

CANCER INSTITUTE (WIA)

ANNUAL & SCIENTIFIC REPORT

2023 - 2024

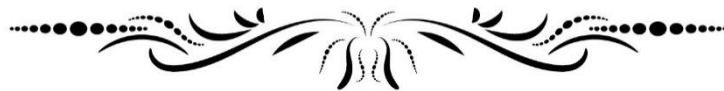


*With Humanity and in Wisdom
Since 1954*

Cancer Institute (WIA)

ANNUAL & SCIENTIFIC REPORT 2023-2024

CANCER INSTITUTE (WIA)
Adyar, Chennai – 600 020, INDIA
Ph: 044-2491 0754 / 2491 1526; Fax: 91 – 44 – 2491 2085
Website: <https://cancerinstitutewia.in>
Email: chairman@cancerinstitutewia.org



MISSION STATEMENT

Our vision is that no human being, without any social or economic divide, should undergo suffering because of any cancer disease either he/she should not develop a cancer at all or, even if he/she develops with appropriate treatment should be able to lead the remaining part of his/her life in good quality and to the normal duration.

VISION STATEMENT

Our mission is to provide

- state-of-the-art treatment for all cancer patients irrespective of their social or economical status
- To carry out clinical, applied and fundamental research on all aspects of malignancy and its allied diseases including causation, course, prevention, detection, diagnosis, treatment and rehabilitation
- To spread out the knowledge on all aspects of cancer to medical, para-medical as well as general communities
- To concentrate on the preventive aspects of cancer in order to significantly reduce , if not totally eliminate, the incidence of cancer
- To establish tumor registries, both hospital and population based, to further the study of cancer and allied diseases



7 Decades of Dedication

SERVICE ABOVE SELF

Treatment affordable and equitable

20% of patients are treated totally free and 40% at a nominal cost



OUR FOUNDER DR. MUTHULAKSHMI REDDY

Her Vision

**State-of-the-Art treatment for all
socio-economic class of patients**

DR. S. KRISHNAMURTHI

His Words

Service above Self



DR. V. SHANTA

Her Passion

Patient comes first

CONTENTS

S.No.	Topic	Page No.
1	Governing Body Members	6
2	Administrative Staff	7
3	Overview	10
4	Events	14
5	College of Oncological Sciences	21
6	Radiation Oncology	24
7	Surgical Oncology	31
8	Medical Oncology / Pediatric Oncology	43
9	Blood Bank	51
10	Anaesthesiology / Pain & Palliative Care	55
11	Molecular Oncology	73
12	Epidemiology, Bio-Statistics & Cancer Registry (EBCR)	80
13	Preventive Oncology	89
14	Cancer Biology & Molecular Diagnostics	96
15	Psycho-Oncology & Resource Center for Tobacco Control (RCTC)	103
16	Radio-diagnosis and Imaging Sciences	118
17	Medical Physics	119
18	Nuclear Medicine	120
19	Onco-Pathology	124
20	Clinical Biochemistry	128
21	Clinical Microbiology	130
22	Medical Gastroenterology & Endoscopy (MGE)	139
23	Physiotherapy	142
24	Quality Control	144
25	Library	153
26	List of Volunteers	154
27	Publications	155
28	Acknowledgements	164
29	Donors List	165
30	Auditors Report	206

GOVERNING BODY OF THE CANCER INSTITUTE (WIA)

Regd. Under the Societies Registration Act of 1860

Shri. R. Seshasayee Chairman, Cancer Institute (WIA), Adyar, Chennai – 600020	Chairman
Dr.E.Hemanth Raj Secretary/ Executive Vice Chairman, Cancer Institute (WIA), Adyar, Chennai-600020	Secretary
Dr.T.G.Sagar 26/8, LIC Colony 3 rd Street, Thiruvanmiyur, Chennai – 600 041	Member
Dr.Kalpana Balakrishnan Director, Cancer Institute (WIA), Adyar, Chennai – 600020	Member
Shri Vinod Jain Siyat House, No.961, Poonamallee High Road, Purasawalkam, Chennai – 600084	Member
Shri Arun Alagappan Murugappa Group, 10, Chittaranjan Road, Teynampet, Chennai-600018	Member
Shri.Vijay Sankar The Sanmar Group, Chennai	Member
Shri M.K.Jain Managing Director, Asia(Chennai) Engg Company Pvt. Ltd.No.2, 1 st Floor, Golden Bridge, Wheat Crofts Road, Nungambakkam, Chennai – 600034	Member
Mrs.Mallika Srinivasan Chairman, Tractors & Farms Equipments Limited (TAFE) 77, Nungambakkam High Road, Chennai – 600034	Member
Mr. Srivats Ram Managing Director, Wheels India Ltd., Chennai	Member
Mr. C.N.Raghavendran C.R.Narayana Rao (Consultants) Private Limited, No.10, Karpagambal Nagar, Mylapore, Chennai – 600004	Member
Mr.N.L.Rajah Senior Advocate, No.8, Venkateswara Nagar 4 th Street, Adyar, Chennai – 600020	Member
Mrs.Girija Vaidhyanathan New No.7 (Old No.4), Central Avenue, Kesavaperumalpuram, Chennai – 600028	Member
Dr.S.Suresh Director, Mediscan Systems, Chennai	Member
Dr.K.Sundaram Clinical Professor, Department of Otolaryngology SUNY Downstate Medical Center, Brooklyn, NY 11203, USA	Member
Dr.TS Ravikumar 231-C, Kilpauk Garden Road, Chennai-600010	Member
Mr.R.Shankar Raman Flat No.123, Kalpataru Royale, 12 th Floor, Road No.29 Near Sion Circle, Sion East, Mumbai -400022	Member
Addl Secretary & Financial Adviser Govt. of India, Ministry of Health & Family Welfare, Nirman Bhawan, New Delhi – 110011	Member
Secretary, Deptment of Health Research & Director General Indian Council of Medical Research, New Delhi – 110029	Member
Director of Medical Education Govt.of Tamil Nadu, 162, Poonamallee High Road, Chennai – 600010	Member
Dr. Mayilvahanan Natarajan Orthopedic Surgeon, MN Orthopedic Hospital	Member

M/s.R.Janakiraman & Co. Approved Auditors

**ADMINISTRATIVE
STAFF**

Shri R.Seshasayee, CA	: Chairman
Dr.E.Hemanth Raj, MS, MCh, Ph.D	: Executive Vice Chairman
Dr.Kalpna Balakrishnan, MBBS, DA, DNB	: Director
Dr.R.Swaminathan, M.Sc, Ph.D (Stat, Epide)	: Associate Director
Mrs. V.Varalakshmi, M.Sc, MBA	: Associate Director (Admin)
Mr.C.V.Narasimhan, BBA, LLB, ACA, ACS	: Associate Director (Finance & Accounts)

Nursing

Dpty. Nursing Supdt. (DNS)

Ms.A.Ayary

Assistant Nursing Supdt. (ANS)

Ms.R.Satyabala

Ms.T.Thangamalar

Ms.J.Jasmine Ruby

Ms.Geetha

Nursing Tutors

Ms.B.Thilaka

Ms.M.Bommi

Nursing I/C

Ms.Bala Christopher

Infection Control Nurses

Ms.A.Beula Roselin

Ms.J.Vijaya Shanthi

Ms.J.Jeevitha

Ms.T.Renuka

Link Nurses

Ms.Prem Sheeja

Ms.Punitha

Ms.Doshy Joseph

Ms.Arul Tamil Selvi

Administrative Officer

Mr.R.Senthil Kumar

Assistant Manager, Dharmasala

Ms.S.Nalini

Cash

In-Charge

Mrs.M.Uma Maheswari

Assistants

Ms.D.Maharani

Ms.N.Aruna

Ms.D.Srilekha

Ms.Remani Mahendran

Ms.B.V.Srividya

Ms.S.Malarmathi

Mr.J.Maria Kulothungan

Ms.A.Kalaimayil

Mr.M.A.Gokulnath

Ms.V.Bhuvaneswari

Mr.M.Elangovan

Ms.M.Kiruthika

Mr.M.Balasubramanyam

Mr.V.Vaitheeswari

Ms.C.M.Arya

Ms.R.Anitha

Ms.E.Gowri

Ms.E.Yamuna

Ms.P.Nanthanavazhini

Ms.S.Pavithra

Mr.P.Sasikumar

Mr.Ramesh

General Administration

Academic Officer

Mrs.D.Mahalakshmi

**General Manager (CSR & Special
Projects)**

Mr.R.Rajshekar

Accounts**Senior Manager**

Mr.T.Sampath Kumar

Manager

Mrs.S.Parameswari

Assistant Manager

Ms.A.Vidhya

Assistants

Mr.S.Balamurugan

Mr.G.Prabhu

Ms.M.Sowmya

Personal Secretary to Executive Vice Chairman

Ms.Priya Ganesh

Secretary to the Director

Mr.V.Krishnakumar

Secretary to Surgical Oncology

Mrs.E.Priya

Communication Manager

Ms.D. Manju Deborah

Finance Managers

Mrs.R.Shanthi

Mrs.M.Bharathi

Quality Control (NABH)

Mrs.T.Jayapradha

Other staff - 3

Lymphoma Data Coordinator &**BMT Coordinator**

Mrs.N.Vanitha

Telephone Operators

Ms.N.V.Varalakshmi

Ms.T.Ramya

Ms.D.Shoba

Ms.D.Geetha

Purchase**General Manager**

Ms.Srividhya Shankar

Manager

Ms.M.Padmavathi

Data Entry Operators

Mr.B.Eswar

Ms.J.Saranya

Pharmacists

Ms.M.A.Gayathri

Ms.A.R.Valarmathi

Ms.J.Muthulakshmi

Ms.T.Rupavathi

Ms.P.Aishwarya

Ms.R.Sarala

Ms.T.Veena

Mr.B.Nagarajan

Ms.V.Dheena

Ms.P.Muneeswari

Mr.S.Aravindan

Mr.J.Faizool Rahman

Ms.V.Sivasankari

CML Patient Coordinator & Office Asst

Mrs.R.Thamil Selvarani

BIRAC Project**Clinical Research Dept****Project Manager**

Ms.Vidya Anand

Kitchen**Dietitians**

Dr.K.Parvathy

Ms.K.Santhana Lakshmi

Other staff – 11

Paediatric Data Manager

Ms.Mubina Begum

Paediatric Dietitian

Ms.Vishali Monisha

Human Resources
Chief Human Resource & Communication Officer

Ms.S.Ajitha

Steno-Typist

Mrs.T.Hemalatha

HR Officer

Mr.A.Niranjan

Trainee-HR

Ms.T.Anitha

Mr.N.Elumalai

HR Officer Trainee

Ms.Helena Jennifer

Junior HR Officer

Ms.R.Harini

Bio-Medical Engineering

Mr.E.Venkatesan

Mrs.S.Vasanthavalli

Mr.R.Balan

Mr.R.Chandru

Ms.S.Bhuvana

Mr.I.Mahash

Mr.K.Priyadharasan

Ms.S.Saranya

Electrical

Electrical Engineer

Mr.P.Namachivayam

Mr.C.Mariappan

Assistant Engineer

Mr.J.Nithya Kumar

Fire & Safety Officer

Mr.S.Sathish Kumar

Civil Engineer – Maintenance

Mr.R.Kumaran

Mr.N.Gokul Chandran

Hospital

Doctor Medical - 116

Doctor Non-Medical - 18

Scientific staff - 45

Nurses - 404

Technicians - 112

Admin staff - 367

Students (Medical) - 79

Phy.Student – 4

Project Staff - 75

Clinical Research Services Unit (CTSU)
Senior Clinical Research Coordinator & Incharge

Mr.V.Paulson Vijayakumar

Senior Clinical Research Coordinator

Mrs.S.Deyvamanohari

Research Pharmacist

Ms.V.Siva Priya

Biostatistician

Ms.T.Sripriya

Data Entry Operators

Mr.V.Jaya Prakash

Ms.D.Priyadharshini

Ms.C.V.Sneha

Clinical Research Coordinators

Mr.S.Sridhar

Mr.H.Peer Mohammed Basith

Ms.Nichila Mary Philip

Ms.V.Sandhiya Devi

Ms.M.Moniga

Dr.S.Eswari

Ms.G.Divya

Ms.M.Amal Jose

Ms.J.Jency

Medical Officer

Dr.B.Sneha

Project Research Scientist

Mr.S.Sujeevan

Social Worker

Ms.R.Rohini

Trainee Clinical Research Coordinator

Dr.G.Pavithra

Dr.K.S.Yogavarshini

Maintenance (System & N/W)

Mr.N.S.Manikandan

Mr.T.Sudharsan

OVERVIEW

70 Years of Excellence: A Legacy of Hope and Healing

The Cancer Institute (WIA), an inspiration of hope and sanctuary of healing, stands as a testament to the vision and dedication of its founders, Dr. Muthulakshmi Reddy, Dr. S. Krishnamurthi, and Dr. V. Shanta. Since its humble inception in 1954, the Institute has grown from a 12-bed cottage hospital into a world-renowned cancer center with over 550 beds. This evolution reflects the pioneers' commitment to revolutionize cancer care, making it accessible and affordable for all, especially the underprivileged.

Dr. Krishnamurthi and Dr. Shanta's tireless work enhanced the Institute's capabilities, evident in the advanced research division, esteemed College of Oncological Sciences and a robust Preventive Oncology Division. Today, the Cancer Institute (WIA) embodies a relentless pursuit of quality care and cutting-edge treatment protocols, equaling the best globally.

Acknowledgements: Pillars of Support and Generosity

We extend heartfelt gratitude to the Government of India and the Government of Tamil Nadu for their steadfast support. Profound thanks to our major benefactors: Sanmar Group, The TVS Family, Kalyani Memorial Trust, Mahesh Memorial Trust, and the Cancer Institute Foundation (CIF), California. Their donations have been pivotal in advancing our mission.

Sincere thanks to corporates contributing under Corporate Social Responsibility (CSR) initiatives in Preventive Oncology, Research, Psycho-oncology, Patient Care, and Education. Noteworthy supporters include Mobis India, RBL, Bank, Kotak Securities, BPCL, CCIL, Verizon and HCL Foundation to name a few. Their support empowers us to deliver unparalleled care using state-of-the-art technology and treatment protocols.

Government Initiatives: Bridging the Gap

The Ayushman Bharat Scheme by the Government of India, Ministry of Health and Family Welfare, has been a game-changer for patients below the poverty line since 2019. Additionally, the Prime Minister's National Relief Fund (PMNRF) has provided grants aiding our mission. The Tamil Nadu Health Systems Project under Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS) continues to support BPL patients, especially for Bone Marrow Transplants. Private and public sector insurance has been empanelled to utilize the cashless facility with various sum-insured health Policyholders (Patients)

Public sector insurance :(GIPSA)	Private Sector insurance :(corporate /Retail)
United India Insurance	SBI General Insurance Ltd
New India Insurance	Bajaj Allianz General Insurance Ltd
Oriental Insurance	Hdfc Ergo General Insurance Ltd
National Insurance	ICICI Lombard General Insurance Ltd
	Aditya Birla General Insurance Ltd

Quality and Accreditation: Upholding Standards of Excellence

National Accreditation Board for Hospitals & Healthcare Providers (NABH) has granted us Re-Accreditation for four more years valid till July 2026 & this prestigious recognition reflects our commitment to excellence in quality. As part of our NABH journey since 2015, we have initiated numerous quality improvement measures across all departments, ensuring a patient-centric approach with proper documentation and implementation.

All the staff of the Institute are working towards continuous quality improvement & the quality core team is committed to uphold high standards of care and operational efficiency.

This year 2024, we have successfully completed the surveillance assessment which was aimed at examining whether the re-accredited hospital is maintaining quality as per NABH requirements & having full compliance to statutory requirements.



Cancer Prevention & Awareness:

A mass public health initiative on Cancer Awareness by the institute

It is worrisome that >75% of cancer patients presenting at the Cancer Institute (WIA), Adyar, Chennai, are either in locally advanced or too advanced stages of disease. Also, the population-based screening programs for common cancers conducted by the institute among apparently healthy men and women in different districts have had <50% response either for undergoing tests or completing further investigations. It was strongly felt that a lack of awareness among general public was the reason.

A novel project was conceived for acquisition of awareness on different aspects of cancer disease by different stake-holders among the general public by designing a bus for the exhibition of audio/video/chart material on cancer incidence statistics, myths, prevention, screening, early detection and treatment. In addition, the photo gallery depicting the history of the institute, its milestone achievements and success stories of cancer survivors were also displayed through the big LED screen on the exterior and five TV monitors and charts on the interior of the bus. A provision for assessing the knowledge acquired and feedback by the visitors is also provided at exit.

The target audience or stakeholders are the students, young and matured adults, geriatric subjects, women and professionals. The choice of locations for stationing the cancer awareness bus for exhibition included schools, colleges, offices, industries, public places, hospitals, healthcamps/mela. This awareness program was inaugurated by the hon'ble health minister of Tamil Nadu, Thiru. Ma. Subramanian on October 25, 2021. The bus has since traversed the nook and corners of 6 districts viz Chennai, Chengalpattu, Kanchipuram, Tiruvallur, Viluppuram and Tiruvannamalai districts after formal flag-off by respective district collectors and government functionaries. The bus is presently stationed in VIT campus in Vellore and covering Vellore, Ranipet and Tirupattur districts since March 6, 2024. This bus exhibition cancer awareness program has been attended by 2.07 lakh visitors from about 450 institutions/places in 500 working days on an average of 414 beneficiaries per day. The feedback has generally been appreciative by the visitors underlying our efforts to dispel the myths about cancer and providing the right facts about the disease – diagnosis, treatment, prevention, research and statistics

Six dedicated staff have been appointed for this project, four of whom travel with the bus (2 assistant managers and 2 of 4 drivers on rotation duty) at any given time camping in the district where the program is ongoing. This staff is managed centrally by a manager on institute rolls. The annual budget for this endeavour is INR 34 lakhs.

TNCRP is a population-based statewide cancer surveillance study by the institute for generating cancer incidence statistics of entire Tamil Nadu from year 2012. The TNCRP report 2023 is a comprehensive account giving cancer incidence pattern by year, age-group, sex, district and site. The total numbers of incident cancers in Tamil Nadu in 2019 were 78,678 with a crude incidence rate of 96.6 per 100,000 populations (Male: 88.2; Female: 105.1). The common cancers among men were stomach (6.7), Lung (6.6), Mouth (6.3) and large bowel (5.9); among women, the order was breast (27.6), cervix (16.0) and ovary (5.7). The estimated new cancers in 2023 were 92,756. An online reporting system for TNCRP has commenced and is continuing.

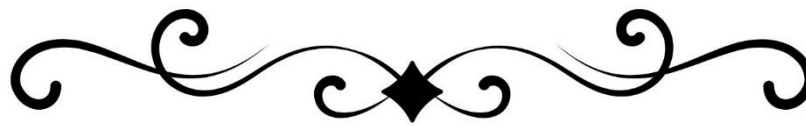
Tobacco Cessation Clinic (TCC)

The Tobacco Cessation Centre operates with the aim of assisting tobacco users in quitting their habit. It provides services to both tobacco users and patients from the cancer hospital, as well as their caregivers. The Tobacco Cessation Centre plays a crucial role in supporting individuals in their journey to quit tobacco use. By providing counseling, behavioral therapy, and access to medication, the centre helps users overcome the challenges associated with quitting tobacco. This, in turn, contributes to improved health outcomes and a reduced risk of tobacco-related diseases. The Centre is staffed by experienced and trained psychologists who offer counseling to tobacco users.

The Dharamsala at the Cancer Institute (WIA), provides essential support to approx 180 cancer patients and caregivers per day, offering free accommodation and nutritious meals. This facility fosters a healing environment with amenities, communal activities, and emotional support services, exemplifying our commitment to comprehensive cancer care and patient well-being.

We continue to follow the ethos enunciated 69 years ago by our founders, providing the state of art oncologic care without social or economic divide. We remain tall as a non-profit voluntary charitable institution not losing focus amidst worrying changes in the concepts in medical care in a corporate environment.

*We are committed to the care of the underprivileged and we shall do our best.
Our journey continues.*



EVENTS

World No-Tobacco Day – 31.05.2023 Theme for the year "We Need Food, Not Tobacco"

In recent years, it has been observed that the disease burden, attributable to tobacco use is on the rise. Considering these issues as a need of the hour and in line with the 'World No Tobacco Day- 2023' Theme "We Need Food, Not Tobacco", Cancer Institute (WIA) organize an awareness rally on 31st May 2023 (Wednesday) on Elliot's Beach, Chennai from 4.30 pm to 5.30 pm, aimed at spreading awareness on the ill effects of tobacco usage.

The rally commenced from Elliot's Beach (near the police booth) towards the church and end at the police booth. A total of 400 participants including cancer survivors, dental college students, NSS, NCC students, and HCL volunteers. The rally was flagged off by pediatric survivors.



The chief guests are Mr. Ramani, Inspector of Police, Dr. Kishore Kumar, IDA President, Dr. AP Mahendran Secretary IDA, Mr. Anoop, HCL Foundation and Mr. Cyril from MACT took an active part. The rally comprises tobacco awareness messages and a food pyramid displayed on a bullock cart to seek the attention of the public. Playback theatre artists from Mary Ann Charitable Trust (MACT) conducted a street play on the ill effects of tobacco and disseminated the tobacco awareness message to the larger population. Due to an increased turnout at the program and able to managed to gather details of only 138 beneficiaries. The remaining beneficiaries were accounted for through the distribution of program awareness materials.

Dr. S. Krishnamurthi Memorial Oration – October 4th 2023



The Cancer Institute (WIA) Adyar along with The Tamil Nadu Dr. MGR University hosted the prestigious Dr. S. Krishnamurthi Memorial Oration, featuring Professor Ashok Venkitaraman, Director of the Cancer Science Institute of Singapore and Distinguished Professor of Medicine at the National University of Singapore.

The event was a compelling exploration of the future of medicine through the lens of cutting-edge cancer research. The oration began with a heartfelt tribute to the late Dr. S. Krishnamurthi, a visionary in the field of oncology and a pioneer in cancer care. His dedication to advancing cancer research and treatment continues to inspire our community. Professor Venkitaraman shared his insights into the evolving landscape of medicine, emphasizing the pivotal role of cancer research in shaping the future. He highlighted the convergence of various disciplines, including genomics, immunotherapy, and artificial intelligence, in advancing personalized and precise cancer care.

One of the central themes of the oration was the promise of precision medicine, which tailors treatment strategies to an individual's genetic makeup. Professor Venkitaraman discussed how genomics is revolutionizing cancer diagnosis and therapy, leading to more effective and less invasive treatments. It was a thought-provoking and visionary exploration of the future of medicine. The Cancer Institute (WIA) Adyar remains committed to honoring Dr. S. Krishnamurthi's legacy by staying at the forefront of pioneering research and compassionate patient care.

National Cancer Awareness Day – November 7th, 2023

Cycle Rally

On National Cancer Awareness Day, the Department of Psycho-Oncology, Cancer Institute (WIA) and HCL Foundation organized a cancer awareness cycle rally at Cancer Institute (WIA), Canal Bank Road, Chennai on 7th November 2023, between 7 am and 8 am. College students from various institutions around Chennai participated in this cycle rally and disseminated the cancer awareness messages by holding placards throughout the rally.

Around 39 students from colleges were gathered to spread the cancer awareness. The rally was flagged off by Thiru. Nelson, Asst. Commissioner of Police, Dr. Swaminathan, Associate Director, Cancer Institute (WIA), Chennai and Dr. Baskaran, Associate Professor & NCC coordinator, Nandhanam Arts & Science College, Chennai.



World Cancer Day – February 2024

A Dialog between the Health Care Professional, Survivors and Caregivers

In view of World Cancer Awareness Day 2022, Cancer Institute (WIA) and HCL Foundation organizing a dialog between the health care professional, survivors, and caregivers of cancer patients on '**Bridging the Care Gap**' for Cancer Survivors and Caregivers of cancer patients on 3rd February 2024, at Auditorium, SK campus, Cancer Institute (WIA), Adyar.



The program was inaugurated by Prof. Kalpana Balakrishnan, Director, Cancer Institute (WIA), Chennai. The health care team comprised Dr. Aravind Krishnamurthy, Professor and head of the Department of Surgical Oncology, Dr. Anandhi, Associate Professor and head of Radiation Oncology, Dr. Varadhan, Assistant Professor, Medical Oncology, Dr. Prasanth, Assistant Professor, Medical Oncology and Dr. Sundaramoorthy, Assistant Professor, Psycho-Oncology with cancer survivors and caregivers of the cancer patients.

The subjects of discussion include quality of life, patient-centered treatment, education, training, emotional and mental health support, and communication. About **103** cancer survivors and caregivers gained from this Program.

[Youth Health Mela 2024](#)

In response to the growing threat of non-communicable diseases (NCDs) among the youth, the Cancer Institute (WIA) Adyar, in collaboration with the HCL Foundation, organized the Youth Health Mela 2024.



This initiative aimed to raise awareness about NCDs and promote a healthier lifestyle among the younger generation.

The program, spanning over three days, featured a variety of activities including stalls, workshops, symposiums, and competitions targeting the youth. These activities were designed to address five key themes: Substance Abuse, Hygiene, Diet, Physical Inactivity, and Environment.

Over the course of six Youth Health Mela programs since 2012, approximately 2 lakh beneficiaries, including policymakers, NGOs, schools, colleges, and corporates, have been reached. The involvement of esteemed individuals such as high court judges, senior advocates, and planning committee members underscored the significance of the event.

This year's event witnessed active participation from government organizations such as the Directorate of Public Health and the National Health Mission, highlighting the collaborative effort towards combating NCDs. The program was inaugurated by esteemed dignitaries including Thiru Ma. Subramaniam, Hon'ble Minister of Health and Family Welfare, and Thiru. Anbil Mahesh Poyyamozhi, Hon'ble Minister of School Education, Govt of Tamil Nadu.

The valedictory session was graced by Dr. Jerald M Selvam, Additional Director, National Health Mission, and Dr. Kalpana Balakrishnan, Director, Cancer Institute, among others.

A total of 49 institutions, including 25 schools and 24 colleges, participated in various competitions, attracting a total of 4100 students. Additionally, 800 individuals participated in workshops and symposiums, while 5500 people visited the exhibition stalls over the three days. In total, 10400 students and members of the public benefited from the Youth Health Mela 2024.

Through collaborative efforts and engaging initiatives, the Youth Health Mela continues to play a vital role in promoting good health and well-being among the youth, contributing towards the achievement of WHO sustainable goals.

Inauguration of the Department of Medical Gastroenterology and Endoscopy - Among India's Elite with Exclusive Endoscopy Suite & Cath Lab



The TCS Foundation's generous donation has enabled the establishment of a state-of-the-art Endoscopy Department and Cath Lab on the 4th floor of the Cancer Institute (WIA), Adyar. These facilities, equipped with cutting-edge technology including an advanced endoscopy theatre, endoscope, C-arm, Angiosuite Cathlab X-ray machine, and microwave thermal ablation unit, enhance our diagnostic and treatment capabilities. As one of the few institutions in India offering such advanced services, the Cancer Institute (WIA) sets a new standard in cancer care. The minimally invasive procedures ensure precision, reduce side effects, and promote faster recovery, with patients often discharged within 24 hours. This facility not only enhances the capabilities of our medical, surgical, and radiation oncology specialties but also plays a crucial role in managing cancer-induced complications such as bleeding and blockages. We are committed to providing our patients with the best possible care through these innovative and advanced medical technologies, ensuring they receive the most effective and least invasive treatments available.



நமக்கு தேவை உணவு, புகைமீலை அில்ல



Grow Food Not Tobacco
Tobacco crops lead to less food on tables

THE COLLEGE OF ONCOLOGICAL SCIENCES

DM - Medical Oncology



Mch - Surgical Oncology



THE COLLEGE OF ONCOLOGICAL SCIENCES

Executive Vice Chairman	–	Dr. E.Hemanth Raj MS, MCh, PhD
Director	–	Dr. Kalpana Balakrishnan DA, DNB
Dean	–	Dr. S.Shirley MD, DNB, MNAMS, PhD
Academic Officer	–	Ms. Mahalakshmi D M.Sc, M.Phil

Medical Education

The college has been offering various National Medical Commission (NMC) recognized super speciality and broad speciality courses in oncology affiliated to the The Tamil Nadu Dr. M.G.R. Medical University. These comprise D.M. Medical Oncology, D.M. Onco-Pathology, M.Ch. Surgical Oncology and M.D. Radiation Oncology. The annual intake of students is 12 for D.M. Medical Oncology, 02 for D.M. Oncopathology, 09 for M.Ch. Surgical Oncology and 07 for M.D. Radiation Oncology.

National Board of Examination in Medical Sciences (NBEMS) recognized courses like Diplomate of National Board (D.N.B.) in Palliative Medicine with an annual intake of 02 students and Fellowship of National Board (F.N.B.) Onco-Anaesthesia with an annual intake of 04 students are being conducted.

New NBEMS recognized course D.N.B. in Radio Diagnosis has been introduced from the year 2023 with an annual intake of 02 students. Fellowship of Indian College of Radiology and Imaging (F-ICRI) has been introduced from the year 2024 with an intake of 02 students per year.

Para Medical Education

Master degree courses like M.Sc. Radiotherapy Technology affiliated to The Tamil Nadu Dr. M.G.R. Medical University, M.Sc. Medical Physics affiliated to Anna University and M.Phil. Psycho Oncology affiliated to University of Madras are being conducted.

Bachelor degree (B.Sc.) courses in Radiotherapy Technology, Radiography and Imaging Technology, Nuclear Medicine Technology and Operation Theatre and Anaesthesia Technology affiliated to The Tamil Nadu Dr. M.G.R. Medical University are also conducted.

Research

Cancer Institute (W.I.A.) is recognised by The Tamil Nadu Dr. M.G.R. Medical University and University of Madras for conducting research leading to the award of Ph.D. by the departments of Molecular Oncology, Nuclear Medicine, Psycho Oncology and Preventive Oncology.

Certificate Courses

Certificate Course in Essentials of Palliative Care (CCEPC) and Certificate Course on Tobacco Cessation are regularly conducted by Cancer Institute (W.I.A.).

Students graduated (April 2023 to March 2024)

Sl.No	Course	No. of Students
1	Ph.D. Oncology (Molecular Oncology)	2
2	Ph.D. Oncology (Preventive Oncology)	0
3	Ph.D. Oncology (Psycho Oncology)	1
4	D.M. Medical Oncology	6
5	M.Ch. Surgical Oncology	5
6	M.D. Radiation Oncology	5
7	Post Doctoral Fellowship in Oncopathology	1
8	M.Sc. Radiotherapy Technology	2
9	M.Sc. Medical Physics	28
10	M.Phil. Psycho Oncology	3
11	B.Sc. Radiotherapy Technology	7
12	B.Sc. Radiography & Imaging Technology	1
13	B.Sc. Nuclear Medicine Technology	3
14	B.Sc. Operation Theatre & Anaesthesia Technology	5
15	Certificate Course in Essentials of Palliative Care	32
16	Certificate Course on Tobacco Cessation	103

Tamil Nadu Medical Council Credit Hours (April 2023 to March 2024)

S.No	CME Programme	Date	Credit Hours
1	Paediatric Brain Tumors	24.06.2023	1
2	CME on Acute Leukemias and TN State level Hematology Quiz	30.07.2023	2
3	Oasys 2023- Oncoanesthesia Symposium & Synopsis	24.09.2023	2
4	Transfusion Medicine Road Show 2024	16.04.2024	1
5	Workshop & Simulation in Oncological Airway	23.06.2024	2

**DEPARTMENTAL
ACTIVITIES
2023 - 2024**

DEPARTMENT OF RADIATION ONCOLOGY



RADIATION ONCOLOGY

Dr. Ananthi Balasubramanian MD DMRT, Professor & Head of Department

The Radiation Oncology Department, established in 1954, has a longstanding commitment to excellence in education and research. Our department offers various teaching and training programs, including the Diploma in Medical Radiation Therapy (D.M.R.T) initiated in 1990, and the Doctor of Medicine (M.D.) course in Radiotherapy introduced in 1992, both affiliated with The Tamil Nadu Dr. M.G.R. Medical University. In 2011, we expanded our educational offerings with the B.Sc. in Radiotherapy Technology, also affiliated with The Tamil Nadu Dr. M.G.R. Medical University and approved by AERB. As pioneers in the multidisciplinary approach to treating malignancies, our department is actively engaged in clinical trials, underscoring our belief that progress in cancer treatment is rooted in robust research.

Faculty - Head and Neck/Thoracic/G.I/Musculoskeletal and Paediatric Oncology

Professor	Associate Professor
Dr.Alexander John MD DMRT Dr.Priya Iyer MDRT	Dr.M.N.Arun Kumar MDRT Dr.C.Vasanth Christopher Jayapaul MDRT Dr.Ram Madhavan MDRT

Assistant Professor	
Dr. K.Ramanaiah MDRT Dr. V.V.Gautam DMRT DNB (RT) Dr. Vengada Krishnan MDRT Dr. Sowmiya S MDRT	Dr. Sadanand DMRT DNB (RT) Dr. Mukesh MDRT Dr. Gopika Rajeev MDRT

Lecturer	Other Staff
Dr. Dinesh Sundarajan MDRT Dr Priyadarshini V MDRT	Technologists – 16 Supporting Staff - 2

Students registered:

M.D (Radio Therapy) - 21
M.Sc (Radio Therapy Technology) - 4
B.Sc (Radio Therapy Technology) - 27

Students Completed:

MD (Radio Therapy) - 7
M.Sc. (Radio Therapy Technology) - 2
B.Sc (Radio Therapy Technology) - 2

Statistics

External beam therapy new cases	2336
Total number of treatments delivered	57483
Conventional treatment	429
3D CRT	1543
IMRT	294
Rapid arc therapy	61
SBRT	3
Total body radiation	22
SRT	6
Brachytherapy applications	889

Programmes Conducted:

In March 2023, the Department of Radiation Oncology hosted the ROME (Radiation Oncology Model Examination), continuing its tradition as an essential academic event designed to prepare final-year postgraduates for their university examinations. This initiative, now in its ninth year since its inception in 2015, has established itself as a cornerstone in the academic calendar.

The 2023 edition of ROME saw distinguished faculty members from various esteemed colleges serving as examiners. Their involvement brought a wealth of diverse expertise and perspectives, significantly enriching the learning experience for all participants. Students from numerous colleges across Tamil Nadu attended the event, reflecting its growing reputation and importance.

The program included a variety of activities such as case presentations, viva voce examinations, student-led panel discussions, and an interactive quiz session. These components were meticulously designed to replicate the format and rigor of actual practical examinations, providing students with invaluable hands-on experience.

By engaging in these realistic simulations, participants were able to enhance their preparedness and build confidence for their forthcoming professional assessments. The feedback from students highlighted the significant benefits of the event, emphasizing the practical insights and exam readiness it facilitated.

ROME 2023 not only fostered academic excellence but also promoted a collaborative and supportive learning environment. The continued success of this event underscores its vital role in the academic and professional development of future radiation oncologists.

Presentation at Conferences:

38th Annual Conference of Radiation Oncologists of India TN & PY Chapter held at Yercaud on 25th and 26th August 2023

- Dr. Swathi – ‘A Ray of Hope- Exploring the efficacy of preoperative radiotherapy in locally advanced breast cancer patients’
- Dr. Manjula- ‘Improved survival rates among HPV positive oropharyngeal squamous cell cancer - A Myth or Fact’
- Dr. Sai Pranav- ‘Outcomes of Oropharyngeal Carcinoma in Elderly Population’
- Dr. Surjith- ‘Hemostatic Radiation effects and outcomes - 5 year single institution data’
- Dr. P.Sundaravadhana- ‘Dosimetric analysis of Thyroid optimised and Thyroid sparing radiotherapy in locally advanced oral cavity and oropharyngeal carcinoma’
- Dr. Ashok Chelladurai- ‘Treatment of squamous cell carcinoma of hard and soft palate using customized mould with HDR brachytherapy’
- Dr. Aravind Natarajan- ‘The surprising connection: how blood group affects radiotherapy outcomes in tongue cancer patients’
- Dr. Barath- ‘Factors influencing outcomes in Geriatric breast patients’
- Dr. Bhavani- - ‘Image based brachytherapy using vaginal surface implants with flexible catheters- A single Institute experience’
- Dr. Sri Vishnu- -‘A Day in After Completion Therapy Clinic - Clinician Perspective’
- Dr. Godson- - ‘A single institute data on the role of lower uterine segment involvement as a prognostic factor in carcinoma endometrium’
- Dr. Karthik- ‘Case report on MALTOMA’.
- Dr. Shivani- ‘Pure mucinous carcinoma of breast - A retrospective single Institution study’
- Dr. Adith- ‘Why not initial pelvic radiation in Metastatic cervical cancer?’

9th Annual Young Radiation Oncologist Conference held at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow in 2023

- Dr. Priyadarshini Venkataraman ‘Hypofractionated radiation therapy in locally advanced oral tongue cancers-Toxicity and tolerance evaluation’
- Dr. Dinesh.S - ‘Capecitabine based chemoradiation in cisplatin ineligible patients of locally advanced carcinoma uterine cervix - Prospective pilot study’
- Dr. Aravind - ‘Concurrent chemoradiotherapy post tracheal stenting in locally advanced non metastatic carcinoma of esophagus’
- Dr. Surjith - ‘Role of dietary factors in reducing the severity of gastrointestinal symptoms after pelvic radiation therapy in gynecological malignancies’

3rd Indian Cancer Congress held at Mumbai in November 2023

- Dr. Aravind - ‘The surprising connection: How blood group affects radiotherapy outcomes in tongue cancer patients’
- Dr. Swathi - ‘A ray of hope- The impact of pre-operative radiotherapy in achieving pathological complete response in breast cancer’
- Dr. Manjula: ‘Improved survival rates among HPV positive Oropharyngeal squamous cell carcinoma Myth or Fact? - A Retrospective analysis from a tertiary care centre in South India’
- Dr. Sai Pranav- ‘Outcomes of Head and Neck Cancers in Elderly Population - An Institute Experience’
- Dr. Sundaravadhana- ‘A dosimetric analysis of thyroid sparing and thyroid optimised radiotherapy in locally advanced oral cavity and oropharyngeal carcinoma’

Awards and Prizes:

38th Annual Conference of Radiation Oncologists of India TN & PY Chapter held at Yercaudon 25th and 26th August 2023

- Dr.Ashok Chelladurai - DR.SHASTRI AWARD for oral presentation on ‘Treatment of SCC of hard and soft palate using customised mould with HDR brachytherapy’
- Dr.Bhavani - DR.GSL AWARD for poster presentation on ‘Image based brachytherapy using vaginal surface implants with flexible catheters – a single institution experience’3rd Indian Cancer Congress held at Mumbai in November 2023
- Dr.Manjula- Meritorious Award for oral presentation ‘Improved survival rates among HPVpositive oropharyngeal squamous cell cancer - A Myth or Fact’

ACADEMIC AWARDS – BEST OUTGOING STUDENT

- Dr Meera Devi, MDRT
- Ms. Mahalakshmi M.Sc
- Ms. Durga B.Sc

FACULTY PARTICIPATION IN MEETINGS/CONFERENCES:

- Dr. Ananthi Balasubramanian - Panelist for the session “Treatment decisions – strengths and pitfalls along the way (Across sites)”
- Dr.Priya Iyer - Oral Presentation- Impact of Neoadjuvant Concurrent Chemoradiation (NACCRT) on Operability and Survival in Locally Advanced Inoperable Breast Cancer. Oral presentation ASTRO, San Diego October 2023. Selected as one of the best abstracts for science highlights at ASTRO
- Panelist for the session “Nuances of locoregional RT” held on 01.03.2024 at WCI conference, Mumbai
- Debate on the topic “Has the role of RT become less in the era of targeted therapy” in 38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud

- Dr.Arun Kumar M N - Chairperson for the session “Paediatric Brain Tumour” in PHOCON 2023 held in The Leela palace, Chennai in Nov 2023
- Chairperson, Panelist and speaker for the session “TSET” in AROI-CORE workshop held in Apollo Cancer Hospital, Chennai in Feb 2024
- Guest lecture in Foundation Day celebration 2023 held in Sarada Krishna Homoeopathic Medical College in Nov 2023
- Panelist for the session “GI cancer- Rectum” in 38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud
- Dr. Vasanth Christopher Jayapaul- “Positive peritoneal wash cytology in endometrial cancers at “ 38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud
- Dr.Ram Madhavan - Guest lecture – “Management of cervical cancer” in Kavery hospital Trichy April 2023
- Dr.Ramaniah- Panelist for” Career Advancements for Radiation Oncologist in our setup” at 38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud
- Speaker for "Practice Changing updates in Oncology 2023" held at Coimbatore in March 2024
- Panelist for "CME on lung cancer" at 38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud
- Dr.Sadanand Sharosh Gandhi- Head and Neck Cancer Summit, Chennai February 2024
- Dr.Mukesh-38th Annual Conference of Radiation Oncologists of India TN & PY Chapter Yercaud.
- Head and Neck Cancer Summit, Chennai February 2024
- International ISRS Conference, Kochi 2023
- Dr.Dinesh- Oral presentation- Capecitabine based chemoradiation in cisplatin ineligible patients of locally advanced carcinoma uterine cervix - Prospective pilot study
- FARO KOSRO 2023, Seoul , South Korea

PROFESSIONAL COURSES:

- Dr.Priya Iyer- The International Collaboration for Research methods Development in Oncology (CREDO) workshop at Lonavala from 04.03.24 to 09.03.24
- Mentor for the NCG Equip Stanford quality improvement project 2023
- Dr.Arun Kumar M N NCG Equip Stanford quality improvement project 2023
- Dr.Vengadakrisgnan-IBS online course on 3D CT guided brachytherapy for cervical cancer, February 2024
- Dr.Sadanand Sharosh Gandhi- IBS online course on 3D CT guided brachytherapy for cervical cancer, February 2024
- NCG Equip Stanford quality improvement project 2023
- Dr Gautam VV –NCG Equip Stanford quality improvement project 2023
- Dr.Mukesh- NCG Equip Stanford quality improvement project 2023
- Dr.Priyadarshini Venkataraman AROI-ESTRO head and neck oncology course Focus on Oral Cancer and Paranasal Sinus Cancer, Mumbai MAY 2023
- Dr.Moushmi.V AROI-ESTRO head and neck oncology course Focus on Oral Cancer and Paranasal Sinus Cancer, Mumbai MAY 2023

CLINICAL STUDIES: (Completed)

- 1. Effect of Neoadjuvant Concurrent Chemoradiation on Operability and Survival in Locally Advanced Inoperable Breast Cancer
- 2. Prevalence of type 2 diabetes among oral cancer patients in a voluntary charitable cancer care centre in South India
- 3. A pilot study on dosimetric analysis of skin sparing radiotherapy in tongue carcinoma using IMRT
- 4. Assessment of fatigue in breast cancer patients undergoing adjuvant radiation – A prospective observation study
- 5. Postmastectomy moderate hypofractionated radiotherapy-A pilot study
- 6. Dosimetric & clinical analysis of radiation induced hypothyroidism in patients with head & neck cancers treated with radiotherapy

On-going studies:

1. A pilot study on Ultra-Hypofractionated Radiation therapy in the adjuvant treatment of breast cancer patients from a tertiary cancer centre in Southern India
2. Impact of Adjuvant Radiotherapy in Breast cancer (IMPART-BC) - Treatment and Psychological outcomes - A Prospective study
3. The impact of pelvic floor exercises in improving voiding dysfunction in cervical cancer survivors presenting with radiation cystitis
4. Re-irradiation with capecitabine for patients with recurrent head and neck cancer / second primary after previous platinum-based treatment (RE-CAP trial)
5. Thyroid gland an organ at risk (OAR) in breast cancer patients treated with locoregional radiotherapy – Biochemical & Dosimetric analysis – Prospective Pilot study
6. A Pilot Study on Hypofractionated Radiation Therapy in Elderly Patients with Head and Neck Squamous Cell Carcinoma from a Tertiary Cancer Centre in Southern India- A prospective pilot study
7. Installation of TrueBeam SVC system in September 2023:

This TrueBeam radiotherapy system offers flexible, high-precision treatment options for a broad range of patient needs. It delivers Intensity Modulated Radiotherapy (IMRT), Stereotactic Body Radiotherapy (SBRT) and Volumetric Modulated Arc Therapy (VMAT). It also has advanced imaging like MV/kV radiographs, Improved Cone Beam CT image acquisition. It also ensures high precision dosage control. This linear accelerator gives enhanced soft-tissue visualization and motion management to ensure patients get exactly what they need and where they need it.

DEPARTMENT OF SURGICAL ONCOLOGY



SURGICAL ONCOLOGY

Dr. Arvind Krishnamurthy, MBBS, MS, M.Ch. Professor & Head of the Department

The department of Surgical Oncology has been providing state of the art cancer care ever since the inception of the Cancer Institute in the year 1954.

Faculty

Professor	Associate Professor
Dr. V. Sridevi Dr. A.S. Ramakrishnan Dr. Anand Raja	Dr. V. Venktesh Dr. Ujwala Prakash Wakpaijan Dr. I. Vijay Sundar Dr. K. Chandrakumar Dr. N. Jayashree

Assistant Professor	
Dr. Amy Jose Dr. S. Pradeep Jeyakumar Dr. V. Manikandan Dr. S. Arun Mitra Dr. Ashik Bary Dr. Mahalakshmi Dr. Diana Niranjani Raj Dr. Kavin Nilavu Dr. Lesin Kumar Dr. Pushkala Dr. Gouri Mukhopadhyay Dr Nutakki Madhuri	Dr. S. Kingston Dr. Rohini Jayashankar Dr. R. Manikandan Dr. Nossam Rama Subba Reddy Dr. Shailesh Patidar Dr. Shalini Shree Dr. P. Malar Raj

Medical Officer	Other Staff
Dr. M.R. Dhanush Kumar Dr. Soundriya Dr. Rajesh	Mrs. Vilasini Raman, Speech Therapist Mrs. R. Prema, Bone Bank Technician Mrs. E. Priya, Secretary

Reconstructive Surgeon
Dr. R. Viswamadesh

Post Graduates

3 rd Year	2 nd Year	1 st Year
Dr. Anand MHM Dr. Gaurav Dr. Raksha Dr. Saravanan Dr. Srinivas Venkatesh	Dr. Suresh Kumar Dr. Gurushankari Dr. Suthar Sweta Rajubhai Dr. Aditi Deewan Dr. Badami Khushbu Arvindlal Dr. Anand. M Dr. Vivaan Dutt Dr. Aravind. S	Dr. Jain Nirmal Kumar Dr. Patel Akash Dr. Gaurav Gupta Dr. Sharada Bhavana Dr. Allu Rohita Dr. Niveditha Dr. Neelam Demakkanvar Dr. C. Shrihari Dr. Kethineni Poojith

Graduated in 2022 - 2023
Dr. Lesin Kumar Dr. Pushkala Dr. Gouri Mukhopadhyay Dr. Nutakki Madhuri Dr. Karnawat Anand Vinay

Total Number of Major Oncological Surgeries

Head and Neck	612
Thoracic	92
Gastrointestinal	454
Urology	271
Musculoskeletal	239
Breast I	343
Breast Unit II	313
Gynaecology	298
Neurosurgery	100
Total	2722

Endoscopies in Endoscopic Suite in the 2nd Floor OT

DLDP:	345
OGD:	228
SG Dilatations:	77
Bronchoscopy:	159
Naso Pharyngoscopy:	212

Nasogastric tube Insertion under guidance:	87
Nasojejunal tube Insertion under guidance:	59
Side Viewing Scopy:	11
Endoscopic Ultrasound:	59
Laser:	04
ERCP:	52
Narrow Band Imaging:	03
Argon Plasma Coagulation:	14
Colonoscopy:	84
TEP Change:	12
PTBD:	42
PCN:	92
OES ST:	14
Polypectomy:	11
EBUS:	61
Lymphangiogram:	01
Picc Line:	03
CRE Balloon Dilatation:	39
FEES:	431
PEG:	01
Cystoscopy:	511
Sigmoidoscopy:	09
ESD:	01
EVL Banding:	01
Tracheal Stent:	15
Ovesco Clip:	01
Hick Man:	01
Rigid Bronchoscopy:	03
Radial Bronchoscopy:	01
Cholangioscopy:	01

Invited Talks

1. Moderated a Panel on Medullary Carcinoma Thyroid. FHNO 2023, December 23rd 2023, Daman
2. Invited Talk on Central Venous Device (CVD) ICC 2023, Mumbai
3. Panel Discussion: Case Based Discussion on Central Venous Device (CVD), ICC 20023, Mumbai
4. Moderated a Panel on Medullary Thyroid Cancers, ICC 2023, Mumbai
5. Invited Talk on Updates on Head and Neck cancer guidelines, ICC 2023
6. Invited Talk on Does cancer-specific psychosocial treatment really improve medical outcomes or does it simply make the patient feel better? (Oncologist Perspective), ICC 2023, Mumbai

7. Invited Talk on judging response to Cancer Therapy: What's New? ICC 2023, Mumbai
8. Master Video on Tracheal Resection for Thyroid Cancer. IASO-MIDCON 2024, Hubballi, March 2024
9. Debate: Total Thyroidectomy V/S Lobectomy for Differentiated Thyroid Cancer larger than 1 cm, IASO-MIDCON 2024, Hubballi, March 2024
10. Moderated a Panel on Localised Breast Cancer, AIG Cancer Summit, January 2024
11. Invited Talk on Safe stapled anastomosis, Safety in Esophageal Cancer Surgery”, Namakkal. August 2023
12. Panellist in Head and Neck Cancers, Officially Licensed Best of ASCO® India 2023 Conference. Pune, June 2023.
13. Invited Talk on Thyroid Cancers, Foundation Day, KGMU. Lucknow, on 2nd September 2023
14. Moderator of tumour board on "Multidisciplinary Tumour Board on Head Neck Cancer" 48th ICON, Lucknow 2023.
15. Panellist in Team-Based Approach to Cancer Prevention and Management – Advances and Novel Strategies. ICNC – “IAPEN India Clinical Nutrition Congress” February 2024, Mumbai
16. Invited Talk on Neoadjuvant treatment in Oesophageal Cancers, FALS Oncology 2023, Hyderabad, 8th December 2023

Conference Organised

Was a part of the Core Organising and the Scientific Committee of the 3rd Indian Cancer Congress, jointly conducted by the Indian Association of Surgical Oncology (IASO), The Indian Society of Oncology (ISO), The Indian Society of Medical and Paediatric Oncology (ISMPO), and The Association of Radiation Oncologists of India (AROI), Jio World Convention Centre, Mumbai from November 2-5, 2023, with the theme “Continuum of Care in Cancer”.

Dr. Vijay Sundar, Events Conducted

1. CME on World Tumor Day in June 2023- Topic Paediatric Neuro Oncology
2. Patient Awareness Programme on World Brain Tumor Awareness Week in November 2023

Conference Attended

1. Indian Society of Neuro Oncology National Conference in April 2023(Presented Posterior)
2. National Conference of Neurological Society of India in Dec 2023
3. World Federation of Neurological Societies CME on Neurosurgery in Oct 2023

Dr.Venktesh,

ACADEMIC ACTIVITIES

Details of involvement in ongoing projects this year

1. “Effect of L-Thyroxin replacement and its impact on sleep efficiency and sleep architecture in total thyroidectomy patients”
Role – Co – Investigator, Principle Investigator – Dr Mahalakshmi
2. “Factors Associated with Returning to Work in Head & Neck Cancer Patients from Regional Cancer Hospital in India: A Mixed Methods Approach”
Role – Co-Investigator, Principle Investigator – Dr Mahalakshmi

AWARDS RECEIVED

1. Received award for Best Oral presentation @ Indian Cancer Congress 2023, Mumbai for the presentation titled- Temporal Bone Malignancies: Long term outcomes of treatment from a tertiary care center.
2. Received award for Best Mini Oral Presentation @ Indian Cancer Congress 2023, Mumbai for the presentation titled-Facial Translocation Approach for tumors of Skull Base: Functional Outcomes and Morbidities- A single Institution Experience.

PROGRAMS ORGANISED:

Organising Secretary for **SCOPE 2023** (Surgical oncology Clinical Orientation Program for Exam going post graduates).

The program was organized by Cancer Institute and Tamilnadu Association of Surgical Oncology (TASO) on 28th October, 2023 between 9 am to 6 pm.

It was a one day mock practical examination for Surgical Oncology Postgraduates. A total of 140 postgraduates from South India participated. 12 seasoned examiners from various surgical oncology institutions in India were invited as faculty. The program was a huge learning opportunity for surgical oncology postgraduates and was well received and appreciated.

INVITED FACULTY IN CONFERENCE

1. delivered a Keynote Address “Closing the Care Gap among vulnerable group in cancer care” on World Cancer Day at Cancer Institute (WIA)
2. Demonstrator of Head and Neck Surgical Procedures in Fresh Frozen Cadavers at the 7th All India Sri Ramachandra CME in ENT- ASCENT 2023, Porur, Chennai
3. delivered a lecture on “Updates in the management of Neck in Head & Neck SCC at Madras Medical College, UIORL, 2023
4. Delivered a Lecture on “Updates in the management of Primary in Head & Neck SCC at CMC Vellore
5. Panelist in the “Diagnostic Approach to Head & Neck Lesions in ENT OPD” and “Minimizing Complications in Thyroid Surgery” at TNAOI Silver Jubilee, 18th South Zone AOI Conclave 2023

6. Delivered a Lecture on “Differences in the management of Paediatric Head and Neck Sarcomas at PHOCON 2023, SRIHER, Porur

7. Moderator for a Panel Discussion on Case Scenarios in Thyroid Cancer at KIMS Cancer Centre, Trivandrum, Thyroid Ca Update 2024

NUMBER OF CLINICAL CLASSES AND SYMPOSIUMS CONDUCTED FOR POST GRADUATES AT THE INSTITUTE: 4.

NEW PROCEDURES INITIATED IN THE DEPARTMENT:

1) Endoscopic Skull Base Surgeries

2) Trans Oral Robotic Surgeries

Dr.Manikandan.V,

ACADEMIC ACTIVITIES

Details of involvement in ongoing projects this year

1. “Effect of L-Thyroxine replacement and its impact on sleep efficiency and sleep architecture in totalthyroidectomy patients”

Role – Co – Author, Principle author – Dr Mahalakshmi

2. “Factors Associated with Returning to Work in Head & Neck Cancer Patients from Regional Cancer Hospital in India: A Mixed Methods Approach”

Role – Co – Author, Principle author – Dr Mahalakshmi

3. As a Co – Principle investigator in PIT (Photoimmuno therapy trial) in advanced head and neck cancers by RAKUTEN

CERTIFICATION COURSES COMPLETED

1. Obtained Fellowship in UNIPORTAL VATS (lung surgeries) under leadership of Dr Diego Gonzalez Rivas at SHANGHAI PULMONARY HOSPITAL- SHANGHAI

2. Successfully completed MEDICAL EDUCATION TECHNOLOGY (MET) course- Conducted by NMC (national medical commission) at SRIHER- Porur

3. Obtained DA VINCI ROBOTIC CONSOLE SURGEON CERTIFICATE after clearing minimal requirement for a console surgeon

PROCTORSHIP

1. Selected as a **Proctor in Operative Robotic Oesophagectomy workshop conducted at CIWIA by ETHICON.**

CONFERENCE/ACTIVITIES

1. Attended INDIAN CANCER CONGRESS (ICC- 2023) held at Mumbai as an INVITED FACULTY
2. **PANELIST** in oral presentation of staging of lung cancer @ ICC MUMBAI
3. Received award for **Best Mini Oral Presentation @ ICC MUMBAI**
4. Attended RGCON – 2024 (Rajiv Gandhi International Conference – Head and Neck) as an

INVITED FACULTY

5. **PANELIST** in Options of Locoregional flaps in head and cancers @ RGCON 2024
6. Attended ‘**MINIMALLY INVASIVE OESOPHAGEAL SURGERY WORKSHOP**’ conducted by Thangam Hospital @ Namakkal as delegate

Dr. Viswamadesh,

Conference Attended & Presentation

Attended a state conference at Mahabalipuram on Feb 9th 10th & 11th – Tamilnadu and Pondicherry association of Plastic Surgery- Presented a paper on ‘Free Vascularized Epiphyseal Fibula Transfer for Proximal Humerus after Oncological Resection’.

Invited to conduct the session of free papers on micro vascular Surgeries

Represented and Participated in workshop conducted at our Institute on March 6th 2024

Dr. Rohini,

1. Completed and Received certificate of completion for post- graduate diploma in Breast Oncoplasty from University of East Anglia- United Kingdom.

Invited to be Reviewer for Breast Global Journal

Dr. Mahalakshmi R Shetty, Assistant Professor

Prospective studies: PI of 2 studies (yet to commence) have applied to Ethics committee (awaiting approval)

1. Study Title: Factors Associated with Returning to Work in Head & Neck Cancer Patients from Regional Cancer Hospital in India: A Mixed Methods Approach
Study team: Prof Arvind Krishnamurthy, Dr V. Venkatesh, Dr Manikandan, Dr Arun Mitra, Dr Mahalakshmi R Shetty, Prof. Surendran Veeraiah and Revathy Sudhakar.
PGs: Dr. MHM Anand & Dr. Ananad Murali
2. Effect of L-Thyroxine replacement and its impact on sleep efficiency and sleep architecture in total thyroidectomy patients
Study team Dr Mahalakshmi R Shetty, Dr Arvind Krishnamurthy, Dr V.Venkatesh, Dr. KrishnaKumar, Dr Manikandan, Dr Arun Mitra Prof. Surendran Veeraiah, Revathy Sudhakar
PGs: To be finalised
3. Chapter under preparation: Controversies in the Extent of Thyroidectomy in PTC for the book Controversies in Endocrine surgery Springer Book publication Editor Dr Rajeev Parameswaran
(Review article) Author: Dr Mahalakshmi R Shetty, Dr V Venkatesh and Dr Arvind Krishnamurthy
Completion and submission time frame: May/Jun
4. Affordable Head and Neck Cancer Care in India - A Regional Cancer hospital Experience on not for profit and charitable cancer care delivery.
(Under preparation for publication by end of the year)

Conference Attended:

3rd Indian Cancer Congress from 2nd to 5th November 2023 at the Jio World Convention Centre, Mumbai

Panelist for: changing scenario in nutritional management in oncology
(Oncologist Vs Nutritionists perspective)

ProSleep 2024 Integrated Sleep Health conference March 2nd-3rd 2024 at Feathers Hotel Chaired a session on Sleep Related Breathing Disorders in Women delivered by - Dr Jeevanan Jahendran ENT Malaysia

AS Delegate:

IFHNOS Head and Neck Cancer Summit (a comprehensive multidisciplinary program covering the entire field of Head & Neck) February 16-18th Chennai India.

Dr Pradeep Jeyakumar, Conferences attended

1. Third Indian cancer congress, November 2023, Mumbai

2. Thirty third Annual national conference to IASG (Indian Association of Surgical Gastroenterology), November 2023, Hyderabad
3. Third Jaipur Surgical Festival (Annual meeting organized by Mahatma Gandhi Institute) - Consensus conference on Carcinoma Gall bladder, December 2023
4. Regularly attended TN SGE meeting (Bimonthly meeting). Presented unit experience on watch and wait for rectal cancer patients in one of the meetings.

Abstracts selected for Posters in Indian cancer congress and IASGCON

1. Watch and wait in rectal cancer patients with focus on near complete responders
2. Quality indicators assessment in colorectal cancer management

Research Projects

1. Completed Pilot project on ERAS protocol in radical subtotal gastrectomy patients (Abstract presented as poster in ICC, by PG)
2. Continuing recruitment and follow up of patients in ongoing Add Aspirin trial

Dr Ujwala Prakash Wakepajain,

Number of research studies carried out as

Primary Investigator:--ongoing Prospective study

Prognostic Value of Pathologic Chemotherapy Response Score in Advanced Epithelial Ovarian Cancer.

Presentation in National Meetings

1. Surgical management of early cervical cancer – ISCCP Conference 2023 -Hyderabad
2. Panel -moderator – Ovarian tumor – Chetgon conference Chennai 2023
3. Panelist for - GTN – Agoicon 2023 -Bhubaneswar
4. Panelist for – Genetic testing in gynecological cancer - Agoicon 2023 – Bhubaneswar
5. Presentation – endometrial cancer – TN-IAGE- Chennai 2023
6. Presentation – Endometrial cancer RIMS- Imphal 2023

Invited Presentation in National Meetings

1. Faculty for the Conference/Workshop of ISCCPCON 2023 at Hyderabad.
2. Faculty for the Conference/Workshop at AGOICON 2023 Bhubaneswar India.

Conference Attended as Speaker

Trichy Ob Gyn CME on 18.11.23

TAPISAR CME 17.12.23

IMA CME 14.05.23

Indian Cancer Congress 21.1.23

Organizing Secretary and Speaker FOGSI CI MDT on 14.06.23

ASGO Nov 2023

AOGIN Dec 2023

AGOICON Nov 2023

ATNRCOG CME 20.12.23

OGSSI CME 30.01.24

Projects

1. Detecting Early Cervical Cancer in Indian Women, Using a Multi-biomarker Panel (The CARE Study)

2. A phase IV observer blind , randomised active controlled, multicentric clinical study to evaluate the immunogenicity and safety of a single dose SIIPL's qHPV vaccine (CERVAVAC™) administered intramuscularly in healthy girls aged 9-14 years as compared to Merck's HPV 6/11/16/18 vaccine (Gardasil®)

3. A single arm multicentric postmarketing surveillance study to assess the safety of SIIPL's qHPV vaccine (CERVAVAC) when administered in a two dose schedule to girls and boys aged 9-14 years and in a three dose schedule to women and men aged 15-26 years

Conference Organised

Conducted FOGSI CI MDT on 14, Jun 2023.

More than 100 members participated

Dr Amy Jose,

Academic Programs Attended:

Basic and Advanced Laparoscopic and hysteroscopy training from Feb 1st 2024- Feb 16 2024 at Medicity, Gurgaon.

Guest Lectures:

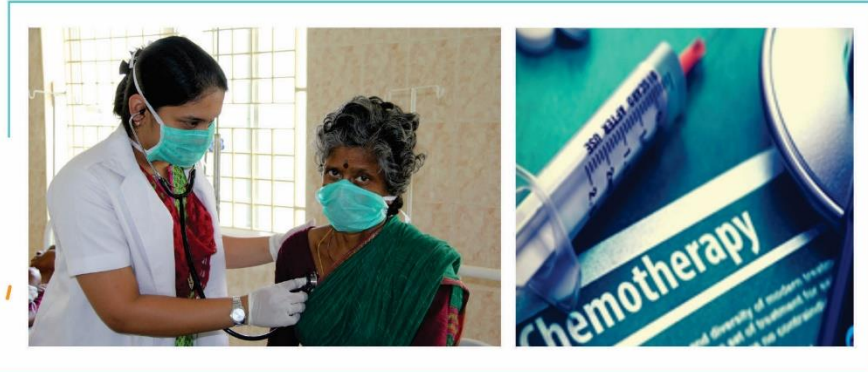
1. Faculty at GYNAEC Oncology CME, Vellore on 9/12/23- for panel discussion on fertility preservation in endometrial Cancers.
2. Lecture on Gynaecological malignancy- Screening and Prevention on 16/8/23 at Loyola ICAM College of Engineering and Technology, Chennai.

Ongoing Projects:

1. Prognostic value of pathological chemotherapy response score in advanced epithelial ovarian cancer. Data Collection in Progress.
2. Efficacy of percutaneous electrical neuro stimulation of auricle as an opioid sparing post-operative analgesic technique in cancer endometrium patients- Prospective randomised interventional study.

Theory Classes for Post Graduates as per TimeTable.

DEPARTMENT OF MEDICAL ONCOLOGY



DEPARTMENT OF PEDIATRIC ONCOLOGY



MEDICAL ONCOLOGY

Dr. Venkatraman Radhakrishnan. MD, DM, M.Sc. – Professor & Head of the Department

Established in 1960, the Division of Medical Oncology at our Institute is the oldest of its kind in the country, specializing in the systemic management of cancer. The department has achieved remarkable advancements in bone marrow transplantation (BMT), performing both haploidentical and matched identical donor transplants. As one of the few charitable hospitals in the nation offering these sophisticated BMT procedures, we have seen a consistent increase in the number of transplants performed over the past few years.

Our department is actively engaged in numerous research projects, including multicenter clinical trials. Our faculty and students have made significant contributions to the field, presenting their research at major national and international conferences, receiving prestigious awards, and publishing their findings in esteemed national and international journals. These accomplishments reflect our ongoing commitment to excellence in cancer care and research.

Current Faculty

1. Dr. Krishna Rathnam. K. MD, DM, FRCAP, Professor

Associate Professor	Assistant Professor	Medical Officer
Dr.Nikita J Mehra, MD, DM	Dr.T.K.Balaji, MD	Dr. Shibani
Dr. Robert Louis MD, DM	Dr.S.Prasanth, MD, DM	
Dr.S.Gangothri, MD, DM	(Pediatric Oncology)	
Dr.K.K.Parathan, MD, DM	Dr.Gargi Das, MD, DM	
	(Pediatric Oncology)	
	Dr.R.Akhil	
	Dr. Khirtivasan MD, DM	
	(Pediatric Oncology)	
	Dr. Mangai MD, DM	

Past Faculty

- Dr. Jayachandran. P.K. MD, MRCP, DM, FRCP - Associate Professor
(On lien from May 2023- May 2024)
- Dr. Sivasree. K. MD, DM. – Associate Professor. Till Sep 2023
- Dr. Indhuja. M.V. MD, DM. – Assistant Professor. Till Aug 2023
- Dr. Akhil R MD, DM. – Assistant Professor. Till Dec 2023

Specialities

- Dr.Rakesh Gopal Consultant – Cardiologist
- Dr.T.Subash Chandhar Consultant – Cardiologist
- Dr. Thiyagesh Devaganapathy Interventional Pulmonologist

Support Staff

Ms. R.Thamil Selvarani: CML
Ms. N.Vanitha: Lymphoma
Ms. M.Mubina Begum:
Ms. Vishali Monisha:

Patient coordinator and Office Assistant
Data coordinator and BMT coordinator
Pediatric Data Manager
Pediatric Dietician

Students registered for D.M	
I Year	10
II Year	8
III Year	5

Senior Residents who completed in 2024

Candidates who were successful in the final Year DM Medical Oncology Examination; conducted by the TN Dr MGR Medical University

1. Dr. Abhishek Charan
2. Dr. Mangai Suseela. M
3. Dr. Spartacus. R.K.
4. Dr. Krithivasan
5. Dr. Prabhat Ganju
6. Dr. Ram Kumar

DEPARTMENTAL STATISTICS FOR 2023

Total No. of Bone Marrow Transplants

- Allogeneic - 23 (previous year 22)
- Autologous - 48 (previous year 31)

Procedures (MOB procedure room)

- Lumbar puncture : 457 (previous year 747)
- Bone marrow aspiration and biopsy : 785 (previous year 765)
- Central line : 282 (previous year 209)
- Ascitic fluid tapping : 628 (previous year 687)
- Pleural Tapping : 144 (previous year 189)
- PICC line : 65 (previous year 66)
- FNAC : 14 (previous year 11)
- Skin biopsy : 2 (previous year 3)

Daycare chemotherapy administered

- Special daycare : 5717 (previous year 5963)
- General daycare : 9383 (previous year 9281)
- MNB Day care : 2299 (previous year 2299)

Pediatric Division Statistics

- | | |
|--|----------------------------|
| a) Total New Patients: | 276 (previous year: 208) |
| b) Total number of inpatients chemotherapy prepared- | 5865 (previous year: 7334) |
| c) Total number of outpatient's chemotherapy prepared- | 3638 (previous year: 5171) |
| d) Transplant | |
| i. Allogeneic- | 11 (previous year 6) |
| ii. Autologous- | 8 (previous year 3) |
| e) Procedures | |
| i. Lumbar puncture: | 1294 (previous year 1396) |
| ii. Bone marrow aspiration and biopsy: | 342 (previous year 212) |
| iii. Central line: | 144 (Previous year 156) |

List of important achievement, events, and activities in Medical Oncology Department ACADEMIC ACTIVITIES BY FACULTY

Dr. Venkatraman Radhakrishnan

Awards and achievements.

1. Indian Society of Clinical Research (ISCR) 4th National Academic Consortium for Clinical Research in India (ACCRI) National Award.
2. Indian Society of Oncology (ISO) best paper award. Indian Cancer Congress.
3. SIOP Hans Peter Wagner Award for outstanding research.
4. SIOP WHO Advocacy Committee member. March 2023-current.
5. India Childhood Cancer Initiative, Chair for Registry and Data Committee.
6. Editorial board member, Pediatric Blood and Cancer.
7. MASCC ESMO anti-emetic guidelines committee member.

Invited talks.

1. AIIMS, New Delhi. NGS in lung cancer. 12.2.23.
2. RGCON 2023. Faculty for research workshop held on 24.2.23.
3. Escalation for treatment in high-risk ALL. RGCON 2023, New Delhi, 25.2.23.
4. Real World Evidence meeting. Tirunelveli. Neutropenic diet and AML trial. 1.4.23
5. ALK-positive NSCLC. 12.4.23.
6. SIOP Asia, Yerevan, Armenia: CINV in children. May 2023.
7. SIOP Asia, Yerevan, Armenia: Population-based childhood cancer registry. May 2023.
8. SIOP Asia, Yerevan, Armenia: Nutrition myths and facts. May 2023.
9. Staging in Pediatric Cancer. IARC meeting, Georgia. June 2023.
10. SIOP Global Partnership Network. CINV in pediatric cancer. June 2023.

11. Dacomitinib in Lung cancer. July 2023.
12. University of Washington Journal Club talk. Aug 2023.
13. Indian Childhood Cancer Initiative. Pediatric Cancer Registry. Sep 2023.
14. IIT Madras. Clinical Trials at Cancer Institute. Oct 2023.
15. Indian Cancer Congress. NGS in oncology. Nov 2023.
16. Indian Cancer Congress. Precision medicine in sarcoma. Nov 2023.
17. Indian Cancer Congress. Recent advances in lung cancer. Nov 2023.
18. London Global Cancer Week. Collaborative trials in pediatric ALL in India. Nov 2023.
19. Pediatric Cancer Staging. PHOCON research workshop. Nov 2023.
20. How to write a research protocol. PHOCON research workshop. Nov 2023.
21. Interview with BIG FM on pediatric cancer awareness. Nov 2023.

Ongoing Trials as PI

1. Anti-Emetic Prophylaxis for Chemotherapy-Induced Vomiting Without Dexamethasone for Children and Adolescents Receiving Highly Emetogenic Chemotherapy: Investigator-Initiated, Open-Label, Multi-Center, Non-Inferiority, Phase III Randomized Controlled Trial.
2. Anti-Emetic Prophylaxis for Chemotherapy-Induced Vomiting Without Dexamethasone for Children and Adolescents Receiving Highly Emetogenic Chemotherapy: Investigator-Initiated, Open-Label, Multi-Center, Non-Inferiority, Phase III Randomized Controlled Trial. CIVIC POD Study. Multi-center, lead investigator.
3. Omitting dexamethasone and identifying the optimal dose of olanzapine (5 mg vs 10 mg) as anti-emetic prophylaxis for patients receiving highly emetogenic chemotherapy: a double-blind, three-arm, phase 3 randomized controlled trial. DOPA/ODIHEC study.
4. Establishing the First Dedicated Population-Based Childhood Cancer Registry (PBCCR) And Network of Hospital-Based Childhood Cancer Registries (HBCCRs) in India. Multi-center, lead investigator.
5. Improving Survival in Childhood Acute Lymphoblastic Leukemia in India (ISCALL): ICiCLe Implementation Study. Multi-center, lead investigator.

Grants.

1. ICMR grant for ISCALL study.
2. St. Jude's Childrens Research Hospital grant for PBCCR study.

Conferences conducted.

1. Treasurer for the Indian Musculo Skeletal Oncology Society (IMSOS) annual meeting and organized the Medical and Pediatric Oncology workshop. Chennai, 3.3.2023 to 5.3.2023.
2. COPE. Cancer Institute Orientation Program for Exam-Going Postgraduates. 7-8 March 2023.
3. Organized the SIOP Global Health Young LMIC session on "Clinical Trials in LMICs", during the SIOP annual meeting in Ottawa in Oct 2023.
4. Organizing committee member, PHOCON 2023 and PHOCON research workshop, Chennai, Nov 2023.
5. Oncology session organizing chairperson. Future of Medicine Conference. Tamil Nadu Dr.MGR Medical University. Jan 2024.

Awards:

Shri Vijay Batra Research Foundation (Adley Group) Award- Indian Society of Medical and Pediatric Oncology, Indian Cancer Congress

Grants:

Prevalence of Monoclonal gammopathy of Undetermined Significance in Tamil Nadu, India:
A Population-based Prospective Cohort Study

Funding agency: The Sanmar Group CSR Trust

Grant Amount: Rs. 112.93 lakhs

Dr. Parathan Karunakaran**Conferences attended (as a faculty)**

1. Hemato-Oncology Conclave 2024 by THOT, Chennai – Speaker: Chemo free therapy in ALL
2. HCC Annual Meeting 2024, Chennai – Speaker: ALL registry- current status, issues, plans
3. PGI Hem-Onc-Fest 2023, Chandigarh – Panel discussion moderator: Sequencing therapies in relapsed CLL.
4. CME on Acute Leukemia, Cancer Institute WIA. Speaker : Role of targeted therapy and BMT in Acute Leukemia
5. Master class in Hodgkins – Cancer Institute WIA, Online. Role: Panel moderator
6. Management of Myelofibrosis in 2023 – Mumbai Hematology Group, Online. Role: Panel discussant.
7. Mediastinal Large B Cell Lymphoma – Mumbai Hematology Group, Online. Role: Panel discussant.

New Roles Assumed

1. Member – steering committee, CTSU department

Dr. Gangothi S**EDUCATION****Faculty Development Programmes (FDP)****Online via SWAYAM_NPTEL certificate course**

1. NPTEL_Introduction to proteomics (July -Sep 2023)
2. NPTEL _ introduction to proteogenomic (July -Oct 2023)
3. NPTEL _Cell culture technologies (Aug-Oct 2023)
4. NPTEL_ functional genomics (Aug -Sep 2023)
5. Pfizer/Princess Margaret Cancer center Lung Cancer preceptorship – December 7th and 8th online meet,2023

RESEARCH PROJECTS

- Ongoing: SOCCER trial
SOCCER: a phase two randomised trial comparing organ preservation after Short course radiation Or Chemoradiation and Consolidation chemotherapy in rectal cancer
- Ongoing NAGA trial
Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma- 2x2 Factorial Phase 3-Multicentric Randomized Controlled Trial Study Acronym- NAGA study (Neoadjuvant vs Adjuvant Gastric Adenocarcinoma)
- Ongoing followup
Prospective, Randomized, Multicenter, Comparative, Double-blind, Parallel study to Evaluate the Efficacy, Safety, Pharmacokinetics, and **Immunogenicity of Biosimilar Pertuzumab (ENZENE)** with Reference Pertuzumab (Perjeta®, Genentech Inc.,) in Previously Untreated Patients with HER2 Positive Metastatic Breast Cancer

TRAINEESHIP PROGRAMME

Trialect Traineeship/Fellowship Program

1. Personalized Healthcare in Doctor Molewaterplein 40, 3015 GD Rotterdam, Netherlands.
(2 weeks February 2024)

Grants and Awards:

1. Graduated at the St Jude Infection Prevention and Control Program – In person training held in Kolkata in May-2023
2. Graduated at the St Jude POEM Research Methodology Workshop held in Istanbul, Turkey in April-2023
3. Completed the virtual component of St Jude Neuro-oncology Training seminar and got selected to visit St Jude Childrens Research Hospital, Memphis, USA for training workshop held in April -2024.
4. Secured the scholarship from St Jude Childrens Research Hospital to participate in CREDO workshop held in Mumbai in March-2024
5. Awarded the Nai Kong-Irene Cheung Career Development Award through SIOP and INPHOG for study on Pediatric mature B-NHL

Organisation:

Organised and conducted the Annual Pediatric Hematology-Oncology Quiz for PHO residents during PHOCON-2023 held in Chennai in November-2023.

Dr. Gargi Das

1. Ongoing projects

- a. **Principle Investigator for the study:** Nasogastric Tube feeding versus Oral feeding for treatment of Moderate to Severe Acute undernutrition in children with cancer: A randomized, open-label, parallel-group, and phase III trial. Started on January 15th 2024
- b. **Co-PI for the multi-institutional study:** The Indian childhood cancer survivorship study (C2S study): after treatment completion registry of childhood cancers - phase – I. AN INPOG-LE-16-01 STUDY

2. Academic programs conducted:

- a. Co-conducted and took part in a Brain tumor CME at the institute on 24th June 2023.
- b. Organized an online teaching program on Hodgkins Lymphoma titled “Masterclass on Hodgkins Lymphoma: Integrating Evidence to Practice and Harmonizing the Management of Childhood and AYA Hodgkin Lymphoma on 19th August 2023.
- c. Organized a social program on Childhood cancer day on 15th February 2024.

3. Guest lectures:

- a. Was invited as faculty for a Panel discussion on venous access devices in Madras Medical College on April 2023.
- b. Was invited as faculty for the workshop on Simulation in Pediatric Oncology in the midterm CME of PHOCON in Jodhpur in July 2023.
- c. Moderator for a session on childhood cancer survivorship PGI HEM ONC FEST, conducted in September 2023.
- d. Gave a talk on “Application of Cytogenetics in management of Pediatric Oncology” 13th October 2023.
- e. Gave a talk on Updates in management of Acute leukemia in Institute of Child Health on November 8th, 2023.
- f. Organised the Workshop on Pediatric Solid tumors in Chennai in November 2023 and gave a talk.
- g. Attended the in-person workshop at St Jude Childrens Research Hospital in Memphis Tennessee from April 1-6th, 2024 on Neuro-oncology capacity building.

4. Achievements/Awards/Prizes:

- a. Led the Multidisciplinary brain tumor SOP development at the institute.

Residents Achievement

Passed out batch – 2020	
Dr. Mangai Suseela Murugesan	Quiz – 2 nd prize – CPG Oncology Meet – 18/12/2021
	Oral presentation – APBMT – 9/10/2021
	Poster ISMPO ISOCON – 28/10/2022
	Quiz 3 rd prize – CPG Oncology meet – 17/12/2022
	Quiz – 3 rd prize – TAMPOS – 29/1/23
	Presentation – CEDAR SIOP meet on Burkitts Lymphoma – 3/2/23
Dr. Ramkumar Mummorthy	Poster presentation – October 2022 – HCC conference Mumbai
	Poster presentation – TAMPOS 2023
	2 nd runner up in TAMPOS Quiz
	Poster presentation in Korean Society of Hematology
Dr. RK Spartacus	Oral presentation – ISMPO ISOCON – 28/10/2022
	E-Poster ESMO Gynec 2023
	Oral presentation TAMPOS 2023
Dr. Prabhat Ganju	Poster presentation – International Myeloma Society Annual Meet
	Poster presentation – TAMPOS 2023
Dr. Abhishek Charan	Oral paper Presentation – RGCON 2023 Delhi
	Oral presentation ISMPO 2022 Chennai
Dr. Kritthivasan Venkatakrishnan	Oral paper presentation – ISMPO 2022 – Chennai
	Oral paper presentation – 5 th Emirates Pediatric Hematology and Oncology Conference
	Poster presentation – ISBMT 2023
	Oral Presentation with Merit Scholarship – MASCC Conference Lille, France
Final Years – 2022	
Dr. Pragadeesh T	Winner Quiz IMSOS
	Oral Paper Presentation ICON 2024
	Oral Paper presentation – ISBMT
Dr. Navya Manasa Vuriti	Poster presentation ISMPO 2022
	Poster and Oral Presentation in ISBMT 2024
Dr. Siddappareddigari Kishore Kumar	Poster presentation HCC – TMH Mumbai

BLOOD BANK

Dr.G. Deepa Devi, MD, Head of the Department

Assistant Professor	Dr.G.Deepa Devi, MD
Medical Officer	Dr.Y. Swapna, M.B.B.S, DCP
Senior Resident	Dr.P. Sunantha , MD,DNB

Other Staff: Technicians, Staff Nurse, Data Entry Operator, Social Worker

Statistics:

	Donor Statistics (Total Collection -7813)		Patient Statistics (Total Screening -9388)	
	No	%	No.	%
Blood Grouping	15,626		19,528	
Rh Typing	15,626		19,528	
HBsAg+VE	28	0.4	185	2
HIV+VE	5	0.06	77	0.8
HCV+VE	14	0.2	33	0.4
SYPHILIS +VE	18	0.2	-	-
MALARIA +VE	-		-	-

Component Statistics

Total Transfusion	19238
Packed Red Cells (PRC)	6315
Random Donor Platelet(RDP)	5363
Fresh Frozen Plasma (FFP)	6425
Single Donor Platelet (SDP)	1020
Granulocyte Concentrate (GC)	115

Total Crossmatching	8211	
Total Camps	69	
Total Camp Collection	4677	
Total Blood Bank Collection	1991	
Total Plasma issued to Reliance Life Science	4715	
Therapeutic Plasma Exchange	25	
Peripheral Blood Stem Cell Collection	Autologous	54
	Allogenic	20
Therapeutic Leucoreduction	6	
Therapeutic Phlebotomy	22	

Ongoing Projects:

1. Dr.G.Deepa Devi is a Co investigator for the study of the topic “ A study to assess the treatment outcome of Therapeutic leukocyte reduction in Leukemia patients”

Future projects:

1. Implementation of NAT in donor screening.
2. Advanced Immunohematology including
 - a. Monospecific differentiation by Gel Column Technique in AIHA work up
 - b. Patient antibody screening
 - c. Rh and Kell matched PRBC transfusion
3. Implementation of Point Of Care Testing in Patient Blood Management

Guest lectures by staff members:

1. Dr. G. Deepa Devi delivered a lecture on Red cell transfusions in complex Immunohematology case scenarios- possibilities & challenges at the CME organized by Department of Transfusion Medicine, Apollo Cancer Centres, Chennai on 21.07.23.

Dr.G.Deepa Devi

1. Attended National e-Workshop on “Basic Concepts of Medical Education & Technology” MEDUWORK 2024 held on 03.02.2024 and 04.02.2024 organized by Department of Pharmacology, Indira Gandhi Institute of Medical Sciences, Patna under aegis of Academic Society of Pharmacologist of IGIMS (ASPIGIMS)
2. Has completed the green belt in lean six sigma certified by Council for Six Sigma Certification (CSSC), Newyork, United States conducted at Cancer Institute(W.I.A), Chennai from 20.12.2023 to 23.12.2023
3. Presented poster on “Peripheral blood pre CD34+ cells as a predictor of effectiveness in harvesting stem cells in patients at tertiary care cancer Centre” at the 11th annual National Conference of Indian Society of Transfusion Medicine TRANSMEDCON 2023 conference being held at Chandigarh from 03.11.23 to 05.11.23.
4. Attended CME on Team India at ISBT Gothenburg conducted by Transfusion Medicine Academic Society (TMAS) on 22.08.2023 in the Virtual Platform

Dr.Y.Swapna

1. Presented poster on “voluntary blood donation awareness assessed by Regular donors and Non-donors - A Pilot study at the 11th annual National Conference of Indian Society of Transfusion Medicine TRANSMEDCON 2023 conference being held at Chandigarh from 03.11.23 to 05.11.23.
2. Presented poster on “An analytical study of sociodemographic and hematologic factors associated with platelet donors at a tertiary cancer centre” at International conference AATM-AABB 2023 at New Delhi in December.
3. Attended National e-Workshop on “Basic Concepts of Medical Education & Technology” MEDUWORK 2024 held on 03.02.2024 and 04.02.2024 organized by Department of Pharmacology, Indira Gandhi Institute of Medical Sciences, Patna under aegis of Academic Society of Pharmacologists of IGIMS (ASPIGIMS)
4. Has completed the green belt in lean six sigma certified by Council for Six Sigma Certification (CSSC), New York, United States conducted at Cancer Institute(W.I.A), Chennai from 20.12.2023 to 23.12.2023.
5. National virtual CME ON “WRITING SUCCESSFUL RESEARCH GRANT PROPOSALS
6. National virtual CME ON “AVOIDING REJECTION:HOW TO SUCCESSFULLY NAVIGATE THE OPEN ACCESS PUBLISHING PROCESS”
7. National virtual CME ON “DATA ANALYSIS MADE EASY WITH JAMOVI SOFTWARE”
8. Asia Pacific Transfusion Medicine Virtual Summit 2023 conducted by Quidel Ortho
9. Completed the Research methodology course from Swayam

Dr. P.Sunantha:

1. External Judge for “Saveetha Annual Transdisciplinary Research Summit (MEDSTAR SUMMIT) conducted in 06.05.2023.
2. External Examiner to conduct clinical/ Viva examination and valuation of theory paper for MD post graduates organized by Saveetha Medical College, Chennai on 04.01.2024.
3. Attended the CME – **CASCADE 2024** organized by Departments of Immunohematology and Blood Transfusion by Jubilee Mission Medical College & Research Institute, Thrissur, Kerala on 06.01.2024. to 10.01.2024.
4. Attended **MEDUWORK 2024**-National e-Workshop on “Basic Concepts of Medical Education & Technology”, 03.02.2024 & 04.02.2024.
5. Attended CME on Transplant Transfusion Strategies & Workshop on Apheresis by Saveetha Medical College, Chennai on 09.03.2024
6. Judge for poster presentation - Transplant Transfusion Strategies & Workshop on Apheresis by Saveetha Medical College, Chennai on 09.03.2024

Departmental events:

1. Our celebrated Blood donor felicitation function on the World Blood Donor Day for the very first time on June 14, 2023 in the auditorium of Dr.S.K.Campus of the institute. Our regular voluntary non remunerated donors and Blood organizers were felicitated. Mementos and certificate of appreciation were distributed to the donors. The donor organizers and voluntary blood donors also shared their views and feedback. This has made a positive impact on them and they appreciated that our institute has recognized their work for the noble cause.
2. Apheresis training for post graduate students in M.D(Immunohaematology and Blood Transfusion)

Latest Technology and equipment:

1. Installation of fully automated Chemiluminescence based Immunoassay system Architect i1000SR Abbott equipment: Architect i1000SR System which has random sampling, increased sensitivity and specificity and rapid turnaround time due to random sampling access i.e the sample can be loaded any time after the QC is run and the reports are ready within 30 minutes after processing.



ANAESTHESIOLOGY, PAIN & PALLIATIVE CARE

Dr. Kalpana Balakrishnan, MBBS, DA, DNB, Director, Head of the Department

Department of Anaesthesiology		
Associate Professor		Assistant Professor
Dr. C Punitha	MBBS, DNB	Dr. Prasanna Vani MBBS, MD, DNB
Dr. Nivedhyaa S	MBBS, MD	Dr. Aishwarya R MBBS, MD, DNB
Dr. Subramanian	MBBS, MD	Dr. Sahithya S MBBS, MD
Dr. Aravind Narayanan	MBBS, MD	Dr. Nairita Das MBBS, MD
		Dr. Pritha Raj MBBS, MD
		Dr. Poorna MBBS, MD
		Dr. Vallary Modh MBBS, MD
		Dr. Hariesh MBBS, MD
		Dr. Karthik AR MBBS, MD, DNB, DM
		Dr. Kausalya MBBS, MD

Other Staff - Medical Officer 1, Tutor 1, FNB Resident 3

Palliative Care	
Associate Professor Dr. V V Meenakshi, MBBS, DA, MD, DNB	Medical Officer (Hospice) Dr. Shobha Patil, MBBS
Assistant Professor Dr. R Thendral, MBBS, DA	Medical Officer Dr. Bharath Srilatha.G MBBS
Palliative Care Physician Dr. Daniel Raj, BDS	Medical Officer Dr. Suga MBBS

DNB Resident

Dr. Rathipriya MBBS

Dr. Jefrilla Nancy MBBS

Dr. Navas Bright MBBS

Total no of cases anesthetized	- 7134
Total no of major cases	- 5840
Total no of minor cases	- 1418
Total no of PAC visits	-7057

No. of Elective cases	5716
No. of Emergency cases	124
Total No. of ASA 3 & ASA 4 cases	341
Cases done under General Anaesthesia	
Oral intubations	2261
Nasal intubations	451
Tracheostomies	103
No. of LMA	278

Cases done under Regional Anaesthesia/Analgesia	
Epidurals	678
Subarachnoid blocks	175
Upper Limb nerve blocks	15
Lower Limb nerve blocks	22
TAP Blocks	24
Combined Spinal Epidural	28
No. of Other Blocks	36

Cases done with the help of specialized airway equipment	
Awake Fibre-optic intubations	106
Double lumen tube insertions	31

Invasive Lines placements	
Central lines	158
Arterial lines	321

Cases done under anaesthesia outside OT

1. Radiology suite	
CT room	37
MRI suite	37
RFA/Microwave	9
Renograms	3
Bone scans	0
Ultrasound	14

2. Endoscopy/ultrasound suite	
Procedures under anaesthesia [ERCP/PTBD/PCN/ESR/Colonoscopy /PEG/SG /OGD/ DLDP etc]	300

3. Procedure	Paediatric Procedural		Anaesthesia for	
D & C				
D & C -				
Cone biopsy - 9	No. of BM studies	No. of central lines	No. of ICAs	No. of othercases
	198	112	987	71

Pre-anaesthesia Checks	
New cases	4434
Review cases	2623
Total	7057

Pain interventions:

No of OPD cases – 93

Referred by	PPC	Hospice	SOG	ROG	MOG	Outside
Nos	42	1	4	41	3	2

Total no of interventions - 55

Image guided

USG guided	fluoroscopy guided	MAXIO guided	Others
15	41	5	8

Epidural Steroid- 19

Intrathecal Morphine- 2

Chemical Neurolysis- 38

Pre-anaesthesia Checks

No. of New cases	No. of Review cases	Total
4434	2623	7057

Palliative care:

Number of cases	OPD	Ward	Hospice
New	1862	740	295
Review	6647	3174	71
Total	8509	3914	366

Total cases in OP & IP - 12423

Home visits - 544

Phone call service – 2479

Psycho Oncology counselling – 704

Nursing procedures – 2973

Social worker needs fulfilment - 136

COMPLETED PROJECTS

Dr. Kalpana & Dr. Punitha

- Effects of anesthetic agents on natural killer cells and biomarker release during Stage 3 EOC surgery completed in January 2024
- I INFUSE trial completed in November 2023

1. ONGOING PROJECTS

Dr. Meenakshi V V

- P.I in Effects of Anaesthetics on colorectal cancer outcomes, an international multi-centric study.
- Clinical lead in the EQUIP Project conducted by NCG, the topic for QI Process implementation is “Improving early referral to palliative care services in patients with advanced gastric and colorectal malignancies”.

Dr. R Thendral

- Administrative lead in the EQUIP QI Project conducted by NCG, the topic for QI Process implementation is “Documentation of discussion of goals of care in patients with advanced pancreatic and colorectal cancers”
- Co-principal Investigator in “APPROACH II” an international multi-centric study.

Dr. Nivedhyaa

- A prospective randomised trial comparing postoperative pain relief between bilateral external oblique intercostal plane block and intravenous morphine in upper abdominal cancer surgeries
- A prospective randomised trial on prehabilitation in ovarian cancer patients.

Dr. Prasanna Vani

- Pre-habilitation in ovarian cancer cytoreductive surgery and its effect on postoperative morbidity (PROSPERITY): A randomized controlled trial.

Dr. Aishwarya Ramkrishnan & Dr. Pravin Sankar

- A prospective observational study to identify the predictors of successful videolaryngoscopic nasal intubation in patients with restricted mouth opening in oral cavity tumor

Dr. Nairita

- Intra-operative hypotension with three different epidural regimens in patients undergoing laparotomy for Carcinoma Ovary - a pilot study for a randomised controlled trial

Dr. Sahithya Sriman, Dr. Pritha Raj & Dr. Poorna

- Percutaneous electrical neurostimulation of auricle for post-operative pain relief after laparotomy surgery in CA endometrium and cervix patients

Dr. Poorna & Dr. Ashwin

- Prospective Randomised study to compare the efficacy of neurolytic ganglion impar block and combined superior hypogastric plexus with ganglion impar block for pain relief in patients with progressive cervical cancer.
- Prospective Observational study to assess the time for optic nerve sheath diameter (ONSD) to return to baseline after carbondioxide desufflation in robotic or laparoscopic surgeries in trendelenberg position

Dr. Kausalya

- Predictive value of Respiratory Exchange Ratio for the occurrence of postoperative complications in a laparotomy - a prospective observational pilot study

Dr. Daniel Raj

- Clinical lead in the EQUIP QI Project conducted by NCG, the topic for QI Process implementation is “Documentation of discussion of goals of care in patients with advanced pancreatic and colorectal cancers”

Dr. Yogesh Kumar

- Assessing Subclavian Vein Collapsibility index for Anticipating postinduction hypotension: A prospective Observational cohort study

Dr. Jefrilla Nancy

- Team member in the EQUIP Project conducted by NCG, the topic for QI Process implementation is “Improving early referral to palliative care services in patients with advanced gastric and colorectal malignancies”.

Dr. Rathipriya

- Team member in the EQUIP QI Project conducted by NCG, the topic for QI Process implementation is “Documentation of discussion of goals of care in patients with advanced pancreatic and colorectal cancers”

2. FUTURE PROJECTS:

Dr. Aishwarya Ramkrishnan

- A retrospective analysis to see the effectiveness of intrathecal morphine on intraoperative hemodynamics and post-operative pain in robotic colorectal surgery

Dr. Poorna

- To assess incidence of cancer pain in our hospital

Dr. Vallary Modh

- To determine association between high intraoperative surgical plethysmographic index (SPI) and post op complication in patients undergoing abdominal surgery.

3. ACADEMIC PROGRAMS

Anesthesia

Dr. Punitha

- 3rd Indian cancer Congress 2023
- KIDANA CON 2023

Dr. Nivedhya

- AORA June 2023,
- VAST Course Jan 2024

Dr. Aravind Narayanan

- Attended South Zone ISACON conference at Mysuru, Karnataka July 2023
- Examiner for Onco-Anaesthesia Fellowship exam of Indian College of Anaesthesiology at Indo-American Hospital Hyderabad Feb 2024

Dr. Prasanna Vani

- TN ISACON Jul 2023,
- KHISA Mar 2024

Dr. Karthik AR

- Lung isolation techniques CME & workshop - July 2023

Dr. Aishwarya

- KIDANA CON 2023
- ISACON

Dr. Nairita

- Lung isolation techniques CME & workshop- July 2023
- ULTRABLOCK 2023-Nov

Dr. Sahithya

- Lung isolation techniques CME & workshop- July 2023
- CCEPC Part B

Dr. Pritha Raj

- Lung isolation techniques CME & workshop- July 2023
- CCEPC Part B
- hemodynamic monitoring workshop

Dr. Poorna

- SZ ISACON 2023
- MSK Pain congress

Dr. Vallary Modh

- Lung isolation techniques CME & workshop- July 2023
- Pain and palliative care

Dr. Kausalya

- Lung isolation techniques CME & workshop- July 2023
- ISACON Puducherry 2023

Dr. Yogesh

- Completed course on CCEPC 2023

Pain and Palliative Care**Dr. V V Meenakshi**

- IAPC lecture series on every Monday
- Completed course on Nephro-Palliative Care conducted by IAPC enhancing our skills and knowledge in palliative care.
- Attended EPEC Faculty Development Program in December 2023.
- Attended IAPCON 2024 held at Ahmedabad.
- Attended the CReDO workshop in March 2024.

Dr. R Thendral

- IAPC lecture series on every Monday
- Attended workshop on Biostatistics and Clinical Research Methodology on 18th -20th August 2023 at Tata Medical Centre, Kolkatta
- Completed course on Nephro-Palliative Care conducted by IAPC enhancing our skills and knowledge in palliative care.

Dr. Daniel Raj

- IAPC lecture series on every Monday
- Completed Basics in Biomedical research course.
- Completed Good Clinical Practice course.
- Completed International Neuro palliative care Course International Neuropalliative Care Society (INPCS), KIPCER and KMC, Manipal
- Attended Hands on workshop on Fluoroscopic Guided Cadaveric Workshop on Interventions in Chronic Pain in Cancer Patients
- Got enrolled in MSc Palliative Medicine for healthcare professionals' course by Cardiff University with full scholarship from Commonwealth.
- Attended IAPCON 2024 held at Ahmedabad.
- Started on ECHO Paediatric Palliative Care Fellowship program.

Dr. Jefrilla Nancy

- IAPC lecture series on every Monday
- Attended EPEC Faculty Development Program in December 2023.
- Attended a CME on POCUS in palliative care at Tata Memorial Centre, Mumbai in August 2023
- Attended IAPCON 2024 held at Ahmedabad.
- Attended GERIPALCON in January 2023
- Started on ECHO Paediatric Palliative Care Fellowship program.
- Preconference workshop 8 Feb 2024 - Extending the reach of paediatric palliative care to improve quality of life of children with life limiting conditions

Dr. Rathipriya

- IAPC lecture series on every Monday
- Attended EPEC Faculty Development Program in December 2023
- Attended a CME on POCUS in palliative care at Tata Memorial Centre, Mumbai in August 2023
- Attended IAPCON 2024 held at Ahmedabad.
- Attended GERIPALCON in January 2023
- Started on ECHO Paediatric Palliative Care Fellowship program.
- Preconference workshop 8 Feb 2024 - Extending the reach of paediatric palliative care to improve quality of life of children with life limiting conditions

Dr. Navas Bright

- IAPC lecture series on every Monday
- Started on ECHO Paediatric Palliative Care Fellowship program.

Mrs. Vinutha Suresh

- Completed a course on “Cognitive Behavioural Therapy” with a renowned CBT Trainer Dr. Joseph Mathew.
- Attended Preconference workshop on “Grief and Bereavement support” at the IAPCON 2024 held at Ahmedabad.
- Completed a course on “Cognitive Behavioural Therapy” with a renowned CBT Trainer Dr. Joseph Mathew.

S/N Lilly:

- Completed CCEPC course part A
- Attended pre conference workshop on “Symptom assessment and management in Palliative Care”
- Attended IAPCON 2024 at Ahmedabad
- Undergoing Connect with Compassion course organized by HR department of Cancer Institute
- Attended a Spoken English class to enhance the communication skills in the official language.

S/N Aleena Xavier:

- Completed Advanced Nursing Skills in Palliative course organized by Academy of Palliative Medicine
- Attended pre conference workshop on “Symptom assessment and management in Palliative Care” during IAPCON 2024
- Attended IAPCON 2024 at Ahmedabad
- Undergoing Connect with Compassion course organized by HR department of Cancer Institute
- Attended a Spoken English class to enhance the communication skills in the official language

S/N Kousalya:

- Completed Advanced Nursing skills in Palliative course organized by Academy of Palliative Medicine
- Undergoing Connect with Compassion course organized by HR department of Cancer Institute
- Attended a Spoken English class to enhance the communication skills in the official language.

Ms Priya - Counsellor:

- Completed Certificate course in managing Psycho social issues of patients with Chronic Illnesses in Palliative Care by IAPC
- Attended Narrative Medicine lecture organized by KIPCER, Bangalore
- Attended Introduction to Meta-Analysis lecture organized by KIPCER, Bangalore.
- Attended Spirituality workshop organized by KIPCER, Bangalore

Mr. Kumaresan – Data Entry Manager:

- Attended Beginners Guide to MS Excel lecture by KIPCER Bangalore
- Attended a Spoken English class to enhance the communication skills in the official language.

4. INVITED FACULTY LECTURES**Dr. Kalpana**

- KIDANACON 2023
- SOAPCCON 2023
- ISACON 2023
- 3rd Indian Cancer Congress 2023
- Troubleshooting DLT placement at ICA meeting on lung isolation techniques at Bangalore July 23rd 2023
- Kalaingar Centenary International Medical Conference on Future of Medicine at Chennai Jan 20th 2024

- The Pleuripotent Anesthesiologist: Evolving roles as a palliative care physician
Kollcutta Jan 28th 2024
- Syringe driver in Palliative Care in the 31st International Conference on palliative care
9th Feb 2024

Dr. Punitha

- 3rd Indian cancer Congress 2023
- KIDANACON 2023

Dr. Meenakshi V V

- Gave awareness about Saath Saath for Cipla employees in their business cycle meeting conducted at Chennai.
- Invited as a faculty for a training program conducted by Pallium India, aimed at integrating palliative care in tuberculosis treatment at the Government Hospital of Thoracic Medicine in Chennai on 15th & 16th May 2023
- Gave lecture on “Nursing needs in onco-palliative care” at a Symposium on “Caring Beyond Cure” organized for World Hospice and Palliative Care day 2023 at Mahaveer Ashraya by Department of Anaesthesia, Pain and Palliative Care.
- Moderator for a lecture on “Approach to a patient presenting with Neurological weakness in a Palliative Care setting” on IAPC Monday morning class on August 2023.
- Invited to handle a case-based learning session on opioids conducted by Sri Venkateshwara Institute of Medical Sciences, to share the knowledge on 3rd June & 1st July 2023
- Course co-ordinator for “Certificate course in physiotherapy-palliative care interface” for physiotherapists by IAPC.
- Faculty for IAPC Volunteer’s course.
- Instrumental in the implementation of EOLC Policy in the institute.
- Deputed by NBEMS as assessor to CMC, Vellore for DNB Palliative Medicine accreditation
- Invited as examiner for Global Fellowship in Palliative care conducted by Pallium India

Dr. R Thendral

- Gave lecture on “Symptom Management IN Palliative Care” at a Symposium on “Caring Beyond Cure” organized for World Hospice and Palliative Care day 2023 at Mahaveer Ashraya by Department of Anaesthesia, Pain and Palliative Care.
- Course co-ordinator for “Certificate course in physiotherapy-palliative care interface” for physiotherapists by IAPC.
- Centre coordinator for conducting the CCEPC exams at our centre, evaluating the proficiency of healthcare professionals in palliative care who had enrolled for CCEPC courses.
- NABH Lecture on End of Life decisions for Surgical Oncologists at Cancer Institute
- Gave lecture on “End of life care and advance care planning” at a seminar on Palliative Care by Dept of Drugs control, Govt of Puducherry on 19th march 2024

Dr. Aravind Narayanan

- Invited Speaker on Paediatric Onco-Anaesthesia Challenges at WINConclave Conference of Rajagiri Hospital, Kochi, Kerala Dec 2023
- Invited Chairperson for Regional Anaesthesia Workshop at Stanley Hospital, Chennai Nov 2023
- Invited Chairperson for Session in TN State ISACON Conference at Thanjavur, TamilNadu July 2023

Dr. Aishwarya

- ISACON 2023- Thanjavur

Dr. Nairita

- SOAPC session - Anaesthesia for Colorectal Ca
- NBEMS session- Anaesthesia for Robotic surgeries

Dr. Sahithya

- NBEMS session- on topic cancer coagulopathy

Dr. Poorna

- faculty for workshop on fluroscopy and usg cadaveric workshop on chronic pain

Dr. Kausalya

- JAMS PowerPoint Made Easy - March 2024

Dr. Karthik AR

- Presented webinar on “Role of Prehabilitation in Cancer Surgery” conducted by Indian College of Anaesthesiologists on 26th April 2023
- Moderated an online panel discussion on “Recent Supreme Court Judgement on EOLC” on 14th July 2023 conducted by SOAPC
- Presented National Board of Examinations Webinar on “Role of Prehabilitation in Cancer” on 15th July 2023
- Faculty at SOAPCCON – 2023 Cardio Pulmonary Exercise Testing Workshop at New Delhi in August 2023
- Presented a lecture on “Electrical Impedance Tomography guided PEEP Titration in the Intraoperative Setting” in Erode ISA monthly meet on 5th November 2023
- Moderated National Board of Examinations Webinar on “Anaesthetic Concerns For Robotic Surgery I : Robotic vs Open Surgery , RALP, Cystectomy” on 6th January 2024
- Moderated National Board of Examinations Webinar on “Anaesthetic Concerns for Robotic Surgery : II -TORS, Esophagectomy” on 13th January 2024

Dr. Daniel Raj

- Gave a lecture on Palliative Care in Head and Neck Cancer for Surgical Oncology residents.
- Gave awareness about Saath Saath for Cipla their business cycle meeting conducted at Chennai.
- Gave lecture on Scope of Palliative Care in Oncology at a Symposium on “Caring Beyond Cure” organized for World Hospice and Palliative Care day 2023 at Mahaveer Ashraya by Department of Anaesthesia, Pain and Palliative Care

Dr. Bharathi Srilatha G

- Gave a lecture on “Cancer Pain assessment and management” at OncoAnaesthesia lecture series on 28, October, 2023.
- Gave a lecture on Advocacy program for sanitary health workers at Manali on march 2024

5. PAPER PRESENTATIONS IN CONFERENCES

Dr. Meenakshi V V

- An abstract titled “Management of patients with inoperable malignant bowel obstruction: Preliminary report from a tertiary level palliative care unit” has been selected to be presented at the 13th World Research Congress of the European Association for Palliative Care in Barcelona, Spain, 16-18 May 2024.

Dr. Nivedhya

- Presented a poster on postdural puncture headache: newer modalities of treatment: AORA June 2023

Dr. Prasanna Vani

- Presented a paper on feasibility of Pre-habilitation in ovarian cancer cytoreductive surgery at Krishnagiri Hosur ISA CME
- Presented a talk on PIPAC at ISA bimonthly meet
- Was a panelist at OASyS on Anesthetic management of Wilms tumour.

Dr. Aishwarya

- ISA bimonthly meet academic lecture in December 23
- OASyS 2023- short snippet on case scenario

Dr. Nairita

- OASyS 2023- moderator on difficult airway in Oral Ca management.

Dr. Sahithya

- OASyS 2023- short snippet on case scenario

Dr. Pritha Raj

- Online seminar on anesthetic management of head and neck cancers

Dr. Poorna

- Paper presentation at SZISACON 2023.
- OASyS 2023- short snippet on case scenario.
- Poster presentation at MSK Pain congress 2024

Dr. Kausalya

- OASyS 2023- short snippet on tracheal stenting

Dr. Karthik AR

- Presented e-poster on “Intriguing and unexpected haemothorax following induction of anaesthesia and one-lung ventilation in pulmonary metastasectomy by video- assisted thoracoscopic surgery” in World congress of Anaesthesiologists (WCA) – 2024 held at Singapore in March 2024

Dr. Daniel Raj

- An abstract titled “Ketamine in the management of refractory cancer pain – Case series from a low resource setting” has been selected to be presented at the 13th World Research Congress of the European Association for Palliative Care in Barcelona, Spain, 16-18 May 2024.

Dr. Yogesh

- OASYS - Case series EOIB as a rescue block for pain relief in upper abdominal cancer surgery

Dr. Ashwin

- OASYS 2023 CHALLENGES of managing atrial fibrillation in prone position in robotic esophagectomy September 24
- ISSPCON 2024 February 3 n holistic approach of cancer pain management in young adult.

Dr. Pravin Shankar

- OASYS 2023- Case report - unexpected hemothorax in VATS metastasectomy

Mrs. Vinutha Suresh

- An abstract titled “Opioid seeking trend among Indian Cancer Survivors: A Case Series” has been selected to be presented at the 13th World Research Congress of the European Association for Palliative Care in Barcelona, Spain, 16-18 May 2024.

Dr. Jefrilla Nancy

- Presented a poster titled “A rare case of double opioid overdose” in IAPCON 2024 held at Ahmedabad.
- Presented poster for GERIPALCON titled “Providing in home palliative care for elderly cancer patients – A SWOT analysis from a tertiary cancer centre” in January 2023

Dr. Rathipriya

- Presented a poster titled “Multimodality management of anasarca in a metastatic cancer patient” in IAPCON 2024 held at Ahmedabad.
- Presented poster for GERIPALCON titled “Providing in home palliative care for elderly cancer patients – A SWOT analysis from a tertiary cancer center” on January 2023

6. CME/SEMINAR/SYMPOSIUM CONDUCTED

- The Department conducted a one-day CME programme titled OASyS-2023 (Onco-Anaesthesia Symposium and Synopses) on 24th September, 2023. The programme had speakers from various Oncological Centres in South India and was attended by delegates from all over Tamil Nadu.
- Advocacy program for general public at Namachivayapuram, Sriperumbudur on March 2024
- Symposium on “Caring Beyond Cure” organized for World Hospice and Palliative Care day 2023 at Mahaveer Ashraya by Department of Anaesthesia, Pain and Palliative Care on October 2023
- Advocacy program for sanitary health workers at Manali on March 2024
- Advocacy programme about Pain & palliative care was conducted at Ashok Nagar by Dr. R. Thendral, Sr. Kousalya and SW Mr. Ranjith on 24th January 2023.
- Our team arranged a no-frills activity for the children at the Paediatric ward at Dr. V. Shantha campus. The event was conducted to celebrate movement and play as part of normal routine in the lives of all kids even if they are in hospital. This activity was intended for International Childhood Cancer Day, March 2023. The event, which was spearheaded by Dr. V.V. Meenakshi, ably supported by Ms. Vinutha

7. AWARDS/ACHIEVEMENTS

Dr. Kalpana Balakrishnan

- Dame Cicely Saunders award of clinical excellence in palliative care by rotary club May 2023
- Honorary fellow of Onco-anaesthesia and perioperative medicine

Dr. Punitha

- Chairman - SOAPC Chennai city branch
- European Pain federation- Certificate Nov 2023

Dr. Nivedhyaa Srinivasaraghavan

- Tamil Nadu SOAPC branch secretary Sep 2023

Dr. Prasanna Vani

- Awarded 3rd prize for best paper presentation at Krishnagiri Hosur ISA CME on March 16 & 17, 2024

Dr. Kausalya

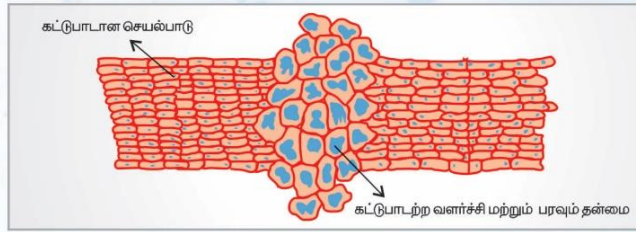
- Reviewer for Indian Journal of Pain

Dr. Yogesh

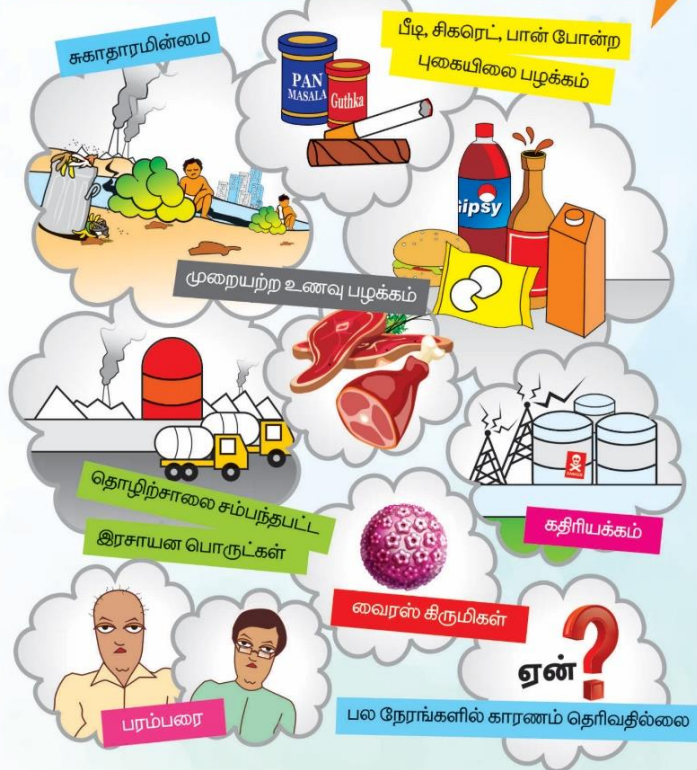
- Price for poster presentation in OASYS

புற்றுநோய் என்பது என்ன ?

கட்டிடத்தின் ஒரு செங்கல்வில் ஏற்படும் பாதிப்பு அந்த கட்டிடத்தையே பாதிப்பது போல், உடலில் ஒரு செல்லில் ஏற்படும் மாற்றம் நம் உடலையே பாதிக்கிறது. பாதிக்கப்பட்ட ஒரு செல் கட்டுப்பாடற்றி பல பாதிக்கப்பட்ட செல்களாக வளர்ச்சி பெற்று உடலின் பல்வேறு பாகங்களுக்கும் பரவும் தன்மை பெற்று விளங்குகிறது. இதுவே புற்றுநோய் எனப்படுகிறது.



புற்றுநோய் எதனால் ஏற்படுகிறது ?



MOLECULAR ONCOLOGY

Dr. R.Sabitha Ph.D., **Professor and Head of the Department**

Faculty

Professor	Associate Professor
Dr.G.Gopal Ph.D Dr R Balaji Ph.D	Dr Priya R Ph.D Dr Mayilvahanan Bose M.Phil.,Ph.D
Assistant Professor Dr A K Deva Magendhra Rao Ph.D	Scientific Assistant Dr.B Meenakumari. M.Sc Ph.DMs T Sangeetha M.Sc

Other Staff: Lab Technologist, Lab Technician, Animal House Technician, Senior Research Fellow, SRF – INSPIRE, JRF, DBT JRF, JRF BRNS, Research Assistant (DBT Welcome Trust) & Junior Research Fellow.

Molecular Oncology diagnostic unit

S.No.	Test Services offered	No. of samples
1.	BCR ABL Qualitative analysis	117
2.	BCR ABL Quantitative analysis	1089
3.	BRCA1, BRCA2 and TP53 gene panel	51
4.	Breast Cancer extended gene panel	15
5.	Hereditary GI panel	10

HEREDITARY CANCER DETECTION & PREVENTION PROGRAM BY NEXT GENERATION SEQUENCING

S.NO	TITLE	TOTAL NO OF CASES	APRIL 2023 – MARCH 2024
1	Registered Patient's till March 2024	1987	96
2	Blood sample obtained from	1071	51
3	Hereditary Breast and Ovarian Cancer cases	633	54
4	Hereditary Non-polyposis Colorectal Cancer cases	301	17
5	LFS/LFL cases	13	-
6	Other cancers/Screening cases	144	12
7	Predictive testing offered for families	55	13

Completed Projects

Project title: Modeling of EWS-FLI orthotopic homograft reporter mice

Ongoing projects (Title with brief summary)

- 1. Project Title:** Prediction of T cell and B cell epitopes for AKAP3 a cancer testis antigen by computational and experimental analysis
- 2. Project Title:** Identification of Tumor Suppressor Kinases Inactivation by Pathogenic Genetic Variants And Analysis Of Consequential Dysregulated Signalling In Gastric Cancer. DST SERB Grant.
- 3. Project Title:** ID-PPP-OTN: Infrastructure and Development of Technologies for Pre-clinical evaluation, Product establishment and Platform integration for Onco-theranostic applications.
- 4. Project Title:** “Effects of Ionizing Radiation-induced DNA Damage Response signaling impinging on MRPS9 and MRPS23 in Breast Cancer”
- 5. Project Title:** Screening and identification of hormone receptor bound tissue specific co-regulator complex proteins as novel therapeutic targets and subsequent drug repurposing in cervical cancer.
- 6. Project title:** Identification of biomarkers to cervical and ovarian cancer (ICMR-CAR project Jan 2019- Dec 2023)
- 7. Project Title:** “Studies on improving the efficacy of dendritic cell vaccines by targeting Indoleamine 2,3 dioxygenases 1 and 2”.
- 8. Project Title:** **OPTIMISTICCC** (OPportunity To Investigate the Microbiome’s Impact on Science and Treatment In Colorectal Cancer) Large bowel microbiome disease network – Phase 2
- 9. Project Title:** **PEACOCC:** Pan-India EARly-onset COlorectal Cancer Consortium (Multi centric)
- 10. Project Title:** Evaluation of circular RNAs dysregulated in early stage breast cancer and identifying their potential function in breast tumorigenesis
- 11. Project Title:** Long Non-Coding RNA MIAT (Myocardial Infarction-Associated Transcript) role in Glioblastoma Multiforme
- 12. Project Title:** Potential Role of m6A and RNA methyl modifiers in Colon cancer

Future projects including budget, in brief

- 1 Efficacy of MRPS23 inhibition for antitumorigenic and tamoxifen sensitization effect involving activation of LMNA and TGFBR2 and expression as marker for DFS in Breast cancer. Submitted to ICMR. Budget: Rs: 61,23,212.00
- 2 Identification of circulating AGO-2 associated miRNAs in Breast Cancer and developing a CRISPR-based Detection System. Submitted to: ICMR Budget : Rs
- 3 Development of AI/ML tool utilizing the immunogenomic landscape of HPV positive cervical lesions. Submitted to ICMR. Budget 2.5 Cr

Academic programs conducted

- Six Month project entitled “Expression Analysis of B4GALT5 & B4GALT6 Gene in Breast Cancer Using Qrt-Pcr” undertaken by S Nitish Kumar, G Nithya Sri and by A Jayanth, B.Tech Biotechnology Sathyabama Institute Of Science And Technology under the guidance of Dr G Gopal.
- More than 40 students from various institutions took training in the department from April 2023 to March 2024.

Presentations by staff members in National/International conferences

1. Miss. R. Aathithya attended and presented a poster entitled ‘Role of HIPK2 in Gastric cancer’ in 43 rd Annual Convention of the Indian Association for Cancer Research (IACR) held at IISER, Pune.
2. Miss. S. Yogalakshmi attended and presented a poster entitled “” Characterization of recombinant anti-CD99 single-chain variable fragment (scFv) and antibodies for targeting Ewing sarcoma" at the 43rd Annual conference of the Indian Association for Cancer Research, held between 19 to 22 January 2024 at IISER, Pune.
3. Ms Kirtana Reddy attended and presented a poster on Modeling of Ewing Sarcoma heterotopic mouse reporter allografts to track the functional dynamics of EWSFLI1 activity. , Priya Ramanathan. IACR-2024 at IISER (19-22 Jan, 2024 - Pune)
4. Ms. Vaishnave S, SRF & Ms. Anusha J, Project associate, were selected for a week long IUIS-FIMSA-IIS IMMUNO-INDIA 2023 course organized by RGCB, Trivandrum from 1-6th October 2023.
5. Ms. Vaishnave S, SRF& Ms. Anusha J, Project associate, were selected for the workshop on 'Series in Advancements in Cell Therapy' and also presented posters at the conference at SACT 2024 from 1-3rd Feb 2024.

Guest lectures by staff members

1. **Dr Gopal** delivered lectures on
 - Tumour Suppressor Kinases in Gastric Cancer. Sai Ram Siddha Medical College
 - Proteomics in Cancer Diagnosis and Therapy .Department of Biotechnology, IIT Madras
 - Mitochondrial Ribosomal Small Subunit (MRPS) Genes in Health and Disease. AICTE ATAL FDP, Department of Biotechnology, Sri Venkateswara College of Engineering (SVCE).
 - Role of liquid chromatography/ mass spectrometry based proteomics in biomarker discovery.CME programme on “Emerging trends in cancer research” at the Cancer Institute(WIA).

- Mitoribosomal small subunit proteins and their role in cancer. Research in progress seminar Sri Ramachandra Institute of Higher Education
 - Role of Mass Spectrometry in Cancer Biomarker Discovery. Faculty Development Program, School of Bioscience and Technology at Vellore Institute of Technology (VIT).
2. **Dr.R. Balaji** delivered a special Lecture on "Animal models for in vivo cancer research" on 20th February 2024 at Department of Biotechnology, University of Madras.
 - **Dr.R. Balaji** delivered a lecture entitled “New Strategies to prevent and treat Cancer Based on Precision Medicine – Immunocompromised mouse models for translational Cancer Research” on 06 October 2023 at Prof. Dhanapalan College of Science & Management, Chennai – INDIA.
 3. **Dr. Mayilvahanan Bose** was invited to deliver a lecture on “**Writing a successful project proposal**” as a part of faculty development program, the webinar was organized and hosted by SRM Madurai College for Engineering and Technology, Pottapalayam, Sivagangai on 24th April 2023.
 - Dr. Mayilvahanan Bose was invited to deliver a lecture on “**Emerging trends in Microbiome Research: From metagenomics to metatranscriptomics**” organized by Department of Biochemistry and Bioinformatics in association with Research and Development cell of Dr MGR Janaki College of Arts and Science for Women, Chennai on 19th July 2023.
 - Dr. Mayilvahanan Bose was invited to deliver a lecture on “**Use and misuse of antibiotics: Impact of AMR on human gut microbiome**” in the Awareness programme on Antimicrobial Resistance (AMR) among stakeholders, Theme: “Preventing Antimicrobial resistance together” organized by Department of Microbiology, Saveetha Dental College, Chennai on 7th October 2023.
 - Dr. Mayilvahanan Bose was invited to deliver a lecture on “**Early diagnosis of cervical cancer: Clinical implications and Path towards innovation**” as a part of Dr. Abdul Kalam day celebration organized by Institution Innovation council of AVIT and Ganesan Incubation and Entrepreneurship center (GIEC) - Vinayaka Mission’s Chennai campus on 19th October, 2023.
 - Dr. Mayilvahanan Bose was invited to deliver a lecture on “**Design, development, filing and follow-up: Our experience with p16 ELISA kit for cervical cancer diagnosis**” in the International seminar Cum Workshop on Patent Filing System and Examination in the Context of Bioproduct Development organized by Department of Microbiology, The American College, Madurai on 20th March 2024.

CME/Seminar/Symposium/Workshops conducted by the Department (during the above period) with a brief report & photos

1. Hands-on training in “Molecular Oncology techniques”.(May 15th to 19th ,2023)
2. Hands on Training in “2d Gel Electrophoresis and Maldi Ms/Ms Identification of Proteins”. (July 10th to 13th, 2023).
3. “Basics of handling immune-compromised mice: do’s and don’ts”.(July 19th 2023).

Achievements/Awards/Prizes

1. Patent Awarded

“Novel Cell Penetrating Anti Tumorigenic Polypeptide (Ciews-Pep) For Potential Therapeutic Application In Treatment Of Ewing’s Sarcoma”Patent Number:429709. Dr. Thangarajan Rajkumar, Dr. Gopisetty Gopal, Ms Thankaretnam Vaikundalakshmi Krishnapriya. 21 Apr, 2023.

2. Patent Applied

A process for development of EFRE and EWS-FLI1 containing dual reporter plasmid constructs for high-throughput screening assays in Ewing sarcoma. Inventors: Dr. Balaji Ramachandran and Mrs. Kirtana Reddy. Indian Patent application no: 202341035803.

3. Workshops attended by Staff:

- i. Dr R Sabitha attended four days “**International Lead Auditors & Laboratory Management System Requirement**” certificate course as per ISO 15189:2022 and ISO/IEC 19011 conducted by Foundation For Quality (India) ,Bengaluru ,from 6th to 9th November,2023.
- ii. Dr Sabitha successfully completed four days Green Belt training and examination for professional attainment meeting the requirements of Council for six sigma certification (CSSC)-USA from 20th Dec 2023 to 23rd Dc 2023.
- iii. Dr. R. Balaji attended 3rd International GCC conference on “Current Trends in Tumor Microenvironment and Therapeutics” coupled with a “Humanized Mice Workshop” organized by the GCC-South Asia Chapter” on February 3-5, 2024, at ACTREC – TATA MEMORIAL HOSPITAL, Navi Mumbai.
- iv. Dr R Balaji attended 11th International Conference (LASACON-2023) of Laboratory Animal Scientists’ Association (LASA) India on “Advancements of 3R’s in Biomedical Research and Laboratory Animal Science and Welfare: International Perspectives” held on 6th -8th November 2023, Bengaluru –INDIA.
- v. Dr. Priya Ramanathan attended the Cell Therapy International Conference & Workshop Series, 'Series in Advancements in Cell Therapy' (SACT), an activity of the CAR-T & Cell Therapy Centre (CTCTC) at ACTREC, Tata Memorial Centre from 1-3rd Feb 2024
- vi. Dr. Mayilvahanan Bose was invited for Microbiome workshop to present the clinical data of the phase II study, as part of “Large bowel microbiome disease network. Creation of a proof of principle exemplar in colorectal cancer across three continents”, funded by a Cancer Research UK Grand Challenge grant “OPTIMISTIC” (Opportunity to investigate

- the Microbiomes Impact on Science and Treatment in Colorectal Cancer) reference [C10674/A29067] on November 9th and 10th 2023, held at University of Leeds School of Medicine, Pathology and Tumour Biology, St James's University Hospital, Leeds, UK
- vii. Deva Magendhra Rao. A. K. underwent trained for International Lead Auditor and Laboratory, Management System Requirement Certificate course as per ISO 15189:2022 and ISO/IEC 19011 at Chennai, 6 th to 9 th January 2024.
 - viii. Mr. S. Jayavelu attended a hands-on training course in Metabolomics from 05-03-2024 To 07-03-2024 from C CAMP,UAS-GKVK campus, Bellary road, Bangalore 560 065.

Brief write-up of departmental events with photographs wherever necessary

International Day of Immunology celebrations at Cancer Institute (WIA)

The Department of Molecular Oncology, a translational research department at the Cancer Institute (WIA) celebrated the International Day of Immunology, under the aegis of the Indian Immunology Society (IIS). Every year, 29th of April is marked as the Day of Immunology, to bring awareness about ongoing research in the field of Immunology to the general public. The Department of Molecular Oncology has conducted these programs since 2017, which was interrupted during the Covid-19 pandemic. Given the challenges of the pandemic, the organizers Dr. Mayil Vahanan and Dr. Priya stressed on the importance of spreading awareness on the Immune system and immunology as being foremost to combat other emerging diseases. This year's theme was "Immunology talks to Public health". Dr. Rajeshwari, Founder and Managing Director of Bioklone Biotech Private Limited, is a scientist and entrepreneur who has been a pioneer in custom antibody production, delivered a lecture on monoclonal antibodies in diagnosis and therapy. During her lively lecture, she frequently interacted with the audience, comprising mostly of college students from the city, engaging them with stories from her own experience during the covid pandemic and inspiring them to take up the entrepreneurial mantle. Dr. Raman Muthusamy, Senior Research Professor at Centre for Infectious Diseases, Saveetha Dental College & Hospitals, who pioneered the One health approach while serving as the Project Director at TRPVB, TANUVAS, explained the importance of the **One health approach** and the necessity of public participation in alerting health authorities to avert health risks like zoonotic diseases.

The program ended with a quiz on Immunology for participating college students. All the participants were issued certificates and Winners of the quiz were awarded prizes. The organizers expressed their sincere thanks to the IIS for their continued support for conducting this annual event.

Public Viva voce

- ✓ Viva voce of **Ms Amritha S**, DST inspire fellow & research scholar was held on 12th May 2023. The title of the thesis was "Identification and validation of potential biomarkers for breast cancer".
- ✓ Viva voce of **Ms. Abirami**, DST-Inspire Fellow and Research Scholar, was held on 27th Dec 2023. The title of her thesis was "Production And Characterization Of Dendritic Cell Vaccine For A Randomized Double-Blinded Controlled Phase Ii Clinical Trial In Stage IIIb Cervical Cancer Patients And Assessment Of Immune Response To The Vaccine"

Donors: Thank you for being here with our journey

- The staff and research scholars of the Department of Molecular Oncology sincerely appreciate **SUNDARAM FASTENERS LTD** for their kind donation to the Leica 3D Live Cell Imaging equipment. We have been able to perform high-quality cell and tissue imaging because of the support. We will teach more students, gradually expand all applications, and hold workshops to help the scientific community.
- We also appreciate **SpinoBiotech's** assistance in purchasing a Multimode Plate Reader, Homogenizer, and three PCs for our research purpose.



EVOLUTION OF CANCER REGISTRIES AT THE CANCER INSTITUTE (WIA), CHENNAI



EPIDEMIOLOGY, BIO-STATISTICS & CANCER REGISTRY (EBCR)

**Dr.Swaminathan R, M.Sc., Ph.D (Statistics), Associate Director,
Professor & Head of the Department**

Dr.Rama R, M.Sc., Ph.D

Associate Professor & Senior Bio-Statistician

Staff Strength: 146

Other Staff : PRO & Section In-Charge, Medical Record Technician, Senior Assistant, OP Assistant, Assistant, Social Investigator, Data Entry Operator, Ward Secretary, Trainee Ward Secretary, Computer Operator, Steno Typist, Data Manager (HBCR Project), Section In-Charge, Senior Investigator (FO), Technical Assistant, Early Career Fellow, Social Worker, Scientific Assistant, Staff Nurse, Health Worker, IEC Coordinator, Data Manager, Project Manager, Research Associate, Senior Biostatistician, Program Manager, Program Co-ordinator

The EBCR comprises several sections encompassing (i) patient services - medical record section with lifetime follow up, documentation and digitization, (ii) Hospital Based Cancer Registry(HBCR) - established in 1954 handling routine hospital statistics for the administration, high- resolution data capture for research studies, (iii) Population-Based Cancer Registry (PBCR) - for statewide surveillance statistics on incidence pattern and trends, (iv) Biostatistics – handling all dataanalytics for faculty/students and (v) Epidemiology – randomization for clinical trials, design and conduct of descriptive/analytical epidemiological studies including molecular and (vi) training/teaching programs in all of the above for personnel at local, national and international levels.

Hospital Statistics

Statistics 2023-24	No. of cases/visits
Total registered	1,86,348
New registration	13,606
Follow up/Review	1,72,742
Inpatient admission	14,327
New Admission	4,757
Re-admission	9,570
New cancer patients	10,180

Region wise distribution of newly registered patients	No. of cases	%
Chennai city and suburbs	8,876	65.2
Rest of Tamil Nadu	3,081	22.6
Andhra Pradesh & Telangana	915	6.7
Other States	301	2.2
Pondicherry	148	1.1
Assam	83	0.6
Outside India	72	0.5
Karnataka	66	0.5
Kerala	64	0.5
Total	13,606	100.0

Completed Projects

BNY Mellon Technology India (P) Ltd funded project, Cancer survival in Tamil Nadu – Principal Investigator: Dr. R. Swaminathan

Objective

To undertake follow up for vital status (alive/dead) at 5 years for 21,947 new cancer cases registered in Tamil Nadu Cancer Registry Project (TNCRP) in 2016 followed up to year 2021 for overall survival as the viable cancer outcome for eliciting the average prognosis from cancer in different population representative settings in the entire state of Tamil Nadu.

The overall results of project activity is summarized as follows:

Overall summary of project activity by residence district - cases registered in 2016 followed through 2021

Residence district	Total number of cancer cases for follow up	Attempts for follow up for vital status (alive/dead) at 5 years from diagnosis completed		No follow up information obtained
		Phase-1	Phase-2	
Ariyalur	596	264	237	95
Coimbatore	3398	1390	1942	66
Dindigul	1814	969	475	370
Erode	2257	1020	877	360
Kanchipuram	4900	2367	2199	334
Kanyakumari	2016	839	965	212
Krishnagiri	982	403	515	64
Madurai	2828	1146	1653	29
Perambalur	492	207	142	143
Viluppuram	2664	1287	1012	365
Total	21947	9892	10017	2038

Phase-1: comprises (i) matching of TNCRP cancer database with cancer mortality database provided by civil registration system (CRS) of government of Tamil Nadu, (ii) telephone inquiries for ascertaining vital status (alive/dead)

Phase-2: comprises utilizing the services of field health staff of government of Tamil Nadu under Makkalai Thedi Maruthuvam (MTM) scheme to undertake house visits for getting follow up information on vital status (alive/dead)

Ongoing projects/studies

HBCR-RCC – fully funded by National Cancer Registry Program (NCRP), Indian Council of Medical Research (ICMR) - Principal Investigator: Dr. R.Swaminathan; Main person for core activity: Dr. R. Rama; Grant: INR 47, 00,000/- per year

The setting up of Hospital Based Cancer Registry in Regional Cancer Centres under NPCDCS scheme has been functional at the institute since April 2022. The output for the period April 2023 – March 2024 is as follows:

HBCR: The total cancer cases registered were 10,180 with a female preponderance (5,332, 52.4%) in the ratio of 1:1.4. Childhood cancers (0-19 years of age) comprised 3.7% while the majority were in the age group of 35-64 years (66.0%). The most common cancers among men were mouth (523, 10.8%), lung (409, 8.4%), anterior tongue (392, 8.1%); among women, the order was breast (1,551, 29.1%), cervix (686, 12.9%) and ovary (323, 6.1%).

Pattern of Care and Survival (POCS) study: High-resolution data abstraction for different survival outcomes is carried out by the registry social investigators using structured forms for 22 major cancers: (1) Breast, cervix and head and neck cancers: Data from case-record on 1,618 patients indexed for treatment in 2022 have been completed: 780 of cancer breast, 325 of cervix and 513 of head/neck cancers. (2) Cancers in Childhood, lymphoid and hematopoietic malignancies, other gynaecological malignancies: Data on 183 patients of all lymphomas, 175 of all leukemias, 287 of other gynaecological cancers, treated during 2022 are being abstracted from the case-records.

Madras Metropolitan Tumour Registry (MMTR) – partly funded by NCRP of ICMR – Principal Investigator: Dr. R. Swaminathan.

Cancer surveillance statistics in Chennai city from year 1982 has been periodically made available in ICMR and IARC scientific publications. Data for the period 2013-2017 has been accepted for publication in the IARC flagship scientific publications series *Cancer incidence in five continents, Volume XII*. A total of 42,065 notifications of cancers diagnosed in 2020-2022 have been registered from 176 sources till date. Data processing for duplication and other checks are in progress. The total incident cancers in year 2019 were 7,311 with a crude incidence rate (CIR) of 148.7 per 100,000 (Male: 143.5; Female:153.9). CIR of common cancers among men were mouth (12.2), prostate (10.9), lung (10.6), large bowel (10.5) and tongue (9.1); among women, the order was breast (52.3), cervix (10.5), corpus uteri(8.9), ovary (8.4) and large bowel (8.1). The estimated new cancer burden in Chennai city is 8,141 in year 2023.

Cancer Institute (WIA) project in collaboration with Department of Health and Family Welfare, Government of Tamil Nadu – Tamil Nadu Cancer Registry Project (TNCRP) Principal Investigator: Dr. R. Swaminathan

TNCRP is a population-based statewide cancer surveillance study by the institute for generating cancer incidence statistics of entire Tamil Nadu from year 2012. The TNCRP report 2024 is a comprehensive account giving cancer incidence pattern by year, age-group, sex, district and site. The total number of incident cancers in Tamil Nadu in 2019 were 78,294 with a crude incidence rate of 96.2 per 100,000 population (Male: 87.8; Female: 104.5). The common cancers among men were stomach (6.6), Lung (6.5), Mouth (6.3), and large bowel (4.4); among women, the order was breast

(27.4), cervix (15.9), ovary (5.6), corpus uteri (4.0) and large bowel (3.9). The estimated new cancers in 2023 in Tamil Nadu were 92,414. An online reporting system for notifying cases to TNCRP has been commissioned and is operational.

DBT India Alliance and Wellcome Trust project – HPV and Oral cancer. Principal Investigator – Dr. N.V. Vani; Supervisor: Dr. R. Swaminathan; Grant – INR 1.8 crore

This molecular epidemiology project aimed to investigate the natural history of oral HPV infection in healthy individuals and evaluate the outcomes of patients with HPV-positive oral and oropharyngeal cancers. The baseline recruitment and oral sample collection of participants (5204) and their first follow-up (with a compliance rate of 85%) have been completed. Second follow-up was completed in 2,796 subjects. The prevalence of oral HPV DNA was 5.5% (274/5011) among healthy individuals after testing their oral gargle samples with a highly sensitive nested PCR (PGMY/GP). Among the HPV negative subjects at baseline, 3.7% acquired a new infection at a median follow up of 18 months. The infection persisted in 9% at a median follow up of eight months and none persisted at 16 months. HPV16 (98.3%) was the most common genotype, followed by HPV18 (1%) and HPV66, HPV70 (0.3% each). Most of the identified HPV types clustered with cervical HPV isolates in the Genbank. HPV variants were observed in nine samples and deposited in the NCBI GenBank database as novel HPV16 isolates (Genbank Accession numbers. OR122955.1 to OR122963.1). None of the samples tested positive for HPV16 mRNA by RT-PCR, and few samples were validated by droplet digital PCR. These findings reveal that HPV is a transient and clinically inactive infection in the oral cavity of healthy individuals. The identification of HPV types, mainly in Indian and Iranian lineages, highlights the importance of regional variations in HPV prevalence.

A prospective cohort study of oral and oropharyngeal cancer patients was conducted to determine the survival outcomes associated with Human Papillomavirus (HPV). Among the 250 patients recruited, 221 cases were eligible for HPV analysis. The prevalence of HPV DNA in oral and oropharyngeal cancer is 56.8%, and HPV16 is present in all these cases. Single nucleotide substitution was observed in seven samples, and the data were submitted to the NCBI Genbank as new HPV 16 isolates (Genbank Accession numbers OR122964-OR122970). However, the percent positivity of HPV16 E6mRNA in these tumors is 8.2%. The HPV-attributable fraction, which is the product of HPV DNA prevalence and the percent positivity of HPV16 E6 mRNA in HPV DNA-positive cases, is 4.65%. Transcriptionally active HPV infection was found only in oropharyngeal cancer cases (20%). Among these, 159 patients who underwent complete treatment were eligible for the outcome analysis. They are in different periods of follow-up ranging from 16 to 43 months. The patients are on follow-up, and their 3-year survival outcome will be determined depending on their HPV status.

Access Cancer Care India (ACCI) project funded by Kings College London (KCL) through the International Agency for Research on Cancer (IARC) – Principal Investigator: Dr. R. Swaminathan; Grant – GBP 172,926

This multi-centric study aims to design and evaluate a new multi-level strategy, integrated and contextualized to the local health system, to improve access to the early detection and care continuum for oral, breast, and cervical cancer among the rural populations in India. Four blocks

(Vikravandi, Kanai, Vanur, and Mailam) were identified in the Viluppuram district, where the pilot intervention will be implemented. Stakeholder mapping, influence assessment, and engagement planning were carried out initially. A questionnaire-based survey was conducted to explore the

knowledge, attitudes, beliefs, and barriers to early detection of breast, cervical, and oral cancers among the general population. The survey involved 492 healthy individuals (243 men and 249 women) from 28 villages. Additionally, a questionnaire survey was administered to breast (34), cervical (34), and oral cancer (32) patients to document their journey from disease onset to the final diagnosis to estimate the access and diagnostic delays. Four Focus group discussions (FGDs) of the general population (two female groups, one male group, and one mixed group) were conducted to explore the barriers to accessing screening and early detection services. Two FGDs with community health workers (CHWs) were done from the Government and private (Cancer Institute field staff) settings to document their current roles and responsibilities, working patterns, training needs, capacity to navigate patients, etc. Four key informant interviews were held with the stakeholders – a Private Practitioner, a Gynecologist at a Tertiary care center, and two local panchayat leaders to document the status of implementation of the cancer screening program, the barriers for the rural people to participate, the plans for improvement, etc. The capacity assessment of the local health systems was conducted through facility visits to sub-center/Primary Health centers (10) and community health centers (2). This is to assess the cancer-related services provided by these facilities, including infrastructure, resources, service utilization, and referral mechanisms, using a standardized facility assessment tool. A desk review was conducted to examine national and state cancer policies, governance, protocol, and guidelines from multiple sources. The next step involves designing and implementing a sustainable and contextualized multi-level intervention strategy to improve the cancer screening uptake and reduce time delay in the cancer care pathway.

New Project

Linkage of nationwide HPV vaccine cohort subjects with population-based cancer registries in India – Grant from International Agency for Research on Cancer (IARC) – Principal Investigator: Dr. R. Swaminathan; Funding 15,000 euros

The long time lag between exposure to HPV and diagnosis of associated cancers makes estimation of vaccine efficacy against cervix cancer endpoint extremely difficult. Passively following up the cohort through PBCRs is a viable option. This study will develop a mechanism to establish long-term data linkage between vaccinated and unvaccinated women cohorts with PBCRs. This linkage will allow the comparison of cervix cancer rates over time among the study participants and other age-matched unvaccinated women.

The first step of identifying, harmonizing and formatting for data linkage has been completed. The trial run with Dindigul Ambilikkai Cancer Registry is planned.

Event

The Data Centre for Population-Based Cancer Surveillance was commissioned in the department under the grant from the BNY Mellon Technology CSR funding. This state-of-art computer centre has seating for 15 persons besides a video conference room and a server room. All data related activities of the Tamil Nadu Cancer Registry Project (TNCRP) are carried out from here. In future, it is expected to blossom into an analytics centre for cancer surveillance statistics.

Consultancy

Dr. R. Swaminathan, Professor and Head, was invited to the International Agency for Research on Cancer (IARC), Lyon, France, (i) to develop the protocol on Linkage of data of HPV vaccine cohorts and PBCRs, (ii) to discuss the descriptive studies on childhood cancer and statewide cancer surveillance.

Fellowship

Dr. R. Rama, Associate Professor, was awarded the “Early Career and Visiting Scientist (ECVS)” fellowship under the Research Training and Fellowship Programme by the International Agency for Research on Cancer (IARC), to visit the Cancer Surveillance Unit (CSU), IARC, Lyon, France for interim analysis of SurvCan-3 data and formatting the call for data for SurvCan-4 project under the supervision of Dr. Isabelle from 10 October to 16 November 2023.

Dr. P. Sampath, Assistant Professor, was awarded the “Early Career and Visiting Scientist (ECVS)” fellowship under the Research Training and Fellowship Programme by the International Agency for Research on Cancer (IARC), to visit the Cancer Surveillance Unit (CSU), IARC, Lyon, France for training on data analysis for the upcoming study on “Enriching cancer data in Tamil Nadu state in South India” with the focus on social inequalities and cancer from 10 October to 16 November 2023.

Training imparted:

Observer training and hands-on experience in Molecular biology techniques like Biomolecular extraction, PCR, and RT-PCR techniques were imparted in the Molecular epidemiology laboratory as part of the continuing department program to one post-graduate student of Biotechnology from Trichy, as per their internship/academic plan.

Observer training and hands-on experience in Epidemiology, Biostatistics, Research methodology and Cancer registration were imparted as part of the continuing department program to 18 graduate/post-graduate students of Engineering, Statistics and Data Science subjects from Chennai and rest of Tamil Nadu as per their internship/academic plans.

Training in Cancer registration principles and methods to three HBCR staff of Sri Ramachandra Medical College and Research Institute for one week.

Conference/Meeting/Workshop

Dr. R. Swaminathan, Dr. N.V.Vani, R. Subhalakshmi, P. Meeravishnu presented the IARC-KCL-ACCI project update and developed an outline for intervention at the ACCI—Third Annual PI meeting in Kochi, Kerala, from 01-02, March 2024.

Ms. T. Chandrakala, Technical Assistant and Ms. A. Parimala, Social Investigator, participated in the Training Workshop on Population Based Cancer Registry (PBCR) at ICMR-NCDIR in Bengaluru, during February 22-23, 2024.

Dr. R. Swaminathan delivered an invited lecture on colorectal cancer incidence, pattern and trend in TNUHP-JICA workshop on colorectal cancer intervention held in Chennai, on February 20, 2024.

Mr. P. Sivakumar and Ms. J. Vidya, Social Investigators participated in the Training Workshop on Hospital Based Cancer Registry (HBCR) at ICMR-NCDIR in Bengaluru, during November 30 – December 1, 2023.

Dr. R. Swaminathan participated as faculty and delivered a lecture on Introduction to the National Cancer Registry Programme – Hospital and Population-based Cancer Registries in pre-conference workshop Understanding data research and clinical trials at the Cancer Institute (WIA), Chennai, on November 24, 2023.

Dr. N.V.Vani attended and presented a poster on “Implementation of an affordable, equitable, and integrated multicancer early detection package to improve cancer outcomes in resource-constrained settings” and participated as a Panelist in the Cancer Programme Panel on “Leveraging the global for local solutions,” at the GACD Annual Scientific Meeting, held in Singapore from 14-16 November 2023.

Dr. R. Swaminathan delivered an invited lecture on Cancer scenario – incidence, pattern, survival and trend in the interaction with Youth Ambassadors for Cancer Control on National Cancer Awareness Day at the Cancer Institute (WIA), Chennai, on November 7, 2023.

R. Madhanagopal attended and presented a poster on “Oral human papillomavirus infection in healthy individuals –a molecular epidemiological study” at the National Conference on “Strategies in the Control of Infectious Diseases” held at Prof. Dhanapalan College of Science and Management, Chennai on 13 October 2023 (awarded best poster)

Dr. R. Swaminathan participated and delivered a lecture on Madras Metropolitan Tumour Registry – Salient Features in the PIs meeting on PBCRs at ICMR-NCDIR, Bengaluru, October 5-6, 2023.

Dr. N.V.Vani attended the workshop on Implementation Science Research conducted by St. John’s Medical College and Research Institute, Bengaluru, from 4-5 October 2023.

Dr. R. Swaminathan delivered an invited lecture on Cancer surveillance in Tamil Nadu through cancer registries in CSI-IITM Symposium at IIT, Chennai during October 3-4, 2023.

Dr. N.V.Vani gave an invited talk as part of the Faculty Development Program on “Today’s Research Tomorrow’s Practice” at Sathyabama Dental College and Hospital, Chennai, on 27 September 2023.

Dr. R. Swaminathan delivered an invited lecture on Cancer surveillance in India through cancer registries in CME programme on Emerging trends in Cancer Research on the occasion of World Research Day organized by department of biochemistry, at Cancer Institute (WIA), Chennai on September 23, 2023.

Dr. R. Rama and Dr. N.V.Vani attended the National Workshop on Systematic Review & Meta-analysis (SRMA-2023) conducted by the Department of Biostatistics, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry from 11-13 September 2023.

Dr. R. Swaminathan attended and presented the project update at the ACCI—Second Annual PI meeting in Udaipur, Rajasthan, from 4-5 September 2023.

Dr. N.V.Vani attended and presented a poster on “Human Papillomavirus and Oral Cancer - Interim Report” at the India Alliance Annual Conclave meeting in Hyderabad from 13-15 July 2023.

Dr. N.V.Vani and Ms. Subhalakshmi attended the ACCI Project—Pre-Intervention Assessment Tools training conducted by RTI International, New Delhi, from June 19 to 20, 2023.

Dr. R. Swaminathan delivered an invited lecture on Tobacco related cancers: Global and national status in Tobacco Cessation Intervention Tele-ECHO Educational Program at the Cancer Institute (WIA), Chennai on April 7, 2023.

Dr. R. Rama, Associate Professor, was invited as a faculty to deliver a lecture on “Role of Hospital Cancer Registries (HCR) in Evidence Based Clinical Care” in the session “Screening and Early Detection” of the 2nd National Conference on Real World Evidence Oncology held at Tirunelveli on April 1, 2023 (Awarded best paper).



PREVENTIVE ONCOLOGY



PREVENTIVE ONCOLOGY

Dr.J.S.Malliga, MD (O&G) Associate Professor, Head of the Department

Faculty	
Dr.V.Dhanuraja, MD	Assistant Professor
Dr.Premila Grace D, BSMS, MA	Medical Officer
Dr. S. Arumuga Kumaran, BDS	Dental Surgeon – Pudukkottai Project
Ms. P.N Kalpana MA, DPT	Project Manager – Villupuram Project
S. Rubi, Social Worker (Program Incharge)	Dental Surgeon – Gummidipoondi Project
Dr.R.Lavanya Devi, BDS	Dental Surgeon – Thiruvannamalai Project
Dr. P. Lakshmi Devi, BDS	Dental surgeon – Sivagangai Project

Staff Strength: 70

Other Staff: Social Investigator, Health Worker, Social Worker, Program Manager, Staff Nurse, Driver, Radiographer, Security, Unskilled worker, Lab Technician, Data Entry Operator, Dental Surgeon

ONGOING PROGRAMS / PROJECTS - DEPARTMENTAL STATISTICS

1. District Cancer Screening Program, Chennai [2008 Onwards]
2. Villupuram Cancer Screening Project, Villupuram [Sep 2014 Onwards]
3. Gummidipoondi Cancer Screening Project, Gummidipoondi [April 2016 onwards]
4. Pudukkottai Cancer Screening Project, Pudukkottai [Mar 2018 Onwards]
5. Tiruvannamalai Cancer Screening Project, Tiruvannamalai [Nov 2018 Onwards]
6. Sivagangai Cancer Screening Project, Devakkottai [Apr 2022 Onwards]
7. Mammomobile Project [Dec 2016 onwards]

1. DISTRICT CANCER SCREENING PROGRAM, CHENNAI: CANCER AWARENESS PROGRAMS

- Total Community based : 57
- Total Members attended : 3563

SCREENING PROGRAMS

- Total number of persons screened : 5565
- Total number of women screened : 5511
- Total number of men screened : 54

CLINICAL OUTCOME

- Oral cancers : NIL
- Breast Cancer : 04 (Under Treatment-02, Outside treatment-02)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 07 (Treated-06, Outside treatment-01)
 - Invasive Cancer : 01 (Outside treatment-01)

2. VILLUPURAM CANCER SCREENING PROJECT, VILLUPURAM: **CANCER AWARENESS PROGRAMS**

- Total Community based : 36
- Total Members attended : 1704

SCREENING PROGRAM

- Total number of persons screened : 5912
- Total Number of women screened : 5396
- Total number of men screened : 516

OUTCOME

- Oral cancers : 02 (Outside treatment-01, Under Evaluation-01)
- Breast Cancer : 03 (Treated-02, Under Evaluation-01)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 17 (Treated-07, Under Evaluation-10)
 - Invasive Cancer : 04 (Treated-03, Under Evaluation-01)

3. GUMMIDIPOONDI CANCER SCREENING PROJECT, GUMMIDIPOONDI: **CANCER AWARENESS PROGRAMS**

- Total Community based : 34
- Total Members attended : 2563

SCREENING PROGRAMS

- Total number of persons screened : 4307
- Total Number of women screened : 4183
- Total number of men screened : 124

CLINICAL OUTCOME

- Oral cancers : 01 (Treated-01)
- Breast Cancer : 01 (Treated-01)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 03 (Treated-02, Outside treatment-01)
 - Invasive Cancer : 03 (Treated-02, Outside treatment-01)

4. PUDUKKOTTAI CANCER SCREENING PROJECT, PUDUKKOTTAI CANCER AWARENESS PROGRAMS

- Total Community based : 65
- Total Members attended : 3551

SCREENING PROGRAM

- Total number of persons screened : 4721
- Total Number of women screened : 4571
- Total number of men screened : 150

CLINICAL OUTCOME

- Oral cancers : NIL
- Breast Cancer : 03 (Treated-02, Under Evaluation-01)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 05 (Treated-04, Under evaluation-01)
 - Invasive Cancer : 01 (Outside Treatment-01)

5. THIRUVANNAMALAI CANCER SCREENING PROJECT, THIRUVANNAMALAI CANCER AWARENESS PROGRAMS

- Total Community based : 43
- Total Members attended : 3364

SCREENING PROGRAM

- Total number of persons screened : 5223
- Total Number of women screened : 5000
- Total number of men screened : 223

CLINICAL OUTCOME

- Oral cancers : 02 (Treated-02)
- Breast Cancer : 03 (Treated-01, Outside Treated-02)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 16 (Treated-12, Under Evaluation-04)
 - Invasive Cancer : 02 (Treated-02)

6. SIVAGANGAI CANCER SCREENING PROJECT, DEVAKKOTTAI CANCER AWARENESS PROGRAMS

- Total Community based : 49
- Total Members attended : 1954

SCREENING PROGRAM

- Total number of persons screened : 4264
- Total Number of women screened : 3991
- Total number of men screened : 273

CLINICAL OUTCOME

- Oral cancers : 02 (Outside Treatment-02)
- Breast Cancer : 03 (Treated-01, Outside Treatment-02)
- Cervical Cancers:
 - Pre-cancers (CIN 2+) : 01 (Treated-01)
 - Invasive Cancer : 01 (outside treatment -01)

7. MAMMOBILE PROJECT -VILLUPURAM

Mobile mammogram is operational in Villupuram district since 2016. Around 1348 women have been screened in the facility during 2023-24

ONGOING RESEARCH

1. 2022-2024 : Evaluating The Effectiveness Of Vaginal Self Sampling Against Provider Sampling In A HPV DNA Based Cervix Screening Program - Principal Investigator- Dr. Malliga J S
2. 2023-2024: Genetic Polymorphism of TNF-alpha and CYP1A1 geneses in dysplasia and carcinoma cases of cervix uteri in South Indian population-Co Investigator- Dr. Malliga J S
3. 2024-2026: Concordance Between Urine and Self Collected Vaginal Samples For High Risk HPV Detection Among Screening Participants In Tamil Nadu- Principal Investigator- Dr. Malliga J S.

PROPOSED PROJECTS

1. ICMR-NHRP PROJECT (National Health Research Priority-Project)

Implementation Research to Enhance Screening, Early Diagnosis and Initiation of Treatment for Oral, Breast and Cervical cancer in Selected Districts of India – Thiruvannmalai site:
Principal Investigator- Dr. Malliga J S

ACADEMIC PRESENTATIONS

Invited Faculty

Dr.Malliga J.S

INTERNATIONAL PRESENTATIONS

1. 21 – 23 June 2023 International Cancer Screening Conference (ICSN2023) - Can India hit the target? Cervix Cancer Control Program in Tamil Nadu State as a case study –Best abstract and Travel Scholarship - Turin Italy
2. 14-24 Oct 2023 –Save Cervix –Data Analysis and Outcome Measures –IARC Lyon France
3. 15-17 Dec 2023 – IACCS 2023 – Cancer Screening Initiatives Indian Scenario Tokyo Japan

NATIONAL PRESENTATIONS

1. 1.04.2023- National Conference on Real World Evidence in Oncology, Thirunelveli Organised HPV Screening Program
2. 18.06.2023 IMS - South Zone International Conference 2023 Madurai, TN– Screening for Vulval Cancers
3. 23.12.2023 FOGSI with YUVA, 2023 East Zone, Imphal, Manipur –Treatment for Cervical Precancers-See and Treat –Virtual
4. 25.01.24 CME on Cervical cancer screening Madurai, TN HPV screening and Colposcopy. A case-based discussion.

Dr.Dhanuraja.V

01.04.2023- National Conference on Real World Evidence in Oncology, Thirunelveli

15.09.2023- AOGIN Community Oncology Workshop, AIIMS, Rishikesh

16 & 17.09.2023- AOGIN India Conference 2023, AIIMS, Rishikesh

GUEST LECTURES

1. **01.08.2023** – Delivered a guest lecture on cancer awareness for students at Krishna Swami College, Anna Nagar, Chennai. Presenters: Dr. Premila Grace, Mrs. Sivaranjani, and Mrs. Anitha.
2. **26.09.2023** – Conducted a guest lecture on cancer awareness for staff and students at Rajah's College, Pudukottai. Presenters: Dr. J.S. Malliga, Dr. J. Preena, and Mr. Venkatesh.
3. **11.10.2023** – On Breast Cancer Day, presented a guest lecture on cancer awareness for GHSS staff and students in Thiruvannamalai. Presenters: Dr. R. Lavanya Devi and Mr. C. Chanthrakumar.
4. **30.10.2023** – Presented a guest lecture on cancer awareness for staff at the Union Office, Devakottai. Presenters: Dr. P. Lakshmidivi and Mr. Murali.
5. **28.11.2023** – Conducted a guest lecture on cancer awareness for staff and students at Govt Arts College, Thiruvannamalai, Villupuram. Presenters: Mrs. Kalpana and Mrs. Saritha.

6. **20.12.2023** – Delivered a guest lecture on cancer awareness for staff and students at TJS Engineering College. Thiruvallur. Presenters: Mrs. S. Rubi and Mrs. P. Gunasundari.
7. **12.01.2024** – Organized a guest lecture on cancer awareness for teachers and students at Vellammal Bodhi Campus, Kallakurichi. Presenters: Dr.V.Dhanuraja, Dr.R.Lavanya Devi, and Mr.C. Chanthrakumar.

DEPARTMENTAL EVENTS

1. SIVAGANGAI MAMMOGRAM PROGRAM –STATIONARY UNIT:

The Department of Preventive Oncology launched the digital mammogram unit at the Sivagangai Cancer Education and Screening Centre on 28.10.2023. The digital mammogram unit was donated by the Rotary Club of Madras, with the funds sponsored by SBI Mutual Fund. Around 438 women have been screened till March, 2024. The project was started with the aim and objective of offering a baseline screening mammogram for all women above 40 years and the immediate beneficiary are 2,25,000 women residing in Sivagangai, Ramanathapuram, Virudhunagar (Karyapatti and Thiruchuzhi Taluks) and Pudukottai (Thirumayam and Ayudayarkoil Taluks.) districts.

2. NATIONAL CANCER AWARENESS DAY – 7 NOVEMBER 2023

Cancer awareness drive was conducted by all the projects (Chennai, Villupuram, Gummidipoondi, Pudukkottai, Thiruvannamalai and Sivagangai) on National Cancer Awareness Day.

3. INTERNATIONAL WOMEN’S DAY AWARENESS PROGRAM – 8 MARCH 2024

Cancer awareness drive for women was conducted by all the projects (Chennai, Villupuram, Gummidipoondi, Pudukkottai, Thiruvannamalai and Sivagangai) on International Women’s Day.



**“Today’s Research
Is
Tomorrow’s Cure”**

CANCER BIOLOGY AND MOLECULAR DIAGNOSTICS

Dr. R. Vijayalakshmi, M.Sc., Ph.D., (Molecular Oncology), Professor and Head of the Department

Dr. Sridevi Duggirala M.Sc., Ph.D., (Microbiology), Assistant Professor

Other Staff : Technologist, Scientific Assistant, Laboratory Technician, Part time Ph.D Student, Project Staff & Project Interns

Molecular Diagnostics

Launch of new diagnostic tests

- The QIAcuity Digital PCR was donated to the department by the Rotary Club of Madras, Ashok Nagar and the Rotary club of Klang, (Malaysia) on 28th June, 2023. The QIAcuity Digital PCR System is designed to deliver precise and multiplexed quantification results for mutation detection, copy number variation (CNV), gene expression studies, and gene-editing analysis.
- The Digital PCR-based assay for EGFR T790M mutation detection from the CfDNA (liquid biopsy) is being offered for lung cancer patients in the department. This is the first molecular diagnostic test in the institute that is being offered with blood as a sample and is performed using dPCR.

QIAcuity Digital PCR System (QIAGEN)

- qPCR based molecular diagnostics – Several new qPCR based assay panels for several cancer types were launched by the department during the year 2023 -2024. The other qPCR based assay panels that are being offered are the KRAS / NRAS / HRAS / BRAF for gastro Cancers and BRAF V600E for thyroid cancer. In addition, the pharmacogenetic qPCR based assays for TPMT- NUDT 15 and DPYD are being given to the patients

The following Molecular diagnostics tests being offered in this department and the number of samples tested are given below -

Molecular Diagnostics Test	Samples screened during (March 2023 - 24)
BC 360 Prognostication test	122
Lung Cancer Diagnostics EGFR mutation testing and ALK RET ROS MET fusion testing	178
EGFR T790M (Liquid biopsy) done by dPCR (QIAcuity)	21
quantitative PCR for Viral load	

1. CMV	904
2. HBV	362
3. HCV	62
COVID Testing – Qualitative	484
AML PCR Panel (Basic and Extended) by qPCR	68
ALL PCR Panel (Basic and MLL): by qPCR	27
PML-RARA Qualitative by qPCR	4
PML-RARA Quantitative by qPCR	23
HPV testing – Qualitative	8716
SERUM CHROMOGRANIN by ELISA	9
New QPCR based tests	
KRAS / NRAS	2
TPMT-NUDT 15	48
DPYD	638
BRAF V600E	10
MTB QUANTITATIVE PCR	207
New Hormone panel tests (iFLASH 1800)	
Hormone panel	96
Inhibin B	134

iFLASH 1800 CHEMILUMINESCENCE IMMUNOASSAY ANALYZER- Several hormone assays are being done using the IFLASH 1800 system which is a fully automated platform, and it uses magnetic particle based direct chemiluminescence Technology for achieving precision & quality results. It is designed for both quantitative & qualitative in vitro assay determinations for a broad range of applications including Tumour markers and thyroid markers, Fertility / Hormones & more. It can perform up to 180 tests/hr. Several Hormone test panels (which include testosterone, and inhibin,) along with the thyroid hormones are being analysed using the analyser.

PROGRAMS FOR MOLECULAR PREVENTION

Ongoing Program: Community Screening Project for Cervical Cancer using Molecular HPV testing with partial genotyping

Funding: CSR 1.5 crores

Source: Chennai Petroleum Corporation, Manali, Chennai

ACADEMIC RESEARCH

Prof R. Vijayalakshmi

Cancer Institute (W.I.A) has been recognised under the Center for Research, Anna University, Chennai for 3 years with effect from 12th March 2024 to conduct collaborative research to pursue Ph.D. program.

Prof. R. Vijayalakshmi was enrolled as a visiting guest faculty in the Centre for Biotechnology, Anna University, for conducting the PG course, Molecular Diagnostics for M. Tech students (2023-2025 batch).

FUNDED RESEARCH PROJECTS AS PI to Dr Vijayalakshmi Ramshankar – SANCTIONED (2023 TO 2024)

- 1) **Project Title:** Development of Spectro-Cytology Screening Technology for Detection of Grades of Cervical Cancer Lesions by Surface Enhanced Raman Scattering (SERS) and Artificial Intelligence. **Funding Agency:** ICMR Intermediate Research Grant. **Collaborating Institute:** CSIR-NIIST, Thiruvanthapuram **Total Sanctioned Amount:** Rs. 8 crores.

- 2) **Project Title:** Development of a Therapeutic Resistance and Relapse Prediction Model for Paediatric Acute Lymphoblastic Leukemia using Artificial Intelligence Techniques
Funding Agency: ICMR AI Adhoc, **Collaborating Institute:** Robert Bosch Center for Data Science and AI (RBC-DSAI), IIT Madras, **Total Sanctioned Amount:** Rs. 47,89,440
Duration: 2023 - 2025

- 3) **Project Title:** Development of dual color plasmonic immunoassay for visual detection of salivary vimentin for early diagnosis of oral cancer. **Funding Agency:** SERB-CRG. **Collaborating Institute:** Sri Ramachandra Institute of Higher Education & Research, Chennai. **Total Sanctioned Amount:** Rs. 51,18,360 **Duration:** 2024 - 2027

- 4) **Project Title :** In vitro diagnostic kit development Lollipop Assay againstsolublesalivaryCD44 isoformfor rapid diagnosisand disease monitoring for oralcancersand oral potentially malignant disorders

**Agency – CSIR-ASPIRE; Collaborating Institute – Nil; Total Sanctioned Amount Rs 50,00,000.
Duration – 2024 – 2027**

FUNDED RESEARCH PROJECTS AS CO PI – SANCTIONED & ONGOING

- 1) **Project Title:** Evaluating the role of addition of low-dose nivolumab and concurrent radiation in patients with triple negative breast cancer receiving neoadjuvant chemotherapy (NACT): a 4 arm, phase II Randomized controlled trial (RCT). **Funding Agency:** ICMR Small Research Grant. **Collaborating Institute:** Nil (PI: Dr. Priya Iyer). **Total Sanctioned Amount:** Rs. 1,443,360. **Duration:** 2024 – 2027
- 2) **Project Title:** Development of Novel Nano-Silymarin Gel for Therapeutic Efficacy in Oral Submucous Fibrosis. **Funding Agency:** ICMR Adhoc

Collaborating Institute: Sri Ramachandra Institute of Higher Education & Research (PI: Dr. C. V. Divyambika). **Total Sanctioned Amount:** Rs. 33,41,130.

- 3) **Project Title:** *Genetic and proteomic expression profiling in clinical stages of oral submucous fibrosis patients* **Funding Agency:** ICMR DHR

Collaborating Institute: Sri Ramachandra Institute of Higher Education & Research (PI: Dr. C. V. Divyambika). **Total Sanctioned Amount:** Rs. 33,41,130.

- 4) **Project Title:** Design of a salivary miRNA panel as a tool for predicting malignant transformation risk in oral potentially malignant disorders. **Funding Agency:** DBT BioCare. **Collaborating Institute:** Sri Ramachandra Institute of Higher Education & Research (PI: Dr. Preethi Ramesh; Mentor: Dr. C. V. Divyambika). **Total Sanctioned Amount:** Rs. 48,73,000. **Duration:** 2024 – 2027
- 5) **Project Title:** (PI: Dr. Vidyarani Shyamsundar) Re-purposing of Anti-hypertensive Drugs (Beta-blockers) and NSAIDS in Oral Squamous Cell Carcinoma: Newer applications to be explored in Preclinical studies. **Funding Agency:** DST TARE. **Collaborating Institute:** 1) Sree Balaji Dental College & Hospital, Chennai; 2) IIT Madras **Total Sanctioned Amount:** Rs. 18,50,000 **Duration:** 2018 – 2022 (Completed)

Ongoing Research Grants - Dr Sridevi Duggirala as PI and Prof R. Vijayalakshmi as Co-PI

Dr Sridevi Duggirala (PI) secured the project titled Patient derived xenografts for combinatorial therapy of PAK1 and TKI inhibitors as a preclinical platform for EGFR positive NSCLC patients. Funding agency - SERB (TARE) Amount – 15,00,00 Lakhs **Co- investigators,** Prof Arvind Krishnamurthy, Dr. Venkataraman, **Prof. R. Vijayalakshmi** (Cancer Institute (W.I.A). Prof Rayala Suresh Kumar (IIT Madras)

ACADEMIC TRAINING PROGRAMS FOR STUDENTS

Hands-on training workshops on the topic “Basics in Cell culture techniques for anti-cancer drug discovery” as an internship is being offered in the department. Many students from various colleges and universities as part of their completion of their graduation / post graduation course are very keen to take this internship. Many students from Sri Padmavathy Viswavidyalaya, Tirupati, SRM University, SRIHER, VIT, Bharat University, MGR Medical University were part of the internship program. During the year 2022 – 2023, around 45 students enrolled for the workshop/internship in our department.

Other Honors/Presentations by staff members in Conferences/Workshop:

Dr R Vijayalakshmi

- **Patent Granted :**

***Patent No.* 202141028755 A PROCESS OF PREPARATION OF SILYMARIN BASED ORAL TOPICAL MUCOADHESIVE GEL FOR ORAL MUCOSAL DISEASES AND PRODUCT THEREOF”. Date of publication: 9.7.2021**

- **Patent Filed :**

A system for detecting nucleic acids using a paper-based substrate and a method thereof’ with Dept of Biotechnology, IIT Madras.

Honours and Awards:

Dr R Vijayalakshmi has been recognized as a Supervisor to guide Ph.D. students at Tamilnadu DrMGR Medical University. This guideship is valid for 5 years from year 2022.

Dr R Vijayalakshmi has been recognised as an **Adjunct Faculty** with Saveetha University to guide research Projects for Dental Students

Prof R Vijayalakshmi is recognised as **Guest faculty** for Center for Biotechnolgy, Anna University.

Presentations

Prof. R Vijayalakshmi

1. Dr. R. Vijayalakshmi was an Invited speaker in the APAC Infectious Disease Forum 2023 held in Kuala Lumpur, Malaysia from 20th to 22 nd August 2023.
2. Dr. R. Vijayalakshmi **won the best oral presentation award** for “Identification of a biomarker compendium for cancer of the gingivobuccal complex by 2D gel electrophoresis followed by mass spectrometry along with validation Indian experience at Indian Cancer Congress - November 2023

Dr Sridevi Duggirala

3. **Dr Sridevi Duggirala**, participated in the Workshop entitled “ DSIR Prism Scheme and its impact in Innovation Ecosystem” – Conducted by Sri Padmavathy Mahila Viswavidyalaya in July 2023
4. Presented an invited talk on “ A paper based microfluidic device for detection of HRHPV for cervical cancer detection” at the international conference "BioTech–MicroCon: Shaping the Sustainable Future" (BTMC -2023) on December 22’ 2023 at Sri Padmavati Mahila Visvavidyalayam Tirupati,
5. Best poster award for the work on “ Analyse the efficacy of clinically validated tyrosine kinase inhibitors by molecular docking method – Novel therapeutics for lung cancer Bhavna Suresh, Sridevi Duggirala and R. Vijayalakshmi at (BTMC -2023)
6. Presented poster on **A docking approach to identify potential p21-activated kinase 1 (PAK1) inhibitors as therapeutics in NSCLC** Sneha Biswas, Sridevi Duggirala and R. Vijayalakshmi.
7. Presented a poster on “**Transcriptome analysis of Human pancreatic stellate cells grown in the presence of Pak1 modulated Miapaca2 cell lines.** Sridevi Duggirala, Vaishnavi B, Sowmya M, Joydeep, Rohan Prasad S, Vijayalakshmi R, Suresh Kumar Rayala, Ganesh Venkataraman at the International Conference on Cancer Biology, at IIT Madras conducted between 14th to 16th September 2023.
8. Invited to conduct a Hands-on – workshop on “ **Basics in Cell culture techniques**” at the Department of Biotechnology, Sri Padmavati Mahila Visvavidyalaya for the M.Sc students on 29th of February, 2024

Ms. Soundharya R

1. Attended AOGIN India 2023: Workshop: "HPV Sampling devices and techniques" and "Screening and treating HPV positives - WHO recommendations"
2. Indian Cancer Congress - November 2023: **Won the first prize** for Best Presentation for the topic - "Molecular Profiling and Copy Number variation analysis on AML patients - First study from India"
3. Attended a Workshop - "Standardising and optimising MRD and Genetic Diagnostics in ALL" at Tata Medical Centre, Kolkata, January 2024.

Aravinda Lochan G

1. Participated in 4th GATC-2023 INTERNATIONAL GENOMICS ANALYSIS AND TECHNOLOGY CONFERENCE Co-Organized with inStem, Bangalore held on 7TH – 9TH April-2023
2. **Awarded Best Oral Paper Presentation** on the title “Demographic Molecular Profiling of Breast Cancer Patients at the Cancer Institute (WIA)” at ICC Mumbai.

3. The abstract (collaborative work)“368P Distinct gene expression profiling explored using nanostring tumor signalling 360 panel with validations in different clinical stages of oral submucous fibrosis patients: A first Indian study.” Published in Annals of Oncology, 34, S1612. (2023). 2022 Impact Factor: 50.5
4. Certificate of successfully completing 4 day’s training program conducted by MEDICAL EDUCATION AND LEARNIING POINT(MELAP /LMS/2024/T-1030) on “Laboratory Management Systems and Internal Audit as per IS/ISO 15189:2022” held at ICMR National Institute for Research in Tuberculosis, Chennai from 10th to 13th April 2024.

K. Mehanathan

1. Presented a scientific offline Paper in the 1 National Conference on RECENT ADVANCES IN DIAGNOSIS AND MANAGEMENT OF ORAL CANCER organized by the Department of Oral Medicine & Radiology, Sree Balaji Dental College & Hospital, Chennaiheld on 21.11.2023.
2. Presented an Oral abstract in the Identification of miRNA panel from OSCC using the Nanostring nCOUNTER - First Study from India in 3rd Indian Cancer Congress 2023 November (2-3) 2023 at Jio Convention Center Mumbai.



PSYCHO-ONCOLOGY AND RESOURCE CENTRE OF TOBACCO CONTROL (RCTC)

Dr. V. Surendran, M.A., M. Phil., Ph. D, Professor and Head of the Department

Faculty

Dr. C. Sundaramoorthy, M. Sc., Ph. D

Assistant Professor

Ms. S. Revathy, M.Sc., M. Phil

Assistant Professor

Other Staff: Psychologist, Psycho-oncologist, Data Entry Operator, Senior Project Assistant, Field Investigator, Research Assistant, Project Assistant & Coordinator, Social Worker & Computer Science.

M.Phil Scholars: Graduated 3, registered 4, Ph.D scholars 5

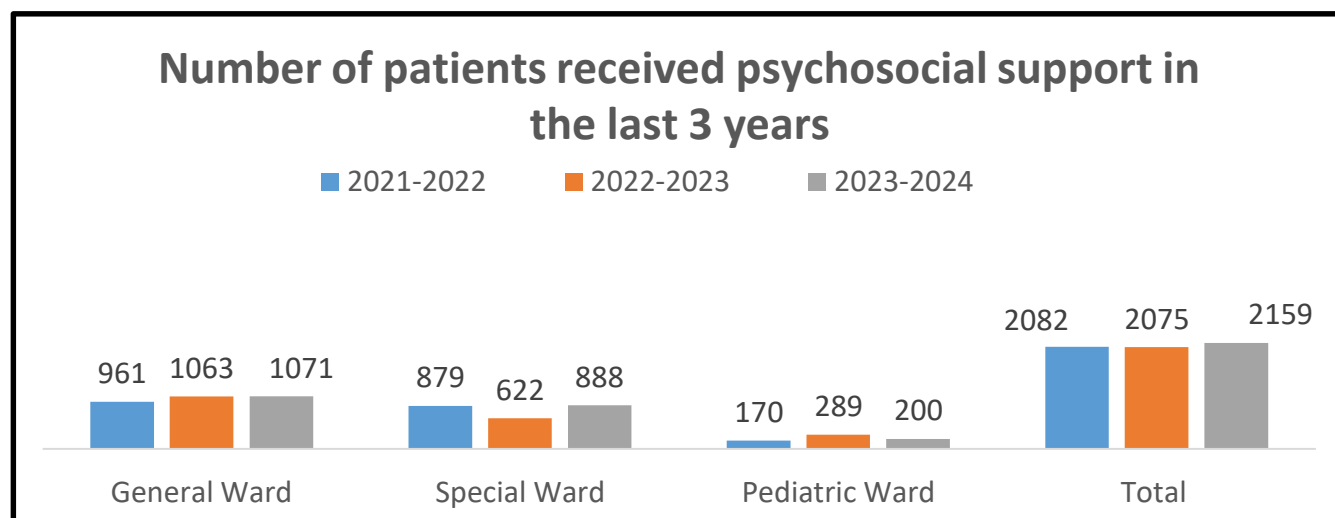
Ph. D Students joined: Ms Divya Mercline

Ph. D scholars completed the course: Mr D Sathish Kumar&Ms Devi N

Annual department statistics

- **Clinical Services: Psychosocial Care (In-Patients)**
- Psycho-oncologists conducted daily assessments of patients to evaluate their distress levels and address other psychosocial concerns. Patients were referred for psycho-oncological consultation by treating physicians from Medical Oncology (MOG), Surgical Oncology (SOG), Radiation Oncology (ROG), Palliative Care (PPC), and the Pediatric Ward. Patients were referred for various reasons, including the management of distress, depression, anxiety, adjustment problems affecting cancer and its treatment, tobacco cessation, and psychological readiness for procedures such as bone marrow transplantation (BMT), amputation, and other surgical interventions. Patients received brief or intensive interventions based on the severity of their psychosocial issues. The interventions aimed to help patients overcome and cope with their challenges. Psycho-oncologists play a crucial role in assessing and addressing the psychosocial needs of cancer patients. The collaboration between psycho-oncologists and treating physicians ensures comprehensive care for patients, helping them navigate the emotional challenges of cancer diagnosis and treatment.

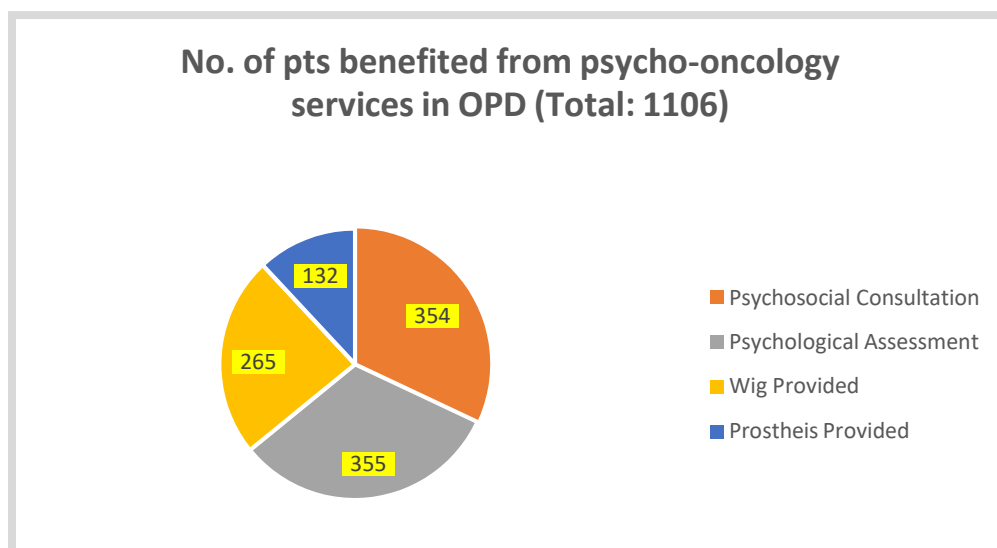
Number of patients received psychosocial support in the last 3 years



Clinical Services: Psychosocial Care (Out Patients)

The Psycho-oncology clinic operates full-time to address the psychosocial needs of both patients and their caregivers from the outpatient clinics. It provides a range of services, including quality-of-life assessments, neurocognitive assessments, distress screening, and interventions for patients under palliative/supportive care. The clinic also offers counseling to advanced cancer patients regarding the availability of hospice care at Mahaveer Ashray.

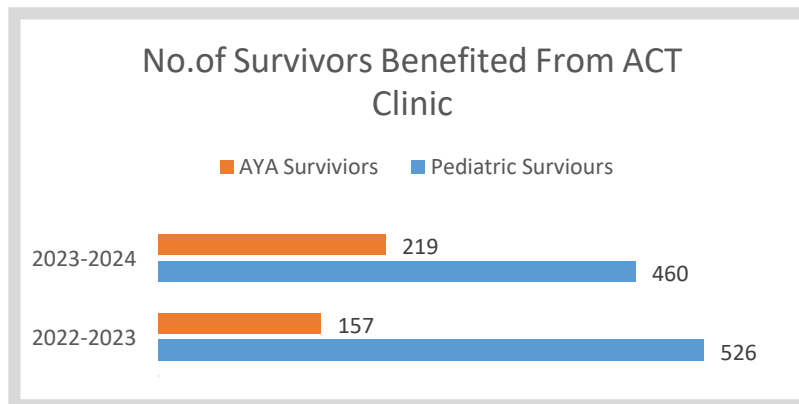
- **Quality of Life Assessments:** The clinic conducts assessments to evaluate the quality of life of patients with locally advanced breast cancer (LABC), rectal cancer, and those participating in clinical trials. These assessments help in understanding the impact of cancer and its treatment on patients' well-being.
- **Neurocognitive Assessments:** Patients undergo neurocognitive assessments to evaluate cognitive function, which is crucial for understanding and managing cognitive changes associated with cancer and its treatment.
- **Distress Screening:** Routine distress screening is conducted to identify patients who may benefit from psychosocial interventions. This helps in addressing emotional and psychological distress early on.
- **Interventions for Palliative/Supportive Care:** Patients under palliative or supportive care receive interventions to help them cope with the emotional challenges associated with their condition. These interventions aim to improve patients' quality of life and well-being.
- **Counseling for Hospice Care:** Advanced cancer patients are counseled regarding the availability of hospice care at Mahaveer Ashray. This counseling helps patients and their families make informed decisions about end-of-life care.
- **Research and Studies:** The department is actively involved in various studies, including assessing the quality of life of LABC patients, rectal cancer patients, and adherence to oral medication among patients with Chronic Myeloid Leukemia (CML). These studies contribute to the understanding of psychosocial aspects of cancer care and help in improving patient outcomes.



- **After Cancer Treatment (ACT) Clinic**

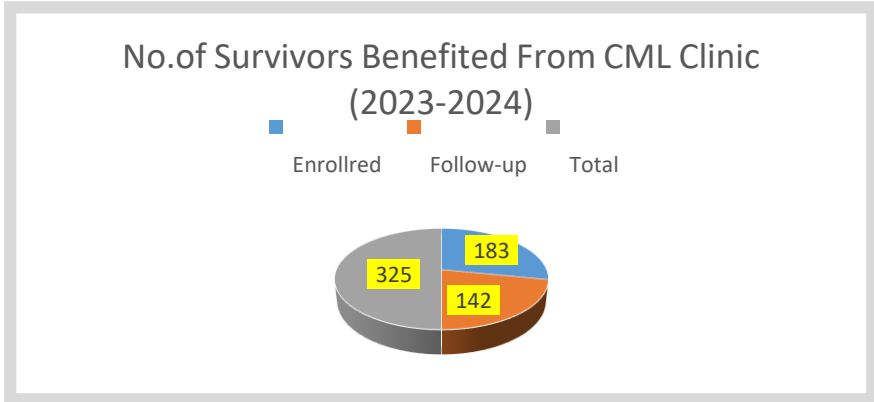
The primary aim of the ACT Clinic is to ensure the long-term health and well-being of cancer survivors by addressing the following key objectives:

1. **Monitoring and Managing Late Effects:** The clinic monitors and manages late effects of cancer treatment, such as cardiovascular complications, secondary cancers, and psychosocial issues, to ensure early detection and intervention.
2. **Survivorship Care Planning:** The clinic develops individualized survivorship care plans for each patient, outlining recommendations for follow-up care, surveillance, and healthy lifestyle behaviors.
3. **Health Promotion and Education:** The clinic promotes healthy lifestyle choices and provides education on cancer survivorship issues, empowering patients to take an active role in their long-term health.
4. **Coordination of Care:** The clinic coordinates care between various healthcare providers to ensure seamless transitions and continuity of care for cancer survivors.



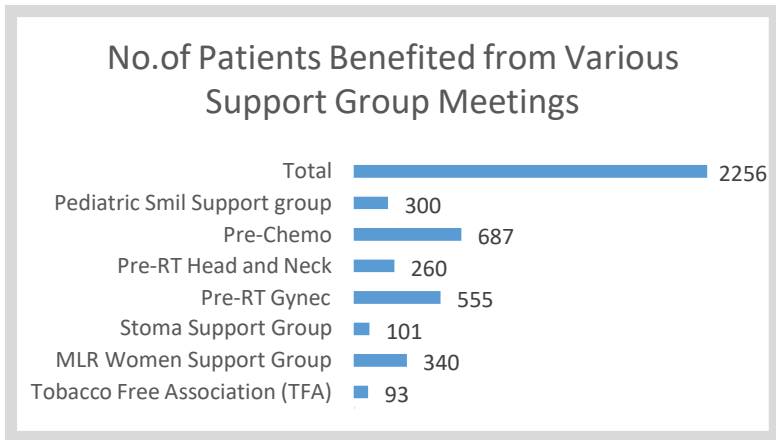
CML Clinic:

The Chronic Myeloid Leukemia (CML) Psychological Consultation Clinic offers specialized mental health support to CML patients, addressing the emotional challenges associated with the disease and its treatment. Services include comprehensive psychological assessments, individual and group therapy, family counseling, stress management, psycho-education, and medication management. The clinic employs a multidisciplinary approach, collaborating with oncologists and social workers to ensure integrated care. Its goals are to enhance patients' quality of life, reduce psychological distress, and promote coping and resilience, and support families and caregivers.



- Support Group Meetings**

Cancer support groups are gatherings of individuals affected by cancer, including patients, survivors, caregivers, and loved ones, who come together to share experiences, offer emotional support, exchange information, and provide encouragement. These groups typically meet on a regular basis and are often facilitated by healthcare professionals, counselors, or trained volunteers. The primary purpose of cancer support group meetings is to create a safe and supportive environment where participants can openly discuss their thoughts, feelings, and concerns related to cancer. Support groups offer a platform for exchanging practical information about cancer treatment options, side effects, coping strategies, and resources available in the community. Participants can learn from each other's experiences and gain valuable insights into managing the various aspects of cancer care.



Completed projects

S:No	Year	Title	Target Population
1	2023	Tobacco cessation intervention TeleECHO Educational Program	Psychologists, Dentist, doctors and research scholars
2	2023-2024	Cancer Control through primary and secondary Intervention and cancer rehabilitation program	Tobacco users, school going students and general public.
3	2022-2023	Patient Preference for Non-Operative Treatment Strategy in Locally Advanced Rectal Cancers: A cross-sectional survey	Patients with rectal cancers
4	2021-2023	Psychosocial Issues Among Paediatric Cancer Patients during Treatment- A Retrospective Study	Pediatric Cancer Patients
5	2023-2024	Cross-Cultural Validation of Financial Toxicity and Happiness in Patients with Cancer in South India	Cancer patients and caregivers

Ongoing Projects

S:No	Year	Title	Target Population
1	2023-2025	Behavioural Profile of paediatric cancer patients during treatment.	Pediatric Cancer patients
2	2023-2025	Predictors of successful quit rates among tobacco users in South India'	Tobacco users
3	2021-2024	Awareness and preference for external breast prosthesis and the associated experiences of breast cancer patients with mastectomy:	Breast cancer patients
4	2021-2024	Perceived appropriateness and missed opportunities of end-of-life cancer care in India:	Patients in end-of-life cancer care
5	2022-2025	Neurocognitive functioning of patients with primary brain tumor – A prospective Cohort Study	Primary brain tumor patients
6	2020-2025	Alternative Livelihood for Bidi workers in Tirunelveli district	Bidi Workers
7	2023-2025	Psychosocial Factors Associated with Health Related Quality of Life among Survivors of Brain Tumor using Patient Reported Outcomes Measurements (PROMs)	Brain Tumor Patients
8	2022-2025	Neurocognitive Functioning in Children with Cancer: A Prospective Study	Children with Cancer
9	2021-2024	Patient Preference for Non-Operative Treatment Strategy in Locally Advanced Rectal Cancers: A cross-sectional survey	Locally Advanced Rectal Cancers
10	2023-2023	Designing and Implementation of Healthcare Model in Patients with stage 2 breast Cancer	Stage 2 Breast Cancer Patient (Qualitative)

Future Projects

S:N o	Year	Title	Target Population
1	2024	Implementing CALM therapy in India	Patient with Metastatic Cancer
2	2024	Psycho-oncology Tele-ECHO Educational Program IV	Healthcare Professionals, Dentist, Psychologist, Psycho-oncologist
3	2024	TeleECHO training module on Family Care	Oncologist and nurses
4	2024-2025	Alternative livelihood for 1000 beedi workers in Tirunelveli and Tenkasi District	Beedi Workers

Academic programs conducted

- **Psycho-oncology TELEECHO Educational Program II**

The department successfully completed the Psycho-oncology Tele-ECHO Educational Program II in collaboration with the ECHO India. This program comprised of 12 sessions on selected areas by trained experts from various institutions and hospitals, followed by case discussions. This is a 6 month long project which was initiated in March, 2022 and completed by August 2022. Around 47 health care professionals were trained through the TeleECHO programme.

Presentations by staff members in National/International conferences

1. Dr V Surendran ‘Cancer Control through Sustainable Alternative Livelihood for beedi workers – An experience from India’ in the 24th IPOS World Congress of Psycho-oncology 2023 held in Milan, Italy from August 31st – September 3rd 2023
2. Dr V Surendran ‘Preference for non-operative treatment strategy in locally advanced rectal cancers’ in the 3rd Indian Cancer Congress 2023 held during 2nd – 5th November 2023
3. Dr V Surendran Chaired the Symposium on ‘Unifying diversity in dying: Quality of death and dying in collectivistic and diverse cultures’ in the 24th IPOS World Congress of Psycho-oncology 2023 held in Milan, Italy from August 31st – September 3rd 2023.
4. Dr V Surendran chaired a session on ‘Psycho-oncology & Supportive care’ in the 2nd National Conference on Real World Evidence in Oncology held on 1st April 2023.
5. Dr V Surendran served as a Panel Member for the discussion on ‘The holistic approach in cancer care: Closing the care gap’ in the National Roundtable Conference on Oncology on 5th April 2023.
6. Dr V Surendran served as a faculty for the Panel Discussion on ‘Medical and Psychosocial late effects of cancer’ in the workshop organized by the Indian Cancer Society on 5th June 2023
7. Dr V Surendran delivered a talk on ‘Psychosocial interventions in pediatric oncology’ in the National Conference on Psycho-oncology organized by Malabar Cancer Centre on 14th October 2023.

8. Dr V Surendran delivered a talk on "Evidence - based psychological interventions for cancer survivors" in the CANREHAB2024 held from 19th to 21st April 2024.
9. Dr C. Sundaramoorthy "Personal, Social and Environmental Factors Determined Tobacco Use among School Going Children in Chennai, India' in the 24th IPOS World Congress of Psycho-oncology 2023 held in Milan, Italy from August 31st – September 3rd 2023.
10. Ms. Revathy presented a study on 'Functional Status and Quality of Life among Colorectal Cancer Survivors' in the 24th IPOS World Congress of Psycho-oncology 2023 held in Milan, Italy from August 31st – September 3rd 2023
11. Ms Revathy delivered a talk on 'What do dying patients in diverse culture experience?' in the Symposium on 'Unifying diversity in dying: Quality of death and dying in collectivistic and diverse cultures' organized in the 24th IPOS World Congress of Psycho-oncology 2023 held in Milan, Italy from August 31st – September 3rd 2023.
12. Ms. Vidhya paper titled" Factors Influencing Distress among Paediatric Cancer Patients at IPOS Congress 2023 held at Milan, Italy.
13. Ms.Vidhya paper titled "Behavioral Profile of Pediatric Cancer Patients during Treatment" in MINDCAN,2023 at Malabar Cancer Centre, Kerla held on October 14th 2023
14. Ms.Divya Retrospective Study on Psychosocial Issues of Adolescent and young Adults Survivors" – MINDCAN,2023 at Malabar Cancer Centre held on October 14th 2023
15. Mr. Sathish S "Tobacco Quit Status- Results of an Oral Screening Camp among Tobacco Users in Chennai, India in 2nd National Conference on Real World Evidence in Oncology- RWE 2023 On 1st April, 2023 At Hotel Appletree, Tirunelveli, Tamil Nadu
16. Dr V Surendran chaired a Scientific Session at the "International Conference on Applied Forensic Psychology in Crime & Delinquency" in the ICAFP- 2023 on March 31st and April 1st, 2023

Guest lectures by staff members

- Dr V Surendran served as a Keynote speaker and delivered a talk on 'Awareness on tobacco cessation' in the Symposium on Oral Oncology & Workshop organized by Meenakshi Annal Dental College & Hospital on 6th & 7th January 2023
- Dr V Surendran delivered a talk on 'Cancer Awareness' for Police officers and Police personnel of the Tamil Nadu Police Department in March 2023.
- Dr V Surendran delivered a talk on 'Tackling high-risk behaviours' for the students of Madras Christian College in March 2023.
- Dr V Surendran delivered a talk on 'Choose Life; Not Drugs' for the students of Ethiraj College on 7th July 2023
- Dr V Surendran attended the wig donation program by Rotaract Club of WCC as a resource person on 12th December 2023.
- Dr V Surendran delivered a talk on 'Introduction to Supportive Psychotherapy in Palliative Care' in the workshop on 'Psychotherapy in Palliative Care' organized by CanSupport on 22nd December 2023.

- Dr V Surendran delivered a talk on ‘Cancer Awareness’ for YRC Student volunteers of CEG Campus on 27th January 2024.
- Dr V Surendran delivered a talk on ‘Selection of age-appropriate tools for psychosocial and neuro-cognitive concerns in childhood cancer survivors’ in the workshop organized by AIIMS on 27th February 2024.
- Dr V Surendran attended the ‘Stakeholder interactions’ of the Health Care Committee at MCCI on 25th January 2024.
- Dr V Surendran attended the ‘Partnering for Change 2024’ annual event of HCL Foundation on 5th & 6th February 2024 in New Delhi.
- Dr.C.Sundaramoorthy delivered a lecture on ‘Health Consequences of Tobacco Usage’ in the part of CSR Programme by T S Srinivasan Centre for Polytechnic College and Advanced Training (Cpat-Tvs), Vanagaram, on 2nd and 3rd May 2023.
- Dr.C. Sundaramoorthy delivered a lecture on ‘Health Consequences of Tobacco Usage’ in the part of Health Awareness Program for school students organized by Donbosco Anbu Illam and HCL Foundation in Govt. Hr.Sec School Avadi , on 25th August 2023.
- Dr.C. Sundaramoorthy was invited as a Judge for Extempore Competition (Tamil) to ABC Exhibition 2023 (All a ’Bout Cancer) at Anna Adarsh College, Auditorium, Anna Nagar on 29th August 2023
- Dr.C. Sundaramoorthy delivered a lecture on Tobacco Cessation for School Students’ in the part of CSR organized by AM Foundation in Govt. Hr. Sec School, Manali, on 18th November 2023.
- Mr. Divyraj Prabhkar talk on ‘Stage Based Interventions for tobacco users’ in the certificate course on ‘Tobacco Control and Cessation’ organized by Madras School of Social Work on 27th February 2024.
- Ms. Revathy talk on ‘Mindfulness Therapy in Palliative Care’ in the workshop on ‘Psychotherapy in Palliative Care’ organized by CanSupport on 22nd December 2023.
- Ms. Revathy guest lecture on ‘Cancer Awareness’ in Sri Lalithambigai Medical College & Hospital on 2nd February 2024 in view of the World Cancer Day 2024.
- Ms. Revathy talk on ‘Interventions in Tobacco Cessation’ in the certificate course on ‘Tobacco Control and Cessation’ organized by Madras School of Social Work on 27th February 2024.
- Ms. Divya tall on Cancer Awareness in World Cancer Awareness Day” organized by GVN cancer center, Trichy. Program held on “4th Feb 2024.
- Ms. Divya talk “Psychotherapy in Palliative care” Organized by **CanSupport, Delhi** on December 22, 2023.
- Ms. Divya attended a panel discussion on Cancer, finances and Career held on 17th Feb, at the Conference Cancer Conundrum, Aerocity, Delhi.

CME/Seminar/Symposium/Workshops conducted by the Department

- The department conducted a Symposium on ‘Unifying diversity in dying: Quality of Death and Dying in collectivistic and diverse cultures’ in the 24th IPOS World Congress held in Milan, Italy from 29th August – 1st September 2023.
- The Department organized a 30-hour certificate course on Tobacco Cessation for students of the Department of Psychology at MSSW, held from January to February 2024.
- The Department of Psycho-oncology organized a panel discussion for sarcoma survivors in the IMSOS 2023 held in Chennai. Around 55 survivors participated and benefited from the discussion wherein a team of oncologists discussed on the various issues, management and coping strategies.

12. Achievements/Awards/Honors

- Dr. V. Surendran serving as an Expert Committee Member for accelerating Tobacco Cessation services constituted by Government of India.
- Dr. V. Surendran Serving as a member of the Lancet Oncology Commission sub group on mental health
- Dr. V. Surendran Served as a Mentor for the Single Center SORT IT program in Oncology held in 2023-2024
- Mr.Divyraj Prabhakar served as a member of the Ethics Committee for Sri Venkateswara Dental College, Thalambur, Chennai
- Mr. Sathish R awarded a best paper presentation Award for Oral of the paper titled “Tobacco Quit Status- Results of an Oral Screening Camp among Tobacco Users in Chennai, India in 2nd National Conference on Real World Evidence in Oncology- RWE 2023 On 1st April, 2023 At Hotel Appletree, Tirunelveli, Tamil Nadu

13. Brief write-up of departmental events

Prosthesis and padded bra for breast cancer patients who underwent mastectomy

Breast cancer has emerged as the most prevalent cancer among women, often diagnosed in advanced stages necessitating mastectomy for some patients. Mastectomy involves the removal of one or both breasts, leaving women facing physical and emotional challenges. To address these challenges and enhance survivorship, the Cancer Institute (WIA) initiated a project to distribute External Breast prostheses. These prostheses, crafted from soft silicone gel to mimic the natural breast shape, serve as vital tools in restoring body image and self-esteem for breast cancer survivors. In total, **132** External Breast prostheses have been distributed to patients and survivors who underwent mastectomy, with the project continuing to provide support and rehabilitation for those affected. This ongoing endeavor underscores the institute's commitment to improving the quality of life and well-being of breast cancer survivors through comprehensive care and support services.

Wig

Chemotherapy treatment for cancer patients often results in hair loss, causing distress for many individuals. To support those affected, **165** wigs were distributed to cancer patients experiencing alopecia. These wigs, crafted from natural human hair, aim to restore confidence and improve the quality of life for patients undergoing treatment and survivors. By providing comfortable and natural-looking options, this initiative addresses the emotional impact of hair loss, enhancing body image and overall well-being for cancer patients.

International Childhood Cancer Day (2023) program was organized at Children of Cancer Institute with Cancer survivors from After Completion Therapy Clinic. The objective of the program was to impose the thoughts of healthy habits to the patients on cancer treatment. Director of SLAM gym was invited as chief to give a fitness talk and healthy life with exercise. Pediatric cancer survivors from ACT clinic also participated in the program and encouraged the children at the pediatric ward. Children were also encouraged with gifts and healthy snacks at the end of the program. Pediatric patients actively participated in the program. Doctors, dietician and social workers at the pediatric ward were also actively participated in the program.

Neuropsychology Research Lab

The Neuropsychology Research Lab is a dedicated research facility focused on investigating the intricate relationship between brain function and behavior. Situated at the intersection of neuroscience and psychology, our lab employs cutting-edge methodologies to explore various aspects of cognition, emotion, and behavior in both healthy individuals and those with neurological disorders. Led by a team of expert researchers and clinicians, our lab is committed to advancing knowledge in the field of neuropsychology and translating research findings into practical applications for improving patient care and quality of life. In total, **20** patients were completed comprehensive neuropsychological battery.

Alternative livelihood for beedi rollers

To facilitate a transition from beedi rolling to healthier alternative livelihoods, the Cancer Institute (WIA) has initiated skill development training programs in Tirunelveli and Tenkasi districts. Tailoring batches from August 1st, 2023, to January 10th, 2024, enrolled 312 beedi rollers, benefiting 282 women. Identification of participants was conducted through a door-to-door survey in Avudayanoor and Maruthamputhur, with interested individuals enrolled in the training. The primary objective is to equip workers with sustainable skills and facilitate job opportunities post-training. Efforts include employing some trainees as peer trainers and collaborating with organizations to create additional job opportunities in the local community, thereby ensuring long-term success in transitioning away from beedi rolling.

Community Based Tobacco Cessation (CBTC):

The Cancer Institute (WIA) in collaboration with the HCLF Project team initiated a Community Based Tobacco Cessation (CBTC) program. As part of this initiative, a comprehensive door-to-door household survey was conducted in the Chemmancherry and Perumbakkam communities. Through this survey, **a total of 60** tobacco users were identified and subsequently offered tobacco cessation services. This targeted approach aims to address tobacco use at the grassroots level, ensuring effective support and intervention for individuals in these communities.

Identify the Tobacco Smokers/Chewers in the Community - (Lung Cancer Screening)

A survey was conducted in 200 households to identify eligible participants for lung cancer screening. Despite challenges, 83 participants have been successfully enrolled for screening. However, reaching the remaining 17 individuals has proven difficult due to factors such as participant unavailability, reluctance to undergo testing, and persistent misconceptions. Multiple follow-up attempts have been made to address these challenges and encourage participation in the screening program.

World Lung Cancer Awareness Day Program:

The Cancer Institute (WIA) hosted a lung cancer awareness program on August 5th, 2023, at the Kannagi Nagar Police Boys & Girls Club. Dr. Karthikeyan, a Surgical Oncologist from the Department of Surgical Oncology at the Cancer Institute (WIA), delivered an informative talk to 27 community residents in attendance. The session covered topics such as tobacco smoking, passive smoking, outdoor air pollution, and their implications for lung cancer risk. Dr. Karthikeyan also discussed lung cancer screening, symptoms, early diagnosis benefits, and treatment procedures. The program garnered positive feedback from participants, who actively engaged in discussions and sought clarifications from experts. Additionally, all attendees pledged to share the knowledge acquired during the program with a wider audience, underscoring the event's impact on community education and awareness.

Awareness of 'Ill-Effects of Tobacco'

Cancer Institute (WIA) in collaboration with Grey Sim Learning Foundation conducted an awareness on "Ill Effects of Tobacco" to ITI students at Government ITI (Co-edu.), Guindy on 29th Sept 2023. A total of **191** students benefited from this awareness.

Awareness of NCD and Lifestyle Modification

The Adyar Cancer Institute (WIA), in collaboration with the Don Bosco Anbu Illam, conducted an awareness session on "Awareness of NCD and Lifestyle Modification" for children at Perungudi (Kallukuttai), Chennai on September 27th, 2023. A total of **27** children benefited from this awareness program.

World Breast Cancer Awareness Month Program

In view of World Breast Cancer Awareness Month, the Cancer Institute (WIA) organized breast cancer awareness for women in the Perumbakkam community on 31st October 2023. A total of **10** women from the community benefited through this program.

Cancer Risk Assessment Questionnaire

The Cancer Institute with the support of HCL Foundation has had the opportunity to convene two prolific meetings with esteemed experts in the field of cancer. These engagements have been pivotal in guiding the efforts toward developing a comprehensive cancer risk assessment questionnaire. Leveraging the wealth of knowledge and expertise shared by these professionals, the Cancer Institute has gained invaluable insights into the multifaceted landscape of cancer risk factors and the intricacies involved in evaluating individual susceptibility to this complex disease.

In addition to insights gained from expert consultations, the cancer risk assessment questionnaire also draws upon existing literature in the field. By synthesizing findings from previous research studies and publications, we are incorporating established knowledge and best practices into the questionnaire's construction phase. This approach ensures that the questionnaire is grounded in evidence-based methodologies and reflects the latest advancements in cancer risk assessment. As the questionnaire progresses through the construction phase, the Cancer Institute remains committed to integrating insights from both expert consultations and existing literature to refine its design further. This holistic approach aims to create a comprehensive tool that addresses the diverse range of factors influencing cancer risk. By leveraging a combination of expert input and scientific evidence, the Institute endeavors to develop a robust questionnaire that will ultimately contribute to more effective cancer prevention and early detection strategies. The final cancer risk assessment scale will be finalized before the 31st of July 2024.

Breast and cervical awareness for women in the community

The Adyar Cancer Institute (WIA), in collaboration with the BROSIGA Anganwadi centre, conducted an awareness session on "Awareness on Breast and Cervical" for women at Gandhi Nagar, Chennai on January 29th, 2024. A total of **18** women benefited from this awareness program.

Stoma Bag

A colostomy bag, also called a stoma bag or ostomy bag, is a small, waterproof pouch used to collect waste from the body. During a surgical procedure known as a colostomy, an opening called a stoma or ostomy is formed between the large intestine (colon) and the abdominal wall. This allows waste products to be excreted through the opening in the abdominal wall rather than via the colon through the rectum and anus. Stools and other waste products are drainable into the pouch-like colostomy bag, which can then be emptied at regular intervals. Living with a colostomy negatively affects overall QOL. The presence of colostomy is associated with a variety of complex problems, such as psychological and sexual problems, dissatisfaction with altered body image, changes in daily routine, travel difficulties and tiredness. Factors such as age, gender and time since treatment may affect ostomy-specific QOL. Family income may also have an impact on the lives of patients due to the high cost of the materials needed for ostomy care. The professional lives of colostomy patients are severely affected, as having a colostomy may provoke a partial or complete loss of work. A total of **199** Stoma bag were distributed to cancer patients and who are affected in colostomy. This is an ongoing project at the Cancer Institute (WIA).

Voice prosthesis for patients with laryngectomy

Voice prostheses play a pivotal role in enhancing the quality of life for individuals who have undergone total laryngectomy due to cancer. These prostheses serve as indispensable devices in restoring speech functionality, enabling patients to communicate effectively and regain a sense of normalcy in their lives. By facilitating speech production, voice prostheses alleviate the psychological and emotional burdens associated with losing the ability to speak, fostering improved social interaction, self-confidence, and overall well-being. Additionally, the restoration of speech through these devices empowers patients to engage in daily activities, participate in conversations, and express their thoughts and feelings, thereby mitigating feelings of isolation and depression often experienced post-surgery. Ultimately, the introduction of voice prostheses represents a significant milestone in the rehabilitation process for cancer patients, offering them renewed hope, independence, and a higher quality of life. A total of **6** patients received the voice prostheses.

KAP Survey:

To assess the knowledge, attitudes, and practices regarding tobacco use among students, we planned Assessment 1. This year, we used Google Forms for the survey. The new schools are Vandiyur Government School, Mapalayam Government School, and Balamanthiram Government School. Initially, we met the school headmasters, explained our project activities, and obtained permission for the Baseline assessment. With support from HCL volunteers and interns from dental colleges, we conducted Assessment 1 (Baseline assessment). A questionnaire consisting of 18 questions was used to assess knowledge, attitude, and tobacco usage among the students. Students from Class 6 to Class 9 were selected for this survey. Among the 808 students who underwent baseline assessment, findings revealed that only 45 (5.17%) were aware of the ill effects of tobacco, while 388 (48.02%) exhibited a certain attitude towards it, and 163 (20.17%) reported using tobacco.

School Intervention on Awareness on Cancer and Substance abuse (Tobacco) and Strengthening of Tobacco Monitoring Committee

As we found the usage of chewing tobacco (Cool lip) among students, we planned our intervention through playway methods such as Snake and Ladder games, puzzles, and flashcards, along with oral check-ups with the help of postgraduate students from dental colleges. We also educated them individually on the ill effects of tobacco using flipcharts. We covered 26 schools in total.

KAP Survey 2

Every year, we will conduct post-assessment to assess the students' knowledge, attitude, and practices. In the JFM quarter, we conducted a post-assessment on the ill effects of using tobacco and healthy lifestyle among students in Mahaboopalayam Government Higher Secondary School, Vandiyur Government School, and Balamandiram Government School from 6th to 9th standard with the support of students from Ultra Best Dental College. Following the post-assessment, it was observed that tobacco knowledge increased significantly to 702 (87.31%), attitudes towards it improved to 687 (85.41%), and tobacco usage decreased notably to 9 (1.12%)

Tobacco Monitoring Committee at school

The Tobacco Monitoring Committee has been formed in 26 schools, with the participation of school headmasters, teachers, and students. The roles of the committee members have been explained to the students, who are designated as "Health Ambassadors." To strengthen the TMC, periodic visits to schools are made, engaging in various activities such as peer group education, outlining the roles and responsibilities of Health Ambassadors, and distributing IEC materials to shops and the general public.

World No Tobacco Day at Madurai

World No Tobacco Day is observed annually on May 31st to raise awareness about the harmful effects of tobacco use and to encourage people to quit smoking. This year, a Walkathon was conducted aimed at spreading awareness about the ill effects of tobacco and was supported by volunteers from HCL, as well as students from the Best Dental College. The event took place on May 31st, 2023, at Race Course, Madurai, between 8:30 AM to 10:30 AM. The Walkathon was flagged off by the Corporation Commissioner, Thiru. Simranjeet Singh Kahlon IAS. The Commissioner addressed the audience, emphasizing the significance of World No Tobacco Day and the importance of creating a tobacco-free society. Multiple awareness boards were set up at the event venue, staffed by HCL volunteers and dental college students. These boards offered various educational materials, brochures, and interactive displays related to the harmful effects of tobacco. Visitors had the opportunity to learn about the health risks associated with tobacco use, such as lung cancer, heart disease, respiratory problems, and oral health issues.

World Cancer Day at Madurai

World Cancer Day is an international event observed on February 4th every year to raise awareness about cancer and encourage its prevention, detection, and treatment. On behalf of the Cancer Institute, we observed World Cancer Day at Thallakullam Corporation School, Madurai. On that occasion, we conducted a focused group discussion on the ill effects of using tobacco, lifestyle changes, and healthcare. Students enthusiastically participated in the event and shared their views on "Tobacco-Free Lifestyle and Cancer Prevention." The school headmaster and teachers distributed IEC materials to the students.

To raise awareness on cancer, we conducted sessions at Ilead and Balamanthiram Social Service Society Group on Cancer Prevention and Tobacco Control. The sessions were eye-opening to the participants, and they clarified their doubts. It was a fully interactive and participative session.

World No Smoking Day

Theme: 'Protecting children from Tobacco industry Interference'

No Smoking Day is celebrated every year on the second Wednesday of March. The aim of celebrating this day is to spread awareness about the harmful effects of smoking and promote the importance of a smoke-free environment. Children and adolescents are particularly vulnerable to the effects of tobacco marketing and advertising. On this occasion, we observed "No Smoking Day" at Kambar Corporation School, Vandiyur Government School, and Anupandi Corporation School. With the initiative of the Tobacco Monitoring Committee, IEC materials have been distributed to all the shops surrounding educational institutions. While distributing the IEC materials, the TMC shared the hazards of passive smoking and made this environment a smoke-free zone.

National Cancer Awareness Day

National Cancer Awareness Day is observed on November 7th in India. The day signifies increased awareness about cancer prevention and early detection for the general public. The date for this occasion was announced in September 2014.

Around 1.1 million new cases are reported every year in India. The probability of survival in India is very low as two-thirds of the cases are diagnosed at an advanced stage. Lung cancer and cancer of the oral cavity are major causes of death among males, while breast cancer and cancer of the oral cavity account for many cancer cases among females. According to estimates, a woman dies every 8 minutes in India due to cervical cancer.

In the year 2023, the Cancer Institute (WIA) and the Tobacco Cessation Centre at KK Nagar, Madurai, observed National Cancer Awareness Day at Pandiyan Neducheliyan Corporation School. 121 participants took part in this program with the support of HCL volunteers. In this program, students were given awareness of how early detection of cancer in the initial stage can significantly reduce the death rate. Students were educated about the early detection of cancer, and we fixed signage boards around the school with the support of the Sanitary Inspector.

International Volunteers Day

Every year, International Volunteer Day is observed on December 5th to acknowledge the vital role of volunteers in achieving sustainable development goals, both nationally and internationally. This day serves to honor the invaluable contributions of volunteers worldwide. In our Cancer Institute (WIA) / HCL - My School project, Health Ambassadors serve as the primary volunteers. To commemorate International Volunteer Day, we observed it at Kambar Corporation School in Madurai. With the support of volunteers from Ultra Best Dental College and HCL Foundation, we conducted oral checks for students ranging from 6th to 12th standard, reaching 124 students. Among them, our team identified some tobacco users and initiated special interventions to educate them about the harmful effects of tobacco use. Additionally, we will follow up by providing cessation services to these students with the knowledge of the school's headmaster.

To mark International Volunteer Day and highlight the importance of volunteer engagement, we organized a human chain to protest against tobacco products. Students from various classes, along with the school's headmaster, teachers, and HCL volunteers, formed the chain and took a pledge against tobacco products.

Sensitisation and follow-up visit of Shopkeepers

Enforcing the COTPA-2003 regulations in shops located within 100 yards of Madurai Corporation schools is facilitated with the support of enforcement officers such as Sanitary Officers, Sanitary Inspectors, Animators, Swachh Police, etc. The Enforcement Officers and Tobacco Monitoring Committee conduct visits to these shops, distributing Information, Education, and Communication (IEC) materials to both shopkeepers and the general public. Additionally, under COTPA-2003 Section 6B, boards are affixed to shops situated within 100 yards of educational institutions to reinforce compliance.

Capacity Building Workshop the Stakeholders

Shops located within 100 yards of educational institutions are prohibited from selling any type of tobacco products, and sales to minors are strictly forbidden. To effectively implement COTPA, workshops are conducted for shopkeepers with the support of the Shopkeeper Association. Mr. Issac Rajesh Sekar, the project coordinator, shared valuable insights on the harmful effects of tobacco and emphasized the prohibition of selling tobacco products to children.

The Shopkeepers' Association has passed a resolution stating, "We will not sell any type of tobacco products to minors and will support the effective implementation of COTPA." The resolution was signed by the Association President, Secretary, and shopkeepers. As part of the workshop, Ultra Best Dental College provided guidance on "Brushing Techniques and Oral Hygiene" and conducted oral checks for the shopkeepers.

Tobacco Cessation Services at Madurai

During the period from April 2023 to March 2024 quarter, we received 30 calls to our helpline numbers, and all cases underwent stage-based intervention, which was documented periodically. We provided cessation services to tobacco users while distributing Information, Education, and Communication (IEC) materials to shopkeepers and the general public, along with raising awareness about the harmful effects of tobacco and methods to quit tobacco usage. Following various awareness programs, some tobacco users have registered with the Tobacco Cessation Center (TCC). We offer stage-based cessation services to tobacco users through both online and offline modes. In total, 30 cases were registered for tobacco cessation. Among these, 12 (40%) successfully quit tobacco, 15 (50%) reduced their tobacco usage, and there were no observed changes in 3 (10%) cases.

RADIO-DIAGNOSIS AND IMAGING SCIENCES

Dr.M.Karthigai Selvi, Department Incharge

Radiologists (Full Time)	Radiologists (Part Time)
Dr. Nesam manivannan Dr. R. Thanaraj Dr. Nagul Dr. P. Anusuyadevi Dr. Swapna Dr. Revathy	Dr. S. Pushparajan Dr.Tanvi (ICRI Fellow) Dr. A. Vignesh Dr.Arun Anbumani Dr.Juhaina Parveen (DNB 1st year resident)

Other Staff: Technologists, Technicians, Staff Nurse & Data Entry Operators

Students enrolled for B.Sc

I Year – 6, II Year – 5 & III Year - 6

Dr.V.Shanta Campus	
Total number of X-Ray cases	2,075
Dr.S.Krishnamurthi Campus	
Total number of digital X-ray cases	25,078
Total number of C-ARM and special procedures	639
Total number of Mammography cases	5,549
Total number of Ultrasonography cases (USG + FNAC + Biopsy)	19,126
Total number of CT cases(CT cases + biopsy)	10,909
Total number of MRI cases	3,298

Academics

CME conducted in cancer institute (WIA) by radiology department

Case based review on advanced breast imaging by Dr. Devimeenal, Dr.Bhawna Dev and Dr.M. Karthigaiselvi.

Paper Presentations:

Radiological overview of brain metastases, Cancer Institute experience - ISNR (Mar 2024) by Dr.M. Karthigaiselvi.

Benign and malignant calcification in digital mammogram and 3d tomosynthesis (Jan 2024) - IRIA by

Dr.M. Karthigaiselvi.

Poster Presentation:

MSK tumors in X-ray imaging - IRIA (Jan 2024) by Dr.M. Karthigaiselvi and Dr.Juhaina Parveen.

Radiological complication in hematological malignancies - ISNR (Mar 2024) by Dr.M. Karthigaiselvi and Dr.Juhaina

Conferences attended:

IRIA conference - Jan 2024 (Dr.M. Karthigaiselvi and Dr.Juhaina)

ISNR conference - Mar 2024 (Dr.M. Karthigaiselvi and Dr.Juhaina)

MRI - rectal imaging @ Tata Memorial Mumbai - Feb 2024 (Dr.M. Karthigaiselvi)

BISICON - Oct 2023 (Dr.Swapna)

Mammography Bootcamp with AI (online CME) - Apr 2024 (Dr.Swapna)

MEDICAL PHYSICS

Dr.N.Vivekanandan, Ph.D., Head of the Department & RSO

Faculty

Other Staff: Senior Medical Physicists, Medical Physicists & RSO

Intern students passed out	Intern students joined
1. Mr.Kamalesh.V.Ka	1. Mr.Murali
2. Mr.Dinesh	2. Ms.Aswini
3. Ms.Vishali	3. Ms.Dhanalakshmi
4. Ms. Sneha Theres.O.J	4. Ms.Yogalakshmi

- Conventional Radiotherapy Planning : 395
- Conformal Radiotherapy Planning : 1826
- IMRTPlanning : 324
- Rapid Arc Planning : 83
- HDR Brachytherapy Planning : 1129
- SBRT- Planning : 5

Completed Projects during 01.04.2023 TO 31.03.2024

1. Quality Assurance of 4D CT and 4D CBCT using Quasar phantom.
2. Biological Optimization using IMRT technique in Head and Neck cancer.
3. Planning study on spatially Fractionated radiotherapy (GRID therapy) using VMAT technique.
4. Acceptance and Commissioning of Medical Linear accelerator- Varian TrueBeam (SVC)

Ongoing Projects as on 30.04.2024

1. Dosimetric Comparison of 3DCRT, IMRT, Tan-IMRT, and VMAT in Breast cancer Treatment.
2. Hypo fractionated one week radiotherapy regimen in breast cancer – comparing 3DCRT, IMRT and VMAT
3. Design and development of Multi-channel interstitial intracavitary Gynecological Brachytherapy Applicator
4. Comparison of plan quality in Hippocampus sparing in WBRT, VMAT plans using Millennium MLC and high definition MLC
5. Academic programs conducted

Teaching MSc Medical Physics, M.Sc. Radiotherapy Technology, BSc Radiotherapy Technology, BSc Radiology.

6. Guest lectures by staff members

Dr.N.Vivekanadan delivered a lecture titled “standing on the shoulders of the giants” at Anna University on International Medical Physics day, 07.11.2023.

NUCLEAR MEDICINE

Dr. R. Krishnakumar, M.D., DMRT, DRM, Ph.D,
Professor and Head of the Department

Faculty

Dr.N.Vivekanandan, MSc[Med Phy], RSO[III], Ph.D.	Medical Physicist cum RSO
--	---------------------------

Other Staff: Medical Physicist, Medical Physicist cum RSO Consultant, Scientific Assistant, Technologists & Technician

B.Sc (Nuclear Medicine Technology)

Students passed out		3
Students registered	I Year	6
	II Year	7
Ph. D registered		1

Nuclear medicine uses radioactive compounds called radiopharmaceuticals or radiotracers that interrogate physiologic or pathologic processes at a molecular level and provide diagnosis and therapy for a variety of diseases.

Nuclear medicine studies are clinically used to assess most organ systems with almost 100 different types of studies or therapies. Many more radiotracers play a crucial role in research.

When used as an imaging agent to evaluate organ function, metabolism, or membrane receptor characteristics, the amount of radiotracer administered is in the pico molar or nanomolar range, which avoids disturbing the process under evaluation while still yielding data that are quantifiable and comparable to normative standards. As functional deficits arise before morphological changes in many diseases, nuclear medicine studies can detect disease in early stages when curative or more effective palliative treatment choices may be an option.

Therapeutic nuclear medicine is developing rapidly as an alternative choice of treatment in oncology. Therapeutic radionuclides have now gained attention for tumor targeting therapy using multiple routes and mechanisms to target radionuclides in the tumor site. The non-invasiveness of the procedure and relatively low toxicity in comparison to conventional chemotherapy and external beam radiotherapy make radionuclide therapy an attractive and realistic alternative in the management of malignant diseases. The contribution of therapeutic radionuclides to tumor treatment will significantly increase in the future.

Annual Statistics

Report of work done during the period APRIL 2023 to MARCH 2024

Bone Scan	-	729x 2	=	1458
Renal Scan	-	230x 3	=	690
Liver Scan –Haemangioma	-	4x 4	=	16
Sentinel Node	-	51 x 2	=	102
Tc99m pertechnetate thyroid scan	-	8x2	=	16
Tc99m Hynic Toc scan	-	—	=	—
Parathyroid MIBI scan	-	—	2	—
DMSA scan	-	-	=	-
a) I-131 uptake and scan	-	95 x 2	=	190
b) I-131 WBI scan	-	103x 2	=	206
I-131 MIBG scan	-	4x 4	=	16
I-131 post therapy scan	-	131 X 2	=	262
Isolated Limb perfusion	-	1	=	1
Lung Scan				
a) Perfusion study	-	—	=	—
b) Ventilation study	-	—	=	—
Therapy				
Lu177 DOTATAE Therapy	-	20 patients	=	20
I-131 Therapy	-	49 patients	=	49
MIBG Therapy		04 patients	=	04
Low dose Therapy		48 patients	=	48
Lu177 PSMA therapy		12 patient	=	12
Total no.of cases			=	3,090

ACTIVITY (in mCi)

Bone Scan	-	729 x 20	=	14,580
DMSA Scan	-	Nil	=	Nil
Renal Scan	-	230 x 5	=	1,150
Liver Haemangioma	-	4 x 20	=	80
Tc99m Parathyroid Scan (MIBI)	-	--	=	--
Tc99m pertechnetate thyroid scan	-	8 x 5	=	40

Sentinel Node study	-	51 x1	=	51
Tc99m Hynic Toc scan	-	Nil	=	Nil
I-131 uptake and scan	-	95 x 0.05	=	4.75
I-131 WBI scan	-	103 x 2	=	206
I-131 MIBG scan	-	4 x 1	=	4
Lung Scan				
a) Perfusion study	-	Nil	=	Nil
b) Ventilation study	-	Nil	=	Nil
Therapy				
Lu177 DOTA Therapy	-	20 x200	=	4,000 mCi
Lu 177 PSMA Therapy	-	12 x 200	=	2,400 mCi
I-131 High Dose Therapy	-	51	=	6,775 mCi
I 131 Low Dose Therapy	-	48	=	1,440
I 131 MIBG Therapy	-	-	=	-
Total Activity (in mCi)				30,730.75 mCi

IV. Ongoing Projects: (Ph.D. Project):

1.Ph.D. Thesis Topic: Quality control, physical and clinical studies of Radionuclide Imaging and Therapy of Nuclear Medicine

Student: G.K.Rangarajan, Scientific Assistant, Department of Nuclear Medicine
 Guide: Dr.N.Vivekanandan, Head, Department of Medical Physics,
 Cancer Institute (WIA), Adyar, Chennai 600 020

Co-Guide: Dr.Devakumar, Associate Professor, Department of Medical Physics,
 Christian Medical College (CMC), Vellore.

2. Pilot study: To evaluate the roll of Lu177 Trastuzumab in patients with HER2 positive metastatic carcinoma breast

V. Future Projects:

- . 1. Pilot study: To evaluate the roll of Tc99m Mebrofenin Hepatobiliary Scintigraphy in predicting post hepatectomy Liver failure**

XIII. Brief write-up of Departmental events with photographs:

XIV. Academics

Academic activities of Dr.R.Krishnakumar

1. Faculty “SNMI –Southern Chapter, Hyderabad, August 2023
2. SNMI Annual conference, Jodhpur, 17 – 19th November 2023.

Academic activities of G.K.Rangarajan

1. Act as a external examiner for BSc AHS at Sri Ramachandra medical university & Hospitals, Porur – February 2024
2. Act as a external examiner for BSc NMT at TNDrMGR Medical university Apollo Hospitals, Chennai – July 2023

Ph.D. Synopsis submitted to Tamil Nadu DR MGR Medical University
Topic: Quality control, physical and clinical studies of Radionuclide
Imaging and Therapy of Nuclear Medicine

Student: G.K.Rangarajan, Scientific Assistant, Department of Nuclear Medicine
Guide: Dr.N.Vivekanandan, Head, Department of Medical Physics,
Cancer Institute (WIA), Adyar, Chennai 600 020

Co-Guide: Dr.Devakumar, Associate Professor, Department of Medical Physics,
Christian Medical College (CMC), Vellore

ONCOPATHOLOGY

Dr. Shirley, MD, DNB, MNAMS, Professor & Head of the Department

Additional Professor	Associate Professor
Dr. K. Murhekar MD	Dr. B.K. Karthik Bommanna MD, DM.(Hematopathology) Dr. A. Jhansi Rani MD, DNB, PDF

Assistant Professor	Junior Pathologist
Dr. Sithara Venkateshwar MD Dr. P.U. Swathy MD Dr. Sneha Suresh MD Dr. Banasri Devi MD Dr. M. Charanya MD	Dr. Nivedita Suresh MD

Other Staff

Scientist C, Scientific Assistants, Technologists, Research Assistants, Technicians, Lab Technician, Multi Tasking Staff, Typists, Data Entry Operator

Post Doctoral Student

Dr. Shireesha Mallik MD

DM OncoPathology Students

Senior Resident

Dr. Sneha K, MD; Dr. Priyanka D, DNB; Dr. Shreya Rath MD; Dr. Subrat Kumar Baliarsingh MD

DEPARTMENTAL STATISTICS	Cases
Histopathology	28175
Cytopathology	11796
Haematopathology	9835
Clinical Pathology	677241
24 Hours Laboratory	77457
Cytogenetics	326

COMPLETED PROJECTS

Significance of vacuolated lymphoblasts in precursor B-Acute Lymphoblastic Leukaemia patients.

Study the processing time of intraoperative oncopathology consultation (frozen section) in a tertiary cancer centre (NCG EQuIP QI project).

Role of interphase fluorescence in situ hybridization assay to evaluate recurrent structural chromosomal abnormalities among pediatric acute leukemia patients.

ONGOING PROJECTS

Establishment of Tumour Bank at the Cancer Institute (WIA), Adyar, Chennai.

DHR-ICMR Advanced Molecular Oncology Diagnostic Services (DIAMOnDS) Project, Department of Health Research, ICMR.

Borderline serous tumours of ovary – a clinicopathological study.

Renal cell carcinoma – role of immunohistochemistry in subtyping.

Evaluating the combined uses of morphology and flow cytometry to categorize Acute Myeloid Leukaemia.

MYC, BCL2 and BCL6 translocation in diagnosis, presentation and prognosis of Large B-cell Lymphomas – Tertiary Cancer Centre Experience.

Relevance of less than 0.01% end of induction bone marrow measurable residual disease among pediatric patients with B-Lineage Acute Lymphoblastic Leukemia.

FUTURE PROJECTS

Dynamic monitoring of genetic and epigenetic modifications in hormone receptor positive breast cancers.

Pseudomyxoma peritonei – a clinicopathological study.

Study of types and subtypes of lymphomas at Cancer Institute (W.I.A.).

Evaluation of proliferative index in tumours.

Measurable residual disease in Acute Myeloid Leukemia.

ACADEMIC PROGRAMME CONDUCTED

HEMATOCON 2023 Quiz program conducted on the behalf of Indian Society of Hematology and Blood Transfusion (ISHBT) on 29th July 2023 at Cancer Institute (W.I.A.), Adyar, Chennai.

National Pediatric Hematology and Oncology conference (PHOCON) Quiz on 25th November 2023 at Chennai.

PRESENTATION BY STAFF MEMBERS IN CONFERENCES

- Oral presentations

Dr.Kanchan Murhekar

Interesting case presentation of Anaplastic Large Cell Lymphoma with Haemophagocytic Syndrome at Annual Conference of TNPC-IAPM, TAPCON 2023 on 21st July, 2023 at Christian Medical College, Vellore.

Dr.Karthik Bommannan

Relevance of CD20 antigen expression among paediatric B-lineage acute lymphoblastic leukemia patients. 55th Congress of the International Society of Pediatric Oncology (SIOP) on 12th October 2023 at Ottawa, Canada.

Approach to B-ALL MRD: Panel designing, creating templates and analysis. 15th annual conference and workshop conducted by The Cytometry Society of India on 26th October 2023 at AIIMS, New Delhi.

Decoding flow cytometry. Mid-term CME of Telangana state chapter of the Indian Association of Pathologists and Microbiologists (IAPM) on 3rd Feb 2024 at Basavatarakam Indo-American Cancer Hospital and Research Institute, Hyderabad.

A teaching case on acute myeloid leukemia. Mid-term CME of Telangana state chapter of Indian Association of Pathologists and Microbiologists on 3rd Feb 2024 at Basavatarakam Indo-American Cancer Hospital and Research Institute, Hyderabad.

- Poster presentation

Dr.Karthik Bommannan

Interphase fish assay on air-dried bone marrow and blood smears: an efficient alternative for karyotyping to evaluate structural chromosomal abnormalities in pediatric acute leukemia patients. SIOP. 11th to 14th October 2023. Ottawa.

GUEST LECTURES BY STAFF MEMBERS

Dr. S. Shirley

An approach to diagnosis of lymphoma at APPCON LUMP 2023 on 6th July 2023 at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur.

Molecular Techniques in Histopathology Diagnosis at Kaleidoscope of Pathology-8 on 9th September 2023 at Chengalpattu Medical College, Chengalpattu.

Role of Immunohistochemistry in the approach to paediatric solid tumours at Tamil Nadu Pondicherry Paediatric Oncology Group (TPPOG) meeting on 9th September 2023 at Cancer Institute (WIA), Chennai.

Tumour-like lesions of Lymph Node at Diagnostic Pearls in Pathology on 23rd September 2023 at Madras Medical College, Chennai.

“From Specimen to Diagnosis: A Comprehensive Guide to Grossing” at CARE-PARE 2023 on 2nd December 2023 at Chettinad Academy of Research and Education, Kelambakkam.

Unveiling Molecular Insights in Lung Cancer on 1st February, 2024 at Chettinad Academy of Research and Education, Kelambakkam.

Dr. B.K. Karthik Bommanan

Measurable residual disease assessment in acute myeloid leukaemia. Tamil Nadu Pondicherry Paediatric Oncology Group (TPPOG) meeting on paediatric myeloid neoplasms on 22nd April 2023 at Cancer Institute (W.I.A.), Adyar.

Choice of kappa and lambda reagents and its impact on interpretation. Online education meeting of The Cytometry Society of India on 5th May, 2023.

Lymphoma case studies. 4th Online International Clinical Flow Cytometry Course (Online), Organized by Trust for Education and Training in Cytometry (TETC) on 1st-2nd October, 2023.

CME / WORKSHOPS CONDUCTED BY THE DEPARTMENT

CME on update in Acute Leukemias on 29th July 2023 at Cancer Institute (W.I.A.), Adyar, Chennai.

National workshop on Interphase FISH assay in hematological malignancies. PGI HemOnc Fest on 21st September 2023 at Post Graduate Institute of Medical Education and Research, Chandigarh.

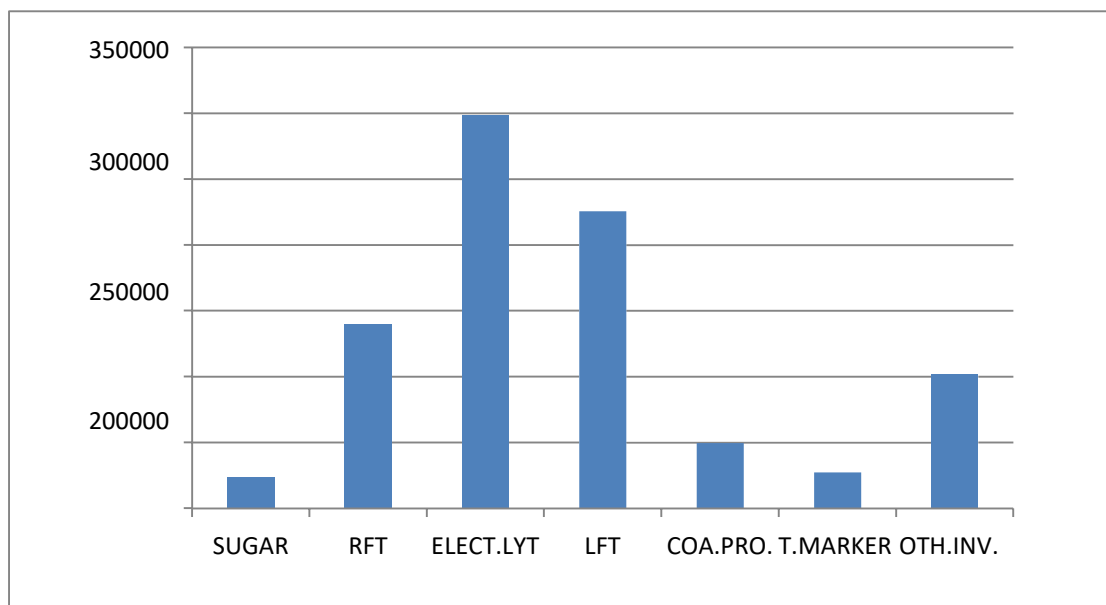


CLINICAL BIOCHEMISTRY

Dr. R. Arivazhagan Associate Professor, **Head of the Department**

Other Staffs: Scientific Assistants, Sr. Technicians, Technicians, Technologist, Jr. Technologist

Tests	Number
Blood Glucose	23,371
RFT	2,98,793
Electrolytes	2,98,793
LFT	2,25,594
Coag. Profiles	49,670
Tum. Markers	27,247
Other Investigations	1,02,296
Total	8,66,525



IMPORTANT EVENTS IN THE DEPARTMENT:

1. One new **Osmo Meter** was purchased and installed on 05-05-2023. And introduced Serum Osmolality and Urine Osmolality as in house tests.
2. **One new BA 200 chemistry analyzer** was purchased and installed in Main Center (Dr. VSC) on 18-2-2024.
3. A new test **Serum Cyclosporine** CLIA method assay was introduced as in house available test

Quality Control Program:

The Clinical Bio Chemistry Department is Maintaining Internal Quality Control with Bio system QC samples, and BIO-RAD two level daily for routine tests and Participating International EQAS program (monthly program) with BIO RAD, USA.

And for Tumor Markers using RANDOX QC sample daily and started to participate EQAS monthly Immuno Assay program with BIO RAD from January 2024.

ACADEMIC ACTIVITY IN THE DEPARTMENT:-

As we are giving **TWO WEEKS** internship training for 1st year M.Sc.Bio Chemistry, Bio Tech and B.Tech Bio Tech. students from out side institutions regularly, this year 76 students have Taken internship training in Clin.Bio Chem.Dept during May – December 2023.

Department Technicians were also attended 16 in-house training classes conducted by Dr. R. Arivazhagan as a part of NABH requirement.

1. Dr. R. Arivazhagan, Ms. Bhuvaneshwari, Ms. Durga Devi, Mr. C. Damodharan, Ms. Sumithra, and Ms.Premalatha under went 4 days ISO 15189:2022 Internal Audit Training course at MMC and Anderson's Laboratory under FQI and MELAP program as per NABL accreditation program.
2. Dr. R. Arivazhagan attended the 49th National Conference of ACBI At Thiruvananthapuram between 13th to 16th September 2023 and on 16th Sep. as a chairperson for a session.
3. Dr. R. Arivazhagan attended the national conference on “ Recent advances in Cancer research and diagnostic approaches “ at Prof.Dhanabalan College for women as a Chair person on 6th October -2023.

The Clinical Bio Chemistry Department celebrated the “**World Cancer Research Day**”

On 23rd September by conducting a CME program on “**Recent Trends in Cancer Research**”

With the theme of **Today's research is Tomorrow's Treatment. Dr. U Sathya Narayana, Director- Research (Rtd.)** Dr. Pinnaneni Sidhartha Institute of Medical Sciences, Vijayawada was the chief guest and gave the Key note address. He gave a talk On “Facts and fallacies of Medical Research in India “.

CLINICAL MICROBIOLOGY

Mrs. V. Varalakshmi Head of the Department & Associate Director (Admin)

Other Staff:

Dr. R Packia Nancy (M.D, DLO, Ph.D Microbiology), Assistant Professor
Senior Microbiologist, Scientific Assistants, Jr Scientific Assistant, Trainee Technologist,
Technologist, Trainee Technician & Technicians

The microbiology department provides comprehensive bacteriological, fungal, virological, and serological diagnostic service helping in treatment of patients with infection. A wide range of samples like blood, body fluids, urine, pus, respiratory secretions, pre op swabs, catheter tips, tissues, stool etc are received for culture, around 46,015 clinical samples and around 13,734 surveillance samples per year.

The department has BacT alert automated systems – 120 cells for blood culture specific for adults & pediatric patients there by help in reducing the turnaround time and results being available after a shortened incubation period of four hours instead of the conventional 24 hrs .

Department has a Vitek 2 Compact automated system for identification and susceptibility testing of bacteria and fungus. Aerobic, Anaerobic, Fungal and Mycobacterial culture of various clinical samples are performed routinely.

The Department has installed MALDI Biotyper System in July 2022 - Identifying Microorganisms by their Molecular Fingerprint, for rapid information on bacteria, fungus & mycobacteria with direct benefits on the patient outcome. Using traditional approaches, it takes at least 24 hours for obtaining growth from clinical specimens and an additional 24 hours for down-stream isolate characterization, as a consequence - therapeutic decisions are generally made empirically until the availability of species identification and resistance patterns. Techniques providing rapid information on bacterial pathogens and their antimicrobial susceptibility are of key importance for the management of infectious diseases patients. The introduction of MALDI-TOF into routine diagnostics at Cancer Institute (WIA) led to a significant acceleration of highly specific species identification and we regard this as a major advance in the field of clinical microbiology. . The MALDI Biotyper System identifies microorganisms using MALDI-TOF (Matrix-Assisted Laser Desorption / Ionization Time of Flight) mass spectrometry to determine a unique proteomic Mass fingerprint of an organism. From the culture plate it takes just 15 minutes (including sample preparation) to identify Microbes instead of 12 hours or more using other techniques. Turnaround time - Within half an hour of Growth & Blood culture: Within half an hour of positivity. While MALDI-TOF fingerprinting had originally been introduced and approved for the identification of solid media cultures, it has readily been adopted for liquid enrichment cultures, reduced turnaround times by at least one working day. MALDI-TOF technique is thus suitable to inform clinicians within the critical phase of sepsis, when laboratory reports are known to have highest impact on treatment decisions.

The department has been helping in active surveillance of infections at high-risk areas – CLABSI, UTI, SSI & VAP, helps monitoring antibiotic resistance, preventing spread of infections, involved in surveillance of OT's, ICU's, BMT Unit, various wards, CSSD, Blood Bank, health care personnel and biomedical waste management for better infection control & conducts continued education for nursing and paramedical staff.

Infection control is a major responsibility of the department, periodic training is given to ICN's on all aspects of infection control, regular review of infections and antibiotic policy to limit the spread of infections & resistance is being done.

Following the Institute policy of providing a safe hospital environment for our patients, we ensure adherence of strict infection control practice at all levels of the hospital. Relevant cultures are sent at the first suspicion of infection to identify focus and antibiotic initiation is done after sending cultures. Compliance with antibiotic policy is reviewed periodically & all efforts are made to reduce overall antibiotic use.

As part of the NABH journey, we have initiated many quality control activities like Quality Assurance Programme, Quality Objective, Quality Indicator / KPI's. at the department.

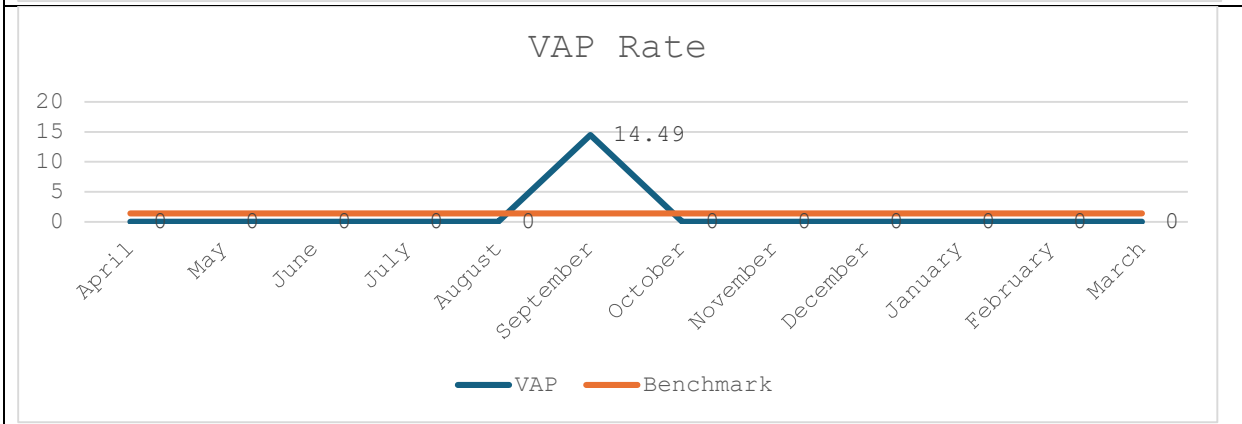
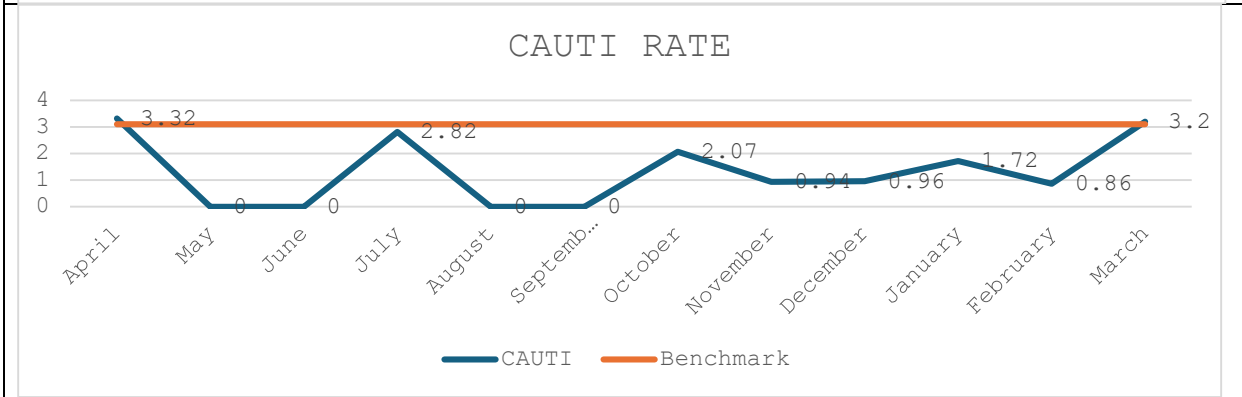
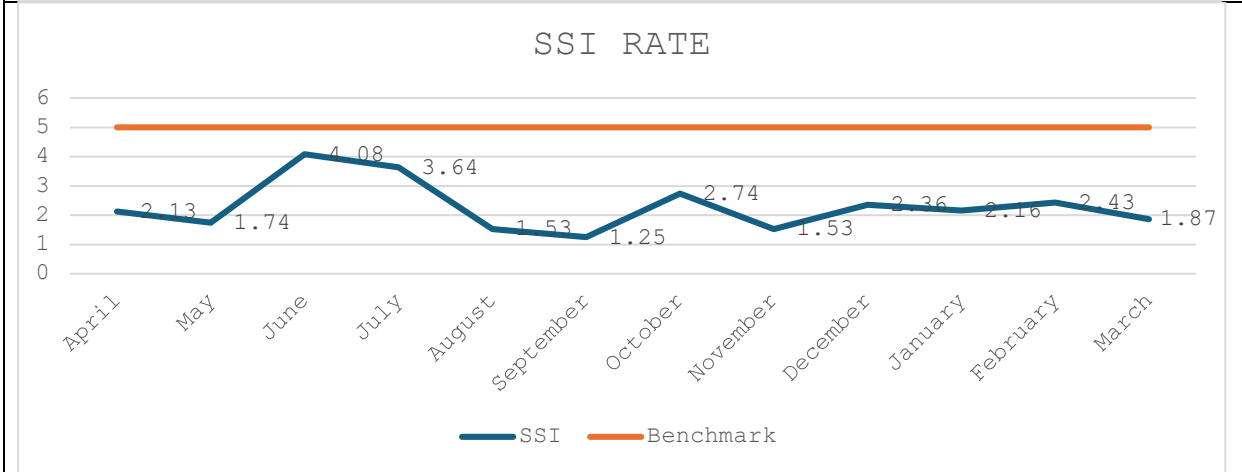
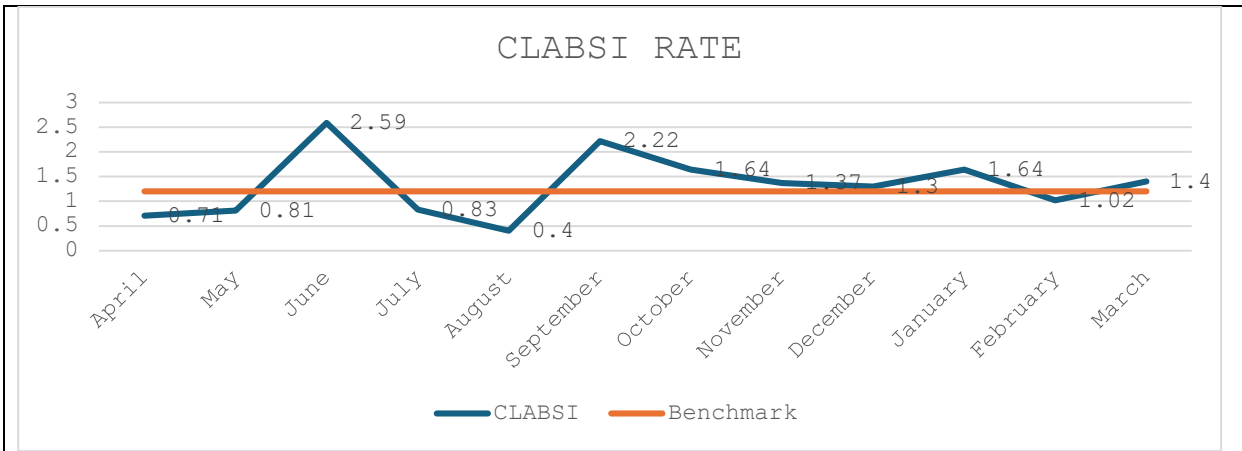
S.NO	SPECIMEN RECEIVED FROM APRIL 2023 - MARCH 2024	No: of specimens
1.	AFB	135
2.	AFB Culture	33
3.	ASO	1
4.	Automated ID/AST (Rapid culture)	48
5.	Ascitic fluid for AFB Culture	19
6.	Ascitic fluid for Culture and Sensitivity	55
7.	Automated – Central line blood (Blue) for Culture and Sensitivity	1
8.	Automated – Central line blood (Green) for Culture and Sensitivity	3
9.	Automated – Central line blood (Red) for Culture and Sensitivity	3
10.	Automated – Enteric blood for Culture and Sensitivity	3
11.	Automated Blood (Central) for Culture and Sensitivity	361
12.	Automated Blood (Peripheral) for Culture and Sensitivity	2118
13.	Automated Blood for Culture and Sensitivity	624
14.	Automated ID/AST and MALDI TOF – all cultures	7020
15.	BMA for Culture and Sensitivity	1
16.	Bile for Culture and Sensitivity	35
17.	Biopsy for Culture and Sensitivity	3
18.	Blood Widal test	29
19.	Blood for Fungal Culture and Sensitivity	15
20.	Bronchial Wash for AFB	62
21.	Bronchial Wash for AFB Culture	58
22.	Bronchial Wash for Culture and Sensitivity	90
23.	CRP	4287
24.	CSF for AFB	15
25.	CSF for AFB Culture	8
26.	CSF for Culture and Sensitivity	55
27.	Catheter tip	9
28.	Central Line tip	193
29.	Clostridium Difficile GDH Toxins A and B	41
30.	Culture & Sensitivity	436
31.	Culture Of	2
32.	ETT Swab for Culture and Sensitivity	5
33.	ETT tip	2
34.	FNAC for AFB	2

35.	Fluid for Culture & Sensitivity	68
36.	Fungal Culture	91
37.	Fungal Culture for skin scrapping	1
38.	Fungal stain	63
39.	Gram Stain - direct	21683
40.	Gram Stain – from samples	1220
41.	Mantoux Test	95
42.	Pericardial fluid for AFB	1
43.	Pericardial fluid for Culture and Sensitivity	1
44.	Peritoneal fluid for AFB	1
45.	Peritoneal fluid for Culture and Sensitivity	1
46.	Pleural fluid for AFB	48
47.	Pleural fluid for AFB Culture	10
48.	Pleural fluid for Culture and Sensitivity	103
49.	Pre OP Swab for Culture	47
50.	Pus for Culture and Sensitivity	116
51.	Pus swab for Culture and Sensitivity	118
52.	RA Factor	19
53.	Sputum for AFB X 3 days	137
54.	Sputum for AFB Culture	132
55.	Sputum for Culture and Sensitivity	953
56.	Sputum for Fungal culture	64
57.	Sputum in Tracheal Tube	22
58.	Stem Cell Culture	77
59.	Stool Hanging Drop Method	2
60.	Stool for Culture and Sensitivity	1106
61.	Synovial fluid for Culture and Sensitivity	2
62.	Throat Swab for Culture and Sensitivity	25
63.	Tissue for Culture and Sensitivity	63
64.	Urine for Culture and Sensitivity	3479
65.	Urine for fungal culture	7
66.	Vaginal Swab for Culture and sensitivity	8
67.	Wound Swab for Culture and Sensitivity	301
68.	Anaerobic cultures	179
70.	Operation theater surveillance	8600
71.	Ward / personel	1943
72.	CSSD	923
73.	ICU/ BMT	299
74.	Water analysis	1768
75.	Blood bank	201
Total no of Samples		59749

SUMMARY OF INFECTION RATES APRIL 2023 TO MARCH 2024

Month	CLABSI	SSI	CAUTI	VAP
April	0.71	2.13	3.32	0
May	0.81	1.74	0	0
June	2.59	4.08	0	0
July	0.83	3.64	2.82	0
August	0.4	1.53	0	0
September	2.22	1.25	0	14.4 9
October	1.64	2.74	2.07	0
November	1.37	1.53	0.94	0
December	1.3	2.36	0.96	0
January	1.64	2.16	1.72	0
February	1.02	2.43	0.86	0
March	1.4	1.87	3.2	0
Infection Rate Benchmark as per National Health Care Safety 2013	1.2	5%	3.1	1.43
ICU Benchmark as per Inter Noso inf consortium	5.36	2.3%	4.1	4.2

*The above infection rates are discussed in HICC meetings & CAPA taken accordingly.



Increased rates of Ventilator Associated pneumoniae – CAPA Measures taken

Corrective action:

- Antibiotic Escalation.
- Mechanical Ventilation to be optimized.
- PEEP optimized, secretion clearance to be facilitated.
- Careful attention to Post - operative wound care is necessary.
- Skin around Tracheostomy wound to be cleaned with povidone Iodine frequently.

Preventive action:

- Head end elevation.
- Keep Cuff pressure >20 cm H₂O.
- Avoid Stress ulcer prophylaxis.
- When possible, manage condensate from Humidity.
- Regular Sedation interruption. To look for readiness to wear manual sedation.
- Proper oral care & positioning & ulcer prophylaxis implemented.
- Nurses & Doctors trained with basics of VAP & its prevention.

Increased rates of Central line associated Blood stream infections – CAPA Measures taken

Corrective action:

- Immediately the Critical alerts are informed to concerned doctor & ICN.
- Isolation.
- Antibiotic escalation based on Antibiotic policy.
- Frequent rounds & audits.

Preventive action:

- Training.
- Audits.

ANTIBIOTIC SUSCEPTIBILITY PATTERN – SENSITIVITY % 2023 – 24

BLOOD

Organism	I	ME	PT	CS	AK	CFL/LE	CU/CI/CE	CL	LZ	VA	TE	TGC
Pseudomonas	97	97	97	97	97	97	NA	100	NA	NA	NA	NA
Staph aureus	52	52	52	52	52	52	52	NA	100	100	100	100
Klebsiella	35	35	35	35	38	29	22	100	NA	NA	NA	100
Escherichia coli	48	48	48	48	52	35	20	100	NA	NA	NA	100

WOUND SWAB

Organism	I	ME	PT	CS	AK	CFL/LE	CU/CI/CE	CL	LZ	VA	TE	TGC
Staph aureus	93	93	93	93	86	21	76	NA	100	100	100	100
Pseudomonas	89	89	89	89	89	89	NA	100	NA	NA	NA	NA
Escherichia coli	78	78	75	75	82	22	13	100	NA	NA	NA	100
Klebsiella	69	69	66	66	83	45	28	100	NA	NA	NA	100

RESPIRATORY SAMPLE

Organism	I	ME	PT	CS	AK	CFL/LE	CU/CI/CE	CL	TGC
Pseudomonas	84	84	88	84	88	75	NA	100	NA
Klebsiella	80	80	79	79	81	52	43	100	100
Escherichia coli	92	92	92	92	95	50	38	100	100

URINE

Organism	I	ME	PT	CS	AK	CFL/LE	CU/CI/CE	CL	LZ	VA	TE	TGC
Escherichia coli	83	83	85	80	85	26	25	100	NA	NA	NA	100
Enterococci	55	55	55	55	NA	55	NA	NA	100	99	99	100
Pseudomonas	72	72	67	56	67	55	NA	100	NA	NA	NA	100
Klebsiella	69	69	62	58	75	41	29	100	NA	NA	NA	100

Abbreviations used.

- ✓ I – Imipenem
- ✓ ME – Meropenem
- ✓ PT – Piperacillin / Tazobactam
- ✓ CS – Cefoperazone / Sulbactam
- ✓ AK – Amikacin
- ✓ CFL/ LE – Ciprofloxacin/ Levofloxacin
- ✓ CU/ CE/ CI – Cefuroxime/ Ceftriaxone/ Cefotaxime
- ✓ CL – Colistin
- ✓ LZ – Linezolid
- ✓ VA – Vancomycin
- ✓ TE – Teicoplanin
- ✓ TGC- Tigecycline
- ✓ NA – Not applicable

Take home Message : 2023 -24 Antibiotic Susceptibility

Staphylococcus aureus

- Incidence of MRSA is around 3% (SSI).
- Linezolid, Vancomycin, Teicoplanin shows 100 % Susceptibility for MRSA.
- Clindamycin shows 95% Susceptibility for MSSA, while 20 % for MRSA.
- Amikacin shows 10% Susceptibility for MRSA.

Antibiotic Policy review 2023 by Medical Oncology

- Amikacin and Piperacillin tazobactam sensitivity is better, may bring it back into our clinical use.
- Gram positive isolates are less common than gram negative isolates.
- Use of Vancomycin and Teicoplanin can be reduced.
- MDR Klebsiella pneumonia – a menace, only sensitive to Colistin and Tigecycline.

Enterococcus (MDR): Mostly isolated from Stool.

- Linezolid shows 100 % Susceptibility.
- Vancomycin, Teicoplanin shows 90 % Susceptibility.
- Vancomycin, Teicoplanin resistance (VRE) seen Mostly with Enterococcus faecium.

Escherichia coli / Klebsiella

- Colistin & Tigecycline shows 100 % Susceptibility (No resistant strain in 2023 -24).
- Susceptibility to Imipenem – 75%, Meropenem is around 77 %.
- Ecoli/ Klebsiella reported from Stool is 100 % MDR.
- Susceptibility to 1st, 2nd& 3rd génération Cephalosporin is around 32% only.
- Piperacillin/Tazobactam shows 87% while Cefaperazone/sulbactam shows 86% & Amikacin shows 91% Susceptibility.
- ESBL Positivity is around 14%.
- Carbapenamase production is around 30% - 35%.

Various surveillance activities done at microbiology.

- ❖ Theatre surveillance both at weekends and in between
- ❖ Special ward & General Ward rooms' surveillance after fogging
- ❖ Random Surveillance of Theatres & Wards
- ❖ ICU Surveillance. (Before & after fogging)
- ❖ CSSD surveillance
- ❖ Blood bank – Blood Bags, Platelets, SDP, RDP etc
- ❖ Kitchen food handlers stool culture, Nail culture
- ❖ Kitchen food analysis
- ❖ Water analysis of various Sump & Overhead tank at Dr.SKC & Dr SC, RO Water, well water, Borewell water, Atmospheric water, CSSD Sterilizer water and Potable Drinking water (Can water) & STP treated water
- ❖ OT Staffs Nasal screening for MRSA
- ❖ Doctors & Nurses hand cultures
- ❖ New chemical & Disinfectant Capacity testing etc.

Continuous Quality Improvement Activities as per NABH requirements

1. Internal Quality assurance
2. External quality assurance
3. Quality objectives:
 1. To improve the Turnaround time of Gram stain smears from 3-4 hrs. to 2 hrs. during Night duty hours
 2. Percentage of Variance in EQAS
 3. To reduce the deviations in Turnaround time of Blood cultures from ICU / BMT
4. Quality assurance program
5. Service standards
6. Key performance indicators
 1. No of reporting errors per 1000 investigations
 2. No of redos
 3. % of adherence to safety precautions by staff working in diagnostics
 4. Incidence of Needle stick injuries
 5. No of blood body fluid exposures
 6. % of Discrepancies in Cross culture of a sample by a 2nd technician
 7. Samples delayed in transport from ward to Laboratory ≥ 45 min
 8. % of Deviations in critical alert information
7. Training on Key result area.

Academics

Ms. Varalakshmi successfully completed four days Green Belt training and examination for professional attainment meeting the requirements of Council for six sigma certification (CSSC)-USA from 20th Dec 2023 to 23rd Dec 2023.

Ms. Varalakshmi successfully completed 2 days course on “**International Lead Auditors & Laboratory Management System Requirement**” certificate course as per ISO 15189:2022 and ISO/IEC 19011 conducted by Melap Institute in November,2023.

Ms. Harini, Valarmathi, Saraswathy, Samudra & Meena completed 4 days course on “**International Lead Auditors & Laboratory Management System Requirement**” certificate course as per ISO 15189:2022 and ISO/IEC 19011 in December 2023.



MEDICAL GASTROENTEROLOGY & ENDOSCOPY [MGE]

Faculties:

1. Dr. [Sqn Ldr] N. Thirumoorthi -Asst. Prof
2. Dr. L. Sujatha-Asst. Prof
3. Dr. S. Baraneedaran-Asst. Prof

Endoscopic services have been provided at our institute since the 1970s, with a focus on Medical Gastroenterology for oncological patients over the past five decades. Our dedicated Gastroenterology team enhances early GI cancer diagnosis and nutritional management, crucial for positive cancer treatment outcomes. The Department of Medical Gastroenterology, Hepatology & Endoscopy was officially established on March 10, 2022. In June 2024, we inaugurated an advanced endoscopic operating theatre, offering a comprehensive range of diagnostic and therapeutic procedures, including stent placement, clipping, endoscopic ultrasound-guided gastrojejunostomy, and endoscopic submucosal dissection. We provide regular Medical Gastroenterology OPD services from Monday to Friday, attend to oncological inpatients with gastrointestinal issues, and conduct academic classes for nursing students and postgraduates.

Endoscopies performed by our department from Jan 2023 to Dec 2023:

S.No.	PROCEDURES	No. of cases
1	Direct Laryngoscopy and Pharyngoscopy	1902
2	Oesophago Gastro Duodenoscopy	1124
3	SG Dilatation	85
4	Naso-Gastric tube insertion	335
5	Naso-Jejunal tube insertion	56
6	Colonoscopy	615
7	Sigmoidoscopy	148
8	Colonic SEMS	8
9	Endoscopic Ultrasound – Diagnostic	56
10	Percutaneous Endoscopic Gastrostomy	3
11	Side View Scopy	13
12	Esophageal SEMS	6
13	Pyloric SEMS	1
14	CRE Balloon Dilatation	36
15	ERCP	27
16	ERCP-SEMS	17
17	ESD	1
18	NBI	5
19	APC	11
20	EUS-GJ	1
21	POLYPECTOMY	13
22	EVL	1
23	OVESCO CLIP	1
24	Esophageal Stent removal	1
25	ERCP Plastic stent removal	2

Conferences attended:

1. IAP-IPC joint International Conference, New Delhi (September 2023)
2. DRILLS, New Delhi (June 2023)
3. TNISGCON Midterm Conference, Trichy (March 2023)
4. ISGCON, Jaipur (January 2023)

OP CENSUS 2023

S.No.	MONTH	No of cases
1	January	254
2	February	256
3	March	245
4	April	219
5	May	268
6	June	299
7	July	336
8	August	393
9	September	334
10	October	391
11	November	376
12	December	308



புற்றுநோய் சில அறிகுறிகள்



இந்த அறிகுறிகள் ஏதேனும் தென்பட்டால் உடனே புற்று நோயாக இருக்குமோ என்று பயப்பட வேண்டாம். தாமதிக்காமல் மருத்துவ ஆலோசனை பெறுங்கள்.

PHYSIOTHERAPY

**Mr. Srinivasan Vijay, (Ph.D), MPT (Ortho), PGDSM, PGDTC, CLT (ACOLS),
Chief Physiotherapist & Head of the Department
Dr. M.S. Satish, MPT (Neuro), MSc (Psy), Ph.D., Chief Physiotherapist**

Other Staff: Senior & Junior Physiotherapist, Physiotherapist

Statistics			
In Patients (SOG+ MOG+ROG)	5,140	Internship students & Clinical postings	198
Out Patients	4,890		
Total	10030		

Completed projects, if any (Title with brief summary)

Prevalence of Lymphedema and the Effectiveness of Complete Decongestive Therapy (CDT) in comparison with Pneumatic Compression Therapy in Managing Upper Limb Lymphedema among Breast Cancer Survivors.

Ongoing projects

Factors determining shoulder dysfunction and Effectiveness of prehabilitation on physical and psychological problems in breast cancer patients with modified radical mastectomy.

Publications from the Department – published materials only

I. Satish MS, Vidhubala E, Veeriah .S, Vijay.S, Krishnamurthy.A, Selvaluxmy .G. Effectiveness of structured exercise intervention in cancer -Related fatigue among oral cavity cancer patients; A Randomised Control Trial. Indian J Med Paediatr Oncol 2023, May 17.

Academic programme conducted/ Collobarated:

Dept of Physiotherapy collaborated with Indian Association of Palliative Care to conduct the certificate course in physiotherapy-palliative care interface, organised virtually by Indian Association of Palliative care on Dec 2nd 2023

CME/Seminar/Symposium/Workshops conducted by the Department with a brief report:

1. Conducted one day hands on workshop on Breast Cancer Related Lymphedema (BCRL) workshop on CDT at Cancer institute (WIA) Chennai on 6th March 2024.
2. Conducted a survivors Program on “**Patient engagement and Experience**” on World physiotherapy day on September 8th at cancer institute (WIA) Chennai.

Brief write-up of departmental events with photographs wherever necessary

World Lymphoedema day Work Shop Conducted at cancer institute

A one day Hands on Work Shop was Conducted jointly by Sree Balaji College of Physiotherapy and Cancer institute (WIA) at Cance Institute. The work shop was attended by a total 45 Physiotherapist from Sree Balaji College and Hospital.

Patient engagement and Experience” on World physiotherapy day on September 8th at cancer institute (WIA

Youth Health Mela Stall in the 7th Youth health mela organised by cancer institute (WIA) from Feb 15th -17th Feb2023.

Best Awareness stall in YHM “Health is worth than Learning”



QUALITY CONTROL DEPARTMENT

Dr. Kalpana, DA, DNB
Mrs. Varalakshmi, MSc, MBA
Mrs. Jayapradha B.Sc., MBA
Mr. Vignesh Thiyagarajan B.Com, MBA
Mrs. K. Sujatha BA
Ms. K. Brindha MA







Chairman
Head & NABH Coordinator
Quality Manager
Assistant Quality Coordinator
Patient Safety & Quality Co-ordinator
Patient Safety & Quality Co-ordinator

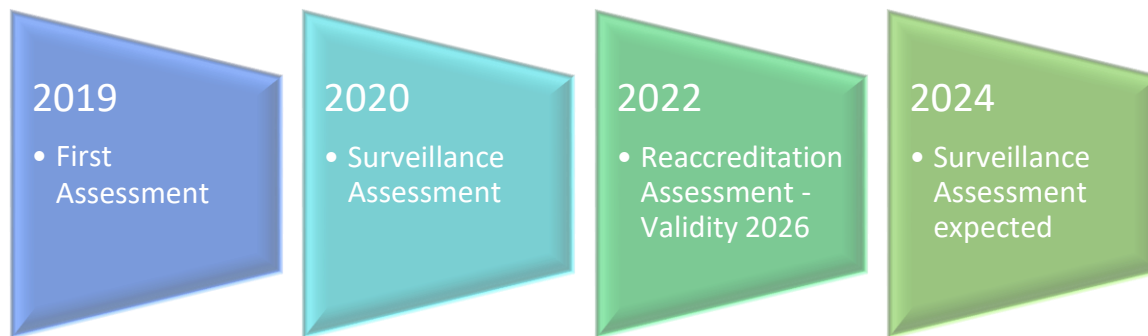
Cancer Institute (WIA) is committed to provide a health care quality that matches the definition, viz. safe, effective, efficient, equitable, timely and patient centered that in turn satisfies the standards set forth by National Accreditation Board for Hospitals and healthcare providers.

The Institution aspires to be a Centre of Excellence in Oncology providing quality treatment and service with state of the art facilities, teamwork of reputed health care specialists and dedicated staff.

The Quality department of the Institute, supports by implementing the various hospital quality measures and NABH standards, so that the entire function is in a desirable state. This in turn shall improve patient experience and patient satisfaction.

CANCER INSTITUTE (WIA)
OUR DIMENSIONS OF QUALITY HEALTHCARE

SAFE We consider Safety as the property of our healthcare system. Hence, we ensure Safe practices in our culture		EFFECTIVE We work to match the best available scientific knowledge—neither under using nor overusing techniques, tests, and medicines.	
	PATIENT CENTERED Patient's culture, social context, and specific needs influence treatment decisions. This system gains patients' trust and responds to their needs and expectations.	TIMELY We work to avoid delays & Unintended delays are a system defect that can have consequences on patients' health.	
EFFICIENT We constantly seek to reduce the waste (and hence the cost) of supplies, equipment, space, capital, time, and opportunities. Reducing such waste provides space and time for effective practices		EQUITABLE Patients' race, ethnicity, gender, language, disability, caste, income, sexual identity, or health status does not prevent them from receiving high-quality care. We make sure the benefits may reach everyone equally.	



Programs Attended

Jayapradha T

- Design Thinking by Consortium of Accredited Healthcare Organizations
- Certification in Digital Health Standards by Consortium of Accredited Healthcare Organizations
- Patient Reported Experience Measures(PREMs)- A tool to elevate patients' voice by Consortium of Accredited Healthcare Organizations
- General Awareness Program on NABH Digital Health Standards

Vignesh Thiyagarajan

- General Awareness Program on NABH Digital Health Standards

Sujatha K

- General Awareness Program on NABH Digital Health Standards

Brindha R

- General Awareness Program on NABH Digital Health Standards

A structured quality improvement and continuous monitoring programme at Cancer Institute (WIA) which is developed and implemented, is communicated and coordinated amongst all the staff of the organization through appropriate training mechanism like induction, in service etc. & the programme is reviewed at pre-defined intervals to find opportunities for improvement.

ACTIVITIES IMPLEMENTED:

PATIENT REPORTED EXPERIENCE MEASURES – PREM – IN PATIENTS

Patient experience goes beyond patient satisfaction and making the patient happy. In addition to collecting patient feedback, the capture patient experience including communication with doctors and nurses, pain management, hospital environment (cleanliness and quietness), the responsiveness of hospital staff, discharge information, communication about medications and overall rating of the hospitals are also captured and portrayed to the Management for further action.

PREM for IP Patients are monitored under the categories of Doctors, Nurses, Investigations, Diet, Physiotherapy, OPD, Discharge, House-keeping, Maintenance and Others with the escalation process

The Process of Escalation was implemented for the processes where the rating by the patients is 3 and below. Each category has an Escalation officer who will be informed through a SMS as and when the rating falls 3 and below.

Action is taken accordingly and the same is logged in to the system. In case, the failure of the escalation officer to act within 48 hours, the same shall be taken up to the Director's Dashboard. This facilitates immediate response to the unhappy patients ensuring that the patients are immediately attended to, at times of distress. Another leap to improve Patient Satisfaction.

PATIENT REPORTED EXPERIENCE MEASURES – PREM – OUT PATIENTS

Though the visit of the OP Patients is for a very short span, in spite of the duration, the several facilities of the organisation are made use of. So, to monitor their feedback and opinion was essential. A relevant questionnaire was prepared and initiated to value the OP population.

Categorizing the Out patients feedback to the Admission, Registration, Cash, Doctors, Nursing, Clearing and Investigations, this is being now captured at all the OP areas.

A Similar escalation like IP PREM is also followed for the OP capture also.

PATIENT REPORTED OUTCOME MEASURES – PROM

This survey is captured to the same set of patients before the initiation of the treatment and also on completion of the treatment. This shall provide an insight into the health analysis which shall improve the Doctor-Patient communication which in turn shall improve the Patient Satisfaction. This measures the patient perception of their functional well-being. This is now worked upon to monitor the treatment outcome of the cervical cancer patients in the department of Radiation oncology. It has also been decided that the PROM and its capture can be changed every half yearly to screen patients of different entities.

INTERNAL AUDITS

Audits are steps to enhance Patient Safety. Internal Audits in various areas are conducted to ensure compliance within the departments. Hospital Wide Audits are also part of the Internal Audits. The findings and corrective and preventive measures are documented. The Corrections are implemented. Audits on Nursing Practices, Facility Management System, Hospital wide, 3 rounds of NC Closure Compliance Audit and Crash Cart were conducted.

These audits pave way to stay in compliance to the standards.

- Crash cart Audit
- Medication Storage Audit
- Order Verification Audit
- Hospital Wide Audit
- Non Compliance Closure
- Audit on the areas graded below 3 during assessment

- Patient Safety Devices Audit
- Quality Rounds
- Documentation of Initial Assessment in wards

PRESCRIPTION AUDIT

This Monthly Audit across the Institute undergoes an audit of medication orders/prescription to check for safe and rational prescription of medications. The findings from these audits are disseminated for the GAP Closure and further implementation.

MEDICAL RECORD REVIEW

Conducted every month across the 3 units, a review on Medical Records is implemented to ensure the compliances to documentation in the records. This has been implemented as an electronic process for the ease of use and for the ease of data analysis. The findings with non-compliances, like other audits are to be closed and needs to be brought into practice.

ANALYSIS OF KEY INDICATORS

Quality indicators are the means to judge the performance of parameters selected. All the mandated indicators by NABH are monitored by various departments and are summarized by the Quality department.

1	Time for initial assessment of In Door patient
2	Number of Reporting Errors/1000 Investigations
3	Percentage of adherence to safety precautions by employees in diagnostics.
4	Medication Error Rate
5	Percentage of medication charts with error prone abbreviations
6	Percentage of In patients developing adverse drug reaction(s)
7	Percentage of unplanned return to OT
8	Percentage of cases where the organization procedure to prevent adverse events like wrong site, wrong patient, wrong surgery have been adhered to.
9	Percentage of transfusion reactions
10	Standardised Mortality ratio for ICU
11	Return to the emergency department within 72 hrs with similar presenting complaints
12	Incidence of hospital associated pressure ulcer after admission (Bed sore per 1000 patient days)
13	Catheter Associated UTI (CAUTI)
14	Ventilator Associated Pneumonia (VAP)
15	Central Line Associated Blood Stream Infection (CLABSI)
16	Surgical Site Infection (SSI)
17	Hand hygiene Compliance rate
18	Percentage of cases who received appropriate prophylactic antibiotic within the specified timeframe
19	Percentage of re- scheduling of surgeries
20	Turnaround time for issues of blood and blood components
21	Nurse- Patient ratio for ICUs
22	Waiting time for out- patient consultation

23	Waiting time for diagnostics
24	Time taken for discharge
25	percentage of medical records having incomplete and / or improper consent
26	stock out rate of emergency medications
27	Number of variations observed in mock drill
28	Patient fall rate (Fall per 1000 patient days)
29	Percentage of near misses
30	Incidence of needle stick injuries
31	Appropriate handovers during shift change (To be done separately for doctors and nurses) – (per patient per shift).
32	Compliance rate to medication prescription in capitals

OTHER ADDITIONAL KPI MONITORED

Radiation Oncology

Work Load - Patient Staff Ratio

% of Patients treated with newer technologies

Medical oncology

Day Care - Average Waiting Time (min)

Average No of Days to start Systemic Therapy

Surgical oncology

Duration time between patient induction time with handing over time

Duration time between handing over time with incision time

TEMPERATURE MAINTENANCE & REFRIGERATOR USAGE FOR MEDICATION

In order to provide more clarity on the temperature maintenance and the storage of medication in the refrigerator, it was decided to conduct an audit just to monitor the usage of refrigerators.

A team was identified in co-ordination to enable the audit.

A Checklist was created to capture, especially in the ward with relevant to the refrigerators. Based on the Checklist, an audit of the refrigerators used for medication storage was conducted in both the campuses.

Changes & Training were implemented based on the Audit findings. Re-audit was also conducted in a periodic manner to confirm the implementation of the changes

CLINICAL AUDIT

Clinical audits are conducted as a quality improvement tool to improve the quality of patient care.

The Quality department ensures that the clinical audits are conducted by the 3 units every year.

MOG - The drug charts of inpatients admitted under Medical Oncology were reviewed for prescription details.

SOG - Morbidity and Mortality & Quality indicators in Head and Neck Surgical Oncology

ROG - Performance evaluation of TLD badge utilization

NURSING AUDIT

Nursing Audits are detailed review and evaluation of selected nursing processes by qualified professional to identify, examine, or verify the performance of certain specified aspects of nursing processes by using established criteria. This assists in evaluating Nursing care given, Achieving deserved and feasible quality of nursing care, Stimulating better nursing processes and focus on patient care.

The following procedures were chosen for the audit

- a. PICC Line
- b. Bladder Irrigation
- c. Tubing Misconnection
- d. Tube Feeding

CLINICAL CARE PATHWAY

Clinical care pathways are standardised evidence-based, multidisciplinary management plans. They identify an appropriate sequence of clinical interventions, timeframes, milestones and expected outcomes for the patients. The pathways provide the team, detailed guidance at various stages of care. Here, at Cancer Institute, the following pathways were developed to improve the Quality of care

- Clinical care pathway in the management of lung carcinoma
- Clinical care pathway in the management of cervical cancer
- Clinical care pathway in the management of endometrial cancer
- Adult solid tumour protocol book

- Care Pathway for Physiotherapy in Inpatient Care
- Care Pathway for Physiotherapy in Outpatient Care
- Care Pathway for Physiotherapy in Breast Cancer
- Care Pathway for Physiotherapy for Intensive Care patients
- Care Pathway for Physiotherapy in Physiotherapy for musculoskeletal Cancer
- Care Pathway for Physiotherapy in Mobilisation in ICU

CONDUCT OF THE CORE COMMITTEE

As part of a structured quality improvement and continuous monitoring program, we at Cancer Institute have formed the Quality Improvement committee. The Members of the Committee are from various departments to form a multi-disciplinary team. This committee meets every month to discuss the various initiation and the improvement across the organization.

- Modification of Drug chart to enable more space for the regular drug prescription.
- Allocation of beds for the ROG in case of an Emergency
- Grading of Inter departmental referral as - Immediate, Urgent & Routine

- Implementation of the SBAR tool for the Clinical Handover by the doctors
- Changes to the Prescription Audit checklist
- Choice of topics for PROM
- Conduct of HIRA Audit
- Observation of Gaps in Crash cart Audit
- SMS to Doctors on Critical Value Alerts
- Updation of the format of the Discharge Instructions to patients
- Replacement of medicine refrigerator
- Rectification of stagnation of rain water within the premises
- Updation of the Formulary
- Review of the policy on patients who are brought dead
- Ambulances to possess Emergency medical kits
- All Internal Audits Corrective action

COMMITTEE REVIEW

The Institute has several committees functioning on a periodicity to address various topics. The review of these committees are addressed to the Director every quarter. The Committees:

Continuous Quality Improvement Core Committee
 Cardio Pulmonary Resuscitation Committee
 Internal Complaints Committee
 Safety & Risk Management Committee
 Hospital Infection Control Committee
 Laboratory Safety Committee
 Pharmaco therapeutics Committee
 Blood Transfusion Committee
 Credential and Privilege Committee
 Purchase Condemnation Committee
 Facility Inspection Rounds Committee
 Hospital Infection Control Committee
 Patient safety Committee

TRAINING

Quality Improvement includes People improvement which in turn will lead to process improvement.

Training is an integral part of People Improvement. Training has the potential to help gain an edge, build competency, boost efficiency and Improvement, enabling consistent knowledge sharing. Trainings by the Quality department is a continuous process to enhance the knowledge of the staff involved in the Quality Improvement processes.

- Training Topic
- Quality Indicators Maintenance & Medication Storage
- NABH Standards
- Introduction to NABH Standards
- Basic of ALL 10 Chapters in NABH
- Basic of Internal audits & Quality Improvement Programme

- Quality Aspects of Nursing
- Basic of Hospital Wide audits
- NABH Nursing Standards & Quality Indicators
- Registration & Admission Process
- Quality Indicators & Quality Aspects
- HRM Standards
- Surgical Safety, Time out, Sign Process, Taking Consents from patients & Quality Indicators
- FMS & HIC Chapters
- Quality Indicators & Quality Aspects
- Prescription Audit
- Nutritional screening, Assessment & safe handling of food
- PSQ Standards
- Hepa - filter area in SOG 01 & RO Water Sterilize & importance
- Quality Indicators & Medication Management
- Narcotic Maintenance, Nursing QI & NABH Aspects
- Training Guidance for Nursing Tutors to Nurses

PATIENT SAFETY WEEK

Patient Safety Week 2023 was celebrated in September in the Institute. The Theme “Keeping our promise to do the sick no harm” was meticulously celebrated with various activities and imparting education to our patients.

Every day of the week was focused on various topics on the emphasis on Patient Safety

a. Engaging Patients for Patient Safety

Educate the patients to understand the important role they play in achieving Safe care. Focus was to educate and empower the patient and the family to take an active role in their care. Involve those who are most impacted by decisions. Strengthening the patient grievance mechanism

b. Mock Drills

Mock drills were conducted as a part of the program to ensure and improve patient safety. The mocks play a significant role to help handle the real time scenarios

c. Medication Safety

Medication Safety ensured is Patient Safety ensured. So Safeguarding the Medication Safety is a big leap in patient safety. Educating and Emphasis was a part of the campaign

d. Hand Hygiene

Maintaining a hygienic hands in the clinical environment is very important for the patients as well as the clinical staff. The importance of the same was stressed upon via education, poster making, presentation of a video on the procedure, etc to make the hand hygiene very effective in the environment

e. Poster / Slogan Competition on International Patient Safety Goals

Numerous and overwhelming participation from the Nurses fraternity was seen to emphasise the International patient safety goals. Sample is given below

ONLINE DOCUMENTATION OF CRITICAL VALUE ALERT

Critical Alert Value after receiving them from the diagnostic services have to be documented along with the intervention. This process was not regular and experienced certain difficulties in implementation. The Quality department created an online documentation process for the clinicians to ensure the completeness in documentation and also to ease the process. At the on look of any Critical values by the diagnostic department, an SMS is being sent to the corresponding consultant for further action. The link to the online documentation is also sent along. A sample is below

PATIENT FEEDBACK ON THE WEBSITE

In order to improve Quality and Patient care, it is a requirement to inform the public the feedback received from the patients to let the public know about the same. The following was displayed in the Institute's website

SURVIELLANCE ASSESSMENT

Having completed the NABH Reaccreditation assessment in Sep 2022, with the validity period extending upto 2026, it is a requirement to undergo a Surveillance assessment which will be conducted by NABH. This is aimed at examining whether the organization is maintaining all the requirements of NABH Standards and other applicable criteria

As we at Cancer Institute have submitted the application to the NABH for the Surveillance assessment. This application was very vast covering all the departments.

Close to 750 documents were uploaded which includes statutory, Standard Operating Procedures, Manuals, Documentation Registers, Photos, etc. The application is currently being monitored by the NABH as we are waiting for the onsite surveillance assessment

LIBRARY

Mr. M. Ravichandran, M.A., M.L.I.S., D.C.A.

Librarian

Mr. P. Ponmudi, B.A., M.L.I.S., D.C.A.

Assistant Librarian

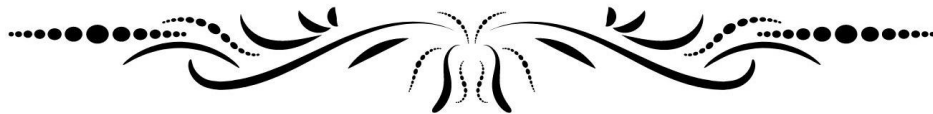
Total number of stack volume			
Books	8,689	E-Books	104
Periodicals		Catalogue	
Current	55	Books	21
Complimentary	3	Annual Reports	1,353
Bound	6,104	Reprint files	65
Cassettes			
Video	65	Compact	138
Audio	77	Floppy	4
DVD	45		

Technical Services - Book Stack is classified and catalogued according to the Dewey decimal classification and Computerized respectively.



LIST OF VOLUNTEERS

1	1 MR. SRIDHARAN	CMCHIS
2	MRS. BAMA	CMCHIS
3	MR. ARAVIND	CMCHIS
4	MR. RAJAN K. S	CMCHIS
5	MS. BHUVANESWARI NITHYANANDAN	STORES
6	MS. JYOTHI	STORES
7	MS. SRIVIDYA	STORES
8	MR. KABILAN	REGISTRY
9	MS. RAMYA RANJITH	OPD
10	MR. KESAVAN E	ELECTRICAL
11	SARAMATHI	OPD



PUBLICATIONS

1. Arunkumar, M. N; John, Alexander; Ganesharajah, Selvaluxmy; Radhakrishnan, Venkatraman. Outcomes of squamous cell carcinoma of the anal canal: A retrospective observational study from a regional cancer institute in South India. *Cancer Research, Statistics, and Treatment* 6(1): p 37-43, Jan–Mar 2023. | DOI: 10.4103/crst.crst_281_22
2. The Outcome of Anaplastic Glioma Treated at a Tertiary Cancer Care Institute in South Asia- Arunkumar Madukkarai Natarajan , Venkatraman Radhakrishnan , Alexander John- *Asian Pacific Journal of Cancer Care* • Vol 9• Issue 1 DOI 10.31557/APJCC.2024.9.1.81-86
3. An Unusual Presentation of Squamous Cell Carcinoma of Head and Neck Region- Gautam VV, Harish Kumar, Arun Kumar MN, Alexander John- *Journal of Case Reports* 2023;13(3):73-76.
4. Metastasis to Ascending Colon from Squamous Cell Carcinoma Cervix: Unusual Presentation- Selvaluxmy Ganesarajah, Vasanth Christopher, Ram Madhavan, Vengada Krishnan P.R- *Asian Pacific Journal of Cancer Care* VOL 8 NO 3 (2023) DOI 10.31557/APJCC.2023.8.3.653-654.
5. Surface mould brachytherapy for ca hard palate-Dr.Mouneageetha, *Med e Journal, The Tamil Nadu Dr. MGR Medical University.*
6. Palliative radiation to jaw metastasis - a rare presentation of lung adenocarcinoma- case report, Dr.Priyadharshini.P.G, *Med e Journal, the Tamil Nadu Dr. MGR Medical University.*
7. Whole ventricular irradiation in paediatric pineal germinoma- a case series study- Dr.Viveknath *Med e Journal, the Tamilnadu Dr.MGR Medical University.*
8. Quality of life in Oral Cavity Carcinoma patients treated with Early Concomitant Boost- Dr.Dhivya *Med e Journal, The Tamilnadu Dr.MGR Medical University.*
9. Intraluminal Brachytherapy as a Boost to External beam radiotherapy in Inoperable Esophageal cancer- Dr.Sunil.M.L- *Med e Journal, The Tamilnadu Dr.MGR Medical University.*
10. Singh M, Thankappan K, Balasubramanian D, Pillai V, Shetty V, Rangappa V, Chandrasekhar NH, Kekatpure V, Kuriakose MA, Krishnamurthy Arvind, Mitra A, Pattatheyl A, Jain P, Iyer S, Iyer NG, Subramaniam N; Head and Neck Cooperative Oncology Group. Contrasting clinical outcomes and socio-economic impact of young versus elderly-onset oral squamous cell carcinoma, a novel health economic analysis. *Cancer Med.* 2024 Jan 15.
11. Balakrishnan, Gurushankari; Krishnamurthy, Arvind. Robotic Surgeries for Cancer in Low- and Middle-income Countries: Hope or Hype in Surgical Oncology? *International Journal of Advanced Medical and Health Research* 10(2):p 64-70, Jul–Dec 2023.
12. Krishnamurthy, Arvind; Raksha, R. Time to face the challenges of comorbidities and multimorbidities in cancer care. *Cancer Research, Statistics, and Treatment* 6(4):p 584-586, Oct–Dec 2023.

13. Kothandaraman SK, Krishnamurthy Arvind, Mittal S, Ramshankar V. Prognostic relevance of pre-treatment inflammatory biomarkers along with other clinicopathological and treatment factors in oral cavity cancers. *J Cancer Res Ther.* 2023 Apr; 19 (Supplement):S212-S221.
14. Published a paper on Indian journal of orthopedics “Distally based fibula flap for reconstruction of distal tibia after oncological resection” 23rd Sep 2023.
15. Published a paper on Indian journal of surgical oncology” free vascularized epiphyseal transfer of fibula following proximal humerus resection: point of surgical technique” 28th Oct 2023.
 “Introduction in lymphedema and anatomy” – Dr Diana niranjani Raj
 “Pathophysiology and Management of Lymphedema” – Dr R.Viswamadesh
16. Assessment of Changes in Clinical Management of Cervical Cancer Patients in Light of New Staging Criteria *Journal of Gynecology Research* Volume 7 | Issue.Doi.org/10.13140/RG.2.2.10155.21281
17. Sudhakaran S, Bhatla N, mathur S, Natarajan J, et al. Evaluation of cervical cancer screening during pregnancy in India: Human Papilloma virus testing can change the paradigm. *NMJI.* 2023;36(1);17-21.
18. Role of extrafascial hysterectomy in adenocarcinoma cervix stage 1b2- 2b after CCRT, accepted for publication in *Journal of colposcopy and lower genital tract pathology.*
19. Kaur J, Rani S, Nilavu K. Pre-invasive Disease of the lower Female Genital Tract: Updates in Screening, Prevention, Diagnosis and Management. *Updates in Gynaecologic Oncology* Ed. Pai H et al. Evangel Publishers. New Delhi 2024; 35-49
20. Kalra M, Bakhshi S, Singh M, Seth R, Verma N, Jain S, Radhakrishnan V, Mandal P, Mahajan A, Arora RS, Dinand V, Kapoor G, Sajid M, Kumar R, Taluja A, Mallick S, Chandra J. Response assessment by positron emission tomography-computed tomography as compared with contrast-enhanced computed tomography in childhood Hodgkin lymphoma can reduce the need for radiotherapy in low- and middle-income countries. *Pediatr Blood Cancer.* 2023Feb;70(2):e30091.
21. Kesana, S., Jayachandran, P.K., Selvarajan, G, Carthikeyan SM, Radhakrishnan V, et al. The Efficacy and Safety of Irinotecan, Paclitaxel and Oxaliplatin (IPO) Regimen as Salvage in Relapsed/Refractory Ovarian Germ Cell Tumors. *Indian J Gynecol Oncolog* 21, 5 (2023).
22. Mathews V, Korula A, Chakrapani A, Bhurani D, Bhattacharyya J, Sengar M, Malhotra P, Boyella PK, Singh PK, Ganesan P, Dhawan R, Melinkeri S, Damodar S, Dolai TK, Radhakrishnan V. Management of B-cell lineage acute lymphoblastic leukemia: expert opinion from an Indian panel via Delphi consensus method. *Front Oncol.* 2023 Apr 24;13:1171568.
23. Srinivasan S, Ramanathan S, Kumar S, Peyam S, Radhakrishnan V. Prevalence and prognostic significance of IKZF1 deletion in paediatric acute lymphoblastic leukemia: A systematic review and meta-analysis. *Ann Hematol.* 2023 May 8. doi: 10.1007/s00277-023-05250-1. Epub ahead of print.
24. Arunkumar, M. N; John, Alexander; Ganesharajah, Selvaluxmy; Radhakrishnan, V. Outcomes of squamous cell carcinoma of the anal canal: A retrospective observational study from a regional

cancer institute in South India. *Cancer Research, Statistics, and Treatment* 6(1):p 37-43, Jan–Mar 2023. | DOI: 10.4103/crst.crst_281_22

25. Satti K, Mehra N, Kalaiyarasi PK, Radhakrishnan V, et al. Retrospective Analysis of Autologous Stem Cell Transplantation Outcomes in Adult Philadelphia Chromosome Positive-Acute Lymphoblastic Leukemia. *Indian J Med Paediatr Oncol.* April 2023. DOI: 10.1055/s-0043-1761413.
26. Pramesh CS, Sengar M, Patankar S, Chinnaswamy G, Gupta S, Vijayakumar M, Sood S, Sathe AN, Radhakrishnan V, Ganesan P, Mallavarapu KM, Badwe RA. A National Cancer Grid pooled procurement initiative, India. *Bull World Health Organ.* 2023 Sep 1;101(9):587-594.
27. GBD 2019 Lip, Oral, and Pharyngeal Cancer Collaborators, Cunha ARD, Compton K, ...Radhakrishnan V, et al. The Global, Regional, and National Burden of Adult Lip, Oral, and Pharyngeal Cancer in 204 Countries and Territories: A Systematic Analysis for the Global Burden of Disease Study 2019. *JAMA Oncol.* 2023;9(10):1401-1416.
28. Bommaman, K., Arumugam, J.R., Koshy, T, Radhakrishnan,V., Sundersingh, S. Role of Interphase FISH Assay on Air-Dried Smears in Identifying Specific Structural Chromosomal Abnormalities among Pediatric Patients with Acute Leukemias. *Indian J Hematol Blood Transfus* (2023). <https://doi.org/10.1007/s12288-023-01699-2>.
29. Radhakrishnan V, Kritthivasan V, Kothandan BT, Srinivasan P, Das G, Ramamurthy J. Reducing chemotherapy dose intensity by 25% and adding rituximab improves survival in pediatric mature B-cell non-Hodgkin lymphoma in LMIC setting. *Pediatr Blood Cancer.* 2023;70(12):e30694. doi:10.1002/psc.30694.
30. Vijayakumar V, Emelda J, Radhakrishnan V, Subramani S. A retrospective investigation of *Candida* spp. and its antifungal susceptibility profile in cancer patients at a South Indian tertiary care hospital. *IP International Journal of Medical Microbiology and Tropical Diseases.* 2023;9(3):167-176.
31. Batra, A., Raja, A., Krishnan, C.K..... Radhakrishnan V . Factors that Impact the Outcomes in Ewing's Sarcoma: Experience from a Regional Cancer Center in Southern India. *Indian J Surg Oncol* (2023). <https://doi.org/10.1007/s13193-023-01817-6>.
32. Nath A, Mathur P, Sudarshan KL,.... Radhakrishnan V, et al. An assessment of childhood cancer care services in India - gaps, challenges and the way forward. *Lancet Reg Health Southeast Asia.* 2023;16:100235. doi:10.1016/j.lansea.2023.100235.
33. Iyer P, Krishnamurthy A, Velusamy S, Sundersingh S, Rajaram S, Balasubramanian A, Radhakrishnan V. Impact of Neoadjuvant Concurrent Chemoradiation (NACCRT) on Operability and Survival in Locally Advanced Inoperable Breast Cancer. *International Journal of Radiation Oncology, Biology, and Physics.* Online first: Nov 2023. DOI:<https://doi.org/10.1016/j.ijrobp.2023.11.042>
34. Rapoport BL, Herrstedt J, Snow RC, et al. 2023 updated MASCC/ESMO consensus recommendations: prevention of nausea and vomiting following multiple-day chemotherapy, high-dose chemotherapy, and breakthrough nausea and vomiting. *Support Care Cancer.*

2023;32(1):36. Published 2023 Dec 18. doi:10.1007/s00520-023-08224-1.

35. Ganju P, Kalaiyarasi JP, Karunakaran P, Veeraiah S, Mehra N. COVID-19 Vaccine Uptake in Patients with Multiple Myeloma and AL Amyloidosis: A Cross-Sectional Observational Study from India. *Indian J Hematol Blood Transfus Off J Indian Soc Hematol Blood Transfus*. 2024 Jan;40(1):30–5.
36. Dixit J, Gupta N, Kataki A, Roy P, Mehra N, Kumar L, et al. Health-related quality of life and its determinants among cancer patients: evidence from 12,148 patients of Indian database. *Health Qual Life Outcomes*. 2024 Mar 13;22(1):26.
37. Alrawabdeh J, Alzu'bi M, Alzyoud M, Odeh N, Hamadneh Y, Mian H, et al. Characteristics of post hoc subgroup analyses of oncology clinical trials: a systematic review. *JNCI Cancer Spectr*. 2023;7(6):pkad100.
38. Dixit J, Malhotra P, Mehra N, Mathew A, Kumar L, Singh A, et al. Cost-Effectiveness of Novel Agent Regimens for Transplant-Eligible Newly Diagnosed Multiple Myeloma Patients in India. *Appl Health Econ Health Policy* [Internet]. 2024 Mar 7 [cited 2024 Apr 23]; Available from: <https://link.springer.com/10.1007/s40258-024-00877-1>
39. Banerjee R, Wang B, Anderson Jr LD, McCaughan G, Mehra N, Cowan AJ, et al. Once-weekly bortezomib as the standard of care in multiple myeloma: results from an international survey of physicians. *Blood Cancer J*. 2023;13(1):162.
40. Mehra N, Gopisetty G, Subramani J, Dhanasekar S, Rajamanickam A, Perumal Kalaiyarasi J, et al. Detection of serum M-protein in acetonitrile precipitates by MALDI-TOF mass spectrometry: A novel, low-cost methodology. *Ann Clin Biochem*. 2023 Sep;60(5):339–48.
41. Satti KK, Mehra N, Kalaiyarasi JP, Radhakrishnan V, Karunakaran P, Rathinam K, et al. A Retrospective Analysis of Autologous Stem Cell Transplantation Outcomes in Adult Philadelphia Chromosome Positive-Acute Lymphoblastic Leukemia. *Indian J Med Paediatr Oncol* [Internet]. 2023 Apr 17 [cited 2023 Apr 19]; Available from: <http://www.thieme-connect.de/DOI/DOI?10.1055/s-0043-1761413>
42. Prinja S, Dixit J, Gupta N, Dhankhar A, Kataki AC, Roy PS, et al. Financial toxicity of cancer treatment in India: towards closing the cancer care gap. *Front Public Health* [Internet]. 2023 [cited 2023 Sep 14]; 11. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10316647/>
43. Nehra P, Chauhan AS, Malhotra P, Kumar L, Singh A, Gupta N, et al. Cost-effectiveness analysis of different combination therapies for the treatment of chronic lymphocytic leukaemia in India. *Lancet Reg Health - Southeast Asia* [Internet]. 2023 Jun 1 [cited 2023 May 12]; 13. Available from: [https://www.thelancet.com/journals/lansea/article/PIIS2772-3682\(23\)00061-6/fulltext](https://www.thelancet.com/journals/lansea/article/PIIS2772-3682(23)00061-6/fulltext)
44. Gupta D, Singh A, Gupta N, Mehra N, Bahuguna P, Aggarwal V, et al. Cost-Effectiveness of the First Line Treatment Options For Metastatic Renal Cell Carcinoma in India. *JCO Glob Oncol*. 2023 Feb;(9):e2200246.

45. How Do We Manage Chronic Lymphocytic Leukemia in India. Current Hematologic Malignancy Reports (2024) 19:56–64. <https://doi.org/10.1007/s11899-023-00722-7>.
46. Acute Promyelocytic Leukemia. Textbook of Laboratory and Clinical Hematology. Bhalani publishers.
47. Prasanth Srinivasan, Jagdish Prasad Meena, Aditya Kumar Gupta, Ashutosh Halder, Arti Kapil, Ravindra Mohan Pandey & Rachna Seth (2023): Safety of Procalcitonin Guided Early Discontinuation of Antibiotic Therapy among Children Receiving Cancer Chemotherapy and Having Low-Risk Febrile Neutropenia: A Randomized Feasibility Trial (ProFenC Study), Pediatric Hematology and Oncology, DOI: 10.1080/08880018.2023.2249940
48. Bhardwaj N, Das G, Srinivasan R. Neuroblastoma-derived v-myc avian myelocytomatosis viral related oncogene or *MYCN* gene. J Clin Pathol. 2023 Aug; 76(8):518-523.
49. Radhakrishnan V, Kritthivasan V, Balaji TK, Srinivasan P, Das G, Ramamurthy J. Reducing chemotherapy dose intensity by 25% and adding rituximab improves survival in pediatric mature B-cell non-Hodgkin lymphoma in LMIC setting. PBC, Vol 70 Issue 12, Dec 2023.
50. Das G, Setlur K, Seth R et al, Serum Adipokines as Biomarkers for Surveillance of Metabolic Syndrome in Childhood Acute Lymphoblastic Leukemia Survivors in Low Middle-Income Countries, Nutrition and Cancer, January 2024.
51. Balakrishnan K, Ramasamy T, Venketeswaran MV. Initiation of Palliative Care Referral from the Intensive Care Unit for Advanced Stage Metastatic Cancer Patients: A Quality Improvement Process from a Tertiary Referral Cancer Institute from South India. Indian J Palliat Care. 2023 Oct-Dec; 29(4):412-417. doi: 10.25259/IJPC_267_2022. Epub 2023 Nov 3. PMID: 38058480; PMCID: PMC10696335.
52. Dr. Meenakshi V V - Book Chapter - Authored a chapter within the Scott's PEDIA_TRICKS Specialty Series textbook on Paediatric Palliative Care, focusing on the critical aspect of “End of Life Care in Children”.
53. A letter to editor titled “Medication Considerations in a Cancer Patient with a Jejunostomy Tube (J-tube)” - Venketeswaran MV. Medication Considerations in a Cancer Patient with a Jejunostomy Tube (J-tube). Indian J Palliat Care. 2023 Oct-Dec; 29(4):456-457. doi: 10.25259/IJPC_145_2022. Epub 2023 Oct 13. PMID: 38058476; PMCID: PMC10696318.
54. Dr. R. Thendral - Book Chapter – Co-authored a chapter within the Scott's PEDIA_TRICKS Specialty Series textbook on Paediatric Palliative Care, focusing on the critical aspect of “End of Life Care in Children”.
55. Dr. Nivedhyaa Srinivasaraghavan - Central venous catheter placemnt in a patient with persistent left superior vena cava, A.R Karthik, Karthigaiselvi Murugesan, Nivedhyaa Srinivasaraghavan et al, Anesthesia Reports ,April 2024
56. Dr. Karthik AR - Tayal A, Shekh I, Karthik AR, Jat KR, Dhochak N, Mittal S, Gupta N, Kabra SK, Madan K. A "Cool" extraction technique for difficult pediatric airway foreign bodies: Report of two

cases. *Pediatr Pulmonol.* 2023 Sep;58(9):2670-2674.

Karthik AR, Narayanan A, Vasudevan A. Sudden bradycardia during saline wash of the chest wall in a patient undergoing modified radical mastectomy - A case study. *Indian J Anaesth.* 2023 Sep;67(9):837-838.

Karthik AR, Murugesan K, Srinivasaraghavan N, Kumar D. Central venous catheter placement in a patient with persistent left superior vena cava. *Anaesth Rep.* 2024 Mar 15;12(1):e12288

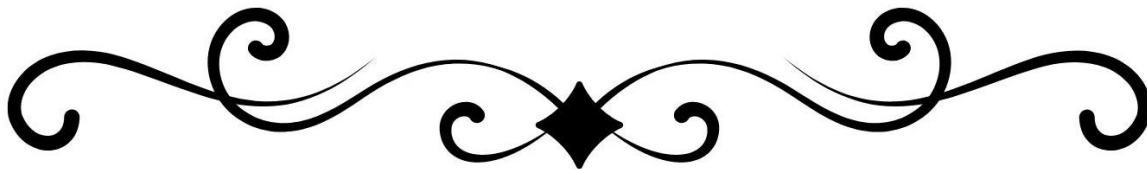
57. Dr. Daniel Raj - A story "That extra mile" was published in the IAPC Newsletter in the month of June 2023, and the republished in e-hospice website in July 2023.
58. Asokan Shobana, Remella V Deeksha, Syed AA Rahman, Tiviya Thangaswamy, Revathi Paramasivam Oviya, Gopal Gopisetty. Current Perspectives of Matrix Metalloproteinase 11 (MMP11) as a Diagnostic and Therapeutic Target for Cancer. *Current Cancer Therapy Reviews.* 2024; 20 (3), 243-251
59. Gopinath, P., Oviya, R.P. & Gopisetty, G. Oestrogen receptor-independent actions of oestrogen in cancer. *Mol Biol Rep* 50, 9497–9509 (2023).
60. Mehra N, Gopisetty G, Subramani J, et al. Detection of serum M-protein in acetonitrile precipitates by MALDI-TOF mass spectrometry: A novel, low-cost methodology. *Annals of Clinical Biochemistry.* 2023;60(5):339-348.
61. Seetharaman, A., Christopher, V., Dhandapani, H., Jayakumar, H., Dhanushkodi, M., Bhaskaran, N. & Ramanathan, P. (2024). Optimization and Validation of a Harmonized Protocol for Generating Therapeutic-Grade Dendritic Cells in a Randomized Phase II Clinical Trial, Using Two Varied Antigenic Sources. *Vaccines*, 12(2), 112.
62. Kodous, A. S., Balaiah, M., & Ramanathan, P. (2023). Single cell RNA sequencing—a valuable tool for cancer immunotherapy: a mini review. *Oncologie*, 25(6), 635-639.
63. Patel Krishna, Rao Deva Magendhra, Sundersingh Shirley, Velusami Sridevi, Rajkumar Thangarajan, Nair Bipin, Pandey Akhilesh, Chatterjee Aditi, Mani Samson, Gowda Harsha. MicroRNA Expression Profile in Early-Stage Breast Cancers. *MicroRNA.*2024 13.71- 81
64. Omayma A.R. AboZaid, Mostafa A. Abdel-Maksoud, Ibrahim A. Saleh, Mohamed A. El-Tayeb, Sawsan M. EL-sonbaty, Faten E. Shoker, Maha A. Salem, Ayat M. Emad, Samson Mani, Arunagiri Kuha Deva Magendhra Rao, Mohamed A. Mamdouh, Mohamed H. Kotob, Mohammed Aufy, Ahmad S. Kodous. Targeting the NF- κ B p65/Bcl-2 signaling pathway in hepatic cellular carcinoma using radiation assisted synthesis of zinc nanoparticles coated with naturally isolated gallic acid. *Biomedicine & Pharmacotherapy.*2024,172, 1162-1174
65. Ramasamy, Deepa, Megha Thippannah, Hema Raja Pushpam Maharajan, Meenakumari Balaiah, Ramakrishnan Ayloor Seshadri, Ahmad S. Kodous, Zdenko Herceg, Anurag Mehta, Arunagiri Kuha Deva Magendhra Rao, and Samson Mani. Transcriptome-wide profiling identifies colon cancer-associated m6A transcripts and potential RNA methyl modifiers. *Molecular Biology Reports.*2024,51 ,299-311.
66. Arunagiri Kuha Deva Magendhra Rao, Deepa Ramasamy, Rajkumar Thangarajan, Samson

Mani. The lncRNA MIAT is regulated by NFYA to promote glioblastoma multiforme through the miR-221-3p/SIRT1 axis. *Gene Reports*. 2024;34, 101883- 101892.

67. Bose, M., Sunder Singh, S., Ganesharaja, S., Chiwate, A. S., Hingmire, S. J., & Rajkumar, T. Development and Evaluation of p16 based Double Antibody Sandwich ELISA for Detection of Cervical Precancer and Cancer. *Asian Pacific journal of cancer prevention: APJCP*, (2023), 24 (7), 2337–2346.
68. Vani NV, Rama R, Madhanagopal R, Vijayalakshmi R, Swaminathan R. Human papillomavirus-attributable head and neck cancers in India – A systematic review and meta-analysis. *JCO Glob Oncol* 2024; March:10e2300464. doi: 10.1200/GO.23.00464.
69. Seetharaman A, Christopher V, Dhandapani H, Jayakumar H, Dhanushkodi M, Bhaskaran N, Rajaraman S, Ranganathan Rama, Sunder Singh S, Vijayakumar V, Rajamanickam A, Suri A, Jagadish N, Rajkumar T, Ramanathan P. Optimization and Validation of a Harmonized Protocol for Generating Therapeutic-Grade Dendritic Cells in a Randomized Phase II Clinical Trial, Using Two Varied Antigenic Sources. *Vaccines (Basel)*. 2024 Jan 23;12(2):112. doi: 10.3390/vaccines12020112. PMID: 38400096; PMCID: PMC10892253.
70. Swaminathan R, Esmey PO, Selvakumaran R, Sampath P, Sankaranarayanan R. Assessment of Registry-Based Surveillance Statistics Used for Cancer Control in the Dindigul District in South India. *J Registry Manag* 2023; Spring 50 (1): 26-33. PMID: 37577285
71. Aggarwal A, Rama R, Dhillon PK, Deepa M, Kondal D, Kaushik N, Bumb D, Mehrotra R, Kohler BA, Mohan V, Gillespie TW, Patel AV, Rajaraman S, Prabhakaran D, Ward KC, Goodman M. Linking population-based cohorts with cancer registries in LMIC: a case study and lessons learnt in India. *BMJ Open*. 2023 Mar 6;13(3):e068644. doi: 10.1136/bmjopen-2022-068644. PMID: 36878651; PMCID: PMC9990691.
72. Nath A, Mathur P, Sudharshan KL, ..., Swaminathan R, et al. An assessment of childhood cancer care services in India – gaps, challenges and the way forward. *Lancet Reg Health Southeast Asia* 2023; <https://doi.org/10.1016/j.lansea.2023.100235>
73. Mailankodi S, Bajpai J, Budukh A, Swaminathan R, et al. Epidemiology of rare cancers in India and South Asian countries – remembering the forgotten. *Lancet Reg Health Southeast Asia* 2023; <https://doi.org/10.1016/j.lansea.2023.100168> published online
74. Vani NV, Madhanagopal R, Swaminathan R, Ganesan TS. Dynamics of human papillomavirus infection in healthy population and head and neck cancer. *Cancer Med* 2023; Feb 27 doi: 10.1002/cam4.5686. Online ahead of print. PMID: 36846921
75. Ramakrishnan AS, Soman AC, Aggrawal A, Karnawat A, Patidar S, Swaminathan R. Conditional survival in patients treated for gastric cancer with a curative intent. *J Surg Oncol* 2023; 12(10): 11731-45 PubMed PMID: 36735183
76. Soerjomataram I, Cabasag C, Bardot A, Fidler-Benaoudia MM, Miranda-Filho A, Ferlay J, Parkin DM, Ranganathan R, ... Swaminathan R, Bray F. Cancer survival in Africa, central and South America and Asia (Survcan-3): a population-based benchmarking study in 32 countries. *Lancet Oncol* 2023; 24(1): 22-32 PubMed PMID: 36603919

77. Bhatia KP, Ganguly S, Sasi A, Kumar V, Deo S, Agarwala S, Radhakrishnan V, Swaminathan R, et al. Sex disparity in childhood cancer in India: a multi-centre, individual patient data analysis. *Lancet Oncol* 2023; 24(1): 54-63 PubMed PMID: 36455568
78. Mehra N, Gopisetty G, Subramani J, Dhanasekar S, Rajamanickam A, Perumal Kalaiyarasi J, Karunakaran P, Kannan K, Rajaraman S, Rajkumar T. Detection of Serum M-protein in acetonitrile precipitates by MALDI-TOF mass spectrometry: A novel low-cost methodology. *Ann Clin Biochem* 2023; May 9:45632231174144. doi: 10.1177/00045632231174144. Online ahead of print. PMID: 37158306
79. Novel HPV16 variants nucleotide sequence submitted to NCBI GenBank database (Accession Numbers - OR122955-OR122970). Available at <https://www.ncbi.nlm.nih.gov/nucleotide/OR122960.1>
80. Venugopal DC, Viswanathan P, Ravindran S, Punnoose AM, Dicky John DG, Prabhakar L, Ramanathan G, Sankarapandian S, Ramshankar V. Antifibrotic effect of silymarin on arecoline-induced fibrosis in primary human buccal fibroblasts: an in silico and in vitro analysis. *Mol Biol Rep.* 2024 Feb 15;51(1):303.
81. Venugopal, D.C.; Caleb, C.L.; Kirupakaran, N.P.; Shyamsundar, V.; Ravindran, S; Krishnamurthy, A.; Harikrishnan, T.; Sankarapandian, S.; Ramshankar, V. Clinicopathological Significance of Cancer Stem Cell Markers (OCT-3/4 and SOX-2) in Oral Submucous Fibrosis and Oral Squamous Cell Carcinoma. *Biomedicines* 2023, 11, 1040
82. Venugopal, D.C.; Senthilnathan, R.D.; Maanvizhi, S.; Sankarapandian, S.; Ramshankar, V.; Kalachaveedu, M. Preparation and Characterization of Silymarin Gel: A Novel Topical Mucoadhesive Formulation for Potential Applicability in Oral Pathologies. *Gels* 2023, 9, 139. <https://doi.org/10.3390/gels9020139>
83. Ramshankar V, Ravindran S, Arun K, Albert K, Sri SL, Ramasubramanian L, Satyaseelan B. Impact of HPV molecular testing with partial genotyping as a feasibility study in cervical cancer community screening program in South India. *J Med Virol.* 2023 Apr;95(4):e28715. doi: 10.1002/jmv.28715. PMID: 37185837.
84. Ayiraveetil, Reshma & Chittem, M. & Lakshminarayanan, Subitha & Veeraiah, S. & Penumadu, P. & Pandjatcharam, J. & Kayal, Smita & Dubashi, Biswajit & Ganesan, Prasanth. (2023). 1745P Why do adult patients with cancer abandon treatment in India? A nationwide qualitative study to understand the perspectives of healthcare workers. *Annals of Oncology.* 34. S946. 10.1016/j.annonc.2023.09.2699.
85. G. K. Rangarajan, R. Krishnakumar, D. Devakumar, M. Karthigaiselvi, Anand Raja & Chandrakumar Krishnan,. The Usefulness of Accuracy and Precision of Bone scan, MRI and Digital Radiography in Limb Salvage Surgery for long bone tumors, *Bio Statistics Research*, Original Article Published: April 2023.
86. Relevance of CD20 antigen expression among pediatric patients with B-lineage acute lymphoblastic leukemia. Karthik Bommanna B.K., Jhansi Rani Arumugam, Venkatraman Radhakrishnan, Shirley Sundersingh. *British Journal of Hematology.* Published on 6th March 2024. <https://doi.org/10.1111/bjh.19370>.

87. Role of Interphase FISH assay on air-dried smears in identifying specific structural chromosomal abnormalities among pediatric patients with acute leukemias. Karthik Bommannan B.K., Jhansi Rani Arumugam, Teena Koshy, Venkataraman Radhakrishnan, Shirley Sundersingh. Indian Journal of Hematology and blood Transfusion. Published online on 26th September 2023. <https://doi.org/10.1007/s12288-023-01699-2>.
88. Flow Cytometric Ploidy Analysis in Acute Lymphoblastic Leukemia and Plasma Cell Myeloma. Karthik Bommannan. Indian journal of Medical and Paediatric Oncology. Published online on 4th November 2023. DOI <https://doi.org/10.1055/s-0043-1776046>.
89. A Retrospective Investigation of Candida spp. and its antifungal susceptibility profile in cancer patients at a South Indian tertiary care hospital Varalakshmi Vijayakumar 1,*, Jennifer Emelda Saraswathi Subramani 1 1, Venkataraman Radhakrishnan 1 Dept. of Microbiology, Cancer Institute (WIA) Adyar, Chennai, Tamil Nadu, India 2 Dept. of Medical and Pediatric Oncology, Cancer Institute (WIA) Adyar, Chennai, Tamil Nadu, India 2 IP International Journal of Medical Microbiology and Tropical Diseases
90. Satish MS, Vidhubala E, Veeriah .S, Vijay.S, Krishnamurthy.A, Selvaluxmy .G. Effectiveness of structured exercise intervention in cancer -Related fatigue among oral cavity cancer patients; A Randomised Control Trial. Indian J Med Paediatr Oncol 2023, May 17.



The Cancer Institute (WIA) is not merely a not-for-profit organization housed within polished walls; it is a living, breathing embodiment of charity and compassion. This institute is the hope that extends far beyond its physical structure, reaching into every corner of our State and beyond.



From all walks of life, they come—men, women, and children—carrying the weight of fear, uncertainty, and often, the burden of illiteracy. They may not fully understand the intricacies of their illness, but they know one thing: within these walls, there is a promise of life and healing.

The Chairman:

CANCER INSTITUTE (WIA)

Adyar, Chennai – 600 020, INDIA

Ph: 044 – 24910754/24911526

Email: chairman@cancerinstitutewia.org

Website: <https://cancerinstitutewia.in>