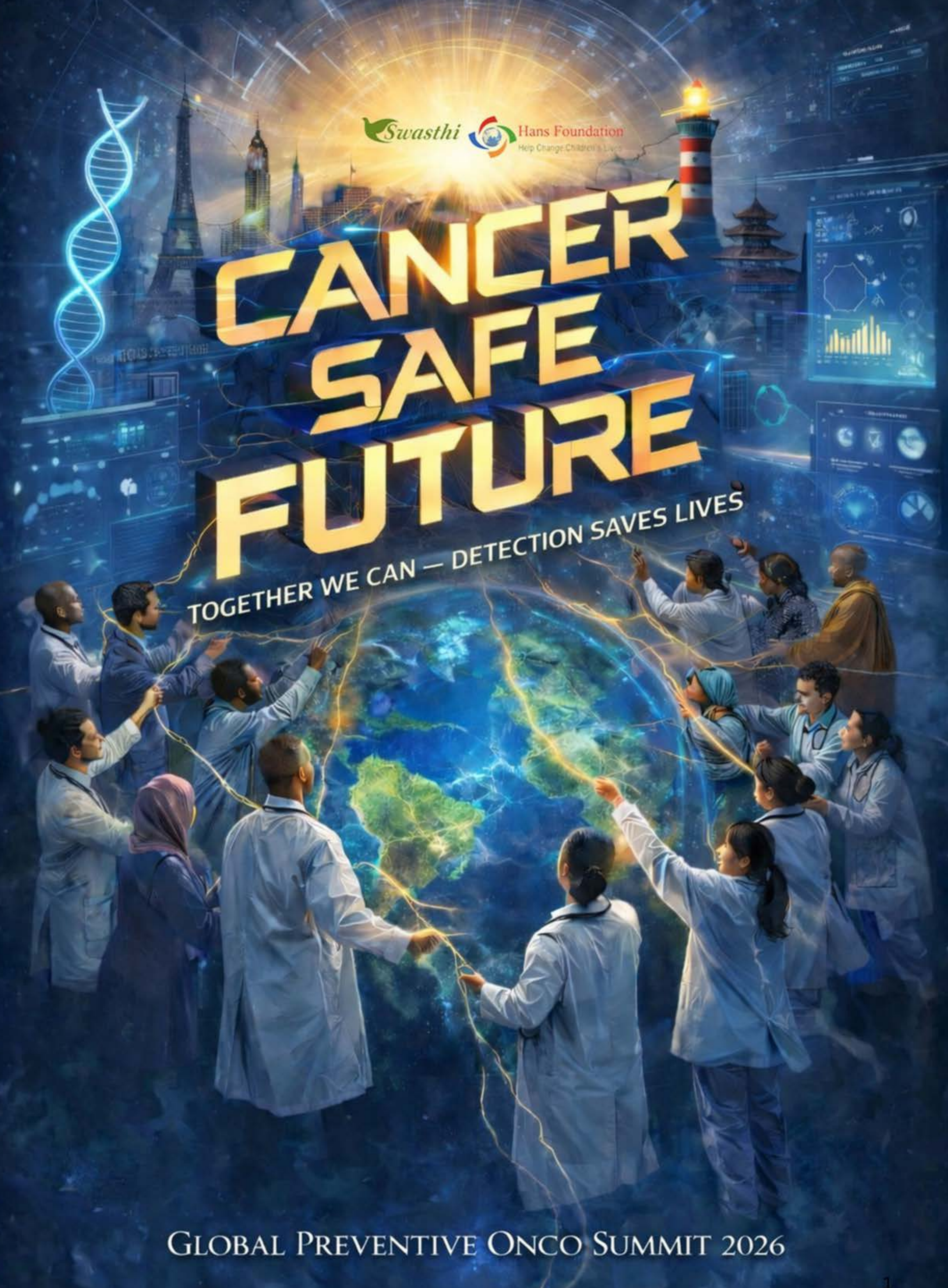

Swasthi
Hans Foundation
CANCER SAFE FUTURE
TOGETHER WE CAN — DETECTION SAVES LIVES
GLOBAL PREVENTIVE ONCO SUMMIT 2026

GPOS 26- SUMMIT REPORT

Chief Editors
Dr. M. V. Pillai
Dr.Mohanan Kunnummal

Editorial Board
Adv. Meenakshi Lekhi
Dr Cherian Varghese
Dr. Sharmila Pimple
Dr. Chandramohan K
Dr Rijo Mathew
Dr. Satheeshan Balasubramanian
Dr. P. G. Balagopal
Dr. Bipin K. Gopal
Dr. Moni Kuriakose
Dr. K. Ramadas
Dr. R. C. Sreekumar
Dr K L Jayakumar
Dr. Arun Warrier
Dr. Rijo Mathew
S N Raghuchandran Nair
Col. Rajeev Manali
Dr. K. K. Manoj
M. S. Faizal Khan
Dr Madhu Murali
Mr. Baby Mathew Somatheeram
Dr. Sandhya K S
Dr. Sara Easow
Dr. Ansar P P
Sri. S. Gopinath IPS (Retd.)
Markose Abraham
Ravindranath K C
Mr Krishnanand Pai
Sri. Sabu Cherian
Mr. Flemy Abraham
Mr. Abey George

Documentation and Design
Adarsh Prathap
Devika Ajith
Vinesh Dharan
Anokha S
Divin George Kurian

Coordinators
Abraham Thomas (Joji)
Adv Lalu Joseph
Babu Parayil
Bibi George Chacko
Dr Saju K A
Rajesh Kumar S V
Gokul Govind
Rahul Chandrasekharan
Arun Karthikeyan
Mathew Jacob
Deepu S G
Cuckoo Parameswaran
Manju Pillai
Priyanka Nair
Ananya
V Karthyayani
Dr Anupama Sreekumar
Dr Devi Mohan
Dr Karthika Gopan
Adv Dimple Mohan
Adv Ambili Jacob
Asha Subrahmaniam
Ponni Maneesh

Special Thanks
Dr George Koshy
Dr Premlal A P
Dr Devin Prabhakar
Dr M S Jayasekhar
R Harikrishnan
Dr Anuja Vargheese
Dr Mary Koshy
Dr Shisha Lis Abraham
Dr Yamini thankachi
Dr Dhanuja V A
Thara Kalyan
Dr Arya A R
Sankari Unnithan
Maya Menon
Sajan Veloor
Hanshi Vinod Kumar
Vinod P G
Syam Mohan

Printed & published by
Swasthi Foundation & Hans Foundation Life

Copyright Notice: Any unauthorized reproduction, distribution, or alteration of this material is strictly prohibited. No part of this document may be copied, regenerated, or used in any form without the express written permission of the author or copyright holder. Violations will be pursued to the fullest extent of the law.

Together We Can

Early prevention Saves Lives

The Global Preventive Onco Summit 2026 (GPOS 2026) is a distinguished international forum that convenes leading experts, researchers, policymakers, and key stakeholders committed to advancing the science and practice of cancer prevention. The summit seeks to enhance awareness, disseminate evidence-based insights, and strengthen collaborative efforts aimed at reducing the global burden of cancer.

Building on the impact of the **Cancer Safe Kerala initiative**, GPOS 2026 underscores the critical importance of population-wide screening, early detection, and community-centered preventive strategies. The initiative continues to focus on delivering accessible screening services, establishing efficient referral and follow-up systems, and generating comprehensive cancer data to guide effective public health policies.

This year's summit featured globally renowned speakers who presented the latest developments in preventive oncology, including advancements in screening technologies, vaccination programs, lifestyle-based risk reduction, digital health innovations, and large-scale awareness initiatives. GPOS 2026 also highlighted exemplary models and best practices from Kerala and other regions, fostering dialogue and partnerships that support long-term global cancer control.

Participants had the opportunity to engage with experts, exchange knowledge, and contribute to a unified international movement dedicated to creating a safer, healthier future free from preventable cancers.

GPOS 2026: A Landmark in Global Preventive Oncology

The Global Preventive Onco Summit 2026 (GPOS 2026) marked the historic culmination of over a decade of grassroots dedication by the Swasthi Foundation. More than just a convening of experts, the summit served as a decisive moment where years of preventive oncology work were translated into scalable, institutional outcomes, setting a new benchmark for public health in India and beyond.

From Grassroots to Global Impact

The foundations for GPOS 2026 were laid in 2013, beginning with initiatives like Snehathalam and Jeevathalam. Over the years, Swasthi shifted the cancer narrative from late stage treatment to early detection, reaching over three lakh individuals. This journey evolved through the Kerala Preventive Onco Summit 2022 and IPOS 2023, eventually blossoming into the global platform witnessed this year.

The Success of "Cancer Safe Kerala"

A central highlight of the summit was the validation of the Cancer Safe Kerala project. Now fully operational, this initiative proved that preventive oncology is a practical, implementable strategy. By integrating free screenings, mental health support, and lifestyle awareness with institutional partnerships, including the Indian Armed Forces, Kerala has been established as a global model for cancer prevention in action.

Core Pillars of the GPOS 2026 Legacy

The summit successfully addressed the urgent need for a multi faceted approach to the cancer burden:

- Global Knowledge Exchange: Facilitating high level dialogue between international researchers and local practitioners.
- Policy Advocacy: Moving prevention from isolated medical spaces into the heart of government health policy.
- Technology & Tradition: Integrating modern diagnostic tools with culturally rooted, holistic care and traditional knowledge systems.

GPOS 2026 stands as a testament to the belief that through community empowerment and scientific advocacy, we can transition from treating disease to preserving health at scale.

Three Major Strategic Goals

1. Establishment of the International Preventive Oncology Centre

The foremost goal of GPOS 2026 is the establishment of India's first International Preventive Oncology Centre in Kerala. While numerous cancer institutions across the country focus primarily on diagnosis and treatment, there is currently no national-level institution dedicated exclusively to preventive oncology. This centre will address that critical gap by serving as a global hub for research, education, capacity building, and policy formulation in cancer prevention. By shifting the healthcare focus from managing advanced disease to preventing cancer before it develops, the centre will position Kerala as a national and international leader in preventive medicine and place it firmly on the global health map.

2. Free Cancer Screening for all eligible adults in Kerala

GPOS 2026 envisions achieving complete population-level cancer screening across Kerala by covering all eligible adults of the state, entirely free of cost. Building on the operational experience of Cancer Safe Kerala, Swasthi Foundation aims to scale its screening infrastructure so that every individual irrespective of age, gender, geography, or economic status has access to early detection for oral, breast, and cervical cancers. Early detection is one of the most powerful tools in reducing cancer mortality and treatment costs. Achieving universal screening will not only save lives but also establish a replicable public health model for India and other regions facing similar cancer burdens.

3. Comprehensive Cancer Insurance Scheme – Implementation Strategy

The third strategic objective of GPOS 2026 is to develop a robust and actionable implementation strategy for a Comprehensive Cancer Insurance Scheme. Cancer treatment

continues to impose severe financial distress on families, often pushing them into long-term economic hardship. Existing insurance models frequently fall short in addressing the full continuum of cancer care, including prolonged treatment and follow up. Through GPOS 2026, Swasthi aims to bring together policymakers, insurance experts, health economists, and healthcare providers to design a financially sustainable framework that ensures no individual in Kerala is denied cancer care due to lack of funds. The goal is to establish a strong financial safety net that complements preventive efforts with assured treatment access. In essence, GPOS 2026 represents Swasthi's transition from advocacy to architecture, from awareness to institution building. It reflects a decade-long commitment now converging into clear systems, measurable outcomes, and a future where cancer prevention is embedded into public health policy, practice, and people's lives.

Abey George
General Secretary Swasthi Foundation &
Chief Cordinator, GPOS 2026

S.Gopinath, IPS(Retd)
Trustee Swasthi Foundation & Chief
Coordinator GPOS 2026 (Event)

Partner for a Cause

The Global Preventive Onco Summit 2026 is proudly coordinated with Swasthi Foundation by the Hans Foundation Life, New Delhi, an organisation deeply committed to health equity, preventive healthcare, and sustainable community wellness. Through its extensive community-driven initiatives, the Foundation works tirelessly to bridge critical gaps in cancer awareness, early detection, and access to preventive healthcare services.

The Hans Foundation Life's association with GPOS 2026 is rooted in its long-standing social mission to address healthcare disparities, particularly among underserved and vulnerable populations. Recognising that a significant proportion of cancers are preventable through awareness, lifestyle modification, vaccination, and early screening, the Foundation actively supports initiatives that promote early intervention, community education, and inclusive public health models. By aligning with GPOS 2026, the Hans Foundation Life seeks to elevate preventive oncology as a public health priority and ensure that global knowledge translates into meaningful grassroot impact.

Flemy Abraham
President, Hans Foundation Life, New Delhi
Chief Coordinator– Global Preventive Onco Summit 2026

Building a foundation for a healthier future.

It brings us immense pride, on behalf of the Global Preventive Onco Summit 2026, to reflect on this gathering held under the auspices of the Swasthi Foundation Kerala and Hans Foundation Life, New Delhi. This summit was a groundbreaking event on a global scale, where we united to shape the future of preventive oncology. Kerala has consistently been a frontrunner in healthcare, and we have now extended that leadership into the realm of preventive oncology. With a strong emphasis on early detection, we reaffirmed that up to two-thirds of cancers are preventable, and that screening can identify most cases of breast, cervical, and oral cancers at their earliest stages. Our goal remains to achieve the highest possible cure and survival rates, while also minimizing treatment complexity and long-term healthcare costs. By educating even our school-aged children about prevention, we successfully laid the groundwork for a healthier future.

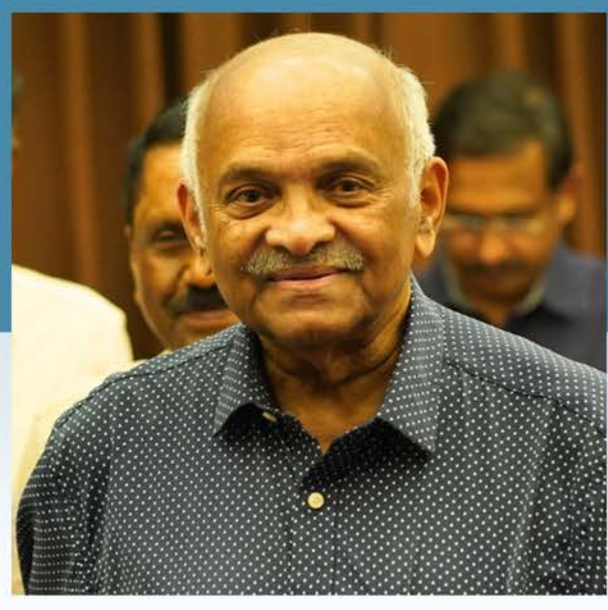
Dr Chandramohan K
President-elect, Indian Association of Surgical Oncology (IASO)
Chairman Swasthi Healing hands

Dr R. C. Sreekumar
Vice President, IMA Kerala State Chapter

Dr Ansar P P
Former General Secretary and Executive Member, Kerala Association of Surgical Oncologists(KASO)

Dr. Rijo Mathew
President IRIA Kerala Chapter ,
Founder & National Coordinator, IRIA Preventive Radiology

UNITED FOR CANCER-SAFE FUTURE



DR. M. V. PILLAI
Chairman – Global Preventive Onco Summit 2026

The Global Preventive Onco Summit 2026 represents a collective commitment to advancing cancer prevention, early detection, comprehensive care, and rehabilitation. This initiative brings together the Government of Kerala, private healthcare institutions, and civil society to address cancer through a unified and sustainable approach. Kerala has demonstrated that prevention and early detection can significantly reduce cancer incidence, mortality, and the financial burden on families. By strengthening public-private collaboration and focusing on proactive health strategies, we aim to build a future where cancer care is accessible, affordable, and equitable. With the support of leading national and international institutions, GPOS 2026 aspires to position Kerala as a global model in preventive oncology.

I congratulate the organisers and look forward to the collective progress this summit will inspire.

UNITED FOR CANCER-SAFE FUTURE

ADV. MEENAKSHI LEKHI
Former Union Minister,
Government of India

It is truly inspiring to witness the Swasthi Foundation taking such a decisive and visionary step towards global cancer prevention. The Global Preventive Onco Summit 2026 stands as a landmark initiative that brings together some of the world's finest minds in oncology, public health, and medical innovation. By hosting this summit in Thiruvananthapuram, Kerala is being positioned as a global hub for dialogue and action in preventive oncology.

The participation of esteemed doctors from institutions such as the Mayo Clinic and the World Health Organization adds immense scientific credibility and global relevance to this effort. Initiatives like these play a vital role in shifting the focus from treating cancer after it strikes to preventing it before it begins. I look forward to the meaningful discussions, collaborations, and outcomes that will emerge from this summit, contributing significantly to a healthier and cancer-safe future.

UNITED FOR CANCER-SAFE FUTURE

PH Kurien IAS
Advisory Board Member, Swasthi Foundation

The Global Preventive Onco Summit 2026 embodies a shared dedication to enhancing cancer prevention, early detection, comprehensive care, and rehabilitation. This initiative unites the Government of Kerala, private healthcare providers, and civil society to tackle cancer through a coordinated and sustainable strategy.

Kerala has shown that effective prevention and early detection can notably decrease cancer incidence, mortality rates, and the financial strain on families. By bolstering public-private partnerships and emphasizing proactive health measures, we aim to create a future in which cancer care is accessible, affordable, and equitable.

With the backing of prominent national and international organizations, GPOS 2026 aspires to establish Kerala as a global leader in preventive oncology.

I extend my congratulations to the organizers and eagerly anticipate the collective advancements that this summit will inspire.

UNITED FOR CANCER-SAFE FUTURE

PROF. (DR.) MOHANAN KUNNUMMAL
Vice Chancellor Kerala University of Health Sciences & University of Kerala

The Global Preventive Onco Summit 2026 arrives at a crucial time when healthcare systems must increasingly prioritise prevention, early diagnosis, and population-level interventions. As the Vice Chancellor of the Kerala University of Health Sciences and the University of Kerala, I view this summit as an important academic and public-health initiative that bridges research, policy, and practice. By bringing together national and international experts, the summit encourages evidencebased dialogue and knowledge exchange that can strengthen cancer prevention strategies and improve health outcomes. Such platforms are essential for translating scientific understanding into effective community action.

I commend the vision behind this initiative and wish the Global Preventive Onco Summit 2026 every success in advancing preventive oncology and public health in Kerala and beyond.

UNITED FOR CANCER-SAFE FUTURE

DR. ROBERT B. DIASIO
Former Director Mayo Clinic Comprehensive Cancer Center, USA

Dr. Robert B. Diasio, MD, is a distinguished physician-scientist and professor of medicine at the Mayo Clinic, Rochester, Minnesota, and a former director of the Mayo Clinic Comprehensive Cancer Center. He has been associated with the Mayo Clinic since 1999 and has previously served as Deputy Director of the Cancer Center. Dr. Diasio's research focuses on pharmacogenomics and the role of genetic factors in determining the effectiveness and toxicity of anti-cancer therapies. He is internationally recognized for his work on the chemotherapy drug 5-fluorouracil (5-FU), which is widely used in the treatment of colorectal and other cancers. His research has been instrumental in identifying the critical role of dihydropyrimidine dehydrogenase (DPD) in drug metabolism, significantly advancing personalized cancer treatment and patient safety.

UNITED FOR CANCER-SAFE FUTURE

DR. SOMASHEKHAR S. P.
Chairman - Medical Advisory Board, Aster DM Healthcare GCC & India

Dr. Somashekhar S. P. is a renowned Surgical Oncologist and Robotic Surgeon, currently serving as the Chairman of the Medical Advisory Board for Aster DM Healthcare (GCC & India) and Global Director of the Aster International Institute of Oncology. He is internationally recognized for his expertise in advanced cancer surgeries, including robotic oncology, HIPEC, and PIPAC. With qualifications including MBBS, MS, MCh (Surgical Oncology), and FRCS (Edinburgh), Dr. Somashekhar has performed over 3,000 robotic cancer surgeries and more than 1,000 HIPEC procedures–the largest such series in Asia. A pioneer of Sentinel Lymph Node Biopsy in India, he has authored over 300 scientific publications, edited major oncology textbooks, and received numerous national and international awards for excellence in surgical oncology, education, and leadership.

UNITED FOR CANCER-SAFE FUTURE

M G SREEKUMAR
Managing Trustee
Swasthi Foundation

As we move closer to the Global Preventive Onco Summit 2026, I would like to extend my sincere greetings to everyone involved in this important initiative. This summit reflects a timely and meaningful focus on cancer prevention and early detection—areas that are critical to improving health outcomes and reducing the burden of disease on individuals and families.

Bringing together experts, researchers, policymakers, and healthcare leaders from across the world, this gathering creates an important space for dialogue, learning, and collaboration. Initiatives such as this play a vital role in strengthening awareness, encouraging preventive practices, and shaping a more informed and proactive approach to cancer care. I commend the vision behind this summit and wish it every success. I hope the discussions and partnerships formed here will contribute significantly to building a healthier and cancer-safe future for our communities.

UNITED FOR CANCER-SAFE FUTURE

PRITHVIRAJ SUKUMARAN
Actor • Director • Film Producer

My heartfelt congratulations to Swasthi Foundation on hosting the Global Preventive Onco Summit 2026, scheduled from January 16–18. Preventive oncology is the cornerstone of a cancer-free future, and this summit stands as an important step towards that vision.

By spreading awareness, promoting early detection, and empowering communities to take charge of their health, we can collectively reduce the burden of cancer. I strongly believe that when people are informed and supported, real change becomes possible.

Together, let us work towards a healthier tomorrow and a world where prevention becomes a universal priority

UNITED FOR CANCER-SAFE FUTURE

MAMTA MOHANDAS
Brand Ambassador & Trustee Swasthi Foundation

It gives me immense joy to share that Swasthi Foundation, in collaboration with doctors from Mayo Clinic (USA), Health & Family Welfare Department, Kerala University of Health Sciences, and several esteemed partner institutions, is advancing a renewed mission – Cancer Safe Kerala. This initiative focuses on empowering every individual across Kerala through comprehensive cancer screening, awareness, and early-detection education. We strongly believe that prevention is the most powerful tool we have, and by helping people understand the risks, early signs, and available screening methods, we can save countless lives.

As we move forward with this transformative mission, I wholeheartedly invite each one of you to walk with us. Your participation can help build a future where Kerala leads the nation in preventive oncology – a future that is healthier, stronger, and free from the fear of late-detected cancer. Thank you for your continued support, trust, and compassion. Together, let us create a safer tomorrow.

UNITED FOR CANCER-SAFE FUTURE

COL. RAJEEV MANNALI
MD & CEO - SUT Hospital

I am pleased to convey my best wishes to the Global Preventive ONCO Summit 2026.

Prevention-led healthcare is the need of the hour, and platforms like GPOS 2026 play an important role in creating awareness, strengthening collaboration and driving early intervention in cancer care. Such collective efforts are essential to reduce the long-term burden of cancer on society.

I appreciate the initiatives of the Swasthi Foundation in promoting preventive oncology and wish the Summit great success in it's mission towards a Cancer-Safe Future.

UNITED FOR CANCER-SAFE FUTURE

Baby Mathew Somatheeram
Global President -World Malayalee Council (WMC) Advisory Board Member Swasthi Foundation

It is a privilege to share my thoughts for this publication. From pioneering the world's first Ayurveda hospital at Somatheeram in 1985 to my current role leading the World Malayali Council, my mission has always been to bridge our rich heritage with global innovation.

True progress lies in the balance of tradition, sustainability, and community. In our pursuit of holistic health, we must also prioritize cancer prevention–an area where mindful living, early detection, and the restorative power of nature can truly transform lives. By embracing a lifestyle rooted in wellness, we can build a resilient and cancer-free society.

I hope these pages inspire readers to lead with vision and a deep commitment to a healthier, more purposeful future. My best wishes to the authors and the readers for the journey ahead.

UNITED FOR CANCER-SAFE FUTURE

Dr K. K. Manojan
Vice Chairman Sree Gokulam Medical College & Research Foundation

It gives me great pleasure to extend my warm wishes to the Global Preventive Onco Summit 2026. Cancer prevention and early detection are among the most important public health priorities today. Initiatives like GPOS 2026 play a vital role in bringing together healthcare professionals, policymakers, institutions, and communities to work collectively toward this shared goal.

I sincerely appreciate the continued efforts of the Swasthi Foundation in championing preventive healthcare and community-based cancer control. The vision of a Cancer-Safe Future is timely and essential, and I am confident this summit will make a meaningful contribution towards strengthening preventive oncology efforts. I wish the Global Preventive Onco Summit 2026 every success.

UNITED FOR CANCER-SAFE FUTURE

Mr M. S. Faizal Khan
Director | NIMS Medicity

It is a privilege to share my best wishes for the Global Preventive Onco Summit 2026.

Strengthening cancer prevention through awareness, early detection, and system-level coordination is essential for improving long-term health outcomes. Initiatives such as GPOS 2026 help translate knowledge into action and encourage a preventive approach to cancer care.

I commend the Swasthi Foundation for spearheading this important effort and wish the summit every success in advancing the vision of a Cancer-Safe Future.

UNITED FOR CANCER-SAFE FUTURE

Mr. John Chandy
Chief Business Officer
Apollo Hospitals

I am happy to extend my best wishes to the Global Preventive Onco Summit 2026.

Cancer prevention and early detection require strong collaboration between healthcare institutions, professionals, and communities. GPOS 2026 provides a valuable platform to advance dialogue, partnership, and action in preventive oncology.

I appreciate the efforts of the Swasthi Foundation in driving this important initiative and wish the summit meaningful outcomes and continued success.

UNITED FOR CANCER SAFE FUTURE

Mr. S. N. Raghuchandran Nair
President - The Trivandrum
Chamber of Commerce and
Industry (TCCI)

Mr. Abraham Thomas(Joji)
Secretary- The Trivandrum
Chamber of Commerce and
Industry (TCCI)

The Global Preventive Onco Summit 2026 highlights the importance of viewing health not only as a medical priority, but as a shared social and economic responsibility. Cancer prevention and early detection have far-reaching implications for workforce wellbeing, productivity, and long-term national development.

By bringing together healthcare leaders, policymakers, researchers, and institutions, this summit creates meaningful opportunities for cross-sector collaboration. Engagement from industry and commerce is essential in supporting awareness, sustainable healthcare initiatives, and community-centric preventive efforts.

We appreciate the vision behind this initiative and extend my best wishes for the success of the Global Preventive Onco Summit 2026. I am confident that the conversations and partnerships fostered here will contribute positively to building a healthier and more resilient society

UNITED FOR CANCER-SAFE FUTURE

Dr. Sandhya K.S
CEO & Partner SK
Hospital, Trivandrum

As the future of oncology increasingly shifts towards prevention and early detection, meaningful collaboration among healthcare institutions, professionals, and communities becomes essential. The Global Preventive Onco Summit 2026 stands as a powerful platform to shape a shared vision, catalyze collective action, and drive transformative progress in preventive oncology. I extend my best wishes to GPOS 2026 and congratulate the Swasthi Foundation for its visionary leadership and unwavering commitment to this critical cause. I wish the summit purposeful deliberations, impactful outcomes, and enduring success.

UNITED FOR CANCER-SAFE FUTURE

Rev. Fr. Dr. Alexander Koodarathil
Managing Director Dr KM Cherian Institute of Medical Sciences, Chengannur

I am happy to extend my warm wishes to the Global Preventive ONCO Summit 2026.

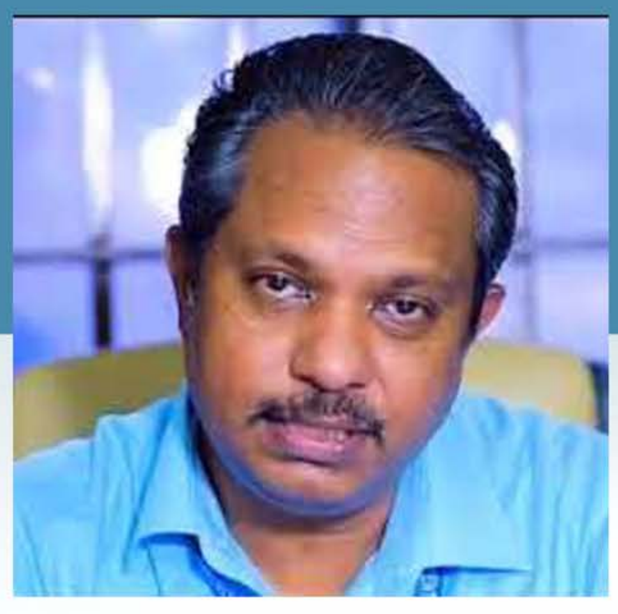
Promoting cancer prevention and early detection is a shared responsibility that calls for compassion, commitment, and collective action. GPOS 2026 is a timely initiative that brings together diverse stakeholders to strengthen awareness and advance a preventive approach to healthcare. I commend the Swasthi Foundation for its vision and dedication, and I wish the Summit every success in contributing to a healthier and cancer-safe future.

UNITED FOR CANCER-SAFE FUTURE

Rev. Fr. Dr. Binu Kunnath
Director Caritas
Hospital

I extend my sincere best wishes to the Global Preventive ONCO Summit 2026. Cancer prevention and early detection are vital to building healthier communities, and initiatives like GPOS 2026 play an important role in strengthening awareness and encouraging a preventive approach to healthcare. Such collective efforts reflect a deep commitment to care, compassion, and public well-being. I appreciate the efforts of the Swasthi Foundation in organizing this meaningful Summit and wish it great success in advancing the vision of a Cancer-Safe Future.

UNITED FOR CANCER-SAFE FUTURE



Dr. Bipin K Gopal
Deputy Director of
Health services State
Nodal Officer (NCD)

I am pleased to extend my best wishes to the Global Preventive ONCO Summit 2026. Strengthening cancer prevention and early detection through coordinated public health action is essential to reducing the burden of non-communicable diseases. Platforms such as GPOS 2026 play an important role in aligning policy, practice, and community engagement toward this goal.

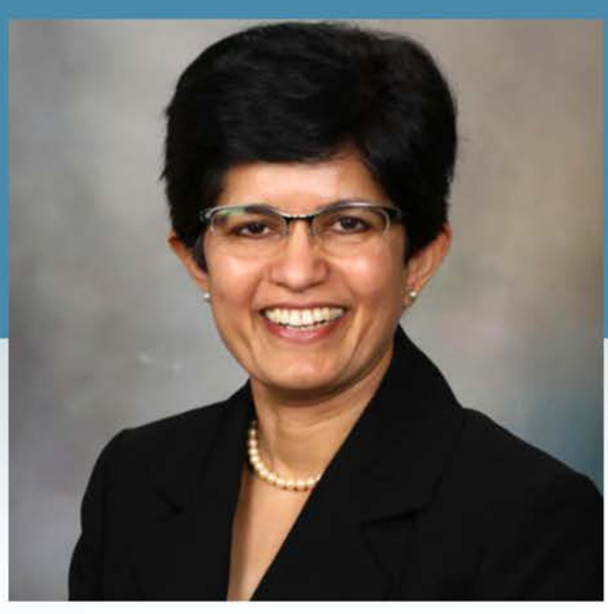
I appreciate the efforts of the Swasthi Foundation in organizing this significant initiative and wish the Summit every success in advancing the vision of a Cancer-Safe Future.

UNITED FOR CANCER-SAFE FUTURE

DR PRATHIBHA VARKEY
President, Mayo Clinic Health System, USA

Dr. Prathibha Varkey, MBBS, MPH, MHPE, MBA, MA (privatum), is the President of the Mayo Clinic Health System, USA, where she leads a workforce of over 17,000 employees serving 16 community hospitals and 50 multispecialty clinics across Minnesota and Wisconsin. She is also a Professor of Medicine and Preventive Medicine at the Mayo Clinic College of Medicine and Science. A nationally recognized expert in quality improvement and preventive medicine, Dr. Varkey has authored more than 80 publications and is the editor of leading texts in medical quality and public health. Her clinical and academic work focuses on preventive medicine, health systems leadership, and improving care delivery through evidence-based quality initiatives.

UNITED FOR CANCER-SAFE FUTURE



DR. KARTHIK GHOSH
Vice President, Mayo Clinic Health System-Minnesota.

Dr Karthik Ghosh is a leading expert in general internal medicine and breast cancer at the Mayo Clinic in Rochester, Minnesota, where she serves as the Chair of the Division of General Internal Medicine. She is also a Professor of Medicine and a Fellow of the American College of Physicians. Dr. Ghosh has been a part of the Mayo Clinic staff since May 2001 and has extensive experience in the Breast Diagnostic and Cancer Clinics, Executive Health, and Consultative Medicine Clinics. She was also the Medical Director for the Breast Clinic at Mayo Clinic for eight years before taking on her current leadership role. Her research interests include breast cancer risk factors and assessment, benign breast disease, mammographic breast density, and risk communication. She has published numerous articles in prestigious journals such as the New England Journal of Medicine, Journal of Clinical Oncology and Journal of the National Cancer Institute.

UNITED FOR CANCER-SAFE FUTURE

DR. ADITYA K. GHOSH
Consultant, General Internal Medicine, Mayo Clinic Rochester, USA

Dr. Aditya K. Ghosh, MD, is a Senior Associate Consultant in General Internal Medicine at the Mayo Clinic, Rochester, Minnesota, where he practices in the Consultative Medicine Clinic. He is an alumnus of Northwestern University and St. George's University, from which he earned his medical degree.Dr. Ghosh's clinical and academic interests focus on cancer interception, early cancer diagnosis, and cancer prevention. His practice emphasizes the evaluation and management of complex medical conditions, coordinated diagnostic care, risk communication, and shared decision-making. He is dedicated to empowering patients to actively participate in their healthcare. Dr. Ghosh has published in peerreviewed medical journals and serves as a reviewer for several academic publications.

UNITED FOR CANCER-SAFE FUTURE

DR AMIT K. GHOSH
Mayo Clinic, USA

Dr Amit K. Ghosh is a distinguished physician who specializes in general internal medicine and nephrology. He has extensive experience in treating chronic conditions such as hypertension, renal disease, and diabetes mellitus, as well as providing comprehensive and personalized care to executives through Mayo Clinic's Executive Health Program. He is committed to educating his patients about their diseases and empowering them to become active partners in managing their health. He also strives to understand and respect each patient's unique expectations and goals of living with chronic disease, and to collaborate with them to resolve any challenges and achieve balance. Furthermore, he is adept at using evidence-based techniques to quantify and communicate risks to his patients in a clear and understandable manner. Dr. Ghosh is also involved in research and education, mentoring residents and fellows and contributing to the scientific literature with his expert content

UNITED FOR CANCER-SAFE FUTURE

DR. ZHENG LIU
Beijing Arion Cancer Center

Dr. Zheng Liu is a leading oncologist and physician-scientist based in China, currently serving as Director and Chief Medical Officer at Beijing Arion Cancer Hospital, with affiliation to the National Cancer Center of China. He specializes in gastrointestinal and colorectal cancers. Dr. Liu is internationally recognized for his work in genomic and transcriptomic approaches to cancer diagnosis and prognosis, with a strong focus on precision medicine and the clinical translation of genetic discoveries. A Professor, Section Chief, and PhD holder, he has contributed to numerous high-impact scientific publications, including research featured in journals such as Genes and NIH-associated platforms, advancing personalized cancer care.

UNITED FOR CANCER-SAFE FUTURE

DR. DECHANG DIAO
Sun Yat-Sen University
China

Dr. Dechang Diao is an academic clinician and researcher affiliated with the Sun Yat-sen University, where he serves at the Sixth Affiliated Hospital. His work focuses on advancing surgical oncology and improving quality of life outcomes for cancer patients. Dr. Diao's research interests include innovative surgical techniques for esophageal replacement, particularly the use of the left hemicolon, as well as the application of electro-acupuncture to enhance quality of life in gastric cancer patients undergoing chemotherapy. He has authored numerous peer-reviewed research publications contributing to surgical practice and integrative oncology care.

UNITED FOR CANCER-SAFE FUTURE

DR LIU YANG
Jiangsu Cancer Hospital

Dr. Liu Yang is a distinguished colorectal cancer specialist and clinical researcher at Nanjing Medical University, China. He is widely recognized for his expertise in advanced minimally invasive and robotic-assisted colorectal cancer surgery. Dr. Liu performs over 300 Grade-4 minimally invasive surgeries annually and has completed more than 300 robotic-assisted cancer surgeries to date. His research focuses on colorectal cancer progression, metastasis, and early detection, with recent work developing integrated cfDNA fragmentomics models for accurate and cost-effective early-stage cancer detection.

UNITED FOR CANCER-SAFE FUTURE

DR. SHENG WANG
Fudan University
Shanghai Cancer
Center

Dr Sheng Wang is an Associate Professor at the Fudan University Shanghai Cancer Center, with long-standing experience in diagnostic imaging within the Department of Radiology. He has been associated with the institution since 2007, contributing significantly to academic research and clinical practice. Dr. Wang's research focuses on AI-driven pathobiology and transformer-based models for predicting cancer prognosis and assessing targeted therapy benefits. He has authored 34 research publications with over 1,400 citations, reflecting the impact of his work in integrating artificial intelligence with oncology, pathology, and imaging sciences.

UNITED FOR CANCER-SAFE FUTURE

DR HARI PARAMESWARAN
Chief Medical Officer,
Obsidian Therapeutics,
USA

Dr Hari Parameswaran, MD, MS, is the Chief Medical Officer at Obsidian Therapeutics, USA, and a globally recognized leader in cell and gene therapy clinical development. He brings decades of experience in designing, managing, and leading complex clinical programs, including tumor-infiltrating lymphocyte (TIL) therapies and other advanced cellular therapies. Prior to Obsidian Therapeutics, Dr. Hari served as Senior Vice President of Clinical Science at Iovance Biotherapeutics, where he led solid tumor adoptive cell therapy programs across multiple indications, including IND submissions, first-in-human Phase I trials, and BLA development. He previously held the position of Chief of Hematology and Oncology at the Medical College of Wisconsin and has led national cooperative clinical trial groups in cell and gene therapy and multiple myeloma. Dr. Hari has also served as Secretary of the American Society of Transplantation and Cellular Therapy (ASTCT).

UNITED FOR CANCER-SAFE FUTURE

PROF. DR GABRIELLE VAN RAMSHORST
Ghent University Hospital in Belgium

Prof. Dr. Gabrielle Van Ramshorst is a consultant surgical oncologist at Ghent University Hospital, Belgium. She specialises in complex colorectal cancer, pelvic exenteration surgery, locally advanced and recurrent rectal cancer, high sacrectomies, and oncological gynaecology. She also serves as an associate editor of the journal Colorectal Disease. Prof. Dr Van Ramshorst has advanced international training in multidisciplinary oncological surgery, supported by a fellowship from the Dutch Cancer Society. She gained extensive experience at leading centres, including the Netherlands Cancer Institute, Amsterdam UMC-VUMC, and the Royal Prince Alfred Hospital, Sydney. Her expertise spans pelvic exenteration, laparoscopic colorectal surgery, HIPEC, and advanced abdominopelvic oncology, contributing significantly to complex cancer care and surgical innovation.

UNITED FOR CANCER-SAFE FUTURE

DR. HIMA RAVINDRANATH
University of Texas Southwestern

Dr. Hima Ravindranath, DPT, CLT, CBIS, is a senior physical therapist at the University of Texas Southwestern and an adjunct faculty member at the University of St. Augustine. She specialises in oncology rehabilitation and has been dedicated to improving functional outcomes and quality of life for cancer patients for several years. She is a Certified Lymphoedema Therapist, Certified Brain Injury Specialist, and ReVital Oncology-certified therapist. An active member of the American Physical Therapy Association, the Texas Physical Therapy Association, and the International Network for Cancer Treatment and Research (USA chapter), she has led multiple oncology rehabilitation workshops and inservice programmes and the establishment of lymphoedema clinics across the United States and India.

UNITED FOR CANCER-SAFE FUTURE

DR BABU RAMACHANDRAN
American Mission Hospital Bahrain

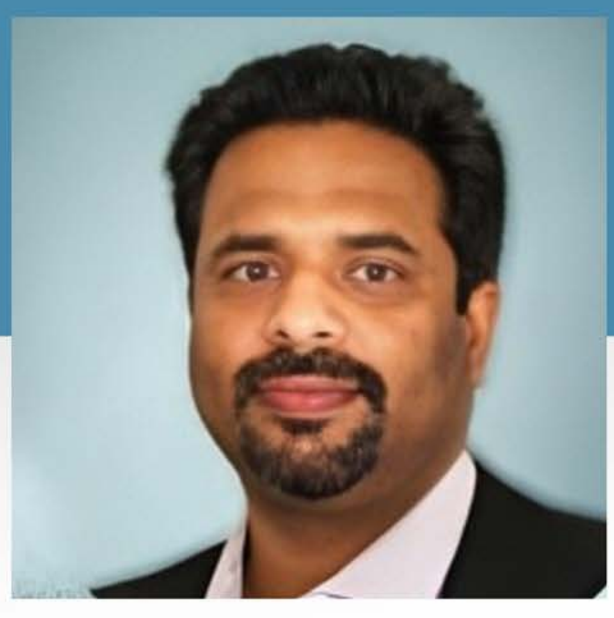
Dr. Babu Ramachandran is a General Practitioner with a special focus on anti-smoking and preventive healthcare, based in Manama, Saar, Bahrain. He is affiliated with the American Mission Hospital, where he heads the Primary Care Department at the Saar Medical and Dental Center. Dr. Ramachandran also serves as the President of the Indian Medical Association (IMA) Bahrain and is actively involved in community-based tobacco cessation and preventive health initiatives.

UNITED FOR CANCER-SAFE FUTURE

DR CHATURBHUJ AGRAWAL
Medical Oncologist,
Bahrain Specialist Hospital

Dr Chaturbhuj Agrawal is a consultant medical oncologist at Bahrain Specialist Hospital. He holds an MBBS, MD (Medicine), DNB (Medicine), DNB (Medical Oncology), and MNAMS and is certified by the National Health Regulatory Authority (NHRA). He also holds international qualifications, including ESMO (Lugano) and MRCP (SC). Dr Agrawal's clinical expertise includes the comprehensive diagnosis and management of solid malignancies–particularly breast, colorectal, lung, and genitourinary cancers –as well as haematological malignancies such as lymphomas and plasma cell disorders. His scope of practice extends to oncologic emergencies, genetic cancer syndromes, targeted biological therapies, cancer immunotherapy, and hormonal treatments, delivering personalised and evidence-based cancer care.

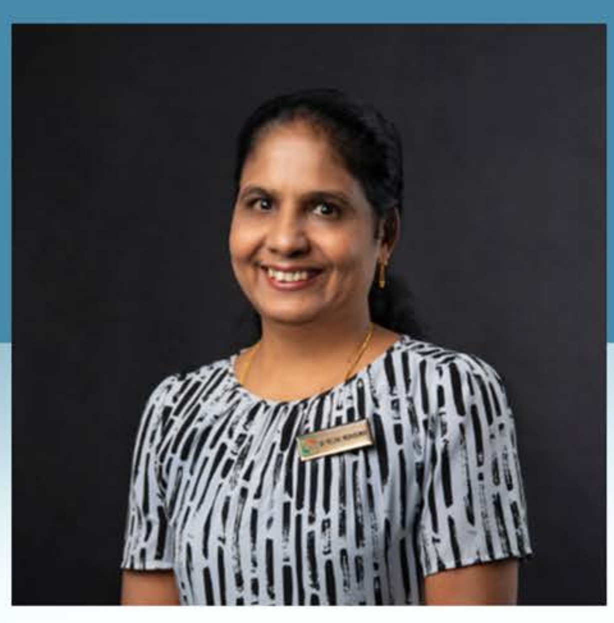
UNITED FOR CANCER-SAFE FUTURE



JAY MOHAN
Founder/CEO of
Rifluxyss Softwares

Mr. Jay Mohan is the founder and Chief Executive Officer of Rifluxyss Softwares LLC, where he also oversees operations and strategic execution. An alumnus of Cochin University of Science and Technology, he brings a strong academic foundation to his leadership in technology and innovation. His professional experience includes work with Look Around Film LLC, reflecting his multidisciplinary exposure across technology and creative industries. Known for his integrity-driven leadership, he is recognised as a motivated and forward-thinking professional committed to building scalable, value-driven digital solutions.

UNITED FOR CANCER-SAFE FUTURE



DR PREETHA MADHUKUMAR
Senior Consultant in Surgical Oncology at the National Cancer Centre Singapore

Dr. Preetha Madhukumar is an Assistant Professor at Duke-NUS Medical School and a Senior Consultant in Surgical Oncology at the National Cancer Centre Singapore. She is a key member of the Breast Surgical Oncology Team at NCCS and serves as a Senior Consultant at the SingHealth Duke-NUS Breast Centre under the Division of Surgical Oncology. Dr. Madhukumar obtained her MBBS and Master of Surgery from India and her FRCS from the Royal College of Surgeons, Glasgow. She has been practicing in Singapore since 1999 and received specialist accreditation (FAMS) in Surgery in 2004. Her clinical expertise focuses on breast cancer screening, early detection, surgical management, and long-term follow-up. Actively engaged in education and research, she is involved in training medical students, residents, fellows, and allied health professionals, while contributing to ongoing breast cancer research initiatives.

UNITED FOR CANCER-SAFE FUTURE

DR SOMASUNDARAM SUBRAMANIAN
Founder & CEO, Eurasian Federation of Oncology (EAFO)

Dr. Somasundaram Subramanian is a well-known Indian origin surgical oncologist who has saved many lives and contributed significantly to the field of cancer treatment in Russia. He graduated from the Moscow Medical Dental Institute (Semashko / Yevdokimov University) in Russia and holds expertise in multiple surgical disciplines, including plastic and maxillofacial surgery, oncology (with European certification), otorhinolaryngology, and healthcare management. He comes from a family committed to medical service and charity, which inspired his approach to medicine and philanthropy. Dr. Subramanian has personally battled cancer multiple times, shaping his empathetic communication with patients. He is also a supervisor of international education and research projects, helping train young specialists and build professional networks in oncology and related fields.

UNITED FOR CANCER-SAFE FUTURE

DR. RAJYASREE NARAYANAN KUTTY
SPECIALIST BREAST SURGEON & FOUNDER OF BARAKAT AL NOOR CLINIC MUSCAT, OMAN

Dr. Rajyasree Narayanan Kutty is a distinguished Indian-origin specialist breast surgeon who has transformed women's healthcare and oncology services in the Sultanate of Oman. She is the Founder of Barakat Al Noor Clinic in Muscat, a specialized center dedicated to the early detection and surgical management of breast cancer. Holding advanced expertise in breast surgery, she has spent decades providing high-quality clinical care while advocating for the importance of regular screenings and preventive health. She comes from a background of rigorous medical training and clinical excellence, which inspired her to establish a private practice that prioritizes patient comfort and diagnostic accuracy. Dr. Rajyasree has personally led numerous community awareness campaigns, shaping a more proactive culture toward breast health in the region. She is also a mentor and a leading voice in the medical community, helping to bridge the gap between advanced surgical techniques and compassionate, patient-centered advocacy for women across the Middle East.

UNITED FOR CANCER-SAFE FUTURE

DR CHINNABABU SUNKAVALLI
FOUNDER AND GLOBAL CEO, GRACE CANCER FOUNDATION, HYDERABAD

Dr. Chinnababu Sunkavalli is a highly acclaimed Indian surgical oncologist who has revolutionized cancer care and advocacy through large-scale community outreach. He is the Founder and Global CEO of Grace Cancer Foundation in Hyderabad, an organization dedicated to providing free screenings and world-class treatment to underprivileged populations across the globe. He graduated with honors in surgical oncology and holds specialized expertise in robotic and laparoscopic surgery, focusing on minimally invasive techniques to improve patient recovery and outcomes. He comes from a background rooted in social responsibility and faith, which inspired his mission to alleviate the burden of cancer through the "Grace" initiative. Dr. Sunkavalli has personally led record-breaking cancer awareness drives, shaping a global movement toward early detection and prevention. He is also a visionary leader in digital health and research, helping to leverage technology to reach remote areas and build sustainable healthcare ecosystems for the future.

JAN 16-18, 2026
HYATT REGENCY TRIVANDRUM

2026

Global Preventive ONCO SUMMIT

Together We Can- Detection saves lives

DAY 1

GLOBAL CHALLENGES & POLICY PERSPECTIVES

The Power of Light: Transforming Lives, Transforming Society

The Global Preventive Onco Summit (GPOS) 2026 commenced with a profound declaration of intent: to enhance awareness, disseminate evidence-based insights, and strengthen collaborative efforts to reduce the global burden of cancer.

Under the morning's theme, "The Power of Light: Transforming Lives, Transforming Society," the summit opened not merely as a medical conference, but as a convergence of science, compassion, and policy.

Welcome

Dr. Sarah J. Easaw, Medical Director and Consultant Oncologist at Dr. KM Cherian Institute of Medical Sciences, delivered the welcome address at the International Preventive Onco-Summit. A distinguished hematologist and medical oncologist with professional experience spanning the United States and India, Dr. Easaw set a reflective and inspiring tone for the summit. She opened her address by warmly welcoming the distinguished dignitaries, members of the Swasthi Foundation, organizers, and participants. To frame the summit's larger vision, she invoked a powerful metaphor of light overcoming darkness, quoting the German spiritual author Eckhart Tolle: "Instead of fighting the darkness, you bring in the light." She used this thought to contextualize the journey of oncology as a discipline.

Dr Sarah J Easaw
Medical Director,
K.M.Cherian institute of
Medical Sciences.

Dr. Easaw reflected on the long history of cancer care, noting that for centuries oncology existed in relative darkness due to limited understanding of the disease. She emphasized that it is only through the relentless dedication of researchers and clinicians, particularly over the last three to four decades, that significant progress has been made. Today, she noted, cancer is understood at the molecular level, early detection has made cure a real possibility, and genetic insights now allow for the prediction of cancer risk.

She highlighted that the purpose of the three-day International Preventive Onco-Summit is precisely this pursuit of light, to deepen understanding, strengthen prevention strategies, promote early detection, and reinforce the possibility of cure. According to her, the summit serves as a collective effort to make the journey of cancer care less daunting and more hopeful for patients and communities alike.

Dr. Easaw then extended a gracious welcome to the dignitaries present on the dais. She specially welcomed the Chief Guest, Her Highness Pooyam Thirunal Gowri Parvathy Bayi, acknowledging her as a pillar of strength and support behind the activities of the Swasthi Foundation. She also welcomed eminent spiritual and medical leaders, including Dr. V. P. Suhaib Moulavi, Palayam Imam; Dr. M. V. Pillai, Chairman of GPOS; Dr. Chandramohan K, Chairman of Swasthi Healing Hands; and the distinguished delegation from the Mayo Clinic, led by Dr. Karthik Ghosh and Dr. Amit K. Ghosh.

In concluding her address, Dr. Easaw called upon all participants to collectively illuminate the path forward in cancer care. She expressed hope that the deliberations and discussions over the course of the summit would help demystify cancer further and make prevention, early detection, and treatment more accessible and humane.

The Lighting of the Lamp

Following the welcome address, the dignitaries gathered for the traditional lighting of the lamp, a symbolic act representing the dispelling of ignorance and the ushering in of knowledge and hope.

Address

Her Highness Pooyam Thirunal Gowri Parvathy Bayi, Princess of the Travancore Royal Family and Chief Patron of the Swasthi Foundation, delivered a moving and deeply personal address at the International Preventive Onco-Summit. Her speech seamlessly bridged the responsibilities of royal leadership with profound human vulnerability, emphasizing the centrality of health, the power of prevention, and the emotional resilience required of both patients and caregivers. She began by underscoring the primacy of health in all aspects of life, stating that without a healthy body, no achievement - be it success, wealth, or recognition, holds true meaning. She reflected that in her family, health has always been a foremost priority, forming the foundation upon which all other pursuits stand.

Her Highness Pooyam Thirunal Gowri Parvathy Bayi
Chief Patron, Swasthi Foundation

Addressing the emotional weight carried by the word "cancer," Her Highness acknowledged the fear it evokes in many minds, often perceived as a final full stop in life. However, she reframed this narrative, asserting that cancer today is more often a pause - a comma, rather than an end. She noted that advances in medical science have transformed outcomes and expressed hope that platforms such as the International Preventive Onco-Summit would continue to provide solutions that make the cancer journey less traumatic and more humane.

Drawing from her own family history, Her Highness shared poignant personal anecdotes that illustrated the progress made in oncology over the decades. She spoke of her grandmother, a cancer survivor in an era when chemotherapy did not exist and treatment was limited to radium needles. Through early self-detection, her grandmother was successfully treated at Tata Memorial Hospital in Mumbai and went on to live a healthy life for eighteen years without recurrence.

She further shared the deeply personal experience of her daughter's battle with leukemia. Diagnosed without warning, her daughter was hospitalized within three days, achieved total remission, and continues to do well. Her Highness attributed this outcome not only to timely medical intervention but also to the collective prayers and goodwill of the community.

Turning to the broader theme of preventive oncology, Her Highness emphasized that the essence of the summit lay in the principle that prevention is better than cure. She highlighted the significant societal challenges in promoting the HPV vaccine for cervical cancer prevention, pointing to resistance from families, educational institutions, and even Parent-Teacher Associations. She observed that many demand absolute guarantees against side effects, often drawing parallels with the skepticism that surrounded the COVID-19 vaccine due to its rapid deployment during a global emergency.

Clarifying this misconception, she noted that the HPV vaccine has been in use for many years and has a well-established safety profile. Despite this, convincing society of its importance remains an uphill task. She firmly stated that hesitation or misinformation should not deny a young girl her right to life-saving preventive care, expressing hope that society stands on the cusp of meaningful change. She urged the medical fraternity and civil society to continue this vital crusade of education and awareness.

In her concluding remarks, Her Highness referred to the Lakshadeepam festival she had recently attended, where one hundred thousand oil lamps were lit, symbolizing light, hope, and positive energy. With this imagery, she offered her humble tribute to the knowledge, commitment, and service of those gathered at the summit, and closed her address with a heartfelt blessing: "May your tribe increase."

Release of Hues of Life

Marking a literary milestone for the event, the souvenir edition of ***Hues of Life*** magazine was officially released.

Dr. V.P. Suhaib Moulavi, the Palayam Imam, performed the honors, handing the first copy to **Dr. Somasundaram Subramanian**, Founder and CEO of the Eurasian Federation of Oncology. Hues of Life, a premium well-being publication with a circulation of 22,000, serves as a trusted voice for policymakers and professionals across Kerala and abroad.

Address

Most Rev. Dr. Mathews Mar Polycarpos
Bishop of the Diocese of Mavelikkara

Most Rev. Dr. Mathews Mar Polycarpos, Bishop of the Diocese of Mavelikkara, addressed the gathering at the International Preventive Onco-Summit, expressing a deep sense of gratitude and blessing in being part of the initiative. He began by recalling his long-standing association with the Swasthi Foundation and acknowledged the organization's wide-ranging contributions to society, from environmental efforts such as the cleaning of Vellayani Lake to public health initiatives, including the Cancer Safe Kerala programme.

With humility, the Bishop stated that while he did not claim authority in the scientific aspects of cancer care, he wished to share his reflections as a layperson based on what he had seen, read, and heard. He noted that cancer is among the diseases that evoke the greatest fear in society, yet emphasized that collective awareness and action can enable communities to confront and survive this challenge together.

Referring to his regular reading of health magazines, Most Rev. Dr. Mathews Mar Polycarpos highlighted reports indicating a steady rise in cancer incidence since 2022. He described this trend as a growing danger that has permeated all sections of society. He also noted that lung cancer among men and breast cancer among women continue to be among the most prevalent forms of the disease.

Despite these concerns, the Bishop reassured the audience that cancer is not without hope. He emphasized that timely diagnosis significantly improves the chances of cure and effective treatment. He identified awareness among the general public as the core objective of the International Preventive Onco-Summit, stressing that accurate information

must reach even the most disadvantaged and marginalized sections of society. According to him, people must be educated not only about the harmful effects of cancer but also about how it develops and spreads.

In concluding his address, Most Rev. Dr. Mathews Mar Polycarpos extended his best wishes to the summit and all those involved in the initiative. He expressed his hope that the collective efforts of the Swasthi Foundation and the medical fraternity would lead to greater awareness, early detection, and improved outcomes in the fight against cancer.

Vote of Thanks

Dr. Reshmi C. P., Vice President of IRIA Kerala and Consultant Radiologist, delivered the Vote of Thanks at the conclusion of the opening session of the International Preventive Onco-Summit. She began by expressing profound gratitude for the divine and reflective tone set during the inaugural proceedings and conveyed deep appreciation for the gracious presence of Her Highness Pooyam Thirunal Gowri Parvathy Bayi. Dr. Reshmi acknowledged Her Highness's enduring commitment to social welfare, noting that her life and work stand as a testament to how compassionate leadership can contribute to building healthier and more resilient societies.

Dr. Reshmi C. P.
Vice President, IRIA Kerala
& Consultant Radiologist

She went on to acknowledge the pivotal contributions of the medical leadership present at the summit. Dr. Reshmi specifically thanked Dr. M. V. Pillai, Dr. Satheeshan Balasubramanian, and the distinguished delegates from the Mayo Clinic for their guidance, expertise, and participation. She also recognized the tireless efforts of the Organizing Secretary, Dr. Ansar P. P., and the organizing team, whose dedication and coordination were instrumental in the successful commencement of the summit.

Looking ahead to the sessions to follow, Dr. Reshmi expressed hope that the spirit and light invoked during the inaugural ceremony would extend beyond words and symbolism. She emphasized the need for this inspiration to translate into concrete policies that prioritize cancer prevention, programs that effectively reach the last mile, and healthcare systems that ensure no life is lost to preventable cancer.

As the opening session drew to a close, the proceedings transitioned toward the scientific deliberations of the summit.

GLOBAL CANCER BURDEN & PREVENTION IMPERATIVES

TOPIC: PUBLIC HEALTH SYSTEMS IN CANCER PREVENTION

Speaker Introduction

Dr. M. V. Pillai
Chairman, GPOS 2026 &
Founder and Chairman,
International Cancer Care
Network (ICCN)

Dr. M. V. Pillai, Chairman of GPOS 2026 and Founder and Chairman of the International Cancer Care Network (ICCN), introduced the keynote speaker for the next session of the International Preventive Onco-Summit. He described the occasion as a unique and personal privilege, particularly as a Non-Resident Indian, to introduce a fellow professional who has pursued and achieved excellence in healthcare, continuing a distinguished family legacy.

Dr. Pillai spoke warmly about his long-standing association with the family of the keynote speaker, Dr. Prathibha Varkey. He recalled being a student of her grandfather, the late Sri N. J. George of Model School, who played a formative role in guiding his career path. He also reflected on his association with Dr. Varkey's mother, Dr. Leelamma Varkey, and her husband, Dr. Varkey Chacko, who were his seniors at Trivandrum Medical College. He noted that Dr. Varkey Chacko's return from the United States was a great source of inspiration and admiration for young medical professionals of that time.

Referring to Dr. Prathibha Varkey's current role as President of the Mayo Clinic Health System, Dr. Pillai remarked that her leadership came as no surprise, observing that excellence clearly runs in the family. He outlined her academic and professional journey, noting her training at Christian Medical College (CMC), Vellore, followed by a Master's in Public Health and an MBA, culminating in her leadership of one of the world's most respected healthcare systems.

He also acknowledged the distinguished team accompanying her, including Dr. Amit K. Ghosh, Dr. Karthik Ghosh, and Dr. Aditya K. Ghosh, and expressed pride in the fact that global scientific sessions were being led by professionals rooted in the region. He highlighted Dr. Prathibha Varkey's scholarly contributions, noting her authorship of more than eighty publications in peer-reviewed journals, and described her as an accomplished scientist and healthcare leader.

Sharing a broader reflection, Dr. Pillai stated that as a student of science, he had always believed that acceptance follows evidence. However, he observed that, much like in matters of faith, belief sometimes precedes understanding. Drawing from spiritual and philosophical traditions, he cited the Biblical phrase “Let there be light” and the Upanishadic invocation “Tamaso Mā Jyotir Gamaya” - a call to be led from darkness to light. He noted that the summit itself embodied this shared aspiration.

Dr. Pillai also acknowledged the collective effort behind the organization of GPOS, highlighting the coming together of the private sector, government institutions, non-governmental organizations, and the military. He briefly referred to the role of military institutions in supporting medical research, including cancer research, emphasizing the global and collaborative nature of advances in healthcare.

In closing, Dr. Pillai reflected on the need to embrace modern scientific progress and strive toward knowledge that must be reached, protected, preserved, and sustained. He then warmly welcomed Dr. Prathibha Varkey to the dais to deliver her keynote address on “PUBLIC HEALTH SYSTEMS IN CANCER PREVENTION”

Keynote Address

Dr. Prathibha Varkey,
President, Mayo Clinic Health System, USA

Dr. Prathibha Varkey, President of the Mayo Clinic Health System, delivered the keynote address at the International Preventive Onco-Summit, expressing her gratitude to Dr. M. V. Pillai for the introduction and her deep appreciation for being part of the summit in her hometown of Thiruvananthapuram. She described the Global Preventive Onco Summit as a remarkable and timely initiative, commending the Swasthi Foundation, organizers, scientists, and program coordinators for their collective efforts in advancing cancer care and prevention.

She noted her pleasure in seeing several of her Mayo Clinic colleagues participating in the summit panels, emphasizing that their presence would enrich the scientific discussions over the course of the day. Dr. Varkey highlighted the significance of the wide-ranging public–private partnership represented at the summit, bringing together hospitals, universities, medical associations, foundations, technology companies, and leaders from government. She described this collaboration as central to the careful implementation of the Cancer Safe Kerala mission.

Dr. Varkey emphasized that such international and interdisciplinary collaboration is essential to conquering cancer and proactively safeguarding the health of Kerala's population. She reflected on Kerala's global reputation for exceptional health outcomes, including low infant and maternal mortality rates and high life expectancy, noting that these outcomes rival those of many Western countries. She attributed this success to high literacy, women's empowerment, investments in public health infrastructure, strong hospital systems, and a community-driven commitment to continuous improvement.

Cancer, she shared, is deeply personal to her - not only as a preventive medicine specialist but also through her family experience. She spoke about her mother, Dr. Leelamma Varkey, who survived cancer for over seventeen years despite being diagnosed with Stage IV non-Hodgkin's lymphoma and experiencing multiple recurrences, along with breast cancer. Dr. Varkey recalled her mother's resilience, humor, and unwavering advocacy for cancer prevention, vaccinations, and screenings, noting that her breast cancer was detected through routine screening mammography. This early detection enabled her mother to continue serving the community for many years, despite having no family history or identifiable risk factors.

Drawing from this experience, Dr. Varkey underscored that effective cancer prevention not only prolongs life but also significantly improves the quality of life for patients, families, and society at large. She posed critical questions to the audience: why is this dialogue urgent, and why is this the defining moment for cancer prevention in Kerala?

She observed that cancer is no longer confined to a small segment of the population or the elderly. It affects people across age groups, socioeconomic strata, religions, and both rural and urban communities. In Kerala, she noted, while it is unclear whether rising cancer incidence reflects higher screening rates or a true increase in disease burden, two persistent challenges remain: late-stage diagnosis and the prevalence of cancers linked to entirely preventable risk factors.

Dr. Varkey emphasized that the financial, emotional, and social costs of cancer remain profound, making a population health approach imperative. She outlined three key priorities: strengthening cancer awareness and prevention (including screening), adopting a population health perspective, and ensuring focused attention on rural and disadvantaged communities.

Speaking on prevention, she noted that when one in ten individuals in India is expected to develop cancer during their lifetime - and when many cancers are linked to preventable causes such as tobacco use, HPV and Hepatitis B infections, obesity, physical inactivity, and sedentary lifestyles- prevention must take precedence over cure. She cautioned that India will be unable to address the growing cancer burden through treatment alone, especially with projections indicating a doubling of cancer cases to nearly two million by 2040.

She highlighted the disproportionate impact of tobacco-related cancers, which account for up to half of cancers in men and a third in women, and stressed that over 90% of oral cancer patients come from lower socioeconomic backgrounds with limited health literacy. Education on the dangers of tobacco, betel nut, and gutka - often initiated between the ages of 8 and 12, was identified as a critical intervention, particularly through school-based programs.
Turning to preventive screening, Dr. Varkey cited evidence from the United States demonstrating substantial reductions in mortality through breast and cervical cancer screening. She commended the Swasthi Foundation for its decade-long efforts in conducting breast, oral, and cervical cancer screening programs across Kerala, reaching thousands in both rural and urban settings.

She outlined two guiding principles for population-level screening initiatives: first, that screening programs must be evidence-based and designed by cancer specialists, scientists, and public health experts; and second, that screening must be accessible and affordable, supported by insurance coverage and multi-sector partnerships. She cautioned strongly against screening without timely follow-up, noting that such practices can create anxiety, distrust, and moral harm. Clear diagnostic and treatment pathways, she stressed, must precede large-scale screening efforts.

Dr. Varkey also emphasized the importance of data collection, research, and publication to evaluate the true impact of preventive oncology programs on morbidity and mortality, while avoiding harm from overdiagnosis. She highlighted the growing role of Big Data and artificial intelligence in healthcare, particularly for risk stratification, targeted screening, and population-level interventions.
Addressing population health more broadly, she stressed that responsibility cannot rest solely with policymakers or public health officials. Successful programs, she noted, depend as much on execution and organization as on strategy and evidence. She cited Kerala's past successes in public health initiatives, such as polio eradication, maternal health improvements, and coordinated responses to floods, Nipah, and COVID-19 - as models of effective execution.

She outlined the need for statewide protocols, integrated and privacy-conscious data systems, robust referral pathways, public awareness campaigns, and continuous quality improvement mechanisms. Above all, she emphasized the centrality of trust - that individuals invited for screening must be supported through diagnosis, treatment, and cure.

Dr. Varkey encouraged leveraging community-based resources, including physicians, ASHA workers, community health workers, and mobile clinics, to improve continuity of care and access - particularly in rural and disadvantaged areas. She highlighted simple yet impactful interventions, such as training community health workers to teach self-breast examination and educate communities on tobacco-related risks.

In her final reflections, she returned to the theme of resilience, stating that her mother's journey taught her that cancer is no match for the human spirit. She expressed confidence that the summit's collective efforts would overcome barriers and positively impact the lives of thousands. She emphasized that achieving a Cancer Safe Kerala would require a collective, sustained effort, addressing social determinants of health and involving policymakers, educators, researchers, clinicians, and communities alike.

Concluding her address, Dr. Varkey stated that the need for transformation in healthcare has never been greater, and that the responsibility to act is both urgent and profound. She thanked the organizers for the opportunity to share her perspectives and wished all participants success as the summit transitions from dialogue to implementation and action toward a Cancer Safe Kerala.

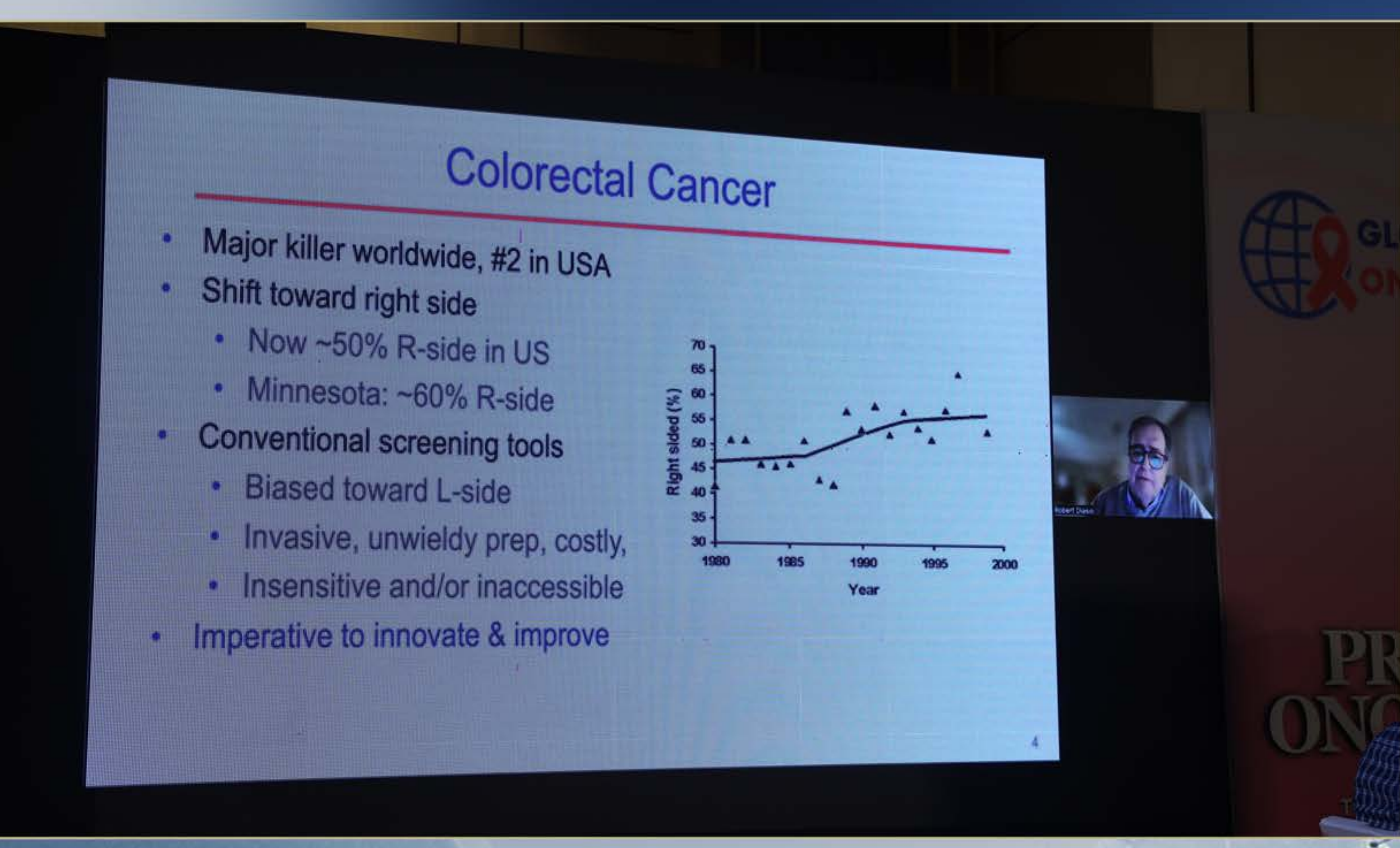
ACTION LEADERS:

Dr. Ansar P.P., Organising Secretary of GPOS 2026
Dr Chandramohan K - President elect , Indian Association of Surgical oncology (IASO) Chairman Swasthi Healing hands
Dr. K. K. Manojan - Vice Chairman, Sree Gokulam Medical College & Research Foundation, Venjaramood, Trustee, Swasthi Foundation
Dr. Rijo Mathew - President IRIA Kerala Chapter ,Founder & National Coordinator,IRIA Preventive Radiology
Dr. K.L. Jayakumar, President AROI, Kerala state chapter

Memento Presentation

Dr. Ansar P. P., Organising Secretary of GPOS 2026, formally presented a memento and plaque to Dr. Prathibha Varkey in recognition of her distinguished keynote address and her invaluable contributions to the field of preventive oncology.

COLORECTAL CANCER SCREENING INNOVATIONS – THE MAYO MODEL



Keynote Address

Dr. Robert B. Diasio,
Emeritus Director, Mayo Clinic Cancer Center, USA

Dr. Robert B. Diasio, Emeritus Director of the Mayo Clinic Cancer Center, delivered a recorded keynote address during Session 2 of the International Preventive Onco-Summit. He began by expressing his gratitude to the organizers of the Global Preventive Onco Summit for the invitation, with special acknowledgement of Dr. M. V. Pillai. While noting his regret at not being able to attend the summit in person, he conveyed hope that his virtual presentation would nevertheless be impactful.

Dr. Diasio introduced the focus of his presentation as colorectal cancer screening innovations, with particular emphasis on the Mayo Model. He provided an overview of Mayo Clinic's major contributions over the past two to three decades in the application of genomics to cancer care. These contributions, he explained, span molecular diagnostics across several programs, including the Women's Cancer Program, where genomics has enabled refined subclassification of breast cancer; the Brain Tumor Program, which has utilized gene amplification to prognosticate outcomes in glioblastoma, and the Experimental Therapeutics Program, where pharmacogenomics has been used to study genes involved in drug activation, efficacy, and toxicity.

Shifting to the central theme of the address, Dr. Diasio focused on the role of genomics in cancer screening, particularly for colorectal cancer. While genomic screening approaches have been explored for multiple malignancies, including lung and breast cancer, he explained that colorectal cancer was chosen for this discussion because of Mayo Clinic's leadership in research that led to practice-changing developments. He noted that colorectal cancer remains a major cause of mortality worldwide and ranks second among cancer-related deaths

in the United States.

He highlighted a critical epidemiological shift observed over recent decades: the predominance of right-sided colorectal cancers. In the United States, at least 50% of colorectal cancers are now right-sided, with figures rising to nearly 60% in Minnesota, where Mayo Clinic's main campus is located. This anatomical shift, he explained, limits the effectiveness of certain conventional screening tools such as sigmoidoscopy, underscoring the need for less invasive, more sensitive, and cost-effective screening techniques.

Dr. Diasio then contextualized colorectal cancer within the Indian setting. Citing data from cancer registries and the World Cancer Research Fund, he noted that colorectal cancer incidence in India has increased significantly, with reported rises ranging from 20% to over 120%. India, he stated, ranks high globally in colorectal cancer mortality, with an age-standardized rate of 2.9 per 100,000. He further observed that states such as Mizoram, Assam, and particularly Kerala show higher incidence rates, making the topic especially relevant to the summit's location.

The core of Dr. Diasio's address centered on the pioneering work of the late Dr. David Ahlquist, a former Mayo Clinic gastroenterologist and member of the GI Cancer Program. Dr. Ahlquist posed a groundbreaking question: whether molecular markers in fecal specimens could be used to improve colorectal cancer diagnosis. Dr. Diasio recalled his initial skepticism regarding the feasibility of applying molecular techniques such as PCR to fecal samples, given their bacterial content. However, Dr. Ahlquist's innovative approach demonstrated that this was indeed possible.

Dr. Diasio noted that Dr. Ahlquist passed away from amyotrophic lateral sclerosis (ALS) nearly six years after the FDA and Medicare approval of the colorectal cancer screening test Cologuard. He is widely recognized as the father of Cologuard, having led the research that identified key fecal biomarkers for colorectal cancer.

Population-based studies were conducted comparing the multi-target DNA test with the fecal immunochemical test (FIT), which had been the standard screening method in the United States, as well as with colonoscopy, the gold standard. Dr. Ahlquist collaborated with Exact Sciences, a company based in Madison, Wisconsin, to commercialize the test. This partnership enabled large-scale population testing, using a

mail-based kit that included a fecal collection container and preservative buffer. The test demonstrated high sensitivity, reproducibility, and minimal operator variation across different climatic conditions.

The initial Cologuard assay targeted multiple biomarkers, including methylated BMP3 and NDRG4 genes, mutant KRAS, beta-actin as a control for human DNA, and hemoglobin. These data were integrated into a logistic algorithm to classify results as Cologuard-positive or Cologuard-negative.

Dr. Diasio discussed the landmark 2014 study published in The New England Journal of Medicine, led by Dr. Thomas Imperiale of Indiana University School of Medicine, with Dr. Ahlquist as a co-author. The study included over 12,000 participants and compared the multi-target DNA test with FIT and colonoscopy. Results demonstrated that the DNA-based test detected significantly more colorectal cancers than FIT and approached the diagnostic performance of colonoscopy, though with somewhat lower specificity.

Key findings included an overall sensitivity of 92% for colorectal cancer detection and 94% sensitivity for early-stage (Stage I and II) cancers. Sensitivity for advanced adenomas was also notable: 42% for large adenomas, 66% for adenomas larger than 2 cm, and 69% for high-grade dysplasia. Specificity was reported at 87%. Despite concerns about false positives, the FDA concluded that the improved sensitivity justified approval for average-risk population screening.

Dr. Diasio addressed concerns that non-invasive screening might reduce colonoscopy utilization. Contrary to these fears, he noted that colonoscopy rates increased, as positive Cologuard results led more patients to diagnostic follow-up. He also highlighted improved screening adherence, as patients were more willing to complete mail-based testing than undergo repeat colonoscopy.

Following FDA approval, Medicare also approved coverage for Cologuard, making it the first non-invasive test to combine fecal DNA and blood marker analysis. This success led to the development of Cologuard Plus, which received FDA approval in October 2024. The updated test demonstrated higher sensitivity, improved specificity, and fewer false positives. In studies involving 20,000 participants, Cologuard Plus detected 95% of colorectal cancers, with negative predictive accuracy of 99.99%, effectively replacing the original test.

Dr. Diasio noted the widespread adoption of Cologuard in the United States, with over 16 million tests performed between 2014 and 2024. He emphasized that positive results continued to drive appropriate colonoscopy referrals, keeping gastroenterology services actively engaged.

He also highlighted the role of Cologuard in addressing health disparities, particularly through a project in Alaska, where colorectal cancer incidence among Alaska Natives is nearly double that of U.S. whites. The test enabled screening in remote, underserved communities and played a key role in convincing regulators of its public health value.
Dr. Diasio concluded by discussing future implications for India and other countries. He noted that in 2026, Exact Sciences was acquired by Abbott Laboratories, opening the possibility of expanding colorectal cancer screening beyond the United States. Ongoing research is also exploring similar molecular screening approaches for other gastrointestinal cancers, including esophageal, gastric, and pancreatic malignancies.

In closing, Dr. Diasio expressed his regret at not being present to answer questions in person and encouraged participants to review the published New England Journal of Medicine studies for further detail. He extended his best wishes for the success of the summit and thanked the Swasthi Foundation and the Hans Foundation for organizing and supporting the Global Preventive Onco Summit.

ACTION LEADERS:
Dr Anoop R - Senior Consultant Medical Gastroenterologist, SGMCRF, Trivandrum.
Dr Rakul Nambiar - Senior consultant HOD Medical oncology, SGMCRF Venjaramood
Dr Baiju Senadhipan Founder Director Senadhipan Institute of Medical Sciences,(SIMS) Chairman, Senadhipan Educational Foundation(SEF)
Dr Shashikiran M S - Senior consultant and HOD Department of Surgical Gastroenterology and Liver and Pancreatobiliary surgery, Sree Gokulam Medical College, Trivandrum.
Dr Gayatri Gopan - Consultant and HOD Medical Oncology, GG Hospital, Trivandrum.

***Dr Arun Kumar M L** - Senior Consultant and Head of the Department of Surgical Gastroenterology and Liver and Pancreatobiliary surgery, GG Hospital, Thiruvananthapuram.*

Memento Presentation

Mementos were presented in recognition of the keynote address delivered by Dr. Robert B. Diasio.

Dr. Arun Kumar M. L. presented the plaque to **Dr. Karthik Ghosh**, who received it on behalf of **Dr. Robert Diasio.**

Dr Baiju Senadhipan presented the memento to **Dr. Amit K. Ghosh**, who received it on behalf of **Dr. Robert Diasio.**

RISK COMMUNICATION
FOR CANCER PREVENTION

Keynote Address

Dr. Amit K. Ghosh,
Professor, General Internal Medicine, Mayo Clinic, USA

Dr. Amit K. Ghosh addressed the gathering with a focused and thought-provoking talk on the science of risk communication in cancer prevention. He began by clarifying that his address would not reiterate epidemiological data or preventive strategies already covered by other speakers, but would instead examine a crucial and often overlooked question: how healthcare professionals can effectively communicate cancer risk to patients who are resistant to preventive measures.

He emphasized that risk communication is critical because nearly 40% of cancer risks are preventable, yet a large proportion of individuals do not participate in screening programs or adhere to preventive advice. According to Dr. Ghosh, this gap arises not from lack of science, but from failures in communication between healthcare providers, health systems, and patients - leading to fear, misinformation, and inaction. Effective communication, he noted, empowers individuals, strengthens communities, and informs sound policy decisions.

Dr. Ghosh outlined three essential elements of risk communication. The first is to help the patient process, which involves clearly conveying what the cancer risk actually is. The second is communicating the relevance, helping individuals understand why the information matters to them personally by explaining their level of risk. The third is conveying the benefit, answering the patient's central question: "What is in it for me?" He stressed that identifying and clearly explaining risk-reducing strategies is key to enabling informed decision-making and meaningful behavioral change.

He further described the core functions of risk communication as increasing knowledge, particularly about modifiable risk factors such as tobacco use, poor diet, and physical inactivity, and motivating behavior change by encouraging protective actions like smoking cessation and healthier lifestyles.

Placing the discussion in context, Dr. Ghosh compared cancer patterns in India and the West. He noted that in Indian men, lung, mouth and tongue, and prostate cancers are most common, while in women, breast and cervical cancers predominate. A major distinguishing factor, he highlighted, is the much higher prevalence of infection-related cancers in India, underscoring the critical importance of vaccination against preventable causes such as HPV and Hepatitis B.

He introduced geography as a powerful determinant of cancer detection, citing data from 43 cancer registries across India. According to this data, an individual's place of residence or "zip code" often determines the likelihood of early detection. He pointed out that infection-related cancers are particularly high in the northeastern states, whereas areas like Thiruvananthapuram show higher detection rates, likely due to better health literacy and stronger healthcare systems.

Dr. Ghosh reiterated that the major modifiable **risk factors contributing to approximately 40% of cancers are largely within human control**. These include tobacco use (21%), infections (15%), alcohol consumption, and poor diet and physical inactivity.

Delving into the psychology of risk, he explained the crucial distinction between absolute risk (the actual probability of developing disease over time) and relative risk (a comparison between groups). Using a simple example, he demonstrated how a change from 1 in 1,000 to 2 in 1,000 represents a 100% increase in relative risk, which can sound alarming despite a minimal absolute increase. He cautioned that physicians must communicate such statistics carefully to avoid fear-mongering while still motivating appropriate action.

Dr. Ghosh emphasized the importance of visual aids and framing in communication. Tools such as bar charts, pictograms, and simple representations, like "4 out of 100 women", help patients better understand risk. He stressed that framing should focus on the benefits of screening rather than solely on fear of death. He also addressed the concept of lead-time bias, urging clinicians to be transparent about the

true benefits of screening and avoid overstating survival gains that may not translate into reduced mortality.

He discussed common cognitive biases that hinder effective communication. Optimism bias, exemplified by statements such as "My uncle smoked until 94 and was fine," leads individuals to underestimate their own risk. Fatalism, especially among those with a family history of cancer, creates a belief that disease is inevitable. Dr. Ghosh stressed the need to counter these perceptions by explaining risk stratification and reinforcing that risk does not equal destiny.

Highlighting the importance of tailored communication, he stated that cancer prevention messaging cannot follow a one-size-fits-all approach. Referring to the Transtheoretical Model of Change, he explained that individuals in the pre-contemplation stage require gentle education without pressure, while those in the action stage need reduced barriers and active facilitation of screening and preventive services.

Dr. Ghosh also underscored the role of community involvement in building trust. Echoing earlier remarks by Dr. Prathibha Varkey, he emphasized the importance of engaging religious leaders, social workers, and community figures, particularly in rural settings where local voices may carry more weight than medical authority alone.

He strongly advocated for a no-blame culture in cancer communication, cautioning against statements that assign fault to patients for habits such as smoking or obesity. Such approaches, he said, are counterproductive and erode trust. Instead, clinicians should respect patient autonomy and be prepared to revisit conversations when individuals are ready.

In conclusion, Dr. Ghosh asserted that risk communication must be formally institutionalized within oncology and medical education curricula. While artificial intelligence and big data can help personalize risk assessment, he emphasized that the delivery of this information must always be grounded in empathy, clarity, and human connection.

Redefining Cancer Control – Moving Upstream Towards Prevention and Early Diagnosis

Keynote Address

Prof. (Dr.) Karthik Ghosh delivered an in-depth address focusing on the need to shift cancer control strategies "upstream," emphasizing prevention and early diagnosis, with a specific focus on breast cancer. She began by stating that breast cancer is the most common cancer among women globally and highlighted the importance of understanding the disease as a continuum - from normal breast tissue, through atypia and pre-cancerous changes, to invasive cancer. This continuum, she noted, provides multiple opportunities for early intervention to halt disease progression.

Prof. (Dr.) Karthik Ghosh
Vice President, Mayo Clinic Health System – Minnesota

She outlined key risk factors for breast cancer and emphasized the importance of categorizing them to help patients understand what is within their control. Non-modifiable risk factors include age, family history, genetic predisposition, and age at menopause. Modifiable risk factors include obesity, use of hormone therapy, and alcohol intake. She also highlighted mammographic breast density as an important biomarker that contributes to risk assessment.

Prof. Ghosh stressed that effective risk stratification in clinical practice requires the integration of detailed patient history, imaging findings, particularly radiologic biomarkers such as breast density; genetic testing, including analysis of single nucleotide polymorphisms (SNPs). She explained that validated risk prediction models, such as the Gail Model, IBIS Model, and CanRisk, are used to estimate both five-year and lifetime breast cancer risk. She categorized lifetime risk into three broad groups: average risk at approximately 12%, high risk at over 20% (often associated with strong family history or prior biopsies showing atypia),

and very high risk ranging from 60–80%, typically seen in carriers of high-risk genetic mutations such as BRCA.

Discussing risk reduction strategies, Prof. Ghosh emphasized lifestyle modification as the foundation for population-level prevention. For the general population, maintaining a healthy weight, engaging in regular physical activity, and limiting alcohol consumption, given its dose-dependent association with breast cancer risk, were identified as critical measures.

She then outlined evidence-based screening strategies tailored to risk level. For women at average risk, she recommended initiating mammographic screening at the age of 40. For those at high risk, she emphasized the role of supplemental screening with breast MRI in addition to mammography. She also discussed chemoprevention for high-risk women, noting that medications such as Tamoxifen, Raloxifene, and aromatase inhibitors, when taken for five years, can significantly reduce breast cancer risk. For women at very high genetic risk, she stated that prophylactic surgeries, including mastectomy and oophorectomy, may be considered following thorough counseling and shared decision-making.

Looking ahead, Prof. Ghosh emphasized the need for a multi-pronged strategy to redefine cancer control. She underscored the importance of culturally sensitive, non-judgmental community awareness programs, highlighting the power of survivor stories in normalizing cancer, reducing fear, and encouraging early care-seeking. She stressed that empowering women is central to improving family and community health, urging women to prioritize their own well-being and preventive care.

She also highlighted the critical role of data and artificial intelligence, advocating for robust databases to track high-risk populations and the use of AI-driven tools to refine risk stratification and personalize prevention strategies.

Concluding her address, Prof. Ghosh quoted Dr. Will Mayo: “In order that the state may have the benefit of advancing knowledge, the union of forces is necessary.” She noted that the summit exemplified this philosophy by bringing together global expertise and local action, united in the shared goal of advancing prevention, early diagnosis, and effective cancer control.

Chairperson: **Dr. Sandhya**, Chief Executive Officer, S.K. Hospital, Thiruvananthapuram

ACTION LEADERS:
Dr. G. S. Jeevan, Consultant Surgical Oncologist, NIMS Medicity
Dr. Sherin Mathew, Consultant Medical Oncologist, RCC, Thiruvananthapuram
Dr. Shafeek S., Senior Consultant Surgical Oncologist, Travancore Breast Institute
Dr. Lekshmi Haridas, Medical Oncologist, RCC Trivandrum

OVERVIEW OF GLOBAL-TO-LOCAL INTEGRATION GOALS

Key Focus: Defining the Vision and Priorities for Integrating Global Cancer Prevention Strategies into India's Healthcare Ecosystem

Keynote Address

Dr. Sudeep Gupta,
Director, Tata Memorial Centre (TMC)

Dr. Sudeep Gupta, Director of the Tata Memorial Centre, began his address by conveying greetings from TMC and setting the context for the session by outlining the future landscape of cancer in India. He noted that India's population is projected to peak at approximately 1.7 billion around 2055, and as the population ages, the burden of non-communicable diseases - including cancer, will inevitably rise. At present, India records nearly 1.5 million new cancer cases annually, a figure projected to increase to over 2.1 million within the next fifteen years.

Dr. Gupta highlighted that cancer mortality in India remains disproportionately high, with nearly 60% of diagnosed individuals succumbing to the disease. He attributed this largely to late-stage presentation at diagnosis. In contrast, he observed that Western countries often report higher incidence rates but significantly lower mortality, underscoring the critical importance of early detection and effective care pathways.

To illustrate the potential for change, Dr. Gupta shared the Muzaffarpur Model developed through the Homi Bhabha Cancer Hospital in Bihar. He described Muzaffarpur as a relatively underdeveloped region where TMC established a cancer hospital. Significantly, he noted that a population-based cancer registry was set up even before the physical hospital infrastructure was completed. Data from this registry revealed that breast cancer had overtaken cervical cancer as the most common cancer among women, even in rural Bihar.

Building on these findings, TMC trained healthcare workers and established daycare centers across six districts. By 2024, the center was registering over 6,000 new patients annually. Dr. Gupta emphasized that this experience demonstrates that high-quality cancer care, systematic registration, and early detection are achievable in rural India when existing infrastructure is effectively repurposed and healthcare personnel are adequately trained.

He then outlined TMC's contributions to research and prevention. Dr. Gupta described a large cluster-randomized screening trial conducted in Mumbai involving 150,000 women. The results showed that cervical cancer screening using Visual Inspection with Acetic Acid (VIA) reduced mortality by 31%, while breast cancer screening through Clinical Breast Examination (CBE) led to nearly a 30% reduction in mortality among women over the age of 50. These findings, he noted, directly informed national policy, leading the Government of India to adopt VIA and CBE as national screening modalities.

Dr. Gupta also highlighted genetic research undertaken by TMC's Centre for Cancer Epidemiology (CCE). Genome-wide association studies (GWAS) identified specific genetic susceptibility markers for gallbladder cancer, a malignancy that is relatively common in North India but rare globally. Additionally, research on oral cancer revealed novel genetic loci where susceptibility interacts with tobacco use, substantially amplifying cancer risk.

He further noted that the CCE operates the National Tobacco Quitline, reinforcing TMC's commitment to tobacco control as a cornerstone of cancer prevention. Emphasizing the principles of implementation science, Dr. Gupta stated that screening alone does not save lives; rather, lives are saved when patients are effectively guided from screening through diagnosis and treatment. Bridging this gap, he stressed, must remain a central priority.

In concluding his address, Dr. Gupta outlined a vision for the future of cancer control in India. He emphasized the need to build capacity at all levels of the healthcare system, from ASHA workers at the grassroots to policymakers at the highest levels. He also underscored the importance of expanding cancer registry coverage to at least 45% of the Indian population, from the current level of approximately 18%, in order to obtain a more accurate and comprehensive understanding of the nation's cancer burden and to guide evidence-based policy and action.

Chairperson: **Maj. Sashank Tripati,** Protector of Emigrants, Thiruvananthapuram, Ministry of External Affairs

ACTION LEADERS:
Ms.Tina James *- President WIT, CEO Revyrie Global*
Dr. Premlal A. P.*, Professor of Plastic Surgery*
Dr. Sivarenjith*, Associate Professor of Surgical Oncology, RCC, Thiruvananthapuram*
Dr. Mintu Mathew Abraham*, Medical Oncologist, NIMS Medicity*
Ms. Arathi Rajeswari*, Executive Member, Women Inclusive in Technology*

PREVENTIVE ONCOLOGY AS A NATIONAL MISSION

Innovation, Research, and Retaining India's Scientific Talent

Keynote Address

Dr. M. Vijayakumar,
Vice Chancellor, Yenepoya University, Mangalore

Dr. M. Vijayakumar delivered a compelling address drawing from decades of clinical and academic experience, framing preventive oncology as both a national imperative and a strategic opportunity for India. He began by sharing a pivotal realization from his clinical practice: of the hundreds of cancer patients he encountered, only about 10-12% presented in early stages (Stages I and II), while nearly 88% arrived with advanced disease. He noted that treating advanced cancers consumes enormous healthcare resources yet often yields poor outcomes. This imbalance, he explained, compelled him to look beyond the operating theatre and toward prevention and early detection.

Dr. Vijayakumar outlined the burden and opportunity inherent in India's cancer landscape. He emphasized that nearly 70% of the cancer burden in India is modifiable, with tobacco alone accounting for approximately 40%. He highlighted that oral, breast, and cervical cancers together constitute nearly 45% of India's total cancer burden. Importantly, all three cancers are easily detectable at an early stage, are almost 100% curable if detected early, and in the case of oral and cervical cancers, are largely preventable.

He then presented case studies in implementation that demonstrated both successes and lessons learned. Recalling the Kolar Project from the 1980s in Karnataka, Dr. Vijayakumar described how high oral cancer rates linked to the use of "Reddy Pudi" (a form of tobacco powder) prompted a community-based intervention. By adopting a village, implementing targeted education, and training residents in intra-oral

self-examination, surveys later showed a significant reduction in tobacco consumption and associated risk.

Expanding on large-scale awareness models, he described the training of 13,500 National Service Scheme (NSS) volunteers using a structured cancer awareness module translated into seven languages. While this initiative substantially improved awareness, a subsequent impact analysis in Udupi revealed that only about 15–20% of the intended population was effectively reached. This, he noted, underscored a critical reality: volunteer-driven models require rigorous monitoring, evaluation, and sustained engagement to translate awareness into action.

Addressing cervical cancer screening, Dr. Vijayakumar highlighted the persistent “custom block” faced by women, many of whom are reluctant to undergo pelvic examinations. To overcome this barrier, he described ongoing innovation in self-sampling for HPV testing, using kits comparable to pregnancy tests. These approaches preserve privacy, reduce discomfort, and significantly improve compliance with screening programs.

He also discussed innovation in cost reduction, identifying affordability as a major barrier to widespread screening. One promising approach under evaluation is pooled sampling (testing multiple samples together initially and retesting individually only if a pooled sample tests positive). This strategy, he explained, has the potential to drastically reduce costs while maintaining accuracy.

To validate and scale these models, Dr. Vijayakumar noted that support has been secured from the Azim Premji Foundation to fund a screening initiative covering 100,000 individuals. This project aims to rigorously test the effectiveness, feasibility, and scalability of these preventive strategies.

In the latter part of his address, Dr. Vijayakumar turned to the issue of retaining India’s scientific and medical talent. He noted that nearly 70% of trained professionals leave the country after graduation, a trend that weakens India’s long-term capacity for innovation. To reverse this, he argued, India must create robust research ecosystems, provide funding opportunities, and actively support startups focused on preventive oncology. He highlighted the role of agencies such as the Biotechnology Industry Research Assistance Council (BIRAC), which now offers grants of up to ₹5 crore for medical and biotech innovation, describing this as

a positive and necessary shift.

Dr. Vijayakumar concluded by reiterating that preventive oncology must be treated as a national mission - one that integrates innovation, community engagement, cost-effective solutions, and sustained investment in human capital, to meaningfully reduce India's cancer burden and ensure equitable, long-term impact.

ACTION LEADERS:
***Dr. Nithin Varghese Abraham,** General Surgeon, GG Hospital*
***Dr. Devika Sunil,** Radiation Oncologist, SGMCRF*

IMPLEMENTING POPULATION-BASED COLORECTAL CANCER SCREENING IN KERALA

Evidence, Workforce, and Funding Strategies

Keynote Address

Dr. Chandramohan K.,
Chairman, Swasthi Healing Hands

Dr. Chandramohan K. delivered a decisive and policy-oriented address, positioning colorectal cancer (CRC) screening not merely as a clinical recommendation but as an urgent public health intervention for Kerala. He emphasized that the state is facing a silent epidemic and warned that failure to act promptly would result in unsustainable human and economic costs. His presentation outlined a comprehensive, evidence-driven roadmap for implementing a population-based CRC screening program tailored to Kerala's unique epidemiological context.

He began by highlighting the problem statement, noting that Kerala presents a paradox: despite having the highest per capita cancer incidence in India - approximately 170 cases per 100,000 population - population-level screening for colorectal cancer remains virtually absent. While oral and breast cancers dominate national discourse, CRC has quietly emerged as the third most common cancer in Thiruvananthapuram and other urban centers. Dr. Chandramohan pointed out that although Kerala possesses arguably the most advanced healthcare system in the country, it continues to focus largely on treating advanced disease rather than preventing it through early detection.

Addressing the epidemiological evidence, Dr. Chandramohan explained why Kerala differs from the rest of India. Nationally, CRC incidence is significantly higher in urban areas, but in Kerala, the traditional urban-rural divide is rapidly disappearing, with the state increasingly functioning as a peri-urban continuum. He attributed this trend in part to dietary transitions, including high meat consumption and widespread adoption of Westernized diets, which directly elevate CRC risk.

Drawing from cancer registry data between 2010 and 2021, he highlighted three critical findings. First, age distribution showed that 60.2% of patients were aged 60 years or above, strongly supporting initiation of screening at age 50, with serious consideration for lowering the threshold to 45 in line with global trends of earlier onset. Second, gender distribution revealed a 59% male and 41% female split, underscoring the need for gender-neutral screening strategies. Third, tumor location data showed that 54.3% of cancers were located in the rectum and 30.6% in the descending colon. This, he stressed, has major programmatic implications, as flexible sigmoidoscopy alone could detect the majority of lesions, reducing reliance on full colonoscopy in resource-limited settings.

Dr. Chandramohan then addressed the awareness-action paradox confronting Kerala. While surveys indicate that 84% of Keralites express concern about cancer, actual screening participation is extremely low, with only 7.14% of eligible individuals in India undergoing screening. He noted that approximately 25% of CRC patients in Kerala present with metastatic disease at diagnosis, and five-year survival rates remain below 40%, largely due to late-stage detection. From an economic perspective, he emphasized that cancer treatment frequently drives families into poverty, while preventing cancer costs only a fraction of treating advanced disease.

Moving to existing infrastructure, Dr. Chandramohan stressed that Kerala is not starting from zero. He highlighted the Arogyam Anandam campaign as a strong foundation, noting that its first phase successfully screened nearly 1.5 million women and that Phase 2 already includes plans to integrate CRC screening for men. He also pointed to the SHAILI digital application, which is currently used to identify high-risk individuals and can be easily expanded to include CRC-specific risk indicators such as rectal bleeding, altered bowel habits, and family history. In addition, he emphasized the availability of a strong community workforce, including over 10,000 ASHA workers and Kudumbashree units capable of mobilizing populations at scale.

Dr. Chandramohan outlined a phased implementation framework spanning five years. The pilot phase, to be conducted in the first year, would focus on high-risk individuals aged 50 and above in two districts, using the fecal immunochemical test (FIT) as the primary screening tool, followed by colonoscopy for positive cases. The expansion phase, in years two and three, would extend screening to five additional districts with biennial FIT testing for all adults aged 50 and above.

The final statewide phase, covering years four and five, would provide organized screening for all adults aged 45 and above across Kerala.
A major focus of his address was the workforce bottleneck, particularly the shortage of gastroenterologists to perform colonoscopies. To address this, he proposed innovative solutions, including task shifting through training general physicians and medical officers in basic endoscopic procedures such as flexible sigmoidoscopy. He also advocated for the development of nurse endoscopist certification programs, drawing on successful models from the United Kingdom and other countries. Additionally, he recommended the use of telemedicine platforms for pre-screening triage to ensure that specialist time is reserved for procedures rather than routine consultations.

Dr. Chandramohan presented a multi-source funding strategy designed to ensure sustainability. He proposed that 40% of funding be allocated from the state budget for infrastructure and personnel, 30% from central schemes such as the National Health Mission and Ayushman Bharat for testing and treatment, and 20% from corporate social responsibility (CSR) initiatives and private-sector partnerships to support mobile screening units and laboratory equipment. He also suggested a cross-subsidization model, offering free services for below-poverty-line families while charging nominal fees to above-poverty-line individuals.

Emphasizing accountability, he outlined monitoring indicators and key performance targets. By the end of five years, the program aims to screen at least 50% of the eligible population, ensure that 90% of FIT-positive individuals undergo colonoscopy, increase early-stage (Stage I/II) detection to at least 60%, and reduce Stage IV presentation by 20%.
In conclusion, Dr. Chandramohan stated that Kerala already has the data, infrastructure, and workforce potential required to implement population-based CRC screening. He outlined immediate next steps, including the formation of a dedicated CRC Screening Task Force, a statewide assessment of endoscopy capacity, and the immediate launch of the pilot phase. He closed by asserting that Kerala has the opportunity to become a model for the developing world in colorectal cancer prevention and urged stakeholders not to let this opportunity pass.

ACTION LEADERS:
Dr. Nithin Varghese Abraham, General Surgeon, GG Hospital
Dr. Devika Sunil, Radiation Oncologist, SGMCRF

Chairperson: ***Dr. Subhash****, Senior Consultant Surgical Gastroenterologist, S.K. Hospital*

ACTION LEADERS

Dr. Jeevan, Surgical Oncologist*, NIMS Medicity*

Dr. Sathchith S., *Consultant General and Gastrosurgeon, GG Hospital*

Ms. Ponni Maneesh*, Trustee, Swasthi Foundation*

CANCER CARE IN KERALA VS THE WEST

What We Do Well, Where We Fall Short, and What Comes Next

Keynote Address

Dr. Sarah J. Easaw delivered a reflective address based on more than three decades of clinical practice in the United States and her recent professional experience in Kerala. She presented a balanced comparison of cancer care systems in Kerala and the West, outlining strengths, gaps, and priorities for future improvement.

Dr. Sarah J. Easaw,
Medical Director and Consultant Oncologist, Dr. K. M. Cheriyan Institute of Medical Sciences

She began by setting the context, noting that Kerala records the highest cancer incidence in India. While this statistic is often viewed with concern, she explained that it also reflects relatively strong detection systems. However, she pointed out that breast cancer rates are particularly high, with districts such as Ernakulam showing worrying trends that require focused attention.

Describing the healthcare model in the United States, Dr. Easaw highlighted that cancer screening is largely mandated and covered by insurance. Annual health check-ups routinely include screening discussions, resulting in relatively high compliance, with mammography participation rates of approximately 70–80%. She also emphasized that treatment protocols in the US are highly standardized and strictly evidence-based. Guidelines such as those issued by the National Comprehensive Cancer Network are closely followed, as insurance authorization depends on adherence. This ensures uniformity of care across regions, regardless of geography.

Turning to Kerala, Dr. Easaw highlighted several areas of strength. She praised the oncology workforce for being exceptionally well trained, up to date with global advances, and capable of delivering care at

international standards. She also noted the presence of strong cancer care institutions, including RCC, MCC, and several high-quality private centers, many of which are integrated into the National Cancer Grid. In addition, she underscored Kerala's leadership in community-based palliative care, describing it as among the best globally in terms of accessibility and compassion.

Dr. Easaw then addressed areas where Kerala falls short. A major concern, she noted, is the absence of standardized, state-wide screening guidelines. Differences in opinion among specialists, such as variations between radiologists and gynecologists on mammography frequency, often create confusion for both clinicians and patients. She also spoke about the continued fear and stigma associated with cancer, which contributes to denial and delayed presentation.

Another challenge she highlighted was the practice of doctor shopping, where patients consult multiple doctors in search of reassurance or alternative opinions. This often leads to delays in starting definitive treatment. Dr. Easaw described financial toxicity as the most difficult ethical dilemma faced by clinicians in Kerala. She spoke candidly about the moral distress of knowing that life-extending treatments exist but remain unaffordable for patients who struggle even to pay for basic diagnostic tests.

Looking ahead, Dr. Easaw outlined key priorities for the future of cancer care in Kerala. She emphasized the need to establish clear, consensus-based screening guidelines at the state level. She stressed the importance of making screening and treatment more affordable through stronger government support and partnerships with non-governmental organizations. Most importantly, she called for a renewed commitment to equity, ensuring that access to quality cancer care is not determined by a person's financial status.

She concluded by stating that Kerala already possesses the clinical expertise and institutional capacity needed to lead in cancer care. Sustained progress, she emphasized, will depend on alignment across stakeholders, improved affordability, and a shared commitment to equitable and timely care.

Chairperson: ***Dr. Rona Joseph****, Medical Oncologist, RCC, Thiruvananthapuram*

ACTION LEADERS

Dr. Judy Mary Kurian*, Professor & Head, Radiodiagnosis, Travancore Medical College*

Dr. Harish S.*, Associate Professor, Medical Oncology, Government Medical College, Thiruvananthapuram*

COLORECTAL CANCER CONTROL IN BELGIUM: THE NETHERLANDS MODEL

Keynote Address

Dr. Gabriëlle van Ramshorst delivered a recorded presentation at the Global Preventive Onco Summit 2026, expressing her appreciation for the invitation and the opportunity to share Belgium's experience in colorectal cancer control. Her address focused specifically on the organized screening model implemented in Flanders and the lessons it offers for population-based cancer prevention.

She began by providing an overview of the Belgian landscape, describing Belgium as a small northwestern European country with a population of nearly 12 million. She explained the country's regional structure, with Flanders in the north as the Dutch-speaking and most populous region, Wallonia in the south as the French-speaking region with approximately 3.7 million inhabitants, and Brussels as a bilingual and multicultural capital region with around 1.25 million residents.

Dr. Gabriëlle van Ramshorst,
Surgical Oncologist,
Ghent University Hospital,
Belgium

Dr. van Ramshorst noted that she works at Ghent University Hospital in Flanders, the country's second-largest university and its only government-owned university hospital. She added a light-hearted remark about Belgium's rich food culture, noting that while famous for beer, fries, chocolates, and waffles, it does not necessarily support cancer prevention efforts.

She then outlined the Belgian healthcare system, which follows a Bismarck-inspired model characterized by universal health coverage, strong primary care, and mandatory health insurance funded through a

combination of employer contributions, taxes, and employee payments. However, she emphasized that Belgium's political complexity, with six different governing bodies at federal and regional levels, leads to variation in public health policies. As a result, Flanders benefits from higher GDP and well-organized screening programs, while Wallonia and Brussels rely more heavily on opportunistic screening, where individuals must actively seek testing through physicians or pharmacies.

Dr. van Ramshorst described the Flanders colorectal cancer screening model, introduced in 2013 in alignment with European Union guidelines. The program targets all individuals aged 50 to 74 years. Every two years, a free fecal immunochemical test is mailed directly to eligible individuals' homes. The test is fully free of charge, and when follow-up colonoscopy is required, nearly the entire cost is reimbursed. She emphasized that this organized approach contrasts sharply with opportunistic screening systems.

Sharing outcome data, she noted that organized screening has led to significantly higher participation rates. In 2021, breast cancer screening coverage in Flanders reached approximately 59 percent, well above rates in Wallonia and Brussels and higher than the EU-27 average. For colorectal cancer, Flanders achieved 54 percent screening coverage, substantially outperforming regions that rely on opportunistic models.

A key element of success, she explained, lies in the communication strategy. Flanders uses a centralized website, bevolkingsonderzoek.be, available in more than ten languages, including Arabic, Turkish, Russian, Spanish, and Polish. The platform includes audio options for individuals with low literacy and employs clear, direct messaging such as "No apologies. No excuses. Take the stool test." Results are communicated transparently, with most participants reassured that 94 percent of samples are normal, while 6 percent require follow-up colonoscopy. She explained that among those undergoing colonoscopy, roughly half have no significant findings, while the remainder are diagnosed with polyps or cancer.

Dr. van Ramshorst then discussed the current status and future goals of the program. As of 2023–24, overall screening coverage is approaching 65 percent, with a target of reaching 70 percent by 2035. She acknowledged ongoing challenges, noting that approximately one in four eligible individuals has never participated in screening. However, adherence following a positive FIT result remains high, with 85 to 86 percent undergoing colonoscopy within one year. She identified younger men aged 50 to 55 as the most difficult group to engage.

To address stigma and denial, she described the innovative “Fool” campaign. Standard government letters, she noted, often fail to influence individuals who avoid screening. A turning point came when a prominent Belgian lawyer, who had ignored screening invitations for three years, was diagnosed with colon cancer. He publicly acknowledged his mistake through national media, stating that he had been a “fool” for ignoring the test. Following his testimony, requests for self-testing kits surged by 200 to 800 percent across various regions. Dr. van Ramshorst emphasized that personal stories from respected figures can break stigma far more effectively than official mandates.

In concluding her address, Dr. van Ramshorst summarized key lessons from the Belgian experience. She stressed that organized, population-based screening is essential and far more effective than opportunistic approaches. Communication must be inclusive, multilingual, and adapted to different literacy levels and media preferences. She highlighted the importance of engaging family members, particularly spouses, in motivating participation, and encouraged the use of community role models and public figures who are willing to speak openly about their experiences.

She closed by expressing her appreciation for the opportunity to participate in the summit and noted that she looked forward to reconnecting with colleagues, including Dr. Chandramohan, at SSO 2026 in Phoenix.

Following the recorded presentation, **Dr. Ramesh Rajan**, Chairperson of the session and Professor and Head of Surgical Gastroenterology at Government Medical College, Thiruvananthapuram, engaged Dr. Gabriëlle van Ramshorst in a brief follow-up discussion. He sought her perspective on the relative preference between stool-based tests and colonoscopy in population-level colorectal cancer screening, and raised additional points related to practical implementation.

In response, Dr. van Ramshorst reiterated that while colonoscopy remains the diagnostic gold standard, it is not suitable as a first-line tool for population-wide screening due to its invasive nature, higher cost, and limited acceptability. She emphasized that stool-based tests, particularly the fecal immunochemical test (FIT), are far more effective as an initial screening tool because they are non-invasive, easy to use, and significantly improve participation rates. She clarified that colonoscopy should be reserved for individuals with positive stool test results, ensuring efficient use of specialist resources while maintaining high diagnostic accuracy.

Chairperson: ***Dr. Ramesh Rajan****, Professor and Head, Surgical Gastroenterology, Government Medical College, Thiruvananthapuram*

ACTION LEADERS

Dr. Devin Prabhakar, *Divya Prabha Eye hospital, Managing Trustee, The Divya Prabha Medical Trust*

Dr M S Jayasekhar *- Senior consultant Plastic surgeon*

Dr Karthika Premlal *- Consultant Pediatrician*

Dr Mintu Mathew Abraham - *Medical oncologist, NIMS Medicity, Neyyattinkara.*

Dr Arun A J *- Radiation oncologist S K Hospital*

Dr Teena Nelson *- Radiation oncologist, S P Medifort*

LESSONS LEARNED FROM TOBACCO CONTROL FOR CANCER PREVENTION

Keynote Address

Prof. Dr. Pankaj Chaturvedi delivered an online address reflecting on more than two decades of experience in tobacco control and public health. He expressed his appreciation for the summit's strong focus on prevention, noting that investing in prevention yields far greater returns than concentrating solely on infrastructure and treatment. He emphasized that reducing cancer burden requires societal and governmental commitment, not just hospital-based expansion.

Prof. Dr. Pankaj Chaturvedi,
Director, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Memorial Centre, Mumbai

He first highlighted the power of advocacy, stressing that the anti-tobacco movement in India was a collective effort rather than the work of isolated individuals. Oncologists, directors of Regional Cancer Centres, medical college leaders, and major hospitals came together under the Voice of Tobacco Victims campaign. When clinicians who traditionally treat disease step forward to prevent it, he noted, the impact is transformative. This model of physician-led advocacy has been recognized by both the World Health Organization and the United Nations as exemplary.

Prof. Chaturvedi then distinguished between awareness and awakening. While awareness that tobacco is harmful is widespread, he argued that awareness alone does not change behaviour. He cited collaborations with the Ministry of Information and Broadcasting that mandated anti-tobacco warnings in cinemas, including alerts during on-screen smoking scenes. This intervention significantly reduced consumption. However, true progress requires an awakening, with messaging strong enough to prompt individuals to quit tobacco or seek screening.

Addressing youth engagement, he referred to data from the Global Adult Tobacco Survey, which showed a reduction in tobacco use between 2010 and 2016, driven largely by adolescents and young adults aged 15 to 18 years. Given India's young demographic profile, he emphasized that school-based health programs represent one of the most effective long-term investments for the next two to three decades.

He then turned to emerging challenges related to alcohol and areca nut use. Prof. Chaturvedi stated unequivocally that there is no safe level of alcohol consumption, as alcohol is a Group 1 carcinogen. He cautioned that governments often view alcohol as a major revenue source while overlooking the enormous healthcare and social costs it generates. He urged doctors to stop endorsing the notion of "safe" or "light" drinking, describing it as industry-driven misinformation. Similarly, he highlighted areca nut and pan masala as Group 1 carcinogens that continue to be glamorized by celebrity endorsements. He pointed to the contradiction of using pan masala-related revenue for national priorities, despite judicial recognition that areca nut itself is harmful.
On infection-related cancer prevention, Prof. Chaturvedi emphasized the proven role of Hepatitis B vaccination in preventing liver cancer. With respect to HPV vaccination, he urged caution in public expenditure planning. Drawing from Mumbai data, he noted that cervical cancer incidence declined significantly even without mass vaccination, largely due to improvements in hygiene and sanitation. Providing women with privacy, access to toilets, and basic sanitary facilities, he argued, can dramatically reduce cervical cancer risk and other infections.

He then addressed screening and implementation gaps. While India has strong evidence-based screening guidelines for oral, breast, and cervical cancers, uptake remains poor, with screening rates as low as 3 to 4 percent in some large states. He emphasized the need for simple, frontline screening approaches, including visual inspection for oral cancer, clinical breast examination for breast cancer, and visual inspection with acetic acid for cervical cancer. He noted that much of the global evidence supporting these low-cost methods originates from Tata Memorial Centre studies conducted in India.

Prof. Chaturvedi stressed the importance of ethical screening and affordable care. He described it as unethical to screen asymptomatic individuals, diagnose disease, and then leave them to bear catastrophic out-of-pocket expenses for diagnosis and treatment. He called for seamless coordination between health departments responsible for

screening and medical education departments responsible for treatment, particularly in government medical colleges, to ensure cashless and continuous care pathways.

He concluded by advocating a whole-of-government approach to cancer prevention. Cancer control, he stated, cannot be the responsibility of the Health Ministry alone. Enforcement of tobacco laws requires the Home Department, school-based prevention needs the Education Department, effective taxation and pricing policies involve the Finance Department, and agricultural diversification away from tobacco and areca nut requires support from the Agriculture Department. He also highlighted the underutilized power of the Juvenile Justice Act, particularly Section 77, which prohibits the sale of tobacco and alcohol to minors but remains poorly enforced.

Prof. Chaturvedi concluded by asserting that if doctors unite in sustained advocacy and governments adopt a coordinated, multi-sectoral approach, cancer can be controlled in a sustainable and effective manner.

Chairperson's Remarks by ***Dr. Balagopal P. G.***

Dr. Balagopal P. G., Chairperson of the session, thanked Prof. Chaturvedi for his insightful and experience-driven address. He acknowledged the success of tobacco control efforts in reducing incidence through persistent advocacy and policy enforcement.

Dr. Balagopal noted that India's cancer spectrum is evolving. While tobacco-related cancers may decline, lifestyle-related cancers such as colorectal and breast cancers are rising due to urbanization, dietary changes, and sedentary habits. He emphasized that screening strategies must adapt to this shifting burden.

He also highlighted the growing importance of survivorship, pointing out that improved survival rates bring new challenges related to long-term treatment effects, rehabilitation, and palliative care. He suggested that India's strategy must evolve from a narrow focus on cancer control to a broader concept of cancer continuum care.

He concluded by thanking Prof. Chaturvedi for his valuable insights and for reinforcing the importance of prevention, policy, and coordinated action in cancer control.

Chairperson: **Dr. Balagopal P. G.**, Director, Malabar Cancer Centre

ACTION LEADERS
Dr. Jayakrishnan C., Professor, Community Oncology, RCC, Thiruvananthapuram
Dr Sano A S, Consultant Surgical Oncologist, SGMCRF

PANEL DISCUSSION: POLITICAL WILL AND PUBLIC POLICY IN CANCER CARE

Opening Remarks

Dr. M. V. Pillai,
Chairman - Global Preventive Onco Summit 2026

Dr. M. V. Pillai opened the panel discussion by drawing attention to the rapidly changing global funding landscape. He observed that the United States Secretary of State had recently indicated a withdrawal of funding for science and technology support to several countries, signalling the decline of an era dominated by grants from institutions such as the Ford Foundation, Rockefeller Foundation, and the National Institutes of Health. He emphasized that even global bodies like the World Health Organization remain vulnerable due to their dependence on volatile external funding sources.

Quoting Mahakavi Ulloor's line "Thanikku thane thuna" (one must rely on oneself), Dr. Pillai stressed the urgency of self-reliance in cancer care. With Kerala recording high cancer incidence and mortality, he cautioned that the government alone, constrained by limited tax revenues, cannot shoulder the entire burden of cancer prevention and treatment. He called for improved allocation of GDP toward health and a realistic acceptance that foreign aid can no longer be relied upon.

Invoking Martin Luther King Jr., Dr. Pillai articulated a long-term vision: within the next ten years, Kerala should develop a system in which no cancer patient is forced to incur out-of-pocket expenditure. Acknowledging that late-stage cancers cannot always be cured, he argued that the strategic focus must shift decisively toward early detection. He strongly advocated public-private partnerships, likening cancer care to a house on fire where neighbours step in to help rather than waiting passively for official response. He emphasized that private hospitals already engaged in charitable care must be integrated into a unified public vision.

Keynote Address

Sri. Binoy Viswam expressed his appreciation for being part of the summit and acknowledged Dr. Pillai not only as a physician but also as a thinker deeply engaged with literature and social responsibility. He framed his remarks around the historical and philosophical foundations of prevention.

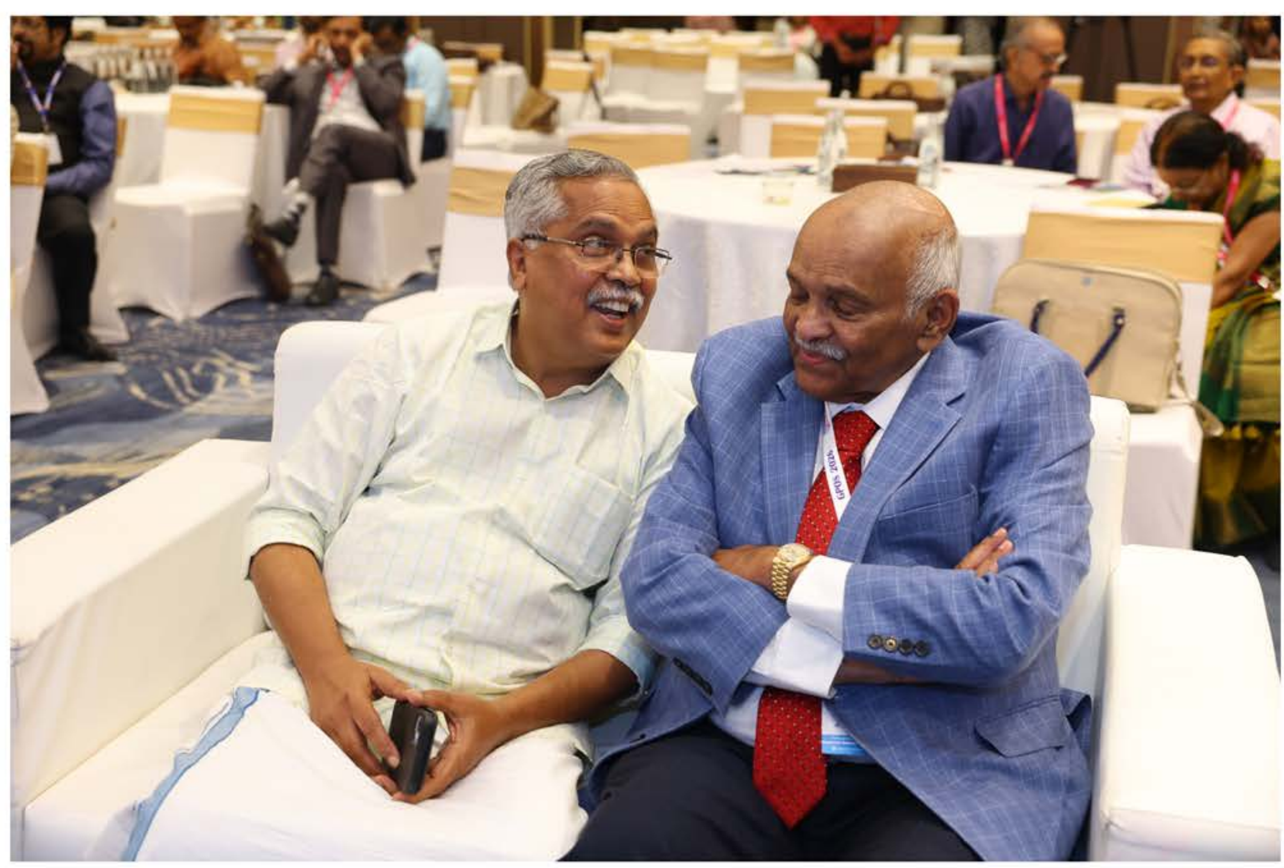
Sri. Binoy Viswam,
General Secretary, CPI
Kerala State

Drawing a compelling parallel, he compared Dr. John Snow, the father of epidemiology, with Sree Narayana Guru. While Snow scientifically identified contaminated water as the source of cholera, Guru offered a simple social message during a diarrhoeal outbreak: fear is futile, drink boiled and cooled water. Sri. Viswam noted that both approaches conveyed the same preventive truth, one through science and the other through social wisdom.

He reflected on Kerala's political legacy, recalling the 1957 Communist Ministry under C. Achutha Menon, which prioritized health and education not merely to advance ideology but to fulfill the unachieved promises of the national movement. Linking prevention to contemporary realities, he stressed that with cancer increasingly affecting those above 55 years of age, education must extend beyond literacy to encompass lifestyle management, emotional resilience, and mental courage. Health, he said, is not confined to medicine alone but is shaped by intellect, conscience, and compassion.

Addressing geopolitics, Sri. Viswam expressed skepticism about reliance on US aid, citing historical withdrawals from UNESCO and current positions on climate change. He criticized the corporate-driven profit-

first mindset of global powers and reiterated that Kerala must chart its own path without waiting for external benevolence. He concluded by affirming political commitment toward a cancer-free Kerala and emphasized that despite ideological differences, the pursuit of a healthy society is a shared goal.



Keynote Address

Adv. K. S. Sabarinathan,
Former MLA and Councillor

Adv. K. S. Sabarinathan spoke from the perspective of a development professional who transitioned into active politics. He began with a stark observation: much of a politician's routine involves attending funerals. Based on his experience, he stated that nearly 60 percent of these deaths are cancer-related, with most cases detected at very advanced stages. He noted the persistent stigma surrounding cancer, where families often whisper "Stage 4" rather than openly discussing the disease.

He identified the critical missing link in Kerala's cancer response as primary detection at the Local Self-Government level. While the state has strong tertiary care institutions such as RCC and medical colleges, early detection has not yet become a political priority for local bodies. Unlike palliative care, which has strong political visibility and community support, early detection remains under-emphasized. He stressed that this imbalance must be corrected.

Adv. Sabarinathan proposed several policy directions. He identified HPV vaccination in schools as a key area for government-led intervention. He argued that Kerala possesses global-level expertise but lacks recognition as a South Asian cancer research hub. To bridge this gap, he called for targeted investments to build world-class research institutions within the state.

He also highlighted financial toxicity as a major social issue, pointing out that Kerala has the highest out-of-pocket health expenditure in India, pushing many families into long-term debt. Acknowledging the decline in foreign funding, he urged the state to identify "new money" by tapping corporate social responsibility funds from major Indian

corporations to support cancer prevention and research. He appealed to senior political leaders to ensure that early detection and research are explicitly included in future political manifestos, moving beyond a sole focus on treatment schemes.

Keynote Address

Sri. C. P. John,
Secretary, CMP Kerala State and Former Member, State Planning Board

Sri. C. P. John presented a structured policy-oriented perspective, outlining five critical intervention areas. He first highlighted a significant technology gap in Kerala's cancer infrastructure, namely the absence of Proton Beam Therapy. While this advanced modality is available in cities such as Chennai and Mumbai, Kerala lacks such a facility. He urged the state to allocate approximately ₹100 crores from the Plan Fund to establish Proton Beam Therapy in a government institution.

He emphasized that shortages of advanced equipment in government hospitals are primarily a public finance issue and called for prioritizing capital expenditure for cancer care in the state budget. He also stressed the need for a massive, statewide early detection campaign, cautioning against complacency rooted in Kerala's historical achievements.

Addressing behavioural and lifestyle factors, Sri. John pointed to the changing disease landscape, including the rise of sexually transmitted infections and their association with certain cancers. He argued that public awareness strategies must evolve to reflect these modern risks.

On the issue of financial protection, he critically reviewed existing support schemes such as Karunya, noting that their effectiveness has diminished over time. He proposed a bold "No Bill Hospital" concept, beginning with cancer care. Under this model, treatment in government cancer centres would be completely free, enabling patients to walk in and walk out without financial burden, funded as a top state priority.

Finally, he suggested leveraging data and narratives from cancer survivors, including public figures, to dismantle fear and stigma and demonstrate that cancer is often curable when detected early.

The panel discussion concluded with a shared consensus that strong political will is indispensable for transitioning from a treatment-centric approach to one centred on prevention and early detection. All speakers agreed on the urgency of updating public policy, exploring innovative funding mechanisms through public finance and CSR, and embedding cancer screening responsibilities within Local Self-Government structures. The session underscored that sustainable cancer control in Kerala will require coordinated political commitment, societal engagement, and long-term vision.

UPSTREAM INTERVENTIONS FOR CANCER CONTROL IN KERALA

World Health Organization Session

Panel Discussion

This landmark hybrid session marked a decisive shift in focus from clinical care to upstream interventions for cancer control. Moderated by Dr. Cheriyan Varghese, the discussion brought together senior experts from the World Health Organization and global public health institutions to examine policy-level and environmental strategies aimed at preventing cancer before its onset.

Session Coordinator:
Dr. Anila Tresa Alukal,
Senior Consultant Gynaecological Oncologist, Sree Gokulam Medical College

The session centred on the four major modifiable cancer risk factors: tobacco use, alcohol consumption, unhealthy diet and physical inactivity, and oncogenic infections, particularly HPV. A clear consensus emerged that while individual awareness and behaviour change are important, they are insufficient on their own. Kerala's rising cancer burden, the panel agreed, can only be addressed through strong legislative enforcement, fiscal measures such as taxation, and structural changes across sectors.

OPENING SEGMENT

Dr. Cheriyan Varghese set the context by describing Kerala's unique epidemiological transition. He highlighted what he termed the "Kerala paradox," where high literacy, strong health systems, and good access to care coexist with a disease profile increasingly dominated by lifestyle-related cancers typically seen in Western countries.

He defined upstream interventions as actions that address root causes such as pricing, availability, marketing, and the built environment, rather than focusing solely on downstream outcomes such as hospital-based treatment. The objective of the session, he explained, was to translate global WHO strategies into actionable, locally relevant policies for Kerala's socio-political context.

Dr. Cheriyan Varghese,
Director, Professor and Head, Prasanna School of Public Health, MAHE Manipal; Former Coordinator, NCD Management, WHO Geneva

HOW TO FURTHER REDUCE TOBACCO USE

Dr. Vinayak Prasad,
Unit Head, No Tobacco Unit, World Health Organization

Dr. Vinayak Prasad emphasized that tobacco remains the single largest preventable cause of cancer, despite Kerala's progress in public smoking bans. He advocated full and uncompromising implementation of the WHO MPOWER framework.

He stressed the need for robust monitoring of emerging trends, particularly the growing use of e-cigarettes and vaping devices among youth, which often escape regulatory oversight. He called for comprehensive protection measures, including truly smoke-free environments without exceptions such as designated smoking rooms. Dr. Prasad also highlighted the importance of strengthening graphic health warnings to counter public desensitization.

Strict enforcement of bans on tobacco advertising, promotion, and sponsorship, especially near educational institutions, was identified as critical. Above all, he underscored taxation as the most effective intervention, advocating higher excise taxes on all tobacco products, including bidis, to reduce initiation and consumption among young people and low-income groups.

WHAT WILL WORK FOR REDUCING ALCOHOL CONSUMPTION

Dr. Dag Rekve,
Senior Technical Officer,
Alcohol, Drugs and
Addictive Behaviours,
World Health Organization

Dr. Dag Rekve addressed alcohol as a Group 1 carcinogen with a clear link to rising incidences of breast, colorectal, and oesophageal cancers. He presented the WHO SAFER technical package as a comprehensive framework for action.

Key measures included strengthening restrictions on physical availability by limiting hours of sale and reducing the density of liquor outlets. He emphasized enforcing drink-driving laws to reshape social norms and integrating brief intervention screening into primary healthcare to identify hazardous drinking early.

Dr. Rekve also called for a total ban on alcohol advertising, including surrogate marketing that targets youth, and advocated pricing policies such as minimum unit pricing and higher taxation. These measures, he noted, are proven to reduce harmful consumption while minimizing impact on moderate users.

INTERVENTIONS TO PROMOTE HEALTHY DIET AND PHYSICAL ACTIVITY

Dr. Swati Bhardwaj,
Senior Public Health Nutrition Expert, Resolve to Save Lives

Dr. Swati Bhardwaj highlighted the role of unhealthy food systems and sedentary lifestyles in increasing cancer risk. She described the current environment as obesogenic, making unhealthy choices easier than healthy ones.

On dietary interventions, she advocated mandatory sodium limits in packaged foods and public campaigns to reduce salt use in home cooking, linking these efforts to reduced stomach cancer risk. She emphasized the elimination of trans fats through strict food safety enforcement and promoted clear front-of-pack warning labels to help consumers make informed choices.

On physical activity, Dr. Bhardwaj stressed that urban planning must prioritise active transport, including safe walking and cycling infrastructure, over car-centric development. She also emphasized the importance of mandatory physical activity in schools to address rising sedentary behaviour among children and adolescents.

HPV VACCINATION AND CERVICAL CANCER CONTROL

Dr. Prebo Barango,
Cross-Cutting Specialist, NCDs and Special Initiatives, World Health Organization

Dr. Prebo Barango presented the WHO's global strategy to eliminate cervical cancer as a public health problem by 2030. He outlined the 90-70-90 targets: vaccinating 90 percent of girls against HPV by age 15, screening 70 percent of women with high-performance tests by ages 35 and 45, and ensuring treatment for 90 percent of women diagnosed with pre-cancer or cancer.

He called on Kerala to prioritize HPV vaccination immediately, noting that the state's strong immunization infrastructure positions it uniquely to achieve these targets faster than any other region in India. He emphasized that eliminating cervical cancer is both scientifically achievable and politically feasible with sustained commitment.

ACTION LEADERS' INTERVENTIONS AND CONCLUDING REMARKS

Dr. Aswathy G. Nath, Senior Consultant Gynaecological Oncologist at PRS Hospital, Thiruvananthapuram, responded to questions on HPV vaccination. She emphasized the safety, efficacy, and long-term benefits of the vaccine in preventing cervical cancer and reiterated the importance of early vaccination, ideally before the onset of sexual activity. She also addressed common myths and concerns, reinforcing that HPV vaccination is a proven public health intervention.

Dr. Mintu Mathew Abraham, Medical Oncologist at NIMS Medicity, Neyyattinkara, addressed questions related to physical activity and cancer prevention. He highlighted the strong evidence linking regular physical activity to reduced risk of several cancers, improved metabolic health, and better treatment outcomes. He encouraged incorporating moderate, sustainable physical activity into daily routines rather than viewing exercise as an intensive or short-term intervention.

Dr. Anoop Paulose, Consultant Medical Gastroenterologist at Sree Gokulam Medical College and Research Foundation, Venjaramoodu, answered questions on the relationship between alcohol and cancer. He explained that alcohol consumption is a well-established risk factor for multiple cancers and reiterated that there is no completely safe level of alcohol intake. He stressed the importance of clear public messaging to counter misconceptions about "safe" or "moderate" drinking.

Dr. Cheriyan Varghese delivered the concluding remarks, drawing together the key messages from the WHO session and the broader discussions. He reiterated that effective cancer prevention requires shifting focus upstream, from individual behaviour alone to policy, environmental, and structural interventions. Dr. Varghese expressed confidence that with coordinated effort and political commitment, Kerala can emerge as a national and global model for preventive oncology.

FUTURE DIRECTIONS IN BREAST CANCER PREVENTION

Keynote Address

Dr. Bharath V. M.,
Senior Consultant Surgical Oncologist, KIMS Hospitals

Dr. Bharath V. M. delivered a forward-looking address focused on the evolving landscape of breast cancer prevention, emphasizing a shift from reactive treatment to predictive and preventive care. He outlined how the future of oncology must balance cutting-edge technological innovation with compassionate, community-based models to ensure equitable impact.

He began by describing a fundamental paradigm shift toward patient-centered care. Traditional healthcare models, he noted, are largely provider-driven and focused on disease pathology, often asking patients what is wrong with them. The emerging model instead asks what matters to the patient, giving equal importance to personal values, fears, and quality of life. Dr. Bharath emphasized that this philosophy must form the foundation for all technological advances in breast cancer prevention.

Addressing next-generation screening and early detection, he highlighted the growing role of precision screening powered by artificial intelligence. AI-enhanced imaging now complements standard modalities such as mammography, ultrasound, and MRI. Acting as a second layer of review, deep learning algorithms generate visual heatmaps that draw attention to subtle abnormalities that may escape the human eye, thereby improving sensitivity and reducing false-negative results.

He also addressed the long-standing challenge of screening women with dense breast tissue, where conventional mammography is often inadequate. To overcome this limitation, he described advanced problem-solving technologies, including Molecular Breast Imaging,

which detects metabolic activity; Contrast-Enhanced Mammography, which combines anatomical detail with vascular information; and Positron Emission Mammography, which provides high-resolution functional imaging.

Dr. Bharath then turned to decentralized and home-based technologies, emphasizing that prevention must extend beyond hospitals into everyday living spaces. Teleconsultations and mobile applications now enable guided breast self-examinations, supported by reminder systems to improve regularity and compliance. He also highlighted emerging innovations such as handheld thermography devices and self-collection biosample kits, which aim to make screening more accessible, less invasive, and more acceptable, particularly for women hesitant to visit healthcare facilities.

One of the most promising frontiers he discussed was the development of breast cancer vaccines. He explained that these fall into two broad categories. Preventive vaccines are being designed for healthy individuals at high risk, such as carriers of BRCA1 or BRCA2 mutations. These vaccines target specific proteins, including alpha-lactalbumin, HER2, and BRCA1-related peptides, training the immune system to recognize and eliminate cancer cells before tumors develop. Therapeutic vaccines, on the other hand, are administered after a cancer diagnosis to reduce the risk of recurrence by stimulating immune responses against residual cancer cells, targeting markers such as MUC1, p53, survivin, and hTERT.

While underscoring the importance of innovation, Dr. Bharath emphasized that equity in healthcare delivery remains paramount. He cited the Kannapuram Model from Kannur, Kerala, as a benchmark for community-led cancer control. This initiative focused on sustained awareness through culturally sensitive communication rather than one-time campaigns. A key component was the creation of a navigator squad comprising trained women volunteers who acted as intermediaries between the community and the health system. These volunteers did more than encourage screening; they supported women throughout the care pathway by coordinating appointments, arranging transport to cancer centers, and providing emotional reassurance.

The impact of this approach, he noted, was striking. In the Kannapuram panchayat, 90 percent of women above the age of 30 underwent breast cancer screening. The patient navigation model significantly reduced dropouts from follow-up investigations, addressing common barriers such as fear, financial stress, and logistical challenges.

In conclusion, Dr. Bharath emphasized that the future of breast cancer prevention lies in combining technological precision with human connection. Harnessing tools such as artificial intelligence and vaccines must go hand in hand with community-driven models like Kannapuram to ensure that scientific advances reach every woman, especially those at the margins. He reiterated that true progress will be measured not by innovation alone, but by how effectively it improves outcomes for the last woman in the line

ACTION LEADERS

Dr (Col) V Radhakrishnan - Deputy Medical Superintendent, GG Hospital, Trivandrum

LESSONS LEARNT FROM BAHRAIN

Leveraging Data to Design Population-Level Screening and Prevention Strategies and the Need for a Mandatory Unique Health ID

Keynote Address

Dr. Chaturbhuj Agarwal,
Consultant Medical Oncologist, Bahrain Specialist Hospital

Dr. Chaturbhuj Agarwal delivered a data-driven and policy-oriented address highlighting how comprehensive health registries, when combined with a mandatory Unique Health ID, can transform cancer prevention and population-level screening. Drawing from Bahrain's experience, he demonstrated how health data can be translated into real-world public health action rather than remaining underutilized statistics.

He began by emphasizing the power of registry-driven public health, noting that population-based registries provide longitudinal data essential for disease surveillance and planning. When effectively used, such registries allow health systems to move from reactive care to proactive prevention. Dr. Agarwal identified the mandatory Unique Health ID as the critical enabler in this process, as it allows seamless linkage of patient data across healthcare providers, minimizes fragmentation, and ensures continuity of care.

Presenting Bahrain as a case study, Dr. Agarwal described the country as a high-income nation with a population of approximately 1.57 million, supported by an integrated public health system coordinated by the Ministry of Health. He outlined Bahrain's investment in a robust digital ecosystem, including the I-SEHA programme, which integrates electronic health records across public and private providers to create a unified patient history. He also highlighted the Sehati mobile application, which gives citizens direct access to their medical records and test results, and the national e-services platform that supports teleconsultations and access to preventive services.

He then explained why such infrastructure is vital in the context of the non-communicable disease burden. In Bahrain, non-communicable diseases account for nearly 75 percent of all deaths, with cancer being the second leading contributor, responsible for approximately 18 percent of NCD-related mortality. Cancer registry data from 1998 to 2011 documented close to 6,000 cancer cases. Dr. Agarwal emphasized that stratifying this data by age and sex allows health authorities to design highly targeted and efficient screening programs focused on populations at greatest risk.

Dr. Agarwal outlined the advantages of a Unique Health ID in screening and follow-up. A mandatory UHID enables automated, age- and condition-specific screening reminders to be delivered directly to individuals through linked digital systems. It also supports advanced risk stratification, allowing algorithms to identify high-risk individuals who may benefit from enhanced surveillance. Importantly, real-time data integration ensures early identification of new cases and prevents patients from being lost to follow-up, a common challenge in fragmented systems.

Moving from data to action, he proposed a policy framework for replication. He stressed the need for a strong legislative foundation that mandates UHID adoption and governs data sharing across sectors. At the same time, he emphasized the importance of safeguarding privacy through robust data governance mechanisms. He also highlighted the necessity of sustained investment in digital infrastructure and workforce training to ensure that such systems are functional and scalable.

In conclusion, Dr. Agarwal stated that Bahrain's experience demonstrates how comprehensive cancer registries combined with a Unique Health ID can fundamentally reshape population health management. He recommended that Kerala and India prioritize investment in registry infrastructure, adopt UHID systems as foundational tools, design screening programs based on real-time data insights, and foster collaboration among clinicians, data scientists, policymakers, and the public to ensure long-term success.

He then explained why such infrastructure is vital in the context of the non-communicable disease burden. In Bahrain, non-communicable diseases account for nearly 75 percent of all deaths, with cancer being the second leading contributor, responsible for approximately 18 percent of NCD-related mortality. Cancer registry data from 1998 to 2011 documented close to 6,000 cancer cases. Dr. Agarwal emphasized that stratifying this data by age and sex allows health authorities to design highly targeted and efficient screening programs focused on populations at greatest risk.

Dr. Agarwal outlined the advantages of a Unique Health ID in screening and follow-up. A mandatory UHID enables automated, age- and condition-specific screening reminders to be delivered directly to individuals through linked digital systems. It also supports advanced risk stratification, allowing algorithms to identify high-risk individuals who may benefit from enhanced surveillance. Importantly, real-time data integration ensures early identification of new cases and prevents patients from being lost to follow-up, a common challenge in fragmented systems.

Moving from data to action, he proposed a policy framework for replication. He stressed the need for a strong legislative foundation that mandates UHID adoption and governs data sharing across sectors. At the same time, he emphasized the importance of safeguarding privacy through robust data governance mechanisms. He also highlighted the necessity of sustained investment in digital infrastructure and workforce training to ensure that such systems are functional and scalable.

In conclusion, Dr. Agarwal stated that Bahrain's experience demonstrates how comprehensive cancer registries combined with a Unique Health ID can fundamentally reshape population health management. He recommended that Kerala and India prioritize investment in registry infrastructure, adopt UHID systems as foundational tools, design screening programs based on real-time data insights, and foster collaboration among clinicians, data scientists, policymakers, and the public to ensure long-term success.

Chairman's Remarks by **Mr. K. S. Shibukumar**, Head of Engineering Services, Adani Airports, Thiruvananthapuram International Airport - Chairperson of the session

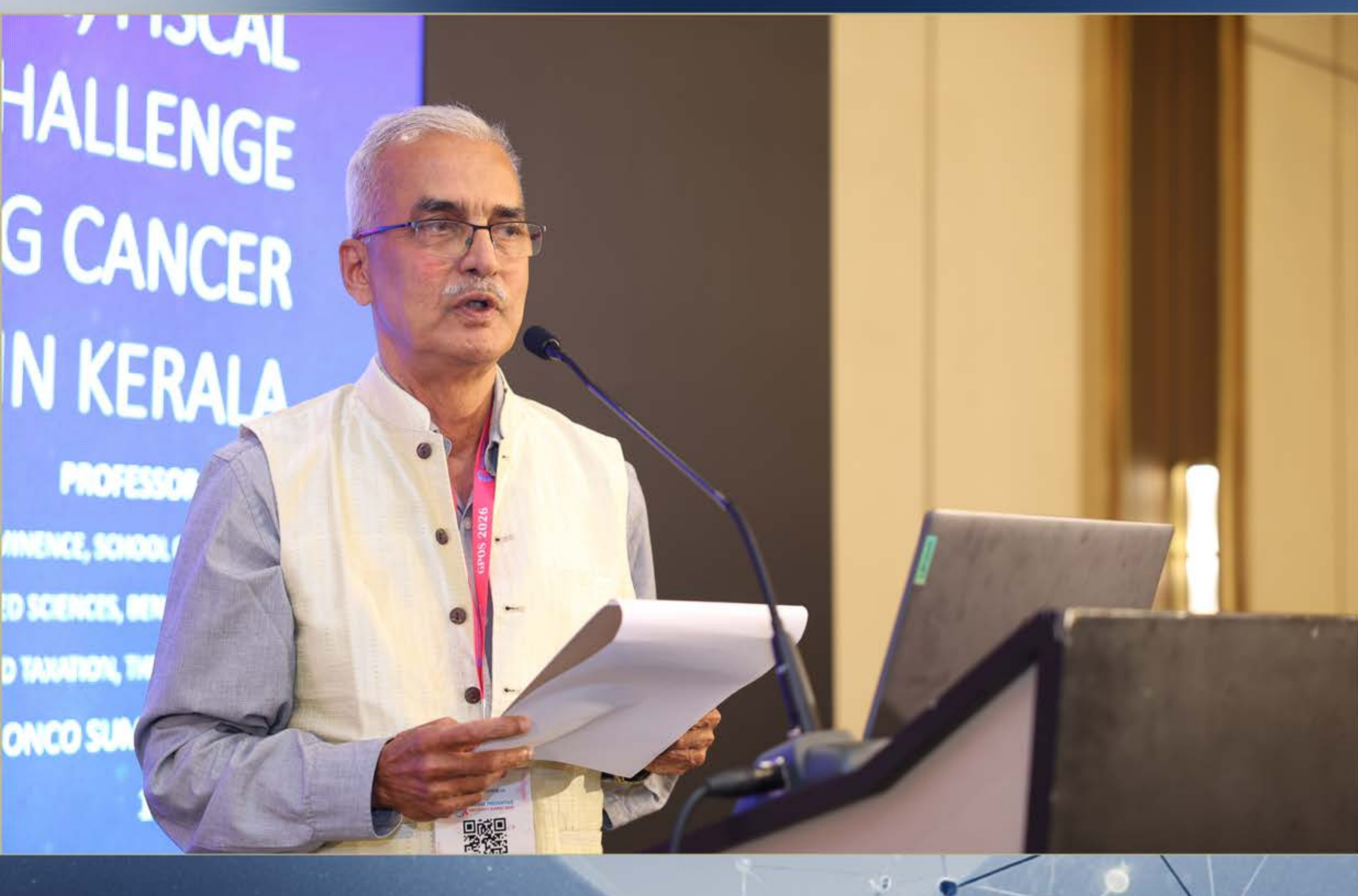
Mr. K. S. Shibukumar reflected on the discussion from the perspective of infrastructure and systems development. He noted that the session addressed an area where healthcare and infrastructure intersect, namely data systems and digital identity.

Drawing parallels with the aviation sector, he emphasized that robust infrastructure forms the backbone of any complex operation, whether managing airports or delivering population-scale healthcare. He stated that the fight against cancer cannot be led by clinicians alone and requires a coordinated ecosystem involving government, healthcare providers, technology partners, and the corporate sector.

Mr. Shibukumar expressed the Adani Group’s openness to supporting such initiatives and invited the Swasthi Foundation to submit a formal proposal. He affirmed that corporate participation can play a meaningful role in strengthening data-driven cancer prevention strategies and advancing public health outcomes.

ACTION LEADERS:
Dr. Vivek George, Professor & Head, Department of Pathology, SGMCRF
Dr Kalaranjini K V - Professor of Pathology, SGMCRF

HEALTH TRANSITION, FISCAL CRISIS, AND THE CHALLENGE OF FINANCING CANCER PREVENTION IN KERALA



Keynote Address

Professor D. Narayana addressed the session on Health Transition, Fiscal Crisis, and the Challenge of Financing Cancer Prevention in Kerala. In his address, he focused on the intersection of three critical realities confronting the state: Kerala's advanced health transition, its growing fiscal stress, and the structural difficulty of financing cancer prevention within the existing health system.

Professor Narayana began by reflecting on the internationally celebrated "Kerala Model" of health, which is often cited as an example of good health outcomes achieved at relatively low cost.

Professor D. Narayana,
Former Director, Gulati Institute of Finance and Taxation (GIFT); Former RBI Chair at the Centre for Development Studies (CDS)

He noted that Kerala was the first Indian state to complete the demographic and health transition, with a life expectancy of 75 years compared to the national average of 70. The state also has one of the highest densities of medical institutions and trained healthcare personnel in the country. However, he cautioned that this success has created a paradox. In recent years, Kerala has emerged as the highest healthcare spender among Indian states, prompting a critical question as to why a state known for efficiency is now spending so much on health care.

He went on to examine public spending patterns using data from the National Health Accounts (2021-22). While Kerala spends 9.7 percent of its General Government Expenditure on health, a proportion comparable to states such as Tamil Nadu, Maharashtra, Gujarat, and Odisha, the real divergence lies in per capita spending. Kerala's government health expenditure stands at ₹4,338 per person, far higher than comparable states. West Bengal spends only 57 percent of this amount, Tamil Nadu 79 percent, Maharashtra 66 percent, and Gujarat 64 percent. Among

major Indian states, Kerala thus bears the heaviest per capita public health burden.

Professor Narayana highlighted that high public spending has not translated into lower household costs. On the contrary, Kerala records the highest per capita out-of-pocket health expenditure in the country at ₹7,889, more than double that of states such as Tamil Nadu or Odisha. When public and private spending are combined, total per capita health expenditure in Kerala reaches ₹13,343, almost twice that of most large Indian states. He emphasized that this contradiction lies at the heart of why financing cancer prevention remains so constrained.

He identified the cost of end-of-life care as a major driver of this expenditure. Drawing on international evidence, including from the United States, he explained that medical systems tend to aggressively treat patients in the final months of life, often at the expense of quality of life. Although more than 70 percent of people globally express a preference to die at home, many die in hospitals due to inadequate symptom control outside institutional settings. The economic consequences are substantial, with studies showing that end-of-life care costs are nearly seven times higher for patients who die in hospitals compared to those who die at home. Indian data, including findings from the NSS 75th Round, reveal a similar pattern, particularly among individuals aged 60 years and above.

Kerala's demographic profile, he noted, intensifies this challenge. Nearly 12.9 percent of the state's population is aged 60 and above, compared to 8.1 percent nationally. As a result, more than 71 percent of all deaths in Kerala occur in this age group, and a disproportionately high number of these deaths take place in hospitals. The combination of an aging population, hospital-centric deaths, and medicalized end-of-life care significantly inflates healthcare expenditure, crowding out resources that could otherwise be directed toward cancer prevention and early detection.

Professor Narayana then turned to lessons from other countries, noting that several European health systems have responded to similar pressures by investing in social care at the end of life. Evidence from the United Kingdom and Europe shows that when local authority-funded social care is available, hospital admissions, inpatient days, and outpatient visits decline substantially in the final year of life. Despite Kerala's global reputation in palliative care, he pointed out that the state has not yet integrated social care into its health system in a meaningful way, representing a missed opportunity to reduce costs while improving

dignity at the end of life.

Addressing the role of health insurance, Professor Narayana cautioned against viewing it as a solution to the financing problem. Only about 20 percent of Indians are insured, and over three-fourths of this coverage is government-funded. Private insurance remains largely confined to the wealthiest sections of society and cannot generate surplus resources for prevention. He stressed that if funds for cancer prevention are to be found, they must come from releasing resources currently locked into expensive hospital-based care rather than from expanding insurance coverage.

He emphasized that while Kerala has made commendable progress in palliative care, its impact on reducing end-of-life hospitalization and expenditure has been limited due to weak integration with primary care and social services. He argued that integrating palliative care with structured social care would enable better symptom control, stronger caregiver support, and dignified home-based care. Such integration, he noted, could significantly reduce hospital deaths and free fiscal space for upstream interventions such as cancer screening and prevention.

In concluding his address, Professor Narayana urged the audience to confront Kerala's fiscal reality. He noted that the state's economy grew at an average of 4.8 percent annually between 2012 and 2022, below the national average. The debt-to-GSDP ratio has crossed 38 percent, fiscal and revenue deficits remain high, and Kerala collects only 12.6 percent of its GSDP as revenue, well below comparable states. Despite this fiscal stress, nearly 40 percent of new government employment in recent years has been in the health sector, further tightening fiscal space.

Professor Narayana concluded by stating that cancer prevention in Kerala cannot be financed through incremental budgeting or wishful thinking. It requires deep structural reform in how end-of-life care is managed, how social care is integrated into the health system, and how avoidable hospital expenditure is reduced. Unless these systemic inefficiencies are addressed, he warned, cancer prevention will remain a policy aspiration rather than a funded reality.

LIFESTYLE MODIFICATION AND BREAST CANCER PREVENTION

Keynote Address

Dr. Rajyasree Narayanan Kutty,
Specialist Breast Surgeon & Founder, Barakat Al Noor Clinic, Muscat, Oman

Dr. Rajyasree Narayanan Kutty addressed the session on Lifestyle Modification and Breast Cancer Prevention. In her address, she emphasized that cancer prevention is a shared responsibility and highlighted lifestyle modification as one of the most powerful and accessible tools available for reducing breast cancer risk.

Dr. Rajyasree began by challenging the common perception that cancer is largely a genetic inevitability.

She noted that while certain risk factors such as genetics are non-modifiable, scientific evidence shows that up to 80 percent of cancers can be prevented through primary prevention strategies linked to daily lifestyle choices. She stressed that this understanding fundamentally shifts the focus of cancer control from treatment alone to prevention through conscious behavioural change.

She explained that breast cancer prevention through lifestyle modification rests on several interrelated factors. Maintaining a healthy body weight, particularly in postmenopausal women, plays a critical role, as obesity significantly increases breast cancer risk. Adequate and quality sleep was identified as equally important, with six to seven hours of rest being essential to maintain immune function and hormonal balance. Dr. Rajyasree highlighted the importance of a balanced diet rich in fruits and vegetables while limiting processed foods and excessive sugar intake, noting that diet forms the foundation of cellular health. She also drew attention to the role of chronic stress, explaining that prolonged stress leads to inflammation and the release of stress hormones that can suppress immune surveillance and potentially accelerate tumour progression. Regular physical activity, she

emphasized, is non-negotiable, as it helps regulate key hormones such as insulin and estrogen, both of which are closely linked to breast cancer development.

Dr. Rajyasree further structured breast cancer prevention around three essential principles: prevention, protection, and periodic examination. She reiterated that adopting healthy lifestyle practices constitutes the first step in prevention, while protection involves minimizing exposure to known carcinogens such as tobacco and excessive alcohol. Equally important, she stressed, is the need for regular screening and periodic examinations, reminding the audience that early detection remains one of the most effective strategies for improving survival outcomes. She encouraged individuals to remain aware, alert, and consistent with health check-ups.

She underscored that primary prevention cannot rest solely on individual effort and must be supported through education and advocacy at the community level. Clinicians and health workers, she noted, have a responsibility to integrate preventive counselling into routine care. Schools and colleges play a crucial role in instilling healthy habits early in life, while women's groups can provide peer support that encourages both lifestyle change and participation in screening programs. Such collective action, she explained, can help reduce fear and stigma surrounding breast cancer while increasing early detection, survival rates, and ultimately reducing mortality, morbidity, and healthcare expenditure.

Drawing from her experience in Oman, Dr. Rajyasree highlighted the work of the Oman Cancer Association as an effective model of NGO-led cancer prevention. She described how the Association has, for over thirteen years, organized annual walkathons to raise awareness and funds for cancer prevention. The organization operates a mobile mammography unit and maintains a dedicated facility for training and support. It provides free training in self-breast examination and clinical breast examination, along with ultrasound services, making it the only non-governmental organization in the region to offer free cancer prevention and screening services at both national and regional levels. She also noted the Association's contribution to palliative care through training and supportive services, bridging gaps in comprehensive cancer care.

In conclusion, Dr. Rajyasree emphasized that lifestyle modification is a powerful means of empowerment against breast cancer. By managing weight, ensuring adequate sleep, maintaining a healthy diet, reducing

stress, and engaging in regular physical activity, individuals can significantly lower their risk. She urged the audience to remain aware, stay alert, and make regular health check-ups an integral part of everyday life, reaffirming that prevention, when practiced consistently, has the potential to save lives.

Chairperson: **Dr. Jayanand Sunil B.**, Senior Consultant Surgical Oncologist & Co-ordinator, KIMS Hospital, Trivandrum

ACTION LEADERS
Dr. Aswathy Satheesh, Senior Consultant Anaesthetist, GG Hospital
Dr. Jojo Joseph Antony, Associate Professor, Dept. of Medicine, SGMCRF
Dr Neeraja P N - Consultant Medical Oncologist, NIMS Medicity, Neyyattinkara
Dr. Sameeksha, GG Hospital

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN ONCOLOGY

Keynote Address

Mr. Jay Mohan,
Founder and Chief Executive Officer of Rifluxyss Softwares, USA

Mr. Jay Mohan addressed the session on Artificial Intelligence and Machine Learning in Oncology. In his address, he sought to demystify artificial intelligence and clarify its role in modern cancer care, emphasizing that technology is not intended to replace clinicians but to empower them.

Mr. Mohan began by underscoring a fundamental principle: artificial intelligence cannot make medical decisions and cannot assume clinical responsibility. He stressed that accountability must always rest with the physician. AI, he explained, functions as a decision-support tool that offers suggestions, risk scores, alerts, and pattern recognition, while the final judgment and ethical responsibility remain firmly in human hands.

He went on to explain why oncology is particularly well suited for the integration of artificial intelligence. Modern cancer care, he noted, is characterized by extreme complexity, with clinicians required to synthesize vast amounts of data including radiological imaging, pathology slides, genomic profiles, and longitudinal clinical histories. Even small variations in these datasets can lead to significantly different treatment decisions. In addition to complexity, the sheer volume of data presents a challenge, as a single patient may generate multiple CT, MRI, and PET scans along with gigabytes of high-resolution pathology images over the course of treatment. Time pressure further compounds the problem, as early diagnosis and timely intervention often determine outcomes, leaving little margin for delay or error.

Mr. Mohan described how artificial intelligence can support clinicians across the cancer care continuum. In early detection, AI can act as a second reader, identifying subtle abnormalities that may be overlooked due to human fatigue or workload. By flagging suspicious regions on imaging studies through visual cues such as heatmaps or bounding boxes, AI systems can reduce missed early cancers. He cited examples such as iCAD Profound for mammography, Rayscape LUNG CT for lung nodule tracking, and Guardant360 for analyzing liquid biopsy data.
In pathology, he explained that grading and interpretation can be subjective and vary between observers and institutions. AI introduces consistency by quantitatively analyzing features such as mitotic figures, nuclear size, and cellular density, ensuring uniform interpretation across laboratories. Tools such as Proscia Concentriq and Paige Prostate were cited as examples that assist pathologists in identifying tumors and standardizing grading.

Mr. Mohan also highlighted the role of AI in supporting treatment decisions. He noted that patients with similar stages of disease often respond differently to the same therapy. By analyzing outcomes from thousands of comparable cases, AI systems can estimate the likelihood of benefit and potential toxicity for specific treatment regimens. Platforms such as IBM Watson for Oncology and Flatiron OncoAnalytics were mentioned as tools that leverage evidence-based guidelines and real-world data to assist clinicians in optimizing treatment choices.
Another critical area he addressed was clinical trial enrollment. He observed that many patients who could benefit from trials are never enrolled because manual screening is labor-intensive and time-consuming. AI can continuously scan electronic health records to match patients with suitable clinical trials in real time. Tools such as Antidote Match and TriNetX were cited as examples that enable rapid identification of eligible patient cohorts.

While outlining these benefits, Mr. Mohan cautioned against unrealistic expectations. He emphasized that AI systems are only as reliable as the data on which they are trained. Poor-quality or non-representative data can introduce bias, particularly if training datasets do not reflect diverse populations. He also noted that AI performs less reliably in rare cancers where data is limited and may struggle in complex clinical scenarios where multiple diseases coexist.

Looking ahead, Mr. Mohan invited the audience to envision a future oncology workflow, possibly by 2035, in which artificial intelligence seamlessly supports clinical practice. In such a setting, AI would

organize and summarize relevant patient data before consultations, integrate radiology, pathology, and genomic information into unified tumor board platforms, and support the design of personalized care pathways based on tumor biology. Most importantly, by handling data aggregation and analysis, AI would free clinicians from administrative burden, allowing them to spend more meaningful time with their patients.

In conclusion, Mr. Mohan reiterated that artificial intelligence should be viewed not as a replacement for human judgment, but as a powerful ally in the fight against cancer. When used responsibly and ethically, he noted, AI has the potential to enhance accuracy, efficiency, and compassion in oncology care.

Chairperson: ***Dr. Arun Mohan****, Senior Consultant Radiologist, SGMCRF*

ACTION LEADERS
Dr. Visakh Prasad*, Associate Professor, Dept. of Radiology, SGMCRF*
Dr. Prabhachandran Nair*, Senior Consultant Pulmonologist, GG Hospital*
Dr. Abdul Shaheed P.P.*, Medical Oncologist, KIMS Trivandrum*
Dr. Malini*, Senior Consultant Radiologist, Metroscans*

STORIES OF HOPE: ROLE OF CINEMA AND MEDIA IN ELIMINATING FEAR OF CANCER

Special Panel Discussion

Moderator: **Dr. Ansar P. P.**, Professor of surgery and head, division of surgical and gynaecological oncology, SGMCRF; GG Hospital; Organizing secretary, GPOS 2026

DISTINGUISHED PANELISTS:
Ms. Cuckoo Parameswaran, Secretary General, AMMA; Vice Chairperson, Kerala Chalachitra Academy
Ms. Shyla Thomas, Lyricist, Media Professional & Technology Entrepreneur
Ms. P.R. Praveena, News Editor, News Malayalam
Mr. Markose Abraham, Senior Media Personnel & Advisory Board Member, Swasthi Foundation
Mr. Raveendranath, HR Head, Asianet Broadband
Mr. Sabu Cheriyan, Vice President, Film Chamber of Commerce & Trustee, Swasthi Foundation

The special panel discussion on Stories of Hope: Role of Cinema and Media in Eliminating Fear brought together distinguished voices from cinema, print, television, and digital media to examine the powerful role of storytelling in shaping public attitudes toward cancer.

Dr. Ansar P.P. opened the session by drawing attention to what he described as the most persistent and invisible enemy in cancer control: fear. He explained that despite advances in medical science, the cycle of fear leading to stigma, stigma to delay, and delay to death continues to dominate public response to cancer. Citing data from Kerala, he noted that cancer incidence has risen sharply from approximately 39,000 cases in 2015 to over 61,000 cases in 2024, translating to a rate of 173 per 100,000 population. He emphasized that one in every fifty families in the state is now directly affected by cancer. Against this backdrop, he argued that saving lives requires a fundamental shift in public narrative, from stories centred on tragedy and inevitability to stories rooted in hope, survivorship, and cure.

The discussion turned to the role of mass media in shaping fear and hope. **Mr. Raveendranath** observed that fear has traditionally dominated media coverage because it attracts attention and viewership. Cancer, he noted, is almost instinctively associated with death in the public imagination. However, he pointed out that sustained awareness and counselling can gradually transform fear into readiness to seek care. He emphasized that the media must consciously amplify messages of treatability and survival, shifting public perception away from cancer as a death sentence toward the reality of life after cure.

Ms. Shyla Thomas explored the psychological barriers that prevent even educated women from participating in screening programs. She observed that cancer has become a shared social reality, present in everyday life yet surrounded by silence. The resistance to screening, she explained, arises from the fear that a diagnosis marks the end of life as one knows it. She stressed that early detection must be normalized in the same way as routine checks for blood pressure or blood sugar. She also noted that media narratives often focus on the suffering associated with treatment rather than on outcomes and recovery, reinforcing fear instead of encouraging timely screening.

Representing the film industry, **Ms. Cuckoo Parameswaran** reflected on how cinema has historically portrayed cancer. She noted that for decades, cancer functioned as a dramatic device in films, often reserved for tragic climaxes or anti-climaxes, with characters unable even to pronounce the disease's name, symbolizing doom. Although public awareness has improved and medical terminology has entered common usage, the emotional connotation of cancer as loss and inevitability persists. She emphasized that cinema, as both art and mass entertainment, carries a responsibility to reshape this narrative. Just as films have influenced social attitudes toward love, justice, and resilience, she argued, they must now portray cancer as a challenge that can be faced and overcome, highlighting survivorship and continuity of life.

Mr. Markose Abraham focused on the educational responsibility of the media. While acknowledging that the media is often criticized for sensationalism, he argued that this tendency can be countered by prioritizing what he termed "prevention journalism." He urged medical professionals to communicate in language that is accessible to the general public, avoiding technical jargon that can alienate and frighten audiences. He also highlighted the financial fear associated with cancer, noting that anxiety about treatment costs often compounds fear of the disease itself. He called on the media to actively inform the public about government support mechanisms and financial assistance, which could significantly reduce hesitation and distress.

Ms. P.R. Praveena addressed the communication gap between the medical community and the public. She observed that while doctors possess scientific knowledge, the media has reach and influence. The gap, she noted, arises because medical language is often inaccessible to lay audiences. She urged a collaborative approach in which media outlets move beyond treating cancer solely as a tragedy or health bulletin item. By highlighting stories of survival and resilience, she argued, the media can normalize the idea that life continues after a

cancer diagnosis. She encouraged doctors to actively partner with journalists to share positive outcomes and success stories.

Mr. Sabu Cheriyan spoke about the proactive role the film industry can play in reducing fear. He critiqued the current approach to statutory warnings shown before films, describing them as excessively graphic and fear-inducing. Such warnings, he argued, reinforce revulsion rather than promoting constructive awareness. He proposed replacing these with short, inspiring messages featuring cancer survivors leading fulfilling lives. He also committed to encouraging filmmakers to integrate cancer awareness organically into mainstream commercial cinema, portraying protagonists who survive and thrive after cancer, thereby creating a powerful and positive impact on audiences at a subconscious level.

The session concluded with a strong consensus on the life-saving potential of hope-driven narratives. **Dr. Ansar P.P.** closed the discussion by presenting a projection based on breast cancer data from Kerala. He noted that current early-stage detection rates remain low, with five-year survival around 61.5 percent. If fear is reduced and population-level screening improves, Stage 1 detection could rise to nearly 81 percent, similar to outcomes seen in countries like England. Such a shift, he emphasized, could save close to 2,000 lives every year in Kerala alone. He reiterated that timely diagnosis saves lives, that cancer is curable in most cases, and that the window for cure is often narrow, sometimes just weeks from the onset of symptoms. The panel concluded with a shared commitment to telling stories of hope, affirming that cancer need not be the end of the story, but a chapter that can be survived and overcome.

UNITED AGAINST CANCER - HOW SOCIETY SHINES A LIGHT ON HOPE?

Moderator: **Dr Arya A R**, Senior consultant Ophthalmologist

DISTINGUISHED PANELISTS:
Ms. Mallika Sukumaran, Senior Cine Artist
Shri Gopinath Muthukad, Magician and motivational speaker; Trustee, Swasthi Foundation
shri Sabu Cheriyan, Vice President, Film Chamber of Commerce; Trustee, Swasthi Foundation
Baby Mathew Somatheeram Global President -World Malayalee Council (WMC); Advisory Board Member, Swasthi Foundation
Ms. Shyla Thomas, Lyricist, Media Professional & Technology Entrepreneur
Ms. P.R. Praveena, News Editor, News Malayalam
Mr. Markose Abraham, Senior Media Personnel & Advisory Board Member, Swasthi Foundation
Mr. Raveendranath, HR Head, Asianet Broadband
Mr. Sabu Cheriyan, Vice President, Film Chamber of Commerce & Trustee, Swasthi Foundation

Mrs. Mallika Sukumaran addressed the gathering by reflecting on how the evolution of medical science has transformed society's understanding of disease and fear. She noted that during her childhood, illnesses such as smallpox, leprosy, and tuberculosis were regarded as death sentences, evoking widespread panic and social stigma. With scientific progress, however, humanity learned that these diseases could be treated and cured. As time passed, attention shifted to ailments of vital organs such as the heart, liver, and kidneys, and eventually to cancer, which emerged as the most feared of all. She observed that changing lifestyles and dietary habits may be contributing to the rise of such diseases. Mallika Sukumaran acknowledged that medical science has consistently responded to new health challenges by developing innovative treatments, and it is encouraging that doctors today are able to manage cancer and other major illnesses to a significant extent.

She pointed out that while the public increasingly looks toward cancer treatment systems, a major source of fear is not just the disease itself, but the perceived financial burden of treatment. Often, she remarked, the fear of unaffordable care outweighs the fear of cancer. She expressed hope in the fact that dedicated doctors are committing their lives to this cause. Speaking personally, she shared her pride in seeing three generations of her family involved in this collective effort,

including her brother, herself, her son Prithviraj, and her granddaughter Prarthana, who rendered the opening song of the event. She pledged her support for advocating strong government-level treatment schemes to ensure that quality cancer care is accessible to all, irrespective of economic status. Stressing the importance of equity, she asserted that treatment should never be determined by wealth or poverty. Drawing from her familiarity with her elder brother's lifelong dedication to medicine, she expressed optimism that with the cooperation of leading scientific minds, Kerala could move toward becoming cancer-free.

She emphasized that awareness is the most powerful tool to dispel the fear surrounding cancer. The entrenched belief that a cancer diagnosis inevitably leads to death must be challenged and dismantled. She underlined the importance of timely diagnosis and seeking care from qualified medical professionals, cautioning against delays caused by reliance on ottamooli or folk remedies, which can be dangerous. She reminded the audience that even minor illnesses can turn fatal if neglected, and therefore cancer alone should not be viewed with disproportionate fear. She also stressed the need to widely publicize information about hospitals and institutions that provide treatment support to economically disadvantaged patients.

Mr. Gopinath Muthukad shared a deeply personal narrative that underscored the life-saving power of early detection and mental strength. He recalled first encountering the word "cancer" during his sixth-grade years, when his mother was diagnosed with uterine cancer. She underwent surgery at Kozhikode Beach Hospital, where her uterus was removed. Despite the diagnosis, his mother displayed remarkable confidence and resilience, and he credited her survival to early detection and her unwavering self-belief. Today, at 90 years of age, she continues to live a healthy life. Through this experience, he conveyed that cancer survival is not an exception but a reality when diagnosis is timely and confidence is strong. He also referenced the book "Cancer Man to Iron Man" by Nithin Valsan as a testament to the human spirit's ability to overcome cancer. Through his art of magic, he extended a broader message of hope, love, and courage to society.

Mr. Sabu Cherian addressed the psychological barriers that prevent people from participating in cancer screening. He observed that fear remains the primary reason why individuals hesitate to get tested. He suggested that technological advancements, including Artificial Intelligence-based screening tools, could help reduce anxiety by making tests more accessible and less intimidating. Emphasizing the role of public policy, he argued that the government should consider making certain cancer screening tests mandatory. Drawing a parallel with the COVID-19 vaccination drive, he noted that widespread compliance was achieved only after vaccination certificates became compulsory. In a similar vein, he proposed that screenings such as breast cancer screening for women above the age of 40 should be mandated, stating candidly that Malayalis tend to adhere more strictly when regulations are clearly enforced.

Mr. Baby Somatheeram offered a holistic perspective on cancer care, highlighting the role of complementary practices and collective support. He shared the example of a woman from Germany who has survived cancer for over 30 years, attributing her sustained well-being to the practice of yoga. He emphasized that successful cancer care does not rely on doctors alone. According to him, five groups play a crucial role in the cancer journey: doctors, nurses, family members, friends, and society at large. When these five pillars work together in harmony, he asserted, resistance against cancer becomes significantly stronger.

Together, these voices reinforced a central message of the summit: fear, financial anxiety, and misinformation are as formidable as the disease itself. Through awareness, early detection, supportive policy, community engagement, and hope-driven narratives, cancer can be confronted not as a death sentence, but as a challenge that society is fully capable of overcoming.

COLORECTAL CANCER SCREENING – THE CHINA MODEL

Keynote Address

Dr. Liu Yang,
Professor & Director,
Colorectal Cancer Centre,
Jiangsu Cancer Hospital,
China

Dr. Liu Yang, Professor and Director of the Colorectal Cancer Centre at Jiangsu Cancer Hospital, China, delivered a recorded address on Colorectal Cancer Screening: The China Model. He began by expressing his gratitude to Dr. Chandramohan for the invitation and conveyed his apologies for being unable to attend the summit in person due to unavoidable circumstances. He noted his appreciation for the opportunity to share China's experience through a video presentation.

Dr. Liu Yang opened his address by outlining the fundamental objective of the China Model, which is to build a sustainable, long-term, population-based colorectal cancer screening system. He explained that the approach is designed around risk stratification to ensure efficiency and optimal use of resources. China, he noted, is in the process of transitioning from opportunistic screening to early detection as a basic public health service, a necessity given the country's population of over 1.4 billion. He observed that India faces a similar challenge in managing cancer prevention at scale due to its large population.

He then explained the urgency that prompted China to prioritize colorectal cancer screening. Colorectal cancer, he stated, is rising rapidly in China and has become the second most common cancer as well as the leading cause of cancer-related death. The most serious challenge, however, lies in late diagnosis. More than 80 percent of patients in China are diagnosed at advanced stages, namely Stage III or Stage IV. This results in poor treatment outcomes and imposes a severe

economic burden on families and the healthcare system.

Recognizing this crisis, Dr. Liu Yang explained that the Chinese government elevated cancer control to a national strategic priority under the “Healthy China 2030” initiative. As part of this national framework, a clear and measurable goal was set to increase the overall five-year cancer survival rate by 15 percent by the year 2030. To achieve this, the government launched and funded large-scale national cancer screening programs, embedding early detection into public health policy.

Dr. Liu Yang then described the practical structure of China’s colorectal cancer screening program, emphasizing that screening a population of 1.4 billion people requires efficiency rather than uniform intensity. China therefore adopted a two-step screening strategy. In the first step, the general population aged 40 to 74 years undergoes primary screening using a risk assessment questionnaire combined with a simple fecal immunochemical test. In the second step, diagnostic colonoscopy is reserved exclusively for individuals identified as high-risk during primary screening. He explained that individuals are stratified into high, intermediate, and general risk categories based on family history and personal history of colorectal polyps, ensuring that limited endoscopic resources are directed to those who need them most.

To demonstrate the effectiveness of this approach, Dr. Liu Yang cited evidence from Shanghai, where millions of elderly residents have been screened through organized programs. In this organized screening cohort, 45 percent of colorectal cancers were detected at very early stages, specifically Stage 0 and Stage I. In contrast, routine clinical diagnosis in non-screened populations detects only about 10 to 15 percent of cancers at early stages. Over a decade, he noted, this organized screening approach has led to a significant reduction in mortality, clearly demonstrating that population-based screening saves lives.

He emphasized that strong community engagement is central to the China Model’s success. China employs a “Grid Management System,” in which community health centers serve as the frontline of screening implementation. These centers identify eligible residents, distribute free FIT kits, and facilitate participation. Individuals who test positive are referred through a fast-track system to large hospitals for colonoscopy. To improve follow-up rates, performance-based incentives are provided to community doctors, ensuring that high-risk individuals complete diagnostic evaluation.

Dr. Liu Yang also highlighted the role of technology and innovation in improving screening quality. One major challenge in colorectal cancer screening is the wide variation in adenoma detection rates among physicians. To address this, China is increasingly adopting AI-assisted colonoscopy systems that act as a real-time second observer. Studies, he noted, show that such systems can increase adenoma detection rates by 20 to 30 percent, particularly for flat polyps that are easily missed by the human eye. In addition, China has approved multi-target stool DNA tests through the National Medical Products Administration. These tests demonstrate excellent sensitivity for colorectal cancer at approximately 95 percent and show significantly higher sensitivity for advanced adenomas at 63.5 percent compared to standard FIT, enabling earlier detection of precancerous lesions.

Addressing the economics of prevention, Dr. Liu Yang emphasized that the combined risk assessment and FIT strategy is the most cost-effective approach for China. The cost of screening ranges from approximately 10 to 50 US dollars per person, whereas treating a patient with late-stage colorectal cancer can exceed 30,000 US dollars per year. He noted that economic evaluations indicate that for every dollar invested in screening, the health system saves approximately five dollars over ten years, underscoring that prevention is not only clinically effective but also financially prudent.

Despite these successes, Dr. Liu Yang acknowledged ongoing challenges, particularly the gap in colonoscopy compliance among individuals who test positive on FIT. While initial participation in FIT screening is high, follow-up colonoscopy rates range from only 14 to 40 percent. He identified fear of pain, shortages of endoscopists in rural areas, and the complexity of bowel preparation as major barriers. Looking ahead, he outlined future priorities, including linking screening registries with treatment and mortality databases through big data platforms, advancing research into liquid biopsy blood tests to improve patient acceptance, and establishing a National Quality Control Center to monitor endoscopy performance across hospitals.

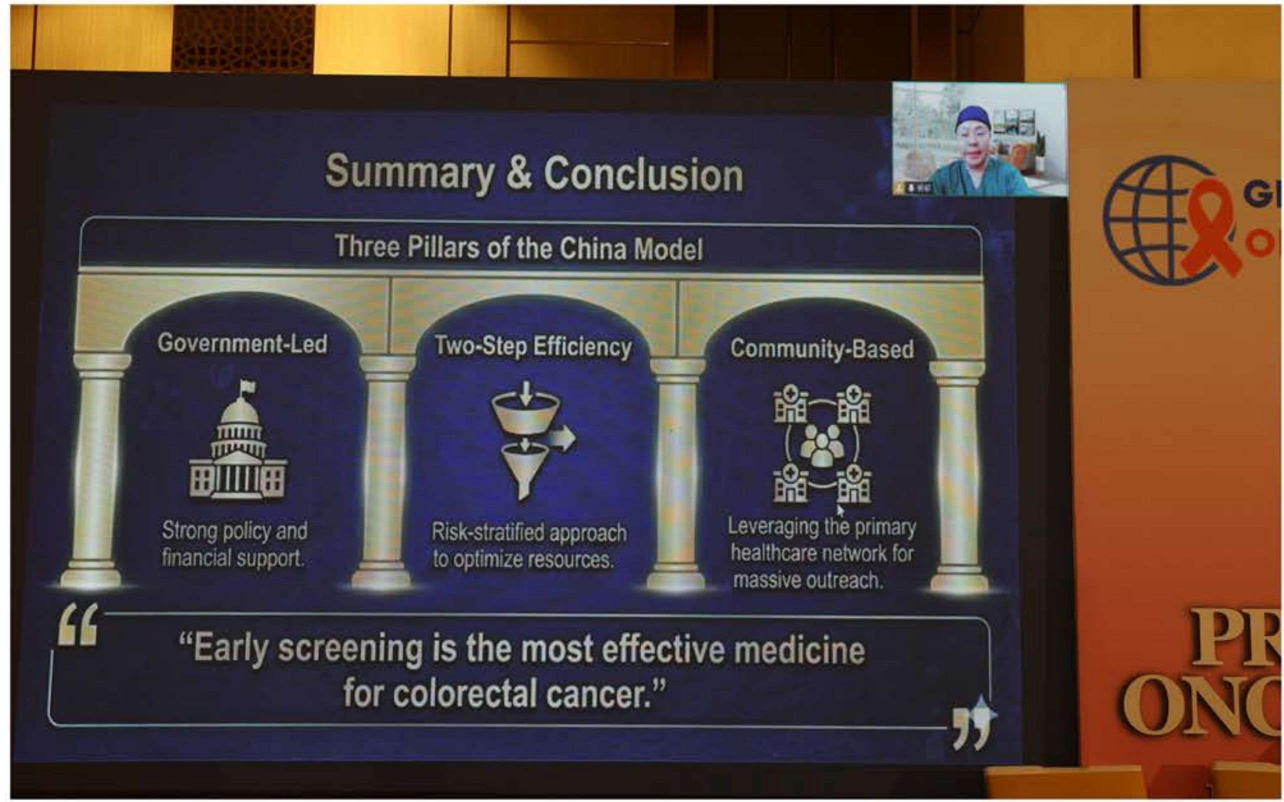
In conclusion, Dr. Liu Yang summarized the China Model as resting on three core pillars: strong government leadership ensuring policy and financial support, a two-step screening strategy that optimizes limited resources, and deep community-based implementation through primary healthcare networks. Representing Jiangsu Cancer Hospital, a leading regional cancer center with expertise in robotic and minimally invasive surgery, he expressed openness to international collaboration and warmly invited partnerships with colleagues worldwide. He concluded by

thanking the organizers of GPOS 2026 for the opportunity to share China's experience.

ACTION LEADERS:

Dr Kiranjith, Professor and HOD, Department of ENT and Head and Neck surgery, SGMCRF, Venjaramood

Dr Mohan T Shenoy , Senior consultant Endocrinologist, SGMCRF, Venjaramoodu



AI IN COLORECTAL CANCER DETECTION

Keynote Address

Dr. Sheng Wang,
Department of Colorectal Surgery, Fudan University Shanghai Cancer Center

Dr. Sheng Wang from the Department of Colorectal Surgery at Fudan University Shanghai Cancer Center gave a recorded address on the role of Artificial Intelligence in colorectal cancer detection as the final session of the day. He began by acknowledging the chairpersons, delegates, and colleagues, and introduced the growing global relevance of the topic.

Dr. Wang opened by outlining the rising burden of colorectal cancer worldwide. He noted that colorectal cancer currently ranks third globally in both incidence and mortality, with numbers increasing year after year. A particularly concerning trend, he emphasized, is the rise of early-onset colorectal cancer. Data drawn from over 40 countries now shows a consistent increase in incidence among individuals under the age of 50. This shift has already influenced screening policies, with the United States lowering the average-risk screening age to 45 years.

Despite this alarming trend, Dr. Wang highlighted that colorectal cancer remains one of the few solid malignancies where prevention is clearly possible. The disease typically develops from a precancerous lesion, such as an adenomatous polyp, which can be detected and removed during colonoscopy, effectively preventing cancer altogether. This unique characteristic provides substantial scope for improving outcomes through effective screening strategies.

He then examined the current bottlenecks within existing screening pathways. In most systems, population screening begins with stool-based tests or imaging, followed by referral for colonoscopy, polypectomy, and histopathological evaluation in those with positive results. In countries with large populations such as China and India, he explained, screening programs must constantly balance expanding population coverage against limited endoscopic capacity and rising costs. Adherence remains a major challenge, as evidence shows that after a positive stool test, only about 43 percent of individuals complete a follow-up colonoscopy within one year.

Dr. Wang also emphasized that missed lesions during colonoscopy pose a serious clinical risk. Missed adenomas are a key contributor to interval colorectal cancers. He cited evidence demonstrating that for every one percent increase in the adenoma detection rate, the risk of interval cancer decreases by approximately three percent. In addition, accurately characterizing detected polyps remains difficult, as distinguishing neoplastic from non-neoplastic lesions through visual assessment alone continues to be a challenge even for experienced endoscopists.

Against this backdrop, Dr. Wang outlined how Artificial Intelligence can address key gaps across the colorectal cancer screening continuum. He explained that AI applications in this field broadly fall into three areas: improving risk stratification, enhancing lesion detection and characterization during endoscopy, and strengthening diagnostic accuracy in pathology.

In the context of risk stratification, Dr. Wang noted that healthcare resources are inherently constrained in populous nations. He referred to the “better principle,” which prioritizes high-risk individuals for earlier and more frequent screening. AI systems can integrate electronic health record data, including age, family history, previous polyps, metabolic risk factors, and inflammatory markers, to generate individualized recommendations. These outputs include a personalized screening start age, surveillance strategy, and follow-up interval, allowing resources to be allocated more effectively.

Turning to colonoscopy, Dr. Wang described the role of Computer-Aided Detection systems. During live procedures, these systems analyze the video stream in real time and flag suspected polyps by displaying visual indicators on the screen. Acting as a second observer, AI reduces human fatigue-related oversight and lowers missed lesion rates. Randomized trials, he noted, consistently show that CADe improves adenoma

detection rates and reduces missed lesions, with particularly strong benefits observed among novice endoscopists. However, he cautioned that AI-assisted detection is not without limitations. False positives, visual distraction, and workflow interruption remain concerns, and direct evidence linking CADe use to long-term reductions in colorectal cancer incidence or mortality is still limited. Reflecting this uncertainty, international guidelines vary, with the American Gastroenterological Association offering no recommendation, the European Society of Gastrointestinal Endoscopy issuing a weak recommendation, and the BMJ guidelines providing a weak recommendation against routine use at present.

Dr. Wang then addressed Computer-Aided Diagnosis, which assists in real-time characterization of detected lesions. CADx systems support decisions regarding whether a lesion should be resected and whether histopathological analysis is required. He explained that CADx improves characterization accuracy, especially among less experienced endoscopists, and reduces interpretation time. Nevertheless, current guidelines remain cautious. The ESGE 2024 guidelines restrict the “resect and discard” strategy to expert endoscopists, meaning that AI at present functions best as a high-confidence decision support tool rather than a replacement for biopsy-based diagnosis.

He stressed that AI adoption must be accompanied by strong governance frameworks. AI carries risks including diagnostic errors, attention costs, overtreatment, and automation bias, where clinicians may over-rely on algorithmic output. Ethical safeguards, privacy protection, bias monitoring, and clear accountability boundaries are essential. Ultimately, he emphasized, clinical responsibility must remain firmly with the physician.

Dr. Wang also highlighted advances in AI-assisted pathology. Through whole slide imaging, histopathology slides can be digitized and transformed into computable data. AI models are now capable of predicting molecular features, such as microsatellite instability and mismatch repair deficiency, directly from routine hematoxylin and eosin slides. This capability offers significant value in resource-constrained settings by enabling early triage and targeted testing. Looking ahead, he noted that foundation models are emerging that may predict treatment response and infer tumor microenvironment characteristics.

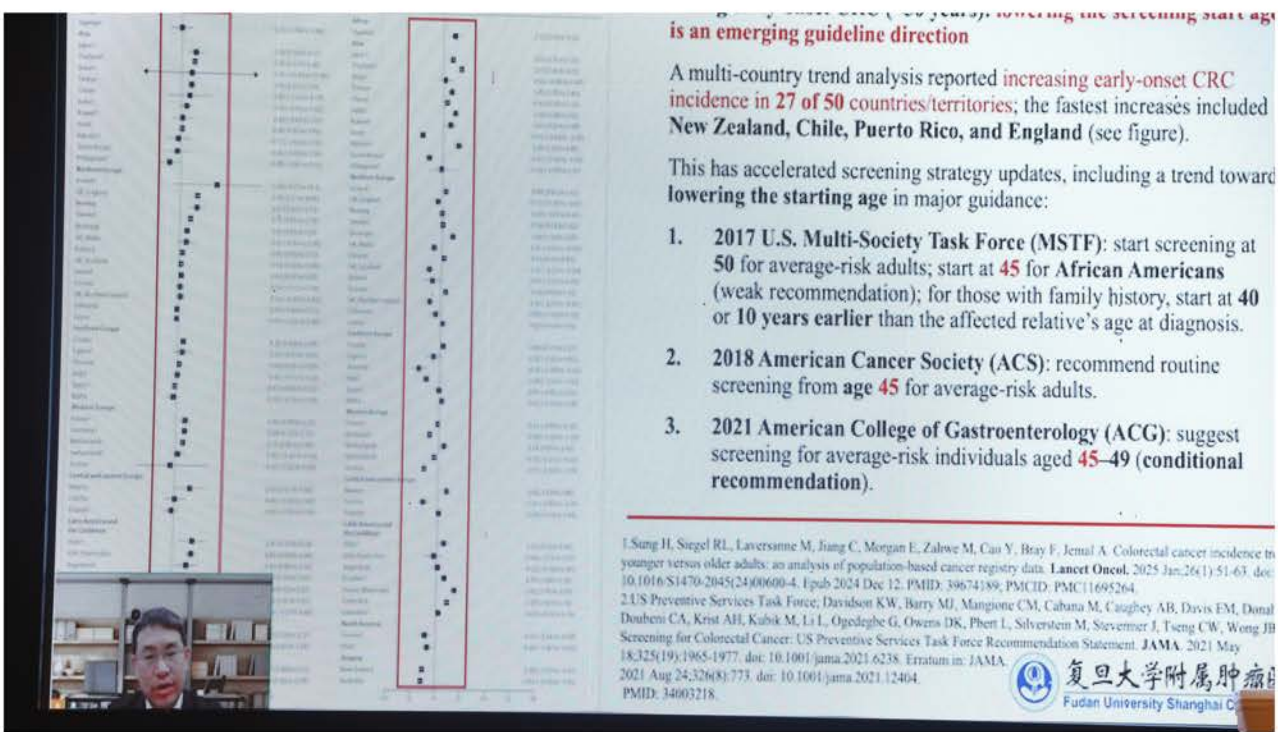
In conclusion, Dr. Wang reflected from a surgical perspective that as AI becomes embedded in screening systems, an increasing number of early lesions will be directed toward endoscopic therapy rather than

advanced surgical intervention. He emphasized that AI development in colorectal cancer screening is inevitable and rapidly advancing. When used judiciously, it expands coverage, reduces missed lesions, and supports clinical decision-making. He concluded by urging the medical community to embrace AI's potential while maintaining vigilance, governance, and professional responsibility.

CHAIRPERSONS:

Dr. Arun Lal, Associate Professor & Unit Chief, Dept. of General Surgery, SGMCRF

Dr. Nithin Varghese Abraham, General Surgeon, GG Hospital, Trivandrum



Gallery

Gallery

Gallery

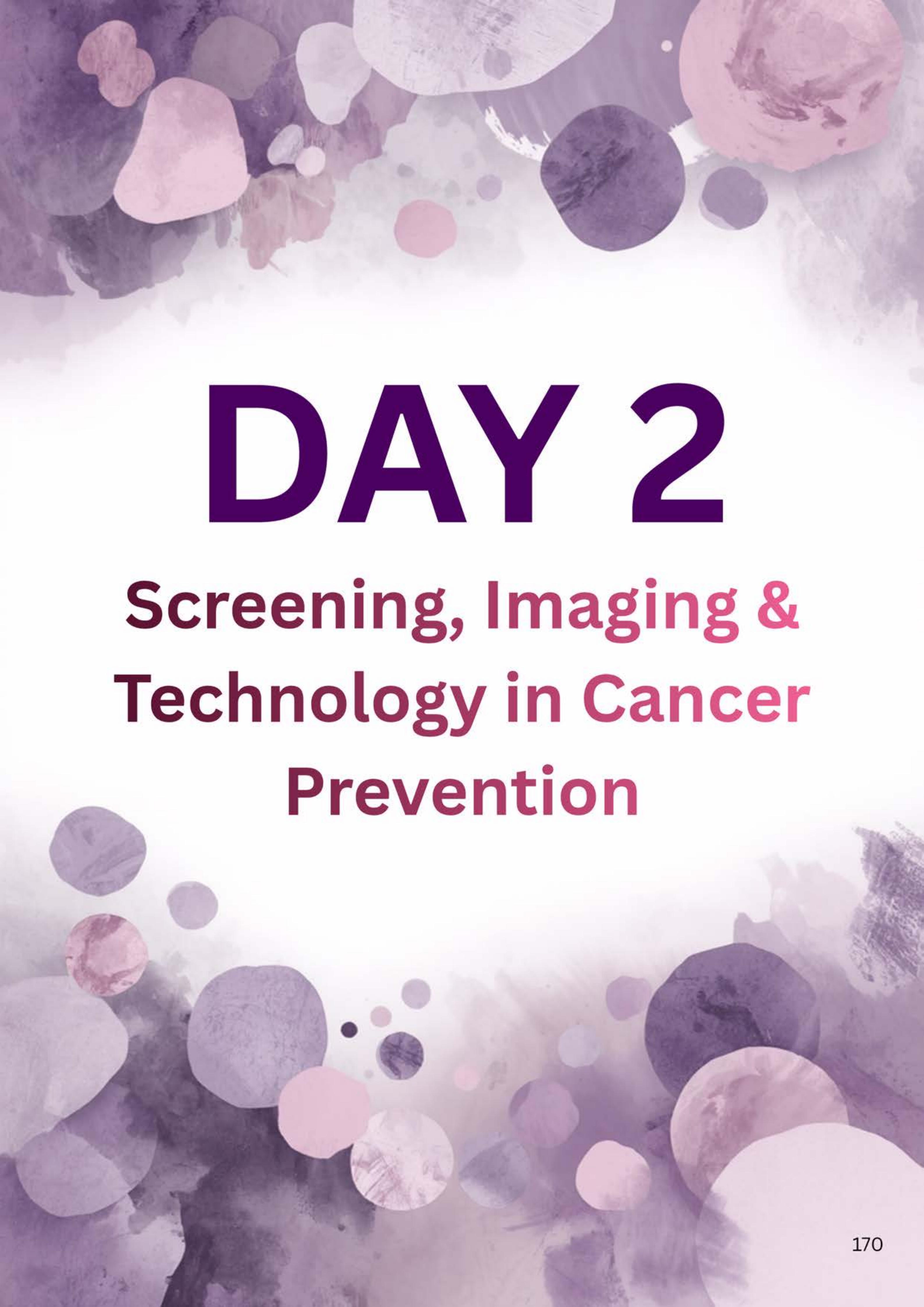
Gallery

Gallery

Gallery

Gallery

Gallery



DAY 2

Screening, Imaging & Technology in Cancer Prevention

RADIOLOGY & IMAGING IN CANCER PREVENTION

From Images to Insights: Building a Scalable Screening Ecosystem

Chairperson: **Dr. Muralikrishna L** President-Elect, IRIA; Lead Consultant Radiology, Kauvery Hospitals, Chennai

Moderator: **Dr Pankaj Sharma** Secretary General, National IRIA

Role of Radiology Centres in Screening

Dr. Rijo Mathew noted that the Global Preventive Onco Summit had entered its second day and emphasized the distinctiveness of the platform. He described the summit as a rare convergence of diverse stakeholders in cancer prevention, bringing together not only multiple medical specialties but also policymakers, administrators, and representatives from the media. This multi-sectoral participation, he observed, makes the summit action-oriented and community-focused, moving beyond academic discussion toward real-world cancer prevention. Representing the Indian Radiological and Imaging Association (IRIA), he expressed his appreciation for being part of this collective effort.

Dr. Rijo Mathew,
National Treasurer, IRIA

Speaking on the theme "The Role of Radiology Centers in Screening," Dr. Mathew outlined the extensive reach of radiology services across the healthcare system. He explained that radiology centers function within government hospitals and medical colleges, corporate and tertiary care hospitals, as well as independent diagnostic centers and small-to-medium healthcare facilities. Across all these settings, imaging infrastructure is widely available, ranging from basic ultrasound and color Doppler studies to advanced modalities such as CT, MRI, PET-CT, and interventional radiology.

While acknowledging the well-established role of radiology in cancer detection, staging, and follow-up, Dr. Mathew emphasized that the core

challenge lies in when cancers are detected. Imaging modalities such as mammography and breast MRI for breast cancer, low-dose CT for lung cancer screening in chronic smokers, and PET-CT for staging are indispensable tools. However, he pointed out that in Kerala, a significant proportion of cancers continue to present at advanced stages (Stage III or IV), leading to poorer survival outcomes. Shifting diagnosis to Stage I or Stage II, he stressed, is essential to improving cure rates.

Moving beyond cancer detection alone, Dr. Mathew introduced the concept of Preventive Radiology. He highlighted that data from the 1990s through the 2020s clearly shows a steep rise in non-communicable diseases (NCDs), particularly in urbanized regions like Kerala. In response to this growing burden, IRIA formally introduced Preventive Radiology as a clinical discipline in 2021, during the presidential tenure of Dr. C. Amarnath. In this framework, radiology biomarkers serve as objective, first-line tools for identifying high-risk individuals and guiding further screening and intervention.

He contextualized this approach by contrasting lifespan with healthspan. At the time of India's independence in 1947, life expectancy was approximately 36 years; today, it approaches 80 years in states like Kerala. While lifespan has increased significantly, Dr. Mathew emphasized that the real challenge lies in extending healthspan, the number of years lived free of disease. He noted that clinical examination and biochemical tests alone are insufficient for this purpose, and that radiology biomarkers are crucial for objectively assessing metabolic dysfunction and early organ damage.

Dr. Mathew identified obesity and fatty liver disease as two major epidemics currently confronting the health system. Radiologists, he observed, had been reporting fatty liver changes on ultrasound for decades, though these findings were often overlooked. Today, non-alcoholic fatty liver disease (MASLD) accounts for nearly three out of ten liver transplants. Without timely intervention, he warned, the healthcare system risks becoming increasingly focused on advanced surgical care rather than prevention. Similarly, he noted that metabolic syndrome assessment must evolve beyond traditional measures such as waist circumference to include objective quantification of visceral versus subcutaneous fat, which can be accurately measured using ultrasound, CT, and MRI and followed over time.

Elaborating on radiology biomarkers in NCDs, Dr. Mathew explained that imaging can assess fat depots such as perirenal and epicardial fat, the latter being metabolically active and associated with chronic

inflammation. Sarcopenia and muscle quality can be evaluated using MRI-based muscle fat infiltration indices, while liver elastography has transformed liver assessment from subjective grading to objective measurement of tissue stiffness, enabling early prediction of fibrosis and cirrhosis.

Radiology, he added, also plays a key role in detecting early target-organ damage involving the liver, heart, kidneys, brain, and vascular system, including premature atherosclerosis and plaque characterization. In this context, he introduced “Kavach” (The Shield), a preventive radiology initiative launched in Kerala. The program aims not only at early cancer detection but also at systematic risk stratification for non-communicable diseases. By objectively demonstrating early organ damage, such initiatives can motivate timely intervention and prevent progression to irreversible organ failure.

In conclusion, Dr. Mathew noted that emerging research into the gut–liver–brain axis and neuro-immuno-endocrine dysfunction highlights the complex biological networks underlying modern disease patterns. Radiology biomarkers, he emphasized, provide valuable insights into these interactions. He concluded by reiterating that the role of radiology extends far beyond diagnosing cancer, positioning it as a central tool in risk stratification, prevention, and the improvement of both individual and community health outcomes.

Mammography & Early Detection

Dr. Reshmi C. P.
Consultant Radiologist, Ananthapuri & GG Hospitals, Trivandrum

Dr. Reshmi C.P. began her address by expressing the radiology fraternity's sense of purpose in being part of the Global Preventive Onco Summit. She emphasized that radiologists play a central role in cancer prevention, particularly through early detection, and focused her presentation on mammography as a critical tool for breast cancer screening.

She outlined the current burden of breast cancer in India, noting that it is the most common cancer among Indian women, accounting for nearly 27% of all female cancers. India reports approximately 1.9 lakh new breast cancer cases every year, a figure projected to increase to about 2.2 lakh annually by 2025–26. Despite advances in treatment, mortality remains high, with nearly 98,000 deaths reported each year. She highlighted the high prevalence of Triple-Negative Breast Cancer in Indian women, estimated at 30–31%, contributing to the aggressive nature of the disease and poorer outcomes. These figures, she noted, underline breast cancer as a major public health challenge in the country.

Dr. Reshmi identified late diagnosis as the primary factor driving high mortality. Nearly 50–60% of breast cancer cases in India are detected at advanced stages. Unlike many Western countries, India lacks organized, population-based screening programs and continues to rely largely on symptom-based detection, where women seek care only after noticing a lump or pain.

She explained that survival in breast cancer is strongly stage-dependent. When detected at early stages (Stage I and II), survival exceeds 90%, whereas in advanced stages it drops below 30%. Imaging, particularly mammography, is therefore central to improving outcomes. Mammography, she emphasized, is the only screening modality proven to reduce breast cancer mortality by 20–40%. Using low-dose bilateral X-ray views, it can detect malignancies years before clinical symptoms appear, allowing less aggressive treatment and better quality of life.

To demonstrate the impact of early detection, Dr. Reshmi presented two recent cases from her department. In the first case, a 54-year-old school teacher underwent opportunistic screening. Mammography revealed a tiny, non-palpable lesion measuring less than 5 mm in the upper quadrant of the left breast. Ultrasound showed an irregular lesion with posterior acoustic shadowing, raising high suspicion. Biopsy confirmed invasive carcinoma. As the cancer was detected at an early stage (T1a), the patient underwent breast-conserving surgery followed by radiotherapy and did not require chemotherapy. She was able to return to work within a month, illustrating how early detection preserves both health and quality of life.

In the second case, a 60-year-old woman presented for screening. The mammogram initially appeared normal, but careful magnification revealed pleomorphic microcalcifications, a feature suggestive of malignancy. Biopsy confirmed invasive ductal carcinoma with a ductal carcinoma in situ component. Early diagnosis again allowed breast-conserving surgery without the need for adjuvant chemotherapy.
Dr. Reshmi highlighted that the benefits of early detection extend beyond clinical outcomes to economic impact. Early-stage breast cancer involves lower treatment costs, limited therapy, and high survival rates, whereas late-stage disease requires prolonged systemic treatment, causes severe financial toxicity for families, and is associated with poor survival.

She then discussed future directions in breast cancer screening, particularly in the Indian context where dense breast tissue is common. Advances such as digital mammography and tomosynthesis (3D mammography) reduce tissue overlap and improve lesion detection. Artificial intelligence is increasingly assisting in lesion analysis in both mammography and ultrasound. She also highlighted the shift toward risk-adapted screening, integrating clinical risk factors, genetic risk assessment using BRCA mutations and polygenic risk scores, and imaging biomarkers such as breast density, background parenchymal enhancement on MRI, and tissue stiffness assessed by elastography.

Based on these factors, women can be classified into low-, intermediate-, or high-risk groups, guiding the need for mammography alone or additional ultrasound or MRI.

Dr. Reshmi emphasized the need for an India-specific screening approach. Breast cancer in India tends to occur at a younger age, with peak incidence between 40 and 50 years, nearly a decade earlier than in Western populations. Dense breasts, cost constraints, lack of awareness, fear, and stigma further limit screening uptake. She proposed a pragmatic national strategy based on targeted and opportunistic screening, focusing on women aged 40-60 years and those at high risk, with mammography integrated into district hospitals and medical colleges as part of the public health system.

In conclusion, Dr. Reshmi stated that breast cancer deaths are largely preventable with early detection. She emphasized that mammography must be a core component of the national cancer prevention strategy, with the goal of detecting disease early, saving lives, and enabling women to live long and productive lives.

Integration of Radiology Centres and Mammography into Statewide Screening Programs

Dr. Pankaj Sharma,
Secretary General, National IRIA; Additional Professor, AIIMS Rishikesh

Dr. Pankaj Sharma began his address by conveying appreciation, on behalf of the Indian Radiological and Imaging Association (IRIA), to the organizing committee of the Global Preventive Onco Summit for creating a unified platform that brought together professionals across specialties. He noted that the summit's outcome, particularly the proposed White Paper, would play a critical role in supporting evidence-based policy formulation for cancer prevention at the state and national levels.

He highlighted IRIA's long-standing commitment to preventive oncology, noting that the Preventive Radiology initiative has now completed five years. Under this program, IRIA has conducted hands-on training programs across the country, focusing on early disease detection through imaging. In the previous year alone, seven such programs were organized, where radiologists were trained to identify specific ultrasound-based biomarkers for early diagnosis. He acknowledged the leadership contributions of radiologists from Kerala in advancing this initiative and recognized senior members of IRIA present at the summit.

Building on earlier presentations, Dr. Sharma focused on the need to integrate radiology centers, particularly mammography services, into

structured statewide screening programs. He emphasized that given India's population size and resource constraints, Western-style population-wide screening is not currently feasible. Instead, he advocated for a targeted screening approach, prioritizing women in the 40–60 age group and other high-risk populations.

He underscored that meaningful integration of screening services is only achievable through strong Public–Private Partnerships (PPP). With limited public-sector infrastructure and wide geographic spread, partnerships between government facilities and private diagnostic centers, supported by schemes such as Ayushman Bharat, are essential to expand access and reduce inequity.

Dr. Sharma outlined the key components required for successful integration. These included the standardization of clinical and imaging protocols, as screening without uniform protocols would yield inconsistent and unreliable outcomes. He stressed the importance of technology standardization, noting that data comparability is impossible when centers operate with varying levels of equipment, such as conventional versus digital mammography. Uniform reporting formats and standard operating procedures, particularly for dense breast assessment common in Indian women, were identified as essential. He also highlighted the need for robust IT infrastructure to enable seamless data capture, tracking of follow-up, and monitoring of quality indicators. Quality assurance was emphasized as non-negotiable, as mammography is highly operator-dependent and prone to errors without proper training and strict guidelines.

Addressing technological enablers, Dr. Sharma highlighted the role of teleradiology in bridging access gaps, particularly in rural, remote, and hilly regions. He explained that teleradiology allows radiologists in peripheral centers to seek expert second opinions in real time, improving diagnostic confidence and accuracy. He also addressed concerns regarding artificial intelligence, stating that AI should be viewed as a supportive tool rather than a replacement. AI can function as an effective triage mechanism by flagging suspicious lesions, while final interpretation and clinical decision-making remain the responsibility of the radiologist.

He then outlined several challenges that must be addressed to operationalize large-scale screening. These include the urban-centric distribution of imaging facilities, shortages of trained radiologists and technologists, limitations of outdated mammography equipment with inadequate detector coverage, and persistent delays in patient

presentation. He illustrated the latter with an example where even individuals with access to the best healthcare facilities delayed seeking care until the disease had advanced. He also acknowledged the need for strong data protection frameworks and noted that the proposed Digital Personal Data Protection (DPDP) Act would be critical in enabling secure health data sharing.

In conclusion, Dr. Sharma emphasized that the path forward lies in strengthening PPP models, expanding district-level cancer screening infrastructure, standardizing technology and reporting, and responsibly scaling AI-enabled mammography. He reiterated that without coordinated integration of these elements, it would not be possible to implement an effective and equitable screening program for India's large and diverse population.

Scaling AI and multimodal imaging technologies in population screening

Dr Muralikrishna L,
President-Elect, National IRIA; Lead Consultant Radiologist, Kauvery Hospitals, Chennai.

Dr. Murali Krishna L. began his address by expressing his appreciation to the organizing committee for the successful conduct of the first day of the Global Preventive Onco Summit and noted that the second day had commenced with a strong focus on implementation-oriented discussions. He stated that his presentation would focus on the critical theme of scaling Artificial Intelligence (AI) and multimodal imaging to enable equitable and effective cancer screening in India.

He emphasized that the core challenge in cancer control in India is not the lack of treatment facilities, but the predominance of late-stage diagnosis. Early detection, he noted, directly translates into improved survival and reduced treatment burden. However, given India's vast population, early detection strategies must be scalable. National programs such as the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) and Ayushman Bharat already prioritize breast, cervical, and oral cancers - areas where radiological imaging plays a central diagnostic role. To fully realize the potential of these programs, scalable imaging solutions are essential.

Dr. Murali Krishna outlined the major constraints limiting large-scale screening. These include a significant shortage of radiologists, the rapidly increasing volume of imaging data generated through screening

initiatives, and inter-observer variability that leads to disparities in reporting quality between urban tertiary centers and rural facilities. Addressing these challenges, he argued, requires a fundamental shift in screening strategy.

He proposed a new paradigm based on multimodal imaging, moving away from a “one-size-fits-all” approach. Instead, screening protocols must be tailored using a combination of demographic data, clinical risk factors, and appropriate imaging modalities. He illustrated this with regional examples: oral cancer screening prioritized in regions with high tobacco-chewing prevalence, lung cancer screening focused on populations with heavy smoking exposure, and cancer-specific modality combinations such as mammography with ultrasound and MRI for high-risk breast cancer patients, low-dose CT for lung cancer screening, and multiparametric MRI combined with PSA testing for prostate cancer.

Central to this model, he explained, is the role of AI as a force multiplier rather than a replacement for clinicians. AI enables automated detection and high-throughput analysis, allowing screening programs to function efficiently at scale. He described how, in a hypothetical village screening program conducting 1,000 mammograms, AI could perform the initial triage and flag approximately 100 suspicious cases. Radiologists could then focus their expertise on these prioritized cases, reducing fatigue while maintaining diagnostic accuracy.

Dr. Murali Krishna highlighted the use of AI-generated heatmaps and bounding boxes to draw attention to subtle lesions that may be missed by the human eye. In lung cancer screening, for example, nodules obscured by ribs can be difficult to detect visually but are identified by AI algorithms. He shared instances where AI detected precursor signals on CT scans that appeared normal to radiologists, with overt malignancies developing in the same regions months later - demonstrating AI’s emerging predictive potential.

He further emphasized AI’s role in standardizing reporting through established frameworks such as BI-RADS for breast imaging, Lung-RADS for lung screening, and PI-RADS for prostate imaging. This standardization ensures that reports generated in peripheral or rural centers meet the same quality benchmarks as those from tertiary institutions, reducing geographic inequity in care.

Looking ahead, Dr. Murali Krishna stressed the importance of strong governance and regulatory oversight. Ethical deployment of AI requires curated implementation, adherence to regulatory frameworks such as

the Medical Devices Rules, 2017, and safeguards against unmonitored or inappropriate use. He cautioned that while AI adoption is inevitable, it must remain radiologist-led to preserve accountability, clinical judgment, and patient safety.

In conclusion, he stated that the future of cancer screening lies in AI-enabled, risk-based, multimodal imaging strategies. When deployed responsibly under radiologist leadership, AI has the potential to dramatically improve early detection, reduce disparities, and strengthen national cancer prevention outcomes.

INAUGURAL CEREMONY

Welcome Address

Mr. Baby Mathew
Somatheeram, Global President of the World Malayalee Council and Advisory Board Member of the Swasthi Foundation

The Global Preventive Onco Summit (GPOS) 2026 commenced with a solemn welcome address by Mr. Baby Mathew Somatheeram, Global President of the World Malayalee Council and Advisory Board Member of the Swasthi Foundation. In his opening remarks, he framed cancer not merely as a clinical condition but as a profound social challenge requiring collective responsibility.

Welcoming the Hon'ble Governor of Kerala, national leaders, and international experts, he emphasized that the summit reflects a vision that is deeply rooted in Kerala while remaining global in ambition. He commended the Swasthi Foundation for its sustained commitment to building a "cancer-safe future" through early detection and community engagement, describing the summit as a defining moment in Kerala's public health journey.

Lighting of the Lamp

Following the welcome address, the summit was formally inaugurated with the ceremonial lighting of the lamp by Shri Rajendra Vishwanath Arlekar, Hon’ble Governor of Kerala, in the presence of distinguished dignitaries.

Felicitation Address

Prof. (Dr.) S. Sundar Manoharan,
Vice Chancellor - Pandit Deendayal Energy University

Dr. Sundar Manoharan highlighted the critical intersection between academia and clinical practice. He illustrated the transformative power of academic research through a case study of a 74-year-old patient with multiple myeloma, whose life was saved through the repurposing of Plerixafor, a drug originally developed for HIV. He emphasized the importance of drug repurposing, targeted delivery systems, and translational research, noting that Pandit Deendayal Energy University has established a BSL-3 facility to bridge the gap between pharmaceutical research and real-world application.

Felicitation Address

Dr. Prathibha Varkey spoke on the moral and economic imperatives of health, reminding the audience that nearly 50% of cancers are preventable through lifestyle modification, vaccination, and tobacco control. Quoting Dr. Charles Mayo, she stated that "the health of the people is the foundation upon which the power of a state is built." She called for measurable cancer prevention goals for Kerala and emphasized that prevention must extend beyond hospitals into schools, workplaces, and local governments. Her address urged decisive action, including universal vaccination coverage and investments in AI and digital health technologies.

Dr. Prathibha Varkey,
President, Mayo Clinic,
USA

Felicitation Address

Adv. Meenakshi Lekhi reflected on the "Kerala Paradox," where high human development indicators coexist with a rising cancer burden. She advocated a balanced and holistic approach to healthcare, highlighting that many modern medicines are derived from phytochemicals found in nature. Linking sustainability to health, she noted that traditional Indian dietary patterns have a significantly lower carbon footprint and urged the integration of traditional knowledge with modern oncology to manage healthcare costs effectively.

Adv. Meenakshi Lekhi,
Former Minister of State for External Affairs, Government of India

Felicitation Address

Dr. M. V. Pillai addressed the genetic and financial challenges unique to cancer control in Kerala. He pointed out that centuries of consanguinity and endogamy have contributed to genetic predispositions to cancer in the region. Cautioning that foreign funding sources are steadily declining, he emphasized the need for self-reliance in healthcare. In a landmark proposal, he formally requested the Hon'ble Governor to champion the establishment of a National Institute of Preventive Oncology in Thiruvananthapuram, assuring full support from the global NRI community and Indian experts.

Dr. M. V. Pillai,
Chairman, Global Preventive ONCO Summit 2026 & Advisory Board Member Swasthi

Felicitation Address

Dr. Mohanan Kunnummal outlined the "Three As" essential for effective cancer control:

- Awareness, to overcome denial and misinformation
- Availability, by ensuring early detection services in every Taluk
- Affordability, through domestic manufacturing of drugs and medical equipment

He called for a Vision 2047, an ambitious roadmap aiming to increase Kerala's life expectancy to 85 years, surpassing current European benchmarks.

Dr. Mohanan Kunnummal,
Vice Chancellor, Kerala University of Health Sciences & Advisory Board Member Swasthi

INAUGURAL ADDRESS

His Excellency Shri Rajendra Vishwanath Arlekar,
Hon'ble Governor of Kerala

In his inaugural address, the Hon'ble Governor spoke on the evolving national mindset, referencing a cartoon by R.K. Laxman to illustrate how young doctors are increasingly choosing to serve the nation rather than seek careers abroad. He redefined "Swadeshi Science" as a return to a nature-aligned lifestyle (Dinacharya), emphasizing that living in harmony with nature is the most effective form of preventive medicine.

Drawing from his tenure as Governor of Bihar, he shared his experience of initiating HPV vaccination for schoolgirls to prevent cervical cancer. Acknowledging Kerala's alarming breast cancer rates, he strongly endorsed Dr. Pillai's proposal and pledged his office's full support to establish a National Research Center for Preventive Oncology in Thiruvananthapuram. He concluded by calling for a harmonious integration of Ayurveda and modern medicine to develop comprehensive solutions for public health challenges.

Memento Presentation

A memento was presented to the Hon'ble Governor by Adv. Meenakshi Lekhi.

CANCER PREVENTION AS A NATIONAL PRIORITY

The Role of Policy, Public Discourse, and Democratic Leadership

Keynote Address

Dr. Sashi Tharoor,
Member of Parliament (Thiruvananthapuram); Chairman, Standing Committee on External Affairs

Dr. Shashi Tharoor delivered a powerful and thought-provoking address emphasizing cancer prevention as an urgent national priority that transcends medicine and enters the domain of democratic governance. Acknowledging the guiding force behind the summit, Dr. M.V. Pillai, and international experts including Dr. Robert Diasio, Dr. Pratibha Varkey, and leaders from the Swasthi Foundation and Hans Foundation, expressed his pride in hosting such a globally significant dialogue in Thiruvananthapuram.

He described Thiruvananthapuram not only as a city of Kerala's intellectual and cultural heritage, but as an emerging epicenter for a far more urgent global mission: the prevention of cancer. He recalled the long-standing aspiration to establish an International Preventive Cancer Centre in the capital and welcomed the summit as a decisive step toward realizing that vision.

Dr. Tharoor articulated what he termed the "Kerala Paradox." While Kerala enjoys health indicators comparable to developed nations - high life expectancy, low infant and maternal mortality, and near-universal literacy - it simultaneously faces the disease profile of affluent Western societies. Non-communicable diseases, particularly cancer, have risen sharply, with cancer incidence nearly doubling over the past decade.

He argued that the role of policy, public discourse, and democratic leadership in cancer prevention is not academic, but existential. In a

democracy, leadership is fundamentally about protecting citizens. Today, the most serious threats to public health do not originate from external aggression, but from lifestyle changes, environmental exposure, and genetic vulnerability.

Dr. Tharoor emphasized that the constitutional Right to Life under Article 21 is incomplete without the Right to Health, and that the Right to Health cannot be restricted to treatment after disease onset. True democratic leadership, he asserted, must uphold the Right to Prevent.

Addressing the economic dimensions of cancer, Dr. Tharoor highlighted financial toxicity as one of the gravest consequences of the disease. In Kerala and across India, families are often pushed into intergenerational poverty by a single diagnosis, forced to mortgage land or sell homes. He stressed that while insurance schemes are necessary, they function only as a safety net.

Using a compelling metaphor, he stated that insurance is the ambulance at the bottom of the cliff, while prevention is the fence at the top. India's health policy, he observed, remains disproportionately focused on curative infrastructure - more hospitals, advanced machines, and expensive therapies, while neglecting upstream prevention. This approach, he warned, is akin to "mopping the floor while the tap is still running."

The establishment of an International Preventive Oncology Centre, therefore, is not only a medical necessity but a financial imperative.
Dr. Tharoor underscored the critical role of public discourse in dismantling fear and stigma surrounding cancer. He noted that cancer has long been enveloped in a "conspiracy of silence," whispered about as though it were a moral or karmic failing rather than a biological disease.

He called for a "cacophony of awareness," urging that conversations about cancer move beyond hospitals into communities, schools, panchayats, and residential associations. Despite Kerala's high literacy, he termed it a tragedy that nearly two-thirds of cancers are still detected at advanced stages, even though screening for oral, breast, and cervical cancers is technically simple and affordable.

Dr. Tharoor outlined a clear three-pronged policy roadmap:

- Universal Screening as a Right: Free cancer screening for all eligible adults must become a core public health entitlement, as fundamental as vaccination.
- Data as a Strategic Tool: Drawing lessons from the Bahrain and China models, he emphasized the need for a mandatory Unique Health ID to

track risk, monitor screening, and enable early interception.
- Global Collaboration: He highlighted the importance of integrating global best practices with local realities, noting that science transcends national boundaries.

In closing, Dr. Tharoor stated emphatically that hope is not a strategy, policy and action are. He urged that the proposed "Kerala Declaration" emerging from the summit must become a living blueprint rather than a forgotten document.

As the Member of Parliament for Thiruvananthapuram, he pledged his voice and sustained advocacy to the cause of cancer prevention. He expressed hope that future generations would look back at the Global Preventive Onco Summit as the moment when society stopped waiting for cancer to strike and instead chose to strike back, with the shield of prevention and the sword of science.

Logo Release
Kids CAN Initiative

The Kids CAN initiative was formally launched with the release of its official logo during a dedicated ceremony at the Global Preventive Onco Summit 2026. The session was chaired by Dr. Devi Mohan, Vice President,Saraswathi Vidhyalaya & Trustee,Swasthi Foundation. The logo was ceremonially released by Dr. Prathibha Varkey, President, Mayo Clinic Health System, USA, and was formally received by Dr. Shashi Tharoor, Member of Parliament (Thiruvananthapuram) and Chairman, Standing Committee on External Affairs.

The logo release was witnessed by an eminent gathering of leaders from healthcare, academia, public health administration, and civil society, including:

Dr. M.V. Pillai, Chairman, Global Preventive Onco Summit 2026

Dr. Mohanan Kunnummal, Vice Chancellor, Kerala University of Health Sciences & Advisory Board Member, Swasthi Foundation

Dr. Bipin K. Gopal, Deputy Director of Health Services & State Nodal Officer (NCD)

Dr. Karthik Ghosh, Vice President, Mayo Clinic Health System - Minnesota

Dr. Chandramohan K., Chairman, Swasthi Healing Hands

Dr. Rijo Mathew, President, IRIA Kerala Chapter; Founder & National Coordinator, IRIA Preventive Radiology

Dr. Arun R. Warrier, Senior Consultant Medical Oncologist, Aster Medicity, Kochi

GLOBAL PREVENTIVE
ONCO SUMMIT
GLOBAL PREVENTIVE ONCO
SUMMIT 2026
ONCO SUMMIT
SUMMIT 2026
www.globalpreventiveoncosummit.com

CHALLENGES AND OPPORTUNITIES IN INTEGRATING QUALITY COMPREHENSIVE CANCER CARE ACROSS PUBLIC AND PRIVATE SECTORS IN INDIA

Panel Discussion

Moderator:
Dr. Arun R. Warrier, Senior Consultant Medical Oncologist, Aster Medcity, Kochi

Panelists:
Dr. Bipin K. Gopal, Deputy Director of Health Services (NCD), Kerala
Dr. Balagopal P.G., Director, Cochin Cancer Research Centre (CCRC)
Dr. Salim V.P., Senior Consultant Surgical Oncologist, Aster Calicut
Dr. Sharath S., Surgical Oncologist, Aster Medcity, Kochi
Dr. Pankaj Sharma, Secretary General, National IRIA; Additional Professor, AIIMS Rishikesh.
Dr. M.V. Pillai, Chairman, Global Preventive Onco Summit
Dr. Rijo Mathew, President, IRIA Kerala Chapter
Dr. R.C. Sreekumar, Vice President, IMA Kerala State Chapter

This panel addressed one of the most pressing structural questions in Indian oncology: how to integrate quality, comprehensive cancer care across public and private healthcare systems, while ensuring equity, efficiency, and sustainability.

Moderating the discussion, **Dr. Arun R. Warrier** emphasized that quality has become the defining metric in modern healthcare, cutting across government institutions, teaching hospitals, and corporate centers. Drawing from the Japanese philosophy of Kaizen, he highlighted that meaningful quality improvement depends on continuous, incremental change involving every stakeholder. Using the Aster International Institute of Oncology as an example, he outlined how structured academics, research, tumor boards, and data collection can improve outcomes, but posed the central question of the session: how can such quality frameworks be extended across sectors through collaboration rather than competition?

Dr. Bipin K. Gopal contextualized the discussion within Kerala's public health reality. He noted that cancer incidence in the state is significantly higher than the national average, accompanied by high mortality, particularly in female cancers. Financial toxicity further compounds the crisis. He emphasized that late-stage diagnosis remains the primary driver of poor outcomes and unsustainable costs. Accordingly, he argued that prevention must take precedence over treatment, focusing

on lifestyle modification, addiction control, and community-based screening for breast, cervical, and oral cancers. Early detection at the pre-cancerous stage, he stressed, is the most effective intervention available.

Sharing practical experience, **Dr. Balagopal P.G.** described how the Cochin Cancer Research Centre (CCRC) leveraged a Public–Private Partnership (PPP) model to overcome infrastructure limitations. The absence of an in-house linear accelerator forced patients to wait several weeks for adjuvant radiation therapy, compromising outcomes. An MoU with Aster Medcity enabled government patients to receive radiation therapy at government-approved Karunya rates, ensuring timely treatment without immediate capital expenditure by the state. This model, he noted, has functioned effectively and demonstrates how private-sector infrastructure can be harnessed for public benefit. However, he cautioned that standardized treatment protocols and better insurance support are essential to sustain such collaborations and control costs.

Addressing surgical delays in government hospitals, **Dr. Salim V.P.** highlighted that while patient volumes are high, limited operating infrastructure creates backlogs exceeding a month. He proposed that the private sector can play a vital role by absorbing part of this surgical load to ensure timely care. Beyond surgery, he pointed to opportunities for collaboration in equipment maintenance and capacity building. Expensive technologies such as HIPEC machines may exist in government institutions but often lack maintenance or trained ancillary staff. Private hospitals, he suggested, can support through AMCs and training of nurses and technicians, improving outcomes in complex procedures.

Adding to this, **Dr. Sharath S.** proposed the use of digital and app-based platforms to dynamically match expertise across sectors, ensuring that the right specialist reaches the right patient at the right time.

Turning to research, **Dr. M.V. Pillai** underscored the fragility of current clinical trial ecosystems, noting that even globally, public research funding is shrinking. He cautioned against commercially driven trials and called for the establishment of a publicly funded National Cancer Institute in India, modeled on the US NCI, to lead unbiased academic research. He emphasized that long-term impact depends on data preservation, citing the Mayo Clinic’s success in maintaining comprehensive medical records from its inception. He advocated for centralized pathology confirmation, national data repositories, and the

revival of the “Choose Wisely” principle to eliminate unnecessary investigations and reduce costs. Clinical trials, he argued, must be overseen by government-led scientific bodies rather than industry interests.Data interoperability emerged as a key challenge. While many private centers use platforms like Oncocollect, integration with government systems remains limited.

From the public sector perspective, **Dr. Bipin K. Gopal** explained that Kerala’s e-Health platform, built around a Unique Health ID, is nearly 75% operational. However, differing EMR architectures between public and private institutions hinder seamless data sharing. He stressed the need for a government-led, standardized interface that allows private-sector data to be securely integrated into state registries.

Focusing on diagnostics, **Dr. Rijo Mathew** highlighted radiology’s pivotal role in achieving universal screening. He stressed that success depends on including small and medium diagnostic centers, which constitute a large but underutilized segment of healthcare delivery. Given the limited radiology workforce, he advocated for the strategic use of Artificial Intelligence and Teleradiology to expand reach and efficiency. Equally important, he noted, is effective risk communication and community engagement, without which screening programs fail to translate into participation.

Summarizing the discussion, **Dr. Arun R. Warrier** emphasized that meaningful integration of cancer care across sectors requires moving beyond financial considerations and institutional egos. Shared infrastructure, interoperable data systems, collaborative research, and mutual learning are essential.

BRIDGING GLOBAL EVIDENCE WITH LOCAL IMPLEMENTATION

Policy, Population, and Programmatic Priorities for India

Keynote Address

Dr. Sharmila Pimple,
Professor & Head,
Department of Preventive Oncology, Tata Memorial Centre, Mumbai

Dr. Sharmila Pimple began by situating India's cancer control strategy within the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD). She emphasized that successful implementation rests on three interlinked pillars:

1. Policy, which provides the legislative and strategic framework, including tobacco control measures and financial protection mechanisms.
2. Programs, which operationalize policy through initiatives such as the National Tobacco Control Programme and organized screening services.
3. Population, which must remain central, ensuring access, equity, and inclusion for vulnerable groups, youth, and underserved communities.

Bridging global evidence with local realities, she stressed, requires alignment across all three domains rather than isolated interventions.

Dr. Pimple highlighted the structural challenges of India's mixed healthcare system, noting that cancer care remains heavily privatized, with over 80% of outpatient care and around 40% of inpatient care delivered by the private sector. This imbalance, she explained, has resulted in severe financial barriers. With 71.7% of healthcare expenditure being out-of-pocket, the economic burden is so high that nearly half of cancer patients discontinue treatment. Addressing this, she outlined national priorities that include strengthening prevention, expanding early detection, scaling diagnostic and treatment

infrastructure, improving financial protection, and supporting indigenous research and innovation.

Using cervical cancer screening as a case study, Dr. Pimple illustrated the implementation gap. Despite well-established evidence, screening coverage in India remains below 2%. Although Visual Inspection with Acetic Acid (VIA) is recommended under NP-NCD as a cost-effective method, its rollout has been hindered by inconsistent facility readiness, weak referral pathways, and inadequate monitoring systems. She discussed the global shift toward HPV DNA testing and self-sampling, now recommended by the WHO due to higher sensitivity and specificity. However, she cautioned that adopting this approach in India presents challenges, including public-sector readiness for triaging, supply chain logistics, and the high cost of molecular tests.

Dr. Pimple strongly emphasized that India cannot depend solely on imported technologies. She highlighted successful indigenous initiatives such as Grand Challenges India (BIRAC), which validated India's first homegrown HPV test kits, and NexCAR19, the country's first indigenous CAR-T cell therapy. She advocated for a Life Course Approach to cancer prevention: starting with HPV vaccination and health education for adolescents (9–15 years), followed by high-coverage screening for women of reproductive age, and culminating in a decentralized care model that ensures seamless linkage from screening to treatment.

Dr. Pimple concluded by reiterating that bridging the "policy to practice" gap demands coordinated, multi-sectoral action involving government systems, private healthcare providers, and civil society organizations.

Dr. Sameer Salahuddin echoed these concerns, noting that while policies and institutions exist, state-level implementation gaps remain substantial. Dr. Pimple emphasized that organizations like the Swasthi Foundation can play a catalytic role in aligning stakeholders and translating policy frameworks into community-level impact.

ACTION LEADERS:
Dr Sameer Salahuddin - Director, Oncology Services ,Travancore Medicity Medical College, Kollam, Director QURE1, Secretary ,Circle of Kindness
Dr Vipul Goyal - Surgical Oncologist, CCRC ,Cochin

THE FATTY LIVER EPIDEMIC IN KERALA

Have We Reached the Statistical Limits of Population Screening?

Chairman's Introduction

Dr. Salim introduced the discussion by drawing attention to a growing yet often overlooked public health concern. He noted that while cancer remains the central focus of preventive oncology efforts, its metabolic precursors, particularly fatty liver disease, are increasingly prevalent in Kerala. Describing it as a silent epidemic, he emphasized the need to critically examine whether existing population-level screening approaches have reached their statistical and practical limits. He then invited Dr. K.T. Shenoy to address this crucial question and share his insights on the evolving challenges of fatty liver screening.

Dr. Salim V.P.,
Senior Consultant Surgical Oncologist, Aster Calicut

Keynote Address

Dr. K.T. Shenoy,
HOD, Dept. of Medical Gastroenterology,
SGMCRF

Dr. Shenoy began by placing the discussion firmly within the Kerala context. The state, he noted, is facing an unprecedented surge in Non-Communicable Diseases, with MASLD representing the hepatic manifestation of widespread metabolic dysfunction. Community-based surveys reveal 40–50% prevalence of fatty liver in the general adult population and >70% prevalence among high-risk groups such as individuals with diabetes and obesity. These figures position Kerala among the most affected regions globally.

Dr. Shenoy introduced the concept of a statistical ceiling in population screening. When a condition becomes highly prevalent, traditional binary screening (presence or absence of fatty liver) loses clinical utility. In practical terms, screening 100 adults in Kerala via ultrasound may identify fatty liver in nearly half the population. Such saturation overwhelms healthcare systems and makes universal intervention unrealistic. At this stage, he emphasized, detection is no longer the bottleneck. The real challenge is prioritization and stratification.

The session underscored the need for a fundamental shift in screening strategy. Dr. Shenoy stressed that fat accumulation alone is not the true clinical threat. The danger lies in progression to fibrosis, which can culminate in cirrhosis and hepatocellular carcinoma (HCC).Accordingly, screening paradigms must evolve from asking “Do you have fatty liver?” to “Are you developing fibrosis?”He advocated for moving beyond routine ultrasound to Fibroscan (transient elastography) and Validated biochemical markers, such as FIB-4 scores. These tools help identify the

small but critical subset of patients at risk of progression, enabling targeted intervention.

The session concluded with a clear message: Mass detection has reached its limits in high-prevalence settings like Kerala. The future of preventive hepatology lies in risk stratification, fibrosis-focused screening, and intelligent resource allocation, ensuring that healthcare systems focus on those most likely to progress to liver failure and cancer.

ACTION LEADERS:

Dr. Mira Vagh Sudam, Associate Professor, Surgical Oncology, RCC, Trivandrum

PREVENTIVE CANCER CARE THAT REACHES THE LAST MILE – GCF WAY

Chairman's Introduction

Dr. Rajasree introduced Dr. Chinnababu Sunkavalli as a pioneer in community oncology. She highlighted the Grace Cancer Foundation's large-scale preventive initiatives, which have earned Guinness World Records for the magnitude of population screening, and emphasized that his work offers a practical blueprint for delivering cancer care to the most underserved communities.

Dr. Rajyasree Narayanan Kutty,
Specialist Breast Surgeon

Keynote Address

Dr. Chinnababu Sunkavalli, Founder and Global CEO of the Grace Cancer Foundation (GCF), addressed the session by outlining the foundation's core philosophy that prevention is the only form of cancer care that is affordable and scalable for all. He framed the concept of the "last mile" as more than a geographic challenge, describing it as a critical gap in awareness, access, and affordability. In the Indian context, he emphasized that rural populations cannot be expected to travel to tertiary cancer centres; instead, cancer care systems must proactively reach communities where people live.

Dr. Chinnababu Sunkavalli,
Founder and Global CEO of the Grace Cancer Foundation (GCF)

He detailed the GCF model, which is built on mobility and technology. Central to this approach is a fleet of fully equipped mobile cancer screening buses that function as hospitals on wheels, offering facilities such as mammography, X-ray, ultrasound, and Pap smear screening. Rather than relying on symptom-based detection, GCF conducts large-scale village outreach programmes, screening thousands of individuals in a single day. These mobile units are supported by tele-oncology, enabling diagnostic images captured in remote areas to be transmitted in real time to expert teams in Hyderabad and international hubs for prompt reporting and guidance.

Dr. Sunkavalli highlighted that large-scale screening is impossible without community trust. GCF therefore works closely with local NGOs, community leaders, and volunteers to ensure acceptance and participation. He noted that the foundation's Guinness World Records for the largest simultaneous cancer screening exercises were not

pursued for recognition, but to demonstrate that population-level screening at scale is both achievable and replicable.

Focusing on Kerala, he pointed out that the state already has strong grassroots systems such as ASHA workers and Kudumbashree networks. Integrating mobile screening units with these existing community structures, he suggested, could enable near-universal coverage. He stressed that screening should not be treated as a one-time camp activity but as a continuum of care, emphasizing that early detection is meaningful only when patients are supported through referral, biopsy, and definitive treatment. The GCF model therefore ensures active hand-holding of patients from initial screening in the village to care at the base hospital.

In conclusion, Dr. Sunkavalli stated that the "GCF Way" is rooted in dignity and equity, aiming to ensure that individuals in remote and marginalized communities have the same opportunity for early cancer detection as those in urban centres. Reaching the last mile, he affirmed, is the true measure of success in preventive oncology.

ACTION LEADERS:

Dr. Krishnanadha Pai, President, Malabar Cancer Care Society
Dr. Sameer Salahuddin, Director, Oncology Services, Travancore Medicity
Dr. Madhu Muralee, Professor of Surgical Oncology, RCC, Trivandrum
Dr. Satheesan, Chief Medical Officer, Gokulam Medical Centre
Dr. Moni Abraham Kuriakose, Co-Founder & Medical Director, Karkinos Kerala
Dr. Abdullah K.P., Founder, Oncure Preventive Healthcare Clinic, Calicut
Dr. Deepthi T.R., Preventive Oncologist, Oncure

The MVR Cancer Centre Model and Its Contribution to Kerala's Cancer Treatment Ecosystem

Building Regional Oncology Capacity

Keynote Address

Dr. Narayanankutty Warrier, Medical Director and Senior Consultant at the MVR Cancer Centre and Research Institute, Kozhikode, delivered a recorded address highlighting the importance of decentralizing high-quality cancer care across Kerala. Apologizing for his inability to attend in person due to institutional commitments, he framed his presentation around a fundamental question: how can a state ensure that world-class oncology care does not remain a geographical privilege limited to a few urban centers?

Dr. Narayanankutty Warrier,
Medical Director and Senior Consultant, MVR Cancer Centre & Research Institute, Kozhikode

He began by situating the discussion within what he described as the paradox of the "Kerala Model." High health literacy and awareness have led to increased detection of cancer, but this success has also resulted in overwhelming patient volumes at apex centers. For decades, patients from North Kerala were compelled to travel nearly 400 kilometers to the Regional Cancer Centre (RCC) in Thiruvananthapuram. While the establishment of the Malabar Cancer Centre (MCC) in Thalassery partially addressed this imbalance, many patients continued to experience what Dr. Warrier termed "referral fatigue," encompassing the emotional, physical, and financial strain of repeated long-distance travel.

In response, MVR Cancer Centre was conceived as a "third way" between the high-cost corporate healthcare model and the overstretched public sector. Dr. Warrier explained that the institution emerged from a cooperative movement, founded in 2011 by the Calicut City Service Cooperative Bank as a community-driven response to a regional healthcare crisis. Utilizing surplus deposits as part of a broader social responsibility initiative, the centre was established under the CARE Foundation (Cancer and Allied Ailments Research Foundation) and formally inaugurated in 2017. This cooperative ownership model, he emphasized, represents a rare example of community-led tertiary cancer care in India.

Dr. Warrier underscored that decentralization is meaningful only when it ensures parity in quality. MVR Cancer Centre was therefore designed to provide the same technological and clinical standards available in leading global cancer centers. Spread across a 20-acre green campus, the 300-bed facility was developed at a project cost of approximately ₹600 crore. The centre houses North Kerala's first robotic surgery unit, advanced bone marrow transplant facilities, and fully automated pathology laboratories. Today, it stands as the third-largest cancer centre in Kerala by caseload, significantly reducing patient burden on RCC and MCC.

Addressing the challenge of affordability, Dr. Warrier introduced MVR's innovative **15/5 cooperative insurance model**. Under this scheme, members who deposit ₹15,000 with the parent cooperative bank become eligible for cancer treatment coverage of up to ₹5 lakh. This model, he noted, ensures that patients with potentially curable malignancies are not denied treatment due to financial constraints, reinforcing the centre's commitment to equitable care.

Looking ahead, he outlined MVR's future roadmap, emphasizing that responsibility does not end at the hospital gate. A key initiative is **CCP Care (Chemotherapy Closer to Patients)**, an AI-enabled startup model designed

to deliver chemotherapy through smaller peripheral centres closer to patients' homes. This digitally integrated system allows clinicians to monitor treatment remotely while minimizing travel and disruption for patients. In parallel, MVR has strengthened its academic mission, currently running over 25 clinical trials and offering DNB training programs aimed at building local oncology talent rather than relying on external recruitment.

In conclusion, Dr. Warrier asserted that building oncology capacity requires more than infrastructure investment. It demands community ownership, financial protection, academic rigor, and a commitment to geographic justice. The MVR Cancer Centre, he stated, stands as proof that a cooperative, regionally rooted model can successfully deliver high-quality, accessible cancer care while strengthening the broader healthcare ecosystem of Kerala.

Chairperson:
Dr. Sano A.S., Consultant Surgical Oncologist, SGMCRF

ACTION LEADERS:
Dr. Joe Joseph, Professor & Head, Dept. of Dental Public Health, Sree Mookambika Institute of Dental Sciences
Ms. Asha Subramaniam, Trustee, Swasthi Foundation

BREAST CANCER SCREENING AND RISK REDUCTION STRATEGIES: SINGAPORE PERSPECTIVE

Keynote Address

Prof. Preetha Madhukumar, Clinical Associate Professor, Duke-NUS Medical School, Singapore

Prof. Preetha Madhukumar, Clinical Associate Professor at Duke-NUS Medical School, Singapore, presented the Singapore perspective on breast cancer screening and risk reduction, drawing on the country's structured public healthcare system and organized national screening programs. She noted that breast cancer remains the most common cancer among women in the region, making early detection and risk-based prevention a public health priority.

She began by outlining the Singapore screening landscape, which is anchored by BreastScreen Singapore, a nationwide population-based screening program. Unlike opportunistic or fragmented screening models, the program is centrally coordinated and designed to minimize logistical and psychological barriers. Women can book appointments online, screening centers are geographically accessible, and results are mailed directly to homes to reduce anxiety. Despite these measures, Prof. Madhukumar highlighted a persistent challenge: participation rates remain low, with only about one-third of eligible women undergoing screening. This, she emphasized, demonstrates that availability alone does not guarantee uptake.

Discussing screening modalities, she reaffirmed mammography as the gold standard, with detection rates of approximately 6–7 cancers per 1,000 women screened under the national program. Importantly, Singapore follows a risk-stratified approach rather than a uniform strategy. Women identified as high risk, such as those with known genetic mutations or prior chest irradiation, are offered enhanced surveillance, including the use of MRI alongside mammography, often

starting at a younger age.

Prof. Madhukumar then turned to primary prevention and risk reduction, stressing that effective breast cancer control begins well before screening. Singapore's national initiatives, including Healthier SG and Active SG, promote lifestyle interventions such as weight management and regular physical activity (at least 150 minutes per week), both of which have been shown to reduce breast cancer risk. For women at significantly elevated risk, she noted that medical options such as chemoprevention and risk-reducing surgery are discussed, always within the framework of structured genetic counseling and shared decision-making.

In conclusion, Prof. Madhukumar emphasized that while early detection through screening saves lives, outcomes improve further when screening is combined with individualized risk assessment and prevention strategies. She advocated moving away from a one-size-fits-all model toward a risk-based approach that aligns screening intensity and preventive interventions with each woman's risk profile.

ACTION LEADERS:
Dr. Amrita Rao, Plastic Surgeon, SUT Hospitals

EARLY DETECTION STRATEGIES FOR BREAST CANCER AND ITS IMPACT ON SURVIVAL

Keynote Address

Dr. Manu Prasad addressed the session by underscoring early detection as the single most decisive factor influencing breast cancer survival outcomes. He emphasized that disparities in survival are driven far more by delays in diagnosis than by limitations in treatment.

He began by highlighting the survival gap associated with stage at diagnosis. Early-stage breast cancer carries an excellent prognosis, with Stage I survival exceeding 90 percent, while survival in Stage IV disease drops sharply to approximately 25–30 percent. In low- and middle-income countries, including India, nearly 50–60 percent of patients present with Stage III or IV disease. Dr. Prasad stressed that this pattern reflects systemic diagnostic delays rather than failures of oncology care.

Dr. Manu Prasad,
Consultant Medical Oncologist at Aster Kannur

Explaining the scientific basis of screening, he noted that the objective of screening programs is to shift the stage at diagnosis. Mammography can detect tumors at an average size of around 12 mm, whereas symptom-based detection and palpation usually identify tumors only after they grow beyond 20 mm. He cited evidence from large randomized controlled trials, including the Swedish Two-County Trial, which consistently demonstrated a 20 - 30 percent reduction in breast cancer mortality through organized mammography screening.

Turning to Indian evidence, Dr. Prasad highlighted the Trivandrum Breast Cancer Screening Project as a landmark regional study. This trial evaluated the impact of Clinical Breast Examination (CBE) performed by trained health workers. The intervention resulted in a statistically significant improvement in five-year survival, increasing from 71 percent in the control group to 77 percent in the screened population. He emphasized that this finding is particularly important for resource-constrained settings, proving that structured, low-cost screening strategies can meaningfully improve outcomes even in the absence of widespread mammography.

Based on this evidence, Dr. Prasad proposed a tiered screening strategy for Kerala. Breast Self-Examination (BSE), while not shown to reduce mortality in randomized trials, plays an important role in building breast awareness and promoting early health-seeking behavior. Clinical Breast Examination should serve as the backbone of population-level screening, given its feasibility and demonstrated impact on down-staging disease. Mammography, he suggested, should be deployed in a targeted manner, particularly in urban settings and through opportunistic screening pathways.

In conclusion, Dr. Prasad reiterated that there is no single screening model suitable for all contexts. Integrating breast awareness and Clinical Breast Examination into the primary healthcare system, while selectively expanding mammography services, is essential to bridging the survival gap and improving breast cancer outcomes in Kerala.

Chairperson:
Dr Midhun - Surgical oncologist , S K Hospital

ACTION LEADERS:
Dr Nithu George - Assistant Professor , Gynaec Oncology , CCRC , Cochin.

MULTI-CANCER DETECTION (MCD) TESTING AND ITS ROLE IN EARLY CANCER DIAGNOSIS

Keynote Address

Dr. Aditya K. Ghosh,
Consultant, General Internal Medicine, Mayo Clinic, Rochester, USA

Dr. Aditya K. Ghosh addressed the session by introducing Multi-Cancer Detection (MCD) testing as an emerging tool in the cancer prevention and early diagnosis continuum. He thanked the Swasthi Foundation for the opportunity and noted that MCD testing represents a novel category of blood-based biomarker screening that occupies a space between secondary prevention and early diagnosis.

He explained that MCD testing, as exemplified by the Grail Galleri test used at Mayo Clinic, is based on Next-Generation Sequencing (NGS) of cell-free DNA (cfDNA). Cancer cells shed DNA fragments into the bloodstream, and these fragments carry unique methylation patterns that differ from normal cells. By identifying these patterns, MCD tests can detect signals associated with multiple cancer types through a single blood draw. While Galleri was the focus of his talk, Dr. Ghosh noted that several similar blood-based screening tests are now entering the market.

Dr. Ghosh then described the clinical implementation challenge faced at Mayo Clinic. Increasingly, patients were arriving with MCD test results obtained elsewhere or requesting these tests proactively. At that stage, clinicians lacked standardized protocols for ordering, interpreting, and acting on such results. Mayo Clinic recognized that declining to engage with this testing would only push patients toward fragmented care and prolonged diagnostic uncertainty. To address this, a multidisciplinary framework was established, encompassing patient education, informed consent, test ordering, external analysis by the testing company, and standardized result communication.

A central principle of implementation was shared decision-making. Mayo Clinic developed structured video-based education to ensure patients clearly understood the scope and limitations of MCD testing. Patients were informed that the test screens for approximately 50 cancer types, has primarily been studied in individuals over 50 years of age, and is not yet FDA-approved or recommended by major medical societies. The test also involved significant out-of-pocket costs, initially around USD 900, later reduced to approximately USD 700. Importantly, patients were advised that a negative MCD result does not replace standard screening such as colonoscopy, mammography, or skin examinations.

Dr. Ghosh emphasized that while MCD testing demonstrates high sensitivity for advanced disease, detecting approximately 90% of Stage IV cancers, sensitivity is considerably lower for early disease, at around 17% for Stage I cancers. Despite this limitation, he highlighted its value in identifying lethal cancers that currently lack routine screening pathways, including pancreatic, ovarian, and esophageal cancers.

He then outlined the diagnostic algorithms developed to respond to a positive test. Rather than a generic positive result, the test provides a “Cancer Signal Origin,” indicating the most likely anatomical source. Mayo Clinic created standardized, site-specific workup pathways. For example, a head-and-neck signal prompted ENT evaluation with endoscopy and cross-sectional imaging, while pancreatic or gallbladder signals triggered pancreas-protocol CT or MRCP. This standardization was essential to ensure diagnostic rigor and avoid unnecessary or inappropriate testing.

To assess real-world feasibility, Dr. Ghosh presented findings from an 18-month prospective cohort study conducted between June 2022 and November 2023, involving 2,244 asymptomatic individuals. Seventeen participants (0.76%) tested positive. Fifteen underwent further diagnostic evaluation, of whom 11 were confirmed to have malignancy, yielding a positive predictive value of 73.3%. These cancers included malignancies of the head and neck, breast, colon, esophagus, lymphoma, ovary, and pancreas, despite all patients having previously completed guideline-recommended screening with negative results. Four patients had positive signals without detectable malignancy and were placed under longitudinal surveillance.

Dr. Ghosh also addressed ethical and practical limitations. In one case, a patient with advanced dementia tested positive, but invasive follow-up was declined, underscoring the need for careful pre-test counseling to ensure patients are suitable for downstream diagnostics. He cautioned

against overdiagnosis and stressed that MCD testing must be used judiciously.

In conclusion, Dr. Ghosh noted that MCD testing should currently be viewed as an adjunct rather than a replacement for established screening programs. Ongoing analysis of a second cohort (2024–2025) is evaluating long-term outcomes, cost-effectiveness, and optimal testing intervals. He concluded that, when implemented within a structured clinical framework, MCD testing represents a promising step toward cancer interception and personalized, risk-based early detection.

Chairperson:
Col. Rajeev Mannali, MD & CEO, SUT Hospital

FROM DIALOGUE TO ACTION – EAST-WEST COLLABORATION IN CANCER PREVENTION

Introductory & Welcome Address

Dr. M. P. Chandran –
President, JG University

The discussion began with a welcome address by Dr. M.P. Chandran, President of JG University. Dr. Chandran articulated the massive logistical challenge required to declare a region like Thiruvananthapuram "cancer-safe." He argued that screening such a vast demographic cannot be handled by doctors alone.

Instead, he proposed a capacity-building initiative leveraging the National Skill Academy to train ASHA workers and nursing students. By equipping this grassroots workforce with diagnostic tactics and interview techniques, the state could perform first-level screening effectively, ensuring that only those with a high propensity for the disease are referred to medical experts for advanced diagnostics.

Presidential Address

Adv. Meenakshi Lekhi
Former Minister of State
for External Affairs,
Government of India

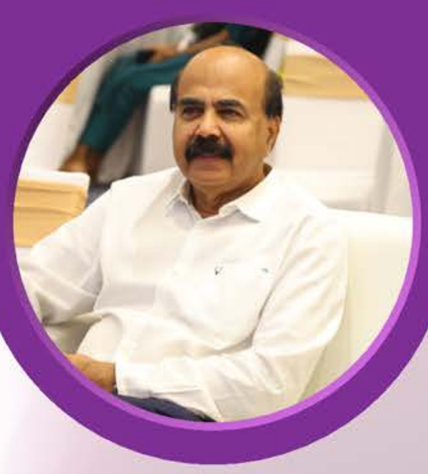
Adv. Meenakshi Lekhi delivered a thought-provoking presidential address that sought to bridge the gap between modern science and traditional wisdom. She highlighted the inherent contradictions in healthcare, noting the tension between the risk of "overdiagnosis", a concern raised earlier by Dr. Aditya Ghosh regarding MCD testing, and the tragedy of late diagnosis.

She emphasized the need to focus on vulnerable groups, including the elderly and those in specific geographies affected by environmental pollution. Adv. Lekhi drew a sharp connection between environmental sustainability and health, citing the alarming ingestion of microplastics and the inflammation caused by genetically modified crops like wheat. She drew particular attention to a startling statistic: over 70% of breast cancer cases occur in women who do not breastfeed, a practice she noted was discouraged in the Global South due to corporate malpractice promoting baby formula. Calling for a "decolonization of the mind," she urged a return to the traditional "Indian Platter," which is plant-heavy and sustainable, arguing that adopting Western consumption patterns would be a disaster for both the planet and human health.

Felicitation Address

Dr. Mohanan Kunnummal shifted the focus to the critical lack of health data in India. He remarked that while the medical community knows lifestyle diseases are rising, the absence of specific statistics makes it difficult to pinpoint causes, declaring that "data is the new gold." He reinforced Adv. Lekhi's points on diet, explaining how the Green Revolution's promotion of high-glycemic rice and wheat contributed to the diabetes epidemic, whereas tribal populations historically remained healthier on a diet of millets. He also issued a stern warning regarding India's demographic dividend; with 60% of the population under the age of 25, the country faces a potential "demographic disaster" if this youth succumbs to junk food and addiction, urging immediate lifestyle interventions.

Prof (Dr.). Mohanan Kunnummal,
Vice Chancellor,
Kerala University of Health Sciences &
University of Kerala



Dr. Chinnababu Sunkavalli spoke passionately about the need to move healthcare out of hospitals and into communities. He observed a distinct dichotomy: the West possesses superior systems and processes, while the East holds stronger family and community structures. The solution, he argued, lies in the intersection of these strengths. Before departing, he pledged a concrete commitment to partner with the Swasthi Foundation to launch a pilot project in Kerala, utilizing his successful mobile screening model to reach the "last mile" of the population.

Dr. Chinnababu Sunkavalli,
Founder and Global CEO, Grace Cancer Foundation, Hyderabad

Dr. Aditya K. Ghosh utilized a powerful analogy to describe the gap in medical education. He noted that the system spends vast resources training "firefighters" (oncologists treating late-stage disease) but almost no time training people to install "smoke detectors" (prevention). Sharing experiences from Georgia, USA, he described the "Ham and a Haircut" initiative, where barbershops were used to encourage prostate cancer screening among African American men, urging Kerala to find similar culturally relevant, scalable ways to spread awareness.

Dr. Aditya K. Ghosh,
Consultant, General Internal Medicine, Mayo Clinic Rochester, USA

Dr. S. Sundar Manoharan,
Director General, Pandit Deendayal Energy University, Gandhinagar

Dr. S. Sundar Manoharan addressed the economic barriers to early detection. He argued that current high-end tests are unaffordable for the masses and called for "frugal innovation." He urged medical practitioners to collaborate with engineering students through platforms like the Smart India Hackathon to develop simple, MEMS-based detection tools using saliva or urine, similar to pregnancy test kits.

Dr. Harikumaran Nair spoke on the "intangibility" of primary prevention. He explained that policymakers and individuals often ignore prevention because it is difficult to measure the lives not lost. He warned that identified risk factors are merely the "tip of the iceberg" and that research must pivot toward unidentified risks to make primary prevention a viable long-term strategy.

Dr. Harikumaran Nair G.S.,
President, Kerala State Medical Council

Mr. Neeraj A. Sharma offered a strategic roadmap based on his experience building India's first mobile cancer detection van in 1999. He proposed that every MLA utilize their constituency funds to purchase two mobile clinics. He calculated that if each clinic screened just 25 women a day, the state could screen millions rapidly, effectively decongesting tertiary hospitals.

Mr. Neeraj A. Sharma,
Honorary Consul General, Republic of Palau
Academic & Institutional Leadership

Mr. Metsing Ediel Lemphane, Ambassador, Kingdom of Lesotho

Providing a global perspective, **Mr. Metsing Ediel Lemphane** shared the dire reality of his nation, which has only one qualified oncologist for 2.2 million people. He highlighted the fragility of their health system and the urgent need for international collaboration to build infrastructure and expertise.

Concluding Statement

The session concluded with a sobering reality check from Dr. Ansar P.P. He presented alarming statistics, noting that Kerala currently faces approximately 60,000 new cancer cases annually, a figure projected to rise to 90,000 by 2030. This trajectory implies that one in every 20 to 50 families in the state is directly affected. However, he ended on a hopeful note, emphasizing that 60% of these cancers are preventable and calling upon the youth to take immediate responsibility for their lifestyle choices to safeguard the future of the state.

National Centre for Preventive Oncology – A Blueprintote Address

The session commenced with a stirring address by Dr. Ansar P.P., who directed his message specifically toward the youth and dignitaries present. He began by confronting the audience with the stark reality of Kerala's public health landscape. Despite the state's high literacy rates, robust community participation, and relatively high per-capita health spending compared to the rest of the developing world, Kerala faces a paradoxical and alarming rise in cancer incidence. Dr. Ansar highlighted that the disease is projected to affect nearly one in every 200 individuals in the state, evolving into a severe public health challenge. However, he emphasized a beacon of hope amidst these grim statistics: approximately 60% of these cancer cases are completely preventable through lifestyle modifications and early interventions.

Dr. Ansar P.P.,
Professor of Surgery and Head, Division of Surgical and Gynaecological Oncology, SGMRF; GG Hospital, Thiruvananthapuram

Dr. Ansar identified a critical structural void in the current healthcare ecosystem. He pointed out that while the medical infrastructure is well-equipped to treat the sick, there is currently no dedicated institution where a healthy individual can seek authoritative guidance on staying disease-free. He posed a rhetorical question to the youngsters in the audience, asking if they knew where to go to learn how to prevent cancer in later life. The absence of such a center means that primary prevention is often

ignored until a person reaches their 50s or 60s, by which point it is often too late to reverse the damage. Consequently, he proposed a radical shift in vision: moving beyond the summit's theme of "Early Detection Saves Lives" to a new paradigm of "Active Prevention."

To address this gap, Dr. Ansar unveiled the blueprint for a proposed National Institute of Preventive Oncology. Unlike traditional hospitals that cater to patients, this center would be a sanctuary for the healthy, designed specifically to prevent the transition from health to disease. The institute is envisioned as a convergence point for modern evidence-based science and Kerala's traditional wisdom, specifically Ayurveda, which is inherently a preventive health system. The goal is to provide personalized, medically sound lifestyle prescriptions that override the generic and often unverified health advice found on the internet.

The proposed institute would be structured around several specialized departments designed to address every aspect of a healthy lifestyle. A Department of Nutrition and Metabolic Health would move beyond fad diets, offering individuals precise dietary plans based on their specific metabolic profiles to prevent future diseases. Similarly, a Department of Physical Medicine and Lifestyle would prescribe exercise regimens tailored to an individual's age and physiological capability, mitigating the risks of injury common with unsupervised workouts. Recognizing the role of stress as a carcinogen, a Department of Mental and Behavioral Health would provide strategies for mental well-being. Furthermore, the institute would feature a Department of Reproductive and Hormonal Health, which Dr. Ansar noted, is critical for guiding women on biological timelines, such as the optimal age for marriage, conception, and the duration of breastfeeding to minimize cancer risks. This would be supported by a Department of Molecular Pathology and Genetics, utilizing advanced screening to identify the 15-20% of the population with hereditary cancer risks right at birth, allowing for lifelong precautionary measures. All of this would be underpinned by a Health Data Repository to drive research and policy.

Concluding his address, Dr. Ansar announced a significant milestone for the project: His Excellency, the Governor of Kerala, has formally agreed to support the establishment of this institute. He detailed the immediate roadmap, which includes the release of a "Trivandrum Declaration" to outline the action plan. The project is set to launch as a pilot in Thiruvananthapuram, aiming to make it a model district for preventive healthcare before scaling the framework to the national level. Dr. Ansar ended with a powerful appeal to the youth, stating that the ultimate goal of this initiative is to save the population from a preventable crisis, a responsibility that must be acted upon immediately to safeguard the next generation.

TELEMEDICINE
Panel Discussion

Keynote Address

Moderated by
Mr. Neeraj A. Sharma, Honorary Consul General, Republic of Palau

Panelists:
Dr. Ansar P.P., Kerala Association of Surgical Oncology (KASO)
Mr. Metsing Ediel Lemphane., Ambassador, Kingdom of Lesotho
Prof. S. Sundar Manoharan, Director General, Pandit Deendayal Energy University, Gandhinagar
Dr. Somasundaram Subramanian, Surgical Oncologist, Aster Medcity, Kochi

This Session examined telemedicine as a force multiplier in preventive and cancer care, extending beyond remote consultations to encompass legislation, trust, technology, and global equity. The discussion emphasized that telemedicine is not a substitute for physical healthcare but a strategic tool to bridge disparities between resource-rich and resource-poor regions.

Mr. Neeraj A. Sharma opened the session by framing telemedicine as a multidimensional intervention that spans technology, patient psychology, legal frameworks, and cross-border healthcare delivery. He emphasized the need to move beyond viewing telemedicine as merely a convenience tool and instead recognize its systemic potential.

Dr. Ansar P.P. highlighted Kerala's unique position, noting its high doctor-to-population ratio compared to vast regions in India and globally where even primary healthcare is inaccessible. He emphasized that telemedicine enables the export of expertise without the physical movement of specialists, allowing resource-rich states like Kerala to support underserved populations efficiently.

Mr. Metsing Ediel Lemphane described the healthcare challenges in Lesotho, where a majority of the population lives in remote highland regions requiring days of travel to reach health facilities. He emphasized that telemedicine could dramatically alter access to care, with time-

zone differences being a minor inconvenience compared to the benefits of avoiding arduous travel. He stressed that a hybrid model, remote specialists supported by local healthcare workers, would be highly effective and culturally acceptable.

Prof. S. Sundar Manoharan discussed scalable, affordable telemedicine solutions developed at PDEU, including multilingual health kiosks deployed in remote villages. These kiosks guide patients through basic diagnostics, transmit data to consultants, and enable rapid triage decisions. He expanded the concept from telemedicine to "tele-care," where continuous monitoring through mobile applications allows proactive health management even for low-income users.

Dr. Somasundaram Subramanian addressed the legal and trust-related challenges of telemedicine, drawing from the Russian model. He explained that Russia mandates at least one physical consultation before telemedicine follow-ups are permitted, ensuring diagnostic accuracy and legal accountability. He cautioned against exclusive reliance on screen-based diagnosis and highlighted infrastructure gaps, such as the lack of trained technicians and digital pathology capabilities in remote areas.

Responding to concerns about patient trust, **Mr. Metsing Ediel Lemphane** emphasized the importance of human intermediaries. He explained that in Lesotho, Rural Health Motivators play a critical role in building trust. Telemedicine becomes acceptable when remote consultations are supported by a physically present, trusted local healthcare worker.

Dr. Ansar P.P. identified Virtual Multidisciplinary Tumor Boards (MDTs) as the most impactful immediate application of telemedicine in oncology. He noted that MDT discussions improve cancer survival by approximately 15%, yet are logistically difficult to conduct physically. Virtual MDTs enable rapid, coordinated decision-making among specialists without geographical constraints.

Dr. Somasundaram Subramanian supported this view, noting that online MDTs are already improving efficiency and serving as valuable training platforms for junior doctors. He introduced PDEU's patented "Trend-Graph" technology, which enables continuous remote monitoring of patient vitals. This system shifts healthcare from episodic consultations to longitudinal care, particularly beneficial for chronic disease management and post-treatment surveillance.

In his concluding remarks, **Mr. Neeraj A. Sharma** summarized the discussion by reiterating that telemedicine is not a replacement for traditional care but a strategic amplifier when combined with physical healthcare systems and community-level support. The session reinforced that effective telemedicine requires regulatory clarity, technological readiness, and human trust bridges, especially in rural and global health contexts.

CANCER CONTROL ACTIVITIES IN THE SOVIET UNION: LESSONS FOR THE WORLD

Keynote Address

Dr. Somasundaram Subramanian delivered a deeply reflective and analytically grounded address on cancer control in the Soviet Union and contemporary Russia, positioning it as a model with enduring lessons for the world. Thanking the organizers for the invitation, he noted that while the session was originally framed as "Lessons for the World," he consciously refined it to focus on the Russian Federation, given his long-standing professional and personal engagement with the region. Declaring that he receives no funding from pharmaceutical companies or industry, Dr. Subramanian stated that his only conflict of interest lay in the welfare of cancer patients.

Dr. Somasundaram Subramanian,
Founder and CEO,
Eurasian Federation of Oncology (EAFO)

He situated his perspective within a powerful personal narrative, describing himself not only as a surgical oncologist but also as a cancer survivor and an indirect victim of the Chernobyl nuclear disaster. While studying in Soviet Ukraine in 1991, he was exposed to radiation that led to the development of cancer five years later, a fate shared by two other Indian students from his cohort. Following multiple surgeries, including one that resulted in the loss of his voice, he redirected his professional life toward philanthropy. For more than fifteen years, he has devoted the entirety of his private practice income to an NGO operating in Russia, supporting the training of doctors and scientists across countries without reliance on government or industry funding.

Drawing on his work with The Lancet Oncology Commission, Dr. Subramanian compared cancer control systems in Russia, China, and India, highlighting stark differences in healthcare workforce density. Using World Bank data, he noted that Russia had nearly five doctors per thousand population, compared to India's less than one, underscoring

that while human resources matter, access to care is ultimately shaped by organization and logistics. He emphasized that Russia’s vast geography, particularly in its Asian territories, presents challenges similar to those faced in India, making systemic design as important as clinical expertise.

Tracing the historical roots of Soviet oncology, Dr. Subramanian explained that the foundations of Russia’s cancer care system were laid soon after the 1917 revolution by visionaries such as Pyotr Herzen and Nikolai Petrov. A decisive decree signed in 1945 created a nationwide framework for cancer control, which later reached its peak under Nikolai Blokhin. Between the 1950s and 1970s, the Blokhin Cancer Center in Moscow emerged as the world’s largest comprehensive cancer institution, housing dedicated facilities for adult and pediatric oncology, cancer research, and even veterinary oncology. He observed that China’s subsequent success in cancer infrastructure was built by closely replicating this Soviet model, while India lagged behind and the United States only later embarked on its national cancer initiative.

Turning to the present, Dr. Subramanian outlined Russia’s current cancer control strategy, which aims to significantly improve early-stage detection and reduce early mortality by 2030. This is supported by a hierarchical national infrastructure that includes top-tier national cancer and radiation centers, over a hundred regional cancer centers, hundreds of ambulatory oncology units delivering treatment closer to patients’ homes, and the enduring Soviet-era concept of the “local oncologist,” ensuring cancer expertise even at district and village levels. He emphasized that this decentralized yet integrated system has been critical in reducing referral fatigue and improving continuity of care.

He also highlighted Russia’s global leadership in nuclear medicine, tracing it back to the post-war “Atom for Peace” initiative. Today, Russia remains a major producer of medical isotopes and radiopharmaceuticals, supplying even Western nations despite geopolitical constraints. In contrast, he argued that although India is a nuclear and pharmaceutical power, it has yet to achieve comparable leadership in nuclear medicine, identifying the country’s failure to join international research platforms such as the Joint Institute for Nuclear Research in Dubna as a missed opportunity.

A defining strength of the Russian system, Dr. Subramanian noted, is its Compulsory Medical Insurance model, which guarantees comprehensive, state-funded cancer treatment for all citizens and permanent residents. Advanced therapies, including immunotherapy,

targeted treatments, and proton therapy, are provided free of cost when recommended by multidisciplinary tumor boards, without the financial caps common in insurance-based systems elsewhere. This, he argued, fundamentally alters patient outcomes by removing cost as a barrier to care.

Addressing perceptions of Russia as a closed healthcare system, Dr. Subramanian contended that language, rather than access, remains the primary barrier. He criticized the trend of Indian medical students studying in Russia exclusively in English, arguing that it limits patient interaction and deeper understanding of the healthcare system. He advocated for language immersion as essential for meaningful clinical and academic exchange, recalling earlier generations of Indian doctors who integrated fully into Soviet medical practice.

In his concluding reflections, Dr. Subramanian challenged the prevailing emphasis on stand-alone cancer prevention clinics. He argued that persuading healthy individuals to dedicate time solely for cancer screening is often impractical. Instead, he proposed a shift toward “Disease Early Detection Clinics,” inspired by the Soviet concept of mandatory annual health checkups, where cancer screening is embedded within comprehensive assessments for metabolic, cardiac, and other chronic conditions. Such a holistic model, he suggested, offers a more sustainable and socially acceptable pathway for preventive medicine. He concluded by asserting that building effective cancer control systems is not merely about acquiring technology, but about organization, equity, and the political will to prioritize health as a public good.

ACTION LEADERS:

Dr Abdullah K. P. , Founder and Managing Director, Oncure Preventive Healthcare Clinic, Calicut.

Dr. Arun Sankar S - Additional Professor of Radiation oncology, RCC Trivandrum

HOPE AND HEALING

Mental Wellness in the Cancer Journey

Panel Discussion

Moderation:
Dr. Arun B. Nair, Professor of Psychiatry, Medical College Hospital (MCH), Thiruvananthapuram

Chairperson:
Dr. K. A. Kumar, Senior Consultant, Psychiatry & Behavioral Medicine, KIMSHEALTH

Panelists:
Dr. P. G. Saji, Professor and HOD Psychiatry, SGMCRF
Dr. Abeer Abdul Rezak, Assistant Professor of Psychiatry, SGMCRF

The session began with a concise yet powerful opening by the moderator, **Dr. Arun B. Nair**, who emphasized that the frame of mind of a patient is not merely a side effect of the disease but a critical factor in its genesis, prognosis, and recovery. Drawing upon the seminal work of Elizabeth Kübler-Ross in her book On Death and Dying, Dr. Arun illustrated the psychological trajectory a patient traverses upon receiving a cancer diagnosis. The journey typically begins with Denial, where the patient questions the validity of the diagnosis, often comparing their own healthy habits (like being a teetotaler) to neighbors who abuse alcohol yet remain disease-free. This is followed by Anger, which is often projected onto caregivers and doctors, complicating patient care. The third stage, Bargaining, sees the patient negotiating with doctors or even God for milestones, such as living long enough to see a child's marriage. This eventually gives way to Depression as the reality sets in, before finally reaching Acceptance. Dr. Arun posited that the primary duty of a healthcare professional is to facilitate a smooth transition to this final stage without the patient enduring excessive psychological trauma.

Addressing the evolution of cancer care, Dr. P.G. Saji offered a critical perspective on modern medicine. Responding to a query about how attitudes toward cancer have shifted over the last three decades, he noted a gap in medical training. While the summit had focused heavily on the statistic that 60% of cancers are preventable, Dr. Saji reminded the audience that cancer happens to a human being, yet doctors are often trained to treat only the pathology. He argued that patients are rarely afraid of death itself; rather, they are tormented by uncertainty and the question, "Why me?" He emphasized that the goal of oncology must shift from simply "adding years

to life" to "adding life to years." While technological advancements are vital, the "human touch" remains the cornerstone of healing, ensuring the quality of living is prioritized alongside survival.Evolution of Care: Treating the Human, Not Just the Pathology

The Diagnostic Challenge: Depression vs. Physical Suffering

A significant portion of the discussion was dedicated to the clinical challenge of diagnosing depression in cancer patients. **Dr. Arun** pointed out that standard diagnostic criteria for depression often fail in an oncology setting. Symptoms like fatigue, weight loss, sleep disturbance, and loss of appetite, standard markers for depression in healthy individuals, are physically inevitable for a cancer patient undergoing chemotherapy. Applying these standard criteria would lead to a false diagnosis of depression in nearly every cancer patient. Consequently, Dr. Arun outlined "Substitutive Criteria" that focus on psychological rather than somatic symptoms:

1. Brooding: Being immersed in dark thoughts for extended periods.
2. Pessimism & Self-Pity: A sense of hopelessness that is the single biggest factor affecting treatment adherence.
3. Social Withdrawal: A retreat from social life into isolation.
4. Non-Reactive Mood: An inability to be cheered up even by positive events.
5. Facial Expression: A fearful or tearful countenance, often denied by the patient due to "toxic masculinity" or societal pressure to appear strong.

Gender Perspectives and The Physician's Duty

Dr. Abeer Abdul Rezak addressed the specific vulnerabilities of women in the context of the rising cancer burden. She noted that while Major Depressive Disorder is already twice as common in females as in males, the risk escalates significantly with a cancer diagnosis. National surveys indicate that 15% to 30% of patients with gynecological cancers suffer from clinical depression. Dr. Abeer highlighted that women, often the multitasking anchors of their families, face a compounded emotional burden when diagnosed, making them uniquely susceptible to psychological distress.

Conclusion: The Art of Selling Realistic Hope

The session concluded with a reflection on the physician's ultimate role. Dr. Arun described the medical profession as the business of "Selling Hope." However, he cautioned that this hope must be realistic. False hope can be destructive, prompting patients to liquidate assets for futile treatments, only to leave their families in financial ruin after they pass. The art of oncology, therefore, lies in breaking bad news while simultaneously empowering the patient.

The goal is to instill a realistic hope that psychologically organizes the patient to fight the disease and, crucially, to trust their doctor, validating Dr. Saji's earlier sentiment that the human connection is the most powerful tool in the medical arsenal.

GENETICS AND CANCER: WHAT IS THE CURRENT ROLE IN PREVENTION?

Keynote Address

The session commenced with Dr. Roshan Daniel setting the foundational context for the discussion: understanding cancer fundamentally as a genetic disease. He clarified that a normal cell cannot transform into a malignant one without accumulating specific mutations. While not all cancers are congenital (inherited at birth), they are all genetic in the sense that they involve acquired mutations. This realization has integrated genetic testing into every phase of cancer care, from prevention and early detection to diagnosis, risk stratification, prognostication, treatment, and surveillance. Currently, these tests are somewhat fragmented across different cancer types, but the field is moving rapidly toward a unified approach where mutation profiles and gene expression patterns will guide management across all phases.

Dr. Roshan Daniel,
KIMS Trivandrum

Dr. Daniel emphasized that cancer prevention is not a monolith but a continuum. Primary Prevention involves lifestyle modifications such as cessation of smoking and alcohol, and weight management to prevent mutations from occurring in the first place. Secondary Prevention focuses on detecting cancers at their earliest, most treatable stages. Genetic testing plays a crucial role in both. Germline testing (testing for inherited mutations) is the current gold standard for identifying individuals at high risk. However, emerging technologies like Multi-Cancer Early Detection (MCED) assays are opening new frontiers. He cautioned, however, that genetic testing alone is insufficient; it must be part of a multi-pronged approach that includes other modalities and lifestyle interventions.

Explaining the biological basis of hereditary cancer, Dr. Daniel referenced the "Two-Hit Hypothesis." In the general population (sporadic cancer), two separate mutations ("hits") must occur over a lifetime to trigger cancer. However, in individuals with a hereditary predisposition (germline mutation), the "first hit" is already present at birth in every cell of their body. Consequently, it takes only one additional acquired mutation, the "second hit" for cancer to develop, which explains why these cancers often occur at a much younger age. He listed common hereditary syndromes such as Hereditary Breast and Ovarian Cancer (HBOC) syndrome (involving BRCA1, BRCA2, PALB2, CHEK2, ATM) and Lynch Syndrome. He also noted an increasing detection of TP53 mutations (Li-Fraumeni syndrome) in recent clinical practice.

A critical practical challenge is determining who requires genetic testing, as it is neither cost-effective nor feasible to test everyone. Dr. Daniel outlined key "Red Flags" that should trigger suspicion: early age of onset, multiple primary cancers in one individual, multiple affected family members, rare cancer types, or specific pathologies (e.g., Triple-Negative Breast Cancer or Microsatellite Instability-High tumors). He illustrated this with a case study involving a family with diverse cancer history. He introduced the concept of "Phenocopies", cases that appear genetic but are actually due to environmental factors (e.g., lung cancer in a heavy smoker father). In such scenarios, testing the affected individual (the "proband") is ideal. If the proband is unavailable, testing the most closely related affected relative is the next best step to accurately identify the mutation.

When a family is identified for testing, the choice of test is critical. While sequencing picks up point mutations, techniques like MLPA (Multiplex Ligation-dependent Probe Amplification) are needed to detect large deletions or duplications. Therefore, comprehensive panels that combine both are preferred. Dr. Daniel elaborated on the profound implications of a positive result:
For the patient, it can open doors to targeted therapies (e.g., PARP inhibitors) or preventive surgeries (e.g., risk-reducing mastectomy).
For the family, it allows for "cascade testing" of asymptomatic relatives. Those who test positive can start intensive surveillance early, potentially catching cancer at a precancerous or early stage.

Crucially, he warned that a negative result does not rule out risk entirely. Even if a specific genetic panel is negative, a strong family history (empirical risk) may still necessitate enhanced screening (e.g., a woman with a sister and mother who had breast cancer remains at double the population risk, regardless of genetic test results).

Dr. Daniel highlighted the proactive approach at KIMS Trivandrum, where they have established a Hereditary Cancer Risk Assessment Clinic. Patients or families with a suspicious history can meet a dedicated Oncogenetics Counsellor (Ms. Parvathy). Using detailed questionnaires and pedigree charts, patients are scored to determine their testing eligibility. This system filters out those with vague histories while ensuring high-risk individuals receive appropriate testing and surveillance.

The discussion touched upon the frontier of Multi-Cancer Early Detection (MCED) tests, such as the Galleri test. These blood-based "liquid biopsies" analyze cell-free DNA to detect signals from over 50 types of cancer, often identifying the tissue of origin. While promising - claiming to detect up to seven times more cancers than standard screening alone, Dr. Daniel noted that they still require rigorous validation before becoming standard practice.

He concluded by showcasing the advanced genomic capabilities at KIMS. Their in-house lab is equipped with NGS (Next-Generation Sequencing), MLPA, Sanger Sequencing, Karyotyping, and FISH (Fluorescence In Situ Hybridization). In a recent audit of 71 patients tested, 12 mutations were found, but a significant number of Variants of Uncertain Significance (VUS) were also identified. Through functional studies and segregation analysis, the team successfully reclassified 13.5% of these VUS as pathogenic (actionable) and nearly half as benign, demonstrating the critical importance of expert interpretation in genetic testing.

Chairperson: **Dr. Shabeerali T U**, Senior Consultant & Chief Coordinator, Hepatobiliary, Pancreatic & Liver Transplant Surgery, KIMS Trivandrum

ACTION LEADERS:
Dr. Azgar Abdul Rasheed, Consultant Pediatric Medical Oncologist
Dr. Sano A S, Consultant Surgical Oncologist, SGMCRF
Ms. Parvathy, Oncogenetics Counsellor
Dr. Neeraja P N, Consultant Medical Oncologist, NIMS Medicity1
Dr. Anju S Chandrabose, Clinical Oncologist, NIMS Medicity

VIROLOGY IN CANCER PREVENTION STRATEGIES

Keynote Address

Dr. Santhosh Kumar T.R., Director, Rajiv Gandhi Centre for Biotechnology (RGCB)

The session began with Dr. Santhosh Kumar providing an overview of the Rajiv Gandhi Centre for Biotechnology (RGCB). He highlighted the institute's robust infrastructure, including its main campus at Jagathy (a 10-minute walk from the venue), a second campus at Akkulam (about 13 km away), and a specialized "Bio-Nest" startup incubation facility in Cochin. This facility is pivotal in supporting biotech industries, particularly those working on disease biology and product development.

Dr. Kumar addressed the core theme: the role of viruses in cancer. While approximately 95% of cancers are caused by other factors, about 20% of global cancer cases are attributed to viral infections, primarily Hepatitis B (HBV), Hepatitis C (HCV), and Human Papillomavirus (HPV). He clarified that while viruses like HIV do not directly cause cellular transformation, they compromise the body's immune surveillance, creating a fertile ground for other oncogenic viruses to thrive. He established the logical premise for the session: if a virus causes cancer, then a vaccine against that virus serves as a cancer prevention strategy. He cited evidence showing that improved sanitation and hygiene have already reduced the prevalence of H. pylori (linked to gastric cancer) and Hepatitis B, directly correlating with a reduction in associated cancers.

The central focus of the talk was Human Papillomavirus (HPV) and its link to cervical cancer, the second most common cancer in India. Dr. Kumar detailed the biology of HPV, noting that while there are many strains, high-risk types like HPV-16 and HPV-18 are responsible for approximately 70% of cervical cancers globally. Other high-risk types (31, 33, 45, etc.) contribute to the remaining cases. He explained the virus's lifecycle: it infects undifferentiated basal cells through micro-abrasions, enters via endocytosis, integrates its DNA into the host nucleus, and hijacks the cellular machinery to produce viral proteins (L1 and L2). He emphasized

that while most HPV infections are transient and cleared by the immune system, persistent infection with high-risk types drives the transformation from cervical intraepithelial neoplasia (CIN 1, 2, 3) to invasive cancer.

Dr. Kumar traced the scientific journey of the HPV vaccine, crediting the pioneering work of Dr. Ian Frazer and Dr. Jian Zhou. Since HPV is difficult to culture in labs, they used Bovine Papillomavirus (BPV) as a model. They successfully expressed the L1 capsid protein in a heterologous system, which spontaneously assembled into "Virus-Like Particles" (VLPs). These empty shells mimicked the virus structure perfectly, triggering a robust neutralizing antibody response without being infectious. This breakthrough led to the development of the first quadrivalent vaccine (Gardasil) by Merck and the bivalent vaccine (Cervarix) by GSK.

A significant portion of the talk was dedicated to India's pivotal role in HPV vaccine trials, specifically a landmark study initiated in 2009 by IARC (International Agency for Research on Cancer), in which RGCB was a key partner. Dr. Kumar candidly acknowledged the controversy that halted the trial but highlighted the immense scientific value of the data generated. RGCB developed sophisticated multiplex assays to quantify neutralizing antibodies against multiple HPV types. Their findings, published in The Lancet Oncology (2016) and subsequent follow-ups, were ground-breaking:

- **Single-Dose Efficacy:** The study demonstrated that a single dose of the HPV vaccine provided protection comparable to two or three doses against HPV 16 and 18 infections.
- **Long-Term Protection:** Follow-up data spanning over a decade confirmed that this protection is durable.
- **Policy Impact:** These findings were instrumental in revising global and national guidelines. The current recommendation has shifted from a 3-dose regimen to a 1-or-2-dose schedule for girls aged 9–14, significantly reducing costs and logistical barriers.

Dr. Kumar proudly discussed the development of India’s first indigenous quadrivalent HPV vaccine, CERVAVAC, by the Serum Institute of India. RGCB played a critical role in evaluating the vaccine's immunogenicity using their established assays. Approved in 2023, this affordable vaccine is set to be integrated into India’s National Immunization Program, marking a monumental step in preventive oncology.

Concluding his scientific address, Dr. Kumar touched upon ongoing research funded by the Department of Biotechnology (DBT). Scientists are trying to understand why the HPV vaccine is so effective even as a

single dose. They are investigating the role of long-lived plasma cells and memory B-cells to see if this VLP platform can be adapted to create vaccines for other diseases. He also paid tribute to the late Dr. M. Radhakrishna Pillai, former Director of RGCB, whose leadership was instrumental in orchestrating these trials.

Chairperson:
Dr. Thankachi Yamini Ramachandran, Deputy Director (CST), Kerala State AIDS Control Society

ACTION LEADERS:
Dr. Dijo D, Microbiologist, SGMCRF
Dr. Gayatri K.B., Consultant Microbiologist, GG Hospital, Trivandrum

Chairperson's Concluding Remarks:

The session concluded with remarks from the Chairperson, Dr. Thankachi Yamini Ramachandran. She reinforced the importance of HPV vaccination not just for adolescent girls, but also for high-risk groups, specifically people living with HIV. She noted that the Kerala State AIDS Control Society actively screens HIV-positive individuals for HPV and administers the vaccine. She praised the arrival of the affordable indigenous vaccine (priced around ₹1,500 for two doses compared to the earlier ₹4,500), calling it a vital tool for public health.

Dr. Thankachi Yamini Ramachandran, Deputy Director (CST), Kerala State AIDS Control Society

A CAREER-LONG EXPERIENCE IN ORAL AND BREAST CANCER SCREENING

Keynote Address

Dr. Ramdas K.,
Director, Clinical Operations and Allied Services, Karkinos Healthcare & Head, PRS Karkinos Cancer Center

The session began with Dr. Ramdas K. reflecting on a career defined by the quest for practical cancer solutions in resource-constrained settings. He opened his address by outlining the fundamental dilemma facing public health in India: while screening methods for common cancers are well-established in the West, blindly adopting them is often unfeasible due to limited infrastructure and financial resources. His objective, through two major randomized controlled trials conducted at the Regional Cancer Centre (RCC) in Trivandrum, was to identify screening strategies that were not only effective but also sustainable for the Indian context.

He emphasized that the goal of screening is to shift the diagnosis from a symptomatic, advanced stage to an asymptomatic, early stage, thereby saving lives. However, he cautioned that mass screening is resource-intensive and carries potential harms, including false positives (leading to unnecessary biopsies and anxiety), false negatives (providing false assurance), and overdiagnosis (detecting lesions that would never cause harm in a patient's lifetime).

Dr. Ramdas detailed the findings of his landmark Oral Cancer Screening Trial, which commenced in 1996. Recognizing that the oral cavity is easily accessible without complex equipment, the study aimed to validate simple Visual Oral Examination as a screening tool. The trial involved over 200,000 participants across 13 clusters. Rather than relying on doctors, the intervention utilized educated youth trained as health workers to conduct house-to-house examinations. These workers screened participants in three rounds at three-year intervals. The results were ground-breaking. After nine years, the study demonstrated a significant reduction in mortality in the intervention arm.

Crucially, Dr. Ramdas highlighted that this benefit was specific to high-risk individuals, those with a history of tobacco and alcohol use. There was no significant mortality benefit in screening the general population without these habits. The study showed a sustained 21% reduction in mortality even after the active screening phase ended. Furthermore, a rigorous cost-effectiveness analysis revealed that the cost per life-year saved was approximately $156. Given that India's per capita GDP at the time was significantly higher than this figure, the intervention was deemed highly cost-effective by WHO standards. These findings were so pivotal that they were featured on the cover of The Lancet in 2014, establishing visual inspection as a global standard for low-resource settings.

Shifting focus to breast cancer, Dr. Ramdas addressed the limitations of mammography in India. While mammography is the gold standard in the West, reducing mortality by roughly 25% in women over 50, it remains inaccessible for the vast majority of Indian women due to high costs and a shortage of radiologists. To address this, he initiated a cluster-randomized trial in 2006 involving 120,000 women to test the efficacy of Clinical Breast Examination (CBE) performed by trained female health workers.

The intervention involved teaching women Breast Self-Examination (BSE) and conducting CBEs during home visits over three rounds. The results showed a remarkable "stage shift", the detection of early-stage cancers improved by 40%. Consequently, the 5-year survival rate was significantly higher in the intervention group (77%) compared to the control group (71%). Although this specific study did not demonstrate a statistically significant reduction in mortality due to sample size limitations, Dr. Ramdas noted that a parallel large-scale study by Tata Memorial Centre in Mumbai confirmed a 15% reduction in breast cancer mortality (rising to nearly 30% in women over 50) using the same CBE method.

Dr. Ramdas concluded by synthesizing the lessons from decades of research. He asserted that India cannot simply copy Western models. Instead, the evidence supports a tailored approach: implementing Clinical Breast Examination (CBE) as a viable, life-saving alternative to mammography, and instituting targeted Visual Oral Screening specifically for high-risk groups consuming tobacco and alcohol. These strategies, he argued, balance scientific efficacy with economic reality, offering a blueprint for cancer control in the developing world.

ACTION LEADERS:
Dr. Mintu Mathew Abraham, Medical Oncologist, NIMS Medicity
Adv. Ambili Jacob, Trustee, Swasthi Foundation

THE SOCIAL RIPPLE OF A CANCER DIAGNOSIS – IMPACT ON FAMILIES AND COMMUNITIES

Panel Discussion

Speaker & Moderator:
Dr. R.C. Sreekumar, Vice President, IMA Kerala Chapter

Panelists:
Dr. Thankachi Yamini Ramachandran, Deputy Director (CST), Kerala State AIDS Control Society
Sri Markose Abraham, Advisory Board Member, Swasthi Foundation

The session commenced with Dr. R.C. Sreekumar setting the stage for a discussion that moved beyond clinical treatment and prevention to the profound sociological impact of cancer. He noted that while protocols exist for counseling in diseases like HIV and TB, cancer care often lacks a structured psychosocial framework.
He posed a critical question: *unlike HIV, where pre-test and post-test counseling are mandated, does cancer care have a similar robust mechanism?*

Dr. Yamini Ramachandran responded by drawing parallels from her experience in HIV control. She confirmed that while HIV protocols mandate extensive counseling before and after testing to prepare the patient, cancer care is currently fragmented. Although some centers offer biopsy counseling, a standardized, empathetic counseling process is often missing, leaving patients to navigate the shock of diagnosis alone.

Sri Markose Abraham vividly described the diagnosis of cancer as a "big drama" that engulfs the entire family. Unlike other diseases, cancer brings with it a unique "Carcinophobia" - a terror that can cause a complete breakdown of the family unit. He highlighted the devastating financial burden, citing a paper presented earlier which estimated that end-of-life care in a private hospital can cost upwards of ₹1.87 lakhs, compared to ₹85,000 in a government setup. Unlike a fever that lasts five days, cancer treatment is a chronic drain on resources that often continues until death. He pointed out the grim reality that for a working-class family, a cancer diagnosis often means the loss of the primary breadwinner, leading to long-term economic instability.

The discussion then shifted to the social stigma surrounding cancer. Dr. Sreekumar noted that despite medical advancements, cancer is still sometimes viewed as a "curse" or "cancer of the sins." He shared anecdotal evidence of marriages dissolving and husbands divorcing wives post-diagnosis due to the inability to cope with the financial and emotional strain. **Dr. Yamini** added that this stigma often forces families into secrecy, refusing to divulge the diagnosis even to close relatives, which further isolates them and prevents them from accessing community support.

A poignant part of the discussion focused on the impact on children. **Sri Markose Abraham** cited alarming statistics suggesting there are potentially 7 million children in India who are "cancer orphans", children who have lost one or both parents to the disease. The loss of a parent often forces these children to drop out of education and enter the workforce prematurely, perpetuating a cycle of poverty. **Dr. Yamini** reinforced this, noting that cancer is no longer a disease of old age; it is increasingly striking people in their 20s and 30s, meaning young parents are dying, leaving behind minor children who lose the "charm of childhood" and are forced to grow up too fast.

When asked about solutions, the panel emphasized the need for systemic support. **Sri Markose Abraham** argued that the community and government must build a "supportive system" that goes beyond medical treatment to include financial aid, palliative care, and emotional support. He criticized the erstwhile high GST on health insurance premiums, arguing that taxing health security is counterproductive. **Dr. Yamini** stressed the importance of health insurance, asking the audience to reflect on how many of them were adequately insured. She argued that the economics of cancer are simple: "Put money into prevention, and you save a fortune on treatment." She also suggested that the government and insurance companies should incentivize prevention by linking annual checkups to insurance premiums or employment benefits, essentially making health screening mandatory for financial security.

Responses from the Audience

From the audience, **Prof. Preetha Madhukumar** *(Clinical Associate Professor, Duke-NUS Medical School, Singapore)* shared insights from Singapore. She highlighted the existence of a dedicated "Psycho-Social Oncology Department" in Singaporean hospitals, which supports emotionally vulnerable patients. She also emphasized the power of "Patient Support Groups," noting that a survivor who has navigated the journey is often the best emotional anchor for a newly diagnosed patient. Additionally, she spoke about the role of philanthropy, suggesting that wealthy individuals should be encouraged to fund cancer care for the indigent, assessing need based on

genuine inability to pay. **Dr. Ramdas K.** (Director of Clinical Operations, Karkinos Healthcare) echoed the need for robust patient support systems within the community to bridge the gap between hospital care and home life.

Conclusion: A Call for Policy Change

The session concluded with a consensus that the "social ripple" of cancer is as damaging as the biological disease. Dr. Sreekumar and the panelists called for immediate policy interventions, including the establishment of government-backed community support systems. They urged the organizers to include these demands in the "Trivandrum Declaration" to be submitted to the government, leveraging the upcoming elections to push for meaningful change in how society supports cancer-affected families.

THIRUVANANTHAPURAM AS A MODEL DISTRICT FOR CANCER PREVENTION: A SCALABLE BLUEPRINT FOR KERALA

Introductory Address

Sri. S. N. Reghuchandran Nair
President, Chamber of Commerce and Industry

In the opening segment of the technical session on prevention, Sri. S. N. Reghuchandran Nair, set the strategic context for the deliberations. While the gathering awaited the arrival of the Honorable Mayor, he used the opportunity to underline the broader significance of the Global Preventive Onco Summit and its potential policy impact.

Sri. Reghuchandran Nair informed the audience that earlier in the day, the Chamber of Commerce had convened to discuss preparations for the upcoming visit of the Honorable Prime Minister on the 23rd. As part of this engagement, a detailed concept note is being prepared for submission to the Prime Minister. Drawing from consultations with subject experts, including Dr. Manoj and international collaborators such as Mr. Govind from the United States, a key proposal has been finalized for inclusion in this note. He announced that the Chamber intends to formally request the establishment of a National Institute of Preventive Oncology in Thiruvananthapuram, citing the city's hosting of India's first Global Preventive Oncology Summit as a strong and symbolic rationale. Supporting documentation will accompany the proposal, and sustained follow-up has been planned to advance this vision at the national level.

Turning to the practical challenges of cancer prevention, Sri. Reghuchandran Nair addressed the issue of public participation in screening programs. He observed that fear remains a major barrier, with many individuals reluctant to undergo screening when they feel asymptomatic, apprehensive that testing may uncover an unwelcome diagnosis. To overcome this hesitation, he proposed a community-led strategy anchored in the administrative structure of the

Thiruvananthapuram Corporation. By actively engaging councilors across all 101 municipal wards, the initiative aims to normalize screening through localized leadership and sustained awareness efforts. Emphasizing that cancer does not discriminate by age, caste, or creed, he concluded that if preventive oncology is to succeed at scale, municipal governance and grassroots leadership must play a central role in mobilizing public trust and participation.

Felicitation Address

Sri. S. P. Deepak,
Advocate & Leader, LDF

In addressing the audience, Sri. S. P. Deepak, an advocate leader from the LDF, brought a poignant perspective as a public representative. He began by noting the sobering reality that as someone who often attends local funerals, he has observed a distressing pattern: out of every five funerals, two or three are related to cancer. This observation underscores the severity of the health crisis at hand.

He emphasized that combating this crisis requires a unified effort across all three tiers of government: the Union Government, the State Government, and Local Bodies. He pointed out that while treatment is vital, it often comes too late. Therefore, a large-scale social intervention focusing on early detection is imperative.

He advocated for mobilizing grassroots resources already available within the 101 wards of the city. These wards have residence associations, volunteers, and local doctors who can be brought together to organize detection drives. He shared that as a public worker, he receives numerous calls daily for medical help, many of which are related to cancer, illustrating the widespread need for a collective, inclusive effort that goes beyond politics, caste, or religion.

In conclusion, he referenced the Honorable Chief Minister of Kerala's recent announcement of a large-scale universal screening project. He stressed that for such a project to be successful, the full cooperation of local bodies is essential, positioning the city corporation as a key player in making cancer prevention a reality at the community level.

Keynote Address

Adv. V. V. Rajesh,
Worshipful Mayor,
Thiruvananthapuram
Municipal Corporation

Adv. V. V. Rajesh, Worshipful Mayor of the Thiruvananthapuram Municipal Corporation, addressed the gathering with a grounded and deeply human perspective. He began by acknowledging that for public representatives, one of the most frequent and painful requests they receive from citizens relates to cancer treatment and support.

Recalling a personal experience from nearly a decade ago, he spoke about visiting a colleague admitted at the Regional Cancer Centre who required blood. Walking through the oncology wards left a lasting impression on him. He reflected that any sense of arrogance associated with public office dissolves instantly when one witnesses the realities inside a cancer ward. Such experiences, he said, reveal the extraordinary, almost Bhagiratha-like effort doctors and healthcare workers undertake every day simply to sustain human life.

From an administrative standpoint, he affirmed that the responsibility of elected bodies is to ensure healthcare that is both accessible and affordable. Having closely observed the work of the Swasthi Foundation over the years, he made a clear commitment that the Thiruvananthapuram Corporation would extend unprecedented support to the Foundation in implementing preventive oncology initiatives across the city.

Responding to the proposal put forward for establishing a National Institute of Preventive Oncology in Thiruvananthapuram, he informed the audience that a high-level meeting on the city's development agenda was scheduled for the following evening in preparation for the Honorable Prime Minister's visit. He assured that this proposal would be formally raised and incorporated into the submission presented at that meeting.

He emphasized that while experts like Dr. M. V. Pillai provide the technical vision and scientific direction, the role of political leadership and administration is to translate that vision into reality. This includes creating infrastructure, coordinating systems, and navigating the complexities of both central and state government procedures so that such initiatives do not remain on paper alone.

As a concrete step forward, he proposed organizing cancer detection camps across all 101 wards of the city, with leadership from the respective ward councilors. He highlighted that councilors are continuously present on the ground, from early morning until late at night, and affirmed that the entire municipal machinery would be placed unconditionally at the disposal of this cause.

He also drew attention to the link between environmental health and disease prevention. He appreciated Swasthi Foundation's work in conserving water bodies such as Vellayani Lake, Akkulam Lake, and the Karamana River, while cautioning that sustainability must guide such efforts. He noted that large sums spent on cleaning water bodies lose value if they are allowed to deteriorate again due to poor drainage and maintenance. Public health investments, he stressed, must be protected through long-term planning and sustainable systems.

Concluding his address, the Mayor assured the gathering that health and preventive care would have a dedicated place in all future administrative deliberations of the Corporation. He expressed confidence that once the administration fully settles into its term, these preventive initiatives would be pursued with urgency and seriousness.

Empowering Communities Through Prevention: A Global Onco Summit Initiative

Keynote Address

Mr. Lipin Raj IRPS,
Author & Senior Divisional Officer, Kerala State, Indian Railways

Mr. Lipin Raj IRPS, addressed the gathering with a perspective drawn from administration, infrastructure, and everyday human movement. Acknowledging the tight schedule, he noted that he would confine his thoughts on community empowerment and cancer prevention to a brief but focused address.

Speaking from his experience within the Indian Railways, he shared a striking observation that serves as an indirect indicator of India's cancer burden. The highest-earning railway station in the Southern Railway zone, he noted, is the one serving CMC Vellore. This, he clarified, is not driven by tourism or commercial activity, but by the sheer volume of cancer patients travelling from across the country to seek treatment. Despite continuous efforts by the Railways to increase train frequency and berth availability, the demand remains overwhelming. Using this as a call to action, he urged policymakers to create an equally strong and accessible cancer care institution in Thiruvananthapuram. While acknowledging the presence of the Regional Cancer Centre, he observed that its capacity is limited, forcing patients from Kerala to undertake long and exhausting journeys for care.

Reflecting on the lived experience of cancer, he used a vivid metaphor, remarking that living with cancer is like living with one's mother-in-law, an existence that demands constant adjustment, patience, and r

eorientation of one's entire life. He then turned to the origins of the term cancer, explaining that while the zodiac sign symbolizes immortality, the medical term was coined by Galen because the appearance of tumor veins resembled the legs of a crab.

He challenged the widespread belief that cancer is purely a lifestyle disease driven by habits such as smoking or diet. Pointing to the presence of cancer in wild mammals like foxes, leopards, and wolves, he argued that the disease cannot be explained by lifestyle factors alone. Instead, he emphasized the central role of DNA mutations and biological processes. Drawing on Emeran Mayer's work on the gut-brain axis, he explained that a large proportion of serotonin is produced in the gut, linking digestive health with mood, fatigue, and depression. This biological connection, he suggested, has implications for long-term resilience and disease defense, including cancer.

He also spoke about the psychological distortions introduced by unrestricted access to online medical information. Referring to the phenomenon of "Dr. Google," he noted how minor symptoms are often misinterpreted as terminal illnesses, intensifying anxiety and straining the doctor-patient relationship. Turning to the economic consequences of cancer, he described how middle-class families are often pushed into severe financial distress. To illustrate this desperation, he referenced the practice of Thalaikoothal in parts of Tamil Nadu, where families facing extreme economic strain sometimes psychologically prepare elderly members for death to preserve limited resources. He questioned whether existing insurance schemes truly protect families from the prolonged and escalating costs of cancer treatment. He also addressed dietary myths, observing that carnivorous animals consume raw meat without necessarily showing higher cancer rates, reinforcing his argument that genetics and environment may play a greater role than diet alone.

A significant portion of his address was devoted to the role of Indian Railways in supporting cancer patients. He explained the Emergency Quota system and highlighted that cancer concession certificates are valid for one year, unlike tuberculosis certificates which are valid for only three months. This policy, he said, recognizes the prolonged nature of cancer treatment. He outlined the concessions available to patients, ranging from substantial reductions in higher classes to full concessions in certain categories, ensuring that travel does not become an added barrier to treatment.

Before concluding, he made a specific appeal to the doctors present. He requested that medical professionals travelling by train ensure they select the “Doctor” option and provide their professional details while booking tickets. This allows the Railways to prioritize berth confirmation for doctors and enables onboard staff to quickly locate medical assistance during emergencies, potentially saving lives during transit.

Private Sector Participation in Cancer Screening: Role of Standalone Radiology and Imaging Centres in Kerala

Keynote Address

Dr. Manoj K. S., Senior Consultant Radiologist at Metro Scans, Thiruvananthapuram, opened the session with an unflinching assessment of the current reality of cancer screening in Kerala's private diagnostic sector. Drawing on decades of experience, he stated plainly that organized cancer screening, as a proactive and structured activity, is largely absent in standalone private imaging centres.

While government-run institutions may conduct mandated screening programs, the private sector, despite possessing extensive infrastructure and advanced equipment, continues to function in a reactive mode. Patients typically present only after symptoms appear, turning imaging centres into endpoints for diagnosis rather than entry points for prevention. He emphasized that this represents a serious missed opportunity, especially in a state where access to imaging facilities is relatively high.

Reflecting on the evolution of imaging modalities, Dr. Manoj pointed out that low-dose CT remains the gold standard for lung cancer screening, yet is rarely offered to asymptomatic individuals in private practice. He questioned why such a powerful tool continues to be underutilized despite clear evidence of benefit. He was particularly critical of the continued dependence on ultrasound for certain cancers. While acknowledging its usefulness in thyroid and ovarian evaluation, he argued that in conditions like prostate cancer, ultrasound offers very limited diagnostic value. Its continued use, he suggested, is driven more
by habit and convenience than by evidence.

He identified MRI as the most significant shift in cancer screening over the past decade, particularly with the advent of abbreviated MRI protocols. Traditional MRI scans, he noted, are lengthy and expensive, making them impractical for screening large populations. Abbreviated MRI protocols, optimized to deliver high diagnostic accuracy in as little as ten minutes, have changed this equation entirely. Drawing from his own clinical practice over the past seven years, he described a dramatic increase in prostate cancer detection using abbreviated prostate MRI, sometimes identifying multiple new cases within a single day. In breast cancer screening as well, he emphasized that abbreviated MRI consistently outperforms mammography and ultrasound, especially in women with dense breast tissue. He also spoke about whole-body MRI using diffusion-weighted imaging, a radiation-free technique capable of surveying the entire body for malignancy. Although technically demanding, he described it as a powerful and promising tool that is gradually gaining acceptance.

Looking ahead, he outlined a future shaped decisively by artificial intelligence. He described how AI is rapidly integrating into radiology workflows and predicted that it would fundamentally transform cancer diagnosis. He introduced the idea of the virtual biopsy, where AI-enhanced imaging could characterize tumor pathology with such precision that invasive needle biopsies may eventually become unnecessary. He also referred to the parallel growth of genetic testing and liquid biopsy techniques, noting that since 2025 there has been an exponential rise in

technologies capable of detecting circulating tumor DNA, further strengthening non-invasive diagnostic strategies.

In closing, Dr. Manoj reiterated that the private diagnostic sector in Kerala remains vastly underutilized in the domain of cancer screening. Yet, he stressed that it is uniquely positioned to lead the next phase of early detection through high-volume imaging, abbreviated protocols,
and AI-driven analysis. He expressed confidence that within the coming decade, radiology would move from a supporting role to complete ownership of cancer diagnosis, replacing invasive approaches with accurate, patient-friendly imaging solutions.

Chairperson's Concluding Remarks:

The session concluded with remarks from the Chairperson, **Dr. R. C. Sreekumar**, who endorsed this vision and underscored the responsibility of the private sector to bridge the gap between technological capability and public access, ensuring that cutting-edge diagnostics serve not just a few, but the wider population.

Recommendations and Roadmap for Radiology Integration into Kerala's Preventive Oncology Model

Keynote Address

Dr. Praveen Kesav,
Consultant Interventional Radiologist, SGMCRF & GG Hospital

Dr. Praveen Kesav began the final session of Day 2 by acknowledging the challenge of standing between the audience and dinner but promised a roadmap that synthesized the day's discussions into actionable future strategies. He framed his talk around three core questions: What is the cancer challenge, Why is radiology integration crucial, and How do we achieve it This discordance leads to delayed diagnosis; a patient in a village with a suspicious breast lump often faces significant hurdles before reaching a diagnostic facility.

Dr. Praveen painted a visionary scenario where AI and radiology integration bridge this gap: a patient in a remote village gets evaluated, a mammogram is sent via internet to an expert center, screened by AI, confirmed by a radiologist, and treated early, allowing her to return to normal life without the devastation of late-stage cancer. He highlighted the stark reality of the urban-rural divide in India. While 60% of diagnostic facilities are concentrated in urban areas, nearly two-thirds of the population resides in rural regions.

Focusing on breast cancer as a case study, Dr. Praveen noted that India sees nearly 1.9 lakh new cases annually, with a mortality rate of over 50%. The goal is to shift this paradigm by detecting cancers at Stage 1 or 2, where cure rates exceed 90%. He argued that radiology centers, which are proliferating even in smaller towns, are uniquely positioned to lead this preventive charge. To operationalize this, he proposed a Hub-and-Spoke Model. Spokes were to be Tier-1, Tier-2, and Tier-3 diagnostic centers, acting as the first point of contact. If a mammogram is flagged
as abnormal here, the patient is referred to the Hub. The hub was to be a tertiary center equipped for biopsies, multi-modality treatment, and advanced care. This model will decentralize care, ensuring that patients do not need to travel to the hub for every follow-up, thereby reducing the 40% dropout rate often seen after initial diagnosis.

Dr. Praveen emphasized that AI is not just a futuristic concept but a necessity for scaling screening to a population as vast as India's. He explained that a radiologist screening their 1,000th mammogram cannot maintain the same attention span as their first. AI can filter out the 99% of normal scans, allowing radiologists to focus their expertise on the 1% of suspicious cases. AI acts as a "digital second reader," improving sensitivity, ensuring standardized reporting, and even auditing the quality of image acquisition. Furthermore, AI can automate patient navigation, alerting them to abnormalities and booking appointments at the Hub, ensuring seamless continuity of care.

Dr. Praveen outlined a concrete 6-Year Roadmap for Kerala.
Phase 1 (Year 1): Pilot and validation model in select districts to test the framework.
Phase 2 (Years 2-3): Expansion to 3-5 districts.
Phase 3 (Years 4-6): Statewide scale-up, deploying mobile screening units to hard-to-reach areas.

The targets are ambitious - achieving 70% screening coverage for the eligible population, increasing early detection by 20%, and ensuring a diagnostic turnaround time of 48 hours. He stressed the need for decentralization, empowering district collectors and health officers to tailor screening programs to local realities, acknowledging that what works in Trivandrum may not work in Munnar.

Dr. Praveen concluded with a 90-Day Activation Plan to select pilot districts and execute Public-Private Partnerships (PPPs). He called for incentivizing private radiology centers to participate in government screening programs.

Chairpersons:
Dr. Pankaj Sharma, Secretary General, National IRIA
Dr. Muralikrishna L., President-Elect, IRIA
Dr. Reshmi C.P., Vice President, IRIA Kerala
Dr. Rijo Mathew, President, IRIA Kerala Chapter

Chairperson's Concluding Remarks:
Dr. Rijo Mathew, in his concluding statement, thanked Dr. Praveen for the comprehensive presentation. He expressed pride that the national and state leadership of the Indian Radiological and Imaging Association (IRIA) is now fully sensitized to Preventive Radiology. He assured the audience that radiologists are no longer just behind the scenes but are ready to be at the forefront of the war against cancer, ensuring that radiology becomes a pillar of preventive oncology.

Gallery

Gallery

Gallery

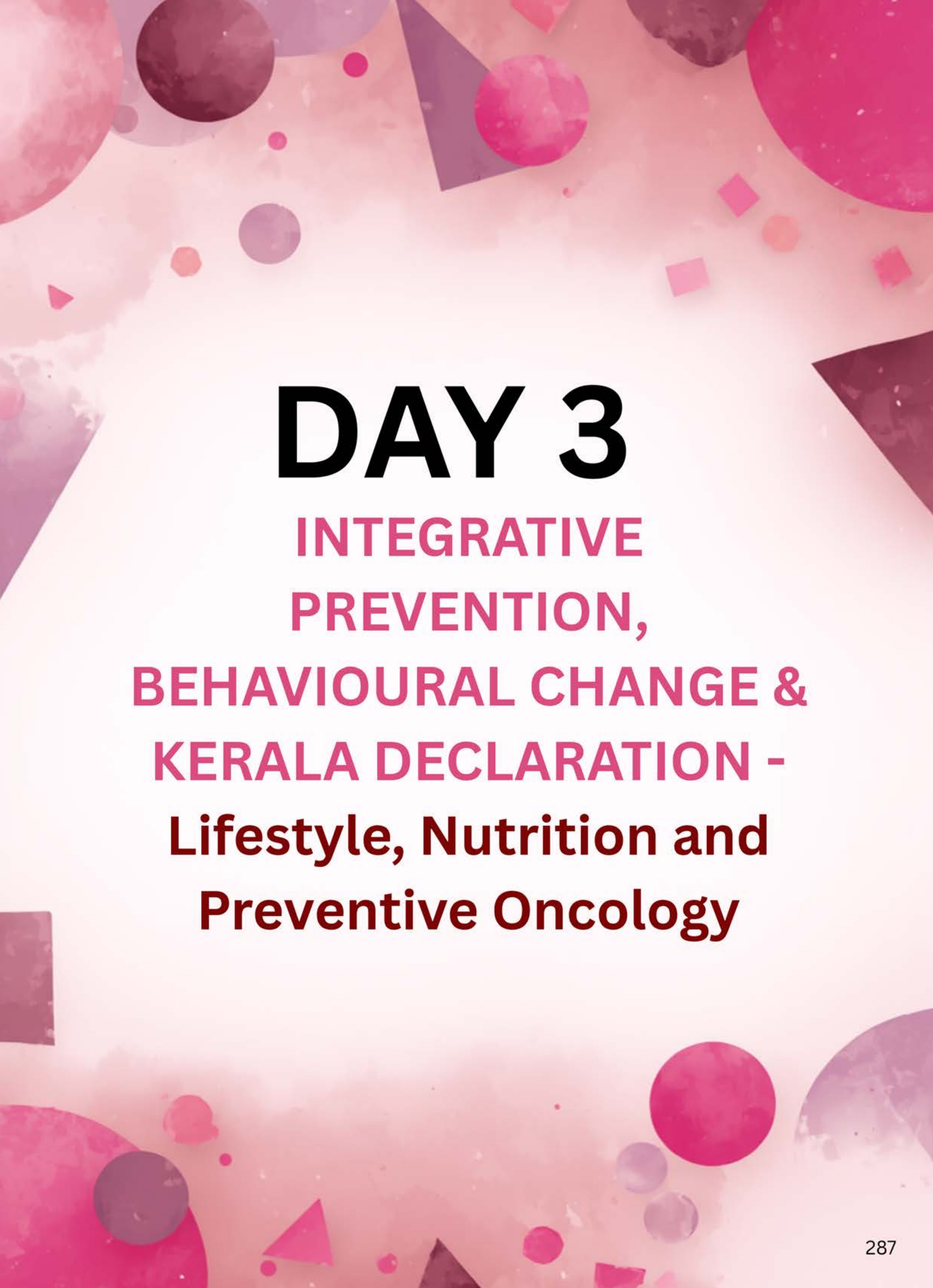
Gallery

Gallery

Gallery

Gallery

Gallery



DAY 3

INTEGRATIVE PREVENTION, BEHAVIOURAL CHANGE & KERALA DECLARATION -

Lifestyle, Nutrition and Preventive Oncology

MOBILE APPLICATION BASED ONLINE TUMOUR BOARD PLATFORM FOR TIMELY, AFFORDABLE, AND EQUITABLE CANCER CARE IN RURAL POPULATIONS

Keynote Address

Dr. Abdullah K.P.,
Founder and Managing Director, Oncure Preventive Healthcare Clinic, Calicut

The third day of the summit commenced with a session focused on technological equity in cancer care. After the introduction of the distinguished panel by the moderator, Dr. Abdullah K.P. began his address by reflecting on the deliberations of the previous two days. He reiterated the summit's core consensus: approximately 50% to 60% of cancers are preventable, and nearly 70% of the remaining cases can be detected in the early stages.

He emphasized that early detection is not merely a medical statistic but a societal imperative that saves families and communities. Introducing his organization, Oncure, he described their journey over the last two years, establishing preventive health evaluation clinics in Calicut and Kannur. Their mission, evolving from the slogan "Cancer-less Kannur" to a "Cancer-less Globe," has focused on affordable, high-quality care through awareness camps, HPV vaccinations, and screening programs like Pap smears and clinical breast examinations.

Dr. Abdullah then addressed the paradox of Kerala's healthcare landscape. While the state boasts robust infrastructure, including three government cancer centers and numerous private specialty hospitals, a significant "Access Gap" persists. He pointed out that residents in districts like Kasaragod, Alleppey, and Pathanamthitta still face hurdles in accessing expert oncology care compared to those in metro cities. This gap is exacerbated by rising risk factors such as obesity and diabetes, leading to a high incidence of thyroid and colorectal cancers in

the state. He highlighted that for many rural patients, the barrier is not just the availability of treatment but the distance burden and the financial strain of traveling to tertiary centers for expert opinions.

A central theme of Dr. Abdullah's presentation was the critical importance of the Multidisciplinary Tumor Board (MDTB). He argued that in modern oncology, "It is not the incision that matters, but the decision." Cancer care is no longer the domain of a single doctor; it requires a consensus among surgeons, medical oncologists, and radiation oncologists. Using breast cancer as an example, he explained that the sequence of treatment, whether to operate first or administer chemotherapy/immunotherapy, is a complex decision that dictates survival. He cited compelling statistics: MDTBs increase accurate diagnosis by 86%, improve optimal treatment planning by 94%, and reduce medical errors by 67%. However, access to such expert boards is often limited to patients in large corporate hospitals, leaving those in rural areas with fragmented care.

To bridge this divide, Dr. Abdullah unveiled "Plan My Onco," a mobile application designed to democratize access to expert cancer care. He described it as a platform for "Expertise Without Borders." The app allows patients or their primary physicians to upload diagnostic reports (images, PDFs, videos) into a secure, HIPAA-compliant environment. A dedicated case coordinator then organizes this data and assigns it to a specialized online Tumor Board comprising experts from across the globe.
Step 1: Registration and data upload by the patient or primary physician.
Step 2: A specialized coordinator reviews the case and assigns it to the specific board (e.g., Breast Cancer Board).
Step 3: The Board meets virtually to review the case and formulate a treatment plan.

Dr. Abdullah emphasized that this model is strictly patient-centric, not hospital-centric. The platform provides an unbiased expert opinion and a treatment roadmap that the patient can choose to execute at their local hospital, thereby empowering local physicians and reducing the need for unnecessary travel. He concluded by announcing that the "Plan My Onco" app is launching soon on the Play Store and App Store, marking a significant step toward timely, affordable, and equitable cancer care for rural populations.

Chairperson:
Dr. T. K. Thomas, Professor and Head of the Department of Surgery, SGMCRF

ACTION LEADERS:
Dr. Deepthi T. R., Preventive Oncologist, Oncure Integrated Health Screening Centre, Kannur
Dr. Arun Lal, Associate Professor and Unit Chief, Department of General Surgery, SGMCRF
Dr. Anu V. Babu, Associate Professor and Unit Chief, Department of General Surgery, SGMCRF

HEALTHY DIETS AND CANCER PREVENTION

Keynote Address

Following the opening formalities, Dr. Gayatri Gopan commenced her session by acknowledging the inherent complexity and controversy surrounding the topic of diet and cancer. She noted that for every study claiming a food is beneficial, another often contradicts it, making definitive advice challenging. However, she aimed to distill current scientific consensus into a practical guide. She began by defining a healthy diet fundamentally as one that protects against malnutrition and non-communicable diseases (NCDs), asserting that poor diet is a leading global health risk, potentially even more impactful on general population health than cancer itself.

Dr. Gayatri Gopan,
Consultant Medical Oncologist, GG Hospital, Trivandrum

Dr. Gayatri emphasized that cancer prevention starts early, specifically with breastfeeding. Adequate breastfeeding for up to two years is scientifically proven to protect mothers against breast cancer. She then addressed the plethora of modern dietary trends - Mediterranean, Keto, Paleo, Intermittent Fasting, and DASH diets, which often confuse patients. Despite the noise, she highlighted that the consensus across oncology textbooks and reviews favors a plant-based diet rich in grains, legumes, and fruits, utilizing olive oil, similar to the Mediterranean model.

Dr. Gayatri shared her clinical experience of fielding frequent questions from anxious patients: "Can I eat rice? Does sugar feed cancer?" She clarified that while limiting sugar and refined carbohydrates is prudent

for general health and obesity prevention, completely demonizing these foods is unhelpful, especially for patients suffering from complications like oral mucositis who need calories.

Regarding Intermittent Fasting, she cited a study on 14 patients undergoing Ramadan fasting (dawn to dusk for 14 hours), which suggested proteomic changes that might prevent cancer. However, she cautioned that the sample size was too small to draw major conclusions and noted conflicting reports, such as recent headlines linking intermittent fasting to heart attack risks. The key, she argued, is balance.
Addressing the common fear of pesticides, Dr. Gayatri explained that the World Health Organization (WHO) sets "Maximum Residue Limits" for pesticides, which are generally not genotoxic at approved levels. She reassured the audience that washing vegetables thoroughly, peeling skins, and using vinegar or salt water can effectively minimize residue risks.

She also issued a specific warning regarding Aloe Vera. While popular for health, the yellow latex substance found between the outer green rind and the inner clear gel is potentially carcinogenic. She advised meticulous cleaning to remove this yellow layer before consumption.
Dr. Gayatri delved into the IARC (International Agency for Research on Cancer) classifications:
Group 1 (Definite Carcinogens): Processed meats (bacon, sausage) and alcohol. She stressed that unlike heart health myths, for cancer prevention, "No amount of alcohol is safe."
Group 2A (Probable Carcinogens): Red meat and high-temperature frying. High heat releases polycyclic aromatic hydrocarbons (PAHs) and heterocyclic amines. She also touched upon Acrylamide, a chemical formed when starchy foods (like French fries) are cooked at high temperatures, though noted it is risky mostly in very large quantities.
Group 2B (Possible Carcinogens): Artificial sweeteners like Aspartame (found in Diet Coke, ice creams, yogurt) and Aloe Vera whole leaf extract. She praised the habit of reading ingredient labels to avoid these hidden additives.

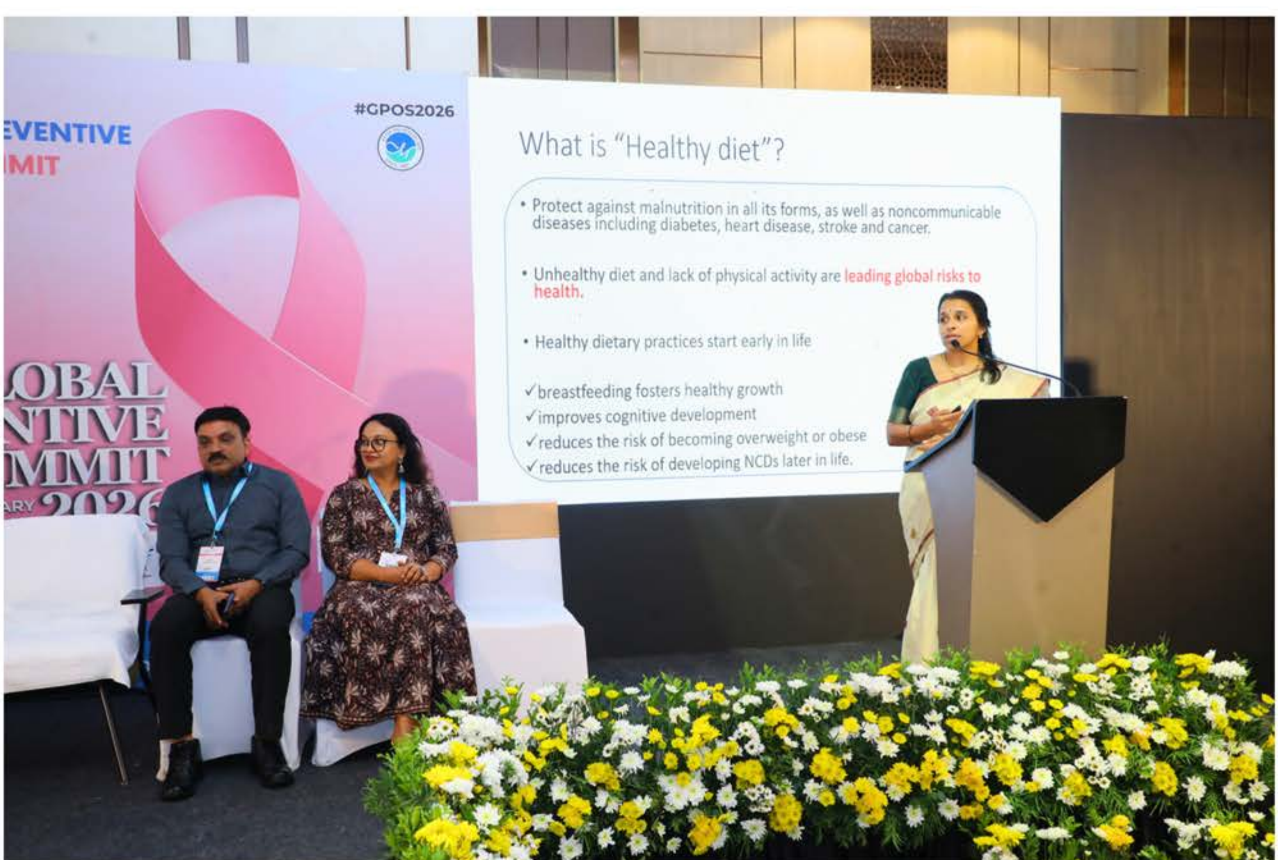
Switching to prevention, Dr. Gayatri highlighted that obesity is a major driver for cancers of the esophagus, colon, breast, endometrium, and kidney. Therefore, a diet that maintains a healthy weight is inherently anti-carcinogenic. She endorsed the WHO recommendation of consuming 5 portions of fruit and vegetables daily (approx. 400g total), diverse in color and type. Foods rich in fiber, antioxidants, and omega-3 fatty acids are proven to reduce colorectal cancer risk.
She concluded with a holistic message, “While diet is not a magic bullet,

a healthy lifestyle combined with screening can reduce or delay cancer onset by 30-50%, even in those with genetic predispositions".

ACTION LEADERS:

Dr. Benny P. V., National Convener of Food and Nutrition IMA, Professor of Community Medicine, SGMCRF

Dr. Aswathy Satheesh, Senior Consultant Anaesthetist, GG Hospital, Trivandrum



CANCER PREVENTION WITHOUT BORDERS: THE POWER OF INTERNATIONAL COLLABORATION

Speaker Introduction

The session opened with a heartfelt introduction by the Chairperson, Dr. M.V. Pillai, who described his invitation to Ambassador T.P. Sreenivasan as a matter of pride. Highlighting a friendship spanning nearly half a century, Dr. Pillai lauded Ambassador Sreenivasan as a quintessential example of Kerala's contribution to India's external affairs - bringing intellectual prowess, impartiality, and vision to the global stage. He traced the Ambassador's roots to an illustrious family of educators in Kayamkulam, noting that anyone taught by his parents excelled in life, a legacy T.P. Sreenivasan carries forward as a writer, teacher, and orator.

Dr. M.V. Pillai,
Chairman, GPOS

Dr. Pillai expressed regret that the nation had not sufficiently honored him, recounting a harrowing incident in Nairobi where Ambassador Sreenivasan, then India's High Commissioner, suffered a physical assault by burglars who broke his leg and attacked his wife, an act Dr. Pillai framed as "defending the nation both physically and intellectually." He concluded by soliciting the Ambassador's goodwill for the summit's dream project: the National Institute of Preventive Oncology (NIPO).

Keynote Address

Ambassador T.P. Sreenivasan (IFS),
Former Ambassador and Permanent Representative of India to the United Nations

Ambassador T.P. Sreenivasan began his address with characteristic humility and humor, quipping that he is neither a cancer specialist nor a doctor, but for him, "If Dr. M.V. Pillai is in Dallas, all is well with the world." He explained his presence at a medical summit by referencing a "One Health" discussion initiated by Dr. Pillai the previous year, which revealed the profound interconnectedness of all professions in solving global problems. Consequently, the Ambassador chose to speak not on the medical technicalities of cancer, but on the political necessity of international cooperation in health.

Ambassador Sreenivasan drew a sharp contrast between the global response to HIV/AIDS and Ebola versus COVID-19. He pointed out that during previous epidemics, the UN Security Council (UNSC) took charge, treating health as a security threat. This high-level political engagement facilitated substantial international cooperation. However, when COVID-19, the greatest existential threat in recent history struck, the UNSC did not meet even once to discuss it. The crisis was relegated entirely to the World Health Organization (WHO), a technical agency with no political teeth. He attributed this failure to geopolitics, specifically the suspicion surrounding the "Wuhan virus" and the potential lab-leak theory involving Chinese and American experiments. Because China, a permanent member with veto power, refused to allow the UNSC to deliberate on the matter, the global response was fractured. Countries retreated into isolationism rather than collective action. Ambassador

Sreenivasan argued that this lack of political cohesion delayed the development and equitable distribution of vaccines by two years, resulting in millions of preventable deaths.

Expanding on the concept of security, T.P. Sreenivasan argued that "UN security does not merely mean the absence of war." He cited historical precedents where the UNSC addressed complex issues like the Israel-Palestine conflict even during the Cold War. He posited that health is a fundamental pillar of international relations, inextricably linked to politics, disarmament, and decolonization. He recalled suggesting the creation of a "Health Keeping Force" (wearing red berets) modeled after the UN Peacekeeping Force (blue berets) to intervene in health emergencies. While the idea was initially welcomed, it was ultimately shelved due to concerns over sovereignty and inspection rights, a missed opportunity for global health governance.

Bringing the discussion home, Ambassador Sreenivasan acknowledged Kerala's dubious distinction as the "cancer capital of India." He validated Dr. Pillai's concerns about the exorbitant cost of treatment, noting that cancer "kills not only cells but the financial viability of people." This economic devastation makes the proposed National Institute of Preventive Oncology vital. He argued that prevention is the most effective crisis management strategy.

The Ambassador illustrated the importance of political vision with an anecdote about US Presidents. He recounted how President George W. Bush closed a major infectious disease facility, operating under the isolationist belief that such diseases would not reach American shores. Years later, President Barack Obama reopened it, recognizing that in a globalized world, the US is "only five hours away" from the most rampant diseases in Africa or Latin America. This foresight was validated when COVID-19 arrived, proving that no nation is an island in matters of health.

In his concluding remarks, Ambassador Sreenivasan reiterated that the WHO, often hamstrung by political influence (as seen with China during the pandemic), is insufficient to handle global health security alone. He urged the medical community to advocate for broader international programs that treat health crises with the same urgency and political weight as military threats. He emphasized that true cancer prevention "without borders" requires keeping power struggles out of health cooperation, ensuring that scientific breakthroughs benefit humanity equitably.

ACTION LEADERS:

Dr. Kiranjith, Professor and HOD, Dept. of ENT and Head & Neck Surgery, SGMCRF

Dr. Salim V.P., Chief Consultant Surgical Oncologist, Aster MIMS Calicut

Dr. Sugeeth M. Thambi, Deputy Medical Superintendent, RCC Trivandrum

HORMONES AND CANCER PREVENTION: UNDERSTANDING RISK, REGULATION, AND PROTECTIVE STRATEGIES

Keynote Address

Dr. Anila Tresa Alukal,
Senior Consultant
Gynecological Oncologist,
Sree Gokulam Medical
College

Dr. Anila Tresa Alukal opened the session by highlighting the critical relevance of hormones as a modifiable risk factor in cancer prevention. She focused on the physiology of three primary hormones: Estrogen, Progesterone, and the emerging risk factor, Prolactin , and their impact on the "finely tuned" organs of the breast, ovary, and endometrium. She explained the molecular mechanisms at play, noting that Estrogen binds to receptors to drive cell proliferation and angiogenesis (blood supply formation), potentially leading to DNA damage accumulation over time. Conversely, Progesterone acts through receptor-mediated pathways to induce cell differentiation and growth arrest, offering a protective counterbalance.

A significant portion of Dr. Anila's address was dedicated to the intersection of societal trends and biological risk. While factors like early menarche (before age 12) and late menopause (after age 55) increase lifetime estrogen exposure, they are largely non-modifiable. However, she passionately addressed Nulliparity (having no children) and Late First Live Birth (after age 30) as critical modifiable risks. She expressed concern over the shifting ideologies of the younger generation, noting that many young people today question the necessity of marriage and childbirth. Dr. Anila urged the audience to educate the next generation on the biological reality: pregnancy induces a protective differentiation

of cells that reduces long-term cancer risk.

Dr. Anila tackled the complex issue of Hormone Replacement Therapy (HRT) for post-menopausal women. She acknowledged that menopausal symptoms can be distressing, often necessitating intervention. However, evidence from major studies like the Women's Health Initiative (WHI) indicates that Combined HRT (Estrogen + Progestin) significantly increases the risk of breast cancer, particularly in current users. In contrast, Estrogen-only therapy (typically for women without a uterus) has shown a reduction in breast cancer risk but comes with a 42% increase in ovarian cancer risk. She emphasized the need for a personalized approach, using tools like the Gail Model to quantify individual risk before prescribing therapy.

The discussion moved to the protective role of contraceptives, challenging common misconceptions.
Oral Contraceptive Pills (OCPs): While there is a slight, transient increase in breast cancer risk during use, OCPs provide profound long-term protection against ovarian and endometrial cancers. Dr. Anila highlighted that taking OCPs for 5+ years can reduce ovarian cancer risk by 30-50%, a benefit that persists for decades after cessation.
Mirena (Levonorgestrel IUS): She championed the Mirena coil as a powerful preventive tool. By delivering a low dose of levonorgestrel directly to the endometrium, it causes atrophy (thinning) of the lining, reducing endometrial cancer risk by 50% while minimizing systemic side effects.

Dr. Anila concluded by focusing on natural, high-impact preventive strategies. She stressed that exercise is often talked about but rarely implemented effectively. Regular physical activity (150 minutes/week) enhances insulin sensitivity and improves hepatic metabolism of estrogen, thereby lowering circulating estrogen levels and reducing adipose tissue inflammation. She also called for a shift in how we discuss Breastfeeding. While usually promoted for infant health, its benefits for maternal cancer prevention are equally profound. Lactation induces T-cell mediated protection and reduces ovulatory cycles, decreasing cumulative estrogen exposure. Data suggests that for every 12 months of breastfeeding, breast cancer risk drops by 4.3%.

Dr. Anila summarized the session with a call to action aligned with the summit's theme, "United by Unique." She reiterated that while hormones are potent biological drivers, exposure to them is modifiable through reproductive choices, medical interventions like the Mirena IUS, and lifestyle changes. She urged the medical community to move beyond

treating cancer to actively educating families about the "old school" but scientifically validated protective benefits of early childbirth and breastfeeding.

ACTION LEADERS:

Dr. K. Mahadevan, Professor & HOD, Dept. of Ophthalmology, SGMCRF
Dr. Manjusha Viswanathan, Professor and Unit Chief, Dept. of OBG, SGMCRF
Dr. Sheela Vasudevan, Professor Emeritus, Pathology, SGMCRF
Dr. Karthikeyan, Professor of Surgery, GG Hospital Trivandrum
Dr. Celin Soumya S., Consultant Radiologist, NIMS Medicit

ORAL CANCER ELIMINATION STRATEGIES: EMPOWERING DENTISTS AS THE FRONTLINE WORKFORCE

Keynote Address

Dr. Moni Abraham Kuriakose,
Co-Founder, Medical Director & CEO, Karkinos Kerala

Dr. Moni Abraham Kuriakose began his address with a provocative thought exercise, challenging the audience to imagine the "elimination" of oral cancer. He acknowledged the seeming audacity of such a goal in India, the global epicenter of oral cavity cancer. However, he clarified that "elimination" does not mean total eradication (like smallpox); rather, it means reducing the incidence to a level where it is no longer a major public health issue, specifically, a threshold of fewer than 4 cases per 100,000 population.

Drawing inspiration from the WHO's cervical cancer elimination strategy, Dr. Moni proposed a parallel 90-70-90 target for oral cancer to be achieved over the next 20 years.
90% Habit Cessation: Preventing the initiation of tobacco/alcohol use and aiding cessation. Currently, adoption is only at ~10%.
70% Early Detection: Detecting lesions at the pre-cancer or early stage. Currently, the national average is a dismal 2%.
90% Treatment Completion: Ensuring patients finish their course of care. Currently, this stands at ~50%.

Dr. Moni highlighted the economic advantage of oral cancer prevention over cervical cancer. While cervical cancer prevention requires expensive HPV vaccines (approx. ₹4,000 for two doses) and HPV testing (approx. ₹2,000), oral cancer primary prevention (habit cessation) and secondary prevention (visual screening) cost essentially nothing beyond the consultation fee.

He anchored the scientific validity of this approach in the landmark Trivandrum Oral Cancer Screening Study led by Dr. R. Sankaranarayanan and Dr. Ramdas. This cluster-randomized trial demonstrated that simple visual examination by trained health workers reduced oral cancer mortality by nearly 30%, an impact unmatched by any pharmacological intervention.

Addressing the feasibility of mass screening, Dr. Moni discussed replacing the "eye of the health worker" with the "camera of the mobile phone." He presented data showing that while frontline health workers have a screening accuracy of about 70%, AI-driven mobile screening (Deep Neural Networks) achieves an accuracy of 87%, dangerously close to the 92% accuracy of a specialist. This proves that technology can democratize expert-level screening.

Dr. Moni candidly addressed the gaps in the current system. He noted that the journey from symptom to treatment is often "extremely convoluted," with a total delay averaging 6 months. Shockingly, 50% of the delay is attributable to primary care providers failing to diagnose or refer correctly.

The solution, he argued, lies in a massive, untapped workforce, “Dentists”.

- In India, there are 150,000 oral cancer cases and 200,000 dentists, a roughly 1:1 ratio.
- In Kerala, with 20,000 cases and 20,000 dentists, the manpower exists to assign every cancer patient to a dentist for early detection.

Quoting Steve Jobs, Dr. Moni reminded the audience that "Ideas without execution are delusions". To operationalize this vision, he announced a Demonstration Project in Kerala involving the Indian Dental Association (IDA), the Association of Oral and Maxillofacial Surgeons of India (AOMSI), and Karkinos Healthcare, financially supported by the K. Chittilapilly Foundation.

The Workflow: Every dental appointment becomes an opportunity for cancer screening. Dental clinics will serve as the hub for risk assessment and screening.

The Network: Suspicious lesions will be referred to Oral & Maxillofacial Surgeons for biopsy and management of Oral Potentially Malignant Disorders (OPMD).

Coordination: A virtual tumor board and navigation system will guide patients to treatment centers, ensuring no one is lost to follow-up.

Dr. Moni concluded by dedicating his talk to his mentor, the late Dr. R. Sankaranarayanan, a pioneer who showed the world that oral cancer elimination is possible. He reiterated that the science is solid and the manpower exists; the only missing link is logistics and execution, which this new project aims to solve.

Chairperson:

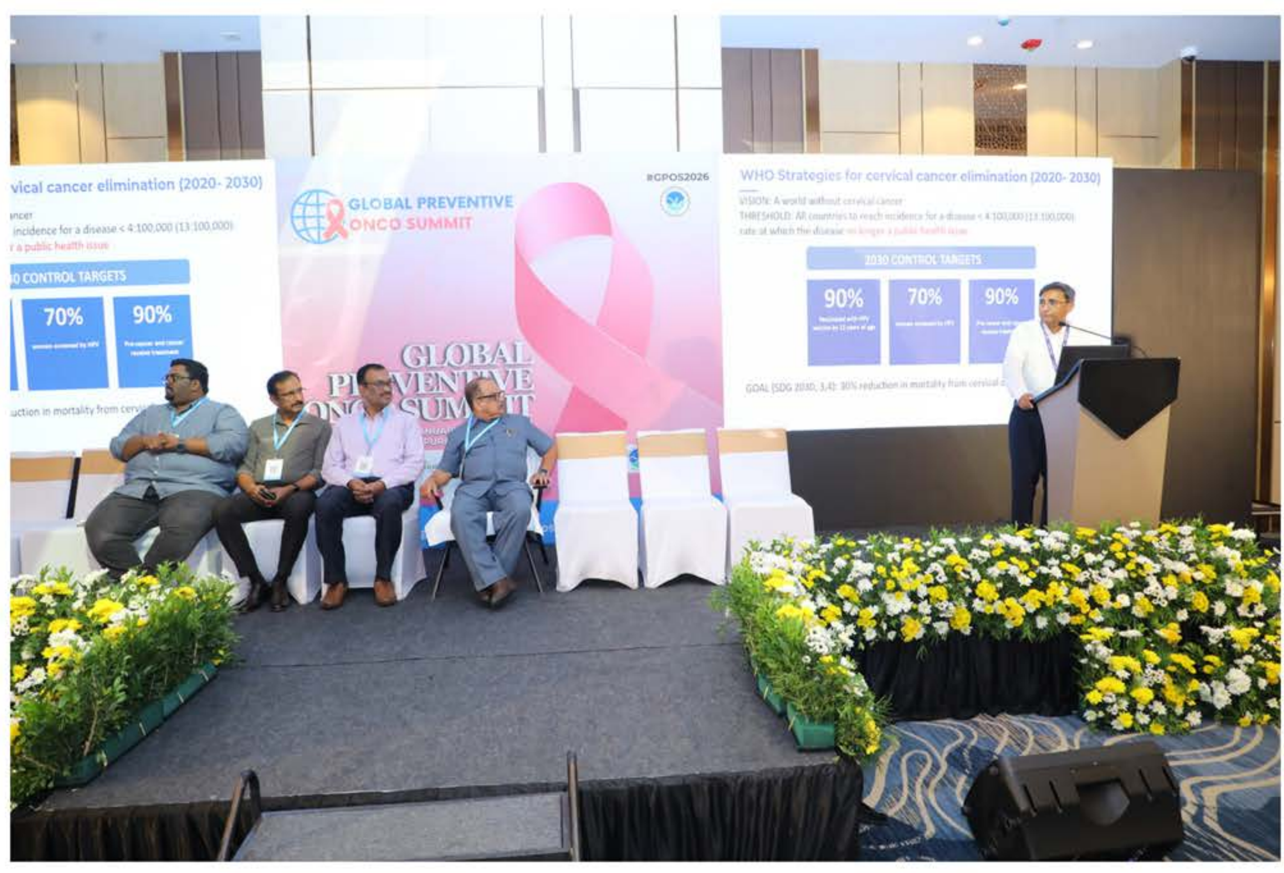
Dr. Karthikeyan, Professor of Surgery, GG Hospital Trivandrum

ACTION LEADERS:

Dr. Ajay Pillai, Senior Consultant and HOD Anesthesia, GG Hospital

Dr. Sulphi Abdul Basheer, Senior Consultant and HOD Oro-maxillofacial Surgery, SGMCRF

Dr. Anand Sekhar, Associate Professor, Noorul Islam College of Dental Sciences



ROLE OF INDIA'S CORPORATE SECTOR IN IMPLEMENTING A NATIONWIDE BREAST CANCER SCREENING PROGRAMME

Speaker Introduction

The session commenced with Dr. M.P. Chandran introducing the keynote speaker, Mr. John Chandy, representing the Apollo Group of Hospitals. Dr. Chandran highlighted Apollo's status as a pioneer in integrating corporate leadership with public health impact. He emphasized that Mr. Chandy brings a unique perspective on how India's corporate sector can evolve beyond conventional Corporate Social Responsibility (CSR) to become active partners in population-level cancer prevention. The Chairperson noted that as India seeks to scale breast cancer screening, sustainable models combining reach, affordability, technology, financing, and accountability are essential - areas where corporate healthcare can play a transformative role.

Dr. M.P. Chandran,
President, J.G. University, Ahmedabad

Keynote Address

Mr. John Chandy began his address by quoting Dr. Prathap C. Reddy, the Chairman of Apollo Hospitals: "The cardiology of yesterday is today's oncology." This statement underscored the shifting burden of disease and the urgent need to prioritize cancer prevention over mere treatment. He detailed Apollo's strategic shift toward preventive oncology, highlighting the establishment of Asia's first Women's Cancer Center in New Delhi. This facility is unique - designed "for women, by women", and focuses exclusively on breast and gynecological cancers with a primary mandate of early prevention, detection, and comprehensive care.

Mr. John Chandy,
Chief Business Officer,
Apollo Group (Corporate Partnerships & Outreach)

Mr. Chandy elaborated on Apollo's specific initiatives to make screening accessible. A key USP has been the deployment of Mobile Health Screening Buses. These units are equipped with advanced diagnostic tools, including mammography, ultrasound (with special permission for breast screening), Pap smear testing, and X-ray facilities. This model brings screening to the doorstep of women, removing logistical hurdles.
He also touched upon the integration of technology, specifically how Artificial Intelligence (AI) and robust data collection are being used to identify hereditary cancer risks and streamline patient management. He mentioned Apollo's collaboration with prestigious global institutions like Johns Hopkins to maintain world-class standards.

Mr. Chandy concluded with a significant announcement and gesture of

partnership: he committed to bringing the Apollo Cancer Screening Bus to Trivandrum, aiming to conduct a dedicated screening program for breast and cervical cancer for the benefit of the local population.

ACTION LEADERS:
Dr. M.V. Pillai, Founder and Chairman, ICCN
Dr. Rijo Mathew, President, IRIA Kerala Chapter
Dr. Khader Hussain, Chief Consultant Thoracic Surgical Oncologist, Apollo Proton, Chennai
Dr. George Koshy, Senior Consultant Interventional Cardiologist, Cosmopolitan Hospital
Dr. Ansar P.P., Professor of Surgery and Head, Division of Surgical and Gynaecological Oncology, Sree Gokulam Medical College and Research Foundation Venjaramood; GG Hospital, Thiruvananthapuram

Vote of Thanks and Concluding Statement

Dr. M.V. Pillai,
Founder and Chairman,
ICCN

Dr. M.V. Pillai delivered the vote of thanks, offering high praise for Mr. Chandy, whom he described as a "dynamic visionary and go-getter." Dr. Pillai shared historical context, noting that Dr. Prathap Reddy handpicked Mr. Chandy, a Stanford University graduate, to drive Apollo's vision.

Dr. Pillai highlighted the "Proton Beam Therapy" center in Chennai as a prime example of corporate innovation. He noted that despite the immense cost (over ₹500 Crores), the center is viable due to patient inflow from across Southeast Asia. He drew a sharp contrast with the current state of healthcare in Kerala, stating, "What is lacking in Kerala right now is innovation." He urged the younger generation and local stakeholders to be inspired by leaders like Mr. Chandy to bring such visionary, technology-driven healthcare solutions to the state.

SCREENING FOR LUNG CANCER IN HIGH-RISK INDIVIDUALS: WHAT IS THE CURRENT STANDARD?

Keynote Address

Dr. Khader Hussain,
Chief Consultant Thoracic Surgical Oncologist,
Apollo Proton, Chennai

Dr. Khader Hussain began his address by characterizing lung cancer as the "number one cancer killer" globally, as well as specifically in Asia. He highlighted the sheer scale of the crisis, noting that in 2022 alone, there were an estimated 2.48 million new cases worldwide. While the disease has historically been driven by smoking, accounting for roughly 85% of cases in the West, Dr. Hussain drew urgent attention to a shifting demographic: the non-smoker.

A significant portion of the talk addressed the rising incidence of lung cancer among non-smokers, particularly in East Asia and India. Dr. Hussain pointed out that while smoking prevalence among Asian women is often low (less than 6% in some regions), the incidence of lung cancer remains alarmingly high, almost double that of certain Western counterparts relative to smoking rates. He attributed this to alternative risk factors including:

Second-hand smoke and Air Pollution: Significant environmental drivers in the region.

Genetics and Family History: He emphasized that family history is a critical risk stratifier for non-smokers. Having a single family member with lung cancer increases risk by 3.7 times, and multiple members by 8 times.

Genetic Mutations: He referenced the high prevalence of specific mutations (like EGFR) in the Asian population compared to the West.

Dr. Hussain traced the history of screening, noting that initial attempts using Chest X-rays failed to reduce mortality. The "wake-up call" came with the advent of Low-Dose CT (LDCT). He cited landmark trials that changed the standard of care:

NLST (National Lung Screening Trial): The US study that proved a 20% mortality reduction with LDCT.

NELSON Trial: A European study confirming these benefits, particularly in men, with even higher potential benefits seen in women.

He outlined the current eligibility criteria for screening, generally targeting individuals aged 50–80 years with a significant smoking history (20 pack-years) who are current smokers or have quit within the last 15 years. The procedure itself is patient-friendly.

Non-Invasive: A quick scan taking just 5–7 minutes.

Minimal Radiation: The effective dose is approximately 0.65 to 1.5 mSv, significantly lower than a standard diagnostic CT (approx. 7-8 mSv) or natural background radiation.

Follow-up: Suspicious nodules (typically >4mm) trigger a protocol of serial imaging or biopsy to track growth.

Dr. Hussain candidly discussed the hurdles specific to the Indian context. Despite having the manpower, doctors, and CT scanners, the uptake of screening is abysmal. He noted that in his own experience at Apollo Cancer Institute over 12 years, recruitment for screening has been a challenge. He identified specific arguments often used against screening in India:

1. **High Prevalence of Tuberculosis (TB):** Granulomas from TB often mimic cancer nodules on scans, leading to false positives and potentially unnecessary biopsies.
2. **Cost and Resources:** The financial burden of scanning a massive population.
3. **Radiation Phobia:** Unfounded fears regarding the low radiation dose.

However, he argued that despite these challenges, screening is "worth doing" for the high-risk population because early lung cancer is asymptomatic. By the time symptoms appear, the disease is usually advanced. Detecting cancer at Stage 1 allows for curative treatments like keyhole surgery (VATS/Robotic) or SBRT, sparing lung volume and avoiding chemotherapy.

Concluding his talk, Dr. Hussain looked to the NHS UK as a model of success. Their targeted lung health check pilots achieved a 60% uptake, detecting thousands of cancers, with 64% found at Stage 1. This shift from late-stage to early-stage diagnosis is the only way to improve the

I

dismal 5-year survival rates.

He called for a comprehensive support workforce in Kerala, including "patient navigators," AI integration to assist radiologists, and robust education to ensure the right people are screened. He ended by acknowledging his mentors, including Dr. E. Hemanth Raj and Prof. Pan-Chyr Yang (Taiwan), whose work on non-smoker screening continues to guide the field.

Chairperson:
Dr. Rameshwara, Senior Consultant Cardiovascular and Thoracic Surgeon, SGMCRF

ACTION LEADERS:
Dr. Jineesh, Associate Professor of Pulmonology, SGMCRF
Dr. Asher Ennis Nayagam, Senior Consultant Cardiovascular and Thoracic Surgeon, NIMS Medicity

MYELOMA CAR-T CELL THERAPY: TREATMENT & CURE

Keynote Address

Dr. Hari Parameswaran,
Adjunct Professor,
Department of Medicine,
Medical College of Wisconsin; Chief Medical Officer, Obsidian Therapeutics

Dr. Hari Parameswaran began his address by shifting the summit's focus from prevention to the treatment of advanced disease, specifically Multiple Myeloma, a cancer he described as his "favorite disease" due to the transformative progress made over his 30-year career. He highlighted that while myeloma is a relatively small cancer numerically (approx. 30,000 cases in the US and 100,000 in India), it has served as a critical model for understanding cancer genomics.

In the 1990s, a myeloma diagnosis was a grim sentence; patients typically survived only 1 to 1.5 years, and early diagnosis made no difference to the outcome. Today, the landscape has changed dramatically. The 5-year survival rate has surged from 32% in the mid-90s to nearly 62% recently, with many patients now effectively "cured". This success, he argued, proves that deep scientific understanding and intense research can turn a fatal disease into a manageable one.

Dr. Hari introduced the second major lesson from myeloma: the human immune system is the most effective weapon against cancer. He described cancer as a "parasite" or colony of bad cells that can be eliminated if the immune system is properly educated - much like a vaccination. This is the premise of Cellular Immunotherapy, specifically CAR-T Cell Therapy (Chimeric Antigen Receptor T-Cell Therapy).

He explained the CAR-T process: a patient's T-cells (immune cells) are extracted, genetically engineered in a lab to recognize specific cancer markers (like BCMA in myeloma), and reinfused into the patient. These

"super-soldier" cells then hunt down and destroy the cancer.

Presenting data from a landmark study involving heavily pre-treated myeloma patients with a life expectancy of just 6 months, Dr. Hari revealed stunning results. After a single infusion of Ciltacabtagene Autoleucel (Cilta-cel), nearly 40% of these patients remained disease-free five years later without needing any further treatment.

Furthermore, at the five-year mark, 100% of the survivors were MRD-Negative (Minimal Residual Disease negative), meaning no trace of cancer could be found even with the most sensitive tests. This represents a shift from "treating" cancer to potentially "curing" it, even in advanced stages.

Despite these victories in blood cancers (liquid tumors), Dr. Hari acknowledged a glaring "Oncology Gap." Solid tumors like lung, liver, and pancreatic cancer remain difficult to treat, with 5-year survival rates still dismal compared to myeloma. He explained the unique challenges solid tumors present:
Physical Obstacles: Solid tumors create a hostile Tumor Microenvironment (TME), a fortress of immunosuppressive cells and proteins that block T-cells from entering. In some lung cancers, up to 60% of the tumor mass is actually this protective microenvironment, not cancer cells.
Target Heterogeneity: Unlike myeloma cells which uniformly express targets like BCMA, solid tumor cells are diverse, making it hard to find a single target that kills the cancer without harming normal tissues (e.g., targeting lung cancer cells might damage healthy lung tissue).

Dr. Hari outlined the future roadmap for closing this gap, driven by advanced Genetic Engineering using tools like CRISPR.

- **Frontline Therapy:** The goal is to move CAR-T therapy from a "last resort" to a first-line treatment. Using it early (Neo-adjuvant setting), when the cancer burden is low and the immune system is stronger, could significantly increase cure rates.
- **Precision Gene Editing:** Scientists are now editing T-cells to remove "brakes" like PD-1 or creating "logic-gated" cells that only activate when they detect a specific combination of antigens, ensuring safety and efficacy.
- **In Vivo Reprogramming:** To solve the logistical nightmare and high cost of manufacturing cells in a lab (shipping blood across continents), the next wave of technology aims to use lipid nanoparticles (LNPs) or viral vectors to reprogram immune cells inside the patient's body.

Dr. Hari concluded with optimism, predicting that in the next 20 to 30 years, most cancers will be treated primarily through genomic and immunological approaches. His company, Obsidian Therapeutics, is already pioneering this with FDA-approved therapies for melanoma and ongoing work in lung cancer. He emphasized that the convergence of synthetic biology and AI-driven personalization will eventually replicate the myeloma success story across all major cancers.

Chairperson:
Dr. Aswin, Hematologist, KIMS Trivandrum

ACTION LEADERS:
Dr. Sugeeth M. Thambi, Deputy Medical Superintendent, RCC Trivandrum
Dr. Krishnanunni, Medical Oncologist, S.K. Hospital
Dr. Gohul, Haematologist, PRS Hospital
Dr. Guru Prasad, Pediatric Oncologist, RCC Trivandrum
Dr. Raina T. Pillai, Senior Consultant Physician, GG Hospital

CINEMA AS A BEACON OF HOPE IN CANCER PREVENTION

Panel Discussion

Speaker Introduction

Dr Ansar P P
Professor of Surgery and Head, Division of Surgical and Gynaecological Oncology, SGMRF ; GG Hospital, Thiruvananthapuram

Dr. Ansar P.P., Professor of Surgery and Head of Surgical and Gynaecological Oncology at Sree Gokulam Medical College, introduced Ms. Mamta Mohandas, describing her as not only an acclaimed actress, producer, and playback singer, but also a powerful voice of courage, resilience, and hope. He highlighted her role as the Brand Ambassador and Trustee of the Swasthi Foundation, noting how she has transformed her personal journey with cancer into a sustained commitment to awareness and early detection.

He emphasized her advocacy for positive storytelling, explaining that her work demonstrates how cinema can evolve beyond narratives of despair to become a force for education, empowerment, and prevention. Dr. Ansar also briefly mentioned her engagement as an environmental activist, referring to her involvement in the Revive Wayanad project, and how it reflects the link between environmental health and human well-being.

Keynote Speaker:
Ms. Mamta Mohandas, Actress, Producer, Playback Singer, Brand Ambassador & Trustee, Swasthi Foundation

Chairperson:
Mr Johnson J Edayaranmula, Executive Director of the National Resource Centre for Non-communicable Diseases (NRC-NCD)

Panelists:
Ms. Ananya, Cine Artist
Sri. Soorya Krishnamoorthy, Former Director, KSFDC
Dr. M.V. Pillai, Chairman, GPOS
Dr. Chandramohan K., Chairman, Swasthi Healing Hands
Shri. Sabu Cheriyan, Vice President, Film Chamber of Commerce

Keynote Speech

Ms. Mamta Mohandas
Actress, Producer, Playback Singer, Brand Ambassador & Trustee, Swasthi Foundation

Ms. Mamta Mohandas began by reflecting on how unusual it initially felt to be asked to speak about the intersection of cinema, authentic storytelling, and cancer prevention. Although she has spoken many times about her personal journey, resilience, and the importance of avoiding toxicity and inflammatory conditions, whether in domestic spaces, work environments, or within one's own thoughts and words. But this particular theme required deeper introspection. She acknowledged that connecting storytelling to hope in cancer prevention was not immediately easy, but it was deeply meaningful.

She reminded the audience that she has now completed 20 years in cinema, and that she was diagnosed with cancer at the age of 24. Like many young people, she believed cancer was something that happened to "other people", those who were older or those who neglected their health. She described herself at that time as disciplined and health-conscious: exercising daily, eating clean, abstaining from alcohol and smoking, and leading what she believed was a careful life. Yet, she emphasized one stark realization - 'she was wrong'.

Her diagnosis at 24 came as a shock, especially since she was the only one among her friends who did not indulge in excessive partying. By then, she was already three years into her film career. It was a particularly hopeful phase professionally: the film Passenger had just been released, audience acceptance was returning, and she had signed multiple projects back-to-back. Against this backdrop of momentum,

the diagnosis struck her “like a slap,” abruptly halting everything. She had to withdraw from projects and deliver devastating news to collaborators, often without being able to explain the reason. In one instance, a respected director was deeply offended by her exit from a film, not knowing that her silence was shaped by fear and stigma.

She spoke candidly about how, in 2009, cancer carried an enormous stigma. There was little understanding of how to speak about it, how support systems functioned, or how society perceived those diagnosed. Being open was not easy. Despite this, she continued to participate in society and work, crediting her profession for enabling that continuity. At the same time, the pressure to look perfect, appear unaffected, and perform flawlessly was immense. She recalled a period when her appearance had to be entirely reconstructed with makeup, describing the emotional and psychological agony of living through treatment while pretending nothing was wrong.

She acknowledged that while these reflections might seem to drift from the assigned topic, they were all interconnected. Cinema , she asserted, is an extraordinarily powerful medium, yet it has historically portrayed cancer and terminal illness as a death sentence rather than a diagnosis. Films often depict late detection, prolonged suffering, and inevitable death before the climax, glorifying silence as dignity. She stressed that this portrayal is far removed from reality.

She argued that cinema has the potential to reframe these narratives positively. Through powerful storytelling, it can normalize scenes such as a woman stepping out during a workday for a breast cancer screening, a man openly discussing family health history, or a young girl confidently taking the HPV vaccine. These moments, she said, can be written naturally and meaningfully into mainstream narratives.

She identified a critical gap between what medicine understands and what society believes. Bridging this gap, she suggested, requires collaboration - doctors, researchers, and scientists participating in script development and narrative design. Such involvement could transform how cancer journeys are portrayed, offering hopeful and realistic endings rather than predictable tragedy. She emphasized that cinema is not yet being used to its full potential in shaping accurate public understanding of disease.

On a personal level, she reflected on the long-term impact of cancer treatment. While she managed to continue her career, she continues to experience mild but persistent side effects that affect quality of life. She

noted that quality of life is a key metric in cancer care, particularly in the United States, and shared that she had the opportunity to be part of a clinical study.

She spoke in detail about participating in the Opdivo (Nivolumab) clinical trial at UCLA, which began in 2014, noting that she is listed as number four on the ASH papers among 23 patients in that study group. She described this as nothing short of a miracle. Having undergone chemotherapy, radiation, and transplant over six years following her diagnosis in 2009, immunotherapy marked a turning point. She explained how drugs like Nivolumab work by removing the “blinder” from T-cells, allowing them to recognize and attack cancer cells in a healthier internal environment. She pointed out that immunotherapy is now being used as a first-line treatment in conditions such as Hodgkin’s disease, calling it an extraordinary advancement.

She expressed deep gratitude to researchers and clinicians, reminding the audience that such breakthroughs are decades in the making. The research for Nivolumab, she noted, began around 1984, the year she was born, underscoring how long scientific progress can take.

Addressing young cancer patients, she shared the message she consistently offers: “Stay alive.” She emphasized that medicine continuously evolves , and that within five years, treatments can improve exponentially, sometimes offering cures that were previously unimaginable. She spoke with visible emotion about people she had known who gave up just years before immunotherapy became available. She admitted that even she had moments of despair, recalling a time in 2014 when the struggle felt unbearable. Yet, she stood before the audience as proof that survival and hope are possible.

She then turned her attention to caregivers and families, offering a firm but compassionate appeal. She urged them not to burden patients with excessive grief, negativity, or fear. A patient’s daily life is already a battle, she said, and caregivers must be emotionally strong before approaching someone who is vulnerable. Often, she observed, patients appear stronger than those around them. She stressed that caregivers should enhance life, bring joy, and offer stability. Emotional breakdowns, she advised, should be processed privately; returning to the patient with strength, lightness, and reassurance. “Be a powerhouse,” she said, reminding the audience that solutions exist, and that future decades may bring revolutionary ways to eradicate cancer or empower the body to fight it internally.

She concluded by affirming her commitment to cinema and her hope to someday tell her story differently through film. She described her life not as a tragedy , but as a celebration, explaining that she once believed her life had already ended long ago. She reflected on freedom, noting that people often think freedom comes after death, when in truth, humans are born free. She encouraged everyone to live freely and fully, remain aware, think well, act kindly, and do good.

She closed by expressing how comfortable she feels among doctors and those who truly understand the cancer journey, acknowledging that cinema gave her a voice and shaped her path, one she entered accidentally but now cherishes deeply. She expressed hope that future stories will portray cancer not as doom, but as a lived experience filled with dignity, strength, and celebration.

Felicitation Address

Mr Johnson J Edayaranmula,
Executive Director of the National Resource Centre for Non-communicable Diseases (NRC-NCD)

Mr. Johnson J. Edayaranmula began by expressing his deep sense of privilege in sharing the dais with Ms. Mamta Mohandas, describing her not only as a celebrated actress, producer, and playback singer, but as a "beacon of hope for cancer prevention." He revealed a personal resonance with the topic, stating that both he and Mamta stood there as cancer warriors, representing millions whose lives have been shaped not only by medical science, but by courage, companionship, and narrative strength. He observed that storytelling gives illness a language, fear a form, and hope a destination, allowing experiences that are otherwise isolating to be shared and understood.

Reflecting on the session theme, Mr. Johnson noted that cinema opens pathways beyond laboratories and clinics, into cultural and narrative interventions. Long before cancer registries and screening programs became widespread, cinema helped give cancer visibility, dignity, and a voice, at a time when society hesitated even to speak the word. He recalled how public figures such as the late Innocent reduced stigma by speaking openly about cancer, and how Nargis Dutt's illness inspired Sunil Dutt to build one of India's most enduring cancer care institutions. He emphasized that cancer prevention is ultimately about behavioral choices, but warned that information alone cannot shift behavior at scale. While science convinces the mind, culture convinces the heart, and it is the heart that ultimately shapes action. Expanding the canvas beyond cinema, he spoke of music, theatre, literature, and digital

storytelling as powerful tools that reach audiences untouched by medical journals. He concluded by calling for deliberate collaboration between science, policy, and the arts, reminding the audience that cinema and music often become silent companions to patients during chemotherapy nights and anxious waiting rooms. He thanked the Swasthi Foundation and described Mamta as a living reminder of resilience when the curtain falls and real life begins.

Felicitation Address

Sri. Soorya Krishnamoorthy followed with reflections on the relationship between art, culture, and healing, opening with gentle humor before sharing two deeply moving stories. The first was about a schoolgirl from Holy Angels Convent who, instead of playing after school, would walk daily to a cancer institute housing terminal patients. At a time when admission there implied near-certain death, patients would wait at the gate for her arrival. She would sit among them and sing. He noted that while modern judges might critique her technical skill, her singing was the most divine music, because it offered peace to those waiting for death. He defined culture as "concern for others," and asserted that art has the power to provide relief even when it cannot cure.

Sri. Soorya Krishnamoorthy,
Former Director, KSFDC

His second story recounted poet O.N.V. Kurup's experience in Sweden, where an elderly man dressed in his best clothes waited at a remote railway station for a son who had died decades earlier in World War II. Though the villagers knew the truth, they collectively preserved the man's hope through silence. Sri. Soorya described silence as the greatest music, illustrating that hope is the very breath of life for the human mind, and that artists must take their role in healing and recovery seriously.

Felicitation Address

Dr. M.V. Pillai,
Chairman, GPOS

Dr. M.V. Pillai responded by describing the session as a historic union of science, art, literature, and philosophy. He observed that while earlier discussions had focused on individual components, this dialogue allowed participants to see the larger whole. He linked the conversation to the 2018 Nobel Prize in Physiology or Medicine, which highlighted mechanisms that regulate immune balance, drawing a parallel between biological peacekeepers in the body and emotional balance fostered through creativity and belief.

Bridging modern science with history, he cited Melpathur Narayana Bhattathiri, who composed the Narayaneeyam during illness, and referenced scientific literature demonstrating that creativity and positive belief can enhance immune function. He also emphasized the power of media in shaping health behavior, recalling how journalist Katie Couric's televised colonoscopy dramatically increased screening uptake. He urged policymakers to formally integrate artists and media professionals into cancer control strategies.

Felicitation Address

In the concluding moments, Dr. Chandramohan K described the discussion as the best session of the entire summit. He proposed that Mamta Mohandas should serve as a statewide ambassador for cancer care, insisting that the summit's message must reach every corner of Kerala and beyond. He acknowledged her parents, requesting her father, Mr. Mohandas, to stand and be recognized, and closed with a message to patients everywhere: stay positive, stay alive, and stay hopeful, because if one can hold on a little longer, new medicine will come.

Dr. Chandramohan K.,
Chairman, Swasthi Healing Hands

Felicitation Address

Ms. Ananya then shared her reflections, noting that she had been introduced to the Swasthi Foundation's work through Cuckoo Parameswaran. She spoke about how attending the previous day's sessions transformed her understanding of cancer, which she had earlier viewed only from the outside. Listening to Mamta's lived experience, she observed, created a deep, attentive silence in the hall, one that could only emerge when truth is spoken from the heart. She emphasized that cancer can enter anyone's life without warning, and that facing it requires courage.

Ms. Ananya,
Cine Artist

Addressing the doctors present, she described them as a fortress of support for patients, stating from personal experience that trust in a doctor provides nearly ninety percent of a patient's relief. The confidence and mental satisfaction that arise from that trust, she said, create a form of healing that works alongside medicine. She expressed her happiness at being part of a summit that opened space for discussions on palliative care, and gracefully declined a request to sing, suggesting she would do so on a more fitting occasion.

ROLE OF REGIONAL CANCER CENTER (RCC) TRIVANDRUM IN IMPLEMENTATION OF STATE POLICIES ON CANCER PREVENTION

Keynote Address

Dr. Madhu Muralee,
Professor of Surgical Oncology, RCC Trivandrum

Dr. Madhu Muralee began the session by conveying apologies on behalf of the Director of RCC, Dr. Rajanich Kumar, who was unable to attend due to health reasons. Stepping in to represent the institution, Dr. Madhu reflected on RCC's 45-year journey as an industry leader in cancer care and control. He structured his address to cover the Past, Present, and Future of RCC's role in state policy, emphasizing that the sheer volume of patients treated and cured stands as a testament to the institution's impact.

Dr. Madhu highlighted three "phenomenal" contributions where RCC displayed vision far ahead of its time:

1. **Community Oncology (1981):** When the national focus was purely on establishing treatment centers (radiotherapy/surgery), RCC pioneered the concept of "Community Oncology." In 1981, they established a dedicated department not to treat, but to go out into the community for screening and awareness, a game-changer that other institutes later adopted.
2. **The Hub-and-Spoke Model (1986):** Long before the term became a corporate buzzword, RCC decentralized care by identifying five peripheral centers (e.g., in Palakkad, Kannur) in 1986. They installed manpower and infrastructure in these "spokes" to handle screening and early detection locally, reducing the burden on the central "hub".
3. **Policy and Tobacco Control (1987-1996):** RCC was instrumental in celebrating the first World No Tobacco Day in 1987 and formulated a 10-year Cancer Plan for Kerala as early as 1988. They also pioneered telemedicine in 1996 and tobacco cessation clinics in 1992.

The result of these decades of intervention is evident in "Stage Migration." Dr. Madhu noted that when he joined RCC in 2004, nearly 60% of breast cancer cases were locally advanced. Today, in 2026, the statistic has flipped: roughly 60% are early-stage cancers. He contrasted this with his experience as an examiner in other states, where advanced cases are still the norm. This shift from incurable advanced disease to curable early disease is the direct fruit of long-term screening policies, including the landmark Trivandrum Oral and Breast Cancer screening trials.

Dr. Madhu identified a critical gap in the current scenario. While awareness is high and treatment for diagnosed cancer patients is available (through various schemes), there is no clear pathway for "Screen Positives", i.e., high-risk individuals identified in camps who do not yet have cancer but require follow-up.

To address this, RCC introduced the Pothencodu Model in Trivandrum.

- The Pilot: In a screening of 5,000 people, 14 were diagnosed with cancer and treated. However, 240 people were identified as "high risk" (screen positive) but non-cancerous.
- The Solution: Instead of abandoning them, RCC collaborated with the Local Self Government (LSG) to utilize District Cancer Control Committee (DCCC) funds. Each of these 240 individuals was provided ₹10,000 to cover follow-up diagnostics (Ultrasound, Mammogram, CT, PSA) over the next 2-3 years.
- The Result: This follow-up led to the early detection of 4 additional cancers, proving that supporting "screen positives" saves lives.

Looking ahead, Dr. Madhu emphasized that RCC’s role must evolve from being the sole provider to a facilitator. He advocated for a model of "Competing, Complementing, Collaborating, and Cooperating" with the private sector.

RCC’s mandate for the future will focus on:

- **Training & Capacity Building:** Generating a skilled workforce of nurses and paramedics for peripheral centers.
- **Advisory Role:** Guiding District Cancer Control Committees on how to effectively utilize their funds (as demonstrated in Pothencodu) rather than hoarding the responsibility of execution.
- **Policy Formulation:** Continuing to shape the roadmap for the state's cancer control.

Chairperson:
Dr. Shaji Thomas, Professor, Head and Neck Surgery, RCC, Trivandrum

ACTION LEADERS:
Dr. Elizabeth Mathew Iype, Additional Professor of Head and Neck Surgery, RCC
Dr. Suchetha, Additional Professor, Gynaecological Oncology, RCC

MODIFIABLE RISK FACTORS IN OROPHARYNGEAL CANCERS: PREVENTION AND EARLY DETECTION

Keynote Address

Dr. Adharsh Anand opened the session by thanking the organizers and setting the stage for a discussion on oropharyngeal cancers. He noted that while head and neck surgeons typically encounter these cases at the treatment or salvage stage, his talk would focus on the preventive aspects derived from literature and clinical experience. He clarified the anatomical distinction often blurred in studies from low- and middle-income countries: while Oral Cavity and Oropharyngeal cancers are frequently grouped together due to the prevalence of tobacco-related cases, his focus was specifically on the Oropharynx, comprising the base of the tongue, tonsils, soft palate, and uvula.

Dr. Adharsh Anand,
Consultant Head & Neck Oncologist & Reconstructive Surgeon, Parumala Hospital

Dr. Adharsh identified Tobacco and Alcohol as the primary culprits, responsible for three-fourths of cases in India. He highlighted a dangerous synergy: when a person consumes both alcohol and tobacco, the risk is not merely additive but multiplicative, leading to a 30-40 fold increase in cancer risk.

However, he offered a message of hope: risk is reversible. If a patient quits smoking, their risk profile drastically improves over time, eventually matching that of a non-smoker after 20 years of cessation.

A significant portion of the talk addressed the "Western Epidemic" that is now arriving in India: HPV-positive Oropharyngeal Carcinoma.

- **The Virus:** HPV is a double-stranded DNA virus. While 70% of people are exposed to it, most clear the infection naturally. The concern lies with persistent infection by high-risk types, specifically HPV-16, 18, and 33.
- **The Mechanism:** The virus integrates into the human genome, where oncoproteins like E6 and E7 disrupt tumor suppressor pathways (p53 and Rb), driving carcinogenesis.
- **The Trend:** India typically lags 20 years behind Western health trends. In the West, despite declining tobacco use, oropharyngeal cancer rates are rising due to HPV. Dr. Adharsh predicted a similar surge in India over the next two decades due to changing sexual practices and social behaviors.
- **Bimodal Peak:** Unlike tobacco-related cancers, HPV-positive cancers show a bimodal age distribution: a first peak at 30-35 years (due to early exposure) and a second peak after 60 years (due to waning immunity).

Dr. Adharsh outlined a multi-tiered approach to primary prevention:

- **Regulatory Measures:** He praised India's strict tobacco control laws, including graphic health warnings on cigarette packs and the ban on tobacco sales within 100 yards of educational institutions. He also noted the mandatory anti-tobacco warnings in films, countering the "heroic" portrayal of smoking on screen.
- **Vaccination:** The HPV vaccine (Gardasil-9) is a powerful tool. While primarily marketed for cervical cancer, studies from the US show it offers cross-protection against oropharyngeal cancer. He advocated for gender-neutral vaccination for both boys and girls aged 9-26 to achieve herd immunity.
- **Diet:** A diet rich in fruits and vegetables and low in processed foods remains a cornerstone of cancer prevention.

While visual screening is effective for oral cavity cancer (as proven by the Trivandrum model), Dr. Adharsh noted that it is not effective for oropharyngeal cancer due to the anatomy (deep location of tonsils/base of tongue). Furthermore, unlike cervical cancer, there is no standardized screening tool (like a Pap smear) for the oropharynx.

Currently, detection relies on biomarkers like p16 Immunohistochemistry (IHC), which is a cost-effective surrogate marker for HPV infection.

Dr. Adharsh concluded by highlighting Kerala's robust cancer control strategy, active since 2008. The model integrates government and private sectors across four levels:

- Level 1: Primary Health Centers (PHCs) for awareness.
- Level 2: District Hospitals for diagnosis.
- Level 3: Medical Colleges for treatment.
- Level 4: Comprehensive Centers (RCC, MCC) for specialized care, training, and policy-making.

The speech ended with a message that Prevention is holistic and that It requires a combination of strict regulatory policies, community education, lifestyle modification, and preparation for the impending wave of HPV-related cancers through vaccination and awareness.

Chairperson:

Dr. Manoj Krishnan, Senior Consultant and HOD, Dept. of ENT, GG Hospital, Trivandrum

THE ROLE OF EXERCISE IN CANCER PREVENTION AND THE MITIGATION OF CANCER-RELATED DEFICITS

Keynote Address

Dr. Hima Ravindranath,
DPT, Member of the American Physical Therapy Association (APTA) & Texas Physical Therapy Association (TPTA)

The session commenced with Dr. Hima Ravindranath extending her gratitude to the Swasthi Foundation. She framed her talk with clear objectives: to explain the evidence-based role of exercise not just in reducing cancer risk, but also in managing the physical, functional, and psychosocial deficits that accompany a diagnosis. Her central message was that exercise is a modifiable behavior with robust scientific backing for both prevention and recovery.

She opened with a reality check for the audience, challenging the common misconception that daily work constitutes exercise. "Walking from 8 to 5 at work is not exercise," she clarified. She defined exercise as "planned, structured, and repetitive bodily movement," encompassing aerobic, resistance, flexibility, and balance training.

To energize the room and demonstrate functional fitness, Dr. Hima conducted a 30-second "Sit-to-Stand" test. The audience participated enthusiastically, with many completing over 20 repetitions. She playfully chided those who managed fewer than 15, advising them to start exercising immediately, while congratulating the high performers.

Dr. Hima delved into the molecular mechanisms by which physical activity combats malignancy:

1. **Inhibiting Proliferation**: Moderate-intensity exercise regulates metabolism, inducing apoptosis (programmed cell death) in cancer cells.
2. **Reducing Lactic Acid**: The lactic acid produced during exercise inhibits the immunosuppressive environment around tumors,

thereby enhancing the body's natural cancer surveillance.

3. **Boosting Immunity**: Exercise combats "immune aging," keeping the immune system robust enough to detect and destroy aberrant cells.

Phases of Intervention:

1. ***Prevention:***

Dr. Hima presented compelling data: regular physical activity can reduce the risk of several cancers by 10–25%.

- Breast Cancer: Risk reduction of 15–20%.
- Colorectal Cancer: Risk reduction of 24%.
- Endometrial Cancer: Risk reduction of 20%.
- Overall Mortality: A staggering 33% reduction.
- This protection stems from reduced chronic inflammation, improved immune surveillance, and maintenance of healthy body weight.

2. ***During Treatment (Mitigation of Deficits):***

Dr. Hima addressed the severe physical toll of cancer treatments - surgery (lymphedema, joint immobility), chemotherapy (fatigue, neuropathy), and radiation (fibrosis).

- **Cancer-Related Fatigue:** Affecting nearly 80% of patients, this is not just physical but cognitive. Exercise is proven to be a potent antidote.
- **Range of Motion:** She cited examples from the US where patients are sent to physical therapy *before* radiation (Pre-hab) to ensure they have the arm mobility required to hold the necessary positions for treatment.
- **Chemo-Induced Neuropathy:** Balance exercises are crucial to prevent falls in patients suffering from sensory loss due to neurotoxic drugs.
- **The "Combined Effect":** She referenced a study of 301 breast cancer patients, which showed that a combination of aerobic and resistance training yielded far superior results in maintaining muscle mass and quality of life compared to aerobic exercise alone.

3. ***Oncology Rehabilitation & Pre-hab:***

Dr. Hima passionately advocated for Oncology Rehabilitation as a specialized discipline involving a multidisciplinary team (physiatrists, PTs, OTs, psychologists). She introduced the concept of "Pre-hab", assessing and strengthening a patient before surgery or chemotherapy begins. This establishes a baseline, making it easier to return the patient to their prior level of function post-treatment.

For cancer survivors, she recommended:

- 150 minutes of moderate-to-vigorous aerobic exercise per week.
- 2–3 days of resistance training per week.
- If 30 minutes at a stretch is too difficult, she advised breaking it down into 5–10 minute intervals.

Dr. Hima concluded by reassuring the audience that exercise is safe even during chemotherapy, provided it is customized by experts. She left the audience with a simple, actionable tip: search for "Happy Walk" videos on YouTube. These are accessible, guided walking workouts ranging from 10 minutes to an hour that anyone can do at home to kickstart their fitness journey.

ACTION LEADERS:

Dr. V. K. Sreekala, Professor and Head, Department of Physical Medicine and Rehabilitation

URBAN AIR, WATER, AND CANCER: ARE INDIA'S METROS REACHING THE LIMIT OF HUMAN TOLERANCE?

Keynote Address

Dr. Sameer Salahuddin,
Director, Oncology Services, Travancore Medicity Medical College, Kollam; Director, QURE1; Secretary, Circle of Kindness

Dr. Sameer Salahuddin began his address by holding a mirror to our daily complacency. He presented a hypothetical glass of dirty, contaminated water to the audience. "If I served this to you," he asked, "would anyone drink it? No." Yet, he pointed out, we breathe air of similar toxicity every single day without a second thought, simply because the pollution is invisible. He painted a grim picture of the daily Indian commuter - whether in air-conditioned cars with limited filtration or the common man on a scooter or in public transport, inhaling toxic fumes continuously.

He highlighted the irony of health-conscious individuals doing yoga or morning walks in metro cities, unaware that deep breathing in such polluted environments might be doing more harm than good. Children, the most vulnerable demographic, are unknowingly growing up in an environment that is slowly poisoning them.

Dr. Sameer challenged the notion that Kerala is immune to the pollution crisis affecting cities like Delhi. While the national headlines focus on "Red Zones" (hazardous air), he urged policymakers to look at the "Yellow Zones", places transitioning from pristine green to polluted yellow.

He cited a recent Manorama Online article titled "Kochi is Becoming Polluted," noting that Kochi's Air Quality Index (AQI) frequently exceeds 50. More shockingly, he revealed that his hometown of Kollam recorded an AQI of over 250 in May of the previous year, a level considered hazardous. The "environmental reality" of Kerala is shifting, with average

PM 2.5 levels often hitting 27, well above the accepted limit of 10–15.

Moving to the medical impact, Dr. Sameer explained that the danger lies in the cumulative DNA damage caused by inhaling toxic fumes, particulate matter (PM 2.5), and heavy metals over years. This is not just about lung cancer. He listed a spectrum of malignancies linked to air and water pollution:

- Bladder Cancer
- Mesothelioma
- Lymphoma & Leukemia (often linked to water pollution)
- Skin and Breast Cancer

He presented a sobering statistic: 14 of the world's 20 most polluted cities are in India, with PM 2.5 concentrations often exceeding safety thresholds by 5 to 10 times.

Dr. Sameer argued that we cannot fight what we do not measure. He called for a rigorous data collection strategy that correlates industrial zones, traffic corridors, and river pollution data with disease incidence and population density. This mapping is essential for resource allocation. He urged doctors to play an active role in this by providing clinical data to policymakers, forcing a shift in regulations regarding emission standards, waste management, and industrial monitoring.

Refusing to end on a note of despair, Dr. Sameer showcased a proactive model implemented in Kollam titled "Kollathinu Nalla Shwasam" (Good Breath for Kollam). Spearheaded by the Circle of Kindness society and supported by the Quilon Chest Club and local oncology groups, this campaign represents a grassroots movement meeting scientific monitoring.

He outlined the 5-Point Strategy detailed in his presentation:

1. **Ward-Level Monitoring**: Installing community-operated sensors for hyperlocal air and water quality tracking.
2. **Schools & Youth Engagement**: Training the next generation as environmental health advocates.
3. **Multi-Stakeholder Collaboration**: A partnership between hospitals, NGOs, and the municipality.
4. **Community Ownership**: Empowering residents to take responsibility for their neighborhood's environmental health.
5. **Early Detection Camps**: Deploying mobile screening units in high-risk areas.

Dr. Sameer highlighted recent activities, including a "Walkathon" flagged off by the District Environmental Engineer, Smt. Rachel Thomas, to raise awareness. He concluded with a powerful message from his slides: "When communities own the solution, sustainable change becomes possible. Clean air transforms from policy aspiration to lived reality."

Chairperson:
Dr. M. S. Jayasekhar, Senior Consultant Plastic Surgeon, Suvarna Aesthetic, Trivandrum

ACTION LEADERS:
Sri. Rahul Chandrasekhar, Co-ordinator GPOS
Sri. Arun Karthikeyan, Co-ordinator GPOS

PREVENTIVE CANCER CLINICS IN CORPORATE HOSPITALS

Keynote Address

Dr. Saheer Neduvanchery,
Assistant Professor of Surgical Oncology, Government Medical College, Thrissur

Dr. Saheer Neduvanchery opened the session by thanking the organizers and highlighting a critical gap in the current healthcare narrative. He noted that while advancements in treatment are frequently discussed, the preventive aspect of oncology has often been overlooked by both policymakers and healthcare providers. He expressed hope that this summit would provide the necessary stimulus to prioritize prevention.

Dr. Saheer presented sobering statistics regarding Kerala's cancer burden. He pointed to data showing Kerala has the highest cancer incidence in India, with 166 cases per 1 lakh population, significantly higher than the national average. While acknowledging factors like increased lifespan and better diagnostic facilities contribute to these numbers, he emphasized the psychological fallout: a pervasive sense of anxiety and panic among the general population.

He described a growing phenomenon where "seemingly healthy individuals" are increasingly approaching oncologists with questions about cancer risk and screening. However, the current system fails them. There is no dedicated space for these individuals to seek assurance or guidance, leaving them lost in a system designed for treating illness, not maintaining wellness.

Dr. Saheer proposed a structured solution: Preventive Cancer Clinics. These would be dedicated spaces where asymptomatic individuals can walk in for:

- Structured risk assessment and counseling.

- Lifestyle modification guidance.
- Dedicated screening protocols (24/7 access).
- Education on early detection strategies.

He argued that such clinics would not only alleviate community panic but also drive **early diagnosis**, which is the key to reducing treatment costs, minimizing physical morbidity, and maintaining quality of life.

Addressing the question of where these clinics should be established, Dr. Saheer made a compelling case for the Corporate/Private Sector.

- **Population Preference:** He cited data indicating that **60-70%** of people in Kerala rely on private hospitals for their care.
- **Technological Leadership:** Corporate hospitals possess advanced diagnostic infrastructure (e.g., vacuum-assisted biopsy for non-palpable breast lumps) that is often unavailable or delayed in government settings.
- **Complementing the Government:** He referenced government initiatives like the *Aardram* mission, which, while well-intentioned, often overburden existing public infrastructure. A patient might wait weeks for a mammogram in a medical college, whereas a corporate clinic can offer immediate service.

Dr. Saheer outlined three strategic reasons for corporate hospitals to invest in preventive oncology:

1. **Social Responsibility (CSR):** It shifts the brand image from purely "illness-treatment centers" to "comprehensive wellness partners," enhancing credibility and community trust.
2. **Strategic Marketing:** It serves as a long-term engagement strategy. Patients who enter for screening build a relationship with the facility, likely returning (along with their families) for future healthcare needs.
3. **Return on Investment (ROI):** While screening itself is low-cost, it generates **downstream revenue**. A cancer detected early will likely be treated at the same facility. Furthermore, operational efficiency improves as specialized oncologists can focus on complex interventions while preventive clinics handle routine screening. Additionally, these clinics become a "Data Goldmine" for creating regional cancer registries.

Dr. Saheer concluded by framing preventive clinics as a "Win-Win" for all stakeholders: patients get early detection and reduced anxiety; hospitals gain reputation and engagement; and society benefits from improved public health outcomes.

- **Dr. Sreekumar S Pillai** raised a question regarding the future landscape of healthcare providers in India (Corporate vs. Mission hospitals) was raised. Dr. Saheer predicted a dominance of Government and Corporate sectors.
- **Dr Sharath Krishnan** highlighted the ongoing development of the Kerala Cancer Grid, which aims to integrate cancer care across treating hospitals using a hub-and-spoke model, furthering the goal of uniform, high-quality care.

Chairperson:
Dr. Sreekumar S. Pillai, Professor, Dept. of Surgical Oncology, Jubilee Mission Medical College, Thrissur

ACTION LEADERS:
Dr. Sharath Krishnan, Associate Professor and HOD of Surgical Oncology, Medical College, Thrissur
Dr. Sunandakumari L. T., Professor and Unit Chief, Dept. of General Surgery, SGMCRF
Dr. Muneer A., President, Quilon Oncology Group; Lead Hemato-Oncology & Medical Oncologist, Travancore Medicity

Recorded message

"Good morning friends.

I am happy to offer my hearty felicitations to all those who are participating in the cancer summit in Trivandrum today.

This year I miss you; however, I hope I will be able to join you and participate with your cancer control activities.

I am expecting to be back in November and hope to meet you all at that time.

Once again, I wish my friends very hearty felicitations.

Jai Hind."

Dr. Babu Mathew,
Former Professor & Head,
Community Oncology,
RCC Thiruvananthapuram

PUBLIC–PRIVATE PARTNERSHIPS IN CANCER PREVENTION: A STRATEGIC IMPERATIVE FOR KERALA

Keynote Address

Col. Rajeev Manali began his session by fundamentally reframing the approach to cancer control. He argued that cancer is not merely a clinical disease to be managed within the sterile walls of a hospital, but rather a profound "community challenge" that demands a societal response. Establishing the core philosophy of his address, he stated that "Prevention begins at the doorstep," emphasizing that the battle against malignancy must be fought in our homes, neighborhoods, and daily lives through a grassroots strategy that empowers every citizen to be a guardian of their own health.

Col. Rajeev Manali,
CEO, SUT Hospitals
Pattom

To illustrate the urgency of the situation, Col. Manali presented a data-driven analysis of the cancer landscape. He highlighted the staggering global burden of 19.3 million new cases, narrowing down to the Indian context where 1.41 million new cases and 916,000 deaths were recorded in 2022 alone. He then drew a sharp, comparative lens between two major Indian metros, Delhi and Kerala, to demonstrate how environment and lifestyle dictate disease patterns. Delhi, ranked number one in metro cancer rates with an incidence of 147 per 100,000, faces a crisis driven largely by pollution and lung cancer. In contrast, Kerala follows closely with an incidence of 135 per 100,000, but its primary drivers are distinct: tobacco use leading to oral cancer, and a high prevalence of breast cancer4. This comparison served to underscore a critical point: Kerala's cancer crisis is rooted in lifestyle and habits, factors that are inherently modifiable through targeted community intervention.

Moving to solutions, Col. Manali proposed the creation of a "Unified Grid" where the citizens, society, and state intertwine to form a robust safety net. He described this evolution as moving "From Self-Help to System Strength," outlining an adaptable action plan for public participation. He assigned specific responsibilities to the citizenry, urging active participation in waste management and pollution control to reduce environmental carcinogens. He called for a culture of proactive health, where families support vaccination drives for HPV and Hepatitis B, adhere to periodic health check-ups, and watch vigilantly for early symptoms. Furthermore, he stressed the importance of financial protection, advocating for the facilitation of group insurance to ensure that families and domestic workers are shielded from the financial toxicity of cancer treatment.

Shifting focus to the state's role, Col. Manali detailed necessary governmental interventions to support this grid. He emphasized grassroots mobilization, suggesting the use of ASHA workers, Anganwadis, and Kudumbashree units, and even MGNREGA workers, to take the message of prevention deep into the community. He called for the strengthening of infrastructure, equipping Primary Health Centers (PHCs) for detection and Taluk hospitals for early treatment, while proposing Regional Cancer Centers at a ratio of one for every two to three districts. In a bold, visionary proposal, he suggested the implementation of gene testing facilities. He estimated that genomic studies for newborns could cost approximately ₹40 Crores a year, while a one-time screening of Kerala's 3.6 million school-going children would require an investment of ₹36,000 Crores, a massive but potentially game-changing strategy to identify genetic predispositions early.

Addressing his peers in the private sector, Col. Manali argued that private hospitals must evolve beyond being mere treatment centers to become active partners in prevention. He called for extending the reach of care by using private infrastructure to spread affordable cancer services across the state, ensuring that geography does not dictate survival. He urged private institutions to leverage their advanced technology and expertise for genomic studies and precision check-ups, thereby augmenting the state's capacity and ensuring availability for all. This collaboration, he noted, is essential to offload the burden from the public sector and create a seamless continuum of care.

To demonstrate the viability of such a community-based model, Col. Manali presented a detailed case study of Brazil's Family Health Strategy, launched in 1994. He described its structure, where teams consisting of a doctor, nurse, and community health workers cover specific populations

of 3,000 - 4,000 people, relying on a door-to-door approach for health education and early detection. The impact was undeniable: by 2023, the program covered nearly 70% of Brazil's population, resulting in reduced hospitalizations, lower infant mortality, and improved maternal health. Most impressively, this model proved cost-effective, running at approximately $50 per person annually, proving that high-impact public health is achievable.

Col. Manali concluded by situating Kerala within a global movement of successful public health interventions. He drew parallels between Kerala's potential PHC-led screening grid and other success stories like Rwanda's HPV vaccination drive and Thailand's Universal Health Coverage. Reaffirming that Kerala is not an outlier but has the potential to lead, his final message was a powerful call to unity. Displaying the slogan "Together We Can," he urged all stakeholders, public and private, to work together, signaling a future where collaboration is the key to defeating cancer.

Chairperson:
Dr. Sreekumar S. Pillai, Professor, Dept. of Surgical Oncology, Jubilee Mission Medical College, Thrissur

ACTION LEADERS:
Dr. Krishna G, Medical Superintendent, SGMCRF
Dr. Manoj Parameswaran, HOD and Senior Consultant Neurologist, SGMCRF

LAW AND ORDER AND ONCOLOGY: THE PREVENTIVE ROLE OF POLICE IN REDUCING CANCER RISK BEHAVIOURS

Speaker Introduction

The session began with the Chairperson, Sri. S. Gopinath IPS, introducing the State Police Chief, Sri. Ravada Chandrasekhar. He highlighted the unconventional but critical link between "Law and Order" and "Oncology." While doctors treat the disease, the police force plays a pivotal role in curbing the causes, specifically the "risk behaviors" involving carcinogens like tobacco, alcohol, and narcotic drugs. The session aimed to explore how the police force could evolve from an enforcement agency to a preventive partner in the fight against cancer.

Sri. S. Gopinath IPS (Retd),
Former IG; Trustee, Swasthi Foundation.

Keynote Address

Sri. Ravada Chandrasekhar IPS,
Director General of Police (DGP) and State Police Chief, Kerala

DGP Ravada Chandrasekhar commenced his address by framing the drug and substance abuse menace as a "two-headed hydra" that is deeply interconnected with cybercrime. He emphasized that these threats operate silently, target the youth, and leave deep societal scars, much like cancer itself.

A central theme of his speech was the limitation of brute force. He stated unequivocally, "The police alone cannot solve it, and enforcement alone will not solve the problem". While the police can block websites, seize contraband, and arrest offenders, these measures cannot substitute for ethical behavior and parental guidance.

He argued that the battle against cancer-causing risk behaviors must be fought in homes and classrooms, not just on the streets. He called for a multidimensional approach involving trust, dialogue, and guidance from parents and teachers to immunize the youth against addiction.

The DGP outlined concrete strategies the Kerala Police is implementing to reduce the availability of carcinogenic substances:

- **Cracking Down on Supply:** He reported that the police had been proactive, detecting around 30,000 cases of drug offenses in the previous year and seizing commercial quantities of synthetic and designer drugs.
- **Economic Deterrence:** Going beyond arrests, the police are now attaching the property of individuals involved in drug racketeering to dismantle the financial backbone of the trade.

- **PODA Scheme:** He announced the extension of the Prevention of Drug Abuse (PODA) scheme to more companies and workplaces. Under this initiative, employees submit letters committing to a drug-free lifestyle and agree to random testing, creating a culture of accountability.

Sri. Chandrasekhar highlighted Kerala's unique vulnerability, noting that the state is "geographically positioned" in a way that aids the transit of drugs from neighboring states like Andhra Pradesh, Odisha, and Karnataka. He warned that the market is shifting from traditional substances to more dangerous "designer drugs," necessitating constant vigilance.

Concluding his address, the DGP reiterated that the role of the police is to create a safe environment where "cancer risk behaviors" are minimized through strict enforcement of the COTPA (Cigarettes and Other Tobacco Products Act) and the NDPS Act. However, he urged the medical community and families to take up the mantle of awareness, stating that parental vigilance is the first line of defense against the menace that leads to both crime and cancer.

Chairpersons:
Sri. S. Gopinath IPS (Retd), Former IG; Trustee, Swasthi Foundation.
Dr. R.C. Sreekumar, Vice President, IMA Kerala State Branch
Sri. Prithviraj D.K., DYSP Police Headquarters, Crime Branch

RISK REDUCTION STRATEGIES IN KERALA: WHAT HAVE WE ACHIEVED SO FAR?

Keynote Address

Dr. Bipin K. Gopal,
Deputy Director of Health Services (DHS), Govt. of Kerala; State Nodal Officer, NCD

Dr. Bipin K. Gopal began his address by presenting the unique "Kerala Profile." He highlighted that while the state boasts impressive health indicators: a life expectancy of 75 years, an infant mortality rate (IMR) of just 5 (comparable to developed nations), and literacy rates near 100%, there is a concerning flip side.

Kerala is currently undergoing a rapid epidemiological transition due to rampant urbanization and changing lifestyles. Dr. Bipin noted that the state is on the verge of becoming the "Diabetes Capital" of the country, with 24% of the population diagnosed with diabetes and another 14% with pre-diabetes. When combined with high rates of hypertension, obesity (34% in women), and an aging population, the burden of non-communicable diseases (NCDs),including cancer, COPD, and renal diseases is escalating.

To meet this challenge, Dr. Bipin described a massive transformation in the public health infrastructure over the last decade. The image of government hospitals as "dilapidated buildings with old yellow paint" is being erased. Modern infrastructure now rivals corporate hospitals, equipped with Cath labs in 12 district hospitals, stroke units, and widespread dialysis centers.

Technology has been a key enabler. He introduced "e-Health" and the "SHAILI" mobile application, used by ASHA workers to conduct

community-level surveys. This app helps identify individuals at risk for lifestyle diseases and cancer, acting as the first step in the screening funnel.

A major focus of the state's strategy has been the decentralization of cancer care. Historically, patients across the state had to travel long distances to the Regional Cancer Centre (RCC) in Trivandrum or the Malabar Cancer Centre (MCC) in Kannur. This caused immense financial and emotional stress.

To address this, the government established District Cancer Care Grids. Today, chemotherapy units are functional in 28 peripheral hospitals (district and taluk level). After initial treatment at a tertiary center, patients can now receive follow-up chemotherapy closer to home. Dr. Bipin noted that nearly 1.48 lakh chemotherapy sessions are conducted annually in these decentralized centers, significantly reducing the out-of-pocket expenditure for patients.

Dr. Bipin detailed the ambitious cancer control campaign "Arbudhamuktha Keralam" launched on World Cancer Day (February 4th). Recognizing that fear and financial insecurity act as barriers to screening, the government mobilized a "team effort" involving political leaders, religious organizations, celebrities, and residents' associations to de-stigmatize testing.

In the last 10 months, the state screened over 20 lakh people. The results revealed the hidden burden of disease:

- **Breast Cancer:** 267 new cases and 66 pre-malignant cases detected.
- **Cervical Cancer:** 84 new cases and over 2,000 pre-malignant cases detected.
- **Oral Cancer:** 65 new cases and 24 pre-malignant cases detected.
- **Colon Cancer:** 14 new cases detected.

Dr. Bipin highlighted the Kerala Cancer Grid, which ensures a definite referral pathway from Primary Health Centers (PHCs) to tertiary centers like RCC and MCC, ensuring no patient is lost to follow-up.
He concluded with a significant announcement regarding primary prevention: following a successful pilot in the Wayanad district, the state is rolling out the HPV Vaccination program for girls aged 14 across the entire state starting February 1st.

community-level surveys. This app helps identify individuals at risk for lifestyle diseases and cancer, acting as the first step in the screening funnel.

A major focus of the state's strategy has been the decentralization of cancer care. Historically, patients across the state had to travel long distances to the Regional Cancer Centre (RCC) in Trivandrum or the Malabar Cancer Centre (MCC) in Kannur. This caused immense financial and emotional stress. To address this, the government established District Cancer Care Grids. Today, chemotherapy units are functional in 28 peripheral hospitals (district and taluk level). After initial treatment at a tertiary center, patients can now receive follow-up chemotherapy closer to home. Dr. Bipin noted that nearly 1.48 lakh chemotherapy sessions are conducted annually in these decentralized centers, significantly reducing the out-of-pocket expenditure for patients.

Dr. Bipin detailed the ambitious cancer control campaign "Arbudhamuktha Keralam" launched on World Cancer Day (February 4th). Recognizing that fear and financial insecurity act as barriers to screening, the government mobilized a "team effort" involving political leaders, religious organizations, celebrities, and residents' associations to de-stigmatize testing.

In the last 10 months, the state screened over 20 lakh people. The results revealed the hidden burden of disease:

- **Breast Cancer:** 267 new cases and 66 pre-malignant cases detected.
- **Cervical Cancer:** 84 new cases and over 2,000 pre-malignant cases detected.
- **Oral Cancer:** 65 new cases and 24 pre-malignant cases detected.
- **Colon Cancer:** 14 new cases detected.

Dr. Bipin highlighted the Kerala Cancer Grid, which ensures a definite referral pathway from Primary Health Centers (PHCs) to tertiary centers like RCC and MCC, ensuring no patient is lost to follow-up.

He concluded with a significant announcement regarding primary prevention: following a successful pilot in the Wayanad district, the state is rolling out the HPV Vaccination program for girls aged 14 across the entire state starting February 1st.

ACTION LEADERS:
Dr. Jayakrishnan, Professor of Community Oncology, RCC Trivandrum

Concluding Remarks

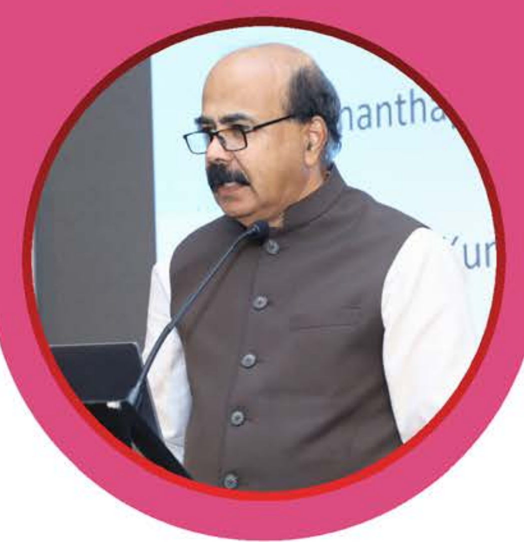
Dr. Jayakrishnan from RCC delivered the concluding remarks, praising the comprehensive overview. He reaffirmed RCC's role as a partner in this venture, highlighting their efforts in training doctors and mid-level service providers (MLSPs) to detect cancer. He emphasized the equity of the program, noting that 60% of those screened belonged to the Below Poverty Line (BPL) category, with mammograms provided free of charge to ensure that cost is never a barrier to early detection.

Dr. Jayakrishnan,
Professor of Community Oncology, RCC Trivandrum

COLLABORATION MODELS TO START NATIONAL PREVENTIVE ONCOLOGY CENTER IN KERALA

Keynote Address

Prof. (Dr.) Mohanan Kunnummal,
Vice Chancellor, Kerala University of Health Sciences (KUHS);
Chairman, GPOS 2026



Prof. (Dr.) Mohanan Kunnummal commenced the session by establishing the urgency of the moment. With cancer now a primary public health challenge where 30-50% of cases are preventable, he argued that late detection is not just a medical failure but a cause of immense suffering and economic drain. He presented the vision for GPOS 2026 not merely as a conference, but as a turning point to shift the paradigm from "cure" to "prevention" under the banner: "Together We Can: Early Detection Saves Lives".

He formally proposed the establishment of the National Institute of Preventive Oncology (NIPO). However, emphasizing a holistic approach, he branded this future institute as "A Centre for Positive Health". Unlike traditional cancer centers that focus on the sick, NIPO would focus on healthy and at-risk individuals, integrating modern science with traditional wisdom to catch disease before it starts.

Dr. Kunnummal outlined why Kerala is the perfect soil for this initiative. The state boasts a strong public health system, high literacy, and a history of robust community participation (seen in its literacy and palliative care movements). Yet, despite high development indices, the cancer burden is rising. This paradox makes Kerala the ideal "model state" to pioneer a lifestyle-based prevention model that can be replicated nationally.

Drawing from the project blueprint, Dr. Kunnummal detailed the structural makeup of the proposed institute. The core philosophy rests on mind-body-metabolic integration and technology-enabled precision prevention.

He outlined the specific departments that would constitute NIPO, moving beyond standard oncology:

- Nutrition & Metabolic Health: To address diet-related risks.
- Physical Medicine & Lifestyle: Focusing on activity as medicine.
- Mental & Behavioural Health: Addressing the psychological roots of lifestyle choices.
- Reproductive & Hormonal Health: Targeting gender-specific risks.
- Traditional & Complementary Medicine: Validating ancient wisdom with evidence.
- Molecular Pathology & Genetics: For high-risk identification.
- Health Data Repository: To analyze trends and outcomes.

Dr. Kunnummal emphasised that NIPO would not be a static building but a dynamic hub for research and outreach. Key activities would include longitudinal prevention studies, AI-based risk prediction, and digital health platforms to reach the youth. The goal is to create actionable policies where prevention is "essential, not optional".

Chairperson:
Dr. M.V. Pillai, Founder and Chairman, International Cancer Care Network (ICCN); Former Clinical Professor of Oncology, Thomas Jefferson University, USA

ACTION LEADERS
Dr. Bipin K. Gopal, Deputy Director Health Services, Kerala (State Nodal Officer, NCD)
Dr. Satheeshan Balasubramanian, Director, Malabar Cancer Center (MCC), Thalassery

*Remark by **Dr. Bipin K. Gopal**, Deputy Director Health Services, Kerala (State Nodal Officer, NCD)*
Dr. Bipin Gopal acknowledged that while the infrastructure and science are ready, the human element remains the hurdle. Changing behavior in a population accustomed to "treatment" rather than "prevention" requires a concerted effort from academia, celebrities, and religious leaders to shift the cultural narrative.

Concluding Remarks

Dr. M.V. Pillai,
Founder and Chairman, International Cancer Care Network (ICCN); Former Clinical Professor of Oncology, Thomas Jefferson University, USA

Dr. M.V. Pillai delivered a stirring concluding statement, focusing on the barriers that must be broken to realize NIPO's vision.

1. **The Silo Problem:** He identified "silos" as the primary enemy of progress. Trivandrum is home to world-class centers like SCTIMST and RGCB, yet they operate in isolation. He cited the example of HTLV-1 (Human T-lymphotropic virus) related lymphomas. Decades ago, Dr. Robert Gallo hypothesized that Kerala's coastal belt would harbor this virus. It took years for local institutions to test this, eventually confirming 30 cases, a discovery that could have happened much earlier had institutions communicated effectively.

2. **Validating Traditional Medicine:** Dr. Pillai challenged the medical community's skepticism toward Ayurveda and Siddha. He argued that modern medicine progresses by constantly disproving itself, and this scientific rigor should be applied to traditional systems rather than dismissing them. He shared the example of Arsenic Trioxide, a remedy known in Indian Siddha medicine but scientifically validated and patented by China for treating Acute Promyelocytic Leukemia (APL). He urged the new institute to use modern tools like AI and Nanotech to mine India's traditional knowledge before others do.

3. **Leveraging the "Global Indian":** Finally, Dr. Pillai highlighted the "gold mine" of the Indian diaspora. He noted that global experts from the International Cancer Care Network (ICCN) are willing to serve

unconditionally. He urged the state to move beyond a colonial mindset of needing "Western brains" and instead embrace its own people who are leaders in global oncology. He concluded with a call for unity: "United we stand, divided we fall," setting the stage for the creation of NIPO.

LESSONS LEARNED & REPLICABLE STRATEGIES FROM KERALA'S INITIATIVES

Creation and Implementation of Successful State-Led Cancer Prevention Programs and Their Scalability

Keynote Address

Dr. Satheeshan Balasubramanian opened the session by reflecting on the transformative journey of cancer control in Kerala over the past decade, acknowledging the "Aardram" mission as the bedrock of these policy shifts. He traced the state's structured approach back to 2017, when the government mandated the directors of the Regional Cancer Centre (RCC), Malabar Cancer Centre (MCC), and Cochin Cancer Research Centre (CCRC) to formulate a comprehensive Kerala Cancer Control Strategy (2018-2030). Developed over four intense months with inputs from the World Health Organization (WHO), this strategic document defined clear primary and secondary targets to guide the state's long-term efforts.

Dr. Satheeshan Balasubramanian,
Director, Malabar Cancer Centre (MCC),
Thalassery

To oversee the implementation of this ambitious strategy, the Kerala Cancer Care Board was established under the chairmanship of the Health Minister. Dr. Satheeshan highlighted the board's unique inclusivity, noting that it brings together not only government officials from the DME, DHS, and NHM but also experts from private institutions across the southern, central, and northern regions. This governance structure was further strengthened in 2022 with the addition of a Technical Group comprising external experts to ensure decisions remain evidence-based. Simultaneously, execution was decentralized through the creation of District Cancer Control Committees (DCCCs) in all 14 districts, chaired by District Collectors to ensure grassroots compliance.

A significant portion of the address focused on the expansion of data capabilities through population-based cancer registries, which now cover all 14 districts. This data has unveiled alarming shifts in the state's cancer profile, specifically a marked North-South divide in disease patterns. Dr. Satheeshan pointed out a disturbing trend in Northern Kerala, particularly in Kannur, where lung cancer has risen to become the second most common cancer among women, often diagnosed only at late stages (Stage 4). This contrasted sharply with patterns seen elsewhere.

To address such disparities and improve access, he outlined the "Pyramid of Care" model designed to decentralize treatment:

- **Base (PHCs/CHCs)**: Focus on awareness and early detection.
- **Middle (Taluk/District Hospitals)**: Handling early detection and palliative chemotherapy. Currently, 28 hospitals across the state provide chemotherapy, supported by a strict Referral Protocol ensuring that no patient travels more than 50 km or 3 hours for basic cancer treatment.
- **Apex (RCC, MCC, Medical Colleges)**: Reserved for complex procedures like transplants, robotic surgeries, and advanced research.

Dr. Satheeshan emphasized the state’s commitment to quality control through the development of Standard Treatment Guidelines by 300 experts and an executive order mandating that no patient be treated without a decision from a Multidisciplinary Tumor Board. These clinical efforts are supported by digital platforms like the "Cancer Care Suite" and the "Shaili" app.

Discussing the massive "Arbudhamuktha Keralam" screening drive, he candidly addressed the logistical challenges. While 50% of those screened belonged to the BPL category, he highlighted a critical gap: only 15% of those referred for further testing actually followed through. He identified this "loss to follow-up" as a key area where private partnerships could bridge the divide.

Demonstrating the power of community ownership, Dr. Satheeshan presented the Malabar Cancer Care Society Consortium, which united over 40 NGOs under one umbrella for uniform awareness activities. He shared a powerful success story from a Kannur panchayat where, after two years of community-led groundwork (with MCC remaining in the background), 2,800 out of 3,200 eligible women attended screening in a span of just 10 days–proving that public trust drives participation.

Concluding the main address, he reiterated that primary prevention is not a "small-time job" but a continuous marathon requiring deep behavioral change. He called for intensified public-private collaboration, reminding the audience that in the realm of community care, "commitment must be more than business."

Chairperson:
Dr. Bipin K. Gopal, Deputy Director Health Services, Kerala; State Nodal Officer, NCD

DISCUSSION: The Mystery of Non-Smoker Lung Cancer

Following the presentation, **Dr. Bipin K Gopal** expressed his concern regarding the alarming rise of lung cancer in Northern Kerala. He noted a stark contrast in etiology: while 99% of male lung cancer patients had a clear history of smoking, the female patients were overwhelmingly non-smokers. This discrepancy compelled the team to look beyond lifestyle factors.

Elaborating on the topic, **Dr. Satheeshan** revealed that MCC collaborated with the Centre for Climate Change to map these disease patterns geospatially. This analysis identified specific "pockets" or hotspots where lung cancer incidence was unusually high in both men and women, suggesting a common environmental trigger. The primary suspect is Radon gas emissions. To investigate this, they have partnered with Kannur University to measure radon levels in these high-incidence zones. Furthermore, the team is approaching national atomic energy authorities to conduct specialized studies to confirm if natural radiation is the silent killer driving this localized epidemic

KERALA DECLARATION

POLICY RECOMMENDATIONS, IMPLEMENTATION FRAMEWORK, AND COMMITMENTS FROM STAKEHOLDERS.

KERALA DECLARATION

The Global Preventive Onco Summit (GPOS 2026) culminated in the adoption of a historic policy document titled the **"Kerala Declaration on Cancer Prevention, Early Detection, and Equitable Care (2026)."** Following three days of intense deliberation, this declaration serves as the summit's crowning achievement, encapsulating the collective spirit of the event under the slogan: **"Together We Can: Early Detection Saves Lives and Prevention Saves Society."**

The declaration opens with a solemn Preamble, stating: *"We, the participants of the Global Preventive Onco Summit (GPOS 2026), comprising policymakers, public health leaders, clinicians, researchers, civil society organizations, media professionals, and international experts - having convened in Thiruvananthapuram, Kerala, recognize that cancer has emerged as one of the foremost public health challenges of our time."*

The document emphasizes a foundational acknowledgement: over one-third of cancers are preventable, and more than 90% are curable if detected early. It reaffirms that prevention is the most cost-effective, equitable, and humane pathway to cancer control.

The framework is anchored in five core principles:

1. **Prevention First**: Prioritizing cancer prevention alongside treatment, recognizing that these strategies also mitigate other non-communicable diseases.
2. **Equity & Access**: Ensuring no citizen is denied prevention or diagnosis due to geography, gender, income, or social status.
3. **Evidence-Driven Policy**: Rooting population strategies in rigorous scientific data.
4. **Whole-Society Approach**: Unifying the efforts of government, academia, the private sector, NGOs, media, and communities.
5. **Technological Enablement**: Embracing digital tools to democratize healthcare access.

To transform Kerala into India's first fully integrated *"Cancer Safe State,"* the summit adopted specific commitments:

1. **Kerala as a Model State**: Elevating the existing health model to serve

as a national benchmark.

2. **Oral Cancer Elimination**: Operationalizing the dental workforce as "frontline warriors," making every consultation an opportunity for screening and habit cessation.
3. **Tobacco & Alcohol Control**: Reaffirming risk reduction as a top policy priority.
4. **AI & Imaging**: Leveraging Artificial Intelligence to enhance early detection capabilities.
5. **Financing Prevention**: Shifting the narrative to view prevention financing as an investment rather than an expenditure, including aligning insurance reimbursements for preventive services.
6. **Holistic Integration**: Integrating Mental Health, Nutrition, and Lifestyle factors into cancer prevention.
7. **Population-Based Screening**: Mandating statewide screening for high-burden cancers: Breast, Cervical, Oral, and Colorectal.
8. **Universal HPV Vaccination**: Endorsing gender-neutral, equity-focused universal HPV vaccination aligned with global elimination targets.
9. **Digital Health Ecosystem**: Implementing mandatory Digital Health IDs to integrate data across public and private institutions.
10. **Public-Private Partnerships (PPP)**: Creating structured frameworks to expand infrastructure and strengthen referral networks.
11. **Community & Cultural Engagement**: Utilizing the transformative role of cinema, media, and school-based programs to eliminate fear and stigma.
12. **Academic Leadership**: Establishing national and international Centres of Excellence in preventive oncology to foster research and training.

To ensure these commitments translate into measurable action, the summit announced the constitution of a Preventive Oncology Task Force. The implementation framework encourages annual progress reporting, public dashboards for transparency, and a continuous review mechanism to refine outcomes based on evidence.

By adopting the Kerala Declaration, the summit affirmed that early detection saves lives, prevention preserves dignity, and equity defines progress. A formal Call to Action was issued to the Government of Kerala, academic institutions, health systems, civil society, and international partners to collectively execute this vision. *The document was formally adopted on January 18, 2026, in Thiruvananthapuram, Kerala.*

VALEDICTORY FUNCTION

Welcome Note

S. Gopinath IPS (Retd.),
Former IG and Trustee,
Swasthi Foundation

Sri. S. Gopinath began the valedictory function with a strong sense of fulfillment, expressing his happiness at standing before the gathering after three days of what he described as "threadbare discussions" on preventive oncology. Speaking on behalf of the Swasthi Foundation, the Hans Foundation, and all associated stakeholders, he stated that everyone involved felt genuinely "contented" with the success of the summit.

He extended a warm welcome to the Chief Guest, Smt. Veena George, Honorable Minister for Health, Government of Kerala, and proceeded to acknowledge the distinguished members on the dais. He specifically welcomed Dr. M.V. Pillai, the President of the function, along with the international guests Dr. Prathibha Varkey, Dr. Karthik Ghosh, Dr. Amit Ghosh, and Dr. Aditya Ghosh, noting that some of them were seated among the audience. He also welcomed Dr. Mohanan Kunnummal, Vice Chancellor of KUHS, Dr. Satheeshan Balasubramanian, Director of MCC, Dr. M.P. Chandran from JG University, and Prof. S. Sundar Manohar from Pandit Deendayal Energy University, as well as Dr. Bipin K. Gopal, Deputy DHS, Col. Rajeev Manali from SUT Hospital, Mr. Flemy Abraham from the Hans Foundation, and Dr. Abdullah, Director of OnCure.

He concluded his welcome by offering special recognition to what he called the "main showman" of the entire event, Dr. Ansar P. P., and invited everyone, including the non-medical public who had been "enlightened" by the sessions, to take a collective step forward in addressing the challenges of oncology through collaboration.

Presidential Address

Dr. M.V. Pillai delivered a deeply reflective Presidential Address that blended political insight with a philosophical meditation on time, leadership, and legacy. He began by paying a unique tribute to Smt. Veena George, recalling that he had been a great admirer of her during her career as a journalist. Drawing a powerful comparison, he likened her to Walter Cronkite, the legendary American news anchor, remarking that in the United States, news was not considered truly valid until Cronkite read it. In the same way, he observed, Indiavision news was never fully accepted by the public until Veena George presented it. He praised her transition from journalism to politics, calling it a "giant leap into Kerala politics", and noted that despite the media's tendency to highlight controversies, she had achieved more in the last five years than many others in public life.

Dr. M.V. Pillai,
Chairman, GPOS and Founder, International Cancer Care Network (USA)

Dr. Pillai then turned the audience's attention to the significance of the moment in time, stating that the day marked the "turn of the second quarter of the 21st century." Defining a generation as the 25 to 30 years it takes for one life cycle to give rise to the next, he said the gathering was effectively standing at the threshold of a new generation. He posed a profound question to the audience: "Before we leave, can we leave our imprint on the sands of time?"

He highlighted the extraordinary diversity of leadership present at the summit, ranging from business leaders and venture capitalists to movie artists and retired police officers, describing it as a “dynamic group” united by a shared pursuit of excellence.

He concluded his welcome by offering special recognition to what he called the “main showman” of the entire event, Dr. Ansar P. P., and invited everyone, including the non-medical public who had been “enlightened” by the sessions, to take a collective step forward in addressing the challenges of oncology through collaboration.

In his concluding reflection, he referred to Kerala’s well-known tourism slogan, “Incredible Kerala,” and declared that the collective commitment demonstrated at the summit would elevate the state to something even greater. “This movement will mark Kerala as the Credible Kerala,” he said, asserting that through sustained political will and public participation, Kerala would emerge as a global model for trustworthy, evidence-driven, and people-centered cancer prevention.

Keynote Address

The session began with the ceremonial lighting of the lamp, followed by the keynote address by Smt. Veena George, Honorable Minister for Health and Woman and Child Development, Government of Kerala. Minister Veena George opened her address with humility and gratitude, acknowledging the presence of distinguished dignitaries including Dr. M. V. Pillai, Dr. Mohanan Kunnummal, and the Swasthi Foundation.

Smt. Veena George
Honourable Health Minister , Kerala.

She congratulated the organizers for transforming the summit into a “global village”, bringing together eminent experts from across the world. She made it clear that her presence was not merely to deliver a speech, but to hear and receive suggestions that could meaningfully contribute to strengthening Kerala’s health policies. She expressed her happiness that preventive oncology is gaining renewed momentum in Kerala.

She then articulated the core philosophy guiding Kerala's public health system, the Ardram Mission, explaining that Ardram in Malayalam signifies tenderness and compassion, reflecting a healthcare system that holds its people closer. Under Ardram 2.0, the government has committed to strengthening healthcare infrastructure, networking all 200 government laboratories through a hub-and-spoke model, institutionalizing annual health checkups, addressing lifestyle-related diseases with special focus on cancer prevention, advancing the One Health programme for disease elimination and integrated research, and decentralizing healthcare delivery across the state.

The Minister highlighted Kerala's strategic shift toward decentralization in cancer care. While oncology services were historically concentrated at the Regional Cancer Centre (RCC), Thiruvananthapuram, and the Malabar Cancer Centre (MCC), Kannur, she announced that the Chief Minister is inaugurating the Cochin Cancer Research Centre in Ernakulam, ensuring comprehensive coverage for the central region of the state. She also noted the implementation of the Cancer Data Registry, a first-of-its-kind initiative in Kerala, along with the Cancer Care Grid and Cancer Care Suite, which together enable systematic tracking of trends, validation of programmes, and streamlined treatment pathways.

She praised the research outputs emerging from Kerala's public institutions, specifically highlighting Cerviscan, a device developed by RCC that has received recognition from the World Health Organization, and the innovative initiative at MCC that integrates modern medicine with Ayurveda, particularly in the domain of palliative care.
Referring to the large-scale screening initiative launched on World Cancer Day, February 4, 2025, she described "Arogyam Anandam" (Health is Joy) as a decisive step to overcome the deep-rooted public fear of cancer screening. Over a span of ten months, the programme screened 21 lakh people, including 15 lakh women in the very first month, marking one of the largest preventive health mobilizations in the state's history.

To bridge the gap between households and health institutions, the government leveraged technology through the Shaili app, meaning "Lifestyle", which was deployed by ASHAs, Junior Public Health Nurses, and Junior Health Inspectors to collect health data from households across the state. The Minister assured that all data is securely stored in the State Data Center and is accessible only to treating clinicians. The app generates a scientific risk score, based on which individuals are encouraged to visit their nearest Family Health Centre for medical assessment.

She spoke about the establishment of People's Health Centers (Janakeeya Arogya Kendrams) in 2023, which serve three to four wards, covering approximately 400-500 families, and are staffed by Mid-Level Service Providers. She highlighted the Stree Clinics, held every Tuesday at these centers, which allow women to walk in freely for screening of hypertension, diabetes, anemia, and preliminary cancer detection, significantly increasing participation due to their proximity to home and ease of access.

The Minister acknowledged the historic collaboration with the private healthcare sector, which played a crucial role in supporting the government throughout the campaign and led to the identification of more than 600 new cancer cases through screening initiatives. Drawing a parallel with cardiology, she noted that decentralizing cardiac care by establishing cath labs in every district reduced cardiac mortality from 30 percent to 6 percent, expressing confidence that a similar decentralized approach could transform cancer outcomes in Kerala.

She concluded by thanking the international faculty and the Swasthi Foundation, assuring the gathering that the recommendations emerging from the Global Preventive Onco Summit would be integral to framing future state health policies and to further strengthening Kerala's Wellness Mission.

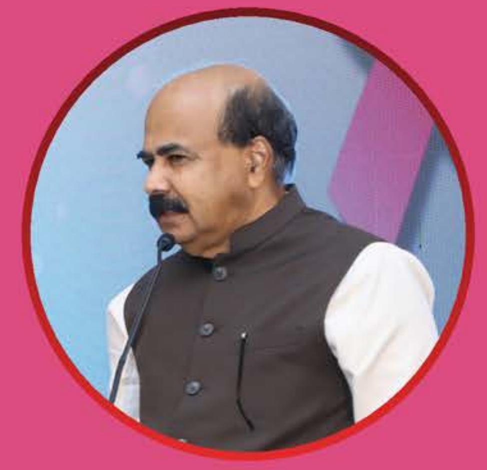
Felicitation Address

Dr. Prathibha Varkey took the podium and shared her admiration for the "inspiring several days" of the summit. She congratulated the Swasthi Foundation and the collective leadership behind conceptualizing a "Cancer-Safe Kerala." Her central message focused on the strategic importance of data, emphasizing that while collecting data is crucial, sharing what works and what does not with the rest of the world is equally important. She thanked the government leaders for their motivation and the community for their participation, noting that "no public health effort can succeed without community involvement."

Dr. Prathibha Varkey,
President, Mayo Clinic Health System, USA

Dr. Mohanan Kunnummal reflected on the hectic and intensive discussions over the past three days and reiterated the summit's most significant outcome, the collective decision to establish a National Center of Preventive Oncology. He formally announced that the Kerala University of Health Sciences is ready to host this center, marking the summit not merely as an event, but as a transformative learning experience that will lead to institutional action.

Dr. Mohanan Kunnummal,
Vice Chancellor, KUHS



Dr. Karthik Ghosh described the electrifying energy of the summit and observed that Kerala already has the people, knowledge, and motivation required for change, and that the summit simply brought these forces together. Quoting Swami Vivekananda through his father's words, "Awake, arise, and stop not till the goal is reached," he declared that the gathering had indeed awoken and arisen. He expressed confidence that Kerala would lead the country in cancer prevention and thanked Mr. Abey George and the Swasthi Foundation for orchestrating the summit.

Prof. Dr. Karthik Ghosh,
Vice President, Mayo Clinic Health System

Dr. Amit Ghosh began with an anecdote about a famous South African cardiac surgeon who became a politician after realizing that while surgery saves one life at a time, policy decisions can save thousands with a single signature. Drawing a parallel to the summit, he praised the Swasthi Foundation for bringing together not only clinicians but also key decision-makers like the DGP and the Health Minister, highlighting that initiatives such as the large-scale screening program could save millions through governance. He concluded with a story about a village praying for rain where only one child brought an umbrella, likening the leaders and students present to that child, as those who possess both faith and preparedness to bring change.

Dr. Amit K. Ghosh,
Professor, General Internal Medicine, Mayo Clinic, USA

Dr. Aditya K. Ghosh,
Consultant, General Internal Medicine, Mayo Clinic, USA

Dr. Aditya Ghosh addressed the youth and students in the audience, emphasizing that cancer prevention and control is a "long game" spanning the next 25 years. He stated that the students present would be the real drivers of future change, and encouraged them to carry the energy of the summit forward and "seize the day."

Dr. M.P. Chandran,
Chairman and President, JG University, Ahmedabad

Dr. M. P. Chandran expressed his happiness at witnessing such a diverse gathering of academicians, students, researchers, professionals, and NGOs, all united by a single pledge to make Kerala the "safest place in the world for cancer prevention."

Prof. Dr. S. Sundar Manohar,
Vice Chancellor, Pandit Deendayal Energy University

Prof. Dr. S. Sundar Manohar admitted to experiencing "goosebumps" while listening to the Health Minister's announcement that 21 lakh people had been screened. However, as an academician, he raised a critical question, "Who is going to study this data?" He pointed out that while clinicians are focused on interventions, the role of Artificial Intelligence in prediction and analysis has not been sufficiently explored. He highlighted the potential of predictive AI in screening, diagnosis, drug discovery, and biomarker identification, and committed his university to organizing a dedicated session on Predictive AI for Oncology to support Kerala's massive data-driven prevention efforts.

Vote of Thanks

Dr. Ansar P. P.,
Organising Secretary
GPOS 2026

Dr. Ansar P. P. formally concluded the Global Preventive Onco Summit 2026 by proposing the vote of thanks on behalf of the Organizing Committee, Swasthi Foundation, and Hans Foundation, describing it as his "proud privilege." He expressed deep gratitude to Smt. Veena George, Honorable Health Minister of Kerala, for her inspiring leadership and unwavering commitment to cancer prevention and early detection, noting that her vision gives confidence to the entire medical community.

He acknowledged the presence of international leaders including Dr. Prathibha Varkey, Dr. Karthik Ghosh, Dr. Amit Ghosh, and Dr. Aditya Ghosh, stating that their insights helped bridge global best practices with local realities. Special appreciation was extended to Dr. M.V. Pillai, Chairman of GPOS 2026, whose visionary leadership and lifelong contribution to oncology continue to guide the foundation.

Dr. Ansar thanked Dr. Mohanan Kunnummal for his academic leadership and Dr. Satheeshan Balasubramanian for strengthening comprehensive cancer care, along with Dr. M.P. Chandran and Prof. S. Sundar Manohar for reinforcing the role of universities in future health systems. He also acknowledged Dr. Bipin K. Gopal for demonstrating that prevention programs are viable in Kerala, and thanked key action leaders including Col. Rajeev Manali, Sri. S. N. Raghuchandran Nair, Dr. Chandramohan K., Dr. R.C. Sreekumar, and Dr. Rijo Mathew for translating ideas into action.

He expressed gratitude to Sri. S. Gopinath IPS, Trustee of Swasthi Foundation, and Mr. Flemy Abraham and the Hans Foundation for their partnership, and noted the launch of “Plan My Onco,” an online tumor board platform, thanking Dr. Abdulla for its presentation. He also appreciated the efforts of the organizing team, including Ms. Malavika Mohan, Mr. Rahul Chandrasekhar, Mr. Arun Karthikeyan, Mr. Bibin, Mr. Jyothish, Mr. Shanku, the Hyatt Regency staff, Ms. Aishwarya for anchoring, and Mr. Vishnu Unnikrishnan and his technical team.

In a special mention, Dr. Ansar placed on record the organization’s deep appreciation for Mr. Abey George, Secretary of Swasthi Foundation, describing his unwavering commitment, meticulous planning, and selfless service as the backbone of the entire summit. He concluded by thanking all participants and reaffirming the summit’s core message, “Early detection saves lives and prevention saves society.”

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

Gallery

The Global Preventive Onco-Summit 2026 brought together brilliant minds, dedicated healers, and passionate advocates from across the globe with a singular, unwavering mission: to make cancer prevention a reality for all. The conversations held, the knowledge exchanged, and the blueprints drawn during these three days will echo far beyond the walls of this venue. We arrived as individuals and organizations; we leave as a united front.

This moment marks not the end of our dialogue, but the beginning of our collective action. As we step forward, we carry the spirit of the Cancer Safe Kerala initiative into our communities, armed with the undeniable truth that early prevention truly saves lives. Every person standing here represents a promise to the future, a promise of accessible care, relentless awareness, and unyielding hope.

The road ahead is demanding, but looking at the strength of this gathering, one thing is certain: we do not walk it alone. The vision of a cancer-free world is within our grasp as long as we continue to move forward as one.

A Heartfelt Note of Gratitude and Our Vision for Tomorrow
By Swasthi Foundation

Grace and Gratitude

Every monumental endeavor begins with a spark of divine grace. As we bring the Global Preventive Onco-Summit (GPOS) 2026 to a close and present this report to the world, we first bow our heads in profound gratitude to the Almighty. It is through His boundless blessings, guiding light, and the strength He instills in us that the Swasthi Foundation has been able to dream of a cancer-free world and take concrete steps toward it. The resilience to overcome challenges and the spirit to serve humanity come from a higher power, and for that, we remain eternally thankful.

Thanking Our Pillars of Strength

A vision of this magnitude cannot be realized by a single entity; it is the triumph of a collective consciousness. We extend our deepest and most heartfelt appreciation to the global medical fraternity, esteemed researchers, and dedicated delegates who traveled from far and wide to share their invaluable wisdom. You have turned this summit into a true crucible of innovation and hope.

To our visionary partners, philanthropic allies, and institutional collaborators, your unwavering faith and vital support have been the lifeblood of this initiative. We also owe an immense debt of gratitude to our core organizing committee, our action leaders, and the countless volunteers who worked tirelessly behind the scenes. Your sleepless nights and selfless dedication transformed our shared aspirations into a powerful reality. Finally, we thank the community. It is your trust, your participation, and your courage that fuel our mission every single day.

The Swasthi Vision - A Horizon of Hope and Action

The conclusion of GPOS 2026 does not mark an end, but rather the dawn of a new, accelerated phase of our mission. The Swasthi Foundation looks to the future with a clear, resolute, and actionable vision: a world where cancer is no longer a feared, insurmountable adversary, but a universally preventable, detectable, and manageable condition.

Moving forward, our focus is firmly set on scaling the profound impact of the Cancer Safe Kerala initiative. We envision this model transcending geographical boundaries, serving as a replicable global blueprint for population-wide screening, accessible diagnostics, and community centered preventive care. We are committed to embracing the future of digital health—advancing online tumor boards and data-driven public health strategies to ensure that no one is left behind in the fight against cancer.

Crucially, the sustainability of this movement rests on the shoulders of the next generation. We envision a future where mobilizing the vibrant energy of our youth becomes the cornerstone of our grassroots outreach. By empowering young leaders and volunteers to champion lifestyle based risk reduction and compassionate care, we ensure that the message of early prevention echoes through every household.

The summit may have concluded, but our collective pledge is stronger than ever. Armed with science, united by compassion, and guided by faith, the Swasthi Foundation will continue to march forward. We firmly believe that together, we can rewrite the narrative of cancer ensuring that early prevention saves lives today, tomorrow, and for generations to come.

Together We Can!

together
we can!