



MALABAR CANCER CENTRE
POST GRADUATE INSTITUTE OF
ONCOLOGY SCIENCES AND RESEARCH
THALASSERY

(An Autonomous Centre under Govt of Kerala)
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ANNUAL REPORT
2022-23



VISION

The development of an exponentially progressing apex institution in oncology with equal thrust on clinical care, oncology related educations and multifaceted research

MISSION

Non compromising professionalism and quality in cancer treatment, research and education

SERVICE STANDARDS

Quality and health care delivery ● Accountability in the Governance from top to bottom ● Maintaining a patient-centered clinical care ● Effective communication ● Internal customer satisfaction

UNIQUE ACHIEVEMENTS

- First Government owned hospital in Northern Kerala to start Bone Marrow Transplantation.
- The only Government centre performing pediatric transplants
- First Cancer Centre in Northern Kerala to acquire High end multiple energy linear accelerator with FFF technology.
- First Cancer Centre in Northern Kerala to acquire Blood Irradiator.
- First cancer centre in Kerala to Start Cancer Genetics Clinic
- First Cancer centre in India to develop, test and implement E-Palliative care.
- First Cancer Centre in South India to be a PAIN FREE HOSPITAL
- First institution in Kerala to acquire and use Robotic biopsy and intervention radiology assistance system
- First Cancer centre in Northern Kerala to introduce High end Dual Energy Linear Accelerator with VMAT capability in Public sector.
- F-18 PSMA scan performed first time in Kerala
- The first under Government Sector to launch Bone Marrow Donor Registry in India.

RECOGNITIONS

1. **Chief Minister's Awards for Innovation in Public Policy-2015
Category: Personnel Management (I-Prize)**
2. **Kerala State Energy Conservation Award, 2016 (I-Prize)**
3. **National Healthcare Excellence Awards, 2016
Category: Best Single Speciality Hospital (Oncology)**
4. **Kerala State Pollution Control Board Award 2017**
5. **Kerala State e-Governance Awards 2016 & 2017**
 - a) **e-Palliative Care Project won II Prize in e-Citizen Service Delivery
Category**
 - b) **Aware & Awake Project won II Prize in Social Media & e-Governance
Category**
6. **Kerala State Pollution Control Award – 2018.**
7. **Kerala State e-Governance Awards 2019-20, 2020-21.
OPPAM Initiative won Third Prize in social media & e-Governance
Category and Second Prize in Innovations in Covid Pandemic
Management**
8. **NABH Accreditation-2020**
9. **DSIR-SIRO Certification**
10. **Gold Certification (B PMJAY Quality Certification programme is a
joint initiative by NHA and Quality Council of India)-Malabar Cancer
Centre is the first Government hospital in Kerala to get a Gold Quality
Certificate -2022**

TABLE OF CONTENTS

CONTENTS		PAGE NO
Apex Body	Governing Body	06
	Executive Committee	08
Preamble Malabar Cancer Center- Introduction	Organogram	09
	From Director's Desk	10
	About MCC-PGIOSR	12
	MCC Profile at a glance	15
	Department and Divisions	21
Department Activities & Achievements	Department of Anesthesiology	24
	Department of Cancer Palliative Medicine	27
	Department of Cancer Registry and Epidemiology	29
	Department of Clinical Hematology and Medical Oncology	34
	Department of Clinical Laboratory Services and Translational Research	38
	Department of Dentistry & Rehabilitation	58
	Department of Nuclear Medicine	60
	Department of Preventive and Community Oncology	62
	Department of Radiation Oncology	66
	Department of Radiology/Radio-Diagnosis	70
	Department of Respiratory Medicine and Critical Care	73
	Department of Surgical Oncology	74
	Department of General Administration	84
	Department of Oncology Nursing	100
	Department of Engineering and Maintenance	106
Independent Divisions	109	
Research, Publications, Committees and Courses	Research, Publications, Committees and Courses	119
	Research-IRB,IEC	120
	Research Proposals	121
	Scientific Advisory Committee	128
	Research Advisory Committee	129
	Intra Mural Research Fund Review Committee	129
	Publications	129
	Other Supportive Committees	131
	Courses At MCC	132
Accounts & Audit Report	Accounts & Audit Reports	133
Patients Welfare Activities	Patients Welfare Activities	140
	How to Support MCC	142
Right to Information Act	Right to Information Act	143

GOVERNING BODY MEMBERS

1	Chief Minister of Kerala	Chairman
2	Minister for Health & Social Justice, Kerala	Vice-Chairman
3	Minister for Electricity, Kerala	Alternate Vice-Chairman
4	M.L.A. of the Thalassery constituency	Member
5	President, District Panchayat, Kannur District	Member
6	Chairman, Thalassery Municipality, Thalassery	Member
7	A public man from the North Malabar region (to be nominated by the Government of Kerala)	Member
8	Vice Chancellor-Kannur University	Member
9	Secretary, Department of Finance, Kerala	Member
10	Secretary, Department of Power, Kerala	Member
11	Secretary, Department of Health & Family Welfare, Kerala	Member
12	Secretary- Planning Department, Kerala	Member
13	Secretary, Department of Science, Technology & Environment	Member
14	Director- Rajiv Gandhi Centre for Biotechnology, Trivandrum	Member
15	Director of Medical Education, Directorate of Medical Education, Trivandrum	Member
16	Director, Malabar Cancer Centre, Thalassery	Member & Secretary to Governing Body
17	Director, Regional Cancer Centre, Trivandrum	Member
18	Principal, Medical College, Kozhikode	Member
19	Principal/Chief Executive Officer of Medical College, Pariyaram	Member
20	An eminent Medical Scientist	Member
21	One nominee of the Ministry of Health, Government of India	Member
22	One nominee of the Charitable Society Established for rehabilitation and financial assistance for poor cancer patients.	Member
23	One Head of the department nominated from Malabar Cancer Centre, Thalassery by the Government	Member

**GOVERNING BODY NO 13 ON 23.12.2022 AT MALABAR
CANCER CENTRE, THALASSERY.**

Sl No	Name and designation	Position
1	Shri. Pinarayi Vijayan Hon'ble Chief Minister of Kerala	Chairman
2	Smt.Veena George Hon'ble Minister for Health and Women and child development	Vice-Chairperson (via online)
3	Shri.K.Krishnankutty Hon'ble Minister for Electricity	Alternate Vice-Chairman (via online)
4	Adv.A.N.Shamseer MLA, Thalassery Assembly constituent	Member
5	Smt.JamunaRani, Chairperson, Thalassery Municipality	Member
6	Smt.Tinku Biswal IAS, Principal secretary, Health and Family welfare and Ayush Department	Member
7	Smt.Shyni George Additional Secretary, Department of Planning & Economic Affairs	Member
8	Smt.Anila.T Additional Secretary, Finance Department	Member
9	Dr.Thomas Mathew , Director of Medical Education	Member (via online)
10	Prof.Gopinath Ravindran, Vice Chancellor, Kannur University	Member (via online)
11	Prof. Dr. Ajayakumar.T, Nominee of Principal, Government Medical College, Kozhikode	Member (via online)
12	Prof. Chandrabhas Narayana, Director- Rajiv Gandhi Centre for Biotechnology Thiruvananthapuram	Member (via online)
13	Dr.S.Ajith, Principal In-charge, Government Medical College, Pariyaram	Member & Secretary
14	Dr.Rekha.A Nair, Director – Regional Cancer Centre, Thiruvananthapuram	Member (via online)
15	Dr.Satheesan B, Director Malabar Cancer Centre, Thalassery.	Member & Secretary

EXECUTIVE COMMITTEE MEMBERS

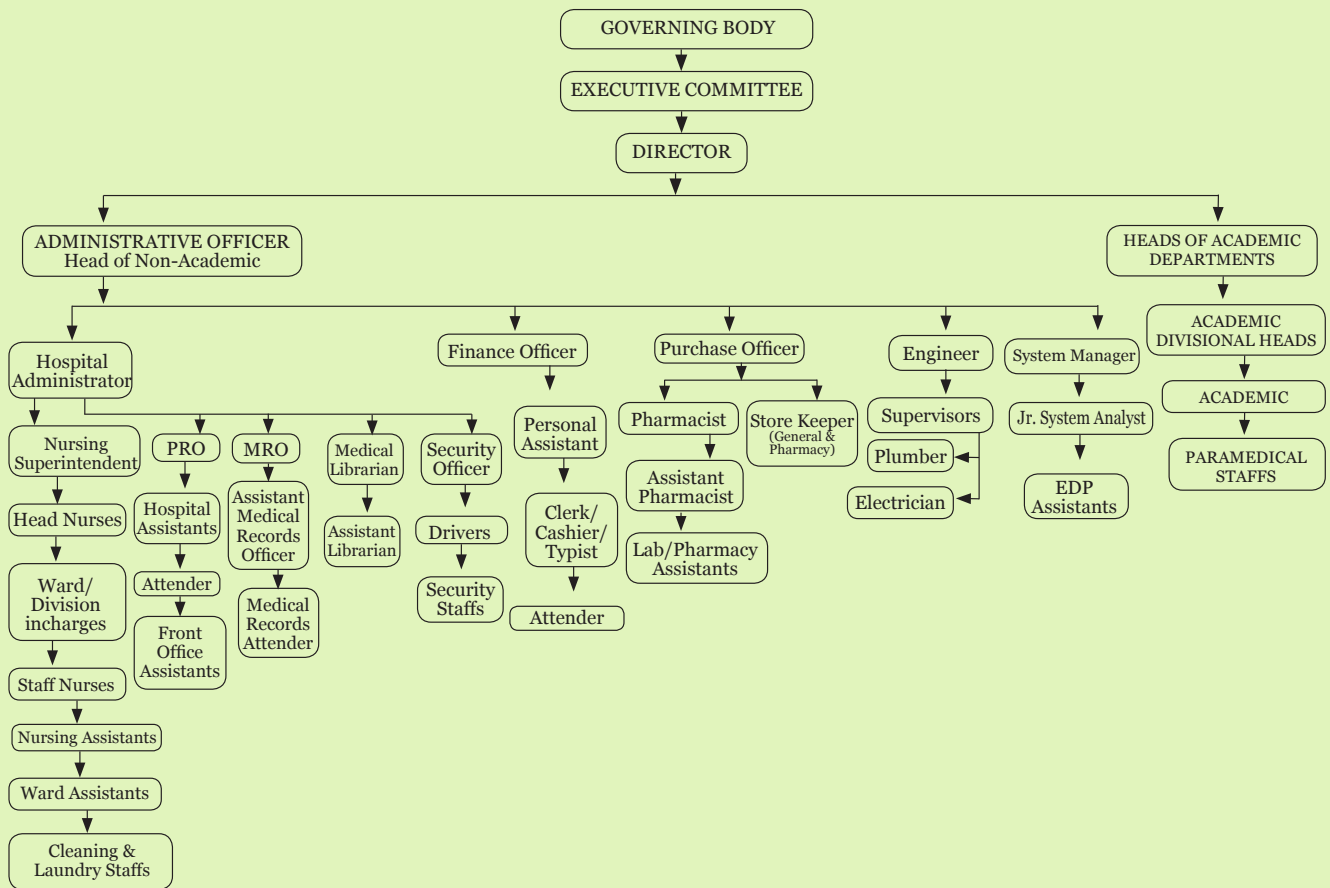
1	Secretary, Health & Family Welfare Department	Chairman
2	Secretary, Finance Department	Member
3	Secretary, Planning and Economic Affairs Department	Member
4	Secretary, Power Department	Member
5	MLA of Thalassery Constituency	Member
6	Director of Medical Education	Member
7	Chairman , Thalassery Municipality	Member
8	Director, Regional Cancer Centre, Trivandrum	Member
9	Director- Cochin Cancer Centre & Research Centre Kochi	Member
10	Director, Malabar Cancer Centre	Member/Convenor

EXECUTIVE COMMITTEE MEETINGS

2022-23	EC No :82	27-05-2022	O/o the Principal Secretary, Department of Health& Family Welfare
2022-23	EC No.83	19-11-2022	Conference Hall, Malabar Cancer Centre
2022-23	EC No.84	15-3-2023	Conference Hall no.610, 2nd floor, Kerala Legislative Assembly, Thiruvananthapuram

SL NO	ATTENDEE	EC MEETING NUMBERS	DESIGNATION
1	Dr.Rajan Khobragade IAS	82	Principal Secretary Health and Family welfare, Chairperson
	Ms.Tinku Biswal IAS	83,84	
2	Adv.A.N.ShamseerMLA Thalassery, (Hon'be Speaker KLA)	82,83,84	Member
3	Smt.Jamuna Rani, Chairperson, Thalassery municipality	82,83	Member
4	Smt.K.S.Usha, Additional SecretaryFinance department	82	Member
	Smt.Anila, Additional Secretary, Fiance department	83	Finance department
5	Smt.Shiny George, Additional Secretary, Department of Planning & Economic Affairs	82,84	MemberPlanning Department
6	Shri.Sreelal.T.V, Joint Secretary, Department of Power	84	Member Power department
7	Dr.Remla Beevi, Director of Medical Education	82	Member
	Dr.Thomas Mathew	83	
8	Dr.Rekha.A.Nair, Director, Regional Cancer Centre, Thiruvananthapuram,	82,83,84	Member
9	Dr.P.G.Balagopal, Medical Superintendent and Director-in-charge Representing, Cochin Cancer & Research Centre, Kochi	82,83,84	Member
10	Dr.B.Satheesan, Director-MCC (Convener)	82,83,84	Member

ORGANOGRAM



FROM DIRECTOR'S DESK

“Remember to celebrate milestones as you prepare for the road ahead.”

- Nelson Mandela

2022-23 have witnessed Malabar Cancer Centre achieving some important milestones in the expansion process as an institution. As an exponentially progressing institution, MCC has spread its wings in the field of ocular oncology and neurosurgical oncology in the previous year. The ocular oncology division started functioning in August 2022. Neurosurgical oncology division started its services in 2022 November. Significant number of patients started getting benefits of the services provided by the above-mentioned divisions. Malabar cancer centre marked an achievement in the form of QCI – gold certificate which is first time by a government hospital in Kerala. Being an academic institution MCC was upgraded as a PG institution, the official announcement of the same was made and MCC is renamed as Malabar Cancer Centre Post Graduate Institute for Oncology Science and Research.

There were 4598 new cancer patients registered among the total registration of 7795. The total number of patients visited during the period was 85802 and there were 5566 in-patients. 2415 new patients received radiation therapy and 2047 major surgeries were performed in operation theatres. 189 students including 17 medical doctors, 154 MLT students, 02 medical physics intern, and trainees underwent short-term training at MCC during this period and 116 research projects are being carried out. Equal thrust has been given for clinical care, Oncology related educations and multifaceted research.

The community oncology department could play a significant role in cancer awareness and cancer control activities in major parts of Kerala. Exhibitions, seminars, and cancer detection camps were carried out by the department. Structured



programmes with various local self-government bodies showed positive results. These are part of epidemiological and intervention studies carried out by the department of Community Oncology.

Malabar Population Based Cancer Registry (MPBCR), with the prior approval & support by Government of Kerala and Puducherry Government supported by ICMR for the three Districts of Kannur, Kasaragod and Mahe, from 2014 onwards and expanded into the other five Districts of Wayanad, Kozhikode, Malappuram, Thrissur and Palakkad, from 2018 onwards. Only new cancer cases and cancer mortality from the above said Districts are registered in MPBCR. . Government issued the order of starting the Kerala Cancer registry. Later, the Government had issued orders directing all Hospitals and Labs to report all cancer cases to the Government of Kerala. Kerala Cancer Control Strategy recommends the formation of Kerala Cancer Registry. The state-wide cancer registry is important for cancer control activities and interventions and to plan appropriate strategies for cancer care. This is expected to cover the entire state of Kerala providing authentic data on cancer incidence and mortality enabling the government

to prioritise the targets in cancer care, develop and implement policies on cancer control, early detection strategies and plan economic flow in cancer care. The Kerala Cancer Registry shall be under the Apex committee for supervising and formulating implementation strategy for Kerala Cancer Strategy.

The continued support of philanthropists and various NGOs and voluntary organizations to help needy patients is duly acknowledged with respect and gratitude. A few to specifically mention are Malabar CH Centre for providing free food for all inpatients. Similarly, Ashraya Charitable Society, Abhaya foundation, and DePaul Centre for providing accommodation and food for patients of MCC are appreciated and acknowledged.

The volunteer program of Kannur Cancer Control Consortium (KCCC) is another project initiated during this period. Volunteers assist patients in registration and navigation. This has been highly appreciated by patients. Community support system is also planned through KCCC. Reproducing similar models in Kasargode, wayanad, Kozhikode and Malappuram are in the process.

Scientific Advisory Committee provided invaluable guidance and input on the development of various academic and training programs in the institution. Government of Kerala has decided to develop Malabar Cancer Centre as a Post Graduate Institute of Oncology Sciences and Research, through KIIFB, These developments are proposed to carry out in a phased manner and in the 1st phase, Construction of Radiotherapy (RT) block with 3rd LINAC (Expansion) and Out Patient (OP) block renovations are included. And the same is in the finishing stage The KIIFB Phase – II Project, which includes development works of MCC not considered in the Phase – I Project and the work commenced

I express my sincere thanks to all the members of Governing body, the Executive committee, and other standing committees and my staff for keeping and nurturing MCC as an apex institution in oncology in the state. I expect this annual report would provide a bird's eye view of the work and achievement of this institution in the 2022-23 periods.

Dr. Satheesan Balasubramanian

MALABAR CANCER CENTRE POST GRADUATE INSTITUTE OF ONCOLOGY SCIENCES AND RESEARCH

Malabar Cancer Centre, Thalassery (MCC) is an autonomous Centre under Health and Family Welfare Department, Government of Kerala, started with an aim to establish a comprehensive cancer centre, providing the much-required oncology care to the population of the Northern region of Kerala and neighbouring parts of Karnataka and Tamilnadu states and Union Territory of Pondicherry(Mahe). The centre is situated on a beautiful hilltop in Kodyeri in Thalassery Municipality 5km away from the town. MCC was established in 2001. The main objective of the Centre is not only to provide comprehensive cancer care but also to develop as a Research and Training Centre of International standards. At present MCC has total bed strength of 203.

The institution is a tertiary cancer centre that renders its service to society with equal thrust on clinical and oncology-related education research and Clinical care Oncology services. MCC is being developed as a postgraduate institute of oncology sciences and research. The institution is in the process of developing and establishing a unique Clinical Research department to coordinate clinical research activities. It has research

association with the School of Health Sciences, Kannur University Centre for Electronic Materials Technology, Thrissur, P.S.Vaidhyarathnam Ayurveda College, Kottakkal, HTIC-Chennai, various institutions of National Cancer Grid etc. It is expected that these could bring revolutionary changes in the management of cancer. Malabar Cancer Centre has been recognized as Research Institute by the Kerala University of Health Science and Kannur University.

The control and management of the Society are vested in the Governing Body consisting of 23 members with the Honourable Chief Minister of Kerala as the Chairman, Honourable Minister for Health as Vice Chairman, and Honourable Minister for Power as Alternate Vice-Chairman. The routine activities and functions of the Centre are supervised by the Executive Committee, with the Secretary, Department of Health and Family Welfare, Government of Kerala, being the Chairman of the Committee. The members of the Governing Body and Executive Committee function in their official positions. The institute has grown to possess highly sophisticated facilities to provide cancer care. The hospital has a team of well-trained staff, rendering cancer care to the needy.

LANDMARK

Year	
1998	Formation of Malabar Cancer Centre Society
2001	Clinical services started
2004	Started Blood bank services
2005	4 Slice CT Scanner and Telecobalt radiotherapy unit
2008	Administration of MCC was transferred to Health and Family welfare department from Power Department
2009	Bed strength increased from 40-100, Home care services were started
2009	Limb salvage surgery, second operation theatre, nurse's hostel, Pain free hospital.
2009	Dormitory for Patients- MPLAD of Smt. Sathi Devi MP
2010	Dual energy linear accelerator with VMAT, Hematology services, Hospital based cancer registry, Community oncology department, Doctor's quarters, BSc Medical Radiology
2011	Regular Pathology services, upgraded biochemistry lab.
2011	High end Dual energy linear accelerator with VMAT installed
2012	Started Department Library system
2012	Cryostat installed and Frozen section studies started
2013	Bone Marrow Transplantation Unit was established
2013	First Autologous Hemopoetic Stem Cell Transplantation was performed
2013	First Allogenic Hemopoetic Stem Cell Transplantation was performed
2014	Pediatric bone marrow transplantation, Population based cancer registry including Kannur, Kasargode and Mahe districts
2014	RFID System with CCTV Surveillance camera Implemented in Medical library
2014	Digital Xray machine
2014	1.5 Tesla MRI
2014	4D CT scanner
2014	ETO sterilizer
2015	First Pediatric Hemopoetic Stem Cell Transplantation was performed
2015	Second Linear accelerator with FFF technology- first of the kind in Government sector
2015	Blood Irradiator
2016	Biometric Punching system started
2016	Started various fellowship programs including 'Fellowship in Hemato-oncology and Bone marrow Transplantation' training programme.
2017	First Matched Unrelated Donor (MUD) allogenic Hemopoetic Stem Cell Transplantation
2017	Cancer genetics laboratory with Next Generation Sequencer(NGS) was established
2017	BMT unit shifted to new block (4 bedded state of the art units)

2017	Separate pediatric oncology division started
2017	Parent orientation programme in Pediatric oncology introduced
2017	Mutation Analysis for various cancers
2018	Fluorescence in Situ Hybridization (FISH)
2018	State of art Proteomics laboratory is established
2018	Started immunotherapy in solid tumors, Population Based Cancer Registry is expanded to Kozhikode, Wyanad, Malappuram, Thrissur, and Palakkad
2018	Conventional radiotherapy simulator –Imagin (Panacea) was installed
2018	Hyperthermic Intraperitoneal Chemotherapy (HIPEC) was started
2019	First Pediatric Matched Unrelated Donor (MUD) allogenic Hemopoetic Stem Cell Transplantation
2019	Intervention radiology started
2019	New Cobalt Radio therapy machine installed to replace the old one
2020	NABH accreditation
2020	Started E-office software and E- Sanjivani online OPD
2020	Brachytherapy: New brachytherapy machine was installed 2020. Flexitron (Elekta-Nucletron)
2020	64 Slice fluoro-CT scan was installed
2020	Paediatric Haemato-ocology Block Inaugurated
2020	Portable Digital Xray unit
2021	Stated Nuclear medicine department-PET CT scan, SPECT CT
2022	2022 Started DOTA Therapy, PSMA Therapy 2022
2022	Upgraded to Postgraduate Institute of Oncology Sciences & Research
2022	Ocular oncology division was started, first retinal artery intraarterial chemotherapy was performed
2022	Endoscopic Ultrasonography unit/EBUS/EUS installed and started functioning
2023	Surgical Operating Microscope
2023	3D laparoscopy system installed

MALABAR CANCER CENTRE: PROFILE 2022-23

SL NO	PROFILE	TOTAL
1	Total New Registrations	7795
2	Follow up cases	85802
3	Total outpatients	93597
4	Total in patients	5566
5	Total Deaths	135

SL NO	SURGERY	TOTAL
1	Major Surgeries	2047
2	Minor Surgeries	718
	Total Surgeries	2765
3	Endoscopies	2000

SL NO	CHMOG	TOTAL
1	OPD Attendance (Clinical Hematology +Pediatric Oncology)	14133
2	OPD Attendance (Medical Oncology + Solid Tumor Division)	23108
3	New Case in OPD (Clinical Hematology+ Pediatric Oncology)	1135
4	Day Chemo Administered	17906

SL NO	RADIATION ONCOLOGY	TOTAL
1	Curative RT	1305
2	Palliative RT	1292
3	Brachytherapy	491
4	4DCT Simulation	2548

SL NO	RADIOLOGY/RADIO DIAGNOSIS	TOTAL
1	MRI	1602
2	CT	5113
3	Mammography	3226
4	Ultrasound	2427

SL NO	ONCOPATHOLOGY	TOTAL
1	Biopsy small	2423
2	Biopsy Radical	1582
3	Biopsy Second Opinion	2626
4	Fine Needle Aspiration Cytology(FNAC)	599

5	FNAC with Cell Block	128
6	FNAC Second Opinion	218
7	Effusion Fluid Cytology	327
8	Effusion Fluid Cytology with Cell Block	296
9	Peripheral Smear	1200
10	Gynaec cytology	99
11	Bone marrow aspiration	687
12	Bone marrow biopsy	683
13	BM Aspiration 2nd opinion	114
14	BM biopsy 2nd opinion	117
15	Flow Cytometry	248
16	Frozen sections	854
17	Total No Reports Issued	12201

SL NO	MOLECULAR ONCOLOGY AND CYTOGENETICS	TOTAL
1	BCRABL QUANTITATIVE	286
2	BCRABL QUALITATIVE	46
3	EGFR	175
4	PML RARa	25
5	DPYD MUTATION	02
6	JAK2 MUTATION	60
7	AML PANEL	61
8	ALL PANEL	55
9	FISH BCRABL	44
10	FISH PML RARa	03
11	FISH HER2	85
12	FISH SS18 (Break apart)	03
13	FISH ALK	04
14	FISH ROS	04
15	FISH EWSR	05
16	MYELOMA PANEL	10

SL NO	PREVENTIVE AND COMMUNITY ONCOLOGY	TOTAL
1	Volunteer Training Programme (ECDC)	31
2	Cancer Awareness Class	21

SL NO	NUCLEAR MEDICINE	TOTAL
1	SPECT /CT	814
2	PET / CT	1030

SL NO	BLOOD BANK	TOTAL
1	Whole Blood Donors	3254
2	Flow Cytometry	112
3	Blood Donation Camps	55

SL NO	EDUCATION & TRAINING	TOTAL
1	Medical Doctors	17
2	BSc/MSc MLT,BSc/MSc Life Science	154
3	MSW/ Psychology	35
4	BSC MRD/ Medical Microbiology	16
5	Observership	08
6	Internship	46

SL NO	DNB/DRNB COURSE	DURATION IN YEARS/ NO. OF SEATS
1	Surgical oncology	3/2
2	Clinical hematology	3/2
3	Pathology	3/1
4	Radiation Oncology	3/3

SL NO	FNB /DIPLOMA COURSE	DURATION IN YEARS/ NO. OF SEATS
1	Pediatric Hemato Oncology	2/2
2	Head and Neck Oncology	2/2
3	DMRD	2/2

SL NO	FELLOWSHIP PROGRAMME	DURATION IN YEARS/ NUMBER OF SEATS
1	Head and Neck Oncology	2/1
2	GynaecologicOncology	2/2
3	Hemato-Oncology &BMT	1/2
4	Gastrointestinal Oncology	1/1
5	Oral Oncology	1/1
6	Aphaeresis Medicine	1/1
7	Oncopathology	1/1
8	Head and Neck Pathology	1/1
9	Oncology Nutrition	1/1
10	Onco-Imaging &Interventional Radiology	1/1
11	Psycho Oncology	1/1
12	Medical Social Worker	1/1

EXTERNAL COMMITTEE

SL NO	COMMITTEE	NUMBER OF MEETINGS
1	Scientific Advisory Committee (SAC)	01
2	Institutional Ethics Committee (IEC)	05
3	Intra Mural Research Fund Review Committee	01

INTERNAL COMMITTEE-ACADEMIC

SL NO	COMMITTEE	NUMBER OF MEETINGS
1	Academic Council	12
2	Institutional Review Board –Scientific Committee(IRB-SRC)	22

INTERNAL COMMITTEE-ADMINISTRATION

SL NO	COMMITTEE	NUMBER OF MEETINGS
1	HOD Committee	04
2	Admin Committee	39
3	Hospital Management Committee	10
4	Nursing Administration	06
5	Scheme Review Committee	07
6	Biomedical Waste Management committee	06
7	Pharmaco Therapeutics Committee	06
8	Hospital Blood Transfusion Committee	04

OTHER COMMITTEE

SL NO	COMMITTEE	NUMBER OF MEETINGS
1	Hospital Infection Control	12
2	Medical Record Audit Committee	05
3	Facility Management & Safety Committee	02
4	Clinicians Committee	12
5	Grievance Handling Committee	03
6	Internal compliance Committee	02
7	Quality Cell	06
8	Code Blue committee	05
9	Radiation Safety committee	02

PATIENT WELFARE AND SUBSIDY

SL. NO.	PARTICULARS	2022-23 IN LAKHS
1	Total % of patients given free treatment using various financial assistance schemes.	89.29%
2	Treatment charge discount	69.00
3	Pharmacy discount	2179.00
4	Total treatment subsidy is given by MCC	2248.00
5	Free treatment for patients	892.31
6	Patient Free Transportation	2.74
7	Through Patient Welfare Fund (Donation from philanthropist)	8.44
8	*Patient Free Food Schemes	33.91
9	Total	3185.40

PATIENT FREE FOOD SCHEME 2022-23

Number of patients benefited	CH Centre Contribution in Lakhs	MCC Contribution in Lakhs	Actual Expenditure in Lakhs
5566	18.89	15.02	33.91

PATIENT TREATMENT SCHEMES 2022-23

SL. NO.	SCHEMES	UNIQUE PATIENT BENEFICIARIES	AMOUNT UTILIZED IN LAKHS
1	Karunya Arogya Suraksha Pathathi	4236	2852.72
2	Karunya Benevolent Fund	1429	841.34
3	Karunya Arogya Suraksha Pathathi - out of package	2627	563.03
4	Karunya Benevolent Fund - Out Of Package	1018	312.18
5	CSS	328	236.20
6	ESI 2021	170	213.58
7	CST	416	151.02
8	Medisep Kerala	178	119.41
9	PMNRF	279	48.65
10	Arogyakiranam	4	18.96
11	Thalolam	21	18.27
12	Medisep Kerala Out Of Package	97	17.20
13	Kerala Social Security Mission Assistance	10	8.64
14	Cope with Cancer	44	8.57
15	PWS	139	7.45
16	Arogyakiranam 2023 IP High End Treatment	1	5.00
17	Sneha Santhwanam	27	4.35
18	Arogyakiranam 2023 Op	13	3.65
19	Sahayika Chennai	5	1.16
20	Akshaya Fund For BMT	3	0.99
21	ThanalVatakara	2	0.85
22	Bairooha Foundation	7	0.60
23	Care and Cure Foundation	1	0.40
24	Co-op Bank Mavilayi	1	0.20
	Grand Total	11056	5434.41

DEPARTMENTS AND DIVISIONS

ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF ANAESTHESIOLOGY**
2. **DEPARTMENT OF CANCER PALLIATIVE MEDICINE**
3. **DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY**
 - o MEDICAL RECORDS DIVISION
4. **DEPARTMENT OF CLINICAL HAEMATOLOGY AND MEDICAL ONCOLOGY**
 - o CLINICAL HEMATOLOGY DIVISION
 - o MEDICAL ONCOLOGY DIVISION
 - o PAEDIATRIC ONCOLOGY DIVISION
5. **DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH**
 - o ONCO-PATHOLOGY DIVISION
 - o BIOCHEMISTRY DIVISION
 - o MICROBIOLOGY DIVISION
 - o TRANSFUSION MEDICINE DIVISION
 - o MOLECULAR ONCOLOGY DIVISION
 - o CANCER GENETICS DIVISION
6. **DEPARTMENT OF DENTISTRY AND REHABILITATION**
 - o DENTISTRY DIVISION
 - o REHABILITATION ONCOLOGY DIVISION
7. **DEPARTMENT OF NUCLEAR MEDICINE**
8. **DEPARTMENT OF PREVENTIVE AND COMMUNITY ONCOLOGY**
9. **DEPARTMENT OF RADIATION ONCOLOGY**
 - o RADIATION ONCOLOGY DIVISION
 - o RADIATION PHYSICS DIVISION
10. **DEPARTMENT OF RADIOLOGY/RADIO-DIAGNOSIS**
 - o INTERVENTIONAL RADIOLOGY DIVISION
11. **DEPARTMENT OF RESPIRATORY MEDICINE & CRITICAL CARE**
 - o PULMONOLOGY DIVISION
 - o CRITICAL CARE DIVISION
12. **DEPARTMENT OF SURGICAL ONCOLOGY**
 - o GENERAL SURGICAL ONCOLOGY DIVISION
 - o HEAD AND NECK ONCOLOGY DIVISION
 - o OCULAR/OPHTHALMIC ONCOLOGY DIVISION
 - o GYNAECOLOGY/ GYNAECOLOGIC ONCOLOGY DIVISION

NON-ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF GENERAL ADMINISTRATION**
 - o GENERAL ADMINISTRATION DIVISION
 - o HUMAN RESOURCES AND ESTABLISHMENT DIVISION
 - o ACCOUNTS DIVISION
 - o PURCHASE/ STORES AND PHARMACY DIVISION
 - o SECURITY DIVISION
 - o ACADEMIC DIVISION & LIBRARY AND INFORMATION SCIENCE
 - o HOSPITAL ADMINISTRATION DIVISION - PUBLIC RELATIONS AND CLINICAL SERVICES
2. **DEPARTMENT OF ONCOLOGY NURSING**
 - o NURSING SERVICES DIVISION
 - o CSSD UNIT
3. **DEPARTMENT OF ENGINEERING AND MAINTENANCE**
 - o ENGINEERING & MAINTENANCE DIVISION
 - o BIOMEDICAL ENGINEERING DIVISION

INDEPENDENT DIVISIONS UNDER DIRECTOR

- o DIVISION OF HEALTH INFORMATION TECHNOLOGY
- o DIVISION OF PSYCHO-ONCOLOGY
- o DIVISION OF CLINICAL RESEARCH AND BIostatISTICS

**ACADEMIC
DEPARTMENTS &
DIVISIONS**

DEPARTMENT OF ANAESTHESIOLOGY



DEPARTMENT IN-CHARGE: Dr. JASHMA C, Associate Professor

BRIEF HISTORY OF DEVELOPMENT

Department of Onco-anaesthesiology started functioning since 2001 with visiting anaesthesiologist from nearby hospitals. In 2009-10, Dr.(Col)N.C.Krishnan was appointed as consultant and he developed the department to the present status.He trained the technicians and organised the visiting consultants. He rendered his services till 2011.In 2015, a permanent faculty joined. At present the department has 5 faculties. On January 13th 2020 major OT complex started functioning after renovation work of OT-1and OT-2..

Now the institution has three major operation theatres and a brachytherapy OT.The major OT Complex is designed with Air Handling Unit with laminar flow, HEPA filter and Temperature, Pressure, Humidity monitoring. Each major OT is equipped with Anaesthesia workstation, Pendant, Intubation Trolley, Drug Repository, Energy devices, Suction devices etc.

NON-OPERATING ROOM ANAESTHESIA (NORA)

1. Cathlab procedures- radiofrequency ablation, microwave ablation
2. Linear accelerator treatment for pediatric cancer patients
3. 4D-CT planning under anaesthesia for pediatric cases
4. PET scan for pediatric cases
5. MRI under general anaesthesia for pediatric cases
6. CT-guided microwave ablation

The surgical intensive care unit (ICU) of Malabar Cancer Centre (MCC) is managed by the onco-anaesthesiology team along with surgical oncologists and respiratory physician.

CURRENT FACILITIES

1. High-end Anaesthesia work station with electronic gas mixing, End Tidal gas monitoring.
2. Multipara monitors with cardiac output monitoring, EtCO₂, SpO₂, Invasive and non-invasive blood pressure monitoring, temperature monitoring, CVP monitoring.
3. Syringe pumps, infusion pumps, fluid pressure bags and body/fluid warmers
4. Depth of anaesthesia monitoring- entropy, BIS
5. Neuromuscular transmission monitoring
6. Total Intravenous Anaesthesia, Target Controlled infusion and PCA pumps.
7. Ultrasound machine for central venous catheterization and regional anaesthesia
8. Nerve stimulator, manual jet ventilation catheter, high flow nasal cannula

NEW SERVICES

1. Ocular oncologic procedures under general anaesthesia.

STATISTICS

MAJOR OPERATION THEATRE AND BRACHYTHERAPY OT

SL NO	PROCEDURE	NUMBERS
1	General Anesthesia(GA)	1422
2	General Anesthesia GA+EDB(Expansion)	351
3	Sub Arachnoid Block(SAB)	270
4	CSEB	24
5	GA+SAB	01
6	Short General Anesthesia	45
7	Monitored Anaesthesia Care (MAC)	01

NON OPERATING ROOM ANAESTHESIA (NORA)

SL NO	PROCEDURE	NUMBERS
1	General Anesthesia(GA)	31
2	Short General Anesthesia	69
3	Sub Arachnoid Block(SAB)	01
4	IV Sedation	04

NORA CASES

SL NO	PATIENT CATEGORY	TOTAL NO OF NORA CASES
1	Adult	26
2	Pediatric	79

CONFERENCE PRESENTATION

Sl.No.	NAME OF PERSON	DELEGATE / FACULTY	TITLE OF PRESENTATION	NAME OF CONFERENCE	PLACE	YEAR
1	Dr Roopesh	Delegate	Validation of a questionnaire and estimating the prevalence of occupational exposure to biological fluids among anaesthesiologists	SAARC AA 2022, 14 TH International Congress Of Anaesthesiologists	Kochi	2022
2	Dr Roopesh	Delegate	Incidence of post-operative pulmonary complications following cytoreductive surgeries and HIPEC-A retrospective analytic study	ISACON 2022 Indian society of anaesthesiologists, National conference	Shillong	2022

3	Dr Sonali	Delegate	Incidence of perioperative cardiac complications in patients with heart disease undergoing major oncosurgeries:A retrospective study	SAARC AA 2022, 14 TH International Congress Of Anaesthesiologists	Kochi	2022
4	Dr Sonali	Delegate	Incidence of intraoperative cardiac arrest in a tertiary cancer centre:A retrospective study	ISACON 2022 Indian society of anaesthesiologists, National conference	Shillong	2022

PUBLICATIONS

1. Opneja S, Sureshan R, Balasubramanian S, Nizam J, Prabhakaran J, Divakaran N, Raveendran R. Incidence of perioperative cardiac complications in patients with heart disease undergoing major oncosurgeries: A retrospective study. *OnkologiaiRadioterapia*. 2022 Oct 1; 16(10).
2. Opneja S, Sureshan R, Balasubramanian S, Divakaran N, KV R. Incidence of intraoperative cardiac arrest in a tertiary cancer centre: A retrospective study. *OnkologiaiRadioterapia*. 2022 Dec 1; 16(12).
3. Sureshan R, Opneja S. Comparison of propofol versus fentanyl infusion for postoperative sedation in mechanically ventilated patients following head and neck oncosurgeries-A Retrospective analytic study. *OnkologiaiRadioterapia*. 2022 Nov 1; 16(11).

STAFF

ACADEMIC STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Dr Jashma.C	Associate professor and Department In-charge
2	Dr Roopesh s	Assistant professor
3	Dr Joon P	Assistant professor
4	Dr Sonali Opneja	Assistant professor
5	Dr Namratha Divakaran	Assistant professor

NON-ACADEMIC STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Mr. Vipin.K	OT and Anaesthesia technician
2	Mr. Mayan John	Dialysis technician
3	Mr.Sreejesh P.P	OT and Anaesthesia technician
4	Mr. Balukrishnan.S.R	OT and Anaesthesia technician
5	Mrs. Shaija .E	OT in-charge and Staff nurse
6	Mrs. Sajna .N	Staff nurse
7	Mrs. Jisha .P	Staff nurse
8	Mr. Maneesh P	Staff nurse
9	Mr. Roni Anthony	Staff nurse
10	Mr. Sreejith S	Nursing assistant

DEPARTMENT OF CANCER PALLIATIVE MEDICINE



DEPARTMENT IN-CHARGE : Dr. BIJI M S, Assistant Professor

BRIEF HISTORY OF DEVELOPMENT

Cancer Palliative Medicine has been functioning in this Centre, since November 2002. The Centre is a recognized medical institution for possession and supply of Oral Morphine. The Palliative Care Services also provide counselling services to patients and their family members. It aims at improving the quality of life of cancer patients especially those for whom curative options have been exhausted.

Cancer Palliative Medicine Division has an in-patient, out-patient and home care facility.

The Homecare facility for the needy patients was started on June 20, 2009. Home care is done thrice in a week catering to the need of patients staying within 35 kms from MCC. There are so far 591 patients registered in homecare facility. Patients are given medication free of cost. Procedures like ascitic tapping, wound dressing, catheterization, ryles tube introduction are done. Apart from this psychological support to the patient and their families are also given.

E-palliative medicine: The homecare service from MCC is Nurse- lead and doctor assisted program using information technology. In order to make the service more effective consultation of the patient is done through e-palliative medicine wherein the patient and relatives can see and consult the doctor directly making the homecare visit more satisfying to them. This was started in the year 2014-15.

STATISTICS

CLINICAL DATA

SL NO	SERVICES	NUMBER
1.	Palliative Medicine OP	8204
2	In-patient	2007
3	Lymphedema Clinic OP	1427
4	Stoma clinic OP	1900
5	Social workers counselling OP	4000

OPD	IP	LYMPHEDEMA CLINIC OPD	STOMA CLINIC OPD	OPD (SOCIAL WORKER)
8204	2007	1427	1900	4000
FINANCIAL YEAR			NO OF TAB.MORHINE 10MG	NO OF TAB. MORPHINE 20MG
2022-23			114549	12816

COURSES CONDUCTED

- Part A IAPC course in “Essentials of Palliative care”** for doctors and nurses -15th and 16th batches completed in 2022-2023
- Part B IAPC course “Hands on training in Palliative care”** – 3 doctors completed in 2022-2023
- NFPM (National fellowship Program in Palliative Medicine)** hands on training- 2 doctors and 1 nurse completed in 2022-23

AWARDS AND RECOGNITION

- Dr.M.S.Biji received for the prestigious **“International Award for Excellence in Palliative care 2021-22”** instituted by Cancer Aid Society, an Associate of United nations Department of Global Communications, having special Consultative Status with United Nations Economic and Social Council and Participant World Health Organization’s GCM/NCD at the **30th International Conference of IAPC IAPCON 2023 held at NIMHANS Convention Centre, Bangalore** from 9th -12th Feb 2023.

FUNCTIONS, CONFERENCE & WORKSHOPS ORGANIZED ATTENDED & PRESENTED

- Dr.Biji attended the 30th International Conference of IAPC IAPCON 2023 held at NIMHANS Convention Centre, Bangalore from 9th -12th Feb 2023 and presented a poster on “A3 Methodology guided solution to address prolonged waiting time in Palliative care outpatient Department.” Also received the International award for Excellence in Palliative care 2021-22.

ONGOING RESEARCH PROJECTS

- Return to work after curative cancer therapy and the barriers associated with it.
- Assessment of spiritual wellbeing in advanced cancer patients receiving palliative care in a tertiary cancer center in Kerala-A mixed method study.

STAFF

ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1.	Dr.Biji M.S.	Assistant Professor & Department in-charge

NON-ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Mrs. Sheeja Nellikka	Staff Nurse

DEPARTMENT OF CANCER REGISTRY & EPIDEMIOLOGY



DEPARTMENT IN-CHARGE: DR. SAINA SUNIL KUMAR Lecturer

BRIEF HISTORY OF DEVELOPMENT

Registry is tasked with ensuring good quality cancer data available to inform and drive improvements in standards of cancer care and clinical outcomes, as well as enabling the use of cancer information to support audit and research programmes.

The department of cancer registry systematically collects, stores, summarizes, and distributes information about cancer patients who are treated in MCC or live in a particular geographic area. These data describe the patient and the disease. Data collected include patient demographic information, cancer identification, diagnostic procedures, cancer-directed treatment, and survival. These data can be analyzed and the information distributed for the education of the medical professional and the community.

FUNCTIONS OF CANCER REGISTRY

- Case finding (case ascertainment): Identifying reportable cases.
- Abstracting: Using the medical record as well as other sources to identify and document information about the patient and the patient's disease in a standard manner on a paper or computerized form.
- Follow-up: For the patient's lifetime, the registry continues to monitor the patient's health status at periodic intervals.
- Quality control: Procedures that ensure the accuracy and completeness of registry data.
- Reporting: Analyzing data and distributing information using the registry database.

In collaboration with National Cancer Registry Programme of Indian Council of Medical Research (ICMR), a Hospital Based Cancer Registry (HBCR) was initiated on November 2010 and started functioning from February 2011 onwards. This department was set up to provide the cancer statistics reported at MCC and the information on patient care.

DETAILS OF EXISTING / NEW FACILITIES

1. **Hospital Based Cancer Registries in India [funded by NCDIR/ICMR]:** Hospital based cancer registry collect information of cancers reported in MCC, regardless of where that person with cancer resides. Collection, collation and transmission of data of all malignant neoplasms reported / diagnosed /treated from MCC from 1st January 2022 onwards.
2. **A study on patterns of care and survival of head and neck, breast and cervical cancers**

in India under the Hospital Based Cancer Registries of National Cancer Registry Program [funded by NCDIR/ICMR]: To describe the clinical features, patterns of care and overall survival of head and neck, breast and cervical cancers among patients availing of care at the study hospital.

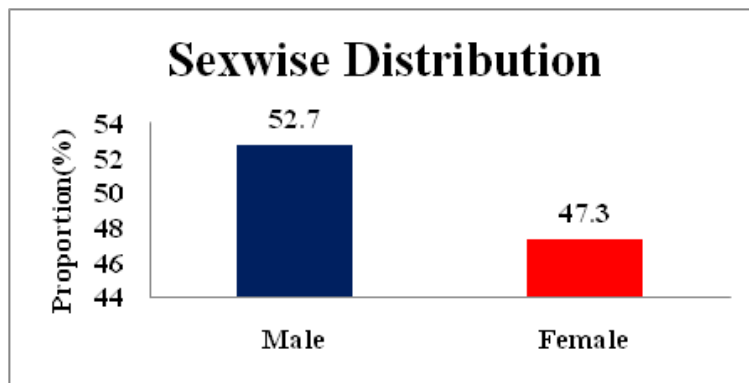
- Malabar Population Based Cancer Registry (MPBCR):**The Malabar Population Based Cancer registry was launched in 2014 for three districts Kannur, Kasaragod and Mahe. Population-based cancer registries seek to collect data on all new cases of cancer/mortality occurring in a well-defined population. As a result, and in contrast to hospital-based registries, the main objective of this type of cancer registry is to produce statistics on the occurrence of cancer in a defined population and to provide a framework for assessing and controlling the impact of cancer in the community. The department published the 4 Malabar Population Based Cancer Registry Reports for years 2014, 2015, 2016 and 2017. The department expanded MPBCR area to the 5 more districts Kozhikode, Malappuram, Wayanad, Thrissur and Palakkad in 2018.

STATISTICS

HOSPITAL BASED CANCER REGISTRY REPORT 2020

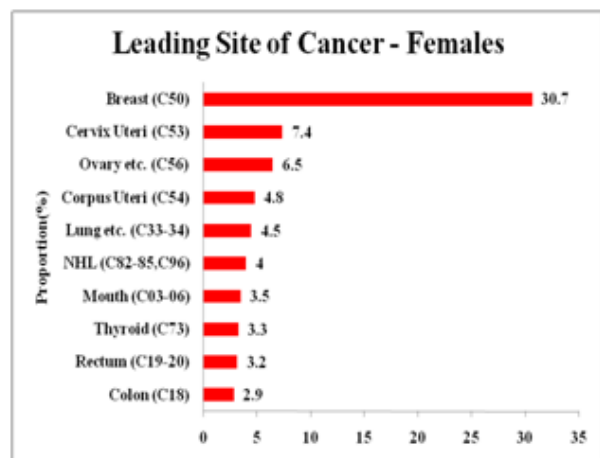
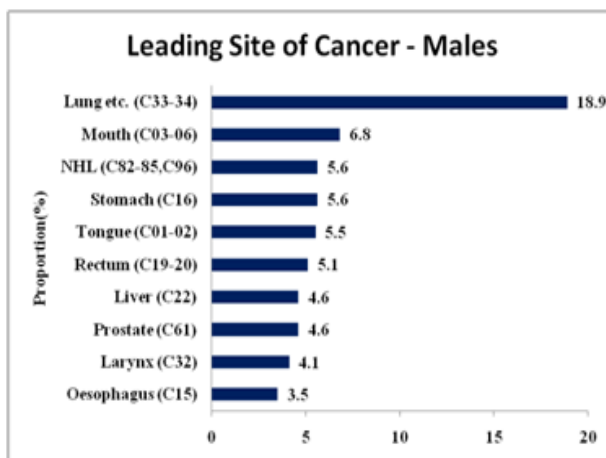
MAGNITUDE OF CANCERS

During the year 2020, the total number of cancer patients registered in the HBCR was 5459 [Male: 2879, Female: 2580] and the male to female ratio was 1.1:1

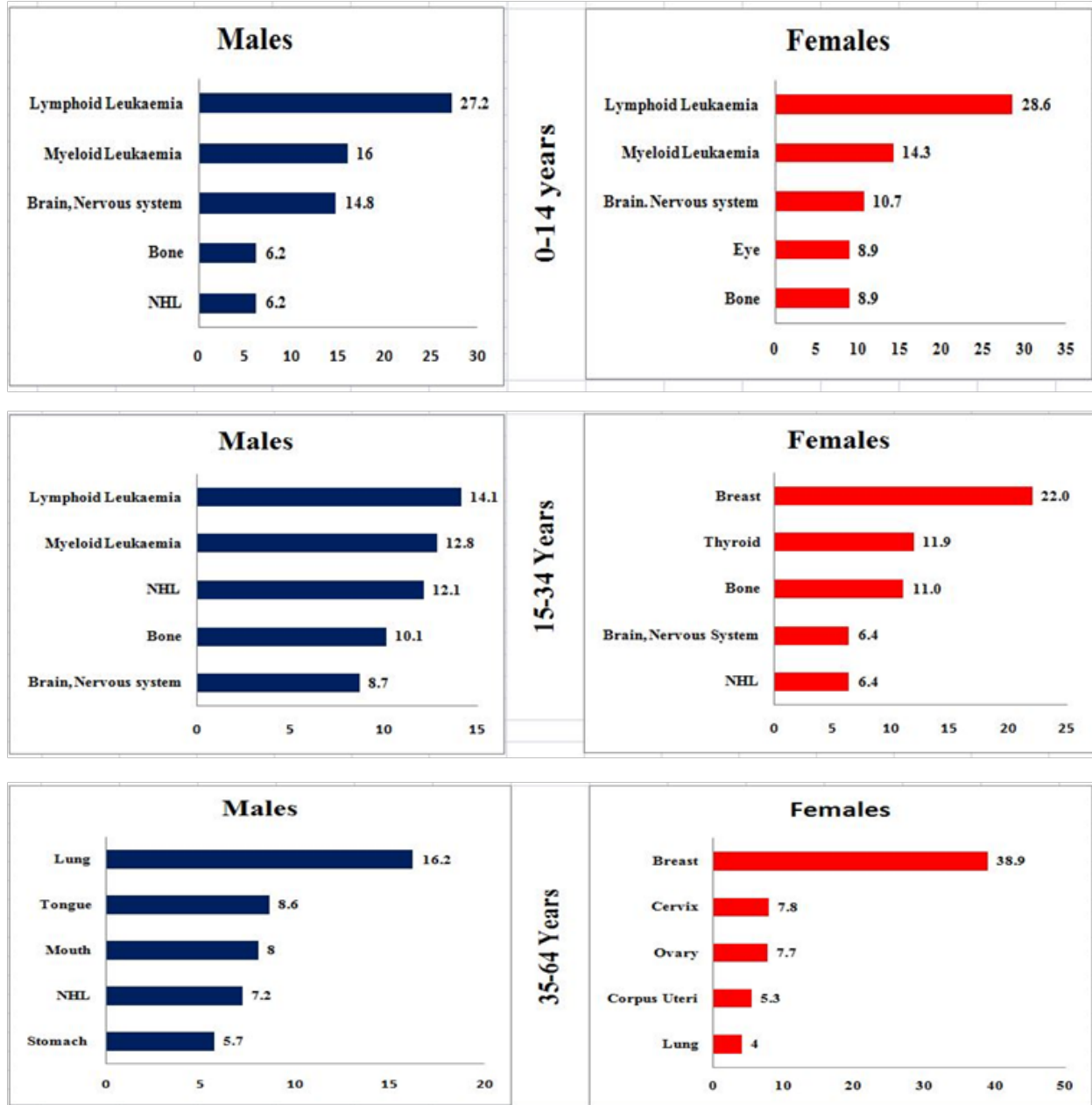


RELATIVE PROPORTION OF TEN LEADING SITE OF CANCER – MALES & FEMALES

RELATIVE PROPORTION OF TEN LEADING SITE OF CANCER – MALES & FEMALES



FIVE LEADING CANCER SITES BY BROAD AGE GROUP



ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DEPARTMENT

- **Statistical Consultancy:** Assistance is provided to statistical design and data analysis to the students and faculties under various departments of MCC.
- **Internship/Project Facilities :** Provides internship/project facility for interested Biostatistics Students pursuing the post graduate in Statistics.
- **Regular academic sessions** conducted Wednesday [Journal Club] and Thursday [Topic presentation] of every week.

ATTENDED & PRESENTED

- Dr. Saina Sunilkumar, Dr. Bindu T and Ratheesan K attended Hybrid Review Meeting on implementation of e-Mor software in hospital conducted by ICMR-NCDIR. on 15.11.2022

ONGOING RESEARCH PROJECTS

SL. NO	RESEARCH PROJECTS	NAME OF PI
1	Hospital Based Cancer Registries in India	Dr. Saina Sunilkumar
2	A study on patterns of care and survival of head and neck, breast and cervical cancers in India under the Hospital Based Cancer Registries of National Cancer Registry Program	Dr. Saina Sunilkumar
3	Population Based Cancer Registry for three districts Kannur, Kasaragod and Mahe	Dr. Satheesan B
4	Expansion of Malabar Population Based Cancer Registry in other five districts (Wayanad, Kozhikode, Malappuram, Palakkad and Thrissur)	Dr. Satheesan B
5	Lifestyle & Cancer	Dr. Satheesan B

PUBLICATIONS - BOOKS / JOURNALS

- Hospital Based Cancer Registry Report 2019.
- Abhayam Newsletter December 2020, March 2021, June 2021, September 2021, December 2021 and March 2022.

STAFF

ACADEMIC STAFF

NO	NAME	DESIGNATION
1	Dr. Saina Sunil Kumar	Lecturer and Department In-charge
2	Dr. Bindu T	Lecturer
3	Ratheesan K	Lecturer

NON-ACADEMIC STAFF

NO	NAME	DESIGNATION
1.	Prachith K S	Coding Clerk

MECIAL RECORDS DIVISION

DIVISION IN-CHARGE: JAYADEV G Medical Record Officer

BRIEF HISTORY OF DEVELOPMENT

Medical records department is situated in ground floor adjacent to outpatient departments and reception. It is one of the busiest departments in Malabar cancer centre. All the patient files are kept in movable racks according to UHID and the death files are kept separately. There are two types of registration, malignant and non malignant cases. Malignant and Non malignant cases are kept separately according to UHID. Malignant case folders are colour coded according to the site of cancer for easy identification. On an average 450 files are retrieved and sent to different outpatient departments. Files send to different departments were given after making an entry in file tracking module using the barcode and the process repeats when the file returns to Medical records division for filing

Inpatient and outpatient files kept in separate folder and are arranged in chronological order. After discharge the IP file is being separated from OP folder and kept in separate folder. Before filing deficiency checking and coding using ICD-10 is being performed. Deficiencies noted are intimated to concerned division/ departments for completion.

SERVICES PROVIDED

1. Dispatch of medical records for patient care purpose
2. Dispatch of files for academic purpose
3. Receive the medical records from the various specialties after the patient has either been discharged or expired.
4. Check the files for any discrepancies and get it amended by the respective person including doctors, nurses and other support staff.
5. Assembling of IP sheets
6. Arrange the files as per the order.
7. Death registration through online.
8. Intimation of notifiable diseases
9. Intimation of Medico Legal Cases
10. Diagnostic coding of diseases using ICD-10

STATISTICS

SI No	CATEGORY	NUMBER OF FILES
1	Outgoing File	100591
2	Chart In	128699
3	Discharge Analysis Done	5547
4	Death Intimation	133
5	Notifiable Disease	12

STAFF

NON-ACADEMIC STAFF

SI No	NAME	DESIGNATION
1	Mr. Jayadev G	Medical Record Officer and Division in-charge
2	Ms. Nameetha S	Medical Record Attender

DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY



DEPARTMENT HEAD: DR. CHANDRAN K NAIR, Professor

BRIEF HISTORY OF DEVELOPMENT

The Department of CHMOG has three divisions -namely, Clinical Hematology division, Pediatric Oncology division and Medical Oncology (solid tumor division).

Clinical Hematology division focuses on evaluation and treatment of benign hematological disorders in all age groups and malignant hematological disorders in patients aged 15 and above. This division also provides Hematopoietic stem cell transplantation for benign and malignant disorders in both adults and in children.

Medical oncology division deals with comprehensive evaluation and medical treatment of various types of solid tumors in adults with chemotherapy, immunotherapy and targeted agents. Spectrum of cases seen in Medical Oncology division include Breast cancer, Gastrointestinal cancers, Lung cancer, Head and Neck cancers, Gynaecological cancers, Endocrine cancers, Thoracic cancers, Genitourinary cancers, Brain tumors and cancers of bone and soft tissues.

This division is well versed in administration of intraperitoneal and intravesical chemotherapy. Paediatric oncology division at MCC caters to management of childhood cancer in children below 15 years of age. The spectrum of childhood cancers that are managed in this division include leukemias - ALL & AML, Lymphomas - Hodgkin and Non-Hodgkin lymphomas, Solid tumors - Wilm's tumor, Neuroblastomas, Hepatoblastomas, Bone tumors (Ewing sarcoma and Osteosarcoma), Brain tumors (Medulloblastomas, optic pathway gliomas and other astrocytomas), Retinoblastomas, soft tissues sarcomas (RMS and NRSTS), Germ cell tumors, etc.

STATISTICS

SL No.	PROCEDURE	No. OF PATIENTS
1	OPD attendance Clinical hematology	12378
2	OPD attendance Pediatric oncology	2755
3	New cases Clinical hematology	1045
4	New cases Pediatric oncology	90
5	OPD attendance Medical Oncology solid tumor division	23108
6	Bone Marrow study hematology	616
7	Bone marrow study pediatric oncology	89
8	Lumbar puncture with I.T MTX	324
9	Lumbar puncture with I.T MTX-Pediatric Oncology	380
10	Day Chemo administered	17906

BONE MARROW TRANSPLANTATIONS

SL . NO	AUTOLOGOUS	ALLOGENEIC(MSD)	ALLOGENEIC (MUD)	ALLOGENEIC(HAPLO)	TOTAL
1	18	4	-	8	30

DETAILS OF EXISTING / NEW FACILITIES

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DEPARTMENT:

- 84 topics presented during this year

CONFERENCE, CME & WORKSHOP ATTENDED

- Dr Vineetha presented the topic “Approach to bleeding child” at IMA Clinical meeting on April 20th and at IAP Thalassery meeting on April 30th as part of World hemophilia day celebrations.
- Dr Jeny presented a case “ Case of Glanzmann Thrombasthenia” at IMA Clinical meeting on April 20th
- Dr Eswar presented a case “ Case of APS in a child” at IMA Clinical meeting on April 20th
- Dr Rayeesa presented a case “ Case of factor 12 deficiency” at IMA Clinical meeting on April 20th
- Dr Manuprasad attended “New Era in the management of head and neck cancer” Organized by Cancer Research and Statistics Foundation in Mumbai from July 11th and 12th as Faculty- Topic of presentation- Immune checkpoint inhibitors in Radioiodine refractory thyroid cancer
- Dr Chandran K Nair attended KEM alumni meet CME and presented “ approach to newly diagnosed myeloma ”
- Dr Jithin T K and Dr K G Gopakumar attended 7th Midterm CME of Pediatric hematology oncology chapter of IAP on 2nd and 3rd of July 2022 as faculty
- Dr Jithin T K was an invited speaker for the talk “Importance of well baby clinic in pediatric oncology” at the 7th Midterm CME of Pediatric hematology oncology chapter of IAP on 2nd and 3rd of July 2022
- Dr K G Gopakumar was an invited speaker for the talk “Initial stabilization of a child with suspected cancer” at the 7th Midterm CME of Pediatric hematology oncology chapter of IAP on 2nd and 3rd of July 2022
- Dr K G Gopakumar delivered a talk on “ Childhood Cancers; How are they different ? “ in the Nursing symposium and workshop conducted as part of the 7th Midterm CME of Pediatric hematology oncology chapter of IAP on 2nd July 2022
- Dr Manuprasad attended ESMO Advanced course on biomarkers for precision medicine held on Oct 9th and 10th at Singapore
- Dr Vineetha presented poster “Indications, Outcome and Cost implications of HSCT in children- experience from a public sector tertiary care center in rural India” at PHOCON 2022 as delegate.
- Dr Vineetha presented the topic “Thalassemia- what is new in management “at IAP Thalassery in May 2022 as part of International thalassemia day celebrations.
- Dr Vineetha presented the topic “Thrombocytopenia in children at IAP, Alappuzha in December 2022.
- Dr Vineetha presented the topic “Hematological malignancies- An overview” at Kannur Cancer Control Programme training for doctors from health services.
- Dr Manuprasad attended 20th annual conference of Women’s cancer Initiative -TMH as faculty October 14th-16th
- Dr Manuprasad attended ISMPO ISO CON 2022 on Oct 29th-30th as faculty in Chennai
- Dr Chandran K Nair attended Cancer consolidation annual meeting October 20th -23 as faculty in Mumbai
- Dr Manuprasad attended in association with Malabar oncology club and association of medical

and pediatric oncologists of Kerala (Ampok) and KASO (Kerala association of surgical oncologist) conducted Urooncocon 2022 a national conference on recent advances in urological cancer.

- Dr Manuprasad attended European Society Of Medical Oncology ASIA (ESMO ASIA) 2022 Conference in Singapore on Dec 2nd-5th and presented a poster and won the Best Abstract award in Genitourinary Cancer category (Title-Toxicity and Outcomes with Oral Fosfestrol in CRPC-Experience from a Low middle income country)
- Dr Manuprasad attended 6th Year End Review In Lung Cancer organized by Cancer Research and Statistics Foundation held at Mumbai on Dec 16th-18th as Faculty
- Dr Jithin T K attended training on infectious diseases in children with cancer at St Jude Children's research hospital, Memphis, USA as part of Global ID program. It was a 2 weeks program - 20/02/2023 - 04/03/2023.

ONGOING RESEARCH PROJECTS

- An Audit of outcome patients with epidermal growth factor receptor mutations in non-squamous non-small cell lung cancer from a tertiary cancer center in Northern Kerala
- Phase I, open label first in human study investigating the safety, tolerability, pharmacokinetics, and preliminary antitumor activity of HSP90 inhibitor GRC 54276 alone and in combination with anti-PD-1 monoclonal antibody pembrolizumab or anti-PD-11 atezolizumab in subjects with advanced solid tumors and Hodgkin's lymphoma - PI(2 patients enrolled, 1 patient being screened) PI
- A Multicenter Randomised, Double blind, Parallel, Phase III Global Study to Assess the Efficacy and Safety of BPO1 (Bevacizumab) when compared to Avastin r-Eu in combination with Carboplatin and Paclitaxel during induction phase and Bevacizumab alone during the maintenance phase in patients with newly diagnosed or recurrent Stage IIIb/ IV Non Squamous (ns) Non- Small cell lung cancer (NSCLC)-PI(3 patients enrolled, 2 patients ongoing) PI
- A phase 3 study of CCNU versus CCNU plus mebendazole in glioma - PI(IEC approved, yet to start recruitment)
- Treatment pattern and outcomes if patient with NSCLC in second-line setting - a multicentric study - PI(enrolled 10 patient, ongoing study, waiting for data from other center too)
- Prospective, multicenter, open-label, phase IV, interventional study to assess the safety and efficacy of Cap imatinib in Indian patients with mesenchymal epithelial transition (MET) exon 14 skipping mutation positive advanced non small cell lung cancer(NSCL) as PI(screened patients, currency protocol being amended) - PI
- A Phase IV, prospective, multicenter, open label non-comparative interventional study to assess the safety of alpelisib plus fulvestrant, in men and post-menopausal women with HR-positive, HER2-negative advanced breast cancer (aBC) with PIK3CA mutation, whose disease has progressed on or after endocrine based treatment (Screened 2, enrolled 1) PI
- Immunotherapy in Advanced solid Tumors - a multicentric retrospective study from India (enrolled 22 patient from our center, overall about 600 patient)
- Phase 3 randomized study for evaluation of physician choice Rx and triple metronomic as second line therapy in head and neck cancer (investigation initiated multicenter trial - 1 patient from MCC - ongoing, total 114 patients completed recruitment)
- Efficacy of Pioglitazone in combination with neoadjuvant chemotherapy in patient with Extremity Skeletal High-Grade Osteosarcoma Treated with curative intent: An open-label, multi-center, randomized phase II Clinical trial (IEC approved, yet to recruit)
- A Randomized, Multiple-dose, multicenter, comparative parallel study to evaluate the Pharmacokinetic, PHARMACOKINETIC, Efficiency and safety of subcutaneous injection of denosumab (Hetero) and Reference medical product (Denosumab, Amgen Inc) in patients with bone metastases from solid tumors (Reapproved yet to start)
- Quality of life outcome in cancer patients living with intestinal stoma - A prospective cross-sectional study (enrolled 54 patients, interim abstract presented in a national conference by Dr Biji)

PUBLICATIONS - BOOKS / JOURNALS

- Oral metronomic chemotherapy as a feasible preoperative therapy in advanced resectable oral cavity squamous cell carcinomas – a preliminary experience. Shenoy V P Praveen Kumar, Manuprasad Avaronnan, Babu Sajith, Aravind Sithara, Narayanan Vinin N, Nayanar Sangeetha, Balasubramanian Satheesan *ecancer* 16 1425 (2022)
- Utility of annual surveillance mammography in patients with treated breast cancer- A single Institutiona experience from India- Manuprasad A, Sreelakshmi Soman, Satheesh Babu TV ,Geetha MuttathOnkologiaiRadioterapia (2022) Volume 16, Issue 12
- Praveen Kumar Shenoy VP, Raghavan V, Manuprasad A, Sajeev Kumar PB, Raj Z, Nair Fearof Recurrence and Somatic Symptom Severity in Multiple Myeloma Patients: An Institution- Based Cross-Sectional Study. *Indian J Med Paediatr Oncol* [Internet]. Thieme Medical Publishers, Inc.; 2022 Sep 1 [cited 2023 May 19];43(4):355–60. Available from: <http://www.thieme-connect.de/products/ejournals/html/10.1055/s-0042-1755302>.
- Sengar M, Korula A, Ganesan P, Rajendra A, Jain H, Samuel P, et al. Prognostic Factors and Outcomes of Adolescent and Adult Burkitt Lymphoma and Leukemia from a Low-Middle Income Country: An Experience from Hematology Cancer Consortium. *Blood* [Internet]. American Society of Hematology; 2022 Nov 15 [cited 2023 May 19];140(Supplement1):6687–9. Available from: [1/6687/487216/Prognostic-Factors-and-Outcomes-of-Adolescent-andhttps://ashpublications.org/blood/article/140/Supplement](https://ashpublications.org/blood/article/140/Supplement)
- Raghavan V, Jithin TK, Gopakumar KG, Nandini Devi R, Manuprasad A, Shenoy PK, et al. Indications, outcome and cost implications of hematopoietic stem cell transplantation (HSCT) in children - Experience from a public sector tertiary care centre in rural India. *PediatrHematol Oncol J*. Elsevier; 2022 Jan 1;7(4):S24.
- Nirmal G, Jithin TK, Gopakumar KG, Parthiban R, Nair C. Prevalence and Outcomes of Carbapenem-resistant Bloodstream Infection in Children with Cancer. *Journal of Pediatric Hematology/Oncology*. 2023 May 3:10-97.
- Fear of Recurrence and Somatic Symptom Severity in Multiple Myeloma Patients: An Institution Based Cross-Sectional Study. Praveen Kumar Shenoy V. P, Vineetha Raghavan Avaronnan Manuprasad, Sajeev Kumar P. B. Zoheb Raj Chandran K. Nair *Ind J Med Paediatr Oncol* 2022;43:355–360

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. Chandran K Nayar	Professor and HOD
2	Dr. Manuprasad A	Additional Professor
3	Dr. Vineetha Raghavan	Associate Professor
4	Dr. Praveen Kumar Shenoy	Associate Professor
5	Dr Jithin T K	Assistant Professor
6	Dr. K.G Gopakumar	Assistant Professor
7	Dr Nandini Devi	Assistant Professor
8	Dr Abhilash Menon	Assistant Professor

DEPARTMENT OF CLINICAL LAB SERVICES AND TRANSLATIONAL RESEARCH



DEPARTMENT HEAD: DR. SANGEETHA K NAYANAR, Professor

ONCOPATHOLOGY DIVISION

BRIEF HISTORY OF DEVELOPMENT

Diagnostic services in the Clinical laboratory at Malabar Cancer Centre (MCC) grew several folds from its inception in 2001. The Division of Oncopathology caters to diagnostic reporting of all registered cancer patients at MCC. The final diagnosis of the type and nature of cancer is ascertained in the subdivisions of Histopathology, Cytopathology & Haematopathology. The techniques of frozen sections and automated immune histochemistry enable accurate and specialised cancer treatment and outcome for patients. The Division aims to be the backbone of dedicated cancer research in the upcoming field of molecular pathology, as cancer treatment moves into the realm of personalised medicine. It has the latest technology in Molecular Pathology aimed at providing complete diagnostic and prognostic facility. The division is situated in spacious premises to the new laboratory block which is on par with state of art laboratories in India & abroad. Innovative research which can translate into life changing modalities is our dream.

Division of Oncopathology conducts Senior Residency & two Institutional Fellowship programmes for post-doctoral candidates, one each in Oncopathology and Head and Neck Pathology to foster specialized training and experience in the field. The faculty and residents are encouraged to do original research project and create academic publications and presentations. Undergraduate students pursuing BSc.MLT are given rotation posting in all divisions of the service laboratories. MCC has been sanctioned two seats for DM oncopathology in the academic year 2023-24. The faculties' details mentioned as below.

CURRENT FACILITIES

- Services of grossing on automated grossing station
- Automated tissue processing and staining of biopsy specimens
- Cryostat cut frozen sections and intra-operative reporting
- Immunohistochemical staining on automated stainer
- Diagnostic reporting of surgical tissue specimens
- Facility for Fine needle aspiration for OP & IP patients
- Processing & reporting of FNA & fluid aspiration samples using Cytocentrifuges and the automated Liquid based cytology which has technical advantages over conventional cytology
- Diagnostic reporting of Peripheral blood & bone marrow aspiration/biopsy samples with

immunophenotyping on Flow Cytometry

- Fluorescent In Situ Hybridisation(FISH) for blood, breast and soft tissue cancers
- Archiving of tissue paraffin blocks & slides for future reference
- Academic seminars and discussions for undergraduate & postgraduate students
- Research projects and publications in collaboration with clinical and research Divisions

MAJOR EQUIPMENTS AVAILABLE

SL.NO	NAME	QUANTITY
1	AutomatedCoverslipper	01
2	AutomatedTissueProcessor	01
3	Automated H & E Stainer	02
5	Digitalincubatorbacteriological	01
6	Electronictimerwithbattery	06
7	Electricsaw forbonecutting	01
8	Electronicbalance	01
9	Grossingstation	01
10	Hotair oven	02
11	Micropipette	02
12	Cryostat	01
13	pH meter	02
14	Pressurecooker	01
15	Refrigerator	04
16	Rotarymicrotome	03
17	Slidecabinet	10
18	Tissueembedder	01
19	Tissuefloatationbath	02
20	Kitchenweighingbalance	01
21	Hygrometer	04
22	Barcodescanner	01
23	Biosensor-Refrigerator	03
24	Barcodeprinter	01
25	Microscope	21
26	Multiheadteachingmicroscope	01
27	Centrifuge	02
28	Liquidbased cytology–thinpreprocessor	01
29	Trinocularmicroscope	01
30	Automated IHC stainer	03
31	Microwaveoven	01
32	Liquidbasedcytology	01
33	Cytocentrifuge	01
34	Printer	04
35	Multipurposevortexer	01
36	Biosafety hood	01
37	Hygrometer	04
38	Formalin monitor	01

39	Blood cellcounter	02
40	Slidefilingcabinet	14
41	Blockfilingcabinet	08
42	DigitalPathologysystem	01
43	Flow cytometry	01
44	Desk top PCs	15
45	Photocopier cum Printer	01

MAJOR EQUIPMENTS PURCHASED/INSTALLED

1. Digital Pathology
2. IHC Machine

NEW FACILITIES/TESTS STARTED

1. ISH for EBER, Kappa and lambda

CLINICAL DATA

SL NO	STATISTICS	NO OF PROCEDURES
1	Biopsy small	2423
2	Biopsy Radical	1582
3	Biopsy Second Opinion	2626
4	FNAC	599
5	FNAC with Cell Block	128
6	FNAC Second Opinion	218
7	Effusion Fluid Cytology	327
8	Effusion Fluid Cytology with Cell Block	296
9	Peripheral Smear	1200
10	Gynaec cytology	99
11	Bonemarrow aspiration	687
12	Bone marrow biopsy	683
13	Bone Marrow Aspiration 2nd opinion	114
14	Bone Marrow biopsy 2nd opinion	117
15	Flowcytometry	248
16	Frozen Section studies	854
17	Total Number of reports Issued	12201

ACADEMIC PRESENTATIONS

SL. NO	TYPE OF PRESENTATION	TOPIC OF PRESENTATION	NAME OF THE CONFERENCE	PLACE & DATE	PRESENTER
1	Moderator	WHO updates in Genitourinary Pathology	Uro-Oncocon 2022	Kannur November 26 th -27 th	Dr.Sangeetha .K Nayanar
2	Panel Discussion	Molecular tumor board	Uro-Oncocon 2022	Kannur November 26 th -27 th	Dr.Sangeetha .K Nayanar
3	Panel Discussion	Penile Cancer	Uro-Oncocon 2022	Kannur November 26 th -27 th	Dr.Sangeetha .K Nayanar
3	Oral paper presentation	Primary Bone lymphoma- A ten year experience at a tertiary cancer centre in South India	ISMPO-ISOCON 2022	Chennai 28 th -30 th October	Dr. Sithara Aravind
4	Oral paper presentation	Pathological factors responsible for recurrence in early breast cancer patients in a tertiary cancer centre- 3 year experience	70 th annual conference of IAPM, APCON 2022	Bengaluru 2 nd -4 th December	Dr.Kandathil Joseph Philip
5	Poster presentation	Measurable residual disease assessment in B-Lymphoblastic Leukemia by 5 and 10 – color flow cytometry: An institutional appraisal.	14 th annual TCS Conference	Hyderabad 14-15 th October	Dr. Anand Vijaya Narayanan
6	Panel Discussion	Molecular tumor board	Uro-Oncocon 2022	Kannur November 26 th -27 th	Dr. Anand Vijaya Narayanan
6	Panel Discussion	Multidisciplinary management of muscle invasive bladder cancer	Uro-Oncocon 2022	Kannur November 26 th -27 th	Dr. Anand Vijaya Narayanan
7	Oral paper presentation	Origin and survival outcomes of Pseudomyxoma peritonei- A retrospective study	ISMPO-ISOCON 2022	Chennai 28 th -30 th October	Dr. Anu Jose Markose
8	Slide seminar	Pineal parenchymal tumor of intermediate differentiation	88 th IAPM Kerala Chapter meeting	13 th March	Dr. Shruthi Surendran
9	Poster presentation	High Grade Myxoinflammatory fibroblastic sarcoma of Leg	88 th IAPM Kerala Chapter meeting	13 th March	Dr. Thara .K

10	Poster presentation	Teratocarcinosarcoma of Trachea- A rare entity	88 th IAPM Kerala Chapter	13 th March	Dr. Faseela Beegum
11	Oral paper presentation	PSA negative skene gland adenocarcinoma: Study of two cases	ISMPO-ISOCON 2022	Chennai 28 th -30 th October	Dr. Aysha Suhana
12	Case presentation	Early T –cell precursor Acute Lymphoblastic Leukemia	Path alumni, Calicut	September 30 th	Dr. Aysha Suhana
13	Slide seminar	Mixed choriocarcinoma and Placental site trophoblastic tumor	89 th IAPM Kerala Chapter meeting	Calicut August 28 th	Dr. Seena Tresa Samuel
14	Oral paper presentation	Leucocyte common antigen (LCA) negative nodal diffuse large B cell lymphoma- A case report	ISMPO-ISOCON 2022	Chennai 28 th -30 th October	Dr. Seena Tresa Samuel
15	Oral paper presentation	Mixed choriocarcinoma and Placental site trophoblastic tumor- A rare entity	ISMPO-ISOCON 2022	Chennai 28 th -30 th October	Dr. Seena Tresa Samuel

PUBLICATIONS

- Breast cancer in young women of age 35 years and below: Initial experience at a tertiary cancer centre in South India, Sithara Aravind, Geetha Muttath, Fathima Bincy, Mohandoss Murugesan, Sangeetha KNayanar, Satheesan Balasubramanian, Oncology and Radiotherapy 15(9) 2021:1-6
- Analysis on the composition of leukapheresis product – A comparison between MCS+® + and spectra optia® apheresis equipment, Murugesan M, Chellaiya GK, Nair CK, Nayanar SK, J Appl Hematol 2021;12:1-5
- Adopting a vein assessment tool improves procedural outcomes in double dose platelet collections – A prospective study, Augustine M, Murugesan M, Nayanar SK, Padmanabhan M, Transfus Apher Sci 2021;60:103198
- Determination of mononuclear cell count using peripheral smear and flow cytometry in peripheral blood stem cell products: A retrospective study from an Indian cancer center, Krishnan A, Murugesan M, Therayangalath B, Philip KJ, Nayanar SK, Nair C K. Asian J Transfus Sci 2021;15:151–6
- Analysis of red blood cell irradiation practices from South India, Murugesan M, Augustine M, Nayanar SK, Asian J Transfus Sci 2021;15:199–203
- Testing for Microsatellite Instability in Colorectal Cancer – a Comparative Evaluation of Immunohistochemical and Molecular Methods Deepak Roshan VG, Sangeetha K Nayanar, Vipin Gopinath, K J Philip, Noushad Aryadan, Vivek Nair, Varadharaja Perumal G. J. O. Issue 39, 2022
- The frequency of EGFR mutation in lung adenocarcinoma patients from a tertiary cancer center of South India, Sangeetha K. Nayanar, Anju Mohan, Praveen Shenoy, Saravanan M, Vipin Gopinath, Deepak Roshan VG JCRT accepted
- Phenotypic and genotypic appraisal of pulmonary mucinous Adenocarcinoma: a retrospective study; Deepak Roshan VG, ramji A, Saravanan M, Gopinath V, Nayanar S, National Journal of Laboratory Medicine, Accepted
- Genomic analysis of breast cancer patient from Kerala:- A novel BRCA1 mutation detected, Adarsh D, Nayanar S, Gopinath V Deepak Roshan VG, Breast Disease, Accepted

STAFF

ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Dr.Sangeetha.k.Nayanar	Professor& HOD
2	Dr. Sithara Aravind	Additional Professor
3	Dr. Kandathil Joseph Philip	Assistant Professor
4	Dr.Aswathi Krishnan M	Associate Professor
5	Dr. Anand Narayanan	Assistant Professor
6	Dr.Vivek Nair	Assistant Professor

NON-ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Mrs. Sabna Dev S K	Cyto Technologist
2	Mrs. Nimi G K	Cyto Technologist
3	Mrs. Subitha S	Cyto Technician
4	Mrs. Soumya V K	Lab Technician
5	Mrs. Biji K R	Lab Technician
6	Mrs. Preethu Das T K	PA to Principal
7	Mrs. Reena K C	Lab Assistant
8	Mr. Vishnu Raj N	Attender

BIOCHEMISTRY DIVISION

DIVISION IN-CHARGE: Dr. SINDHU E. R., Assistant Professor.

BRIEF HISTORY OF DEVELOPMENT

The division of Biochemistry (MCC clinical lab) at Malabar cancer Centre is committed to providing accurate and reproducible results on clinical material within the shortest possible time. It is a well-equipped, computerized, fully air conditioned laboratory providing round the clock services. The clinical lab has the facility to do all the biochemical as well as hematological assays required in the hospital. It is connected to Hospital Information System for electronic reporting of results within the turnaround time. The quality systems are compliant with the ISO 15189 standard guidelines.

There is Vitros fully automated dry chemistry analyzers (Vitros 250 for Biochemistry analysis. Vitros 5600 for both Biochemistry and immunoassays), an Access 2 analyser (Beckman Coulter) for tumor marker analysis. For hematological tests we have two Mindray BC-6200 CBC analyzers in the lab. Electrophoresis and immunofixation tests are performed in the Helena SAS3 SAS4 fully automated system. Fully automated STAGO analyzer for coagulation assays and ABG analyser are available. The osmolality analyser for osmolality tests and MiniVIDAS for immunoassays are installed.

One Month training/observership Program are conducted for undergraduate and post graduate students of various colleges. M. Sc. Student's projects are carried out in our division under the supervision of Dr. Sindhu ER.

Various clinical samples from outside hospitals are also tested and reported.

NEW EQUIPMENT / FACILITIES/ PROCEDURE



Mindray BC-6200 CBC analyzers -2

DETAILS OF EXISTING / NEW FACILITIES

SL NO.	NAME OF EQUIPMENTS	PURPOSE
1	Blood Gas Analyzer (ABG Machine)	Blood gas analysis
2	Coagulometer (STAGO fully automated system)	Coagulation studies
3	Cardiomarker analyser Mini Vidas	Chemi luminous immuno assays

4	Vitros 250 Biochemistry Analyser	Biochemistry assays
5	Vitros 5600 Biochemistry Analyser	Biochemistry and immuno assays
6	Access 2 tumor marker analyser (Beckman Coulter)	Chemiluminous immuno assays
7	Blood cell counter Mindray BC-6200	Complete Blood Cell count
8	CRP Analyser	CRP analysis
9	Vein Viewer	To view vein for blood collection
10	Electrophoresis apparatus with immunofixation	Electrophoresis with immunofixation of serum protein

STATISTICS

TOTAL NO. OF SAMPLES: 45150

SL. NO	TEST	NUMBER
1	Complete Blood Counts	44193
2	Biochemistry	44697
3	Urine Analysis	1264
4	Coagulation tests	6636
5	Tumor marker	8681
6	Serology	5964
7	ABG	567
8	Electrophoresis with immunofixation	1560
Total		1,13,562

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DIVISION

- i. Classes taken for B. Sc Nursing.
- ii. Applied for MSc Medical Biochemistry

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS

Paper presented by Dr. Sindhu ER

1. International Conference on 'Plant Chemistry, Gene Prospecting and Clinical Biology. Organized by Kerala Academy of Science, at Mar Ivanios college TVM on 10/11/2022 to 11/11/2022

Title: Profiling of light chain elevation in newly diagnosed myeloma patients and correlation between light chain type and CRAB criteria.

2. International conference on 'Environmental, Agricultural, Chemical and Biological Sciences' organized by Voice of Indian concern for the environment on May 13-14, 2023 at Srimad Andavan college, Thru chirapilly, Tamilnadu (Hybrid)

Title: Correlation of Ig G and Ig A monoclonal gammopathy with CRAB criteria in newly diagnosed multiple myeloma patients'

PUBLICATIONS - BOOKS / JOURNALS

- 1 AntholiKeloth Kavya, Chandran K Nair, Maya Padmanabhan, Edakkadath Raghavan Sindhu. Evaluation of Haematological Parameters and Lymphocyte Monocyte Ratio as a Prognostic Marker in Diffuse Large B-cell Lymphoma and T Cell Lymphoma Patients- An Observational Study, The Asian Pacific Journal of Cancer Care 2022: 7 (4): 607-13.
2. Anjilikal TomyTomcy, Edakkadath Raghavan Sindhu. Mesenchymal stem cells- an excellent therapeutic agent for cancer. Asian Pacific Journal of Clinical Oncology. 2023:1-9.

ONGOING RESEARCH PROJECTS:

1. Impact of derived haematological parameters from automated analyser on overall and event free survival among colorectal cancer patients-
2. Research collaboration for cancer research with Dr. Ruby John Anto, Rajiv Gandhi centre for Biotechnology

STAFF

ACADEMIC STAFF

SL NO.	NAME	DESIGNATION
1	Dr. Sindhu E. R	Assistant Professor and Division In-charge

NON-ACADEMIC STAFF

SL NO.	NAME	DESIGNATION
1	Mrs. Mini	Lab Technician
2	Mr. Aneesh	Lab Technician
3	Mrs. Namitha	Lab Technician
4	Mrs. Dhanya Prabha N	Lab Technician
5	Mrs. Aneesha	Lab Technician
6	Mrs. Sinsha NP	Lab Technician
7	Mrs. Ajisha	Lab Technician
8	Mrs. Akhila	Lab assistant

MICROBIOLOGY DIVISION

DIVISION IN-CHARGE: Dr.PARTHIBAN R., Additional Professor.

BRIEF HISTORY OF DEVELOPMENT

The division of microbiology at Malabar cancer Centre is committed to providing accurate and reproducible results on clinical material within the shortest possible time. This department provides test turnaround times suitable to clinical situation in which the tests are requested. This has been achieved by round the clock laboratory services, reporting and use of state of the art equipment. The quality systems are compliant with the ISO 15189 standard guidelines.

Automated state of the art equipment is available for blood cultures, and molecular diagnostics. The department provides services on all days of the week.

The department provides services for environmental testing and water testing in the hospital infection control. Implementation of best practices for infection control including surveillance of healthcare associated infections is under the scope of Microbiology.

Microbiology division leads the Hospital infection control program, for which various activities are undertaken to minimize (reduce) the rates of infection there by providing a safe environment to the patients as well as to the Staff.

One Month training/observership Program conducted for undergraduate and post graduate students of various colleges. Student's projects are carried out in the division under the supervision of faculties. Various clinical samples from outside hospitals and colleges are also being tested and reported.

MAJOR EQUIPMENTS AVAILABLE

SL. NO	EXISTING FACILITIES	PURPOSE
1	VITEK - 2	Automated Bacterial Identification and Susceptibility testing
2	MALDI-TOF	Automated Microorganisms Identification (Rapid)
3	BacT/ALERT -3D	Automated Blood culture System
4	Bactec – 9050	Automated Blood culture System
5	Real-Time PCR	Molecular diagnosis for Infectious diseases
6	GeneXpert	Molecular diagnosis for Infectious diseases
7	Anaerobic Chamber	Culture of Anaerobic Microorganisms
8	Thermofisher-Kingflex	Automated Extraction system for RNA/DNA
9	Refrigerated Centrifuge	Used for RNA/DNA Extraction
10	Fluorescence Microscope	For Mycobacterium tuberculosis identification
11	Gradient Thermal Cycler	Research Purpose

CLINICAL DATA

TOTAL NO. OF SAMPLES: 8194

SL.NO	NAME OF TESTS	NUMBER OF TESTS
1	Blood Culture and Sensitivity	2494
2	Urine Culture and Sensitivity	1587
3	Feces Culture and Sensitivity	123
4	Respiratory Culture and Sensitivity	298
5	Exudate Culture & Sensitivity	823
6	Fungal Culture	71
7	AFB Staining	149
8	Gram Staining	101
9	PCP Staining	34
10	Koh/Wet Mount	130
11	Vdrl	53
12	RA	4
13	ASO	2
14	Widal Test	33
15	Cd Toxin	55
16	Beta Galactomannan Assay	32
17	Environmental Samples	766
18	Blood Bank	312
19	Water Analysis	83
20	Disinfectants	149
21	Bacterial Identification(Out Side)	211
22	Virology	684
Total number of Tests		8194

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DEPARTMENT

- Classes taken for B.Sc MRT and B.Sc Nursing.
- Orientation classes regarding HIC activities for newly joined staffs.
- Exam Evaluators for B.Sc Nursing (KUHS).
- Thesis Evaluator/Examiner for different Universities

CONFERENCE & WORKSHOP DETAILS - ATTENDED & PRESENTED

A. Dr. R. Parthiban

- Presented a scientific oral paper on "A Multi-Centre Study on Combinatorial Tapestry Pooling of Samples for Validation of SARS CoV2 RT-PCR Testing" in Indo-Singapore International Conference on Sciences, Agriculture, Engineering, and Management (ISICSAEM2022), organized by Rathinam College of Arts and Sciences, Coimbatore, Tamil Nadu, India- on August 13, 14 2022.
- Certificate Course in AST reporting & Beyond supported by American Society of Microbiology -April 2022 to August 2022.

- Certificate Course in COVID-19: DIAGNOSTICS AND TESTING conducted by FIND, The Global Alliance For Diagnostics, United States Agency For International Development's Bureau For Humanitarian Assistance And Reaching Impact, Saturation, and Epidemic Control(RISE) – August 2022
- National e-Awareness cum Training on IPR (Joint Workshop conducted in Association with University of Madras & CSIR-Institute of Minerals & Materials Technology, Bhubaneswar, India) on 25 -30th July 2022

B. **Dr. Sajani Samuel**

- Certificate Course in COVID-19: DIAGNOSTICS AND TESTING conducted by FIND, The Global Alliance For Diagnostics, United States Agency For International Development's Bureau For Humanitarian Assistance And Reaching Impact, Saturation, and Epidemic Control(RISE) – August 2022
- Presented a poster on "Unusual bacterial isolates and its Antimicrobial Susceptibility profile causing blood stream infections in Cancer patients in a Tertiary Cancer Centre" at 1st National Conference MARSCON 2022 (Microbiology, Antimicrobial Resistance and Antimicrobial Stewardship conference), organized by Department of Microbiology, Dr. D.Y Patil Medical College, Hospital and Research Centre, Pune- on 3rd and 4th June 2022.

C. **Dr. Saravanan. M**

- Certificate Course in COVID-19: DIAGNOSTICS AND TESTING conducted by FIND, The Global Alliance For Diagnostics, United States Agency For International Development's Bureau For Humanitarian Assistance And Reaching Impact, Saturation, and Epidemic Control (RISE) – August 2022.
- ICMR – Basic Course in Biomedical Research (BCBR), conducted by National Institute of Epidemiology (NIE) – 8 weeks course, 2022 – consolidated score of 80%.
- Participated in One day Faculty Development Programme on Innovation and Entrepreneurship Development Centre conducted by Kerala Startup Mission – 3rd March 2023, Rajagiri School of Engineering & Technology, Ernakulam
- Participated in IEDC Summit – 2023, Organized by Kerala Startup Mission and Innovation and Entrepreneurship Development Centre (IEDC)- Rajagiri School of Engineering & Technology on 4th March, 2023 – RSET, Kochi.

D. **Dr. Sarath K.E.**

- Participated in Antimicrobial Stewardship Module (Day 4 & 5) of 6th Advanced National Workshop on Hospital Infection Control', organized by Hospital Infection Control and Prevention (HICP) unit, Dept of Microbiology, JIPMER, Puducherry - 23rd to 27th August 2022.
- Participated in Good Clinical Practice (GCP) Training _ online conducted by SHODH Clinicals on 16th July 2022.

AWARDS AND RECOGNITIONS

1. **Dr. R. Parthiban:**

- Awarded Best oral presentation award in Indo-Singapore International Conference on Sciences, Agriculture, Engineering and Management (ISICSAEM2022) - on August 13, 14 2022 (Hybrid Offline and Online)
- Invited faculty - Fourth International Conference on Recent Trends in Microbiology (RTM-23), conducted by Microbiology Department, Alagappa University, Karaikudi, Tamilnadu on 5th& 6th Jan 2023.
- Invited faculty - International conference on Infectious Diseases and Advances in Microbial Technology at Saveetha Dental College & Hospitals in association with Microbiology Society –UK on 6th Aug 2022.

- 2022 November - External Examiner for Practical examination for BDS degree exam at Mahe Institute of Dental Sciences, MAHE.
 - Member for world society for virology
- 2. Dr. Sajani Samuel**
- I. Appointed by KUHS as EVO/Observer for third year B.Sc Nursing Degree Regular/ Supplementary examination at Dhanalakshmi College of Nursing, Kannur on 6/5/22 and 19/05/22.
 - II. Appointed by KUHS as Evaluator for first and Second valuation of 1styr B.Sc Nursing Degree examination from 15/9/22, 16/9/22 and 19/9/22-21/9/22.
 - III. Appointed as Ph.D supervising guide by KUHS.
- 3. Dr. Saravanan M.**
- I. Invited faculty for Pathfinder in Research – value added Certificate Course, conducted by Mahe Institute of Dental Sciences and Hospital, Mahe, on 9th March 2023.

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. R. Parthiban	Additional Professor and Division In-charge
2	Dr. Sajani Samuel	Associate Professor
3	Dr. Saravanan. M	Assistant Professor
4	Dr. Sarath K.E.	Assistant Professor

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mrs. Ramitha M.G.	Lab Technician
2	Mrs. Aswathy Maheswar	Lab Technician

TRANSFUSION MEDICINE DIVISION

DIVISION IN-CHARGE: DR. MOHAN DOSS M, Additional Professor

BRIEF HISTORY OF DEVELOPMENT

The Blood Bank division was established in the year 2002 as whole blood collection facility. By the year 2006, the blood bank expanded to provide blood component therapy and became one of the few centres providing blood components in North Kerala during the time period. Apheresis facility for platelet donation and stem cell collection was initiated in the year 2013. Irradiation of blood components using Blood Irradiator was installed in blood centre in 2015. In 2018, Nucleic Acid Testing for early identification of infectious disease in blood donors was established. In 2021, the blood centre started cellular therapy lab for processing stem cells for bone marrow transplant patients.

CURRENT FACILITIES

- 24 x 7 Blood Centre
- Blood Components – Packed Red cells, Platelet concentrate, Fresh Frozen Plasma, Cryoprecipitate
- Apheresis – Platelets, Plasma
- Flow cytometry – CD34 Enumeration, Paroxysmal Nocturnal Hemoglobinuria, Chronic Lymphoproliferative Disorder
- Stem Cell Collection and Cryopreservation
- Irradiation of blood components
- Cell Therapy Lab – for modifying stem cell products

MAJOR EQUIPMENTS AVAILABLE:

1. Apheresis – 4 numbers
2. Automated Blood Grouping Equipment
3. Automated Component Extractor
4. Chemilumescence
5. Nucleic Acid Testing – MiniPool NAT
6. Bact/ALERT
7. Gamma Irradiator
8. Flowcytometer
9. CliniMACS Prodigy – GMP compliant automated cell processing system
10. Blood Mobile

MAJOR EQUIPMENTS PURCHASED/INSTALLED DURING CURRENT FINANCIAL YEAR

1. Cryobath

NEW FACILITIES/TESTS STARTED

1. CliniMACS Cytokine Capture System (IFN-gamma) –allows for the concomitant enrichment of viable antigen-specific CD4+ and CD8+ IFN- gamma–secreting T cells against virus such as CMV, Adeno virus. The procedure was performed using “CliniMACS Prodigy” - GMP-compliant fully automated cell processing system
2. CD3+ cell count enumeration in Hematopoietic Stem Cell product

CLINICAL DATA

STATISTICS

Sl. No	CATEGORY	NUMBERS
1	Whole Blood Donors	3254
2	Apheresis Donors	708
3	Blood Donation Camps	55
4	Stem Cell Collection	32
5	Irradiated Blood Components	5079 units
6	Therapeutic Phlebotomy	199 Procedures

• BLOOD COMPONENTS ISSUED

Sl. No	CATEGORY	NUMBERS
1	PRBC	1125
2	Leukodepleted PRBC	2010
3	Platelet Concentrate	2161
4	Single Donor Platelets	1363 units
5	Fresh Frozen Plasma	346
6	Cryoprecipitate	142
Total		7147

• FLOWCYTOMETRY

Sl. No	CATEGORY	NUMBERS
1	Paroxysmal Nocturnal Hemoglobinuria	15
2	Chronic Lymphoproliferative Disorder	31
3	CD34 Enumeration	66
Total		112

• CELLULAR THERAPY LAB

Sl. No	CATEGORY	NUMBERS
1	TCR αβ and CD19 depletion	07
2	CCS IFNg selection	01

CONFERENCE PRESENTATION

SL NO	STAFF	DELEGATE/ FACULTY	TITLE OF PRESENTATION	NAME OF CONFERENCE	PLACE AND YEAR
1	Dr Mohandoss M	Faculty	How do I test Apheresis Donor	TRANSMEDCON 2022 – Annual Conference of Indian Society of Transfusion Medicine	Indore, 2022
2	Dr Mohandoss M	Oral Presentation	Bacterial Screening of Apheresis Platelets and Septic Transfusion Reactions- Experience from South India	TRANSMEDCON 2022 – Annual Conference of Indian Society of Transfusion Medicine	Indore, 2022
3	Dr Mohandoss M	Faculty	QC of Stem Cell Products – Points to consider	Joint Conclave and Workshop on Stem Cells, Cellular Therapies, Gene Therapy and Tissue Engineering	Jodhpur, 2022

PUBLICATIONS

1. Malodan R, Murugesan M, Nayanar SK. Predicting donor-related factors for high platelet yield donations by classification and regression tree analysis. *HematolTransfus Cell Ther.* 2022 Apr 6:S2531-1379(22)00044-X. doi: 10.1016/j.htct.2022.02.007. E
2. Augustine M, Murugesan M, Nair CK, Nayanar SK. Influence of pretransplant anemia on red blood cell transfusions in myeloma patients undergoing autologous hematopoietic stem cell transplantation. *Glob J Transfus Med* 2022; 7:18-22.
3. Murugesan M, Augustine M, Velayudhan SC, Darussalam T, Nayanar SK. Hemolysin test as a tool to screen high-titer Group O platelet apheresis donors: A prospective study. *Asian J Transfus Sci* Date of Web Publication 26-Sep-2022
4. Mohandoss M. Reference Manager. In: B Abhishekh, editor. *Man. Immunohematol. Transfus. Resid.* 1st ed., Notion Press; 2023, p. 488–90.
5. Mohandoss M. Basics in Biostatistics. In: Abhishekh B, editor. *Man. Immunohematol. Transfus. Resid.* 1st ed., Notion Press; 2023, p. 76–80
6. Mohandoss M. Flow Cytometry in Transfusion Medicine. In: Abhishekh B, editor. *Man. Immunohematol. Transfus. Resid.* 1st ed., Notion Press; 2023, p. 377–88
7. Mohandoss M. HLA System in Transfusion Medicine. In: Abhishekh B, editor. *Man. Immunohematol. Transfus. Resid.* 1st ed., Notion Press; 2023, p. 389–406

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. Mohandoss M	Additional Professor and Division In-charge
2	Dr. Anju R Kurup	Lecturer

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mrs. Maya PK	Staff Nurse
2	Mr. Sabeesh P	Blood Bank Technician
3	Mr. Sajeesh V M	Blood Bank Technician
4	Mr. Shibin C V	Blood Bank Technician
5	Mr. Anoop Joy	Blood Bank Technician
6	Mrs. Thahira D	Blood Bank Technician
7	Mr. Arun K V	Attender

MOLECULAR ONCOLOGY DIVISION & CANCER GENETICS DIVISION

DIVISION IN-CHARGE: Dr. DEEPAK ROSHAN, Associate Professor

BRIEF HISTORY OF DEVELOPMENT:

The Division was established in 2014, and in the following year, in 2015, the initial molecular diagnostics were initiated. In 2017, the division introduced an academic program that provided a dissertation facility for Postgraduate students, and since then, successfully completed more than 25 student projects. In 2020, the division took further steps by initiating a Molecular Pathology Fellowship program, offering one seat every year. Additionally, in the same year, commenced PhD program, and currently, three students are actively pursuing their PhD studies. Looking ahead, the division plans to introduce a degree course in medical biotechnology as part of their future initiatives. The main areas of focus for the Division of Genetics and Cytogenetic and the Division of Molecular Oncology are: molecular diagnosis for personalized therapy and research aimed at understanding the molecular and genetic mechanisms underlying tumorigenesis, metastasis, and drug resistance in different types of cancers.

Division also focuses on the HR development by providing PhD program in life science, short-term training for BSc, MSc, life Science and B Sc MLT students and dissertation works for MSc/MD/MDS students

CURRENT FACILITIES

- Genomic Facility
- Proteomics facility
- Cell culture facility
- FISH analysis

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DEPARTMENT

1. PhD program – Guide Kannur University Life science
2. Fellowship in Molecular diagnosis - 1year
3. PG dissertation program
4. Stipendiary training for MSc Biotechnology - molecular diagnosis
5. PG diploma course in molecular diagnosis (18 months)
6. Observational training program for BSc MLT students

ONGOING RESEARCH PROJECTS - INTERNATIONAL, NATIONAL ETC

1. Deciphering specific genetic alterations in oral precancer and cancer as possible therapeutic and prognostic markers:- sanctioned by ICMR govt of India 25 Lakhs
2. Assessment of key immune factors in pathogenesis of HPV associated oral and oropharyngeal squamous cell carcinoma:- sanctioned by ICMR govt of India 25 Lakhs (Co PI)

AWARDS

1. Dr Vipin SERB –SIRE fellowship System-wide analysis to identify a circulating exosome-based biomarker for early detection of brain cancer
2. Dr Deepak Roshan SERB –SIRE fellowship developing a 3-dimensional (3D) organotypic co-culture system of breast cancer cells with adipocyte and immune cells for drug screening SIRE fellowship – not availed

PUBLICATION

1. Vg, D.R., Nayanar, S.K., Gopinath, V., Philip, K.J., Aryadan, N., Nair, V. and Perumal, V., 2022. Testing for Microsatellite Instability in Colorectal Cancer-a Comparative Evaluation of Immunohistochemical and Molecular Methods. The Gulf Journal of Oncology, 1(39), pp.70-78.
2. James, Sherin, Sithara Aravind, Vipin Gopinath, and Sangeetha K. Nayanar. "Phenotypic Appraisal of Collision Tumors of Thyroid–Initial Experience of a Rare Entity at a Cancer Centre in South India." Asian Pacific Journal of Cancer Care 7, no. 2 (2022): 415-419.
3. Deepak Roshan VG1, Sangeetha K Nayanar2, VipinGopinath3, K J Philip2, Noushad Aryadan2
4. Vivek Nair2, VaradharajaPerumal2 Testing for Microsatellite Instability in Colorectal Cancer – a Comparative Evaluation of Immunohistochemical and Molecular Methods G. J.O.Issue39, 2022
5. Christo Rajan, V. G. Deepak Roshan, Imran Khan, V. G. Manasa, Iris Himal, Jayasree Kattoor, Shaji Thomas, PaturuKondaiah& S. Kannan MiRNA expression profiling and emergence of new prognostic signature for oral squamous cell carcinoma, Scientific Reports volume 11, Article number: 7298 (2021)

MAJOR EQUIPMENTS AVAILABLE

1. Illumina MiniSeq
2. Thermo Q exactive LC/MS/MS
3. ARIA III FACS
4. Fluorescent Microscope with FISH and Karyotypic workstation
5. ABI 7500 Real Time PCR
6. Bio- analyzer
7. Liquid N2 generator
8. Vacuum concentrator
9. Cooling Centrifuges
10. -80 Deep freezers
11. -20 Deep Freezers
12. CO2 Incubators with BSL2 facility

NEW FACILITIES/TESTS STARTED

1. DPYD MUTATION
2. FISH SS18 (Break apart)
3. FISH ALK
4. FISH ROS
5. FISH EWSR
6. MYELOMA PANEL

STATISTICS

SL NO	TEST	TOTAL NUMBER OF SAMPLES
1	BCRABL QUANTITATIVE	286
2	BCRABL QUALITATIVE	46
3	EGFR	175
4	PML RARa	25

5	DPYD MUTATION	02
6	JAK2 MUTATION	60
7	AML PANEL	61
8	ALL PANEL	55
9	FISH BCRABL	44
10	FISH PML RARa	03
11	FISH HER2	85
12	FISH SS18 (Break apart)	03
13	FISH ALK	04
14	FISH ROS	04
15	FISH EWSR	05
16	MYELOMA PANEL	10
TOTAL		868

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. Deepak Roshan	Associate Professor and Division In-charge
2	Dr. Vipin Gopinath	Assistant Professor

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mr. Sreehari	Lab Technician
2	Mrs. Sreeja	Lab Assistant

DEPARTMENT OF DENTISTRY AND REHABILITATION



DEPARTMENT HEAD: Dr PRAMOD SANKAR .S, Associate Professor.

BRIEF HISTORY OF DEVELOPMENT

The department has been working towards the concept of Dental Rehabilitation from 2015 Onwards. Prosthodontic services were added to the scope of services then. Till then only dental extractions and scaling were provided.

The department is the process of developing a division of Rehabilitative Oncology. This novel concept aims towards bringing all the rehabilitative services under one umbrella. The patient shall be evaluated at the time of diagnosis for their prehabilitation and rehabilitation needs and the rehabilitative care plan will be formulated.

More rehabilitative services shall be added in the coming years.

CURRENT FACILITIES:

DENTAL SERVICES:

1. Restorative procedures including Rotary endodontics
2. Surgical procedures including dental extractions and Impactions
3. Prosthodontic services- Removable prosthesis, fixed prosthesis including Implant Prosthodontics
4. Maxillofacial Prosthodontics.
5. Paediatric dental services.
6. Intra Oral Peri-apical x rays- Digital

MAJOR EQUIPMENTS AVAILABLE

1. Dental Chairs- 2 Nos.
2. Dental X ray Unit with sensors- 1
3. Physio-dispenser and implant surgical kit.
4. Dental armamentarium for extractions.

MAJOR EQUIPMENTS PURCHASED/INSTALLED DURING CURRENT FINANCIAL YEAR

1. Dental Chair with accessories.

NEW FACILITIES/TESTS STARTED

1. Improved restorative techniques including rubber dam and sectional matrix system.

CONFERENCES AND TRAININGS ATTENDED

1. NABH master class series 4- Completed in April 2022.
2. Attended HR HEALTH CONCLAVE – November 12- At Ganga Hospital, Coimbatore
3. Attended First International Quality conference organised by EQUiP India at Bangalore on 14 th and 15 th March ,2023
4. 42 Academic sessions (In house) along with Rehabilitative Oncology divisions and Cancer palliative medicine.

STATISTICS

SL. NO.	FACILITIES	NUMBER
1	OP Patients	2918
2	Extractions	1757
3	Scaling	36
4	Complete denture	15
5	Removable partial denture	9
6	Fixed partial denture	29
7	Glass ionomer/+restorations	130
8	Root Canal treatment	61
9	Obturators	8
10	Implants	03
11	Maxillofacial Prosthesis	02

STAFF

ACADEMIC STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Dr Pramod Sankar S	Associate professor & HOD

DEPARTMENT OF NUCLEAR MEDICINE



DEPARTMENT IN-CHARGE: Dr. NIKHIL MOHAN, Assistant Professor

BRIEF HISTORY OF DEVELOPMENT

This department is the most recent one. It was established in 2021 with one faculty. A Nuclear Medicine (NM) scan is a diagnostic exam that provides with important information about organ function. In Nuclear Medicine Imaging Radiopharmaceuticals (radioactive medicine or tracers) are either taken orally, or by intravenous injection or inhalation. Special cameras then capture and form images from the radiation emitted by the Radiopharmaceuticals in the body. NM scans determine the presence of disease based on biological and anatomical changes, i.e. how an organ functions, and what it looks like. Nuclear Medicine scans allow us to evaluate the function of a number of organs including the thyroid Gland, Lungs, Heart, Stomach, Kidneys, and Gallbladder.

In Therapeutic Nuclear Medicine, radioactive medicines or radioisotopes are given orally or by intravenous injection to produce uptake in targeted disease areas and produce cell destruction by effect of alpha or beta particles.

DETAILS OF EXISTING / NEW FACILITIES

- SPECT-CT Scanner
- PET-CT Scanner
- Low Dose Radioiodine Therapy
- High Dose Radio Iodine Therapy
- Beta Therapy

STATISTICS

SL NO	PROCEDURE	NO OF TEST
1	SPECT/CT Cases	814
	Bone Scan	481
	Thyroid Scan	04
	Whole Body Iodine Scan	282
	DTPA Scan	41

	MIBG Scan	01
	EC Renogram	02
	V/Q Scan	01
	HIDA Scan	01
	GI Bleed Study	01
2	Total PET/CT Scan studies	1030
	FDG PET CT Scans	1007
	BONE PET CT Scans	15
	PSMA Scan	08
3	High Dose Iodine Therapy	259
	PSMA Therapy	01
	DOTA Therapy	01
	MIBG Therapy	01

ONGOING RESEARCH PROJECTS

Radiation safety aspects of discharging effluents from High Dose Therapy Ward (I-131) to a soak pit- an institutional experience-with AERB

STAFF

ACADEMIC STAFF

NO	NAME	DESIGNATION
1	Dr. Nikhil Mohan	Assistant Professor & Department In-charge

DEPARTMENT OF PREVENTIVE AND COMMUNITY ONCOLOGY



DEPARTMENT IN-CHARGE: Dr. NEETHU A.P, Lecturer

BRIEF HISTORY OF DEVELOPMENT

Community oncology Department started functioning as a full-fledged department since 2010 January. In 2013, the department started functioning in a separate space with facilities for tobacco cessation clinic, facility for online public awareness, specimen museum, area for specimen mounting and area for storing IEC materials. Community Oncology Department has been regularly conducting cancer awareness programs, volunteer training programs, health exhibitions, school-based tobacco awareness programs and community based health research in 6 districts namely Kozhikode, Kannur, Wayanad, Malappuram, Kasaragod, Palakkad in Kerala, and Mahe in U T of Puducherry. The following are the routine departmental activities since its installation.

- **Cancer awareness campaign:** cancer awareness classes for the general public and health workers in cooperation with various organizations, residential groups, clubs, etc.
- **Tobacco awareness campaign at schools:** anti-tobacco awareness classes using audiovisual aids were conducted at different schools.
- **Exhibitions and observation of cancer-related health days:** cancer and tobacco-related health exhibitions were organized at different public programs and schools. No tobacco day, cancer awareness day, etc. were observed with massive public programs.
- **Trainings and workshops:** Training in tobacco control and cancer screening for health workers, volunteers, JPHNs, and nurses are regularly conducted.
- **Awareness generating public competitions:** painting and literary competitions, online competitions were organized for school children and the general public on tobacco control and cancer prevention.
- **Quarterly newsletter NETHI on tobacco awareness for school children.**
- **Publication of IEC materials for awareness generation.**
- **Screening of short film for tobacco awareness “U-Turn “in schools and public programs.**

- **Community participatory research activities.**
- **Collaborative projects with community components initiated by various universities affiliated with MCC.**

From 2011 to 2022, the department has conducted 1391 cancer screening camps, 662 cancer awareness programs, 175 school tobacco programs, 215 volunteer training programs and 137 health exhibitions along with regular Associate center (ECDC) visits. After 2020 owing to the restrictions imposed by the covid situation, the department continued awareness activities through online webinars and conducted 27 awareness webinars for the public and 3 for students in collaboration with KCCC and other organizations like IMA, Rotary club, Kudumbasree etc.

MCC has established Associate centres with facilities for early detection of cancer in various places in Kannur and Kasaragod district and conducts regular follow up visits to these centres.

1. PHC based ECDC clinics at Cherukunnu, Kuttiattoor, Keezhpally (Kannur Dist) and Cheruvathur and Thrikkaripur (Kasaragod Dist.)
2. NGO Based ECDC clinic-Alakkode, Nellikkampoyil (Kannur District) Chittarikkal (Kasargod District), and Thamarassery (Kozhikode District) under Thalassery Social Service Society (TSSS)

ANTI-TOBACCO CELL (2011)

The anti-tobacco cell was formed under the department on 31-10-11. The cell consists of eminent personalities from different walks of life like teachers, Journalists, Social activists, writers, Janamythri police, etc. The main aim of the cell is to educate the student community on the menace posed by tobacco use. The Executive Committee of the cell comprises the following members, Dr. Satheesan. B(Chairman), Dr. Ramachandran V (Joint Convener), Dr.NeethuA. P, Dr.PhinseM. Philip (Member conveners), and Major P Govindan, Dayanandan Master, ChalakkaraPurushu,Pradeep Master (Executive members).The cell is involved in all our anti-tobacco campaigns.

TOBACCO CESSATION CLINIC (2011)

Tobacco cessation services were provided in the dental OPD in 2011. In 2013, a dedicated tobacco cessation clinic was started in the community oncology department in 2013 after the department moved to separate space. Tobacco cessation treatment is provided to those addicted to all forms of tobacco use. People identified at the camps were directed to the department OPD. Division also conducts various tobacco awareness programs for public and school children. Research on various aspects of tobacco use is also conducted in the division. Tobacco cessation OPD functions on all Wednesdays.

MUSEUM (2011)

The department prepares and maintains a museum of cancer inflicted organs which are also utilized in cancer awareness health exhibitions for awareness generation

EARLY CANCER DETECTION CLINIC (2017)

MCC has initiated early cancer detection clinics led by trained nurses at various panchayaths (cherukunnu PHC at Kannapuram, keezhpally PHC at Aralam) in Kannur district and Kasaragod district (Cheruvathur CHC and Neeleswaram Taluk hospital). Early cancer detection clinics are also initiated in collaboration with NGOs and are functioning well (centers at Alakkode and Chittarikkal and Thomapuram and Nellikkampoyil in collaboration with Thalassery Social service society). Another center was started at Thamarassery in December 2021.

KANNUR DISTRICT CANCER CONTROL CONSORTIUM (KCCC) (2021)

As a part of including socially committed individuals and organizations in the cancer control activities

of MCC, we have formed the Kannur district cancer control consortium for cancer control activities. It is formed with an objective to work under the guidance and technical support of Malabar Cancer centre Thalassery to initiate and promote health care with community participation, create awareness about the prevention of cancer, eliminate fear and stigma about cancer, to spread the message about the curability of cancer and to provide rehabilitation to cancer survivors. KCCC was officially inaugurated on 4th February 2021 by the honourable Chief Minister of Kerala.

DETAILS OF EXISTING / NEW FACILITIES

1. Tobacco cessation clinic on all Wednesdays
2. Museum with mounted specimens of organs with cancer, which is utilized in cancer awareness health exhibitions for awareness generation among students and public

STATISTICS

1. AWARENESS ACTIVITIES

SL NO	NAME OF ACTIVITY	NO OF PROGRAMS
1	Public awareness class	22
2	Public awareness webinar	4
3	School awareness program	6
4	Public program	10
5	Volunteer /health worker training program	31
6	Tobacco clinic observers training	37
7	Health exhibition Days	16
8	Project AIDO SCAN camp	32
9	Special programs/ meetings	34
10	ECDC follow up clinic	37

2. TOBACCO CESSATION CLINIC DATA

NEW CASE	FOLLOW UP
72	90

CONFERENCE PRESENTATION

SL NO	NAME OF PERSON	DELEGATE OR FACULTY	TITLE OF PRESENTATION	NAME OF CONFERENCE	PLACE YEAR
1	Dr Phinse M Philip	Delegate	A sequential explanatory study of diagnostic interval in the diagnostic journey of oral cancer patients at a tertiary care centre in northern Kerala	66th Annual National Indian Public Health Association Conference - IPHACON 2022.	Bharati Vidyapeeth Medical College, Pune, Maharashtra - India. 2022

2	Dr Neethu AP	Delegate	Perceived work ability among breast cancer survivors diagnosed in 2016 and associated factors –a cross sectional study from a tertiary cancer centre in Kerala	AMRITACON 2022	Amritha Institute Of Medical Sciences Kochi 2022
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PUBLICATION

1. Parambil NA, Philip S, Tripathy JP, Philip PM, Duraisamy K, Balasubramanian S. Community engaged breast cancer screening program in Kannur District, Kerala, India: A ray of hope for early diagnosis and treatment. Indian J Cancer 2019;56:222-7
2. Breast cancer screening in rural area in Kannur district, Kerala, India;”TheKannapuram Model”- a community participatory approach (online onlypublication: Citation: 2020 Annual Meeting Official Proceedings, Volume XXI. Ann SurgOncol (2020). <https://doi.org/10.1245/s10434-020-08630-3>
3. Philip PM, Parambil NA, Bhaskarapillai B, Balasubramanian S. Evaluation of a specially designed tobacco control program to reduce tobacco use among school children in Kerala. Asian Pac J Cancer Prev. 2013;14(6):3455-9. doi: 10.7314/apjcp.2013.14.6.3455. PMID: 23886127.
4. Philip PM, Nayak P, Philip S, Parambil NA, Duraisamy K, Balasubramanian S. Population-based cancer screening through community participation: Outcome of a district wide oral cancer screening program from rural Kannur, Kerala, India. South Asian J Cancer. 2018 Oct-Dec;7(4):244-248. doi: 10.4103/sajc.sajc_104_17. PMID: 30430093; PMCID: PMC6190395.
5. Philip PM, Kannan S, Parambil NA. Community-based interventions for health promotion and disease prevention in noncommunicable diseases: A narrative review. J Educ Health Promot. 2018 Nov 27; 7:141. doi: 10.4103/jehp.jehp_145_18. PMID: 30596113; PMCID: PMC6282482.
6. P. M. Philip and S. Kannan, “Patient Interval and Associated Factors in the Diagnostic Journey of Oral Cancer: A Hospital-Based Cross-Sectional Study from Kerala, India,” Asian Pacific Journal of Cancer Prevention, vol. 22, no. 10, pp. 3143–3149, Oct. 2021
7. Parambil NA, Philip PM, Balasubramanian S, Padmanabhan M. Educational short film versus PowerPoint-based lecture in school tobacco awareness programs: Study from a tertiary cancer center, Kerala, India. Indian J Public Health.2022; 66:61-3.

FUNCTIONS, ACTIVITIES, CONFERENCE& WORKSHOP DETAILS

1. EnteKeralam’Exhibition: As part of state wide observation of 1st anniversary of state government, an exhibition was conducted by including various government departments from April 3rd to April 14th.. MCC bagged second prize in the category of best theme pavilions.

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr.Neethu A.P	Lecturer and Department In-charge
2	Dr.Phinse. M.Philip	Assistant Professor

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mr. Santhosh Kumar	Lab Assistant
2	Mrs Nisha	Nursing Assistant

DEPARTMENT OF RADIATION ONCOLOGY



DEPARTMENT HEAD: DR. GEETHA.M Professor

BRIEF HISTORY OF DEVELOPMENT:

The department was started in 2005 with the installation of Telecobalt machine. At present the department of radiation oncology is equipped with the latest technological advances in the field of radiation oncology and provides state of art treatment . The department is equipped with two high-end linear accelerators, Clinac ix (Varian) and Versa HD with FFF (Elekta), Telecobalt machine – Equinox(Team Best), brachytherapy machine (Flexitron – Elekta), CT simulator and a conventional simulator. Dedicated contouring stations (MIM) and planning systems (Eclipse, Monaco & Oncentra) for EBRT and brachytherapy planning also are available. The DNB Radiation oncology course could provide thrust to the academic ventures.

Division of Radiation Physics is under the department of Radiation oncology. This division is in-charges of the radiotherapy equipment and Radiation safety officer ensures the radiation safety in the institution. Through the MoU with Calicut university, MCC provides training and internship for MSc Radiation physics students of the Calicut University.

CURRENT FACILITIES

Major Equipments available

1. TELETHERAPY MACHINES
 - a. High end Linear Accelerators
 - i. Clinac ix (Varian Medical Systems)
 - ii. Versa HD- (Elekta Medical system)
 - b. Telecobalt
2. BRACHYTHERAPY
 - a. HDR Brachytherapy – Flexitron
3. SIMULATOR
 - a. CT Simulator

STATISTICS

SL NO	PROCEDURE	NO OF PATIENTS
1	Total patients	2597
2	Curative (Patient Number)	1305
3	Palliative (patient number)	1292
4	3DCRT	487
5	IMRT/VMAT	551
6	HYBRID ARC	32
7	ABC	5
8	SRS/SRT	10
9	ELECTRON BEAM THERAPY	31
10	2 DRT	226
11	BRACHYTHERAPY TOTAL	491
12	ICA	186
13	SORBO	290
14	Interstitial implantation	15
15	CT Simulation	2548
16	CONV Simulation	49
17	Brachy simulation	178

CONFERENCE PRESENTATION

Sl. No.	NAME	DELEGATE /FACULTY	TITLE OF PRESENTATION	NAME OF CONFERENCE	PLACE	YEAR
1	Dr. Geetha.M	Faculty	SBRT in oligometastasis – Panelist	ISMPOCON-ISOCON	CHENNAI	October 2022
2	Dr. Joneetha Jones	Delegate	Outcome of early glottis cancer treated with definite radiation treatment	Mk Krishnan nair memorial international oncology conference	Trivandrum	August 2022
3	Dr. Joneetha Jones	Delegate	30 day mortality post palliative radiotherapy	Oncology 2022 conference	Cochi	October 2022
4	Dr. Joneetha Jones	faculty	Testicular tumours panelist	urooncocon	Kannur	November 2022
5	Dr. Vinin. N.V	Delegate	Clinical outcome of interstitial brachytherapy for gynaecological malignancy	Mk Krishnan nair memorial international oncology conference	Trivandrum	August 2022

6	Dr. Vinin. N.V	Delegate	Analysis of bladder and bowel toxicity and volumetric dose parameters in carcinoma cervix patients treated with definitive radiation therapy	MVR CANCON	Wynad	September 2022
7	Dr. Vinin. N.V	Delegate	Radiotherapy for pediatric malignancy. An experience from tertiary cancer centre	Oncology 2022 conference	Cochi	October 2022
8	Dr. Greeshma	Delegate	Does radiological response to neoadjuvant chemotherapy predict the clinical outcome in carcinoma lung patients with chemoradiation.	Oncology 2022 conference	Cochi	October 2022
9	Dr. Arun.P. Narendran	Delegate	Analysis of bowel and bladder toxicity and volumetric dose parameters in carcinoma cervix patients treated with definitive radiation therapy	MVR CANCON	Wynad	September 2022
10	Dr. Arun.P. Narendran	Delegate	Comparison of acute morbidity and time toxicity parameters of two neoadjuvant treatment protocols in locally advanced carcinoma rectum	Oncology 2022 conference	Cochin	October 2022
11	Dr. Arun.P. Narendran	Faculty	Prostate Cancer - Panelist	urooncocon	Kannur	November 2022
12	Dr. Anitta Francis	Delegate	Factors contributing to weight loss in patients on Radiation therapy for Head and neck cancer	Caritas Health Conclave 2022	Cochin	June 2022

PUBLICATIONS

1.Muttath, G., Erakkotan, G. K., Jayaraj, A., Cheruliyil Ayyappan, S., Kumar. E.S, A., Narayanan, V., Jones, J., Narendran, A., Yahiya, N., Suresh, A., &Malodan, R. (2022). Volumetric Estimation of Lung Dose and Its Association with Pneumonitis Following Radiotherapy in Breast Cancer Patients. *Asian Pacific Journal of Cancer Care*, 7(2), 207-211. <https://doi.org/10.31557/apjcc.2022.7.2.207-211>

2.Vinin, NV & Jones, Joneetha& T K, Jithin &Gopakumar, K G & Geethanjali, A &Muttath, Geetha. (2022). Radiotherapy for Pediatric Malignancies: An Experience from a Tertiary Cancer Centre. *Asian Pacific Journal of Cancer Care*. 7. 675-678. [10.31557/apjcc.2022.7.4.675-678](https://doi.org/10.31557/apjcc.2022.7.4.675-678).

STAFF

ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Dr. Geetha.M	Professor &HOD
2	Dr. Vinin.N.V	Additional Professor
3	Dr. Joneetha Jones	Associate Professor
4	Dr. Greeshma. K.E	Associate Professor
5	Dr. Arun. P. Narendran	Assistant Professor
6	Dr. Nabeel Yahiya	Assistant Professor
7	Dr. Akhil.P Suresh	Assistant Professor
8.	Mrs. Silpa Ajay Kumar	Lecturer, Rso
9.	Mrs. Sujja. C.A	Lecturer
10	Mrs. Resmi. K. Bharathan	Lecturer
11	Mrs. Lisha Jose	Lecturer

NON-ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Mr. Arun Kumar. E.S	Dosimetrist
2	Mrs. Preethy. U.P	Dosimetrist
3	Mrs. Sriji Soman	Technician
4	Mr. Nijeesh. T.P	Technician
5	Mrs. Beena. P.K	Technician
6	Mrs. Dhanya.V	Technician
7	Mr. Harshal. C.H	Technician
8	Mrs. Gayathri. U	Technician
9	Mr.Faizal A	Technician
10	Mrs. Rajitha Mohan	Technician
11	Mr. Sunoj. K. Anad	Technician
12	Mr. Sandeep Kumar	Attender
13	Mr.Sujith.T	Attender

DEPARTMENT OF RADIOLOGY/ RADIO-DIAGNOSIS



DEPARTMENT HEAD: DR. SATHEESH BABU T V, Associate Professor

BRIEF HISTORY OF DEVELOPMENT

Though a 4 slice CT scanner was installed in 2005, the department was established only in 2011-12. The department is vital to cancer management, with a wide choice of tools and techniques available for the detection, staging, and treatment of the disease. Imaging plays a major role in the detection of cancer as it provides a detailed insight into the exact location and extent of the disease. It can also provide detailed information about structural or cancer-related changes. Emerging methods of molecular imaging, which combine traditional imaging technology and nuclear medicine techniques, can also be used to obtain more detailed information about abnormalities, including their distinct metabolism. As technologies are constantly being refined, imaging modalities will become even more accurate and reliable in the future

INTERVENTIONAL RADIOLOGY DIVISION

Department acquired a high-end Digital Subtraction Angiography machine (Siemens Artis Zee Pure) and became functional in January 2020. A dedicated interventional suite and 5 bedded recovery area is set up in IR. The Solero Microwave Tissue Ablation System for the ablation of tumors in the liver, lung, and kidney is also used. Both vascular and non-vascular procedures are at present done in IR.

FACILITIES AVAILABLE

- 128 slice GE Revolution Evo with facility for CT fluoroscopy
- Clinical MR scanner: GE- Signa HDxT1.5T
- USG scanner– Toshiba Apollo (high-end USG machine), Samsung USG machine, 3 portable machines (Nobulus by Hitachi, Acusonfreestyle wireless USG by Siemens, and Acuson P500 by Siemens), Automated breast ultrasound (iABUS by Episonica).
- Maxio Robot for robotic interventions
- 3D breast tomosynthesis – Upgraded for contrast mammogram & synthesized tomography.
- Vacuum Assisted Biopsy Machine(VAB)
- Conventional X-ray and Digital Radiography (DR).
- High-end mobile DR.-SamsungGM85, Carestream
- GE centricity Enterprise PACS – Upgraded.
- DSA suite (Siemens ArtisZee Pure)
- Starburst Radiofrequency Ablation system by Angiodynamics.
- Solero Microwave ablation system.
- Ziehm C-Arm machine.

NEW FACILITIES

1. Hologic Horizon - Dexascan

STATISTICS

SL NO	MODALITY	INVESTIGATION/PROCEDURE	NUMBER
1	MRI	No of Patients Imaged	1602
2		Full Study	1915
3		Screening	322
4		MR RT Planning	168
5	CT	No of Patients Imaged	5113
6		Full Study	8525
7		Biopsy	307
8		Robotic Biopsy	1
9	Pigtail	USG guided	5
10		CT guided	15
11	Portable X-ray		827
12	Digital Radiography	No of Patients	5687
13		Studies	6191
14		Barium Studies	39
15	C-arm Procedure		18
16	Mammography	Studies	3226
17		Stereotactic biopsy	10
18	Ultrasound	Studies	2427
19		Biopsy	210
20		FNAC	209
21		Aspiration	73
22		Wire localization	43
23		Coil marking	21
24	Interventional Radiology	Trans arterial Chemoembolization	10
25		Radiofrequency ablation	02
26		Microwave ablation	26
27		PTBD	11
28		NG Tube insertion	21
29		N J Tube Insertion	1
30		Intra Arterial chemotherapy	1
31		Hickman line insertion	1
32		Chemoport removal	1
33		Esophageal Stenting	4
34		Balloon dilatation	2
35		PTBD & Stenting	4
36		Lymphangiogram	5
37		Biliary Stenting	3
38		Parent vessel embolisation	3

COURSES OFFERED IN THE DEPARTMENT:

- BSc. MRT
- Fellowship in Oncoimaging and Interventional Radiology
- Diploma in Radio diagnosis – Department was allotted 2 seats under DMRD by NBEMS

STAFF

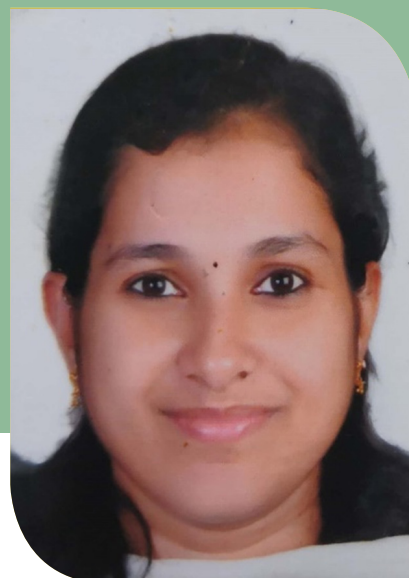
ACADEMIC STAFF

SL. No	NAME	DESIGNATION
1	Dr. T V Satheesh Babu	Associate Professor and HOD
2	Dr. Nrithi S Prasad	Assistant Professor

NON-ACADEMIC STAFF

SL. No	NAME	DESIGNATION
1	Mrs. Shamna P	EDP Assistant
2	Mrs. Sheena T P	Radiographer
3	Mrs. Sindhu K U	Technician/ Radiographer
4	Mrs. Vini Raveendran	X-Ray Technician
5	Mrs. Nimmya Parameswaran	Radiographer
6	Mr. Muhammed Naseem	Radiographer
7	Mrs. Srinsi N K	Radiographer
8	Mr. Praveen Kumar	Radiographer
9	Mrs. Nidhu C D	Radiographer
10	Mrs. Anu AnandhanAchari	Radiographer
11	Mrs. Shajeena	Radiographer
12	Mr. Noufal P	Radiographer
13	Mrs. Shikha M K	Radiographer
14	Mrs. Sabina C V	Radiographer

DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE



DEPARTMENT IN-CHARGE Dr. PRIYA Assistant Professor

BRIEF HISTORY OF DEVELOPMENT

The department is a nascent addition to the institution. Unlike other two dedicated cancer centres under the Government, MCC is located in the suburb of a small town. The nearest multispeciality hospital is 3.5-5km from the institution. Hence the need to develop a department of respiratory medicine and critical care is pertinent. The department has only one faculty.

FACILITIES AND SERVICES

1. Pulmonary function test with DLCO
2. OP and IP services
3. Bronchoscopy and interventions

STATISTICS

OP	PFT	DLCO	PLEURAL TAPPING
1456	470	12	20

STAFF

ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Dr.Priya	Assistant professor & Department In-charge

DEPARTMENT OF SURGICAL ONCOLOGY



DEPARTMENT HEAD : (Officer in-charge): Dr NIZAMUDHEEN M P, Additional Professor

BRIEF HISTORY OF DEVELOPMENT

The department offers surgical service in almost all types of solid tumors. It offers various academic courses including DrNB Surgical oncology and Fellowship programs in various domains. Surgical oncology deals with work up of the majority of the solid tumors registered in MCC. The department has expanded further in the current year. Additional staff that joined the department in the last year were Dr. Rajesh Krishna.P., Assistant Professor, Dr. Bonny A. Joseph, Assistant Professor, Dr. Hridya H., Assistant Professor and Dr. Prasanth P., ad hoc assistant Professor. Infrastructural improvements were done in the department for performing advanced surgeries.

The service was extended to Neurosurgery and Ocular oncology from last year. The department has taken the lead in digitizing medical records in MCC. Currently all cases are documented online and the department is ready to proceed further as the rest of the departments and services catch up with this development.

Currently we have three operation rooms (OR) and a minor procedure room. The creation of a fourth OR, expansion of the recovery room and ICU and endoscopy rooms are going on. The new OR is designed as a robotic OR and the steps to procure a surgical robot are in process.

DIVISIONS

1. HEAD AND NECK ONCOLOGY

CURRENT FACILITIES

Regularly conduct surgeries for all areas in head and neck and carry out complicated reconstructions as well.

MAJOR EQUIPMENT AVAILABLE:

Advanced microscope, laser surgery, Drill system, Nerve monitor, Nasal endoscopy, skull base surgery instruments, navigation system.

MAJOR EQUIPMENT PURCHASED/INSTALLED DURING THE CURRENT YEAR:

Microscope, nerve monitor, Medtronic drill system, new microvascular instruments set.

NEW FACILITIES/TESTS STARTED:

Nerve monitoring for safe thyroid and parotid surgery,

2. GENERAL SURGICAL ONCOLOGY

CURRENT FACILITIES

Regular surgeries include major resections of cancer involving colorectum, stomach, esophagus, pancreas, retroperitoneum, urological organs, genital organs in men, lung, mediastinum, chest wall, bone and soft tissues and pediatric cancers. Vascular access procedures are done regularly in adults as well as pediatric patients.

MAJOR EQUIPMENT AVAILABLE

3D laparoscope, 2D laparoscope, HIPEC machine, Mediastinoscope, cystoscope, CUSA, vessel sealer devices, advanced cautery.

MAJOR EQUIPMENT PURCHASED/INSTALLED DURING THE CURRENT YEAR

3D laparoscope, Sternal saw, ICG enabled laparoscope, cystoscope.

NEW FACILITIES STARTED

3D laparoscopy.

3. GYNEC AND BREAST ONCOLOGY

CURRENT FACILITIES:

Major resections for cancers of ovary, endometrium, cervix, vulva and vagina. Screening including pap smear, liquid based cytology, genetic testing for ovarian cancers, genetic counselling of gynec cancers and breast cancer and major resection and reconstructions of breast cancer.

MAJOR EQUIPMENT AVAILABLE

Laparoscopy, Colposcope, HIPEC.

MAJOR EQUIPMENT PURCHASED/INSTALLED DURING THE CURRENT YEAR

Colposuit, New laparoscopy set.

NEW FACILITIES STARTED

3 D laparoscopy.

UNIT OF ENDOSCOPY

CURRENT FACILITIES

OGD scope, colonoscope, side viewing scope, bronchoscope, EBUS/EUS, Savory Gillard dilators. ERCP and esophageal stenting are offered.

MAJOR EQUIPMENT PURCHASED/INSTALLED DURING THE CURRENT YEAR

Endo ultrasound/endobronchial ultrasound, ultrasonic endo-washer.

NEW TESTS STARTED:

EBUS TBNA, EUS biopsy.

UNIT OF NUTRITION AND DIETETICS

CURRENT FACILITIES/SERVICES:

Nutritional assessment, nutritional management, parenteral nutrition, enteral nutrition services, pediatric care, palliative nutrition care, weight management.

NEW FACILITIES/TESTS STARTED: A pediatric feed room was started.

UNIT OF SPEECH AND SWALLOWING

CURRENT FACILITIES

Clinical evaluation (speech, voice, swallowing), Speech therapy, Voice therapy, Swallowing therapy, Laryngectomy voice rehabilitation. Prophylactic exercise therapy, Instrumental swallowing assessment: - FEES, VFSS, Counseling (pre and post treatment)

NEW FACILITIES/TESTS STARTED:Group therapy for esophageal speakers

UNIT OF PHYSIOTHERAPY

CURRENT FACILITIES

Physiotherapy Division play a pivot role in both prehabilitation and Rehabilitation services of MCC. It provides consultation of both Inpatient and outpatient according to reference of surgical oncology, radiation oncology, Medical Oncology, Pediatric Oncology and palliative medicine according to clinical report, evaluation and assessment provides proper physiotherapy management

MAJOR EQUIPMENTS PURCHASED/INSTALLED

Continuous passive mobilization unit lower limb -1

Quadriceps cycle -2

Exercise ball -1

Ankle exerciser -2

Coordination board -1

Tens+electrical stimulation unit-1

NEW FACILITIES/TESTS STARTED

Multi layer bandaging for lymphedema

NEWLY ADDED SERVICES/DIVISIONS

1. NEURO-ONCOSURGERY -Regular service started on 03/11/2022.

FACILITIES

- Surgery for tumors involving brain, calvarium, skull-base, vertebral column, spinal cord and peripheral nervous system.
- Advanced operating microscope.
- Facilities for awake brain surgery and intraoperative neuromonitoring for better functional preservation.
- Availability of navigation system and facilities for performing minimally invasive navigation guided biopsy.
- Drill, CUSA for performing tumor surgeries.

2. OCULAR ONCOLOGY

Ocular Oncology under the Department of Surgical Oncology offers comprehensive eye examinations and is backed by a strong multidisciplinary oncology team. It offers the best available treatment for Retinoblastoma that includes periodic examination under anesthesia, Intravitreal Chemotherapy, Cryotherapy, Laser therapy, Transpupillary Thermotherapy along with Systemic Chemotherapy. IntraArterial Chemotherapy is the most advanced treatment modality for Retinoblastoma. However, due to the huge financial burden, it is not accessible to all in developing countries like India. A great milestone has been achieved at MCC through performance of Intra-arterial chemotherapy (IAC) It is

affordable and acceptable to children with Retinoblastoma from all socioeconomic strata of the society. The facility achieved success in treating conjunctival squamous cell carcinoma, ocular surface squamous neoplasia with topical and intralesional chemotherapeutic agents, avoiding the morbidity of surgery.

MCC is one among the few centers who have a plaque brachytherapy unit for the treatment of uveal melanoma. This treatment allows us to treat cancer without removing the eye —preserving vision, independence, and quality of life. Also for eyes which are not salvageable, enucleation with placement of a custom fit prosthesis/ artificial eye are performed. Apart from diagnosing and treating ocular malignancies, routine ocular screening in pediatric patients diagnosed with leukemia, diagnosis and treatment of the ocular toxicities of systemic chemotherapeutic agents and radiation, and ophthalmic evaluation of patients diagnosed with neurological tumors pre and post- surgery are also performed..

STATISTICS:

1. TOTAL NUMBER OF MAJOR SURGERIES PERFORMED: 2047

SL NO	SITE/CASES	NUMBER
1	Head and Neck	481
2	Breast	561
3	GIT	500
4	Urology	66
5	Gynec-oncology	280
6	Bone & Soft tissue Oncology	38
7	BAL (Broncho Alveolar Lavage)	4
8	EBUS	2
9	Thoracic	16
10	Neurosurgery	15
11	Pediatric central line insertions	59
12	Ocular oncology procedures	25
	TOTAL	2047

2. MINOR SURGERIES DONE IN BRACHY OT: 718

SL NO	PROCEDURE	NUMBER
1	Biopsy(Excision/incision)	208
2	Tracheostomy	51
3	Central Line insertions	42
4	Orchidectomy	43
5	Re-suturing	32
6	Colposcopy	32
7	Cystoscopy	273
8	Wound debridement	14
9	D&C	4
10	Others	19
	TOTAL	718

3. TOTAL NUMBER OF ENDOSCOPIES DONE 2000

SL NO	PROCEDURE	NUMBER
1	DLDP	1085
2	OGD	366
3	Bronchoscopy	73
4	Colonoscopy	258
5	DNE	4
6	Sigmoidoscopy	56
7	EBUS FNAC	4
8	Dilatation	6
9	ERCP	1
10	PEG insertion	7
11	DLDP+RT insertion	4
12	PEG Removal	3
13	FEES	132
14	Tracheoscopy	1
	TOTAL	2000

ACADEMIC ACTIVITIES

The routine academic activities of the department were:

1. Monday, 8- 8.45 am: Discussion on general topics/Thesis topics discussion/Department meeting.
2. Tuesday to Thursday ,8- 8.45 am : Short topic discussion, case presentation, journal presentation, morbidity and mortality discussion
3. Friday 8- 8.30 am: Grand rounds

COURSES OFFERED IN THE DEPARTMENT

1. DrNB In Surgical Oncology
2. Fellowship In Head And Neck Oncology
3. FNB Head And Neck Oncology
4. Fellowship In Oral Oncology
5. Fellowship In Gynaecologic Oncology
6. Fellowship In Gii Oncology
7. Training MDS Students
8. Training for BASLP Students

PAPERS PUBLISHED

1. Koruth A, Vijay S, Attakkil A, Nair R, Thomas L, Mullath A. Infrahyoid Flap: Case Series of a Robust & Reliable Flap. MAR Oncology. 2023; 5(2).
2. Abhay K. Kattapur, M. P. Nizamudheen, Ashwini Ramji, Sangeeta Nayanar, B. Satheesan. Snee (a) k Peek from Skene! Indian Journal of Gynecologic Oncology (2022) 20:39.
3. Dr Nizamudheen M P, Dr Aravind N. Comparison of pathological outcomes in laparoscopic vs

open rectal cancer surgeries in rectal cancer surgery in a tertiary cancer center– The lappath study, Submitted to journal CRST for publication.

4. Dr Nizamudheen M P, Dr Vijayasarithi. S. Outcomes following treatment of pelvic exenteration in rectal cancer in a tertiary care center” has been received by Indian Journal of Surgical Oncology. Submitted to IJSO.
5. Snany Surendran, Uma V. Sankar, Santhoshkumar Nochikkattil, Reena Cheekapraavan, Narayanankutty Warriar, Sajith Babu. SGA as a preoperative nutritional assessment tool for head and neck cancer patients in a tertiary health care setting. Journal of Cancer Therapy>Vol.13 No.8, August 2022.
6. Shivshankar Timmanpyati, Arvind Krishnamurthy, Purvish Parikh, Meenakshi Bajaj, Sumant Gupta, Purabi Mahajan, Priti Arolkar, Gargee Rai, Rajeswari Alagirimunuswamy, Arnab Gupta, Nagaraj Huilgol, Shamali Poojary, Nandita Dhanaki, Fagun Gandhi, Rajeshwari Prem, Shaveta Bhatta, M V Chandrakant, C Reena, Savita Goswami, Arun Balaji, Manjusha Vagal, Meenu Walia, Esther Sathiaraj, Manish Goswami. IAPEN India Nutrition consensus guidelines in oncology clinical practice. Journal of Nutrition Research 2021;9(1):8–18.

CONFERENCE ORGANIZED

1. UROONCOCON 2022, 26-27 November, 2022. Hotel BenaleInternational, Kannur. The conference was attended by 112 delegates and faculty including surgical oncologists, radiation oncologists, medical oncologists and urologists from various prominent centers in India. The program was successful for its academic content and participation.

CONFERENCES ATTENDED

- Dr Shalini Kurien – attended APTS, 2023, international thyroid conference, Kochi.
- Dr Lavanya S- attended ISMPO ISOCON 2022 Oct 28-30, Chennai.

CONFERENCES PRESENTATIONS

1. Dr Ganesh Vijaykumar..DrNB Resident SOG, Paper presentation at NATCON Madurai, October 2022. Compliance to quality indicators during rectal cancer surgery in a tertiary cancer center - Interim analysis.
2. Dr Ganesh Vijaykumar. DrNB Resident SOG, Poster presentation at NATCON Madurai, October 2022 - abdominoperineal excision with prostatectomy in locally advanced rectal cancer - retrospective analysis.
3. Dr Ashitha R G. E poster. FOGSI, Kozhikode, March 2023. Survival outcome of stage IV epithelial ovarian cancer treated with curative intent at a tertiary care center.
4. Dr Ashitha R G. E poster. FOGSI, Kozhikode, March 2023, Nodal possibility in high grade endometrial ca. Paper presentation.
5. Dr Adarsh D, FOGSI, Kozhikode, March 2023, Faculty talk on HIPEC.
6. Dr Sandeep Vijay, E poster for international conference APTS 2023 Kochi – “Re Exploration of the thyroid bed; Mythical monster or surgery with acceptable morbidity?”
7. Dr Sandeep Vijay, E poster for National conference FHNO 2022 held at Guwahati. "Tracheostomy for surgically treated advanced tongue cancers, necessity or outdated practice?"
8. Dr Kishore Kumar, Poster – NATCON IASO 2022 Madurai – Chest wall resection with neo-rib reconstruction-institutional experience.
9. Dr Kishore Kumar, Poster – NATCON IASO 2022 Madurai. Facing the challenges of retroperitoneal sarcoma at a tertiary cancer center.
10. Dr. Rajesh Krishna P –Faculty at TMC skull base course. Chaired session on management of orbit tumors.
11. Dr. Rajesh Krishna P – faculty – Video presentation of a case of awake surgery for dominant hemisphere insular glioma resection. Hotel President – Mumbai. Organized by TMH, Mumbai.

12. Dr Nizamudheen MP – Paper presentation – Extramural venous invasion in rectal cancer and its correlation with presence of distant metastasis. North zone conference of IASO. Pahalgam, Kashmir.
13. Dr.Nizamudheen M P – faculty talk – transanal minimally invasive surgery (TAMIS) – Jan 2023 -SRMC- Chennai.
14. Dr Nizamudheen M P – Panelist- Management of Esophageal cancer – ASICON 2022- Mumbai.
15. Dr Nizamudheen M P – Moderator – Panel discussion on management of oligo-metastatic colorectal cancer. Conference organized by KMC – Manipal in May 2023.
16. Debate – Role of sublobar resection in lung cancer – MIMS oncology conference, Hotel Taj Gateway, Kozhikode. May 2023.
17. Dr Anoop A – AOICON January 2023 Jaipur – Clinico-pathological demographics and outcomes of verrucous carcinoma of oral cavity; a retrospective study.
18. Dr Anoop A, E poster – FHNO 2022, Guwahati – Does impact of the lymph node density on survival in carcinoma tongue differ from carcinoma of the GB sulcus?
19. Ms. Roopa V, 3/03/2023. 9th annual national conference of the musculoskeletal oncology society, Chennai. Faculty in panel discussion on multimodality approach in rehabilitation of musculoskeletal cancer patients.
20. Dr Abhipsa mishra, Poster presentation – FHNO 2022, Guwahati.
21. Dr Nizamudheen M P, MVR cancon, Wayanad, faculty on invasive mediastinal evaluation.
22. Dr Satheesan B, NATCON IASO 2022, Madurai, faculty talk
23. Mr Aneeth M V. was an invited speaker in a national workshop (LARYNX 2022) conducted by VPSLakeshorehospital, Cochin on July 15 Th 2022 and given a talk on the topic “role of SLP in post laryngectomy rehabilitation.
24. Mr Aneeth M V. was an invited speaker in a national level conference on Elucidating the diversities in dysphagia assessment and management conducted by Holy Cross College (Autonomous), Tiruchirappalli on 10 th to 12 th November 2022. The topic “Dysphagia rehabilitation in head and cancers”.
25. Mr Aneeth M V. was an invited speaker in a national conference organized by Association Of Phonosurgeons India (APSI) Kerala chapter in association with Association of otolaryngologist India (AOI), Thiruvandapuram at Udhaya Samudra leisure Beach Hotel, Kovalam on 17,18,19,February 2023 and delivered a talk on the topic “interpretation of video fluoroscopy – oncodeglutology perspective”,
26. Mr Aneeth M V. was an invited speaker in the Fellowship training program on speech And Swallowing Rehabilitation in Head And Neck cancer- conducted by Dr. S.R Chandrasekhar institute of Speech And Hearing, Bengaluru (WEBINAR) From December 2022 to April 2023 and delivered a talk on the topics- Clinical swallowing assessment, indirect Swallowing Therapy, Compensatory Strategies.
27. Mr Aneeth M V. was the invited Professional Expert for the specialty Clinic for Laryngectomy patients, conducted By Composite Regional Centre For Skill Development, Rehabilitation & Empowerment Of Persons With Disabilities(Kozhikode)(under Ministry of Social Justice & Empowerment, Government of india) on 6th January 2023.
28. Reena Rajesh, SNF@ school programme (online / offline) class for school children organized by food safety department, Government of Kerala.
29. Reena Rajesh. Challenges in Nutritional Management of Cancer Patients Diabetes Dialogues 2022 organized by Providence Diabetic care, Thiruvananthapuram.
30. Dr Ferhana F M, paper presentation, NATCON 2022 – Extend of use of prosthetic limb among amputees in a tertiary cancer center.
31. Dr Ferhana FM, paper presentation, NATCON 2022 – Case presentation- malignant odontogenic tumors- rare entities causing treatment dilemma.

TRAINING:

- Dr Nizamudheen M P, underwent Advanced VATS esophagectomy training, at Basavatarakam Indo-American Cancer Centre, Hyderabad.
- Dr Lavanya S Microvascular surgery training, at Ganga hospitals Coimbatore.
- Dr Lavanya S Head and neck robotic surgery training at HCG hospital at Bangalore.

ONGOING PROJECTS/ONGOING STUDY

1. SPT trial (multi-institutional)
2. AREST trial (multi institutional)
3. NAGA trial (Multiinstitutional)

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. Satheesan B	Professor & Director
2	Dr. Nizamudheen M P	Additional Professor & Officer in-charge
3	Dr. Adarsh Dharmarajan	Associate Professor
4	Dr. Ashitha R G	Assistant Professor
5	Dr. Sandeep Vijay	Assistant Professor
6	Dr. Anoop A	Assistant Professor
7	Dr. Rajesh Krishna	Assistant Professor
8	Dr. Bonny A Joseph	Assistant Professor
9	Dr. Dr Raveena Nair	Assistant Professor
10	Dr. Hridya H	Assistant Professor

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mrs. Reena Rajesh	Dietician
2	Mrs. Roopa V	Physiotherapist
3	Mr. Aneeth M V	Speech & swallowing therapist
4	Mr. Rasiq	Endoscopy Technician

**ADMINISTRATION
DEPARTMENTS / DIVISIONS**

DEPARTMENT OF GENERAL ADMINISTRATION



DEPARTMENT HEAD: RAJESH A.K., Administrative Officer

BRIEF HISTORY OF DEVELOPMENT

General Administration Department ensures that hospitals operate efficiently and that medical staff members are adequately trained and supported. Equipped with a broad range of responsibilities, hospital administrators must be equally well-versed in the fundamentals of health care delivery and business management. The key responsibilities of this Department are to supervise daily administrative operations, monitor expenses and suggest cost-effective alternatives, create quarterly and annual budgets, develop and implement effective policies for all operational procedures, prepare work schedules, maintain organized medical and employee records etc;-

The policy making body of the Institute is the Governing Body (GB) and the day-to-day activities are controlled by the Executive Committee (EC). The Institution has an HOD Committee, which is convened every two months, and discusses the future development programmes, strategies to be adopted, various issues related to staffs, and takes decisions for the smooth functioning of the institution. There is also an Administrative Committee, which is convened every week and takes decisions on various matters related to day-to-day administration.

In order to meet the objectives of the Institute, the Administration coordinates the activities of the institution and creates policies so that all areas of the Institute staff functions efficiently. The Administration recruits, hires hospital staff such as Doctors, Academicians, Engineers, Nurses and other para-medical and scientific/technical staff, for the entire staff requirements of the Institute. The employees are periodically evaluated and proper guidance and training are provided to them to bring out the maximum output. The Director and other Senior Officers lead these administrative services and is directly responsible for the day-to-day operation.

GENERAL ADMINISTRATION DIVISION

The General Administration Department handles the overall administrative activities related to the Hospital and liaison work with Government and other Departments. The Department consists of ministerial staff looking after the day-to-day affairs of the Centre, in accordance with the existing rules and regulations of the Centre and in accordance with Government orders/instructions, issued from time to time.

GENERAL ADMINISTRATION	
Administrative Officer	Mr.Rajesh A.K Phone: 0490 23 99 201 E-mail: ao@mcc.kerala.gov.in,aomcctly@gmail.com
Finance Officer /Accounts Officer	Mr.RejiSankarST Phone: 0490 23 99 205 E-mail: accountsofficer@mcc.kerala.gov.in
Purchase Officer	Mr. Jiju TTV Phone: 0490 23 99 257 E-mail: purchaseofficer@mcc.kerala.gov.in
Hospital Administrator	Smt.Anitha.T Phone:0490 23 99 307 Email: hospitaladmin@kerala.gov.in
Medical Librarian	Mr. Subhash Chandran A.K Phone: 0490 23 99 282 E-mail: medlib@mcc.kerala.gov.in
Security Officer I/c	Mr.RejiSankar S.T Phone: 0490 23 99 205 E-mail: financeofficermcc@gmail.com>
Accounts Section	Phone: 0490 23 99,267 E-mail: accounts@mcc.kerala.gov.in
HR & Establishment	Phone: 0490 23 99 207 E-mail: estt@mcc.kerala.gov.in
Purchase Section	Phone: 0490 23 99 244 E-mail: purchase@mcc.kerala.gov.in
General Store	Phone: 0490 23 99 418
Pharmacy	Phone: 0490 23 99 254,228, 404

STAFF

NON-ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Mr. Rajesh AK	Administrative Officer & HOD
1	Mr. Rejoy.K	Clerk/Cashier/Typist
2	Mr. Jayadeep E K	Clerk/Cashier/Typist
3	Mr. Anoop V S	Clerk/Cashier/Typist
4	Mrs. Surekha M C	Clerk/Cashier/Typist
5	Mrs. Bindu T k	Clerk/Cashier/Typist
6	Mrs. Mini P	Clerk/Cashier/Typist
7	Mr. Jayanandan A	Clerk/Cashier/Typist
8	Mr. Dinesh Kumar T M	Clerk/Cashier/Typist
9	Mr. Prasoonan P P	Clerk/Cashier/Typist
10	Mrs. Sandhya K P	Clerk/Cashier/Typist
11	Mr. Shajith R P	Clerk/Cashier/Typist

HUMAN RESOURCES & ESTABLISHMENT DIVISION

DIVISION IN-CHARGE: Mr. REJI SANKAR.S.T Finance Officer /Accounts Officer

BRIEF HISTORY OF DEVELOPMENT

This Division maintains all the personal records of staff, their service matters, recruitment procedures, appointment, posting, leave matters, attendance etc: and Finance Officer is the Officer in-charge of the Division- The overall matters of staffs are looked after by this Section and plays a pivotal role in maintaining discipline of the institution.

STAFF JOINED THE INSTITION DURING THE PERIOD

SL. NO	ID	NAME	DESIGNATION	DEPARTMENT	DOJ
1	9910619	Gireeshma.G.K	Dosimetrist/Physicist	Nuclear Medicine	01.06.2022
2	9910620	Dr. Rohini T	Professor cum Principal	INSeR	11.07.2022
3	9910621	Dr. Rajesh Krishna P	Assistant Professor	Nurosurgery	03.11.2022
4	9910622	Dr.Bonny A Joseph	Assistant Professor	Surgical Oncology	11.01.2023
5	9910623	Dr.Nrithi S Prasad	Assistant Professor	Radiology	02.02.2023
6	9910624	Dr. Abhilash Menon	Assistant Professor	Medical Oncology	24.02.2023
7	9910625	Dr. Hridya. H	Assistant Professor	Ocular Oncology	01.03.2023

STAFF WHO HAD LEFT INSTITION DURING THE PERIOD

SL. NO	ID	NAME	DESIGNATION	DEPARTMENT	DOJ	DATE OF RELIEVING
1	9910604	Dr.Srikiran T K	Assistant Professor	Radiology	09.09.2020	30-04-2022
2	9910433	VIJU V	Clerk Cashier Typist	GAD	03.04.2017	23-04-2022
3	9910609	Dr.Sherin P Mathew	Assistant Professor	Medical Oncology	24.02.2021	13-05-2022
4	9910571	Karthika. O	Medical Records Asst.	MRD	21.06.2019	06-06-2022
5	9910603	Dr.Rahul A S	Assistant Professor - NM	Nuclear Division	7.09.2020	30-11-2022
6	9910554	Reshmi B	Staff Nurse GR II	Onco Nursing	29.01.2019	16.11.2022
7	9910558	Dr. Priya Jayarajan	Assistant Professor	Respiratory Medicine	06.03.2019	19-01-2023
8	9910597	Archan V Hari	Staff Nurse GR II	Onco Nursing	13.01.2020	13-02-2023
9	9910615	Dr. Vivekanandan	Assistant Professor	ROG	07.07.2021	28-02-2023
10	9910584	Anju Baby	Staff Nurse GR II	Onco Nursing	15.10.2019	01-03-2023

RECRUITMENT PROCEDURES

As per Service Rules of MCC, under Chapter-V-Recruitment Rules, it is mentioned that the Recruiting authority to various posts shall be as follows:

Director	Government of Kerala
Academic staff -	Staff Selection Committee of MCC
Paramedical, Nursing, auxiliary, Technical staff, Junior Administration staff, Last grade	Director or Recruitment Committee constituted for the purpose.

ACADEMIC STAFF

The recruitment of Academic staff is conducted by Staff Selection Committee, consisting of the following, as decided by the Governing Body of MCC:

1. Secretary to Government, Health Department or his nominee - Chairman
2. Secretary to Government, Planning & Economic Affairs Department or his nominee - Member
3. Secretary to Government, Finance Department or his nominee - Member
4. Members of Scientific Committee - Members
5. External subject expert(s) - Member
6. Director, Malabar Cancer Centre Society, Thalassery - Convener

Nationwide notification shall be published in leading newspapers and website of MCC, as and when vacancy arises for permanent posts. Accordingly applications received, within the stipulated date, shall be evaluated by the Academic Sub Committee of MCC, which includes Heads of 4 Clinical Departments i.e. of Clinical Lab Services, Hematology & Medical Oncology, Surgical Oncology and Radiation Oncology. A convenient date shall be fixed for Selection Interview, in consultation with Interview Board members. The eligible candidates shall be invited for the Selection Interview.

On the day of Interview, the candidates shall be seated in a separate area and all their electronic gadgets shall be collected and kept separately. The documents of each candidate shall be verified and the eligible candidate will only be allowed to mark their attendance.

NON-ACADEMIC STAFF

The recruitment of non-academic staff of MCC is conducted by Recruitment Committee, consisting of the following, as decided by the Executive Committee of MCC:

- Director-MCC
- External Subject Expert (s)
- HOD of concerned Department
- HOD- Clinical Laboratory Services and Translational Research/Senior HOD of any Clinical Department (Clinical Hematology/Radiation Oncology/Surgical Oncology)
- Administrative Officer.

State wide notification will be published in leading newspapers and website of MCC, for filling vacant posts, on permanent basis. Applications received will be forwarded to LBS, Trivandrum for scrutiny and conducting written test for candidates. Written test carries 75 marks out of 100. LBS will prepare a provisional rank list of candidates who had appeared for written test and the same will be forwarded to MCC. Out of the rank list the first four provisionally ranked candidates, for each post (1:4 ratio), will be invited to attend Selection Interview conducted by MCC. Interview carries 25 marks out of 100. While verification of certificates and testimonials all communication devices including electronic gadgets will be collected from the candidates and are seated separately. A set of questions are prepared just before the interview by the subject experts, which carries 15 marks out of 25. Same questions are asked to all candidates and candidates after interview are not allowed to contact other candidates. Moreover the interview board members will be informed of the marks scored by the candidates in the written test, only after interview is over. This is to avoid bias. Accordingly, a rank list will be prepared, and published in the website, immediately after the Interview. Communal rotation is followed for appointment of all non-academic staff in MCC.

FINANCE AND ACCOUNTS DIVISION

DIVISION IN-CHARGE: REJISANKAR S.T Finance Officer /Accounts Officer

BRIEF HISTORY OF DEVELOPMENT

The Division is instrumental in developing and maintaining a strategic financial plan and annual operating and capital budgets, financial analysis of new programs, acquisitions, and business development, revenue management, preparation of the financial statements in accordance with financial management and techniques appropriate to the health care industry, decision support and cost accounting, oversight of disbursements and receivables processes, oversight of patient admissions processes, etc.:-

LIST OF SERVICES PROVIDED

1. Computerized accounting and Book Keeping
2. Budgeting & Forecasting
3. Business Strategy
4. Fixed Assets
5. Cash Management
6. Bank Reconciliation
7. Statutory Payments (TDS, GST, Professional Tax, etc.)
8. Accounts Payable
9. Accounts Receivable
10. Billing and Monitoring
11. Bill wise Details
12. Invoice and Voucher Maintenance
13. Internal Auditing
14. Reporting Finance & Accounts
15. Financial Analysis

FUNCTIONS

The finance and Accounts Division of Malabar Cancer Centre is involved in planning, budgeting, accounting, financial reporting, and internal controls including internal audit, procurement, disbursement of funds, and monitoring the physical and financial performance, with the main aim of managing resources efficiently and achieving pre-determined objectives. Sound financial management is a critical input for decision-making and programme success.

Malabar Cancer Centre is an autonomous non-profit organization under the Department of Health & Family Welfare, focusing on quality healthcare in oncology, with an affordable cost index or nil out-of-pocket expenditure. In general 12-15% of maintenance /operational expenditure, including staff salary, is supported by the Government. The rest of the operation cost of MCC needs to be met by its funds. The service rates are fixed accordingly to cover the rest of the expenditure (80-85%).

To prevent treatment burden over beneficiary, the treatment expenditure for said 80-85% is fixed on a clear-cut study with a break-even index. Moreover, all major treatment schemes have been supported by MCC, especially KarunyaArogyaSurakshaPathathi (KASP), KarunyaBenevolent Fund (KBF), and Employees State Insurance (ESI), Cancer Suraksha Scheme (CSS), Snehasanthwanam, etc. As these insurance schemes are not fully covering the treatment cost, the rest of the expenditure is borne by MCC from its resources which is considered as “Out of Package”.

ACHIEVEMENTS

1. **Gold Certification** (B PMJAY Quality Certification programme is a joint initiative by NHA and Quality Council of India)-Malabar Cancer Centre is the **first Government hospital** in Kerala to get a **Gold Quality Certificate. Certificate No. G-2021G-00084, Valid up to 31-07-2023**
2. **CSR Certification – Ministry of cooperate affairs-** For Spending and Receiving funds from companies under the Companies Act 2013, CSR certification is mandatory as per the recent amendments of MOC. **Registration number is CSR00010773**
3. **12 A Certification from Income Tax Department.** 12 A Renewed Registration vide Unique Registration Number AAATM4095KE19999, Valid up to**2026-27**
4. **80 G Certification from Income Tax Department-** 80 G Vide Unique Registration Number AAATM4095KF20110 Valid up to**2026-27**
5. **Registered under section 35 Income Tax Act** as Scientific and Research Organization vide Registration no. AAATM4095KG20217&is valid till Assessment Year **2026-2027**

COMPLIANCE WITH ADMINISTRATIVE & STATUTORY REQUIREMENTS

1. M/s RSM Associates is the statutory Auditor for the Financial Year 2022-23 and completed the Audit during the period.
2. Return of TDS, Income Tax, GST, etc. for the Assessment Year 2023-24 has been completed without any deficiency.

PLAN AND NON-PLAN ALLOCATION & UTILIZATION STATUS 2022-23

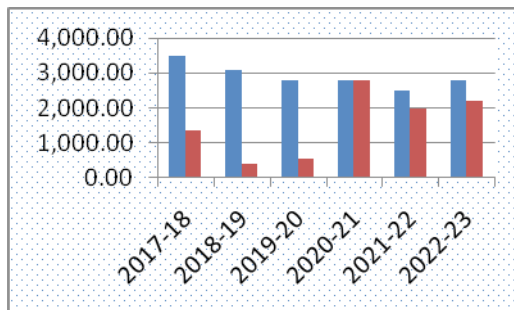
Vide order no. G.O. (Rt) No.2085/2022/H&FWD dated 23.08.2022 Administrative sanction for an amount of Rs. 2800.00 lakhs (PLAN)was received from the Government for various activities of MCC. The budget allocation & utilization status under Government Plan & Non-Plan fund, from 2017-18 onwards are cited below:

PLAN ALLOCATION	HEAD OF ACCOUNT	HEAD OF ACCOUNT	TOTAL BALANCE
Particulars	2210-05-200-96-35	2210-05-200-96-36	available
Grant in aid	1680.00	1120.00	2800.00
Released by government	1327.00	884.50	2211.50
Expenditure	1327.00	884.50	2211.50
Percentage	100%	100%	100%
Short Allocation	353.00	235.50	588.50

NON -PLAN	HEAD OF ACCOUNT	HEAD OF ACCOUNT	TOTAL BALANCE
Particulars	2210-05-200-96-31	2210-05-200-96-36	available
Grant in aid - Non-Plan	611.94	527.85	1139.79
Released by government	611.94	527.85	1139.79
Expenditure	611.94	527.85	1139.79
Percentage	100%	100%	100%

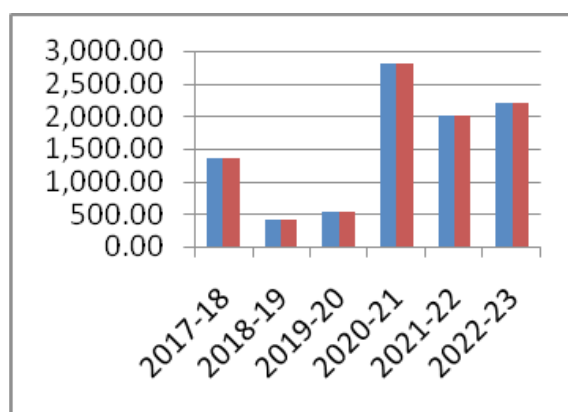
**LAST FIVE YEARS GOVERNMENT SUPPORT IN PLAN AND NON-PLAN HEAD
PLAN BUDGET ALLOCATION STATUS**

Financial Year	Budget	Allotted Grand	Allocation (% Wise)	Short (% Wise)
2017-18	3,500.00	1,350.00	38.57	61.43
2018-19	3,080.00	412.54	13.39	86.61
2019-20	2,800.00	533	19.04	80.96
2020-21	2,800.00	2,800.00	100.00	0.00
2021-22	2,500.00	2,000.00	80.00	20.00
2022-23	2,800.00	2,211.50	78.98	21.02



PLAN BUDGET UTILIZATION STATUS

Financial Year	Budget	Allotted Grand	Actual Expenditure	%
	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	%
2017-18	3,500.00	1,350.00	1,350.00	100.00
2018-19	3,080.00	412.54	412.54	100.00
2019-20	2,800.00	533.00	533.00	100.00
2020-21	2,800.00	2,800.00	2,800.00	100.00
2021-22	2,500.00	2,000.00	2,000.00	100.00
2022-23	2,800.00	2,211.50	2,211.50	100.00



STAFF

NON-ACADEMIC STAFF

SL No	NAME OF EMPLOYEE	DESIGNATION
1	Mr. Reji Sankar S T	Finance/Accounts Officer and Division In-charge
2	Mr. Jayadeep. E.K	Clerk/Cashier/Typist
3	Mr. Anoop. V.S	Clerk/Cashier/Typist
4	Mrs. Surekha.M.C	Clerk/Cashier/Typist

PURCHASE/STORE AND PHARMACY DIVISION

DIVISION IN-CHARGE: Mr. .JIJU.T.T.V Purchase Officer

BRIEF HISTORY OF DEVELOPMENT

All purchase matters including medicine purchase are handled by this Division. All purchases of the institution are routed through this Division, including local purchases. Purchase procedures are carried out, following Store Purchase Rules. The Division is handled by the Purchase Officer. The important functions of this Division are as follows:

- To ensure competent quality execution of all regular purchasing duties and administrative works.
- To prepare reports and summarize data including sales report and book value.
- To support relevant departments with quotations for the purpose of tenders.
- To monitor and co-ordinate deliveries of items between suppliers to ensure that all items are delivered to site/store on time.
- To plan and manage inventory levels of materials or products.

Major equipment purchased/Installed (Department /Division wise) during the period 2022-2023 are as follows:

SL. NO	DEPARTMENT	EQUIPMENT NAME	SUPPLIER	INSTALLATION DATE	AMOUNT
1	CLSTR Cytogenetics	Deep Freezer (-80 Degree) CTN BIRAC	Eppendorf India	11-04-2022	982,940/-
2	CSSD	Horizontal Steriliser	CL Micromed	18-04-2022	4,897,000/-
3	Casualty	ECG machine	RinsMarketing	19-04-2022	105,000/-
4	Cath Lab	ECG machine	RinsMarketing	19-04-2022	105,000/-
5	Day Chemo Ward	ECG machine	RinsMarketing	19-04-2022	105,000/-
6	Pediatric Ward	ECG machine	RinsMarketing	19-04-2022	105,000/-
7	Microbiology	Reagent Refrigerator	Biolinx India	20-05-2022	167,029/-
8	CLSTR-Pathology	Formalin Monitor	Techserve Healthcare	03-05-2022	69,620/-
9	Microbiology	Thermal Cycler	IgeneLabserve	09-05-2022	569,439/-
10	Recovery	ABG Machine	CL Micromed	09-06-2022	FOC
12	OP	Spot Light	Kerala Surgicals	08-06-2022	22,400/-
13	OP D	Spot Light	Kerala Surgicals	08-06-2022	22,400/-
14	OT	Patient Warmer(Donation)		16-06-2022	Donation
15	Microbiology	Hot Air Oven	KochinInlab	21-06-2022	18,160/-
16	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
17	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
18	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-

19	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
20	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
21	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
22	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
23	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
24	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
25	Microbiology	Microscope Binocular	Adelta Optec	14-06-2022	22,429/-
26	Brachy OT	OT Light	Vishal Surgicals	25-06-2022	1,016,750/-
27	Paediatric OP	OT Light	Vishal Surgicals	25-06-2022	1,016,750/-
28	OT	Cryotherapy Machine	Appasamy Associates	20-07-2022	59,360/-
29	Microbiology	Water Bath	Labline Instruments	08-07-2022	13,570/-
30	Microbiology	Incubator Bacteriological	Labline Instruments	08-07-2022	25,370/-
31	Microbiology	PH Meter		14-07-2022	
32	Microbiology	Centrifuge	Universal Agencies	20-07-2022	87,084/-
33	Microbiology	Centrifuge	Universal Agencies	20-07-2022	87,084/-
35	Pharmacy	Reagent Refrigerator	Biolinx India	22-07-2022	206,907/-
36	Pharmacy	Reagent Refrigerator	Biolinx India	22-07-2022	206,907/-
37	Pharmacy	Reagent Refrigerator	Biolinx India	22-07-2022	206,907/-
38	Endoscopy	Endoscopic Ultrasonography Unit/ Ebus/EUS	Olympus Medical S/M	17-08-2022	16,551,966/-
39	BIRAC Covid Suraksha Project	Temperature Data Logger	Ambtronics Engineers Pvt	30-08-2022	115,581/-
41	Psycho Oncology	Bio Feedback Device	M/s. Pukhya Healthcare	23-12-2022	7,61,000/-
42	OT	Applanation Tonometer Hand Held	Medicare Instruments	23-12-2022	140,000/-
43	Blood Bank	Blood Collection Monitor	KochinInlab	08-12-2022	94,080/-
44	Blood Bank	Blood Collection Monitor	KochinInlab	08-12-2022	94,080/-
45	Blood Bank	Blood Bank Refrigerator	KochinInlab	08-12-2022	310,000/-
46	Blood Bank	Rotary Shaker	Unique Scientific	12-12-2022	15,000/-
47	CLSTR-Pathology	Centrifuge-Cyto	Agile LifeSciences	16-12-2022	552,240/-
48	OT	Operating Microscope-Ophthalmic	Appasamy Associates	20-01-2023	108,000/-
49	Physiotherapy	Muscle Stimulator With Tens (Donation)	Pas Mediservices	12-01-2023	Donation
50	Physiotherapy	CPM Machine(Donation)	Pas Mediservices	12-01-2023	Donation
51	OT	Electrosurgical Unit	Johnson and Johnson	05-01-2023	420,000/-
52	OT	Electrosurgical Unit	Johnson and Johnson	05-12-2023	420,000/-

53	OT	Leg Stirrup with Lift Assist for Lithotomy & Amputation- 2 Nos	Champak Enterprises	03-12-2023	1,321,600/-
54	Blood Bank	Sterile Connecting Device	Meridian Lifecare	17-02-2023	1,550,000/-
55	Blood Bank	Cryobath	Meridian Lifecare	17-02-2023	196,000/-
56	OT	Laprosopy System-3d	Olympus Medical S/M	13-02-2023	7,801,834/-
57	OPD	Slit Lamp with Digital Imaging System	Biolinx India	08-03-2023	3,752,000/-
58	Microbiology	Vertical Autoclave	Universal Agencies	07-03-2023	1,11,00,510/-
59	Microbiology	Vertical Autoclave	Universal Agencies	07-03-2023	1,11,00,510/-
60	Cytogenetics	Centrifuge	Universal Agencies	07-03-2023	48,144/-
61	Imageology	Dexa Scan	Triviron Healthcare	17-03-2023	5,350,000/-
	Total				4,91,60,492/-

STAFF

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Mr. Jiju T T V	Purchase Officer and Division Incharge
2	Mr. Jayanandan	Clerk/Cashier/Typist
3	Mr. Dinesh Kumar T M	Clerk/Cashier/Typist
4	Mr. Prasoonan P P	Clerk/Cashier/Typist
5	Mrs. Sandhya K P	Hospital Assistant

MEDICINE /CONSUMABLES & REAGENTS

The entire medicines, consumables, surgical disposables, X-ray films, common drugs, antibiotics, re-agents etc.-, required for the institution are purchased through this Division. E-tender procedures are followed for the purchase of medicines on yearly basis. Purchase procedures are initiated by giving wide publicity through newspapers and website of MCC. A prebid meeting is conducted with potential Suppliers and tenders are floated. Selected firms are to execute a Supply agreement with MCC and payment shall be released based on the supply and proper checking of bills. Non-quoted medicines/emergency medicines are purchased from Neethi stores/Local market, subject to availability. Total purchase amount of medicines during the year 2022-23 is Rs. **19, 78, 29,682/-** (Rupees Nineteen crore seventy eight lakhs, twenty nine thousand six hundred and eighty two only). The total purchase amount of Reagents & consumables during the year 2022-23 is Rs **7, 78, 51,292 /-**(Rupees Seven crores seventy Eight lakhs fifty one thousand two hundred ninty two only)

PHARMACY

MCC Pharmacy, due to the peculiar location of the institution, has much significance in providing medicines to the patients in MCC. As the institution is located far away from Thalassery town, it is necessary that all required medicines needs to have adequate stock. Non-availability of medicines in the Pharmacy will force poor patients to travel long way to Thalassery for getting the medicines. Moreover, in general, cancer drugs are not available in medical stores in Thalassery area.

The main activities of Pharmacy are as follows:

1. To ensure that sufficient quantity of medicines and other items are stored/stocked in the Store for ready issue.
2. To assist the Clinicians in obtaining latest information regarding any drug in terms of its trade name, manufacturers name, source details of package etc
3. To check the drugs and other items on receipt in the Pharmacy, from stores/suppliers/main store regarding their nomenclature, date of manufacture, date of expiry, shelf life and any sign of deterioration, damage or defects if any.
4. To issue drugs and other items from Pharmacy to OPD/Wards/ICU's/OT and other Departments after receiving proper indents.
5. To maintain the details of drugs and other items issued in register.
6. To ensure that medicinal products are stored appropriately and securely to ensure freshness and potency
7. To keep up to date with recent developments in the pharmaceutical industry.

The Pharmacy Division consists of Pharmacy Main Store, Main Pharmacy, IP Pharmacy, Day Chemo Pharmacy and Storage area. At present there are three Pharmacies operating in MCC, one the main Pharmacy, the other (IP Pharmacy) in the 2nd floor, exclusively for IP patients and 3rd one at Day chemo Ward, exclusively for Chemotherapy patients. The main Pharmacy is having the facility of Cold storage system (Walk in cooler) for maintaining the potency of Drugs. Separate Narcotic Drugs counter is also provided in main Pharmacy. All medicines and consumables related to cancer treatment, i.e, anti-cancer drugs, surgical & disposables, antibiotics, reagents, X-ray films etc;- are purchased through this Division. The Main Pharmacy functions 24 x 7 hrs and other pharmacy's functions during day time. On requirement and proper indent from the Pharmacist, drugs are purchased through the Purchase Division and supplied to the Pharmacy main Store. The main store keeps records of the stock and issue medicines to various sections like main Pharmacy, IP pharmacy, Wards, Operation theatre etc:-. Considering the large number of patients, medicines are issued through token system, which reduces the rush in front of Pharmacy. This Division is headed by the Pharmacist, and supported by Assistant Pharmacists, Pharmacy Assistants, and Ward Assistants. A detail of purchase and sales during the year 2022-23 is as below:

Total purchase amount - Rs. **19, 78, 29,682/-**
 Total sale amount - Rs. **26, 10, 27,613/-**

STAFF

NON-ACADEMIC STAFF

SL No	NAME OF EMPLOYEE	DESIGNATION
1	Mr. Sneha V N	Pharmacist/Pharmacy In-charge
2	Mr. Viju V S	Store Keeper
3	Mr. Sugandham	Assistant Pharmacist
4	Mrs. Sajitha p	Assistant Pharmacist
5	Mr. Nidheesh K	Assistant Pharmacist
6	Mrs. Sabitha M V	Pharmacy Assistant
7	Mrs. Bindu K T	Pharmacy Assistant
8	Mrs. Darley Joseph	Pharmacy Assistant
9	Mr. Viju V V	Clerk/Cashier/Typist

STORES DIVISION

DIVISION IN-CHARGE: Mrs. LASITHA K V Store Keeper

BRIEF HISTORY OF DEVELOPMENT

This Division is headed by Purchase Officer and Store Keeper is the Officer in-charge. This Division works in tandem with the Purchase Division and mainly looks after the physical custody of stores, proper inventory control, preservation of stores, receipt of stores, movement of stores, including packing and forwarding, issue of stores, accounting of stores. This Division ensures that bills with documents in respect of accepted items are cleared immediately to the Accounts section, with a copy to the purchase section and will watch purchase orders periodically for dates of delivery, especially when such items are critical in stock and inform purchase section. Stores Division deals with stock handling, maintenance of Central Stock Register, condemnation, disbursement of required items to various Departments/Divisions, printing & stationary, local purchase etc:- Stock verification is carried out in all Departments/Divisions and Pharmacy of the Centre annually.

STAFF

NON-ACADEMIC STAFF

SL.NO	NAME	CATEGORY
1	Mrs. Lasitha K V	Store Keeper General
2	Mr. Viju V S	Store Keeper Pharmacy

TAPAL/ DESPATCH SECTION

Purchase Officer is the Officer in-charge of this Section. This Division handles the dispatch and inward registers, correspondences with Government as well as other Institutions, maintenance of files related to various contracts, collection of mandatory statements from Staff, convening of various meetings, tapal section, maintenance of various agreements (outsourced manpower) etc:- This Division also handles activities related to the Hospital and also liaison work with Government and other Departments.

SECURITY DIVISION

DIVISION IN-CHARGE: Mr. REJISANKAR S.T. Finance/Accounts Officer

BRIEF HISTORY OF DEVELOPMENT

The security wing of MCC plays a pivotal role in maintaining the overall security of MCC and is headed by Security Officer I/c. He will be under the direct supervision of Director/Administrative Officer. Security guards are ex-servicemen and are outsourced through KEXCON (Kerala Sate Ex-Servicemen Development and Rehabilitation Corporation). They guard the Campus and Centre 24x7 and are posted in various areas of this Centre, for the smooth functioning. Vigilant security measures need to be undertaken as lot of highly sophisticated and costly state of art equipment and some equipment are installed under Atomic Energy Regulatory Board (AERB) regulations. AERB insists tight security for these types of equipment and this Centre comes under the direct supervision of District Police Chief. Security measures are even tightened up, especially during the Covid-19 break out, by installing surveillance cameras as and where required. This Division also acts as In-charge of Drivers and the Hospital vehicles and handles Fires Safety of the Institution.

STAFF

NON-ACADEMIC STAFF

SL.NO	NAME	CATEGORY
1	Mr. Babu.M	Driver
2	Mr. Nidheesh P.V	Driver
3	Mr. Rajeevan Karayi	Driver
4	Mr. Ratheesan.V.P	Driver

SECURITY STAFF

SL.NO	CATEGORY	NOS
1	Security Supervisor	03
2	Security Guards	38
	Total	41

VEHICLES

SL.NO	CATEGORY	NOS
1	Bus	04
2	Jeep (Bolero)	01
3	Car (Indica)	01
4	Van (Eeco)	01
5	Omni Ambulance	01
6	Tempo Traveller	02
7	Goods Auto	01
8	Goods vehicle - medium	01
	TOTAL	12

ACADEMIC DIVISION AND LIBRARY AND INFORMATION SCIENCE

DIVISION IN-CHARGE: Mr. SUBHASH CHANDRAN A K Medical Librarian

BRIEF HISTORY OF DEVELOPMENT

MCC has two libraries- Hospital Library for patients, their carers, and staff and Medical library. The hospital library is supported by Kerala State Library Council.

All administrative work involving the purchase of Books, subscription of journals, scrutiny of bills for the payment, calling for tenders, quotations, etc., are carried out, under this division.

DETAILS OF EXISTING / NEW SERVICES/ FACILITIES

- **24x7 SERVICES:** To get 24x7 access for users. RFID with CCTV camera has been implemented in the Library. **RFID facility started from 2014 onwards.**
- **REFERENCE SERVICES:**Our reference collection has special collection in the field of Oncology. Multi volume books and one copy of each kept in reference.**Reference section started in 2013.**
- **SDI SERVICES:**Assists users in finding the latest information regarding their areas of expertise and interest.
- **DEPARTMENT LIBRARY:****Department Library system started in 2012** and at present we have more than 9 departmental and 5 division libraries.
- **ORIENTATION SERVICES:** Provided orientation to new users how to use e access and library in proper way.
- **RISOGRAPH-PRINTING SERVICES:**Produce high volume of print copies at lower cost than toner copies. **This facility is started in 2017.**
- **UP TO DATE access:** UP TO DATE is an evidence based clinical decision support system by Wolters Kluwer, USA.**UP TO DATE subscription started from 2013 onwards.**

STATISTICS

SL NO	ITEMS	NUMBER
1	Books	3469
	Newly Added	150
2	Journals	
	Printed	25
	Online	47+ 209

LIST OF ONLINE JOURNALS/DATABASES PURCHASED

SL NO.	PUBLISHER	NO OF JOURNALS SUBSCRIBED	ADDED FACILITY
1	John Wiley	23	02
2	Wolters Kluwer	10	26
3	Elsevier	07	138
4	Springer Nature	04	43
5	Taylor & Francis	02	00
6	Uptodate-WOLTERS	01	00

Number of Printed Books/ Printed periodicals issued during the period: 59

Number of Printed Books/ Printed periodicals returned during the period: 60

Number of Printed Books/ Printed periodicals Department transfer: 82

HOSPITAL LIBRARY

BRIEF HISTORY OF DEVELOPMENT

A unique Hospital Library for patients, their relatives, and staff is functioning in the centre since 2004. The library is funded by the Kerala state Library council. Now we have around 10335 books and 31 magazines.

SERVICES

- Issued Periodicals and Books to the patients, patient bystanders, and staff of MCC

STATISTICS

SL NO	ITEMS	NUMBER
1	Books Purchased	159
2	Magazines Subscribed	22
3	Newspaper	05
4	New Members	15

Number of Books issued during the period-322

Number of Magazines issued during the period-172

NON-ACADEMIC STAFF

SI No	NAME	DESIGNATION
1	Mr. Subhash Chandran A K	Medical Librarian and Division in-charge
2	Mr. Ganesan V	CCT

HOSPITAL ADMINISTRATION DIVISION- PUBLIC RELATIONS AND CLINICAL SERVICES

DIVISION IN-CHARGE: Mrs. ANITHA THAYYIL Hospital Administrator

BRIEF HISTORY OF DEVELOPMENT

Division of Clinical Administration and Public Relations (CAPR) handles the day-to-day hospital operations of the Centre with an objective to provide high quality oncology care to the patients. The division plays a major role in ensuring patient satisfaction. The public relations wing acts as the face of the hospital communicating with the patients, relatives and other stake holders supporting them to solve queries, concerns and issues they come across during their treatment and follow up at the centre.

The division has different sections such as registration, admission, follow up, Schemes & insurance, Billing, Help desk, certificates& reimbursement, telephones and communications. The Division also arranges and manages funding from different NGOs in order to ensure treatment to the underprivileged patients.

STATISTICS

SL NO	DESCRIPTIONS	TOTAL
1	Total New Registrations	7795
2	Follow up cases	85802
3	Total Out patients	93597
4	In patients	5566

STAFF

NON-ACADEMIC STAFF

SL NO	NAME	DESIGNATION
1	Mrs. Anitha Thayyil	Hospital Administrator and Division in-charge
2	Mr. Padmakumar. C.S	PRO Cum Social Investigator
3	Mrs. Mahija P M	Hospital Assistant
4	Mrs. Shyni D R	Hospital Assistant
5	Mrs. Bindu V	Hospital Assistant
6	Mrs. Reena K	Hospital Assistant
7	Mrs. Anupama Achuthan	Hospital Assistant
8	Mrs. Sreeja K	Hospital Assistant
9	Mrs. Bhavanamoukthi	Hospital Assistant
10	Mrs. Remya V	Hospital Assistant
11	Mrs. Bindu T N	Hospital Assistant
12	Mrs. Honeymol R	Hospital Assistant
13	Mrs. Aswini V	Hospital Assistant
14	Mrs. Safna Sari	Hospital Assistant
15	Mrs. Gladish A	Hospital Assistant
16	Mr. Sreejith P K	Cashier-Permanent
17	Mr. Rajeevan U	Telephone Operator
18	Mr. Pramod P	Attender

DEPARTMENT OF ONCOLOGY NURSING



DEPARTMENT HEAD: SREELATHA P Nursing Superintendent

BRIEF HISTORY OF DEVELOPMENT

The Malabar Cancer Center was established in November 2000 and the clinical services were started in 2001. The Nursing Department commenced operations with a team consisting of 1 Nursing Superintendent, 2 Senior Nurses, 14 Staff Nurses, and 10 Nursing Assistants. Initially, the department started with an OPD, and after two months, the Inpatient Department was established with 18 beds. Simultaneously, the first chemotherapy sessions were initiated. The Operation Theatre became operational after two months. In 2007, a specialized staff nurse was assigned to the Palliative Unit. Subsequently, specialized nurses in palliative care established Stoma Care and Lymphedema Care Clinics.

In 2008, the BCCPN and CCCPAN courses were introduced, overseen by the Palliative Nurse Coordinator. The department currently has qualified specialist nurses in various departments, with four nurse leading clinics.

QUALITY IMPROVEMENT PROGRAMS

- Pain free hospital initiative
- Distress scale
- Staff education
- Patient education
- Nursing audits
- Participation in quality improvement projects and research
- Nursing empowerment

TRAINING ACTIVITIES

Clinical Nursing Education Unit (CNEU) programme is very active in oncology nursing department. Patient education and staff education program are organized under the guidance of CNEU.

CELEBRATIONS

1. International nurses week celebrated at Malabar cancer centre from May 7th to May 14th 2022.
2. Theme: Nurses: A voice to Lead. “Invest in nursing and respect rights to secure global health”
3. Nurses week Inaugurated on 6th May 2022 by Mrs.Sreelatha .P the nursing superintendent MCC followed by sports competition The week was filled with academic events like CNE, Quiz and non-

academic sessions like arts, sports and cultural events. The CNE was inaugurated by Dr.Satheesan B. Director MCC Nurses week celebration came to an end on 14th may 2022 with vibrant cultural programme

Best unit Award“- Day Care chemotherapy Unit& “Best ward Award” –Pediatricward

RESEARCH ACTIVITIES

Nurses participating in quality improvement project, research activities and in clinical trials.

NURSING AUDIT

The quality of nursing care is ensuring by conducting regular audit identify the gaps and implement the action plan.

STAFF

NON-ACADEMIC STAFF

STAFF NURSES

SL. NO	NAME	DESIGNATION
1	Sreelatha.P	Nursing Superintendent and HOD
2	Shyni A F	Head nurse
3	Abhina S S	Staff nurse
4	Aiswarya K S	Staff nurse
5	Ajaya Kumar V D	Staff nurse
6	Akash Surendran	Staff nurse
7	Ameer Sanchani O	Staff nurse
8	Anjana G N	Staff nurse
9	Anuthara R	Staff nurse
10	Asha John B	Staff nurse
11	Ashamol M A	Staff nurse
12	Athira K Chandran	Staff nurse
13	Bijitha P	Staff nurse
14	Bindhu Raman	Staff nurse
15	Blassy P	Staff nurse
16	Ansil M	Staff nurse
17	JaleemaLawarance	Staff nurse
18	Jayasree	Staff nurse
19	Jemy Mathew	Staff nurse
20	Jibin K V	Staff nurse
21	Jisha K	Staff nurse
22	Jisha P	Staff nurse
23	Jithin T P	Staff nurse
24	Kavitha C N	Staff nurse

25	Ligy Jose	Staff nurse
26	Maya P K`	Staff nurse
27	Navami T C	Staff nurse
28	Nidhina	Staff nurse
29	Nimmy P V	Staff nurse
30	Nirmala Nallacherry	Staff nurse
31	Prajina E	Staff nurse
32	Prasanth C Das	Staff nurse
33	Praseeda K	Staff nurse
34	Praseetha M	Staff nurse
35	Rinsha P K	Staff nurse
36	Sabitha K	Staff nurse
37	Sachithra E	Staff nurse
38	Sajika	Staff nurse
39	Sajina N	Staff nurse
40	Sajitha P	Staff nurse
41	Saritha K R	Staff nurse
42	Saritha N	Staff nurse
43	Seena E	Staff nurse
44	Shabina Palliparavana	Staff nurse
45	Shaija E	Staff nurse
46	Shamseer	Staff nurse
47	Sheeja Nellikka	Staff nurse
48	Sheena C	Staff nurse
49	Sherjin A J	Staff nurse
50	Sunitha Kumari S	Staff nurse
51	Shiji P	Staff nurse
52	Shiji Poulouse	Staff nurse
53	Shijila V	Staff nurse
54	Shimna Sebastian	Staff nurse
55	Shiniraj R	Staff nurse
56	Sibi K Daniel	Staff nurse
57	Sijo Augustine	Staff nurse
58	Silja Kurian	Staff nurse
59	Sindhu N R	Staff nurse

60	Sindhu S	Staff nurse
61	Sini S S	Staff nurse
62	Smitha Grace	Staff nurse
63	Smithamol D	Staff nurse
64	Soumya Mathew	Staff nurse
65	Sreeja Kumari G	Staff nurse
66	Sreejisha P	Staff nurse
67	Sreelatha T N	Staff nurse
68	Sujatha K	Staff nurse
69	Suma Devi	Staff nurse
70	Sunitha Kumari S	Staff nurse
71	Sumi P R	Staff nurse
72	Vijina K	Staff nurse
73	Vineeth Krishnan	Staff nurse
74	Eana S	Staff nurse
75	Chithira.B	Staff nurse
76	Anjana.S.R	Staff nurse
77	Bijeesh Mohan	Staff nurse
78	Jolly	Staff nurse
79	Jincy Xavier	Staff nurse
80	Haseenamol .K.A	Staff nurse
81	Roni Antiny	Staff nurse
82	Bhavya.K.K	Staff nurse
83	Manjima.T	Staff nurse
84	Sabitha.C.S	Staff nurse
85	Navya.T.K	Staff nurse
86	Satheesh .M	Staff nurse
87	Sheeba.S	Staff nurse
88	Rajalekshmi.V	Staff nurse
89	Sunera Rajan	Staff nurse
90	Sreenivas	Staff nurse
91	Sreeja.K	Staff nurse
92	Fathimath Suhra	Staff nurse
93	Simimol	Staff nurse
94	Kastoori	Staff nurse

95	Aneesha S	Staff nurse
96	Soumya Jose	Staff nurse
97	Seena Matew	Staff nurse
98	Jayakrishna Prabhu	Staff nurse
99	Deepa Mathew	Staff nurse
100	Depu Raj	Staff nurse
101	Sabitha.M.S	Staff nurse
102	Ajith.N	Staff nurse
103	Sabeena Mathew	Staff nurse
104	Abhilash.K.K	Staff nurse
105	Sindhu.M	Staff nurse
106	Jitha Joseph	Staff nurse
107	Srijil A	Staff nurse
108	Maneesh	Staff nurse
109	Meera.R.Nair	Staff nurse
110	Neha.S	Staff nurse
111	Asha Gopi	Staff nurse
112	Chithira.B	Staff nurse
113	Naseema.P.P	Staff nurse
114	Tessy Jose	Staff nurse
115	Remya Raveendran	Staff nurse
116	Ancy Panicker	Staff nurse
117	Manju Mathew	Staff nurse

NURSING ASSISTANTS

S.NO	NAME	DESIGNATION
1	Abitha.C.A	Nursing Assistants
2	Agimol Dominic	Nursing Assistants
3	Biju Prasad	Nursing Assistants
4	Bindhu K M	Nursing Assistants
5	Deepa Prabha O B	Nursing Assistants
6	Dhanya E	Nursing Assistants
7	Dhanya P M	Nursing Assistants
8	Jerry A	Nursing Assistants
9	Jinshi R S	Nursing Assistants

10	Jiji.P.S	Nursing Assistants
11	Kalamol A B	Nursing Assistants
12	KavithaPrakash	Nursing Assistants
13	Lethamma P R	Nursing Assistants
14	Mary I C	Nursing Assistants
15	Mercy John	Nursing Assistants
16	Midhun Gopalakrishnan	Nursing Assistants
17	Neethu B S	Nursing Assistants
18	Nisha T	Nursing Assistants
19	Prajina E K	Nursing Assistants
20	Ragi Sandhya	Nursing Assistants
21	Rehana T	Nursing Assistants
22	Rekha Muraleedharan	Nursing Assistants
23	Santhini Chandran	Nursing Assistants
24	Sajina.K.K	Nursing Assistants
25	Shamla N	Nursing Assistants
26	Shibila K	Nursing Assistants
27	Shibu S	Nursing Assistants
28	Shobitha L	Nursing Assistants
29	Silna.K.K	Nursing Assistants
30	Sreejith S	Nursing Assistants
31	Suma.S	Nursing Assistants
32	Surya C	Nursing Assistants
33	ZeenathBattantavida	Nursing Assistants
34	Indu.P	Nursing Assistants
35	Neena.A.P	Nursing Assistants
36	Reshma.V	Nursing Assistants
37	Riya.K	Nursing Assistants

DEPARTMENT OF ENGINEERING AND MAINTENANCE



DEPARTMENT IN-CHARGE: REENA P C Supervisor, Electrical

BRIEF HISTORY OF DEVELOPMENT

Primary function of the department is to maintain huge infrastructure of Electro-mechanical equipment, Medical Equipment etc through periodical and timely preventive & breakdown maintenance by engaging departmental staff and various AMC contracts. During the reporting period of 2022-23, the department successfully carried all such works skilfully and efficiently without any major incidents affecting the day-to-day functioning of MCC. The task has become more challenging on account of various construction activities in the campus, which causes regular issues in the infrastructure maintenance. However, the department overcome all such issues with careful and dedicated actions to avoid or minimise problems affecting smooth functioning of MCC. This has ensured optimum utilisation of these important infrastructures, in turn helping the Hospital administration to achieve successful functioning of MCC during the period.

In addition to the Primary functions, the department is also involved in ongoing developmental activities like KIIFB Phase I & II projects by providing needful inputs and suggestions to optimise the resources. The Engineering Department also take up various major and minor plan projects through the PMC agency appointed for the same or directly with the approval of competent authorities. These plan projects played a major role in development of MCC for the past two decades.

The Engineering Department also involved very actively in identifying land required for future developments and road widening during the period and necessary documents for the land acquisition along with DPR (through an external agency, M/s SILK) has been submitted to the Government authorities for further needful action in the matter.

The following team at MCC is taking care of all works entrusted to the Engineering Department with full dedication to ensure smooth functioning of the MCC as well as playing a major role in the infrastructure development works.

The following achievements/ activities are carried out/ execute in MCC during this tenure in addition above mentioned routine works.

1. Construction of vertical extension of Nurses Hostel



Plinth area : 1128.47 sq.m

The total project cost: ` 430 Lakhs

Plan budget - 2018-19

Administrative Sanction: GO(Rt) No: 2449/2018/H&FWD dated 31-07-2018

Contracting agency: M/s ULCCS

The Nurses Hostel building in Malabar Cancer Centre was constructed in 2010 with a plinth area of 909.99sqm and having Ground floor and First Floor with 25 rooms, Kitchen, dining Hall and recreation room and 47 incumbents. admitted in the hostel The nurses strength in the hospital has increased considerably, Malabar Cancer Centre have no other provision for accommodating the nursing staff in MCC campus. Nursing students may be provided accommodation in the campus itself citing lack of hostel facility in the locality and the safety of the students moreover it is mandatory to provide accommodation inside the campus for PG students as MCC has already started PG admission Hence it was decided to extend the nurses Hostel building for further 2 floors. With 1130 Sq m additional area . The room number increased to 68 Nos from 25 and occupancy increased to 163 from 47 with a broad study area , Dining Hall Lift,CCTV,Solaretc Now Construction of vertical extension of nursing hostel building completed and HonorableCM inaugurated the Nurses hostel on 23-12-2022 and occupation started

2. OP Block renovation (KIIFB Phase-I)



Plinth area :sq.m

The total project cost: ` 81.70 cr

Administrative Sanction: KIIFB fund

SPV: Bharat Sanchar Nigam Ltd

Contractor: M/s CVCC, Kochi

Inaugurated on 23rd December 2022 by Honorable Chief Minister

Renovation of OP block completed in all respect and Honorable CM inaugurated renovated OP Block on 23-12-2022 and OP started functioning The OP Block includes 34Nos air-conditioned OP Rooms with Pre evaluation room , procedure room Seminar hall, Cafeteria, Hematology recovery room, Waiting area, Sample Collection area, Admission Counter etc Lift facility also arranged in this area for patients

3. Construction of waiting area and resting area for Bystanders [MLA ADS]



Plinth area : 387.05 sqm

The total project cost: ` 100 Lakhs

Administrative Sanction: MLA ADS

Execution Agency: Kerala PWD

Inaugurated on 29th July 2022 by Honorable Speaker

To minimize the crowd inside the Hospital, Malabar Cancer Centre has restricted the by-standers entry to 2 persons. Moreover Malabar Cancer Centre is not having a waiting and resting area for by-standers. This makes lot of inconveniences. Considering these difficulties of public the Hon'ble MLA Ad. AN. Shamseer, Thalassery Constituency has granted fund under ADS for the Construction of Building for bystanders waiting area in Malabar Cancer Centre. Kerala Public Works Department is executing above work and M/s ULCCS Ltd. is the contracting agency for above work The bystanders waiting area includes male & Female resting area , separate toilet units, waiting and resting area with refreshment facility Dining area etc

STAFF

NON-ACADEMIC STAFF

SI No	NAME	DESIGNATION
1	MrsReena .P.C	Engineer In-Charge
2	Mr. Chandran .K	Supervisor Electrical
3	Mrs.Liji Krishnan	SupervisorBiomedical
4	Mrs. Shijina .E	Supervisor Civil
5	Mr. Susanth .P.P	Electrician
6	Mr. Nyju A.C	Electrician
7	Mr.Anil Kumar .S	Electrician
8	Mr. Rasheed P	Plumber
9	Mr. Jinsithlal. O.N	Plumber

**INDEPENDENT
DIVISIONS UNDER DIRECTOR**

DIVISION OF HEALTH INFORMATION TECHNOLOGY

DIVISION IN-CHARGE: Mr. RANJITH M K System Manager

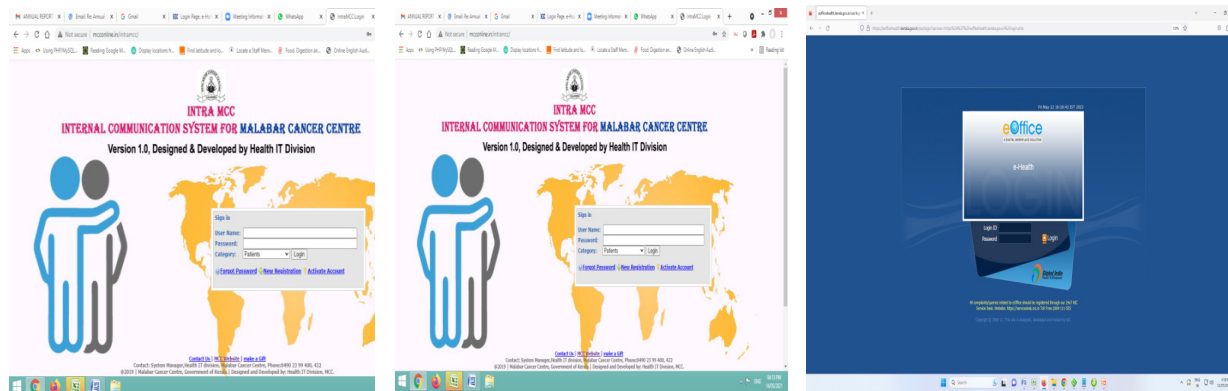
BRIEF HISTORY OF DEVELOPMENT

The Health Information Technology Division under the Department of Cancer Registry and Epidemiology was established in the year 2012. Currently, the division is under the direct control of the Director. Health information technology (HIT) in general is increasingly viewed as the most promising tool for improving the overall quality, safety and efficiency of the health delivery system.

The main responsibilities of the division are to provide technology vision and leadership in the development and implementation of the organization-wide information technology (IT) program and the planning and implementing of information systems to support both clinical and business operations and achieve more effective and cost beneficial IT operation. The division led to implement the hospital policy for information and associated computer technology. It undertakes broad system development and research and has responsibilities for organizational change to support new system

THE MAJOR RESPONSIBILITIES OF THE DIVISION ARE AS FOLLOWS

- a) Plan for the Information Technology needs of the organization including electronic health records, voice, data, imaging, telecommunication, office automation.
- b) Plans and manages the implementation of new information systems and software acquisitions.
- c) Manages system administration including local area networks.
- d) Researching and installing new systems.
- e) Managing and Administering the official website of the organization
- f) Develop and implement policies and procedures for computer systems and operation and maintains the privacy and security of all IT information.
- g) Ensures the cost-effective expenditure of resources
- h) Perform other relevant duties as identified that support the mission and vision of Health IT division and MCC



MAJOR ACTIVITIES/ PROJECTS

1. Administration & Management of e-Hospital Software implemented at MCC.
2. Maintenance and support of e-Office project at MCC.
3. Updating and maintaining official website of MCC.
4. Server and Database Administration, Management and Maintenance
5. Desktop Computers (400+), Laptop(60+), Printer (140+), Scanner, Projectors, Local Area Network (70+Switches & 12 Racks), Network devices, UTM, etc. Maintenance and support
6. Maintenance of CCTV Security Surveillance System, PA system & Wi-Fi Connectivity
7. Managing and administrating of Virtual Tumor Board, Zoom meeting, epalliative software, Patient support through OPPAM Whatsapp Group and Social media, Webinars, etc.
8. OPPAM Project received Kerala Government E-governance award (2019-20 & 2020-21 under the categories Social media and e governance (3rd place) & Innovations in COVID Pandemic management (2nd place).
9. Maintenance and Management of online examination System, Online career applications, IntraMCC software
10. Managing, Administrating, providing support for e-Procurement Project, Echo Project, Canteen Billing and Management Software, File Tracking System, Online Birth & Death Registration, GeM, HR & Pay Role Management Software, Biometric Punching System and Proximity ID card, Bio-medical Asset Management & Maintenance System, Mobile app for MPBCR, Interfacing Bio chemistry Analyzers, eSanjeevani OPD, Centralized Procurement and Rate contract System(CPRCS), Online Registration System through ORS portal, Official E-mail to all Employees, etc. Managing National Knowledge Network (NKN), PG ILL and BSNL ILL connectivity
11. Interfacing of all Analyzer in labs with e-hospital Software and Lab Manager Software.
12. Implemented various Guidelines for smooth running of the division such as Guidelines for Computer Users at MCC, Guideline for E-mail users, IT equipment and communication network maintenance Plan, Backup policy, etc.

IT GUIDELINES

- a) Guidelines for Computer Users at MCC
- b) Guidelines for using official Email Service of MCC
- c) Guidelines for using Video Conferencing
- d) IT Equipment and Communication Network Maintenance Plan
- e) Department Manual-Hospital IT
- f) CCTV Security Surveillance System Monitoring Policy
- g) Guideline for bio-metric Punching system & Employee ID card
- h) Guidelines for conducting Online Examinations & Interview for the Selection of Contract/ Project/ Trainee/ Outsourced Staff

SOFTWARE AVAILABLE

1. **Hospital Management Information System (e-Hospital@NIC):**This is an integrated Hospital Management Information System (HMIS) that automate the activities of the hospital and improve patient care. e-Hospital is web enabled and built on industry standard software technologies and best practices. The software is developed and implemented by National Informatics Centre. The software is accessed from our Hospital Server which is located in the Health IT Division.
2. **Doctors Portal:** Doctors portal is used for clinic management and developed and implemented by National Informatics Centre.
3. **EBloodbank:** The software is developed and implemented by National Informatics Centre and is used for managing Bloodbank.
4. **MOCDOC-Interfacing of Laboratory equipment with e-hospital Software and Lab Manager:** The software was implemented in 2022 and the analyzers are interfaced with e-Hospital software for automatic laboratory report generation.MOCDOC is a Laboratory Information and Management System and is used for managing various laboratory results (Biochemistry, Pathology, Microbiology, Molecular, Genetics, blood bank, etc.).
5. **E-Palliative: An online Palliative Care and Support Network:** The ePalliative System is a web based online Palliative Care and support network to support the palliative care activities of different palliative units and to provide online resources and support to them. The system helps the unit to get regular consulting and advices from medical experts through online. The system is an online web- based application and it helps the patient to interact with doctors through video conference mode.
6. **Official Website in CMF:**This was developed and hosted as a dynamic website with domain www.mcc.kerala.gov.in using open source Content Management System (Joomla). Along with the website Online career application module, Registration module, dynamic photo gallery, Event calendar, etc. are also hosted.
7. **Online Examination System:**The software is developed in house and is a web application developed using open source technology. This software is using for conducting online entrance examinations for fellowship programmes, selection examination for contract/temporary/Trainee/project staff recruitment.
8. **HR and Payroll Management System:** The HR and Payroll Management System software is trail running stage and the software is implemented for HR management, bio-metric attendance management, leave management and for payroll processing.
9. **File Movement Tracking Software:** The software is implemented for tracking the movement of patient physical file across different divisions and sections. The software also helps to schedule the patient follow-up visit.
10. **Intra MCC: Internal communication System for MCC:** In MCC, more than 12000 requests are received in a year for issuing certificates such as Treatment Certificate, Pension forms, Expenditure Certificate, Medical Certificate, Utilization certificate, No dues Certificate, Treatment Summary, LIC claims, Insurance claims, Essentially certificate, Tax exemption certificate, certificate for Financial assistance, Medical Reimbursement certificates, etc. The IntraMCC software was developed in-house for managing and tracking the certificates requests. The system also provides SMS alert to applicant if the certificate is ready for issuing.
11. **RailC:** This software is developed in-house and implemented for generating and issuing Railway Concession form for the patients travelling to and back from MCC.
12. **Bio-medical Asset and Maintenance Management System:** The Bio-medical Asset and

Maintenance Management System software is a web application capable of managing all the bio-medical assets, break-down maintenance, Preventive maintenance, Calibration, etc. in an easily manner. The system is capable of integrating with similar software system and is developed using open source technologies. The software was implemented at MCC from June 2020 onward.

13. **e-office Software:** The e-Office, a digital workplace solution aims to support governance by ushering in more effective and transparent inter and intra-government processes. The implementation of e-office software may automate the entire work flow of file processing starting from Tapal/File Creation, reduce the delay in file processing, increase the efficiency, enhance transparency, enhance inter departmental communication, increase accountability and assure data security & data integrity. The Administrative committee meeting held on 22-11-2019 at Malabar Cancer Centre discussed the possibilities of implementing e-Office software at MCC and requested to the Government for the implementation. As per our request, Kerala State IT Mission set-up the e-office instance for Malabar Cancer Centre and provided online demonstration and training. Malabar Cancer Centre implemented the e-office software from 20-07-2020 onward.
14. **e-Sanjeevani Online OPD:** e-Sanjeevani, the National Tele consultation Service of Ministry of Health and Family Welfare is first of its kind online OPD service offered by a country government to its citizens. National tele-consultation Service aims to provide healthcare services to patients in their homes. Safe & structured video based clinical consultations between a doctor in a hospital and a patient in the confines of his home are being enabled. C-DAC Mohali is developed the platform for the Government and providing technical support. MCC started oncology speciality OPD through e-Sanjeevani platform from 09-07-2020 onward.
15. **Mobile Application for MPBCR Data Collection:** Mobile app was developed and implemented for MPBCR data collection. A Cancer Mapping (GIS with Clustering) application was also developed and implemented in 2019.
16. **Canteen Management Software:** For the smooth management of hospital canteen, canteen management software (Gofrugal) was implemented from April 2020 onwards. The major modules include Billing Management, Purchase and Inventory Management, Accounting Management, Dynamic Reports & Statistics
17. **GE Centricity PACS:** Used for accessing DICOM images (CT, MRI, Digital X-ray, etc). The PACS also interfaced with e-Hospital Software.
18. **IBM SPSS Statistics Base 20.0:** 10 user licenses procured and implemented in different department for statistical data analysis.
19. **Tally 6.5.5 Multiuser gold version:** Implemented in Accounts division for managing accounts.
20. **E-Procurement System of Govt. of Kerala:** Implemented in March 2013.
21. **Official email ID to all employees using Govt. of India E-mail Service:** The system was implemented in July 2015 onward.
22. **Centralized Procurement and Rate Contract System of Govt. of Kerala:** The software was implemented in 201.
23. **Online Birth & Death Registration of IKM:** The system was implemented in Sep. 2013
24. **GeM: Government e-Market Place of Govt. of India:** Implemented in 2020.
25. **Online Appointment of New Cases through ORS portal:** The online new case Registration through ORS (<https://ors.gov.in>) portal was implemented in February, 2016.
26. **SACR: Self Assessment and Confidential Report Management System:** This software is

developed in-house for managing employees self assessment and confidential reports.

27. **Augnito Voice Recognition/Voice AI software:** The software is implemented for reporting purpose in Pathology, Nuclear Medicine and Radiology departments.

HARDWARE AND NETWORK INFRASTRUCTURES

The details of IT hardware are as follows;

SLNO	ITEM	QUANTITY
1	Server	16
2	Workstation	40
3	Desktop PC	399
4	Laptop	61
5	Laser Printer	107
6	Inkjet Printer	02
7	Dot matrix Printer	15
8	Network Printer	07
9	Barcode Printer	16
10	Card Printer	03
11	Scanner	35
12	Barcode Scanner	50
13	Network Switch	68
14	Web camera	35
15	LCD Projector	27
16	Tablet	08
17	Modem	03
18	External Hard disk	26
19	External DVD Writer	02
20	Biometric Punching Device	16
21	CCTV Camera	566
22	NVR	19
23	PA System Speaker	160
24	Amplifier	09
25	Wi-Fi-controller	01
26	Wi-Fi Access Point	37

27	Router	01
28	OHP	01
29	Risograph	01
30	UTM	01
31	High Resolution Digital Visualiser	02
32	Wireless Interactive White Board	02
33	Digital Camera	02
34	Network Attached Storage Device	02
35	Thermal Bill Printer	04
36	Ink Tank Printer	01
37	All IN One PC	02
38	Touch KIOSK	01
39	Presentation Pointer	04
40	LED Projector	01
42	Motorised Screen	01

NETWORK INFRASTRUCTURE

1.	National Knowledge Network (NKN) Dedicated Internet Connection-100 Mbps
2.	Power Grid Internet Leased Line Connectivity-100Mbps
3.	BSNL Internet Leased Line Connectivity-20Mbps
4.	2 BSNL Broad band Connection with static IP for Machine remote Support
5.	Structured Cat6 cabling (LAN) with L2 and L3 switches
6.	Wi-Fi Connectivity

STAFF

NON-ACADEMIC STAFF

SI No	NAME	DESIGNATION
1	Mr. Ranjith M K	System Manager and Division In-Charge
2	Mrs.Bavina C	Junior System Analyst

DIVISION OF PSYCHO-ONCOLOGY

DIVISION IN-CHARGE: Mrs. JISHA ABRAHAM Lecturer

BRIEF HISTORY OF DEVELOPMENT:

Psycho oncology is the division that deals with the behavioural, emotional, cognitive and social aspects of cancer patients and their families. Presently the division is headed by the Director. The division of psycho oncology has been functioning in this centre, since July 2017.

CURRENT FACILITIES

Division focuses on the psycho-social interventions for patients and families from cancer diagnosis till survivorship and palliation, thereby improving their quality of life. Various psychometric assessments are conducted in the division to understand the patient better. The division provides alcohol and tobacco de-addiction counselling for the patients. The division gives due importance to the stress management of the staff and students dealing with cancer patients. This division also manages the GET WELL CLINIC (Geriatric Wellness Clinic) and genetic clinic and counselling aspects of the hospital. The division is conducting one year institutional fellowships on Psycho-oncology and Oncology Social Work and providing internships and observership for Psychology and Social work students.

STATISTICS OF PATIENT CONSULTATION BY THE DIVISION

SL.NO	SESSIONS	NUMBER
1	Get well clinic	121
2	Genetic counselling	275
3	Pretreatment counselling	689
4	In patient routine counselling	1590
5	Post operative counselling	543
6	Psycho-oncology consultation	555
7	Discharge counselling	2125
ACADEMIC STATISTICS		
1	Trainee (MSW& Psychology)	35
2	Academic session (BSc N & BSc MRT)	42
3	Rehab and division academics	65

ACADEMIC ACTIVITIES INCLUDING COURSE OFFERED DEPARTMENT :

1. One year Fellowship in Psycho-oncology
2. One year Fellowship in Oncology Social Work
3. Internship and observership program for Medical social work and psychology students

NEW EQUIPMENT: Biofeedback device

DETAILS: Biofeedback device is a technique that helps the individual to learn to modify their physiology for the purpose of improving physical, mental, emotional and spiritual health. This augments the normal sensory feedback and allows better control of body functions that are usually considered involuntary. Mechanism of this equipment is measuring physiological or biochemical parameter of the body, then gets transformed into a visual, auditory, or tactile signal. This can help to manage the physical symptoms and thereby improving the overall well-being through stress management training.

FUNCTION, CONFERENCE & WORKSHOP

Organized two days workshop on Mindfulness based CBT on June 4th & 5th, 2022. Dr. Johnson Alex, Clinical Psychologist and Director of JS Care Science was the resource person. Thirty two participants attended the workshop.

1. Jisha Abraham (Psycho-Oncologist) presented on the topic “Psycho-Oncology” as part of mental health day seminar at KE College Mannanam (online).
2. Sobhith V K (Medical Social Worker) presented on the topic “Social Work Practice in Cancer Care” in a Webinar conducted by Rajagiri College of Social Sciences, Kalamassery.
3. Mental Health Day Observance - Mental Health Day ribbons were distributed among hospital staff along with Mental Health Day message. As part of the Mental Health Day observance, sessions on various topics related to Psycho-oncology was presented for students from Gov. College, Nadapuram by Mrs. Jisha, Mr. Sobhith V K., Ms. Angel Mary John, Ms. Aparna K Mohanan, Ms. Rizwana, Ms. Harsha Mary Jose, and Ms. Nimitha.
4. Ms. Aparna K Mohanan (Fellow, Psycho-oncology) & Ms. Angel Mary John (Fellow, Oncology Social Work) attended community programme on Breast Cancer and Oral Cancer awareness held at District T B Centre on 30th October & 1st November respectively.
5. Division organized an Induction program for the BSc Nursing students of INSeR in December 2022.
6. Institutional visit by 30 BSc. Psychology students and one faculty from the Jamia Hamdard University, Kannur Campus visited Malabar Cancer Centre on 10th February, 2023. They were given an orientation on Introduction to Psycho-oncology and the Role of a Psycho-oncologist in a Cancer Setting. This was followed by discussion and a Q&A session.
7. Exit exams for Fellowship in Psycho-oncology and Fellowship in Oncology Social Work were conducted on 23/2/2023. Dr. Surendran V and Dr. Anitha A were the external examiners.

ONGOING RESEARCH PROJECT

1. Fatigue, perceived stress, anxiety and depression among adult survivors of haematological malignancies: a cross-sectional study (completed analysis).
2. ‘Distress and Insomnia among cancer patients admitted for surgery: A Retrospective cross-sectional study.’ (data consolidation)
3. Study on “Post Traumatic Growth, Resilience and Quality of Life among Adolescent and Young Adult Cancer Patients, Survivors and Healthy Individuals” by Ms. Aparna, Fellow Psycho-oncology (completed)
4. Study on “BID and QoL of oral cancer patients before and after curative surgical treatment” by Ms. Angel, Fellow Oncology Social Work.(completed)

PUBLICATIONS- JOURNALS (INTERNATIONAL, NATIONAL)

1. Padmanabhan M, Abraham J, B S, Sobhith VK. Perceived stress and coping among Oncology Health Care Workers (OHCW) during the COVID-19 pandemic in a tertiary cancer centre in India. World cancer research journal [Internet]. 2022; 9:e2161. Available from: <https://www.wcrj.net/article/2161>

STAFF

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mrs. Jisha Abraham	Lecturer and Division in-charge

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Mr. Sobith V K	Medical Social Worker

DIVISION OF CLINICAL RESEARCH & BIOSTATISTICS

DIVISION IN-CHARGE: Mrs. MAYA PADMANABHAN Lecturer

BRIEF HISTORY OF DEVELOPMENT

The Division of Clinical Research & Biostatistics (CRB) was formally organized in 2013. The Division of CRB was created primarily to coordinate the clinical, epidemiological and translational researches in the institution, coordination of collaborative research ventures, education in the field of biostatistics, Bioethics and clinical research, administrative responsibilities in institutional academics, various courses and training conducted in MCC, organization and monitoring of Institutional Review Boards-Scientific Review committee (IRB-SRC), Institutional Ethics Committee (IEC), Scientific Advisory Committee (SAC), various external standing committee. It also provides statistical consultation for the academic faculties and other components of oncology departments. Training of academic staff and students in clinical research and biostatistics is also an important function. The mission of the Division of Clinical Research and Biostatistics is to develop, disseminate and apply bio statistical and analytical methods for research in the cancer, encompassing both research design and analysis. Division supports the conduct of clinical trials, data management, regulatory requirements etc. At present the department is working under the supervision of Director, MCC.

CURRENT FACILITY

Division has the facility of IBM SPSS version 20.0 for doing statistical analysis

STATISTICS

SL NO	DETAILS	NUMBERS
1	Total no. of Project Reviewed by IRB-SRC	116
2	No. of Project send to IEC full review	37
3	No. of Project approved by IEC	36
4	No. of Academic monitoring Cell meeting conducted	12
5	No. of Scientific Advisory committee meeting conducted	1

CONFERENCE ATTENDED/ PRESENTED

State level faculty training programme for Research Methodology; conducted by Govt Homoeopathic Medical College, Kozhikode –Attended by Mrs. Maya Padmanabhan on 4th January 2023

STAFF

ACADEMIC STAFF

NO.	NAME	DESIGNATION
1	Mrs. Maya Padmanabhan	Lecturer and Division in-charge
2	Mr. Riyas M	Lecturer

NON-ACADEMIC STAFF

NO.	NAME	DESIGNATION
1	Mrs. Bhavana mukthi	Hospital Assistant

RESEARCH, PUBLICATIONS, COMMITTEES & COURSES

RESEARCH

Research in Malabar Cancer Centre is conducted as per the ICMR guidelines and an academic research guideline specific for the institution is prepared. As research is a major responsibility of the institution, all efforts are taken to maintain the highest ethical and scientific standards. Malabar Cancer Centre is involved in clinical research in major Oncological disciplines and it emphasizes on interdisciplinary research. The Institutional Review Board is responsible for supervising the scientific and ethical issues associated with any research conducted in the institute. The institute has memoranda of understanding with several governmental organizations so that their expertise can be used in clinical research. In order to ensure that research is conducted under the most stringent conditions the institute has an Institutional Review Board (IRB).

The IRB is made of two separate bodies

- a. The Scientific Review Committee (SRC)
- b. The Institutional Ethics Committee (IEC). Both these bodies are constituted as per the guidelines provided by the ICMR for conducting biomedical research

SCIENTIFIC REVIEW COMMITTEE (SRC)

The SRC meets twice in every month (2nd and 4th Saturday) and / or as and when required. SRC is responsible for reviewing the scientific merit of any new research proposal. All research proposals have to be submitted by the first week of every month so that it can be reviewed by the SRC. Once studies are approved by the SRC, they are submitted to the IEC for ethical approval. All academic staff are trained in Good clinical practices. It is a mandatory requirement for conducting clinical research in MCC.

INSTITUTIONAL REVIEW BOARD –SCIENTIFIC REVIEW COMMITTEE

SL.NO	NAME	DESIGNATION & DEPARTMENT
1	Dr.Satheesan B	Chairperson, Professor, Dept of surgical Oncology
2	Dr.Sangeetha K Nayanar	Vice Chairperson, Professor, Department of Clinical Lab service & Translational Research
3	Dr. Chandran K Nair	Vice Chairperson, Professor, Department of Clinical Hematology and & Medical Oncology
4	Dr.Geetha M	Vice Chairperson, Professor, Department of Radiation Oncology
5	Dr.Satheesh Babu T V	Member, Associate Professor, Department of Imageology
6	Dr. Parthipan Rudrapathy	Member, Associate Professor, Division of microbiology
7	Dr.Sithara Aravind	Member, Associate Professor, Division of Oncopathology
8	Dr.Pramod Sankar S	Member, Associate Professor, Department of Dentistry & Rehabilitation
9	Dr.Mohandoss M	Member, Associate Professor, Division of Transfusion medicine and Blood bank
10	Dr.Vineetha Raghavan	Member, Associate Professor, Department of Clinical Hematology and & Medical Oncology

11	Dr. Vinin N V	Member, Associate Professor, Department of Radiation Oncology
12	Dr. Nizham M Parekutty	Member, Associate Professor, Dept of surgical Oncology
13	Dr. Manuprasad	Associate Professor, Department of Clinical Hematology and & Medical Oncology
14	Dr. Adharsh D	Member, Associate Professor, Dept of surgical Oncology
15	Dr. Joneetha Johns	Member, Associate Professor, Department of Radiation Oncology

INSTITUTIONAL ETHICS COMMITTEE

Constituted as per ICMR guidelines in August 2013. The IEC meets once in every three months and / or as and when required- No. ECR/780/Inst/KL/2015/RR-21

NO	NAME	QUALIFICATION WITH SPECIALIZATION	CURRENT ORGANIZATION	ROLE/ DESIGNATION IN ETHICS COMMITTEE
1	Dr. Srikumar Vasudevan	MBBS, DLO	ENT Surgeon, Josgiri Hospital Thalassery, Kannur, Kerala-670101	Chairman
2	Dr. Chandni Radhakrishnan	MBBS, MD (General Medicine), PhD (Medicine) PGDMLE	Professor of Medicine & HOD of Emergency Medicine Government Medical College, Kozhikode, Kerala, 673008	Clinician
3	Dr. Sangeetha K. Nayanar	MBBS, MD (Pathology), DNB (Pathology)	Professor & Head Department of Clinical service & Translational Research, Malabar Cancer Centre, Kerala, 670103	Member Secretary
4	Dr. Jeeja M.C	MBBS, MD (Pharmacology) PDCR (Professional Diploma In Clinical Research)	Professor, Department of Pharmacology Govt. Medical College, Kozhikode, Kerala, 673008	Medical Scientist
5	Dr. Anoop Kumar A S	MBBS, MD (Anesthesiology & Critical Care), IDCCM (Critical Care Medicine), EDIC	Sr. Consultant & Chief Critical Care Medicine Baby Memorial Hospital Kozhikode, Kerala, 673004	Clinician
6	Dr. Biju George	MBBS, MD (community Medicine), PG Diploma in Applied Statistics, PG Diploma in Applied Population Research	Associate Professor, Department of Community Medicine, Govt. Medical College, Kozhikode, Kerala, 673008	Clinician

7	Dr.Anitha A	MSW, PhD (Social Work)	Assistant Professor & Teacher In-Charge, Department of Social Work, SreeSankaracharya University of Sanskrit, (Kalady) Regional Campus, Payyannur Kannur, Kerala	Social Scientist
8	Dr. Robin E J	B.A (Philosophy) M.A (Philosophy) PhD (Philosophy)	Assistant Professor Department of Philosophy University of Calicut Kozhikode, Kerala,673635	Social Scientist
9	Dr.V Ramachandran	MA (Hindi) PhD	President Karunya Charitable Society for Pain &Paliative care, Puducherry Mahe,673310	Lay Person
10	Adv.D V Narayanan	B.Sc Physics, LLB	11/452 G, Kuriyal Lane, Calicut, 673032	Legal Expert
11	Adv.M.Jameel Ahmed	B Com, LLB	M K Associates 1 st Floor , M K Office, Near L.I.C Road,P.OTalap,Kannur, Kerala 670002	Legal Expert

NEW RESEARCH PROJECTS

S.N.	PROJECT TITLE	PI	DEPARTMENT
1	Geriatric Nutritional Risk Index in Elderly Gastrointestinal Cancer Patients: An Experience from a Tertiary Cancer Care Center in Kerala	Dr. Nizamudheen MP	Surgical Oncology
2	A Phase 1, Open Label First In Human Study Investigating The Safety, Tolerability, Pharmacokinetics, And Preliminary Antitumor Activity Of Hpk1 Inhibitor GRC 54276 Alone And In Combination With Anti-Pd-1 Monoclonal Antibody Pembrolizumab Or Anti-Pd-L1 Atezolizumab In Subjects With Advanced Solid Tumors And Hodgkin's Lymphoma	Dr. Manuprasad A	Clinical Haematology & Medical Oncology
3	Radiation safety aspects of discharging effluents from High Dose Therapy Ward (I-131) to a soak pit- an Institutional experience.	Dr.Rahul Azeez	Nuclear Medicine
4	Lung Cancer in Women- A Survival Analysis	Dr. Geetha M	Radiation Oncology
5	30 Day Mortality Post Palliative Radiotherapy For Adult Solid Tumors	Dr. Joneetha Jones	Radiation Oncology
6	Adherence to Quality Indicators in the Treatment of Cervical Cancer with Radiation Therapy	Dr. Geetha M	Radiation Oncology
7	Post Traumatic Growth (PTG), Resilience and Quality of Life among Adolescent and Young Adult (AYA) Cancer Patients, Cancer Survivors and Healthy Individuals: A Comparative Cross sectional Study	Ms. Jisha Abraham	Psyco Oncology

8	Body Image Distress and Quality of Life of Oral Cancer Patients Before and After Curative Surgical Treatment: A Longitudinal Prospective Study from a Tertiary Cancer Center	Ms. Jisha Abraham	Psyco Oncology
9	Efficacy of Pioglitazone in combination with Neoadjuvant Chemotherapy in Patients with Extremity Skeletal High-Grade Osteosarcoma Treated with Curative Intent: An Open-label, Multi-centre, Randomized Phase II Clinical Trial	Dr. Praveen Kumar Shenoy	Clinical Haematology & Medical Oncology
10	Pattern of Presentation of Lung Cancer in Women	Dr. Geetha M	Radiation Oncology
11	Care of patients with Acute Myeloid Leukemia during COVID in India	Dr. Vineetha Raghavan	Clinical Haematology & Medical Oncology
12	Epidemiology and treatment outcomes of patients older than 55 years of age with Acute Myeloid Leukemia in India	Dr. Vineetha Raghavan	Clinical Haematology & Medical Oncology
13	Dosimetric Evaluation and Toxicities of DARS in Laryngopharyngeal Cancer Patients- A Prospective Study	Dr. Geetha M	Radiation Oncology
14	Patterns of Failure After Postoperative Volumetric Arc Radiotherapy in Oral Cavity Cancer	Dr. Joneetha Jones	Radiation Oncology
15	A study on patterns of care and survival of head and neck, breast and cervical cancers in India under the Hospital Based Cancer Registries of National Cancer Registry Programme	Dr. Saina Sunil Kumar	Cancer Registry
16	Evaluating the Molecular Alterations in Acute Lymphocytic Leukemia Cases Reported in a Tertiary Cancer Centre	Dr. Vipin Gopinath	Molecular Oncology
17	Identification of Potential Bioactive Compound from Acetone Fraction of <i>Tinospora Cordifolia</i> using Reverse Docking	Dr. Vipin Gopinath	Molecular Oncology
18	Evaluation of Glucose Metabolic Pathway Associated Genomic Signature in Different Cancer using TLGA data set	Dr. Deepak Roshan VG	Genetics
19	Frequency of JAK2 V617F Mutation in Philadelphia Negative Myeloproliferative Cases Reported in a Tertiary Cancer Centre in South India	Dr. Deepak Roshan VG	Genetics
20	An exploratory survey to assess the incidence of speech difficulties among post operative patients undergone head and neck cancer surgeries in a cancer centre	Dr. Anoop A	Surgical Oncology
21	Neutron Dose Measurement InVmat Radiotherapy Treatment Of Prostate Carcinoma	Dr. Silpa Ajay Kumar	Radiation Physics
22	Comparative Assessment Of Speech And Swallowing Function In Oral Cancer Patients Undergoing Segmental Mandibulectomy.	Dr. Raveena	Surgical Oncology

23	Intrathecal administration of drugs during treatment of pediatric acute leukemia; practices among clinicians in India	Dr. KG Gopakumar	Pediatric Oncology
24	Compliance to vaccination in childhood cancer survivors & knowledge attitude and practice among parents	Dr. KG Gopakumar	Pediatric Oncology
25	A retrospective study comparing predicted and actual incidence of VTE by IMPEDE VTE score in myeloma patients in a tertiary Centre	Dr. Chandran K Nair	Clinical Haematology& Medical Oncology
26	Comparison Of Acute Morbidity And Time Toxicity Parameters Of Two Neo-adjuvant Treatment Protocols In Locally Advanced Carcinoma Rectum	Dr. Arun P Narendran	Radiation Oncology
27	Comparison of Treatment outcome of two neoadjuvant treatment protocols in Locally advanced carcinoma rectum	Dr. Arun P Narendran	Radiation Oncology
28	Does radiological response to neo adjuvant chemotherapy predict clinical outcome in carcinoma lung patients treated with chemoradiation	Dr.Greeshma. K.E	Radiation Oncology
29	Survival Outcome In Patients With Lung Cancer Treated With Radical Intent Radiotherapy	Dr.Greeshma. K.E	Radiation Oncology
30	Diagnostic Accuracy Of Ultrasound In Predicting Metastatic Axillary Lymph Nodes In Patients With Carcinoma Breast	Dr. Satheesh Babu TV	Imageology
31	Retrospective Audit Of Sample Adequacy And Complications Of Percutaneous Transthoracic Ct Guided Lung Biopsies	Dr. Satheesh Babu TV	Imageology
32	The Pick Up Rate And Patterns Of Distant Metastasis In Patients Undergoing Contrast Enhanced CT Of Thorax And Abdomen For Staging In Cases Of Newly Diagnosed Carcinoma Breast	Dr. Satheesh Babu TV	Imageology
33	Incidence of intraoperative cardiac arrest in a tertiary cancer centre:A retrospective study	Dr Sonali Opneja	Anesthesiology
34	Incidence Of Post-Operative Pulmonary Complications Following Cytoreductive Surgeries And HIPEC-A Retrospective Analytic Study	Dr. Roopesh	Anesthesiology
35	Prevalence And Parental Perspectives On The Use Of Complementary And Alternative Medicine In Children With Cancer	Dr.Gopakumar	Pediatric Oncology
36	Patterns Of Failure in Soft Tissue Sarcoma	Dr. Akhil P Suresh	Radiation Oncology
37	Setup Error Assessment In Breast Radiotherapy Treatment Using Two Positioning Methods	Mrs. Silpa	Radiation Physics
38	Pathological prognostic factors responsible for recurrence in early breast cancer patients in a tertiary cancer centre – 3 year experience.	Dr. Kandathil Joseph Philip	Pathology

39	Effectiveness of Psychotherapy and Yoga on Distress of Breast Cancer Patients: A Comparative Two Arm, Open-Label, Multi-centre, Randomized Controlled Trial	Dr.Satheesan.B	Surgical Oncology
40	Survival Analysis Of Esophageal Cancer Patients Treated With Palliative Radiotherapy	Dr Nabeel Yahiya E	Radiation Oncology
41	Neoadjuvant Chemoradiation In The Treatment Of Oesophageal Carcinoma - A Single Institution Experience	Dr Nabeel Yahiya E	Radiation Oncology
42	Transmission Effect Of The Abdominal Compression Plate In External Beam Radiotherapy	Mrs.Resmi.K. Bharathan	Radiation Physics
43	Dosimetric Effects Of Thermoplastic Mask On The Dose Distribution For Photon Beams	Mrs. SujaC.A	Radiation Physics
44	Arc Check SNC Phantom for Quality Assurance of Modern Linear Accelerators	Mrs. SujaC.A	Radiation Physics
45	Evaluation of Insomnia in the Perioperative Period in Patients Undergoing Cancer Surgeries and Factors Affecting It	Dr. Joona	Anesthesiology
46	Outcomes Of Pelvic Exenteration In Rectal Cancer: An Institutional Study	Dr. Nizamudheen MP	Surgical Oncology
47	Comparison Of Two Completely Automated Blood Cell Counters Performances Employing Internal Quality Control	Dr. Sindhu E. R	Biochemistry
48	Comparison Of Analytical Performance Of Two Different Coagulation Analyser Models Utilizing Internal Quality Control	Dr. Sindhu E. R	Biochemistry
49	Comparison Of The Analytical Performance Of Two Different Model Dry Chemistry Analyzers Using Internal Quality Control	Dr. Sindhu E. R	Biochemistry
50	Treatment Outcome In Patients Treated With Definitive Radiation Therapy In Carcinoma Esophagus	Dr. Vivekanand K	Radiation Oncology
51	Outcomes of treatment for Retroperitoneal Sarcoma(RPS) at a tertiary Cancer Center	Dr. Nizamudheen MP	Surgical Oncology
52	Indications , Outcome And Cost Implications Of HSCT In Children - Experience From A Public Sector Tertiary Care Centre In Rural India	Dr Vineetha Raghavan	Clinical Haematology& Medical Oncology
53	Clinico Pathological Demographics and Outcomes of Verrucous Carcinoma of Oral Cavity: A Retrospective Study	Dr.Anoop A	Surgical Oncology
54	Knowledge, Assessment, Practice of Febrile Neutropenia among Nurses Working in a Tertiary Care Cancer Centre	Dr Vineetha Raghavan	Clinical Haematology& Medical Oncology
55	Biomarker Development For Early Detection Of Colon Cancer (CRC) Using Proteomic Approach	Dr. Vipin Gopinath	Molecular Oncology
56	Evaluating the Efficacy of Tinospora cordifolia Derived Compounds in Colon Cancer Therapy	Dr. Vipin Gopinath	Molecular Oncology

57	Development Of Breast Cancer 3D Tumor Model For In Vitro Evaluation Of Anticancer Drugs	Dr. Deepak Roshan VG	Genetics
58	Study the STAT and mTOR signaling in CML cell lines with B3A2 and B2A2 subtypes of BCR-Abl fusion protein	Dr. Deepak Roshan VG	Genetics
59	Molecular Characterisation of Acute Myeloid Leukemia (AML)	Dr. Vipin Gopinath	Molecular Oncology
60	Study The Chemo-Sensitization And Radio-Sensitization Properties Of Bacopa Monnieri In Breast Cancer	Dr. Deepak Roshan VG	Genetics
61	Chest Wall Resection And Reconstruction - Institution Experience With PMMA-Prolene Mesh Sandwich Technique	Dr. Satheesan B	Surgical Oncology
62	Does PNI Further Worsen Survival In Node Positive Oral Cancer : A Retrospective Analysis	Dr. Sandeep Vijay	Surgical Oncology
63	Abdominoperineal Excision With Prostatectomy In Locally Advanced Rectal Cancer - Retrospective Analysis	Dr. Satheesan B	Surgical Oncology
64	Factors Associated With Tracheostomy For Advanced Tongue Cancers In The Perioperative Period	Dr. Sandeep Vijay	Surgical Oncology
65	Assessment Of Spiritual Wellbeing In Advanced Cancer Patients Receiving Palliative Care In A Tertiary Cancer Center In Kerala-A Mixed Method Study	Dr.M.S. Biji	Palliative
66	Measureable/Minimal Residual Disease Assessment In B-Lymphoblastic Leukemia By 5 And 10- Color Flowcytometry: An Institutional Experience.	Dr.Anand Vijaya Narayanan	Pathology
67	A Randomized, Multiple-dose, Multicenter, Comparative Parallel Study to Evaluate the Pharmacokinetic, Pharmacodynamic, Efficacy and Safety of Subcutaneous Injection of Denosumab (Hetero) and Reference Medicinal Product (Denosumab, Amgen Inc.) in patients with bone metastases from solid tumors	Dr. Praveen Kumar Shenoy	Clinical Haematology& Medical Oncology
68	A Phase 3 Study Of CCNU versus CCNU Plus Mebendazole In Glioma	Dr. Manuprasad A	Clinical Haematology & Medical Oncology
69	Salvageability And Treatment Outcomes In Recurrent Colorectal Cancer	Dr. Nizamudheen MP	Surgical Oncology
70	A Prospective Study To Determine The Need For Annual Ferritin Screening Among Frequent Plateletpheresis Donors	Dr.Anju	Blood Bank
71	Outcome Of Multi-Organ Resection As A Part Of Cytoreductive Surgery In Patients With Ovarian Cancer	Dr.Alex	Surgical Oncology
72	Incidence And Factors Affecting Low Anterior Resection Syndrome After Rectal Cancer Surgery	Dr.Sano	Surgical Oncology
73	Utility of Dripo - Electronic Infusion Monitor in Minimizing Infusion Flow Rate Errors Compared to Conventional Gravity Method – A Non Randomized Controlled Trial	Dr.Satheesan.B	Surgical Oncology

74	A Survey On Perception Of Role Of Anaesthesiologist Among Patients Undergoing Oncosurgeries	Dr Sonali Opneja	Anesthesiology
75	Surface Dose Variations in FF and FFF Beams for Different Clinical Setup	Mrs.Resmi.K. Bharathan	Radiation Oncology
76	Measurement Of Cross Caliberation Coefficient For Plane-Parallel Ionization Chamber Using Different Dosimeters, Energy And Medium	Dr. Silpa AjayKumar	Radiation Oncology
77	Determination Of Inflection Point And Comparison With Profile Normalisation Intreatment Planning System	Mrs. SujaC.A	Radiation Oncology
78	Role Of Baseline Hemoglobin,Albumin,Lymphocyte And Platelet (HALP) Score As A Novel Prognostic Marker For Patients With Diffuse Large B Cell Lymphoma; A Retrospective Analysis From A Tertiary Cancer Centre In South India	Dr.Sithara	Pathology
79	Compliance To Strict Surveillance Protocol In Surgically Treated Oral Cancer Patients	Dr.Sivakumar	Surgical Oncology
80	A Multicenter, Randomized, Double-Blind Phase 3 Study of HBI-8000 Combined with Nivolumab versus Placebo with Nivolumab in Patients with Unresectable or Metastatic Melanoma Not Previously Treated with PD-1 or PD-L1 Inhibitors	Dr. Nandini Devi	Clinical Haematology& Medical Oncology
81	Randomised controlled trial evaluating the efficacy of tracheoesophageal voice prosthesis in patients undergoing total laryngectomy- A pilot study	Dr.Satheesan.B	Surgical Oncology
82	Clinical Outcome of patients with nasopharyngeal carcinoma treated with definitive radiotherapy	Dr.Vinin	Radiation Oncology
83	A Retrospective Analysis Of Clinical Outcome In Patient With Carcinoma Oropharynx Treated With Radical Radiotherapy	Dr.Greeshma. K.E	Radiation Oncology
84	A Retrospective Analysis of InotuzumabOzogamicin (InO) usage in Adult Patients with Relapsed/Refractory (R/R) B-cell Acute Lymphoblastic Leukemia (ALL)	Dr. Chandran K Nair	Clinical Haematology& Medical Oncology
85	Variation Of Dose To Normal Organs Due To Isocentre Shift In Tangential Breast Radiotherapy: A Simulation Study	Mrs.Lisha	Radiation Oncology
86	B- CALANO - blood culture positive alert system	Dr.Parthiban	Microbiology
87	Clinico-Pathologic Characterisation& Prognosis Of Single Hit And Double Hit/Triple Hit High Grade B Cell Lymphomas	Dr.Sanooba	Pathology
88	Clinical outcome of patients with meningioma treated with radiation therapy	Dr. Akhil P Suresh	Radiation Oncology
89	treatment pattern and outcomes in elderly patients with nsclc	Dr. Manuprasad A	Clinical Haematology& Medical Oncology

90	survival outcome and recurrence pattern in low to intermediate risk carcinoma endometrium	Dr. Arun P Narendran	Radiation Oncology
91	Clinical Outcome In Patients With Carcinoma Hypopharynx Treated With Definitive Radiation Therapy	Dr.Jonnetha	Radiation Oncology
92	Dosimetric comparison between VMAT and DCAT SBRT treatment delivery technique using FF and FFF beams for lung cancer	Dr. Silpa AjayKumar	Radiation Oncology
93	Dosimetric Evaluation of Pareto and constrained mode of optimization for VMAT plans in SBRT Lung cases	Dr. Silpa AjayKumar	Radiation Oncology
94	Clinicopathological characteristics and outcome of sinonasal malignancies	Dr. Akhil P Suresh	Radiation Oncology
95	Clinical Outcome of Patients with Malignant Major Salivary Gland Tumors Treated with Curative Intent	Dr. Akhil P Suresh	Radiation Oncology
96	survival outcome and recurrence pattern in high risk carcinoma endometrium	Dr. Arun P Narendran	Radiation Oncology
97	Comparison of PDD Distribution using two Phantom materials	Dr.Resmi	Radiation Oncology
98	Uterine Carcinosarcoma: A single institutional study on phenotype, management and survival.	Dr. Geetha M	Radiation Oncology
99	Dosimetric comparison of Craniospinal Irradiation Using VMAT and 3DCRT Technique	Mrs.Suja	Radiation Oncology
100	Clinical Outcome of Oral Tongue Cancers Treated with Post Operative Radiotherapy	Dr. Geetha M	Radiation Oncology
101	Survival Outcome in Node Positive Oral Tongue Cancer Patients	Dr. Geetha M	Radiation Oncology
102	Organ at Risk Dose in Short Course Radiotherapy for Carcinoma Rectum- A Dosimetric Study	Dr Nabeel Yahiya E	Radiation Oncology
103	A randomized study of neoadjuvant systemic therapy in oral cavity cancer	Dr. Manuprasad A	Clinical Haematology& Medical Oncology
104	Evaluation Of Prognostic Significance Of Tumor Budding In Oral Squamous Cell Carcinoma – A Retrospective Cohort	Dr.Anand Vijaya Narayanan	Pathology
105	Synchronous And Metachronous Primary Malignancies- A Retrospective Analysis From A Tertiary Care Centre	Dr.Sangeetha	Pathology
106	Assessment of various etiological factors for oral squamous cell carcinoma in non-habit patients- A cross sectional case control study	Dr Mudiyya-irakkani Muth-uswami	Saveetha university
107	Clinicopathological and radiological characteristics of Hepatocellular Carcinoma- A retrospective study from a tertiary cancer center	Dr. Satheeshbabu	Imageology
108	Therapeutic Outcome and Safety of CT Guided Robotic Assisted Microwave Ablation in Treatment of Small (<= 3 cm) and Medium Sized (3-5 cm) Hepatocellular Carcinoma	Dr. Satheeshbabu	Imageology

109	Re-Exploration of the Thyroid Bed: An Analysis of Complications & Outcomes	Dr. Sandeep Vijay	Surgical Oncology
110	In Silico Designing of a clinically actionable and more affordable NGS panel for oral squamous cell carcinoma	Dr. Deepak Roshan VG	Genetics
111	Validate and check the feasibility of Malnutrition Self Screening tool among adult Cancer patients	Mrs.Reena	Surgical Oncology
112	Role Of Pet/Ct Scan In Post Chemoradiation Response Assessment In Patients With Carcinoma Lung	Dr.Subin	Radiation Oncology
113	Factors determining ICU admission and outcomes following Autologous stem cell transplantation.	Dr. Chandran K Nair	Clinical Haematology& Medical Oncology
114	safety and efficacy of generic carfilzomib at 70 mg/m2 once weekly, real world data	Dr. Chandran K Nair	Clinical Haematology& Medical Oncology
115	Evaluation of Speech & Swallowing Outcomes for Early Stage Tongue Cancer Patients treated with Surgery	Dr.Anoop A	Surgical Oncology
116	Influenza like illness during treatment for cancerin children	Dr.Jithin	Clinical Haematology& Medical Oncology

SCIENTIFIC ADVISORY COMMITTEE (SAC)-RECONSTITUTION 2020

Scientific advisory committee will periodically review the training, services and research activities of the Malabar Cancer Center and evaluate and make recommendations to the Executive Committee (EC) and Governing Body of the Malabar Cancer center.

S.No.	NAME	DESIGNATION	POSITION
1	Prof. Kanjaksha Ghosh	Former Director, National Institute of Immune Hematology, ICMR	Chairman
2	Dr.Manoj Murahekar	Director, National Institute of Epidemiology, Chennai	Member
3	Dr. Mohanasankar Sivaprakasam	Director, HTIC, Associate Professor, Department of Electrical Engineering, IIT Madras	Member
4	Dr. B. Venkatraman	Outstanding Scientist & Director, Health, Safety and Environment Group, Indira Gandhi Centre for Atomic Research, Kalpakkam	Member
5	Dr.Moni Kuriakose	Director, Cochin Cancer Centre	Member
6	Dr. R. Swaminathan	Assistant Director, Professor and Head Department of Epidemiology, Biostatistics and Cancer Registry & Cancer Institute (WIA), Chennai	Member
7	Dr.R.M.Pandey	Professor & Head, Dept of Biostatistics, AIIMS, New Delhi	Member
8	Dr. Sathees C Raghavan	Professor, Department of Biochemistry, Indian Institute of Science, Bangalore	Member
9	Dr. Manju Sengar	Professor, Department of Medical Oncology, Tata Memorial Hospital, Mumbai	Member
10	Dean, Research	KUHS (Official nomination)	Member
11	Director	MCC	Convener

RESEARCH ADVISORY COMMITTEE (RAC)

SL.NO	NAME & ADDRESS	POSITION
1	Dr. Bhudev Chandra Das , PhD, FNASc, FASc, FAMS, FNA, J.C. Bose National Fellow. Hargobind Khorana Chair Professor Amity Institute of Molecular Medicine & Stem Cell Research (AIMMSCR) Dean, Health and Allied sciences Amity University Uttar Pradesh, Sector-125, Noida, India-201313	Chairman
2	Prof. KBR Varma , Vice Chancellor, Sathya Sai University, Prasaqnthi Nilayam, Anantapur District, Puttapathi, Andhra Pradesh 515134	External Member
3	Dr. Shantikumar Nair , Dean of Research, Director, Nanosciences, Center for Nanosciences, Amrita Institute of Medical Science Kochi	External Member
4	Dr. Harikrishna Varma P. R. , Head, Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Satelmond Palace, Poojappura, Thiruvananthapuram, Kerala, India	External Member
5	Dr. N Raghu , Director, Centre for Materials for Electronics, Technology (C-MET), Athani P.O., SH22, Kerala 680581	External Member
6	Dr. Rajendra Pilankatta , Dean, School of Medicine and Public Health (SMPH), Associate Professor, Department of Biochemistry and Molecular Biology, Central University of Kerala, Tejaswini Hills, Periyar (PO), Kasaragod (DT), Kerala – 671316	External Member
7	Prof (Dr) Sangeetha K Nayanar , Head of the Department, Department of Clinical Laboratory, Service and Translational Research, Malabar Cancer Centre, Thalassery.	Internal Member
8	Dr Deepak Roshan VG , Assistant Professor Division of Genetics and Cytogenetics, Department of Clinical Laboratory Service and Translational Research, Malabar Cancer Centre, Thalassery.	Internal Member
9	Mrs Maya Padmanabhan , Lecturer, Division of Clinical Research and Biostatistics, Malabar Cancer Centre, Thalassery.	Internal Member
10	Prof (Dr) Satheeshan B , Director, Malabar Cancer Centre, Thalassery.	Convener & Member secretary

INTRA MURAL RESEARCH FUND REVIEW COMMITTEE

SLNO	NAME	DESIGNATION	POSITION
1	Dr.Sreejayan M P	Professor of Surgery, Govt Medical College Kozhikode	Chairman
2	Dr.Chandran C	Professor, Dept of Statistics, University of Calicut	Member
3	Dr.Anu Augustine	Head, Dept of Biotechnology and Microbiology, School of Life Sciences, Kannur University	Member

PUBLICATION 2022-23

1. Comparison of propofol versus fentanyl infusion for postoperative sedation in mechanically ventilated patients following head and neck oncosurgeries- A Retrospective analytic study, Roopesh Sureshan, Sonali Opneja, Riyas M, Oncology and Radiotherapy 16 (11) 2022: 58-62

2. Phenotypic Appraisal of Collision Tumors of Thyroid – Initial Experience of a Rare Entity at a Cancer Centre in South India, Sherin James, Sithara Aravind, Vipin Gopinath, Sangeetha K Nayanar, *Asian Pac J Cancer Care*, 7 (2), 415-419
3. Testing for Microsatellite Instability in Colorectal Cancer – a Comparative Evaluation of Immuno histochemical and Molecular Methods Deepak Roshan VG ,Sangeetha K Nayanar , VipinGopinath , K J Philip ,NoushadAryadan , Vivek Nair,Varadharaja Perumal G. J. O. Issue 39, 2022
4. Oral metronomic chemotherapy as a feasible preoperative therapy in advanced resectable oral cavity squamous cell carcinomas—a preliminary experience, V P Praveen Kumar Shenoy, AvaronnanManuprasad, Sajith Babu, Sithara Aravind, Vinin N Narayanan, Sangeetha Nayanar and Satheesan Balasubramanian, *ecancer* 2022, 16:1425
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OTHER COMMITTEES

SL NO	NAME OF COMMITTEES
1	Academic Council
2	Admin Committee
3	NABH Committee
4	Building Committee
5	Canteen Core Committee
6	Internal Complaint Committee
7	CSR Committee
8	Patient Welfare Committee
9	Technical Committee
10	Stock Verification Committee
11	Pre-bid Committee
12	Waste Management Committee
13	Library Committee
14	Hospital Management Committee
15	Nursing Administration Committee

NABH RELATED COMMITTEE

S.No.	NAME OF COMMITTEES
1	Quality Assurance Committee
2	Facility Management and Safety Committee
3	Hospital Infection Control Committee
4	Blood Transfusion Committee
5	Code Blue/ CPR Committee
6	Pharmaco-Therapeutic Committee
7	Internal Audit Committee
8	Clinical Audit committee
9	Credentialing and Previlaging Committee
10	Grievance Handling Committee
11	Medical Record Audit Committee
12	Internal Complaint Committee
13	Institutional Ethics Committee
14	Radiation Safety Committee

COURSES AT MCC

SL NO	BSc COURSE	DURATION/ SEATS
1	Medical Radiation Technology	4yrs/25
2	Nursing	4yrs/40

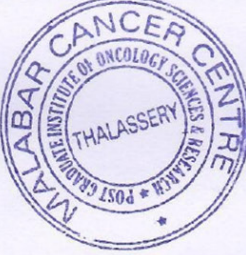
SL NO	DNB COURSE	DURATION/ SEATS
1	Surgical oncology	3/2
2	Clinical hematology	3/2
3	Pathology	3/1
4	Radiation Oncology	3/3

SL NO	FNB COURSE	DURATION/ SEATS
1	Pediatric Hemato Oncology	2/2
2	Head and Neck Oncology	2/2
3	DMRD	2/2

SL NO	FELLOWSHIP PROGRAMME	DURATION/ SEATS
1	Head and Neck Oncology	2/1
2	GynaecologicOncology	2/2
3	Hemato-Oncology &BMT	1/2
4	Gastrointestinal Oncology	1/1
5	Oral Oncology	1/1
6	Aphaeresis Medicine	1/1
7	Oncopathology	1/1
8	Head and Neck Pathology	1/1
9	Oncology Nutrition	1/1
10	Onco-Imaging &Interventional Radiology	1/1
11	Psycho Oncology	1/1
12	Medical Social Worker	1/1

SL NO	SHORT TERM COURSES	DURATION/SEATS
1	IAPC Part A	8 Wks/No Limit
2	IAPC Part B	10 Days/1
3	NFPM	10 Days /1
4	NFPN	10 Days /1

ACCOUNTS & AUDIT REPORTS 2022-23

MALABAR CANCER CENTRE SOCIETY THALASSERY, KANNUR			
CONSOLIDATED BALANCE SHEET AS AT 31ST MARCH 2023			
PARTICULARS	Schedule No.	FY : 2022-2023	FY: 2021-2022
I. FUNDS & LIABILITIES			
1. Trust Funds			
a. Capital Fund	1	1,30,38,46,157.20	1,36,61,67,2
b. Grant in Aid- Capital Grant (Pending Utilisation)	2	12,52,71,264.35	5,67,06,7
c. Funds & Schemes	3	7,21,47,264.94	6,69,16,2
		1,50,12,64,686.49	1,48,97,90,3
2. Current Liabilities			
a. Sundry Creditors		10,69,99,448.52	14,75,63,7
b. Income Received in Advance		1,68,12,133.92	35,07,3
c. Provision for Expenses	4	69,01,480.00	2,57,60,6
d. Other current liabilities	5	7,32,88,651.90	14,15,12,3
		20,40,01,714.34	31,83,44,1
TOTAL		1,70,52,66,400.83	1,80,81,34,5
II. PROPERTY & ASSETS			
1. Property , Plant & Equipment			
a. Tangible assets	6	1,16,63,82,391.35	1,06,82,93,1
b. Capital Work In Progress		3,52,05,689.00	31,02,44,7
		1,20,15,88,080.35	1,37,85,37,9
2. Current assets			
a. Deposits ,Advances & other current assets	7	13,40,78,297.10	5,56,23,0
b. Cash and cash equivalents	8	18,25,11,178.18	16,84,45,6
c. Closing stock	9	18,43,07,258.82	13,04,30,3
d. Sundry Debtors		27,81,586.38	7,50,97,4
		50,36,78,320.48	42,95,96,5
		1,70,52,66,400.83	1,80,81,34,5
TOTAL		1,70,52,66,400.83	1,80,81,34,5
<i>Significant accounting policies and Notes on Accounts</i>	27	-	
As per our report of even date attached			
For RSM & ASSOCIATES CHARTERED ACCOUNTANTS FRNo. 2813S PAUL JOSEPH K FCA PARTNER M.No.26816 UDIN : 23026816BGQQQU9097		For MALABAR CANCER CENTRE SOCIETY <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  </div> <div style="text-align: right;"> <p>Dr. SATHEESAN B <small>DIRECTOR</small> Dr. B. SATHEESAN <small>Malabar Cancer Centre (PGIOSR)</small> <small>THALASSERY</small></p> <p>REJI SANKAR ST <small>FINANCE OFFICER</small> <small>Malabar Cancer Centre (PGIOSR)</small></p> </div> </div>	
Place: COCHIN Date : 30.09.2023			

**MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR**

CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2023

Sl.No:	PARTICULARS	Schedule No.	FY : 2022 -2023	FY : 2021 -2022
I.	<u>INCOME</u>			
	Revenue from Hospital operations	10	55,69,52,609.00	34,47,82,717.1
	Grant In Aid - Revenue Grant	11	13,68,87,000.00	9,10,71,000.1
	Rental Income	12	48,34,480.00	24,55,391.1
	Income from Training and Teaching	13	2,69,58,795.00	1,63,82,254.1
	Other Income	14	46,72,628.83	43,99,127.1
	Pharmacy Collection		26,10,27,613.00	23,02,07,101.1
	Penal Liquidation Charges		20,21,318.00	44,40,835.1
	Interest Income		54,93,371.10	25,66,632.1
	Canteen Sales		3,24,21,684.00	3,09,89,293.1
	Donation Received		16,609.00	1,04,150.1
	Interest on Income tax refund		12,69,705.95	-
	<u>Project fund utilised</u>			
	HBCR - NCDIR -ICMR Project		5,32,671.00	8,28,284.1
	NCDIR - E-MOR Project Fund		4,62,172.00	6,70,152.1
	YIPB Project		-	4,96,565.1
	BIRAC - Lamp Based Study		80,924.00	4,38,797.1
	SARS Cov-2RT-PCR- clinical Study		-	1,05,215.1
	BIRAC CTN Project		31,24,692.00	24,95,636.1
	BIRAC - Mission Covid Suraksha Project		3,84,935.00	60,96,373.1
	PLAN Fund Utilised	26	7,52,87,174.33	-
II	Total Income		1,11,24,28,382.21	73,85,29,522.1
III	<u>EXPENDITURE</u>			
	Pharmacy consumption	15	13,43,48,352.55	17,73,98,800.1
	Employee Benefit Expenses	16	41,79,49,082.00	43,02,53,500.1
	Consumables/ Treatment Expenses	17	7,84,47,377.67	4,60,87,320.1
	Energy Charges	18	3,12,09,505.00	2,65,78,429.1
	Programme Expenses	19	11,24,236.00	8,690.1
	Rates & Taxes	20	5,50,946.00	7,04,675.1
	Vehicle Expenses	21	20,50,051.34	18,17,341.1
	Course Conducting Expense	22	19,21,054.50	14,56,499.1
	Printing & Stationary	23	20,52,665.00	14,06,698.1
	Canteen Purchase & Expenses	24	2,12,90,911.55	1,90,02,639.1
	Other Expense	25	93,60,036.89	46,68,682.1
	Advertisement Expenses		4,00,252.00	7,78,609.1
	Repairs & Maintenance		26,07,814.29	23,36,888.1
	Travelling Expenses		5,43,103.00	3,16,090.1
	Rent Paid		9,13,060.00	11,25,000.1
	Bank Charges		5,302.29	26,481.1
	Legal & Professional Charges		3,10,150.00	3,33,990.1
	Cleaning & Laundry Expenses		1,48,72,651.00	1,39,33,469.1

AMC Charges		73,41,437.00	1,23,52,267.0
Security Service Charges		1,12,29,931.00	1,09,23,890.0
Subsidy given to patients & students		16,55,45,131.00	4,21,806.0
Audit Fee		2,06,500.00	2,06,500.0
Depreciation	6	26,92,05,072.00	15,40,21,916.0
<u>Project Expenses</u>			
<u>HBCR - NCDIR -ICMR Project</u>			
Salary & Allowances		5,18,271.00	6,69,171.0
Printing & Stationery		7,080.00	99,525.0
Postage & Communication		2,820.00	2,836.0
Software		4,500.00	-
Asset acquisition			56,752.0
<u>NCDIR -E-MOR Project Fund</u>			
Salary & Allowances		4,15,138.00	6,28,616.0
Printing & Stationery		18,534.00	41,536.0
Furniture		25,000.00	-
Professional Charges		3,500.00	-
<u>YIPB Project</u>			
Salary & Allowances		-	-
Purchase of re-agents		-	4,96,565.0
<u>BIRAC - Lamp Based Study</u>			
Travelling Expenses		4,508.00	-
Salary & Allowances		-	1,90,188.0
Asset acquisition		12,500.00	59,459.0
Purchase of re-agents		63,916.00	1,89,150.0
<u>SARS Cov-2RT-PCR- clinical Study</u>			
Salary & Allowances		-	-
Covid -19 Combo Kit		-	-
Purchase of re-agents		-	1,05,215.0
<u>BIRAC CTN Project</u>			
Salary & Allowances		19,20,426.00	14,85,485.0
Professional Charges		7,630.00	-
Printing & Stationery		13,610.00	9,198.0
Asset acquisition		11,57,946.00	9,85,333.0
Computer Consumables		6,200.00	9,340.0
Registration fee		3,500.00	6,280.0
Consumables		15,380.00	-

BIRAC - Mission Covid Suraksha Project				
	Salary & Allowances		87,783.00	12,73,597.1
	Training Fee		-	8,000.1
	Printing & Stationery		15,252.00	5,428.1
	Asset acquisition		2,69,400.00	45,02,175.1
	Patient Expenses		-	4,533.1
	Purchase of re-agents		-	2,26,369.1
	Program Expenses & Refreshments		-	24,940.1
	Repairs & Maintenance		-	1,500.1
	Advertisement Expenses		-	49,831.1
	Professional Charges		12,500.00	-
	Expenditure Under Plan Fund	26	7,52,87,174.33	-
IV	Total Expenditure		1,25,33,57,190.41	91,72,91,205.1
V	Excess of Expenditure over Income (II-IV)		14,09,28,808.20	17,87,61,682.1
	<i>Significant accounting policies and Notes on Accounts</i>	27		

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 2813S

PAUL JOSEPH K FCA
PARTNER
M.No.26816
UDIN : 23026816BGQQQU9097

Place: COCHIN
Date : 30.09.2023



For MALABAR CANCER CENTRE SOCIETY

Dr. B. SATHEESAN
DIRECTOR
Malabar Cancer Centre (PGIOSR)
THALASSERY

REJI SANKAR ST
FINANCE OFFICER
Malabar Cancer Centre (PGIOSR)

**MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR**

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2023

Sl.No:	PARTICULARS		FY : 2022 -2023
I.	RECEIPTS		
	Opening Balance		
	Cash in Hand	8,38,542.00	
	Cash at Bank	16,73,41,050.12	16,81,79,592.12
	Corpus Funds		
	Grant Received from Govt		22,11,78,487.00
	Receipts from Funds & Schemes		
	CSR Fund - RITES Limited	14,56,010.00	
	Awake & Aware Project fund	4,108.00	
	BIRAC - CTN Project	25,53,000.00	
	BIRAC Lampbased study	2,597.00	
	C-MET Project Design & Dev.of Ultrasonic TransDuc	29,925.00	
	DBT AIDO Scan Project	11,530.00	
	ICMR Project -HPV Associated Oral	20,215.00	
	ICMR Project - Oral Precancer	16,690.00	
	Indian Oil Corporation , Mumbai	10,57,659.40	
	SRS Project - Clinicopathologic	4,40,486.00	
	HBCR - POCSS Project	10,15,042.00	
	Patients Welfare Schemes	9,94,769.00	
	Patients' Account (PMNRF)	2,15,04,510.00	
	HBCR - NCDIR - ICMR Project	9,11,950.00	
	Medical Librarian	22,000.00	
	NCDIR - E - MOR Project	4,62,236.00	
	SERB Project	14,90,000.00	
	JIPMER Naga Study Project	2,91,026.00	
	Academic & Research Fund	5,35,291.00	3,28,19,044.40
	Income Received		
	Income from Training & Teaching	2,56,10,130.00	
	Revenue from Hospital Operations	26,43,46,182.00	
	Interest income	50,45,933.00	
	Rental Income	33,70,895.00	
	Canteen Sales	2,80,95,164.00	
	Discount Received	1,29,332.00	32,65,97,636.00
	Other Income		
	Penal Liquidation charges	35,000.00	
	Miscellaneous Income	26,49,219.37	
	Van Hire Charges Collected	-	26,84,219.37
	Grand Received from Govt		13,68,87,000.00
	Insurance Claim Received		-
	Income received in Advance		41,08,01,428.63
	Caution Deposit received		22,94,320.00
	Advance received		32,11,360.67
	EMD Received		25,19,316.00
	Security Deposit received		33,26,547.80
	Donation received for Canteen		13,09,588.00
	Income Tax Refund		1,71,33,070.00
	Term Deposit Matured		4,73,02,074.38
	Receipt from Debtors (Net)		5,89,46,060.00

	Creche	2,66,341.00	
	Malabar Cancer Centre	-	
	MCC - Canteen	6,75,053.00	
	MCC - Nursing College	2,33,80,355.30	2,43,21,749.30
	TOTAL		1,45,95,11,493.67
II	<u>PAYMENTS</u>		
	<u>Funds Utilised</u>		
	Patients' Account (PMNRF)	40,46,697.00	
	Patients Welfare Schemes	20,38,450.00	
	BIRAC - CTN Project	18,400.00	
	BIRAC - Lampbased study	4,508.00	
	Medical Librarian	22,632.00	
	HBCR - NCDIR - ICMR Project	796.00	
	NCDIR - E - MOR Project	22,967.00	
	DBT - Aidoscan Project	4,654.00	
	YIPB Project	1,17,572.00	
	Awake & Aware Project fund	46,500.00	
	HBCR in India - ICMR Project 2022	4,500.00	
	JIPMER Naga Study Project	2,000.00	
	SERB Project	14,87,856.00	
	Academic & Research Fund	7,91,321.00	86,08,853.00
	Payment to Creditors (Net)		56,94,64,354.40
	Bank Loan recovered remitted		9,83,500.00
	EMD Refunded		2,62,52,457.00
	Security Deposit refunded		78,90,155.00
	Caution Deposit refunded		16,44,470.00
	Deposits		13,73,46,816.00
	Advance given		70,24,276.00
	GST & Flood Cess & TDS Paid		99,12,559.00
	Tax Deducted at Source		15,54,245.80
	<u>Capital Expenditure</u>		
	Plant & Machinery	14,528.00	
	Furniture & Electrical fittings	1,625.00	
	Capital Work in Progress	97,67,172.69	97,83,325.69
	<u>Indirect Expenses</u>		
	Employee Benefit Expenses	40,42,23,115.00	
	Vehicle Running & Maintenance	4,49,624.00	
	Energy Charges	90,84,988.00	
	Telephone Charges	23,392.00	
	Rent	5,29,852.00	
	Visiting Consultant Charges	4,07,417.00	
	Statutory Payments	4,89,96,511.00	
	Printing & Stationery	1,43,688.00	
	Repairs & Maintenance	10,25,273.00	
	Travelling & Conveyance	1,02,231.00	
	Bank Charges	37,391.13	
	Consumables & Other Treatment Expenses	17,23,394.36	
	Subsidy to Patients	10,945.00	
	Course Conducting Expenses	13,02,299.20	
	Legal & Professional Charges	1,89,000.00	
	Programme Expenses	48,004.00	
	Rates , Fees & Tax	4,98,393.00	
	Canteen Purchase & Expenses	6,44,027.00	

NBH Accreditation Charges	2,95,000.00	
Newspaper & Periodicals	2,800.00	
Recruitment Expenses	1,13,037.00	
Insurance Charges Paid	13,13,383.00	
Meeting Expenses	86,000.00	
General Expenses	15,175.11	
Postage & Communication	3,12,402.00	
Water Charges	65,675.00	47,16,43,016.80
Branch Transfers		
Malabar Cancer Centre	2,48,92,286.80	
MCC - Canteen	-	
MCC - Nursing College	-	
MCC - Creche	-	2,48,92,286.80
Closing Balance		
Cash in Hand	8,42,333.00	
Cash at Bank	18,16,68,845.18	18,25,11,178.18
TOTAL		1,45,95,11,493.67
<i>Significant accounting policies and Notes on Accounts</i>		-

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 2813S

PAUL JOSEPH K FCA
PARTNER
M.No.26816
UDIN : 23026816BGQQU9097

Place: COCHIN
Date : 30.09.2023



For MALABAR CANCER CENTRE SOCIETY

Dr. B. SATHEESAN
DIRECTOR
Malabar Cancer Centre (PGIOSR),
THALASSERY

REJI SANKAR ST
FINANCE OFFICER
Malabar Cancer Centre (PGIOSR)

PATIENT WELFARE ACTIVITIES

The Patient Welfare Committee was constituted for the smooth functioning of our Patient Welfare Activities has attributed a boost to our patient services and management. The Committee consists of Doctors of different specialties, representatives from Administrative section, Social Scientist and Nursing personnel. The Committee co-ordinates the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise funds for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. Majority of the staff members generously donate to this fund. This fund is utilized for the treatment/investigations for the needy patients after proper assessment.

PATIENT WELFARE SCHEMES

- Comprehensive Health Care Project for Scheduled Tribe patients.
- Prime Minister's National Relief Fund
- Chief Ministers Relief Fund
- Cancer Suraksha Scheme
- Thalolam
- Sneha Santhwanam
- CHIS PLUS
- PMRS (Pondicherry Medical Relief Society)
- Employees State Insurance Credit facility
- Karunya Benevolent fund

MCC'S OWN PATIENT SUPPORT FACILITIES

Patient Free Food Scheme:

As most of our patients belong to lower socio-economic strata struggling to earn for their meal, with the financial assistance from philanthropists and like-minded organizations, all in-patients are given food (three times a day) at free of cost. Malabar CH Centre provides Free Food Scheme since 2012.

Patient Welfare Fund:

The Patient Welfare Committee co-ordinates all the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise the money for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. This fund is utilized for the treatment/investigations for the needy patients after proper assessment. Those patients who fail to get any Government assistance scheme are assisted with this fund.

Hospital Library for Patients and Relatives:

A unique Hospital library for patients, their relatives and staff is functioning in the centre since 2005. The library is funded by Kerala State Library Council.

Free Home care Services:

Home care services are provided to patients staying nearby and who are unable to travel to MCC for availing treatment. Medicines like morphine, certain palliative procedures are performed by trained staff. MCC's own vehicle is used for the purpose and no charge is levied for the services.

Drug Bank:

Apart from the above a Drug Bank is also formulated for collection of drugs from Doctors in and around Thalassery and also sample medicines issued from various pharmaceutical companies. Such medicines are issued free of cost to the needy poor patients, who are undergoing treatment from this Centre.

Free Transport System:

Renowned business tycoon and great philanthropist, Shri.Gokulum Gopalan and donated a mini bus for transportation of patients to and from MCC, which is situated on a hill top in the suburb of Thalassery town and Railway station of Thalassery. This is of immense help to poor patients.

Waiting area and resting area for Bystanders

Constructed using the MLA ADS scheme of Advt. AN. Shamseer, MLA Thalassery.

Dormitory Support for bystanders (carers):

Many patients come from far off places from various Districts. Their care givers need accommodation to support their loved ones. Most of them are unable to bear the expenses of stay in rented buildings or Hotels. Hence through MPLADS, Adv.Sathidevi was kind enough to provide a Dormitory, built within the campus. Here bystanders of in-patients are provided free accommodation.

‘AKSHAYA’- Financial support scheme for Bone marrow transplantation:

Bone marrow transplantation (BMT) treatment is highly expensive and not many patients will be able to afford the same. It is a state of art curative treatment for my blood cancers. But it has significant failure and death rate apart from financial toxicity. The Government sponsored schemes will not be quite enough to cover up the expenses in this regard. To help out poor cancer patients, MCC has decided to set up a separate fund for meeting the expenses of patients in this regard. Donations from individuals, voluntary organizations, philanthropists are expected for raising this fund. The fund is proposed as a "Ever Green" scheme. Monthly electronic transfer to the account of Akshya Scheme from the donor's account through standing instruction to the bank is suggested to achieve the goal. Any amount is considered big and there is no limitations to the monthly transfer. It is desired to get a minimum of 10 lakhs per month through this method so that no patient shall drop out of the ambit of Bone marrow transplantation.

SUPPORT GROUPS

MCC initiates the formation of five supports groups for the welfare and rehabilitation of Breast and Colostomy, Bone Marrow Transplantation, All survivors, Limb Salvage Surgery patients;

1. Thejas: Thejas (Breast Support group) is started on 30-09-2009
2. Spandhanam: Ostomy Association started on 21-11-2011
3. Navajeevan
4. Amrutham
5. Sanjeevani

HOW TO SUPPORT MCC

An Appeal: As you are aware that cancer treatment is expensive and many people could not afford the expenditure without some kind of financial assistance. Our centre is also committed to offer free treatment to financially and socially backward patients and others on a concessional rate. Many of our patients had already applied for financial assistance from various agencies. So many broad-minded organizations and agencies had already helped our poor patients and so many of them were expressing their willingness to help such patients in future also.

Generous donations are welcome to realize the dream: It may please be noted that donations to MCC are exempted from income tax according to rule 80G of the Income Tax Act

Donations to MCC may be forwarded to Director, Malabar Cancer Centre or to the following Account in ICICI bank, Thalassery Branch:

Account Name: **MCC SOCIETY PATIENT WELFARE SCHEME**

Account Number: 04620 100 2346

IFS Code: ICIC0000462

MICR Code: 670229102

Swift Code: ICICINBBXXX

VPA ID: mccspws@icici

Bank & Branch: ICICI, Thalassery Branch.

PATIENTS FREE FOOD SCHEME

Recently MCC had started a “Patients Free Food Scheme” for all patients in MCC, irrespective of their financial status. Currently the project is supported by Malabar CH Centre. It provides food for all inpatients through MCC canteen. This noble gesture has helped many poor patients to complete their treatment and it could reduce the financial toxicity to a great extent. MCC is looking forward for further financial assistance as donations from individuals, corporate institutions, State owned Corporations, to provide food for care givers too.

Generous to realize the donations are welcome dream: Donations to MCC may be forwarded to Director, Malabar Cancer Centre or to the following Account in ICICI

Account Name: **MCC SOCIETY PATIENT WELFARE SCHEME**

Account Number: 04620 100 2346

IFS Code: ICIC0000462

MICR Code: 670229102

Swift Code: ICICINBBXXX

VPA ID: mccspws@icici

Bank & Branch: ICICI, Thalassery Branch.

Right To Information Act

Malabar Cancer Centre (MCC) has implemented the Right to Information Act 2005. Citizens can seek information about the activities of MCC by submitting a written request with contact details like Name, address, telephone number, etc and particulars of the information sought by submitting a fee of Rs.10 at the cash counter, or Demand Draft drawn in favour of the Director, Malabar Cancer Centre payable at Thalassery. Court fee stamp/post orders will not be considered.

In accordance with the provisions contained in the section 5(i) of the Right to Information Act, 2005 the following officers are designated as the State Public Information Officer and Appellate Authority of Malabar Cancer Centre.

DISPOSAL OF INFORMATION REQUESTS BY PUBLIC INFORMATION OFFICERS REPORTING YEAR: 2022 – 2023

NAME OF THE DEPARTMENT	NO. OF REQUESTS PENDING AT END OF LAST YEAR	NO. OF REQUESTS RECEIVED DURING THE YEAR	TOTAL NO. OF REQUESTS	NO. OF REQUESTS DISPOSED	NO. OF REQUESTS REJECTED	NO. OF REQUESTS DEEMED TO BE REFUSED 7 (2)	% OF CASES ACCESS TO INFORMATION DENIED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Malabar Cancer Centre, Thalassery	Nil	43	43	38	4	Nil	Nil

Public Information Officer**Sri. A.K. Rajesh**

Administrative Officer

Malabar Cancer Centre Thalassery
Moozhikkara (P.O), Kannur Dist.,
Kerala, India-670103.

Phone:(+91)0490 2355881,

Mobile:(+91) 94960 48800

Fax: (+91) 0490 2355880

**Asst. Public Information
Officer****Smt. Lasitha KV**

Store Keeper

Malabar Cancer Centre Thalassery
Moozhikkara (P.O), Kannur Dist.,
Kerala, India-670103.

Phone:(+91)0490 2355881,

Fax: (+91) 0490 2355880

Appellate Authority**Dr. B. Satheesan**

Director

Malabar Cancer Centre Thalassery
Moozhikkara (P.O), Kannur Dist.,
Kerala, India-670103.

Phone: (+91) 0490 2355881, Fax:

(+91)0490 2355880

*Bank Account details for remitting Application Fee***Account Name: MALABAR CANCER CENTRE SOCIETY****Account Number: MCCTLYRTI****IFSC Code: ICIC0000106****Bank Name: ICICI Bank Ltd.****Branch: Thalassery****Account Type: Current**