



MALABAR CANCER CENTRE

(An Autonomous Institution under Govt of Kerala)
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ANNUAL REPORT 2020-21



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.

Year	LANDMARK
1998	Formation of Malabar Cancer Centre Society
2001	Clinical services started
2004	Blood bank started
2005	CT Scanner and Telecobalt and (Telecobalt and 4 Slice CT Scanner)
2008	Transferred to Health and Family welfare department from Power Department
2009	Bed strength increased from 40-100 (60 to 100), Home care services
2009	Limb salvage surgery started, second operation theatre, nurse's hostel, Pain free hospital.
2009	Dormitory of Patients- MPLAD of Smt. Sathi Devi MP
2010	Dual energy linear accelerator with VMAT, Hematology, Hospital based cancer registry, Community oncology department, Doctor's quarters, BSc Medical Radiology
2011	Regular Pathology services, upgraded biochemistry lab.
2012	Started Department Library system
2013	BONE MARROW TRANSPLANTATION UNIT
2013	First Autologous HSCT transplant was held
2013	First Allogenic HSCT Transplant was held
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
2015	Minimal residual disease testing for CML
2015	first Haplo HSCT transplant was held
2015	First Pediatric Haplo HSCT was held
2015	First Pediatric HSCT transplant was held
2015	Second LINAC
2016	Biometric Punching system started
2016	Started 'Fellowship in Hemato-oncology and Bone marrow Transplantation' training programme.
2017	First Mud allo HSCT transplant was held
2017	Cancer genetics laboratory with next generation sequencer was established
2017	BMT unit shifted to new block (4 bedded state of the art units)
2017	First matched unrelated donor hematopoietic stem cell transplant performed
2017	Separate pediatric oncology division started
2017	Parent orientation programme in Pediatric oncology introduced
2017	Mutation Analysis
2018	FISH
2018	State of art proteomics laboratory is established
2018	Began immunotherapy in solid tumors
2018	conventional radiotherapy simulator –Imagin (Panacea) was installed
2019	First Pediatric MUD HSCT transplant was held
2019	Intervention radiology started
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 Haematocology Block Inaugurated
2021	Established Cancer Bio bank
2021	Stated Nuclear medicine department-PET CT scan, SPECT CT

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**
 - α) e-Palliative Care Project won II Prize in e-Citizen Service Delivery Category
 - β) 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 -2021**

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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 Bio Technology, 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

EXECUTIVE COMMITTEE MEMBERS

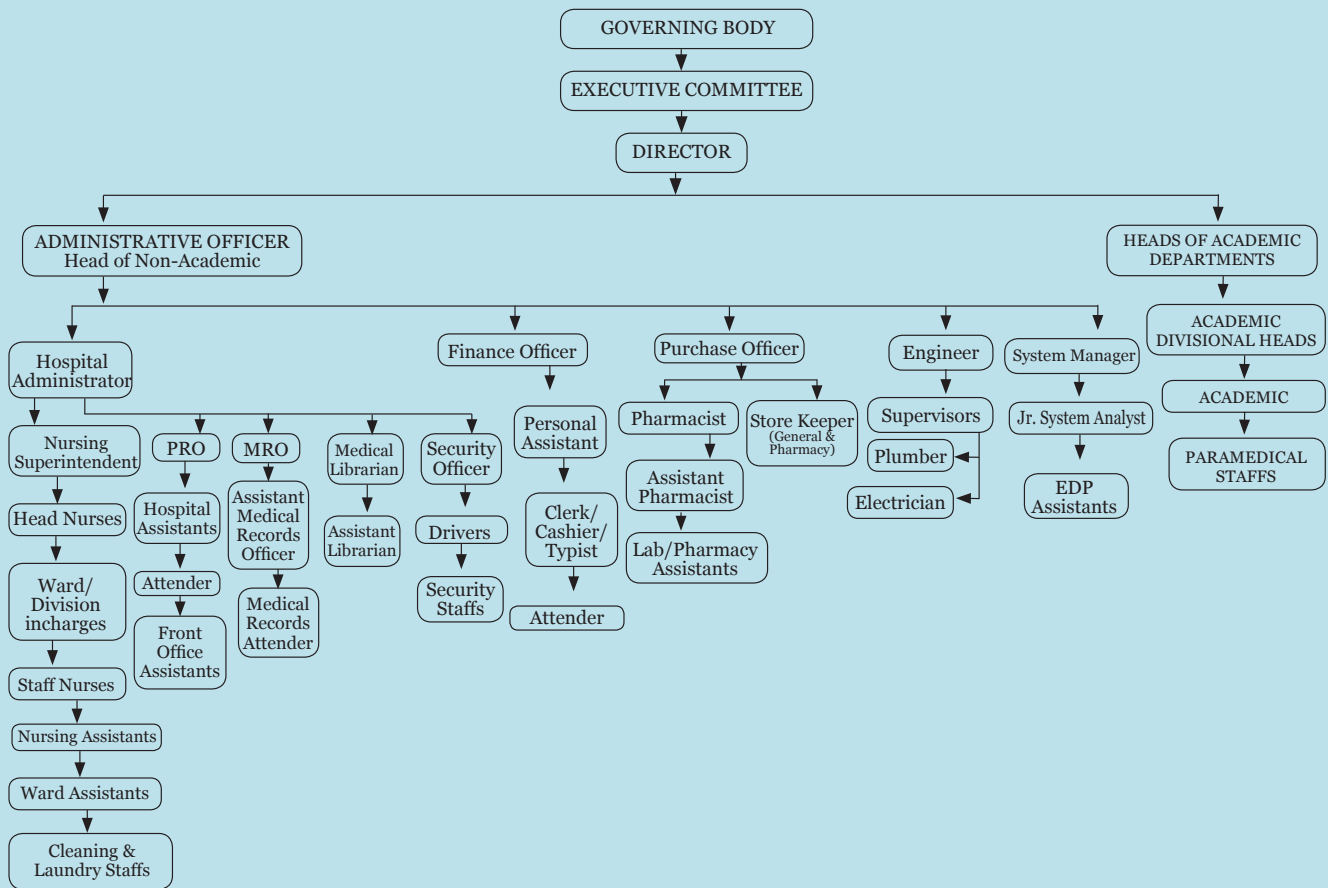
1	Secretary, Health & Family Welfare Department	Chairman
2	Secretary, Finance Department	Member
3	Secretary, Planning and Economic Affairs Department	Member
4	Secretary, Power Department	Member
5	MLA of the constituency in which MCC is situated	Member
6	Director of Medical Education	Member
7	Chairman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

Executive Committee (April 2020-March2021)

2020-21 EC No: 77 Circulation Note
 2020-21 EC No: 78 9-09-2020 online

SL No	Participants Name & Designation	Executive Committee No.
1	Dr.Rajan.N.Kobhragade IAS , Principal Secretary to Government, Health & Family Welfare Ayush Department	77, 78
2	Adv. A.N.Shamseer , Hon'ble Speaker and MLA of Thalassery Constituency	77, 78
3	Shri.C.K.Ramesan , Chairman Thalassery municipality	77
4	Smt.K.S.Usha , Additional Secretary, Finance Department	77, 78
5	Principal Secretary, Planning & Economic Affairs Department	77
6	Smt. Shyni George , Additional Secretary to Government, Planning & Economic Affairs Department	78,
7	Dr.Ramla Beevi , Director of Medical Education	77
8	Dr.Rekha A.Nair , Director, Regional Cancer Centre, Thiruvananthapuram,	77, 78
9	Dr.Moni Kuriakose , Director, Cochin Cancer & Research Centre, Kochi	77, 78
10	Dr.B.Satheesan , Director-MCC	77, 78

ORGANOGRAM



FROM DIRECTOR'S DESK

“Love cannot remain by itself – it has no meaning. Love has to be put into action and that action is service.” - Mother Teresa

Actions matter more than words. Whatever we feel and whatever we believe becomes stronger when supported by our actions, and not just words. Being one of the Premiere Cancer Institutes in the State, these words are truly taken into our hearts to showcase love and affection to patients through selfless service.

Our services are engraved as follows. There were 5384 new cancer patients registered among the total 6718 new registrations in the year. The total number of patients visited during the period was 65119 and there were 4612 in-patients. Around 3203 new patients received radiation therapy and 1537 major surgeries were performed. There were 84 students including five medical doctors, three MSW students, one medical physics intern, and trainees, who underwent short-term training at MCC during this period. Forty-three research projects were being carried out.

The community oncology department could play a significant role in cancer awareness and cancer control activities in this part of the state. Exhibitions, seminars, and cancer detection camps were carried out by the department. Structured programs with various local self-government bodies were highlights of the activities. These are part of epidemiological and intervention studies carried out by the department of Community Oncology.

Expansion of the Population-based cancer registry including five districts of north Kerala-Kozhikode, Wayanad, Malappuram, Palakkad, and Thrissur still faces difficulty in getting data from a few major centres. Population-based cancer registry named Malabar Population Based Cancer Registry was started in 2014. Expansion of the Population-based cancer registry was done in 2018. It's a huge



task and this is expected to fulfill the dream of the Kerala Cancer Registry

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.

Scientific Advisory Committee provided invaluable guidance and input on the development of various academic and training programs in the institution.

I express my sincere thanks to all the members of Governing body, the Executive committee and other standing committees, and our staff for cooperation, and facilitation in developing the institution 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 2020-21 period.

Dr. Satheesan Balasubramanian

MALABAR CANCER CENTRE

Malabar Cancer Centre, Thalassery (MCC) is an autonomous institution 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 neighboring parts of Karnataka and Tamil Nadu States and Union Territory of Pondicherry (Mahe). 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 functional bed strength of 203 with 170 in-patient beds.

The institution is an Apex cancer centre that renders its service to society with equal thrust on clinical and oncology-related education research and clinical care. 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, and Centre

for Electronic Materials Technology, Thrissur, 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 Honorable Chief Minister of Kerala as the Chairman, the Honorable Minister for Health as Vice Chairman, and the Honorable 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.

MALABAR CANCER CENTRE: PROFILE 2020-21

SL NO	PROFILE	TOTAL
1	New Cancer cases	5384
2	Non-cancerous cases	1334
	Total New Registrations	6718
3	Follow up cases	58401
4	Total patients	65119
5	In patients	4612
6	Total Deaths	117
7	Day Care Chemotherapy Injections	12274
8	Inpatient Chemotherapy Injections	4204
9	Total Chemotherapy Injections	16478
10	Total surgeries	2230
11	Total Radiotherapy cases	3203

SL NO	SURGERY	TOTAL
1	Major Surgeries	1537
2	Minor Surgeries	693

SL NO	RADIATION ONCOLOGY	TOTAL
1	Curative RT	994
2	Palliative RT	958
3	BrachyTherapy	277
4	4DCT CT Simulation	2344

SL NO	NUCLEAR MEDICINE	TOTAL
1	SPECT /CT	171
2	PET / CT	221

SL NO	COVID-19 TEST	TOTAL
1	RT-PCR	123000
2	Antigen	5200

SL NO	BLOOD BANK	TOTAL
1	Blood Donations	2619
2	Flow Cytometry	319
3	HLA Typing	78
4	Blood Donation Camps	11
5	Public Awareness Class (Webinar)	08

SL NO	IMAGING	TOTAL
1	MRI	1283
2	CT	4668
3	Mammography	2191
4	Ultrasound	2064

MCC COVID 19 VIROLOGY LAB			
TOTAL NUMBER OF SAMPLES TESTED		SAMPLE STATUS DETAILS	
		Total No. of samples Received	69639
ROUTINE	29156	Total No. of samples tested	69497
SURVEILLANCE	40212	Total No. of samples Pending	0
CB NAAT	271	Total No. of positives Positivity rate	14017 (20%)
TOTAL	69639	Total No. of samples under process	142

SL NO.	ONCOPATHOLOGY DIVISION	NUMBERS
1	Small biopsy	2940
2	Radical specimen	1712
3	Biopsy second opinion	2332
4	Immunohistochemistry	4315
5	Peripheral smear	1287
6	Bone marrow Studies	763
7	Bone marrow second opinion	162
8	Fine needle aspiration	889
9	Fluid cytology	750
10	Second opinion cytology	251
11	Gynaec Cytology	93
12	Frozen sections	752
	Total	16246

EXTERNAL COMMITTEE

SI. No.	COMMITTEE	No. OF MEETINGS CONDUCTED
1	Scientific Advisory Committee (SAC)	1
2	Research Advisory Committee (RAC)	1
3	Institutional Ethics Committee (IEC)	4
4	Intra Mural Research Fund Review	-

INTERNAL COMMITTEE-ACADEMIC

SI. NO	COMMITTEE	NO. OF MEETINGS CONDUCTED
1	Academic Council	12
2	Academic Monitoring Cell	11
3	Institutional Review Board –Scientific Committee (IRB-SRC)	12
4	Academic Council- Standing Committee	10

INTERNAL COMMITTEE-ADMINISTRATION

SI. NO	COMMITTEE	NO. OF MEETING CONDUCTED
1	HOD Committee	5
2	Administrative Committee (Admin Committee)	43
3	Hospital Management Committee	16
4	Nursing Administration	7
5	Scheme review committee	12
6	Biomedical Waste management committee	5
7	Pharmaco-Therapeutic committee	6
8	Hospital Blood transfusion committee	7

OTHER COMMITTEES

SI. NO	COMMITTEE	NO. OF MEETING CONDUCTED
1	Hospital Infection control Committee	10
2	Medical Record Audit Committee	4
3	Facility management and safety committee	2
4	Clinician Meeting	12
5	Grievance Handling committee	4
6	Internal Complaints Committee	6
7	Internal Audit Committee	2
8	Quality cell	7
9	HOD committee (QA Committee)	5
10	Code blue committee	3
11	Credentialing and privileging committee	0
12	Radiation safety committee	4
13	Clinical Audit Committee	1

PATIENT WELFARE AND SUBSIDY

PARTICULARS	2020-21 IN LAKHS
Total % of patients given free treatment using various financial assistance schemes.	82.76%
Treatment charge discount	101.00
Pharmacy discount	1144.00
Total treatment subsidy is given by MCC	1245.00
Free treatment for patients	489.96
Patient Free Transportation	2.78
Through Patient Welfare Fund (Donation from philanthropist)	2.15
*Patient Free Food Schemes	30.58

Free Food Scheme 2020-21

NUMBER OF BENEFICIARIES	MALABAR CH CENTRE CONTRIBUTION IN LAKHS	MCC CONTRIBUTION IN LAKHS	ACTUAL EXPENDITURE IN LAKHS
4612	18.06	12.51	30.57

PATIENT TREATMENT SCHEMES

SCHEMES	UNIQUE PATIENT BENEFICIARIES	AMOUNT UTILIZED IN LAKHS
Karunya Arogya Suraksha Pathathi (KASP)	5015	1852.52
Karunya Benevolent Fund	1269	498.81
Cancer Suraksha Scheme	227	280.02
CST	281	187.95
Karunya Arogya Suraksha Pathathi - out of package	661	424.69
Karunya Benevolent Fund - Out Of Package	236	65.27
KSSM- We Care	13	17.73
PMNR	146	13.31
Arogyakiranam	2	10.68
Thalolam	8	7.48
Sneha Santhwanam for Endosulphan victims	27	5.31
Govt Old Age Home	2	2.22
Patient Welfare Schemes	23	1.55
Akshaya Fund For BMT	1	0.60
Madhymam Health Care Project	1	0.08
ESI	1	0.02
PMRS	1	0.00
Grand Total	7914	3368.22

ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF ANAESTHESIOLOGY**
2. **DEPARTMENT OF CANCER PALLIATIVE MEDICINE**
 - o CANCER PALLIATIVE MEDICINE DIVISION
3. **DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY**
 - o CANCER REGISTRY AND EPIDEMIOLOGY DIVISION
 - o MEDICAL RECORDS DIVISION
4. **DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY**
 - o CLINICAL HEMATOLOGY DIVISION
 - o MEDICAL ONCOLOGY DIVISION
 - o PAEDIATRICS/ PAEDIATRIC ONCOLOGY DIVISION
5. **DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH**
 - o BIOCHEMISTRY DIVISION
 - o BLOOD BANK AND TRANSFUSION MEDICINE DIVISION
 - o GENETICS, CYTOGENETICS, AND MOLECULAR ONCOLOGY DIVISION
 - o MICROBIOLOGY DIVISION
 - o ONCOPATHOLOGY DIVISION
6. **DEPARTMENT OF COMMUNITY ONCOLOGY**
7. **DEPARTMENT OF DENTISTRY AND REHABILITATION**
8. **DEPARTMENT OF IMAGEOLOGY**
9. **DEPARTMENT OF RADIATION ONCOLOGY**
 - o RADIATION ONCOLOGY DIVISION
 - o RADIATION PHYSICS DIVISION
10. **DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE**
 - o PULMONARY MEDICINE DIVISION
11. **DEPARTMENT OF SURGICAL ONCOLOGY**
 - o CENTRAL STERILIZATION AND SUPPLY UNIT
 - o CLINICAL NUTRITION AND DIETETICS UNIT
 - o REHABILITATION-PHYSIOTHERAPY SPEECH AND SWALLOWING THERAPY UNIT
 - o SURGICAL ONCOLOGY
12. **DEPARTMENT OF NUCLEAR MEDICINE**

NON-ACADEMIC DEPARTMENTS

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

INDEPENDENT DIVISIONS

1. **CLINICAL RESEARCH AND BIostatISTICS DIVISION**
2. **HEALTH INFORMATION TECHNOLOGY DIVISION**
3. **PSYCHO-ONCOLOGY DIVISION**

**ACADEMIC
DEPARTMENTS &
DIVISIONS**

DEPARTMENT OF ANAESTHESIOLOGY



DEPARTMENT IN CHARGE: DR. JASHMA. C

ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Dr. Jashma. C	Assistant professor
2	Dr. Joona P	Assistant professor
3	Dr. Roopesh	Assistant professor
4	Dr. Sonali	Assistant professor
5	Dr.Anu Joseph	Senior lecturer
6	Dr. Namrata Divakaran	Senior lecturer

NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Vipin.K	OT and Anesthesia technician
2	Mayan John	Dialysis technician
3	SreejeshP.B	OT and Anesthesia technician
4	Balukrishnan.S.R	OT and Anesthesia technician
5	Shaija.E	Staff Nurse
6	Sajna.N	Staff Nurse
7	Jisha.P	Staff Nurse
8	Ameer .O.Sanjani	Staff nurse
9	Shiraz. N	Staff nurse
10	Shivakumar	Staff nurse
11	Haseena k. A	Staff nurse
12	Sreejith .S	Nursing Assistant

INTRODUCTION

Though the Department of Anesthesiology was formally formed only in 2010-11 with the contract appointment of Col. Prof.Dr.N.C.Krishnan, the permanent faculty joined only in 2015. Now the department is developed into a state-of-the-art facility. The department follows an integrated approach and standard protocols for patient care, education and research.

On 13th January 2020, a major OT complex started functioning after renovation work of OT-1and OT-2. At present, there are 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, and humidity monitoring facility. Each major OT is equipped with an Anesthesia workstation, Pendant, Intubation Trolley, Drug Repository, Energy devices, Suction devices, stainless steel cupboard, stainless steel tables and trolleys.

The surgical intensive care unit (ICU) of Malabar Cancer Centre (MCC) is situated within the operation theatre complex. In the ICU, post-surgical patients and critically ill surgical patients are admitted. The unit has ICU with 10 beds

CURRENT FACILITIES

1. High-end Anesthesia work station with electronic gas mixing, End Tidal gas monitoring.
2. Multipara monitors with cardiac output monitoring, EtcO₂, Spo₂, Invasive and noninvasive blood pressure monitoring, temperature monitoring, and CVP monitoring.
3. Syringe pumps, infusion pumps, fluid pressure bags, and body warmers
4. Depth of anesthesia monitoring- entropy, BIS
5. Neuromuscular transmission monitoring
6. Total Intravenous Anesthesia, Target Controlled infusion and PCA pumps.
7. Ultrasound machine for central venous catheterization and regional anesthesia

STATISTICS

SL NO	PROCEDURE	NUMBERS
1	General Anesthesia	967
2	General Anesthesia + Epidural block	372
3	Sub Arachnoid Block	73
4	Epidural block	1
5	Combined Spinal and Epidural block	24
6	General Anesthesia + Sub arachnoid block	03
7	Regional Blocks	05
8	Short General Anesthesia	36

ACADEMIC / TRAINING PROGRAMMES

- Topic discussions-All Mondays
- Journal club-All Wednesdays
- Staff academics (OT&SICU)-All Saturdays

DEPARTMENT OF CANCER PALLIATIVE MEDICINE



DEPARTMENT IN CHARGE: DR.M.S.BIJI

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. M S Biji	Assistant Professor

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Sheeja Nellikka	Staff Nurse

INTRODUCTION

Cancer Palliative Medicine has been functioning since November 2002. The Centre is a recognized medical institution for the possession and supply of oral Morphine. Palliative Care Services also provide counseling to patients and their family members. The Department caters to in-patients and out-patients as well as has provision for home care.

The Homecare facility for needy patients was started on June 20, 2009. Home care is done thrice a week catering to the need of patients staying within 35 km of MCC. There so far 577 patients registered in the homecare facilities. Patients are given medication free of cost. Procedures like ascitic tapping, wound dressing, catheterization, and Ryle's tube insertion 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. To make the service more effective, consultation of the patient is done through e-palliative medicine software wherein the patient and relatives can see and consult the doctor directly online making the homecare visit more satisfying to them.

ACADEMIC ACTIVITIES AND TRAINING PROGRAMMES

ACHIEVEMENTS:

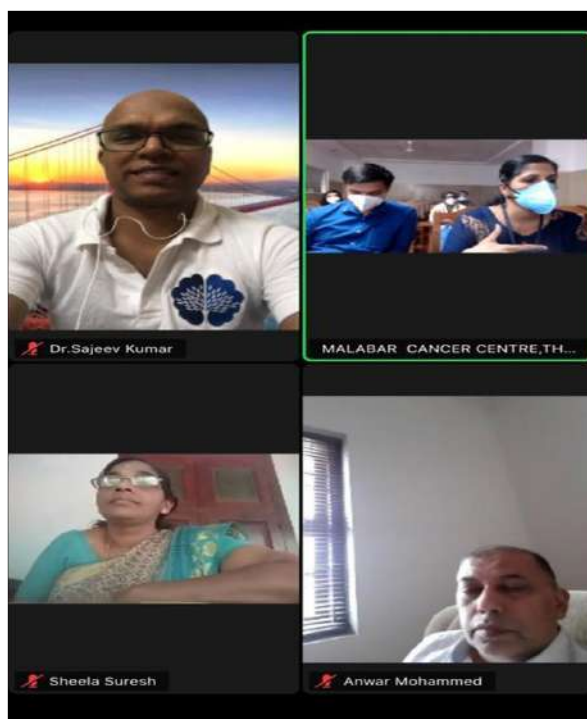
1. Dr.M.S.Biji and Dr.Praveen (from the Department of Clinical Hematology and Medical Oncology) received the Certificate of achievement and Dr.Pramod Sankar(NABH Coordinator),Ms. Anitha

T(Hospital Administrator) and Ms.SheejaNellikka (Palliative Nurse) received the Certificate of Participation for completing the EQUIP(Enable Quality Improve Patient Care)India course by Stanford –India Quality Improvement Collaborative 2019-2020 on 10th July 2020.

2. Dr.M.S.Biji was an invited faculty for the National Fellowship in Palliative Medicine, a one-year course conducted by the Institute of Palliative Medicine for the session on “Pathophysiology and assessment of Pain” (4th Sep. 2020).

ACTIVITIES:

- The 11th batch of the IAPC course was held from 24th -26th July 2020 at the National level on the zoom platform and three candidates participated from MCC, which is an approved IAPC Centre.
- World Hospice and palliative care Day was observed on 10th October 2020 in Malabar Cancer Centre. This year’s theme of World Palliative Care Day was “MY CARE, MY COMFORT”.
- **Webinar:** In association with Palliative Care Initiative in Kannur (PIK), MCC organized a webinar for volunteers in Palliative care. The program was dedicated this year to volunteers all over, who are doing a wonderful job in this COVID-19 crisis. Around 35 volunteers from different units of PIK participated in the webinar. This was followed by a class on “COVID time: Your care in your hands” by Dr. Sarath K.E, Nodal Officer, COVID Cell, and MCC. The class emphasized the precautions to be taken by the volunteers during their home care service. The second session on ‘Stress management during COVID time’ was taken by Dr.Sajeev Kumar P.B, Consultant Psychiatrist, Thalassery, and President IMA Thalassery. He focused on the unnecessary stress people develop during the COVID-19 time and how to overcome it.
- Palliative care day, Kerala Chapter was observed in Malabar Cancer Centre. In connection with this day, a program on “**Compassionate Care: Need of the hour**” was organized by the Department of Cancer Palliative Medicine on 16th January 2021. Ms. Vijayalakshmi Ram, counselor, of Lakshmi Pain and Palliative Clinic, Chennai spoke on the occasion which was attended by nearly 148 participants. The session was on self-realization where the speaker took us through a journey where we are patients seeking medical care in a hospital and what are all our expectations from the health care workers.



STATISTICS

	OPD	IPD	Home care	Stoma Clinic	Lymphedema clinic	Counseling clinic	Occupational therapist OPD
Total	6135	1684	5	974	1220	1550	1216

COURSES AND EXAMINATIONS:

- **IAPC course in “Essentials of Palliative care”** for doctors and nurses-11 batches completed.
- The final examination of the December batch of the **IAPC Certificate Course in “Essentials in Palliative care”** was held on 28.2.21. All 15 candidates registered at MCC took the online mode of examination which included 9 in-house doctors, 2 in-house nurses, and 4 doctors from outside.

DEPARTMENT OF CANCER REGISTRY & EPIDEMIOLOGY



DEPARTMENT IN CHARGE: DR. SAINA SUNIL KUMAR

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Saina Sunil Kumar	Lecturer
2	Bindu T	Lecturer
3	Ratheesan K	Lecturer

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1.	Prachith K S	Coding Clerk

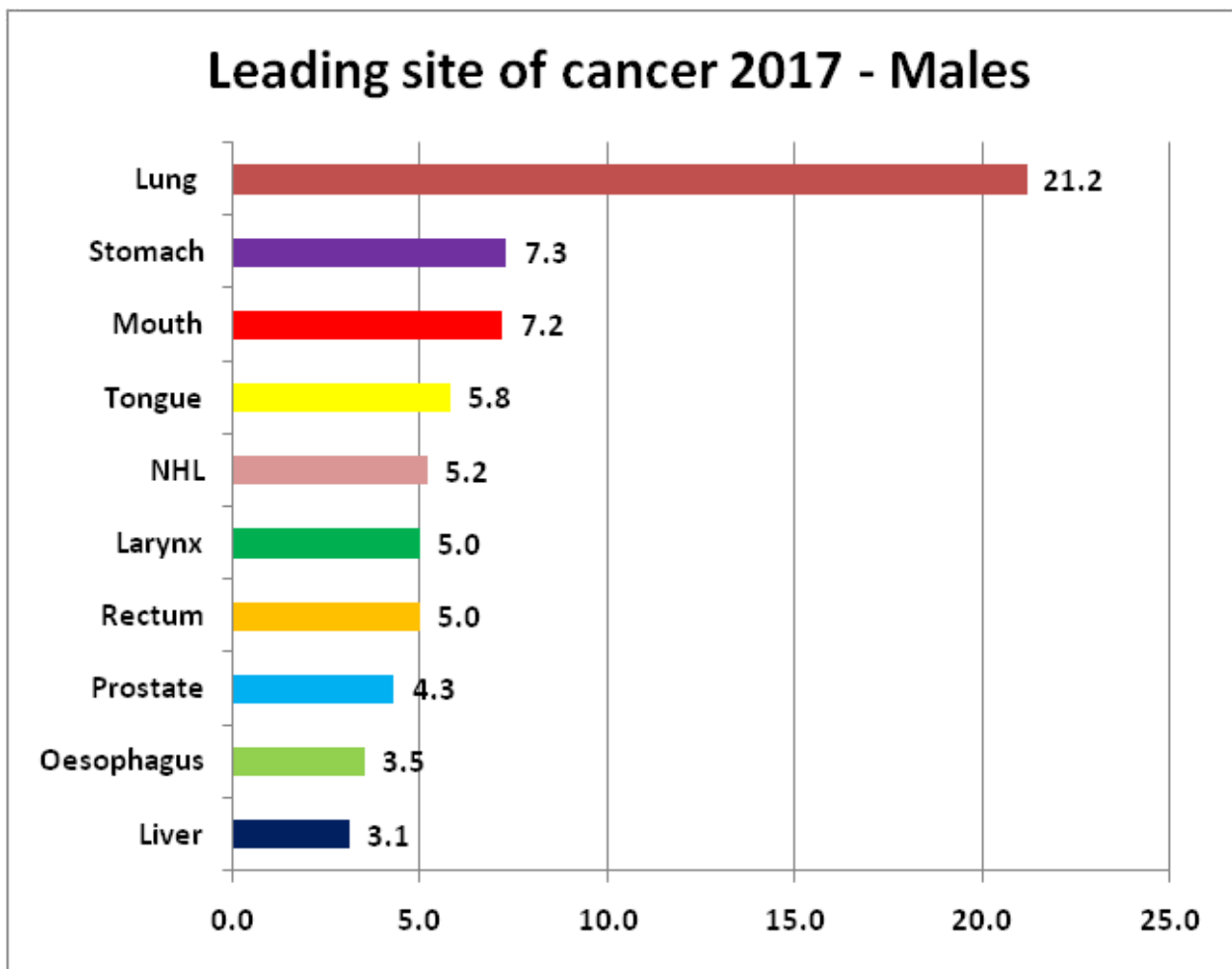
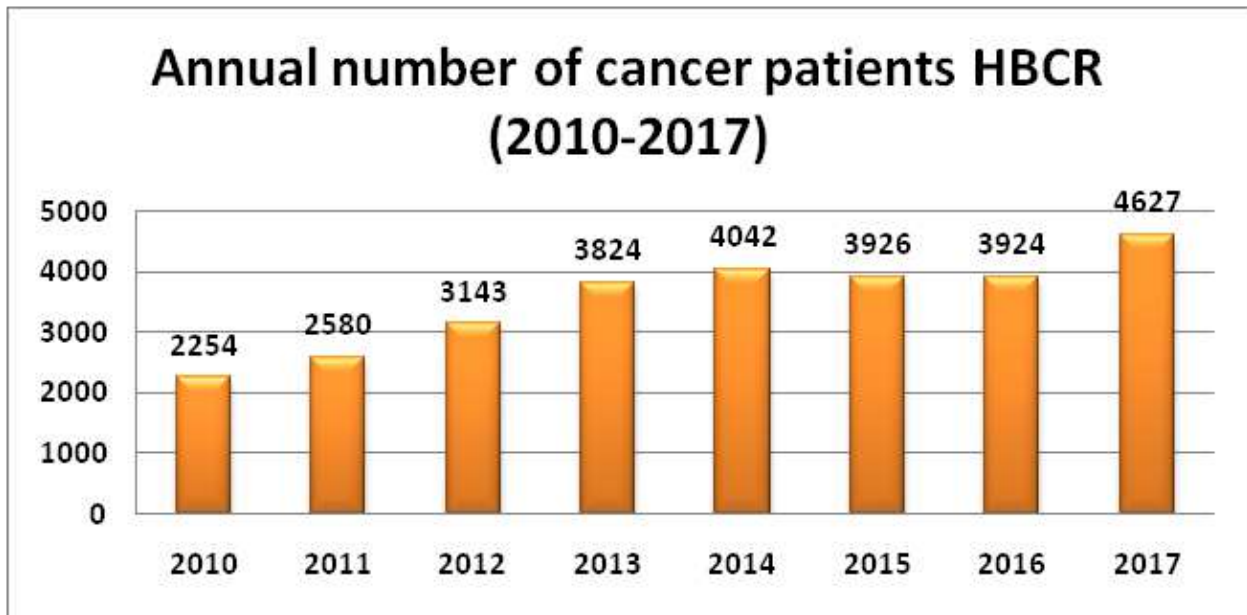
INTRODUCTION

This department was set up to provide cancer statistics and information on patient care. In collaboration with the National Cancer Registry Programme of the Indian Council of Medical Research (ICMR), a Hospital Based Cancer Registry (HBCR) was initiated on November 2010 and started functioning from February 2011 onwards. The department systematically collects, stores, summarizes, and distributes information about cancer patients who are treated for MCC or live in a particular geographic area.

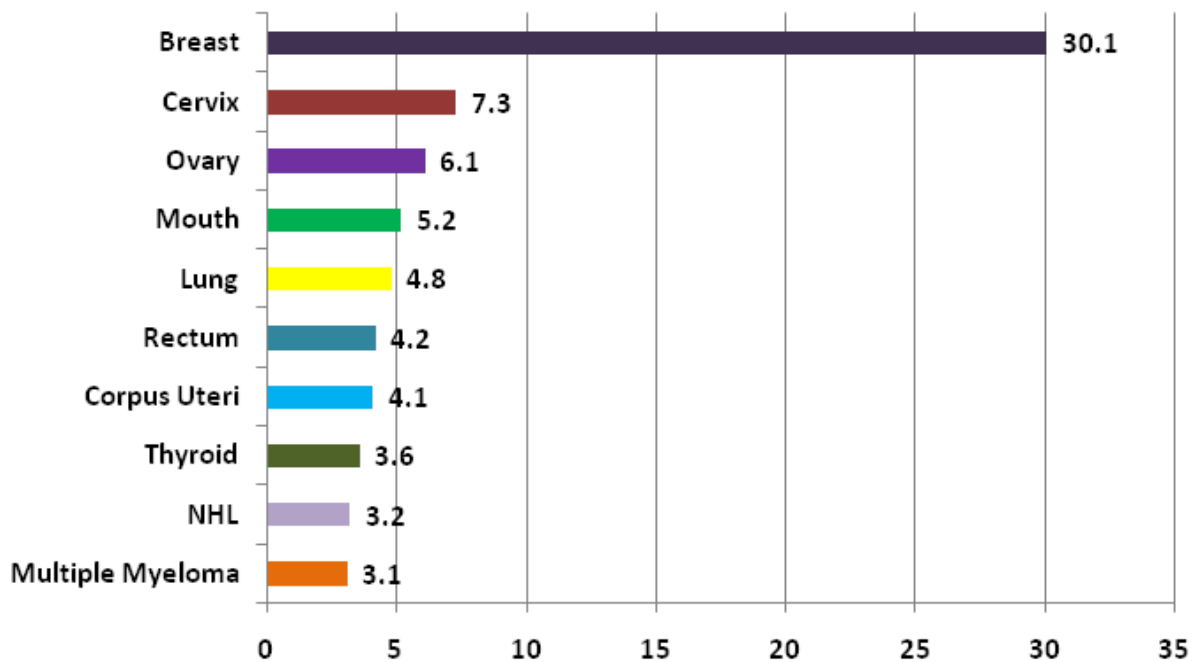
The Malabar Population Based Cancer registry was launched in 2014 for three districts Kannur, Kasaragod, and Mahe. Population-based cancer registries seek to collect data on all new cases of cancer/mortality occurring in a well-defined population. As a result, and in contrast to hospital-based registries, 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 expanded the MPBCR area to the 5 districts Kozhikode, Malappuram, Wayanad, Thrissur, and Palakkad in 2018.

DETAILS OF EXISTING / NEW FACILITIES

- Hospital-Based Cancer Registry
- Population-Based Cancer Registry- Kannur, Kasargode, Mahe, Wyanad, Kozhikode, Malappuram, Thrissur, Palakkad districts

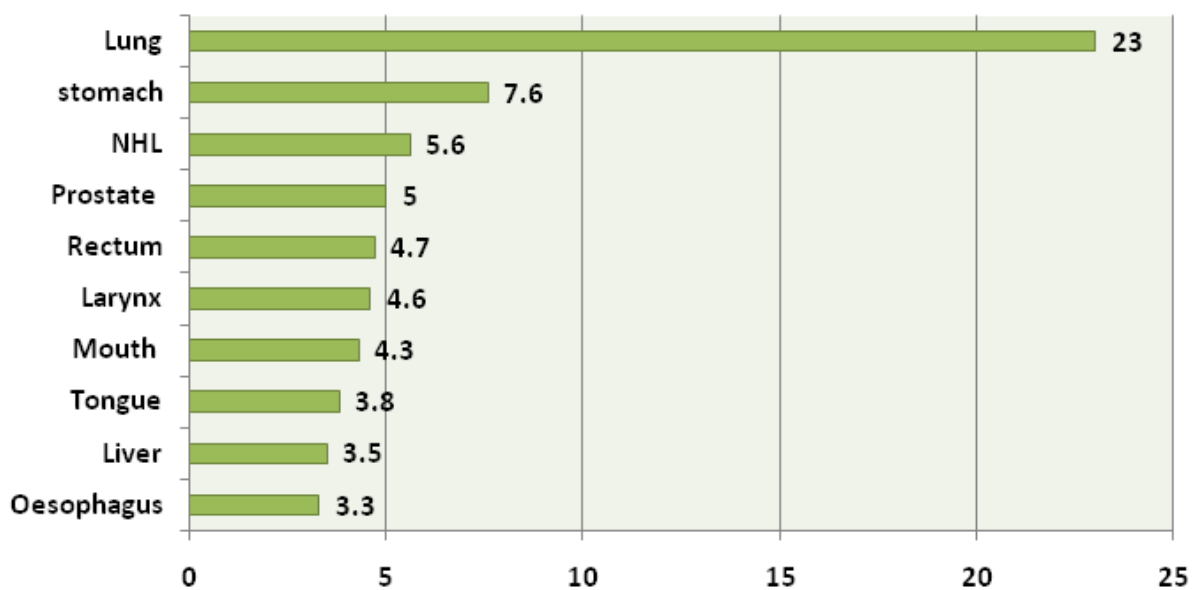


Leading site of cancer, HBCR 2017 - Females

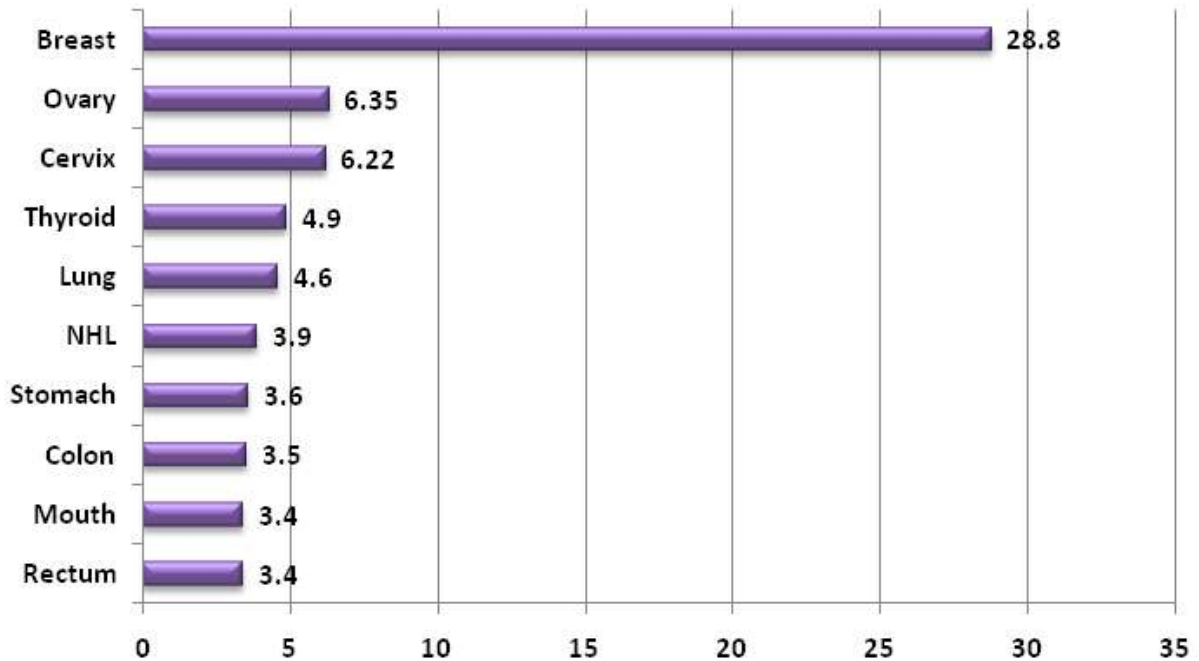


MPBCR 2016:

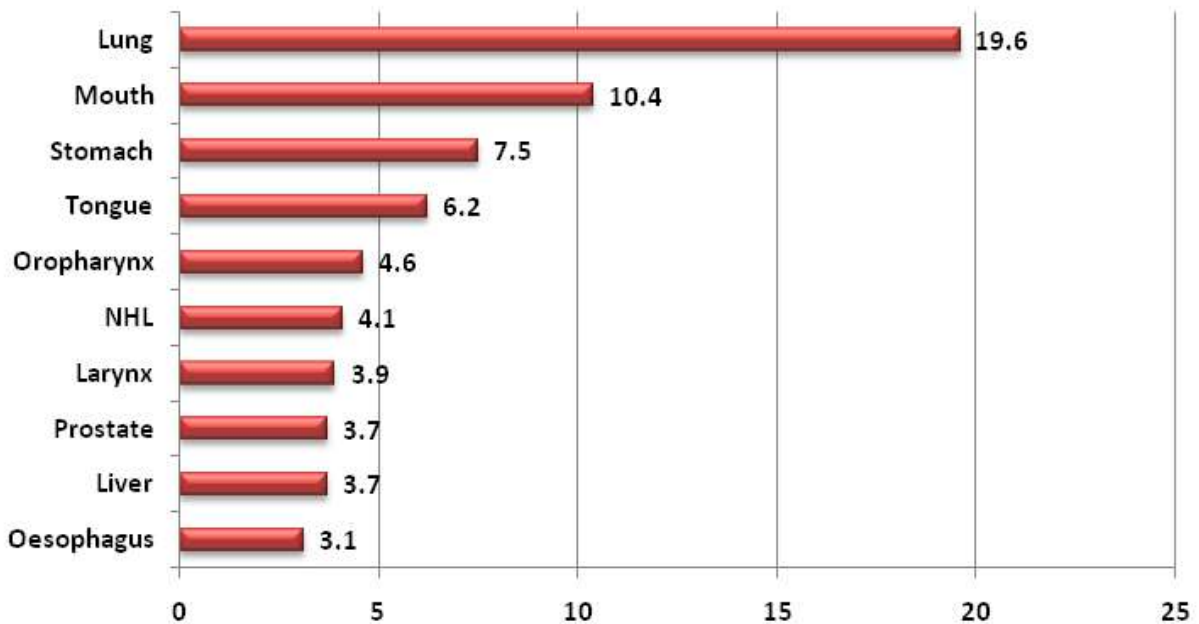
Leading site males, MPBCR 2016 - Kannur District-%

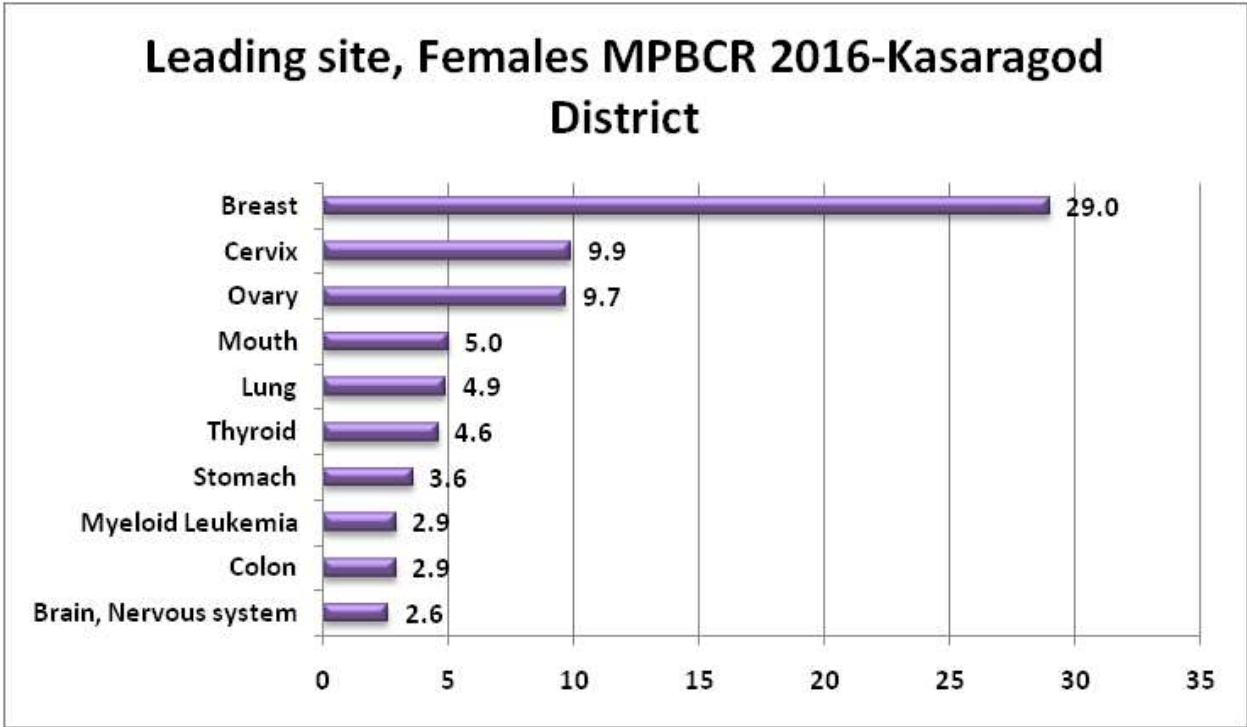


Leading site Females, MPBCR 2016 -Kannur district-%



Leading Site,Males MPBCR 2016- Kasaragod District





ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

Regular academic sessions are conducted on Tuesdays and Thursdays of every week.

No course is offered.

Training in cancer registry for new cancer registries are done on demand basis.

MECIAL RECORDS DIVISION

DIVISION IN CHARGE: JAYADEV G

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Jayadev G	Medical Record Officer
2	Karthika O	Medical Record Assistant
3	Nameetha S	Medical Record Attender

INTRODUCTION

The medical records division is situated on the ground floor adjacent to outpatient departments and reception. All the patient files are kept in movable racks according to a unique hospital ID (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 average 400 files are retrieved and sent to different outpatient departments daily. Files sent to different departments were given after making an entry in the file tracking module using the barcode and the process repeats when the file returns to the Medical Records Division for filing

SERVICES PROVIDED:

The services mainly rendered by the division are:

1. Dispatch of medical records for patient care purposes
2. Dispatch of files for academic purposes
3. Receive the medical records from the various specialties after the patient has either been discharged from the hospital or has expired.
4. Check the files for any discrepancies in the record 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 online.
8. Intimation of notifiable diseases
9. Intimation of Medico-Legal Cases
10. Inpatient file-Diagnostic coding of diseases using ICD-10

STATISTICS

SL. NO	NAME	DESIGNATION
1	Outgoing File	100591
2	Chart In	106809
3	Discharge Analysis Done	4499
4	Death Intimation	117
5	Notifiable Disease	44

DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY



DEPARTMENT HEAD: DR. CHANDRAN K NAIR

ACADEMIC STAFF

SL. NO.	NAME	DESIGNATION
1	Dr. Vineetha Raghavan	Associate Professor
2	Dr. Manu Prasad	Associate Professor
3	Dr. Praveen Kumar Shenoy	Assistant professor
4	Dr. Jithin T K	Assistant professor
5	Dr. K.G Gopakumar	Assistant professor
6	Dr. Nandhini Devi	Assistant professor
7	Dr. Sherin Mathew	Assistant professor

The department of clinical hematology and medical oncology has three divisions -

1) Clinical hematology 2) Medical Oncology 3) Pediatrics/Pediatric Oncology.

This department is involved in the diagnosis and management of hematological disorders (both malignant and benign), solid tumors and pediatric cancers. The department also provides training and participates in research activities.

NEW FACILITIES:

1. State of the art Pediatric Oncology block was inaugurated on 14th September 2020
2. A clinical trial unit was set up for carrying out multicenter trials
3. Started registry and projects under the collaborative projects under the platform-Hematology Cancer Consortium
4. Started multicentric projects mainly in solid tumors under the platform -CRSF(Cancer Research and Statistics Foundation)

COURSES OFFERED/TRAINING IMPARTED:

1. Fellowship in Hemato-oncology and Bone Marrow Transplantation; One year course, yearly intake of 2 candidates.
2. Clinical postings for Pharm D interns

ACADEMIC ACTIVITIES

- 1) **Topic Presentations in the Unit:**
Total Number of Presentations in the unit: 40
- 2) **Departmental Mortality Meetings:**
Monthly departmental mortality meetings -12
- 3) **Clinicopathological Correlation Meetings:**
Conducted twice a month, CPC meetings are conducted along with the Oncopathology division.
- 4) **Case Presentation:**
Once a month, Fellow presents a long case in the unit.
- 5) **Research Proposals Discussions:**
Research proposals are presented in the department before being submitted to IRB

STATISTICS

OPD STATISTICS/PROCEDURES						
Month	OPD attendance (Clinical hematology + Pediatric oncology)	New cases in OPD (Clinical hematology + Pediatric oncology)	OPD attendance Medical Oncology solid tumor division	Bone Marrow study	Lumbar puncture with I.T MTX	Day Chemo given
Total	10137	1109	15835	582	597	12074

BONE MARROW TRANSPLANTATION

2020-2021	Autologous	Allogeneic
Total	14	4

CHEMOTHERAPY ADMINISTERED:

CHEMO ADMINISTERED AS IN-PATIENT		
	Intensive chemo ward	Pediatric Oncology
TOTAL	146	145

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS ORGANIZED, ATTENDED & PRESENTED

1. Kerala PHOCON 2021 was organized by Pediatric Oncology Division in association with IAP Thalassery in March 2021 on the zoom platform. Dr. Jithin was the organizing secretary.
2. CME on “Her 2 positive Breast Cancer- treatment” was organized by Dr. Manuprasad in association with pharma support in the zoom platform
3. Visiting faculty programme-” Polycythemia diagnosis”- topic presentation by Dr. Sreelesh, Associate

Professor, Hematopathology, PGIMER, Chandigarh via zoom platform.

4. Conducted an online webinar - a talk on “Adjuvant Endocrine Therapy in Breast Cancer “by guest faculty Dr. Aju Mathew on 26/06/20.
5. Conducted one day CME on optimizing outcomes in Her2 positive breast cancer on the 27th of March in MCC(in association with Roche)
6. Dr. JithinT K attended conference “Kerala PHOCON” as faculty on 1.11.2020
7. Dr. K G Gopakumar attended APBMT-2020 as delegate on 9,10,11.10.2020
8. Dr. JithinT K attended APBMT-2020 as delegate on 9,10,11.10.2020
9. Dr. Jithin T K attended SIOP-2020 as delegate on 14-17.10.2020
10. Dr. Chandran KN attended Virtual CME On Coagulation cascade on 18.8.20 as faculty

PUBLICATIONS

1. Impact of active tuberculosis on treatment decisions in cancer, **Chandran K. Nair**, Manuprasad Avaronnan, Praveen Kumar Shenoy, Vineetha Raghavan, Priya Jayarajan, Parthiban Rudrapathy, Karthickeyan Duraisamy, Satheesan Balasubramanian, Current Problems in Cancer, mUSiGa; September 22, 2020;1:35
2. Recurrent hyperhemolytic transfusion reaction in myelodysplastic syndrome- A case based approach, Merline Augustine, Mohandoss Murugesan, Chandran K. Nair, Vineetha Raghavan, Sangeetha K. Nayanar, Transfusion and Apheresis Science

DEPARTMENT OF CLINICAL LAB SERVICES AND TRANSLATIONAL RESEARCH



DEPARTMENT HEAD: DR. SANGEETHA K NAYANAR

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Sangeetha K.Nayanar	Professor
2	Dr. Sithara Aravind	Associate Professor
3	Dr.Aswathi Krishnan M	Assistant professor
4	Dr. Kandathil Joseph Philip	Assistant professor
5	Dr. Anand Narayanan	Assistant professor
9	Dr.Vivek Nair	Assistant professor
7	Dr. Noushad Aryadan	Assistant professor*

*resigned in December 2020

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION	JOB TYPE	QUALIFICATION
1	Sabna Dev. S.K	Cytotechnologist	Permanent	MSc,M.Phil, Cytotechnology
2	Nimi. G.K	Cytotechnologist	Permanent	MSc, Cytotechnology
3	Subitha S	Cytotechnician	Permanent	BSc, Cytotechnician Training course
4	Soumya. V.K	Lab.Technician	Permanent	BSc MLT
5	Biji K R	Lab.Technician	Permanent	BSc MLT
6	Preethu Das T K	Personal Assistant	Permanent	B.com
7	Reena K C	Lab assistant	Permanent	DMLT
8	Vishnu Raj	Attender	Permanent	BSc

Diagnostic services in the Clinical laboratory services and Translational Research grew several folds from its inception in 2001. There are five divisions in the Department of CLSTR namely, Clinical Biochemistry and Hematology, Clinical Microbiology, Blood Bank, Molecular Oncology &Cytogenetic, and Oncopathology.

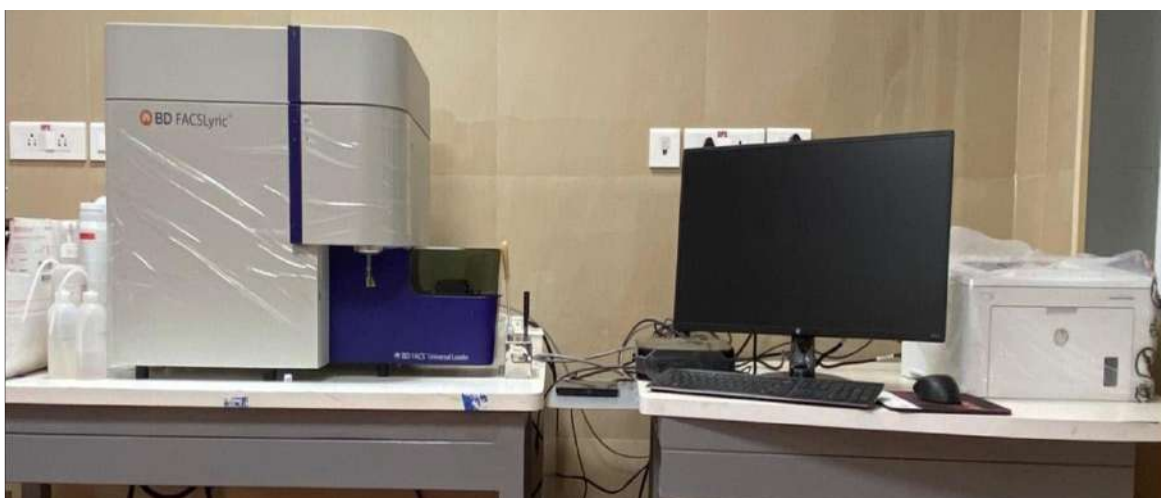
DIVISION OF ONCO PATHOLOGY

The division of Onco-pathology 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 & Hematopathology. The techniques of frozen sections and automated immunohistochemistry special staining enable accurate and specialized cancer treatment and outcomes for patients. The department aims to be the backbone of dedicated cancer research in the upcoming field of molecular pathology, as cancer treatment moves into the realm of personalized medicine. It has the latest technology in Molecular Pathology aimed at providing a complete diagnostic and prognostic facility. The department is situated in spacious premises in 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.

KEY FEATURES OF THE DIVISION

- Services of grossing on automated grossing station on all working days
- Automated tissue processing and staining of biopsy specimens on all working days.
- Cryostat cut frozen sections and intra-operative reporting on all OT days.
- Immunohistochemical staining on automated Stainer.
- Diagnostic reporting of surgical tissue specimens by faculty pathologists
- Facility for Fine needle aspiration for OP & IP patients on all days.
- Processing & reporting of FNA & fluid aspiration samples.
- Diagnostic reporting of Peripheral blood & bone marrow aspiration samples with clinical correlation.
- Receipt & issue of samples and reports through the hospital information system.
- Archiving of tissue paraffin blocks & slides for future reference.
- Academic activities of undergraduate & postgraduate teaching.
- Research activities in collaboration with concerned divisions.

NEW EQUIPMENTS



10 color Flow Cytometer BD LACS Lyrics

DETAILS OF EXISTING / NEW FACILITIES

EQUIPMENT DETAILS

SL. NO	NAME OF THE INSTRUMENT	QUANTITY	MANUFACTURE
1	Rotary microtome Leica RM 2125 RTS	1	Leica
2	Cryostat Leica CM 185 oUV	1	Leica
3	Tissue embedder+ freezer EG 1150 H+ EG 1150G	1	Leica
4	Tissue processer Leica ASP 6025	1	Leica
5	Automatic stainer+ Cover slipper Leica ST 5020+Leica CV 5030	1	Leica
6	Incubator YST- 438	1	Yorco
7	Automatic Immunostainer Leica Bond Max	One rental	Leica (Rental)
8	Semiautomatic Microtome	1	Thermo scientific
9	1. Microscope Magnus	7(2 Trinocular)	Olympus
	0. Microscope DM 750	1	Leica Leica
	0. Microscope DM 1000	1	Carl Zeiss
	0. Microscope Axio Lab A1	5(1 with camera)	Olympus
	0. Microscope CH 20 i	1	
10	Tissue floatation bath YSI 133	1	Yorco
11	Electronic balance KRT 300H DIGITAL	1	KEROY
12	Microwave Oven	1	LG
13	Hot air oven	1	Labline
14	Cytocentrifuge Rotofix 32	1	Hettich
15	Centrifuge R 8C7/99	1	REMI
16	Grossing station	1	Bioclean
17	Liquid-based Cytology	1	HOLOGIC
18	Automated Stainer	1	SAKURA
19	Block filing Cabinet	4	YORCO
20	Slide filing cabinet	5	YORCO

STATISTICS - (APRIL 2020 TO MARCH 2021)

SL. NO.	PROCEDURE	NUMBERS
1	Small biopsy	2940
2	Radical specimen	1712
3	Biopsy second opinion	2332
4	Immunohistochemistry	4315
5	Peripheral smear	1287
6	Bone marrow Studies	763
7	Bone marrow second opinion	162
8	Fine needle aspiration	889
9	Fluid cytology	750
10	Second opinion cytology	251
11	Gynaec Cytology	93
12	Frozen sections	752
	Total	16246

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

- Division of Oncopathology conducts Senior residency & two **Fellowship** programmes for post-doctoral candidates, one in Oncopathology & other in Head and Neck Pathology to foster specialized training and experience in the field for postgraduate doctors.
- Undergraduate students pursuing BSc.MLTis given rotation posting in all divisions of the service laboratories.
- The Division also receives a steady intake of Post graduate trainees pursuing MD Pathology and MDS. Oral Pathology.
- DNB Pathology was started in May 2019 with an intake of two trainees.
- Preparation to start DM Oncopathology, a post-MD three-year super specialty programme under the Medical Council of India.

AWARDS & RECOGNITIONS

1. Dr.Sangeetha K Nayanar was appointed as Principal, Malabar Cancer Centre College
2. Dr.KJ Philip bagged second prize in a poster competition at the 25th ICP-AIPNA International Pathology Conference held at Ahmedabad from 31st January to 2nd February 2020.

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS - ORGANIZED, ATTENDED & PRESENTED

1. Dr.Sangeetha K Nayanar presented Updates on Pathology of Carcinoma Breast-at Pathalumni meeting in the Department of Pathology, Government Medical College, Calicut-
2. Dr.Sangeetha K Nayanar attended monthly meetings of Calicut Pathalumni webinars on topic presentations by faculty and case presentations.
3. Dr.Sangeetha K Nayanar - attended Kerala Chapter of Indian Association of Pathologists & Microbiologists-State Chapter meeting at Alappuzha, February 2020
4. Dr.Sangeetha K Nayanar - attended Kerala Chapter of Indian Association of Pathologists &

Microbiologists-State Chapter meeting online August 2020

5. Dr.Sangeetha K Nayanar- attended the Evidence-Based Medicine and virtual molecular tumor board-online conference organized by Tata Memorial Hospital, Mumbai
6. Dr.KJ Philip attended AIICME 2020, 25th ICP-AIPNA International Pathology conference organized by AIPNA, ICP, and Dept. of Pathology, BJ Medical College, Ahmedabad held from 31st January to 2nd February and presented a poster on “Comparison of prognostic scoring groups with a focus on pathological prognostic indicators in nodal mature T cell lymphomas – 8 years experience from a tertiary cancer centre”, and got 2nd prize in a poster presentation.
7. Dr.KJ Philip attended as a delegate in the annual meeting of the Foundation of Head and Neck Oncology on a virtual platform (FHNO Virtual 2020) on 12th and 13th December 2020 and presented the poster “Impact of extent of pathological extranodal extension on the survival outcome of oral cancer patients – a prospective 4-year study from a tertiary cancer centre”
8. Dr.Sithara Aravind - attended FHNO-2020- Virtual National Conference of FHNO in December 2020. Presented an E-poster titled Clinicopathologic profiling of Collision Tumours of Thyroid.

Dr. Sithara Aravind was invited as a guest speaker and delivered a talk on the Role of Pathologists in Current scenario, as a part of National Oral pathologists’ day 2020, at Mahe Institute of Dental science.

Dr.Anand VN attended the Evidence-Based Medicine and virtual molecular tumor board-online conference organized by Tata Memorial Hospital, Mumbai

ONGOING RESEARCH PROJECTS

1. Evaluation of key immune factors in the pathogenesis of HPV-associated oral and oropharyngeal squamous cell carcinoma - A prospective study-Dr. Sangeetha K Nayanar, Dr. Deepak Roshan & Dr. Shruthi Surendran (DNB dissertation)
2. Impact of extent of pathological extranodal extension on the survival outcome of oral cancer patients – a prospective 4-year study from a tertiary cancer centre- Dr.K.J Philip, Dr.Sangeetha K Nayanar and Dr.Sherin James (Fellowship Dissertation)
3. Dr.Sithara Aravind - Developing a histologic risk stratification score to predict survival in cervical squamous cell carcinoma- A cross-sectional study at a tertiary cancer center in Kerala-
4. Dr.Sithara Aravind, Dr.Vipin Gopinath-Collision Tumours Of Thyroid- Phenotypic and Genetic Profiling of a rare entity
5. Dr.Aswathi Krishnan-Association between mammography micro calcification and Her 2 positivity in breast carcinoma-2 year retrospective analysis from tertiary cancer centre (CO-PI)
6. Immunomorphological and cytogenetic appraisal of Ewing sarcoma: an institutional experience-- Dr.Aswathi Krishnan,Dr.Sangeetha K Nayanar,Dr.Akshay Inamdar (Fellowship Dissertation)
7. Dr. K. J. Philip-Comparison between the radiological and pathological estimation of tumor size in invasive breast cancer patients from a tertiary cancer centre in South India (CO-PI)
8. Dr.Sithara Aravind - Clinicopathologic profile of breast cancer in young women of age 35 years and below (CO-PI)

PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)

1. The spectrum of cytological patterns in cervical smears of a high-risk group: Retrospective analysis of a cancer detection camp experience-Original article. Kanthimathy SD, Kizhakkebhagam NG, Aravind S, Parambil NA, TherayangalathB, Nayanar SK. Cancer Res Stat Treat 2020;XX:XX-XX. Submitted: 28-May-2020 Revised: 27-Jul-2020 Accepted: 10-Sep-2020
2. Dr. Sunitha Gattigorla, Dr. Sithara Aravind, Dr. Sangeetha K Nayanar and Dr. Arun Narendran, Clinicopathological Pattern Of Central Nervous System Tumors: A Five Year Retrospective Study At A Cancer Centre.Int J Pharm Sci.11(2), b30-37

3. Aryadan N, Aravind S, Suresh A, Nayanar SK. Primary Small Cell Neuroendocrine Carcinoma of Urinary Bladder: Case Series of a Rare Entity [Internet].2020 December [Cited April26, 2021];14(12):ER01-ER03.
4. S. Aravind et al.Survival patterns and clinicopathologic spectrum of Glioblastoma Multiforme – Oncology and Radiotherapy Vol. 15 Iss.1:007-010
5. Sithara Aravind, Deepak Roshan V.G, Vinin N.V, Sangeetha K. Nayanar. Histologic comparative analysis is insufficient to differentiate the second primary from metastasis in bilateral breast cancer. Oncology and Radiotherapy 2 Vol.14 Iss.4: 021-024
6. Pandiar D, Aravind S, Nayanar SK, Babu S. Incipient Warthin tumor of intraparotid lymph node in a patient with squamous cell carcinoma of the external auditory canal: An incidental finding. Natl J Maxillofac Surg 2020;11:113
7. Aravind S, Pandiar D, Nayanar SK, Babu S.Nodal metastasis from papillary thyroid carcinoma(PTC) with no evidence ofprimary tumor in the thyroid gland:Case report and literature review. Oral Oncology 105 (2020) 10476
8. James S, Aravind S, Nayanar SK. Angiosarcoma like Squamous cell carcinoma of Oral cavity-Report of arare subtype of squamous cell carcinoma.Annals of clinical and medical case reports,2020 4(3)1-3
9. Dr.Anand Narayanan-Primary diffuse large B cell lymphoma of Uterine Cervix: Treatment outcomes of a rare entity with literature review. Cancer Reports Received: 13 April 2020 Revised: 17 June 2020 Accepted: 18 June 2020. Doi: 10.1002/cnr2.1264
10. Dr.Aswathi Krishnan-Determination of mononuclear cell count using peripheral smear and flowcytometry in peripheral blood stem cell products: a retrospective study from Indian cancer centre- Accepted for publication; Asian journal of transfusion medicine

NEW DEVELOPMENTS IN THE DEPARTMENT FOR THE YEAR

1. New reporting schedule for Faculty in Surgical Pathology, Cytology, Haematology and Molecular Pathology from January-December 2020.
2. Application submitted to Govt. of Kerala and Kerala University of Health Sciences to start super specialty course, DM Oncopathology

BIOCHEMISTRY DIVISION

DIVISION IN CHARGE: Dr. SINDHU E. R.

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1.	Dr. Sindhu E. R	Assistant Professor

NON-ACADEMIC STAFF

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

INTRODUCTION

The division of Biochemistry (clinical lab) 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.. 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 are Vitros fully automated dry chemistry analyzers (Vitros 250 for Biochemistry analysis. Vitros 5600 for both Biochemistry and immunoassays), and an Access 2 analyzer (Beckman Coulter) for tumor marker analysis. For hematological tests, we have two Beckman Coulter CBC analyzers in the lab. The technologists and staff in the division are trained to work independently, to ensure smooth functioning and compliance with the quality systems. Monthly training/observer programme conducted for undergraduate and postgraduate students of various colleges. Student projects are carried out in our division under the supervision of the academic faculty. Various clinical samples from outside hospitals are also being tested and reported.

I NEW EQUIPMENT / FACILITIES/ PROCEDURE:

Serum protein electrophoresis with immunofixation



Automated Electrophoresis with Immunofixation – SAS3 & 4 Helena

ii) Serum-free light chain assay

II DETAILS OF EXISTING / NEW FACILITIES:

SL NO.	NAME OF EQUIPMENT	PURPOSE
1	Blood Gas Analyzer (ABG Machine)	Blood gas analysis
2	Coagulometer (STAGO fully automated system)	Coagulation studies
3	Cardio MarkerAnalyser Mini Vidas	Chemi luminous immunoassays
4	Vitros 250 Biochemistry Analyser	Biochemistry assays
5	Vitros 5600 Biochemistry Analyser	Biochemistry and immunoassays
6	Access 2 tumor marker analyzer (Beckman Coulter)	Chemi luminous immunoassays
7	Blood cell counter (Beckman Coulter) LH 780/750	Complete Blood Cell count
8	CRP Analyser	CRP analysis
9	Vein Viewer	To view veins for blood collection
10	Electrophoresis apparatus with immunofixation	Electrophoresis with immunofixation of serum protein

III STATISTICS:

Samples Handled

Total No. Of Samples: 92523

SAMPLE DETAILS:

SL. NO	TEST	NUMBER
1	Complete Blood Count	34860
2	Biochemistry	42475
3	Urine Analysis	1009
4	Special tests	1597
5	Tumor marker	6155
6	Serology	5467
7	ABG	665
8	Electrophoresis with immunofixation	295
Total		92523

IV ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DIVISION:

- i. Classes are taken for B. Sc Nursing.
- ii. Examiner for B. Sc. Biochemistry and evaluator for B. Sc Nursing course.

V FUNCTIONS, CONFERENCE & WORKSHOP ATTENDED

1. Dr. Sindhu ER (courses attended)

- i) International lead auditor & laboratory quality management systems certificate course (4 days online) conducted by foundation quality India
- ii) QSKOOL modules on laboratory quality management conducted by Quality and accreditation institute and Ortho clinical diagnostics (8 days online course)
- iii) Two days virtual faculty improvement program on 'Bio innovation patenting and entrepreneurship opportunities in biotechnology for sustainable environment' conducted by Oxford college of engineering Bangalore

2. Mrs. Mini K. S

- i) Attended Workshop – Lab Management System and Internal Audit Course- 13-14th March 2021.

VI PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)

1. Dr. Sindhu ER - book chapter

Preventive role of carotenoids in oxidative stress-induced cancer; in the book "Handbook of Oxidative Stress in Cancer: Therapeutic Aspects"

Publishers- Springer publications. (in press)

VII ONGOING RESEARCH PROJECTS

1. Impact of derived hematological parameters from automated analyzer on overall and event-free survival among colorectal cancer patients

BLOOD BANK AND TRANSFUSION MEDICINE DIVISION

DIVISION IN CHARGE: DR. MOHANDOSS M

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Mohandoss M	Associate Professor

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Sabeesh P	Blood Bank Technician
2	Sajeesh VM	Blood Bank Technician
3	Shibin CV	Blood Bank Technician
4	Anoop Joy	Blood Bank Technician
5	Thahira D	Blood Bank Technician
6	Maya PK	Staff Nurse
7	Arun KV	Attender

INTRODUCTION

The Blood center provides quality blood products to patients by using the latest technology for blood collection, processing, and testing. In addition, the division supports the hospital bone marrow transplant programme.

NEW EQUIPMENT / FACILITIES/ PROCEDURE:

- Started COVID-19 Convalescent plasma collection by Apheresis from recovered patients

EXISTING / NEW FACILITIES:

- a. 24 x 7 Blood Centre
- b. Blood Components – Packed Red cells, Platelet concentrate, Fresh Frozen Plasma, Cryoprecipitate
- c. Apheresis – Platelets, Convalescent Plasma
- d. HLA typing
- e. Flow cytometry - Diagnostic
- f. Stem Cell Collection and Cryopreservation
- g. Irradiation of blood components

STATISTICS

SL. NO	CATEGORY	NUMBERS
1	Whole Blood Donors	2619
2	Apheresis Donors	440
3	Blood Donation Camps	11

□ **Blood Components Issued :**

SL. No	CATEGORY	NUMBERS
1	PRBC	2559
2	Platelet Concentrate	1935
3	Single Donor Platelets	916
4	COVID-19 Convalescent Plasma	38
5	Fresh Frozen Plasma	838
6	Cryoprecipitate	210
Total		6496

1	Flowcytometry	319
2	HLA Typing	78

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

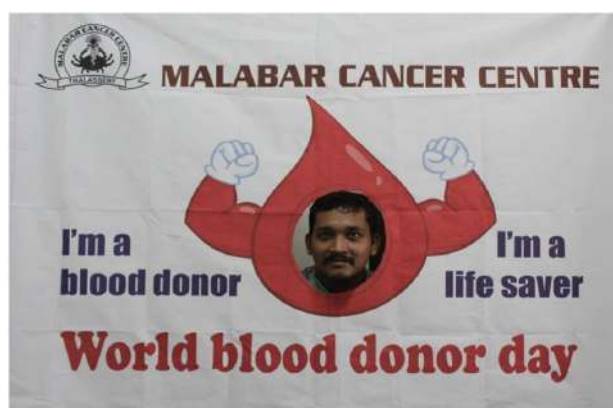
- Fellowship in Apheresis Medicine (1 year)
- Dr. Sreetu Chand IIIyr PG in Transfusion Medicine from SCTIMST, Trivandrum attended her peripheral posting

AWARDS & RECOGNITIONS :

- Dr. Mohandoss M attended DNB Exams (Immunohematology and Blood Transfusion) as Examiner held at Jubilee Medical College, Thrissur on 24.09.2020
- Blood Centre, MCC was recognized as Plasma Bank for collecting COVID-19 convalescent Plasma in Kannur District

FUNCTIONS, CONFERENCE & WORKSHOP ORGANIZED

Malabar Cancer Centre organized a felicitation program for blood donors and Blood Donation Camp organizers as part of World Blood Donor Day Celebrations on 13.06.2020



CONFERENCE ATTENDED & PRESENTED:

1. Dr. Mohandoss was a Delegate in ISBT 2020 – Virtual Congress of the International Society of Blood Transfusion and presented “Impact of Transfusion Dependency at Presentation and Transfusion Intensity during Intensive Chemotherapy on Treatment Outcomes in Acute Myeloid Leukemia “on December 2020
2. Dr. Merline Augustine as a delegate in APBMT 2020- 25th Annual Congress of Asia Pacific Blood and Marrow Transplantation Group and presented “Anaemia in Multiple Myeloma Patients undergoing autologous hematopoietic stem cell transplant influences CD34 cell collection yield and RBC transfusion requirements during Peri-Transplant and Post-Transplant Period “on October 2020
3. Dr. Mohandoss M as faculty in TRANSCON 2020 –National Conference (Virtual) of Indian Society of Blood Transfusion and Immunohematology and presented “Updates in regulations of Cellular Therapy in India” and Poster “ Predicting donor factors in high yield platelet donations by CART analysis “on February 2021
4. Dr. Merline Augustine as a delegate in TRANSCON 2020 –National Conference (Virtual) of Indian Society of Blood Transfusion and Immunohematology and presented “Vein assessment tool on outcomes of double platelet product apheresis”&“Analysis of PRBC Irradiation Practices from South India” on February 2021.

ONGOING RESEARCH PROJECTS:

1. Implications of Vein assessment tool on outcomes of double platelet product apheresis
2. Anemia in Multiple Myeloma Patients undergoing autologous hematopoietic stem cell transplant influences CD34 cell collection yield and RBC transfusion requirements during Peri-Transplant and Post-Transplant Period
3. Does Intensity of Blood Transfusion Influence Clinical Outcome in Adolescent and Adult Acute Lymphoblastic Leukemia
4. Transfusion Risk Prediction for Perioperative blood transfusion in ovarian cancer patients with post NACT and interval cytoreduction surgery
5. Evaluation of Hemolysin Test as a Tool to Screen High Titre Group O Platelet Apheresis Donors

PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)

1. Murugesan M, Padmanaban M, Malodan R, Chellaiya GK, Nayanar SK. Modeling predonation testing strategies in platelet donations - Approach from low throughput apheresis blood center from India. Asian J Transfus Sci. 2020 Jul-Dec;14(2):131-136. doi: 10.4103/ajts.AJTS_93_19.
2. KC G, Murugesan M, Nayanar SK, Malodan R, Padmanaban M. Comparison of abo antibody levels in apheresis platelets suspended in platelet additive solution and plasma. HematolTransfus Cell Ther. 2020; June
3. Murugesan M, Chellaiya GK, Nair CK, Nayanar SK. Analysis on the composition of leukapheresis product – A comparison between MCS+® + and spectra optia apheresis equipment. J ApplHematol2021;12:1-5.
4. Augustine M, Murugesan M, Nair CK, Raghavan V, Nayanar SK. Recurrent hyperhemolytic transfusion reaction in myelodysplastic syndrome- A case-based approach. TransfusApher Sci. 2021 Feb 4;103073. doi: 10.1016/j.transci.2021.103073.

GENETICS & CYTOGENETICS AND MOLECULAR ONCOLOGY DIVISION

DIVISION IN CHARGE: Dr. DEEPAK ROSHAN VG

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Deepak Roshan VG	Assistant Professor
2	Dr. Vipin Gopinath	Assistant Professor

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Vincy Augustine M A	Lab Technician
2	Sreehari O P	Lab Technician
3	Sreeja K V	Lab Assistant

INTRODUCTION

Division of Genetics and Cytogenetics and Division of Molecular Oncology mainly focuses to understand the molecular and Genetic mechanism of tumorigenesis, metastasis, and drug resistance of cancers. The major research direction of division for “bench to bedside” is the following: -

- 1) To explore the molecular mechanisms of cancer; the research fields include genomics, proteomics, signal transduction pathway, drug design, and screening, for anti-cancer drugs.
- 2) To address the problems associated with clinical treatment of cancer patients, such as drug resistance and drug toxicity to develop personalized medicine

Along with molecular research to understand the biology of tumorigenesis, the division is also involved in molecular diagnosis and is also focused on HR development by providing Ph.D. program in life science, short-term training for BSc, MSc, Life Science, and B.Sc. MLT students, and dissertation work for MSc/MD/MDS students.

NEW EQUIPMENT'S



Cell culture facility



BD FACSAria III (Cell sorter)



DNA sequencer and PCRs



Thermo Q exactive LCMS/MS for proteomics, metabolomics and lipidomics



Illuminamiseq next generation sequencer



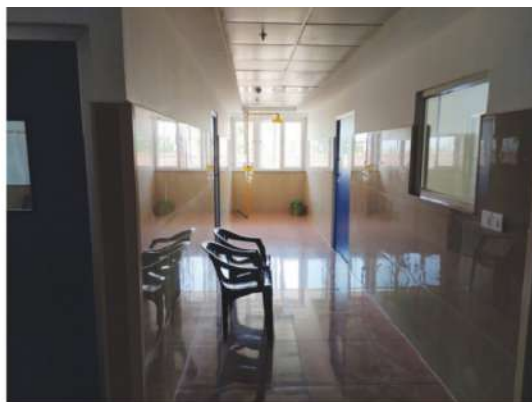
Cell culture facility



DNA sequencer and PCRs

DETAILS OF EXISTING / NEW FACILITIES

- Genomics
- Proteomics
- Cell culture
- FISH



STATISTICS

SL. NO	CATEGORY	NUMBERS
1	Quantitative BCR-Abl	201
2	Qualitative BCR Abl	58
3	JAK2	59
4	AML Panel (10 markers)	51
5	ALL Panel (8 markers)	51
6	FISH blood (PML-RARAa and BCR-Abl)	28
7	FISH Her2	58
8	EGFR Mutation analysis	260
9	RT-PCR PML-RARa	26

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

- Ph.D. In life Science
- Fellowship in Molecular Diagnosis
- PG Diploma
- PG desertion 3 months and 6 months

CONFERENCE ATTENDED & PRESENTED

1. Dr. Deepak Roshan, National Webinar Series “COVID 19; - “Role of molecular biology in diagnosis- a new era” conducted by Department of Microbiology, Sree Narayana College, Kannur, Kerala in association with IQAC on 12th September 2020.

ONGOING RESEARCH PROJECTS

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 the pathogenesis of HPV-associated oral and oropharyngeal squamous cell carcinoma: - sanctioned by ICMR, Govt. of India 25 Lakhs (Co-PI)

PUBLICATIONS - BOOKS / JOURNALS

1. Christo Rajan, V. G. Deepak Roshan, Imran Khan, V. G. Manasa, Iris Himal, JayasreeKattoor, 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).
2. Sithara Aravind, Deepak Roshan V.G, Vinin N, and Sangeetha K. NayanarHistobiologic comparative analysis is insufficient to differentiate the second primary from metastasis in bilateral breast cancer, OnkologiaiRadioterapia(2020) Volume 14, Issue 4.
3. Deepak Roshan VG, Mubashira KP, Sheethel KP, Surya Haritha S, Vipin Gopinath. Evaluation of the anticancer activity of Bacopa monnieri hexane fractions against breast cancer MCF7 cell lines. Oncology and Radiotherapy, (2021), Vol. 15 Iss.2:016-020.

MICROBIOLOGY DIVISION

DIVISION IN CHARGE: Dr. R. PARTHIBAN

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. R. Parthiban	Associate Professor
2	Dr. Sajani Samuel	Assistant Professor
3	Dr. M. Saravanan	Assistant Professor
4	Dr. Sarath K. E	Assistant Professor

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Ramitha M.G.	Lab Technician
2	Deepak Omanakuttan	Lab Technician

INTRODUCTION

The division of microbiology is committed to providing accurate and reproducible results on clinical material within the shortest possible time. This department provides test turnaround times suitable to the clinical situations in which the tests are requested. This has been achieved by round-the-clock laboratory services, reporting, and the 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. Services for environmental testing and water testing in the hospital as well as implementation of best practices for infection control including surveillance of healthcare-associated infections is also under the scope of this department.

DETAILS OF EXISTING / NEW FACILITIES:

S. 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	GenXpert	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

STATISTICS:

TOTAL NO. OF SAMPLES: 5690

SAMPLE DETAILS:

SL. NO	SAMPLE TYPE	SAMPLE NUMBER
1	Urine	1182
2	Stool	88
3	Blood	1811
4	Respiratory(Sputum, throat swab, BAL)	192
5	Pus (wound Swab/ swab/ dead tissues/ Exudates)	845
6	AFB Staining	137
7	Gram Staining	78
8	Fungal culture	67
9	KOH Mount	42
10	Environmental Swabs	625
11	Serology	57
12	Blood bag quality check	211
13	CMV & EBV PCR (Molecular diagnosis)	65
14	CBNAT	NIL
15	Bacterial identification (OutSide Hospitals & Colleges)	17
16.	Blood Culture (OutSide)	35
17.	Water Analysis	55
18.	Disinfectant Testing	183

COVID-19 testing RT PCR samples - 1, 23,000

COVID-19 Antigen testing samples - 5,200

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

- Classes are taken for B.Sc. MRT and B.Sc. Nursing.
- Orientation classes regarding HIC activities for newly joined staff.
- Exam Evaluators for B.Sc. Nursing.

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS - ATTENDED & PRESENTED

1. Dr Sajani Samuel attended “WCIDA-2020” as delegate on 17.10.2020
Dr. Sajani Samuel attended a conference “ World congress on Infectious diseases and Antibiotics” – Virtual Conference and she delivered an Oral Presentation on October 17th. 2020.
2. Dr.Sajani Samuel-E-Poster presentation - 41 Annual Report Conference of Indian Association of Biomedical Scientists - International Virtual Conference on RECENT TRENDS IN BIOMEDICAL RESEARCH 12- 14th March 2021.
3. Dr. M. Saravanan-E-Poster presentation - 41 Annual Report Conference of Indian Association of Biomedical Scientists - International Virtual Conference on Recent Trends in Biomedical Research 12- 14th March 2021.
4. Mrs. Ramitha M.G. Attended Workshop – Lab Management System and Internal Audit Course- 13- 14th March 2021.

PUBLICATIONS - BOOKS / JOURNALS

1. Dr. R. Parthiban - Phenotypic Detection of Metallo- Beta-Lactamase (MBL) Producing Gram-negative Bacteria and Their Prevalence in A Tertiary Care Cancer Centre – Accepted.
2. Changing Trends in Antimicrobial Resistance among Gram-negative Bacilli isolated from Respiratory tract of Cancer Patients at a Tertiary Cancer Centre: A 4-year Retrospective Study.
3. Saravanan Murugesan, Ph.D., Sajani Samuel, Ph.D., and Parthiban Rudrapathy, Ph.D. Microbiological Profile and Antibiotic Susceptibility Pattern of Uropathogens Isolated Among Cancer Patients at A Tertiary Care Cancer Centre, South India. Int J Pharm Bio Sci Volume 11 Issue 2, 2020 (April-June), Pages:56-63.
4. Environment and Public-Health Impact of Sub-therapeutic Antibiotic use in the Poultry Industry – A pilot Study (Book Chapter)

ONGOING RESEARCH PROJECTS:

1. Validation of SARS CoV-2 RT-PCR testing using combinatorial tapestry pooling of samples: A Multi-centre study”.
2. Molecular Characterization of Carbapenem-Resistant Gram-Negative Bacilli in a Tertiary Care Cancer Centre
3. Unusual bacterial isolates and their Antimicrobial Susceptibility Profile causing bloodstream infections in Cancer patients in a Tertiary Cancer Centre.
4. Extended Spectrum β lactamase producing Gram Negative bacilli in Urine Specimen of Cancer Patients at a Tertiary Cancer Centre- Prospective study
5. Phenotypic and Molecular characterization of Fungal pathogens causing Respiratory infections in patients with Hematological malignancy- Prospective study
6. BIRAC Project - “LAMP based point of care POC rapid and low-cost diagnostic test for COVID-19”.
7. Microbial pathogens and their susceptibility pattern in surgical site infections among cancer patients – A Retrospective analysis.
8. Microbial trends and drug-resistance profile of isolates causing infections in febrileneutropenia patients with hematological malignancies - A Prospective study.

DEPARTMENT OF COMMUNITY ONCOLOGY



DEPARTMENT IN CHARGE: DR. NEETHU A P

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Neethu A P	Lecturer
2	Dr. Phinse M Philip	Lecturer

NON-ACADEMIC STAFF

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

INTRODUCTION

The community oncology Department started functioning as a full-fledged department in January 2010. Since then, the department has been regularly conducting cancer awareness classes; volunteer training programs, health exhibitions, and tobacco awareness programs for students and community participatory research activities in 5 districts of North Kerala (Kozhikode, Kannur, Wayanad, Malappuram, Kasaragod, and Palakkad) and Mahe (Union Territory of Pondicherry). A tobacco cessation clinic, an anti-tobacco cell, and the Kannur District Cancer Control Consortium function under the department.

ROUTINE ACTIVITIES

1. Awareness programs

- Cancer awareness campaign: for the general public and health workers -Tobacco awareness campaign at schools using audio-visual aids Exhibitions and observation of cancer-related health days like- No tobacco day, cancer awareness day, with massive public participation.
- Training and workshops: in tobacco control and cancer screening for health workers, volunteers, JPHNs, and nurses.
- Painting and literary competitions, online Competitions for school children and the general public to generate awareness 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 films for tobacco awareness “U-Turn” in schools and public programs.
- Community participatory research activities.

2. Tobacco cessation clinic

- Tobacco cessation OPD functions on all Wednesdays.
- Tobacco cessation treatment
- Anti-Tobacco Awareness Programmes
- Research on various aspects of tobacco use

3. Anti-tobacco cell

- Formed on 31-10-11, the cell is involved in all our anti-tobacco campaigns
- Executive Committee of the cell: Dr. Satheesan B (Chairman), Dr. Ramachandran V (Joint Convener), Dr. Neethu A.P, Dr. Phinse .M. Philip (Member conveners), and Major P Govindan, Dayanandan Master, Chalakkara Purushu, Pradeep Master (Executive members).
- The main aim of the cell is to educate the student community on the menace posed by tobacco use.

4. Kannur District Cancer Control Consortium (KCCC):

- KCCC was officially inaugurated on 4th February 2021 by the honorable Chief Minister of Kerala
- As a part of including socially committed individuals and organizations in the cancer control activities of MCC, the Kannur district cancer control consortium was formed and functions under the guidance and technical support of the institute to initiate and promote health care with community participation, to create awareness about the prevention of cancer, to eliminate fear and stigma about cancer, to spread the message about the curability of cancer and to provide rehabilitation to cancer survivors.

5. Early cancer detection clinic

- MCC 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 were 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).

6. Museum

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

STATISTICS

Awareness activities

Public awareness class (webinar)	School awareness program (webinar)	Public awareness webinars with KCCC	Volunteer training program	Exhibition days	ECDC visit
8	3	15	0	0	4

Tobacco cessation clinic data

New case	Follow up
9	6

ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

- 1 Training and workshops: training in tobacco control and cancer screening for health workers, volunteers, JPHNs, and nurses are regularly conducted.
- 2 Tobacco cessation observer programme for doctors as part of training for cancer control
- 3 Academic sessions for Bsc MRT students in public health
- 4 Academic sessions for nurses and doctors as a part of training in early cancer screening as a part of setting up associate centers of MCC.
- 5 The academic session for institutional fellows, training doctors, nurses, and MSW students in tobacco cessation
- 6 Webinars for Kannur District Cancer Control Consortium

ACTIVITIES

1. October breast cancer awareness month –Observed by conducting 3 webinars on women’s cancers for KCCC members and public
2. November 7, 2020-National cancer awareness day –Observed by conducting cancer awareness classes for kudumbasree members at Nellarcha unit, Wayanad, and Azheekkode, Kannur
3. January 8, 2021-Conducted webinar on cancer awareness in collaboration with Seethi Haji Cancer center, Edavanna
4. January 10, 2021-Conducted cancer awareness class as part of palliative day observation of Ashraya education and charitable trust in collaboration with KCCC
5. Feb 4, 2021-World cancer day observation –Conducted online webinar on “Cancer an introduction for students”and“Cancer myths and facts” on Feb 26 in collaboration with IAP, Thalassery
6. February 5, 2021 Inauguration of colposcopy, cryotherapy unit at Cherukunnu FHC as part of cervical cancer eradication project at Kannapuram
7. March 12, 2021-Cancer awareness class and training on self-breast examination for women conducted in collaboration with PHC, Kurumathur
8. March 13, 2021-Inauguration of early cancer detection clinic at Nellikampoyil by Bishop Mar George Nharalakkat in presence of Honorable MLA Adv Sunny Joseph
9. March 27, 2021-Conducted awareness class for women on cancer in association with KCC and Tellicherry social welfare trust.

COVID cell

Due to the current COVID-19 situation, community programs were not feasible. Community Oncology members Dr. Neethu and Dr. Phinse were posted in the COVID cell along with the infection control department since March 19, 2020. Covid cell has been involved in the screening of patients, staff, and bystanders, conducting regular review meetings, Staff and patient education in COVID-19 appropriate behaviors through announcements, webinars, COVID-19 vaccination of staff of MCC, and formulating guidelines for COVID-19 control in the institution.

FUNCTIONS, CONFERENCES & WORKSHOPS ORGANIZED

1. May 31, 2020- awareness program on tobacco and alcohol health hazards for security staff of MCC at the conference hall. Inaugurated by Director and class conducted by Dr. Phinse M Philip. Conducted an exhibition on tobacco awareness for the public in the portico of MCC along with security staff on the same day



2. February 4, 2021-World cancer day observations

The official inauguration of KCCC was on Feb 4th by the honorable Chief Minister of Kerala



3. Public Awareness webinars –KCCC

Conducted 15 cancer awareness webinars on various topics related to cancer from September 2020 to February 27, 2021, including 3 webinars under the name “KUNHARIVUKAL” exclusively for students.

CONFERENCE & WORKSHOP ATTENDED & PRESENTED

- 64th annual national conference of Indian Public Health Association (IPHA) at AIIMS, New Delhi from 29 February to 2nd March 2020.
 - Dr. Neethu presented a poster: Effectiveness of a structured awareness program in improving knowledge about cancer among women in rural areas of Kannur, Kerala, India
 - Dr. Phinse presented Paper: An exploratory study on the effectiveness of a structured health education program based on the current curriculum in improving knowledge, attitude, and practice about cancer among school children.
- 21st Annual meeting of American society of breast surgeons April 29, 2020. Dr. Neethu presented a poster on a virtual platform: 'Breast cancer screening in a rural area in Kannur district, Kerala, India, "The Kannapuram Model". A community participatory approach

3. 6TH NCG COVID-19 preparedness Webinar 9/5/20
4. 12th NCG COVID-19 preparedness Webinar 27/6/20
5. National Cancer Grid- Kerala state chapter- annual meet held on 7/11/20

NEW RESEARCH PROJECTS

1. Proposal No. BT/CS0016/CS/03/20 titled “Enhancing capacity for the conduct of Human clinical trials for COVID-19 Vaccine candidates”
2. AI-driven Large-Scale screening for Oral and Oropharyngeal cancer- Indo-Swedish Collaborative proposal by DBT - AI in Healthcare

ONGOING RESEARCH PROJECTS

1. Patient and diagnostic intervals in oral cancer: A sequential explanatory study
2. Project for starting Associate centers under MCC for cancer control as part of the decentralization of cancer control activities
3. Kannapuram cervical cancer eradication project

PUBLICATIONS

BOOKS

1. Handbook on tobacco
2. NETHI newsletter –a publication of anti-tobacco cell of MCC every 3 months
3. Handbook for nurses and volunteers in cancer control
4. Pamphlets on oral, breast, and cervical cancers

SCIENTIFIC PUBLICATION IN JOURNALS

India;”TheKannapuram Model”- a community participatory approach (online onlypublication:
Citation: 2020 Annual Meeting Official Proceedings, Volume XXI. Ann Surg Oncol (2020). <https://doi.org/10.1245/s10434-020-08630-3>

DEPARTMENT OF DENTISTRY & REHABILITATION



DEPARTMENT HEAD: DR. PRAMOD SANKAR

ACADEMIC STAFF

SL. NO.	NAME	DESIGNATION
1	Dr. Pramod Sankar	Associate Professor

INTRODUCTION:

Cancer patients often have compromised dental health either due to the disease, comorbidities, or the effect of the treatment that they undergo. Maintenance of optimum dental health is of paramount importance to maintaining the overall quality of life in cancer patients. Department of Dentistry & Rehabilitation provides dental services only to registered cancer patients.

SERVICES PROVIDED:

1. Pre-habilitation dental screening for all Head and neck cancer patients undergoing surgery and / or radiotherapy
2. Dental restorations, oral prophylaxis, and providing fixed and removable prostheses.
3. Hematological patients and patients with solid tumors having skeletal metastasis are also screened for dental health and provided with necessary dental treatments.
4. Surgical patients who need obturators are planned by the head and neck surgery departments.
5. Providing maxillofacial prosthesis services.

EXISTING FACILITIES:

1. Minor Surgical Procedures
2. Dental Implants
3. Rotary Endodontics
4. Maxillofacial Prosthesis
5. Fixed and Removable Prosthesis
6. Dental Radiography



STATISTICS

SL. NO	CATEGORY	NUMBERS
1	OPD	1922
2	Tooth extractions	1061
3	Oral prophylaxis procedures	13
4	Restorations	24
5	Obturator	9
6	Root canal treatments	9
7	Complete denture	1
8	Removable partial dentures	1
9	Maxillo-facial prosthesis	1

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS ORGANIZED, ATTENDED & PRESENTED

1. Dr Pramod S attended a Online training program on Fire Safety and emergency preparedness on 24.11.2020 as a delegate.
2. Dr Pramod S attended an online Master class series- CAHO- as delegate on 14 & 21.10.2020, 11, 18, 25 . 11.2020

DEPARTMENT OF IMAGEOLOGY



DEPARTMENT HEAD: DR. T V SATHEESH BABU
ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. T V Satheesh Babu	Associates Professor
2	Dr. Sriikiran T K	Assistant Professor
3	Dr. Thoufiq Ali	Assistant Professor

NON-ACADEMIC STAFF

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

INTRODUCTION:

Role of Radiology is central 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

ABOUT THE DEPARTMENT

After inauguration of the new imageology block in 2008, the department progressed over the years and has acquired state-of-the-art machines like digital mammograms with 3D tomosynthesis, Digital radiography, C-arm, Maxio robot for guidance in interventional procedures and a Radio frequency ablation machine. The department also acquired the Automated Breast Ultrasound (iABUS by Episonica), first of its kind in India in the government setup. The new extension block of imageology became functional on January 2020. Division of Interventional Radiology became functional on January 2020 and new high-end fluoro CT became functional on March 2020.

Department is conducting a fellowship in Oncoimaging and Interventional Radiology from 2019 onwards with an intake of 2 candidates

DIVISION OF INTERVENTIONAL RADIOLOGY (IR)

One of the most significant advances in patient care in this century has been the development of interventional radiology. Interventional radiology has a significant impact on the management of cancer patients. The entire philosophy of interventional radiology lies in the ability of a radiologist to change his or her mindset from a person who sits at the console and interprets images to a person who assumes clinical responsibility for patient care and participates in the overall clinical management of the patient in close concert with the clinical colleagues.

Department acquired a high-end Digital Subtraction Angiography machine last year (Siemens Artis Zee Pure) and became functional on January 2020. A dedicated interventional suite and 5 bedded recovery areas are present in IR. Also acquired Solero Microwave Tissue Ablation System for ablation of tumor in liver, lung and kidney. 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), 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
- Vacuum Assisted Biopsy Machine (VAB)
- Conventional X-ray and Digital Radiography
- Mini PACS
- DSA suite (Siemens Artis Zee Pure)
- Starburst Radiofrequency Ablation system by Angiodynamics

NEW FACILITIES

- High-end ultrasound by Samsung - RS80 EVO ultrasound machine - Given as part of CSR programme. Has a facility for routine imaging, echocardiography, and advanced imaging like contrast ultrasound and elastography.
- High-end mobile DR by Samsung - Samsung GM85 - Given as part of the CSR programme
- Solero Microwave ablation system by Angiodynamics - Bought as part of DSA tender. It is used for the ablation of liver, lung, and renal masses and is useful when the tumor is close to the vessel. Ablation is faster and better than RFA and is preferred in cases where the lesion is close to large vessels which can produce a heat sink effect.

STATISTICS

N SL. O	MODALITY	INVESTIGATION/PROCEDURE	NUMBER
1	MRI	No of patients imaged	1283
2		Full Study	1530
3		Screening	487
4		MR RT Planning	98
5	CT	No of Patients Imaged	4668
6		Full Study	7703
7		Biopsy	308
8		Robotic Biopsy	1
9	Pigtail	USG guided	23
10		CT guided	11
11	Portable X-ray		731
12	Digital Radiography	No of Patients	5591
13		Studies	6132
14		Barium Studies	34
15	C-arm Procedure		7
16	Mammography	Studies	2191
17		Stereotactic biopsy	10
18	Ultrasound	Studies	2064
19		Biopsy	285
20		FNAC	309
21		Aspiration	59
22		Wire localization	27
23		Coil marking	24
24	Interventional Radiology	TACE	8
		RFA	14
		MWA	2
		PTBD	16
		Ureteric stenting	1

		Nephrostomy	1
		Biliary stenting	9
		Percutaneous cholangiogram	1
		NJ/NG Tube insertion	30
		Pigtail insertion	0
		Bronchial artery embolization	1
		Esophageal stenting	4
		Fluoroscopic balloon dilatation of RIES	2
		Preoperative tumorembolization	1
		Catheter exchange	1
		Lymphangiogram	1
		Lymphatic leak embolization	1

COURSES OFFERED IN THE DEPARTMENT:

1. B.Sc. MRT - This paramedical course is being conducted for the last 9 years with an intake of 25 students per year and is affiliated with KUHS. The course is conducted along with the Department of Radiation Oncology
2. Fellowship in Oncoimaging and Interventional Radiology - It is an institutional fellowship which started in Feb 2019 with an intake of 2 students per year, training in both diagnostic Onco-imaging and interventional oncology. The course duration is for 1 year.

ONGOING RESEARCH PROJECTS:

1. Diagnostic accuracy of signal intensity ratio in in-phase and opposed phase imaging for the characterization of benign and malignant vertebral lesions
2. Spectrum of pulmonary findings in High Resolution Computed Tomography in patients undergoing Chemotherapy for hematological malignancies - A tertiary cancer centre experience
3. Role of mammogram in predicting the molecular subtypes of breast cancer – A Retrospective analysis

DEPARTMENT OF RADIATION ONCOLOGY



DEPARTMENT HEAD: DR. GEETHA M

ACADEMIC STAFF

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

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Shamna P	EDP Assistant
2	Sheena T P	Radiographer
3	Sindhu K U	Radiographer
4	Vini Raveendran	Radiographer
5	Nimmya Parameswaran	Radiographer
6	Muhammed Naseem	Radiographer

7	Srinsi N K	Radiographer
8	Praveen Kumar	Radiographer
9	Nidhu C D	Radiographer
10	Anu AnandhanAchari	Radiographer
11	Shajeena	Radiographer
12	Noufal P	Radiographer
13	Shikha M K	Radiographer
14	Sabina C V	Radiographer
15	Simi T K	Radiographer

INTRODUCTION

Radiation oncology is an essential part of a multidisciplinary approach to cancer treatment. The department of radiation oncology combines the quality and capability of state-of-the-art equipment with the expertise and compassion of the medical staff. It is equipped with the latest technological advances in the field of radiation oncology and provides state of art treatment meeting international standards to the patients. 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 are also available.

NEW FACILITIES

Telecobalt machine – Equinox

A basic external beam radiation therapy facility with a carbon fibre couch. It is a cost-effective, less complicated, lesser power-consuming, less maintenance facility compared to linear accelerators.



Brachytherapy unit – flexitron- 20 channel, remote after loading HDR brachy therapy unit for intracavitary, intraluminal, interstitial, and surface mould therapy



EXISTING FACILITIES

A. LINEAR ACCELERATORS

1. **Clinac –ix (M/s) Varian** : dual energy (6mv & 15 mv) Linear Accelerator with 120 MLCs which can deliver radiation treatment with all advanced techniques



2. **Versa – HD (M/s Elekta):** Linear accelerator with 6mv, 10mv and 15 mv energy, 120 MLCs and flattening filter-free facility for delivering treatment with advanced techniques



3. **CT simulator-** a real-time, CT-linked, 3-d treatment planning system, with a CT scanner, a multi-image display, a treatment planning device with real-time visual optimization, and a laser beam projector.



4. **Conventional simulator – Imaging** - used for radiotherapy treatment planning, in which x-rays in the diagnostic range are used. The equipment is used for 2d planning.



B. TREATMENT PLANNING SYSTEMS

1. Eclipse – with AAA algorithm for planning IMRT, VMAT, IGRT, 3DCRT
2. Monaco – Monte Carlo Algorithm
3. Oncentra – for brachytherapy planning

C. CONTOURING STATIONS

1. Somavision
2. Mim

STATISTICS

SL. NO.	PROCEDURE	NUMBERS
1	Curative	994
	2D	214
	3D	364
	VMAT	406
	SRS/SRT	5
	Hybrid arc	3
	Electron beam therapy	2
2	Palliative	958
3	Brachytherapy	
	ICA	199
	Sorbo	78

ACADEMIC ACTIVITIES

DEPARTMENTAL ACADEMICS

1. Department presentations on Tuesdays and Wednesdays from 8.30 AM to 9AM
2. B.Sc. MRT Teaching
3. RT Board – Monday – Friday 3.30PM – 4 PM
4. Chart Rounds Saturdays 11- 12 Noon

CONFERENCES ATTENDED

1. Dr. Greeshma attended a conference - 9th Asia Pacific Breast Cancer Summit on 8th to 10th January 2021 as a delegate on Online platform. She presented a poster “A study on pattern of locoregional recurrence and its relation to the irradiated volume in patients with Ca Breast requiring adjuvant RT”

ONGOING PROJECTS

1. Internal mammary nodal failure in patients with triple-negative and Her2neu positive breast cancer
2. Incidence of second malignancies in oral cavity cancers
3. Economic burden of breast cancer on households in Kerala

PUBLICATIONS

1. Joneetha, j., n v, v., linda, r., m, g., arun, n., shoaib, n., & nabeel, y. (2020). Preliminary experience with induction chemotherapy in head and neck malignancy from a tertiary cancer centre. *International journal of pharma and bio sciences*, 11(4), 6–10. <https://doi.org/10.22376/ijpbs.2020.11.4.b6-10>
2. Jones, j., vinin, n. V., muttath, g., yahiya, n., nawaz, s., narendran, a. P., & reja, a. (2020). Organ at risk doses in hypo fractionated three dimensional conformal radiotherapy in carcinoma breast following breast conservation surgery. *Onkologia i radioterapia*, 14(2), 1
3. Nv, v., muttath, g., jones, j., shringarpure, k., duraisamy, k., deenathayalan, v. P., & rathi, p. (2020). Clinical outcomes of head and neck cancer patients treated with palliative oral metronomic chemotherapy at a tertiary cancer center in Kerala, India. *The gulf journal of oncology*, 1(33), 68–74.

DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE



DEPARTMENT IN CHARGE DR. PRIYA JAYARAJAN

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Priya Jayarajan	Assistant Professor

INTRODUCTION

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.

STATISTICS

OP	PFT	DLCO
1848	755	16

FACILITIES AND SERVICES

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

DEPARTMENT OF SURGICAL ONCOLOGY



DEPARTMENT HEAD: Dr. SAJITH BABU T.P (Till 23.01.21)
(Officer in Charge): Dr. NIZAMUDHEEN M P(24.01.21 onwards)

ACADEMIC STAFF

SL. NO.	NAME	DESIGNATION
1	Dr. Satheesan B	Professor & Director
2	Dr.Nizamudheen M P	AssociateProfessor& Officer In Charge
3	Dr.Adarsh Dharmarajan	Associate Professor
4	Dr.Shamna Muhammed	Assistant Professor
5	Dr.Anand Ebin Thomas	Assistant Professor
6	Dr.Ashitha R G	Assistant Professor
7	Dr. Sandeep Vijay	Assistant Professor
8	Dr. Anoop A	Assistant Professor

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Reena C	Dietician
2	Roopa V	Physiotherapist
3	Aneeth M V	Speech & swallowing therapist
4	Rasiq	Endoscopy technician
5	Krishna Kumar	CSSU in charge
6	Midhunna KumarMidhun	Nursing assistant

INTRODUCTION

The department of surgical oncology was established in 2001 at the beginning of clinical activities in MCC. As it developed and progressed further, organ-specific sub-categorization was brought in after the year 2010. Currently, the department has three divisions.

Head and neck surgical oncology (HN SOG unit) – HN SOG unit covers surgical treatment for cancers involving the oral cavity, neck, throat, salivary glands, thyroid, ear, nose, scalp, and skull base. The unit also carries out reconstructive surgeries including microvascular reconstruction. Laser excisions of the larynx and navigation-guided skull-based surgeries are being done in this unit.

Breast and Gynaec oncology unit (BG SOG unit) – Gynaec division of the BG SOG unit offers surgical treatment for cancers of the ovary, endometrium, cervix, and vulva. The subdivision also offers cytoreductive surgery and HIPEC for advanced ovarian cancers where it is indicated. The breast subdivision of the BG SOG unit offers radical as well as conservative surgeries for breast cancer along with reconstruction and oncoplastic techniques.

General Surgical Oncology (Gastro, Thoracic, Urology and Musculoskeletal unit (G SOG unit)) – G SOG unit performs surgeries for gastrointestinal, thoracic, urologic cancers and sarcomas of bone, soft tissue and retroperitoneum. The unit also offers minimally invasive e-surgeries for colorectal, oesophageal, gastric, distal pancreatic and splenic cancers. Mediastinoscopy is also done in this unit for invasive mediastinal evaluation. The unit also offers surgeries for various pediatric cancers. Minimal invasive surgeries are also carried out

NEW ACTIVITIES

- A routine planning session was started every Saturday where the entire week's cases are discussed and surgical plan is made. It's a quasi academic session for residents.
- The morning daily academics was modified and developed further and individual units were given a chance for discussing topics relevant to the unit while the entire unit continued to sit together for topics of common interests, morbidity and mortality discussions, and planning sessions. This increased the number of topics discussed in the department and more focused discussion and division specific journal clubs became possible.
- The scope of minimally invasive surgery was extended to gastrectomy, distal pancreateo-splenectomy, and thoraco-laparoscopic esophagectomy. MIS for endometrial cancers is commonly performed

COURSES OFFERED

SL. NO.	COURSES OFFERED	DURATION IN YEARS	NUMBER OF CANDIDATES PER YEAR
1	DNB surgical oncology	3	4
2	FHNO fellowship	2	1
3	Oral oncology fellowship (institutional)	2	1
4	Gynaecologic oncology fellowship	2	1
5	Fellowship in nutrition and dietetics	1	1

STATISTICS

	TOTAL NO OF NEW CASES IN OPD	TOTAL NO OF FOLLOW-UPS	TOTAL NO OF NON-MALIGNANT CASES	TOTAL NO OF MAJOR SURGERY	TOTAL NO OF MINOR SURGERY
TOTAL	3066	31065	1255	1537	693

ACTIVITIES

a) The routine academic activity of the department includes:

1. Monday - Seminar, morbidity, and mortality (Common class)
2. Tuesday - Case presentation (in respective divisions)
3. Wednesday - Journal club (in respective divisions)
4. Thursday - Seminar (in respective divisions)
5. Saturday - Planning session (common session)

b) Morning Class Presentations:

MONTH	TOTAL NO OF PRESENTATIONS
April 20	16
May 20	14
June 20	09
July 20	14
August 20	09
September 20	15
October 20	17
November 20	16
December 20	18
January 21	11
February 21	14
March 21	18

c) Case presentation: 34

d) Department review board meeting: 3

TRAINING SESSIONS

1. A live demonstration of chemo port insertion for residents and fellows was conducted. Dr. Nizamudheen demonstrated USG-guided insertion of chemo ports in the right IJV and left IJV in adult and pediatric patients.
2. Research methodology training session was conducted for fellows and residents - Dr. Sajith Babu organized the programme.

CENTRAL STERILE SUPPLY UNIT (CSSU)

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Krishna Kumar	OT Technician & CSSU In charge
2	Midhun	Nursing Assistant

INTRODUCTION

The Central Sterile Supply Unit is under the Department of surgical oncology. It started functioning in the present location from March 2018 onwards. It functions as per the NABH Standard guideline.

The CSSU is designed in three separate zones. Zone 1 is the unclean area, Zone 2 - the clean area, and Zone 3, the sterile area

Advanced equipment in the unit includes.

1. Steam sterilizer.
2. Plasma sterilizer.
3. ETO sterilizer.
4. Sealing machine.
5. Washer disinfectant.
6. Ultrasonic cleaner.
7. Hot air oven.
8. Hand labeling machine.
9. Gauze cutting machine
10. Compressed Air gun
11. Stainless steel furniture etc.

CLINICAL NUTRITION AND DIETETICS UNIT

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Reena C	Dietician

INTRODUCTION

Nutrition support is one of the inevitable aspects of cancer care. The unit emphasizes to provide nutritional education and dietary advice to all inpatients as well as conducting regular outpatient consultations in the hospital.

SERVICES

1. Internship training
2. Training for dieticians

3. Patient Education
4. Education to public
5. Health education for school children
6. Health education for Health workers

STATISTICS

SL. NO	PATIENTS	NUMBER
1	Total OP patients	2517
2	Total IP patients	12373

PHYSIOTHERAPY UNIT

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Roopa V	Physiotherapist

INTRODUCTION

Pre-habilitation and rehabilitation are Integral Parts of Cancer treatment; Physiotherapy also plays a pivotal role in cancer pre and rehabilitation. Physiotherapy management starts from pre-rehabilitation for every patient and also helps to regain the maximum functional ability of a person due to cancer and its treatment. Even though physiotherapy does not address cancer itself; it is an extremely effective way of helping patients maintain their quality of life. The division works in unison with the surgery, radiotherapy and other oncology departments and helps in minimizing both the long and short-term after-effects of the disease as well as treatment.

CONFERENCE ATTENDED

- Role of Physiotherapy in Pediatric physiotherapy management for Cerebral Palsy organized by KAPC Kannur District.
- Role of Physiotherapy in Breast Cancer management, organized by the Society of Onco-Physiotherapists
- Role of Physiotherapy in Lymphedema Care organized by Premaya health, November 2020
- Lymphedema management - organized by Exercise India on 13th March 2021

STATISTICS

SL. NO	PATIENTS	NUMBER
1	Total OP patients	534
2	Total IP patients	2892

SPEECH AND SWALLOWING UNIT

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Aneeth	Speech Therapist

SERVICES PROVIDED:

IP and OP services for Speech and Swallowing rehabilitation for head and neck cancer patients

INPATIENT/OUTPATIENT, DIAGNOSTIC AND THERAPEUTIC SERVICES PROVIDED

1. Counselling- Pre- and post-treatment counselling
2. Swallowing assessment- Clinical, subjective, and objective
3. Swallowing therapy- Postures, maneuvers, and ROM exercises
4. Speech therapy- Laryngeal speech training
5. Voice therapy

STATISTICS

SL. NO	PROCEDURES	NUMBER
1	Speech consultation	1457
2	Swallowing therapy	462
3	Swallowing assessment	339
4	Speech therapy	55
5	Speech assessment	76
6	FEES	166
7	Video-fluoroscopy	8

FUNCTIONS, CONFERENCE & WORKSHOP DETAILS - ORGANIZED, ATTENDED & PRESENTED

1. Dr Sajith Babu, attended 10th virtual International Robotic Surgery Symposium from Oct 24th, 25th 2020 as a delegate
2. Dr Anand Ebin Thomas, attended online training course on Clinical Research Methodology organised by TMH, Mumbai on 4 consecutive Saturdays- time 9am -12pm (5th -26th September 2020)

PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)

1. Dynamic analysis of serum Ca-125 levels during neoadjuvant chemotherapy in patients with advanced epithelial ovarian cancer: a retrospective study, Adarsh Dharmarajan, A. Remya, Aswathi Krishnan, Int J Reprod Contracept Obstet Gynecol. 2021 Jan;10(1)
2. Re-staging surgery in endometrial cancer: an audit on its value, Sanjay Badesara, Ashitha R. Gangadharan, Rambeer Singh, Adarsh Dharmarajan, Int J Reprod Contracept Obstet Gynecol. 2020 Dec;9(12):4898-4902

DEPARTMENT OF NUCLEAR MEDICINE



DEPARTMENT IN CHARGE: Dr. RAHUL A S ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Rahul A S	Assistant Professor
2	Dr. Nikhil	Lecturer

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Rahul M	Technician
2	Vianey Abraham	Technician

INTRODUCTION

This department is the latest addition in MCC. The department deals with nuclear medicine diagnostic tests and therapeutic radiopharmaceutical administration. It is a state of art department and high dose radio-iodine therapy and DOTA therapy are planned.

DETAILS OF EXISTING / NEW FACILITIES:

- SPECT/CT SCANNER
- PET/CT SCANNER
- LOW-DOSE IODINE THERAPY
- HIGH DOSE THERAPY (awaiting approval from AERB)

STATISTICS: (February-May 2021)

SL. NO	CATEGORY	NUMBERS
1	SPECT/CT cases	171
2	PET/CT cases	221

ACADEMIC ACTIVITIES

- Intra departmental Case discussions
- Radiology Nuclear Medicine Board meetings
- Classes on basics of Nuclear Medicine for Nursing Staff
- Classes on basics of Nuclear Medicine for B.Sc. MRT students

**ADMINISTRATION
DEPARTMENTS / DIVISIONS**

DEPARTMENT OF GENERAL ADMINISTRATION



DEPARTMENT HEAD: RAJESH A. K

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Mr. Rajesh A K	Administrative Officer
2	Mrs. Preethudas	Personal Assistant
3	Mr. Rejoy K	Clerk/ Cashier/ Typist
4	Mrs. Bindu T K	Clerk/ Cashier/ Typist
5	Mrs.Surekha M C	Clerk/ Cashier/ Typist
6	Mr. Sreejith P K	Clerk/ Cashier/ Typist
7	Mrs. Mini P	Clerk/ Cashier/ Typist
8	Mr. Shajith R P	Attender

INTRODUCTION

General administration in a Hospital is responsible for organizing and overseeing the health services and daily activities of a Hospital or healthcare facility. It manages staff and budgets, communicate between Departments, and ensure adequate patient care among other duties like managing health informatics, recordkeeping, overseeing the financial health of the organization, managing human capital, policies for hiring, performance reviews, and staff schedules. 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). To meet the objectives of the Institute, the Administration coordinates the activities of the Centre and creates polices so that all areas of the Institute staff function efficiently.

The department has following divisions:

1. Library and Information Science Division
2. Finance/Accounts
3. General Administration Division
4. Hospital Administration- Public Relations and Clinical Services
5. Human resources and Establishment Division
6. Purchase/ Stores & Pharmacy Division
7. Security Division

LIBRARY AND INFORMATION SCIENCE DIVISION

DIVISION IN CHARGE: SUBHASH CHANDRAN A K NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Subhash Chandran A K	Medical Librarian
2	Harish Babu	Assistant Librarian

INTRODUCTION

Medical Library provides integrated library infrastructure for effective use of electronic resources. 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

Reference Services

SDI Services

Department Library

Orientation Services

Risograph-Printing Services

FACILITIES

Digital Duplicator Facilities.

Digital duplicator/Print duplicator created to produce a high volume of good quality print copies at a lower cost than toner copies.

Digital Library Facilities.

STATISTICS

Books: 3262

Newly Added: 81 (Tender Process is going on)

Journals

- Printed : 23
- On line : 46

Number of Printed Books/ Printed periodicals issued during the period: 98

Number of Printed Books/ Printed periodicals returned during the period: 97

Number of Printed Books/ Printed periodicals Department transfer: 39

Number of prints taken from digital duplicator during the period -70683

LIST OF ONLINE JOURNALS/DATABASES PURCHASED

1. Wiley online
2. Ovid
3. Springer& Nature
4. Taylor & Francis
5. Clinical Key

HOSPITAL LIBRARY

INTRODUCTION

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.

SERVICES

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

STATISTICS

- Number of Books Purchased - 237
- Number of Magazines subscribed - 35
- Number of Newspaper - 05
- Number of New Members - 16
- Number of Books & Magazines issued - 383

FINANCE & ACCOUNTS DIVISION

DIVISION IN CHARGE: REJISANKAR S.T

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Reji Sankar S T	Finance/Accounts Officer
2	Jayadeep. E. K	Clerk/Cashier/Typist
3	Anoop. V.S	Clerk/Cashier/Typist
4	Surekha.M.C	Clerk/Cashier/Typist

INTRODUCTION

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 as per 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

PLAN FUND ALLOCATION CUM UTILIZATION REPORT

Financial Year	Budget	Allotted Grant	% of Expenditure	Deficit in allocation
2020-21	1,800.00	500	100	72.22

NON-PLAN FUND ALLOCATION CUM UTILIZATION REPORT

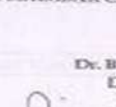
Year	Bud. Provision	Amount released	Expenditure	Deficit in allocation
	(Rs. In Lakhs)	(Rs. In Lakhs)	%	%
2020-21	1139.79	1051.78	100	7.722

INCOME & EXPENDITURE STATEMENT (UNAUDITED)

MALABAR CANCER CENTRE SOCIETY THALASSERY, KANNUR				
CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2021				
Sl. No.	PARTICULARS	Schedule No.	FY : 2020 -2021	FY : 2019 -2020
I. INCOME				
	Revenue from Hospital operations	10	38,77,21,409.00	34,30,23,008.00
	Grant In Aid - Revenue Grant	11	10,51,78,000.00	10,14,57,000.00
	Rental Income	12	18,54,409.00	23,59,980.00
	Income from Training and Teaching	13	1,02,72,626.00	1,50,18,554.00
	Other Income	14	27,84,900.47	21,77,947.00
	Pharmacy Collection		17,62,71,144.00	17,19,01,022.00
	Personal Liquidation Charges		3,71,801.00	11,71,630.00
	Interest Income		17,19,609.00	1,87,90,557.00
	Canteen Sales		2,04,56,111.00	2,19,55,822.00
	Donations & Contributions			25,60,443.00
	Project fund utilised			
	HBCR - NCDIR -ICMR Project		8,13,706.00	-
	NCDIR - E-MOR Project Fund		6,06,296.00	-
	YIPB Project		1,66,428.00	-
	BIRAC - Lamp Based Study		55,531.00	-
	SARS Cov-2RT-PCR- clinical Study		1,99,777.00	-
	Total Income		70,84,71,949.47	68,04,15,963.00
II. EXPENDITURE				
	Pharmacy consumption	15	13,11,67,959.01	13,28,52,416.00
	Employee Benefit Expenses	16	42,41,15,675.00	32,03,51,409.00
	Consumables/Treatment Expenses	17	5,51,52,807.58	10,46,52,979.00
	Energy Charges	18	2,58,58,183.00	2,47,83,572.00
	Programme Expenses	19	1,24,672.00	3,49,116.00
	Rates & Taxes	20	38,74,750.20	10,67,232.00
	Vehicle Expenses	21	18,62,474.00	15,21,420.00
	Course Conducting Expense	22	4,70,637.40	9,84,900.00
	Printing & Stationary	23	13,26,497.37	10,15,139.00
	Capital Purchase & Expenses	24	1,51,37,397.00	1,09,27,356.00
	Other Expense	25	27,15,029.00	1,31,82,400.00
	Advertisement Expenses		6,47,358.00	6,49,116.00
	Repairs & Maintenance		29,18,013.00	23,32,178.00
	Travelling Expenses		1,32,946.00	10,91,134.00
	Rent Paid		9,75,000.00	10,80,334.00
	Bank Charges		1,19,272.98	2,02,350.22
	Legal & Professional Charges		2,98,040.00	6,66,858.00
	Cleaning & Laundry Expenses		1,57,74,612.00	1,19,58,339.00
	AMC Charges		3,80,27,929.00	2,17,07,455.00
	Security Service Charges		1,09,18,130.00	1,12,44,806.00
	Subsidy given to patients		88,24,387.00	-
	Audit Fee		2,06,500.00	3,87,600.00
	Depreciation	6	11,40,18,515.00	13,36,28,805.00
	Project Expenses			
	HBCR - NCDIR -ICMR Project			
	Salary & Allowances		7,00,326.00	-
	Printing & Stationery		92,954.00	-
	Postage & Communication		4,992.00	-
	Computer Consumables		15,234.00	-

NCDIR -E-MOR Project Fund		5,99,790.00	
Salary & Allowances		6,506.00	
Printing & Stationery			
VIPB Project		1,66,428.00	
Salary & Allowances			
BIRAC - Lamp Based Study		5,533.00	
Advertisement Expenses		90,000.00	
Salary & Allowances			
SARS-CoV-2 RT-PCR - clinical Study		93,377.00	
Salary & Allowances		1,06,400.00	
Covid -19 Combo Kit			
IV Total Expenditure		85,65,06,524.54	79,66,40,164.22
V Excess of Expenditure over Income (II-IV)		14,80,36,575.07	11,62,44,291.22
Significant accounting policies and Notes on Accounts	26		


As per our report of even date attached

For RSM & ASSOCIATES CHARTERED ACCOUNTANTS FR No. 28135	For MALABAR CANCER CENTRE SOCIETY
 PAUL JOSEPH K PCA PARTNER M.No.26816 UDIN : 22026816AAAAAG1358	 Dr. B. SATHEESAN DIRECTOR
	Dr. RAJAN N. KOBHRAGADE IAS PRINCIPAL SECRETARY TO GOVERNMENT Health & Family Welfare Ayush Department Chairman of the Executive Committee
Place: COCHIN Date : 30.12.2021	 K.S USHA Additional Secretary to Govt. Finance Department

MALABAR CANCER CENTRE SOCIETY THALASSERY, KANNUR			
CONSOLIDATED BALANCE SHEET AS AT 31ST MARCH 2021			
PARTICULARS	Schedule No.	FY : 2020 -2021	FY : 2019-2020
I. FUNDS & LIABILITIES			
1. Trust Funds			
a. Capital Fund	1	1,29,28,02,183.37	98,70,32,964.00
b. Grant in Aid- Capital Grant (Pending Utilisation)	2	10,62,31,205.58	31,43,12,354.00
c. Funds & Schemes	3	5,32,28,127.06	4,10,43,287.04
		1,45,22,61,516.01	1,30,23,89,108.04
2. Current Liabilities			
a. Sundry Creditors		16,53,09,006.00	11,58,95,506.00
b. Income Received in Advance		21,91,806.02	14,41,913.30
c. Provision for Expenses	4	3,05,05,816.00	1,90,00,656.00
d. Other current liabilities	5	15,60,16,612.61	9,93,45,692.66
		35,40,23,240.63	23,55,83,767.96
TOTAL		1,80,62,84,756.64	1,53,80,72,873.00
II. PROPERTY & ASSETS			
1. Property, Plant & Equipment			
a. Tangible assets	6	70,43,21,102.90	81,10,33,269.00
b. Capital Work In Progress		57,04,41,846.89	34,35,43,250.00
		1,27,47,62,949.79	1,15,45,76,519.00
2. Current assets			
a. Deposits, Advances & other current assets	7	12,44,75,158.43	1,70,84,919.00
b. Cash and cash equivalents	8	8,90,24,944.95	9,33,25,107.00
c. Closing stock	9	9,96,10,744.04	5,46,57,521.00
d. Sundry Debtors		21,84,10,962.43	21,84,28,707.00
		53,15,21,806.85	38,34,96,254.00
TOTAL		1,80,62,84,756.64	1,53,80,72,873.00

Significant accounting policies and Notes on Accounts

As per our report of even date attached

For RSM & ASSOCIATES CHARTERED ACCOUNTANTS FR No. 28135	For MALABAR CANCER CENTRE SOCIETY
 PAUL JOSEPH K PCA PARTNER M.No.26816 UDIN : 22026816AAAAAG1358	 Dr. B. SATHEESAN DIRECTOR
	Dr. RAJAN N. KOBHRAGADE IAS PRINCIPAL SECRETARY TO GOVERNMENT Health & Family Welfare Ayush Department Chairman of the Executive Committee
Place: COCHIN Date : 30.12.2021	 K.S USHA Additional Secretary to Govt. Finance Department

FUNDED PROJECTS

YIPB PROJECT (RS. IN LAKHS)

FINANCIAL YEAR	OB	RECEIPT	EXPENDITURE	BALANCE	%
2020-21	0.39	7.41	1.66	5.36	21.32

AWAKE & AWARE PROJECT (RS. IN LAKHS)

FINANCIAL YEAR	OB	RECEIPT	PAYMENT	BALANCE	%
2020-21	1.54	0.00	0.00	1.54	0.00

HBCR NCDIR ICMR PROJECT (RS. IN LAKHS)

FINANCIAL YEAR	OB	RECEIPT	PAYMENT	BALANCE	%
2020-21	1.00	7.61	8.41	0.20	97.65

NCDIR E MOR PROJECT (RS. IN LAKHS)

FINANCIAL YEAR	OB	RECEIPT	PAYMENT	BALANCE	%
2020-21	0.93	5.74	6.06	0.60	90.93

CLINICAL ADMINISTRATION & PUBLIC RELATIONS DIVISION

DIVISION IN CHARGE: ANITHA THAYYIL

NON-ACADEMIC STAFF:

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

INTRODUCTION

Hospital Administration and Public Relations Division is the control center of the Hospital which looks after the entire operations of the Hospital. This Division manages the day-to-day operations of the Clinical side of the Centre to provide high-quality oncology care to the patients. Various administration activities related to Hospital operations are dealt with by various sections, such as registration, admission, Follow up Schemes & insurance, Billing, helpdesk and certificates& reimbursement. The department also manages funding from different NGOs to ensure the treatment of underprivileged patients.

THE MAJOR ACTIVITIES OF THE DIVISION

- Co-ordination of entire hospital activities
- Co-ordination of various training programs for the staff.
- Co-ordination of various Research Projects

- Liaison work with various Governmental and other agencies
- Billing of Hospital services
- Guidance and counseling for patients and relatives.
- Implementation of various patient welfare services
- Organizing Public events
- Quality assurance and various certification-related activities
- Management of Patient relationship
- Management of communications across the hospital & with the patients and other stake holders
- Assistance in conducting various fellowships, internships, and other training programs for external and internal students.
- Issue press releases to print and audio-visual media
- Management of patients and their relative's concerns, complaints and suggestions
- Issue of various certificates and forms related to patients' treatment.

VARIOUS SCHEMES DEALT WITH BY THE DIVISION ARE

- Karunya Arogya Suraksha Padhathi
- Karunya Benevolent Fund
- Cancer Suraksha Scheme
- Thalolam
- Comprehensive Health Care Scheme for Scheduled Tribe
- Snehasanthwanam for Endosulfan victims
- RBSK
- Society for Medical Assistance to the Poor
- ESI Scheme
- Prime Minister's Relief Fund
- Chief Ministers Relief Fund
- The patient Welfare fund of MCC(A fund created by receiving donations from various organizations, individuals etc. to help patients who do not have any financial support system)

MAJOR CLINICAL ACHIEVEMENTS 2020-21

SL. NO	DESCRIPTIONS	TOTAL
1	New cases	5384
2	Non-cancerous cases	1334
3	Follow up cases	58401
4	Total patients	65119
5	In patients	4612
6	Day CT Injections	12274
7	IP CT Injections	4204
8	Total CT Injections	16478
9	Major Surgeries	1657
10	Minor Surgeries	710
11	Total surgeries	2367
12	Total RT	3203

NEW INITIATIVES:

- **Hospital Management Committee:** Hospital Management Committee functions in a participatory mode of management where there are representatives from various Departments of the Hospital, belonging to various categories. This Committee meets and discusses the problems

related to various sections and suggests corrective actions and steps for institutional improvement. The Core Committee consists of Hospital Administrator, Purchase Officer, System Manager, Nursing Superintendent Medical Records Officer, and Finance Officer. The extended Committee consists of members from Reception, OPD, Day chemo, Wards, Biochemistry, Microbiology, Pathology, Imageology, and Radiation Departments. The members meet once a month and have discussions on various points on day-to-day functioning of the Hospital, take decisions and get them approved by Admin Committee.

- **Single Desk:** A single point Desk has been set up for obtaining all patient's reports, certificates, forms and reimbursement processing. Dedicated software (Intra-MCC) with SMS communication to the patient at each step of processing
- **Cost Counseling-** System to counsel the patient about the estimated cost of each treatment and to support the deserving patients through different schemes. Coordinating with individuals, NGOs, etc. to meet their treatment expenses.

KERALA STATE RIGHT TO SERVICE ACT – 2012

Kerala State Right to Service Act – 2012 has been implemented in MCC from 2014 May onwards. During the year 2019-20, 12538 applications have been received for various services and the same has been resolved within the time limit. The details of the service available are shown below:

SL. NO	NAME OF SERVICE	DESIGNATED OFFICER	TIME LIMIT	FIRST APPELLATE AUTHORITY	SECOND APPELLATE AUTHORITY
1	Right to obtain Medical Certificates/Treatment Certificates for various purposes	Public Relations Officer	3 days	Hospital Administrator	Administrative Officer
2	Right to obtain Certificates for financial assistance from various sources	Public Relations Officer	3 days	Hospital Administrator	Administrative Officer
3	Right to obtain Certificates for reimbursement claims for investigations/treatment	Public Relations Officer	7 days	Hospital Administrator	Administrative Officer
4	Right to obtain Train concession forms for cancer patients	Public Relations Officer	1 day	Hospital Administrator	Administrative Officer

SL. NO	NAME OF SERVICE	NO. OF APPLICATIONS RECEIVED
1	Right to obtain Medical Certificates/Treatment Certificates for various purposes	8909
2	Right to obtain Certificates for financial assistance from various sources	4673
3	Right to obtain Certificates for reimbursement claims for investigations/treatment	302
4	Right to obtain Train concession forms for cancer patients	204
	TOTAL	12538

HUMAN RESOURCES & ESTABLISHMENT DIVISION

DIVISION IN CHARGE: REJI SANKAR.S.T

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Reji Sankar	Finance Officer

INTRODUCTION

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

STAFF WHO JOINED THE INSTITUTION DURING THE PERIOD

SL. NO	ID	NAME	DESIGNATION	DEPARTMENT	DOJ
1	601	Tessy Jose	Staff Nurse	Onco Nursing	27.04.2020
2	602	Remya Raveendran	Staff Nurse	Onco Nursing	20.07.2020
3	603	Dr.Rahul.A.S	Assistant Professor	Nuclear Medicine	09.09.2020
4	604	Dr.Srikiran T.K	Assistant Professor	Imageology	09.09.2020
5	605	Manju Mathew	Staff Nurse	Onco Nursing	08.10.2020
6	606	Reshma.V	Nursing Assistant	Onco Nursing	14.10.2020
7	607	Riya.K	Nursing Assistant	Onco Nursing	14.10.2020
8	608	Anju Aravind O.K	Staff Nurse	Onco Nursing	15.01.2021
9	609	Dr. Sherin P Mathew	Assistant Professor	Medical Oncology	24.02.2021
10	610	Dr. Nandini Devi. R	Assistant Professor	Medical Oncology	26.02.2021
11	611	Dr.Vivek Nair	Assistant Professor	Pathology	12.03.2021
12	612	Ancy M Panicker	Staff Nurse	Onco Nursing	18.03.2021

STAFF RESIGNED DURING THE PERIOD

SL. NO.	ID	NAME	DESIGNATION	DEPARTMENT	DATE OF JOINING	DATE OF RELIEVING
1	220	Ratheesh	Attender	General Administration	01.08.2011	04.04.2020
2	539	Bertin Stephen	Staff Nurse Gr-II	Onco Nursing	14.09.2018	08.04.2020
3	505	Ashwathi.R	Staff Nurse Gr-II	Onco Nursing	04.06.2018	25.04.2020
4	496	Haseena.P.A	Staff Nurse Gr-II	Onco Nursing	17.05.2018	29.04.2020
5	381	Dr.Nived.K	Associate Professor	Onco- Anaesthesiology	04.02.2015	20.06.2020
6	578	Dr.Neha Mohan	Assistant Professor	Imageology	16.09.2019	17.10.2020
7	506	Manjushree	Hospital Assistant	Clinical Administration & Public Relations	04.06.2018	24.10.2020
8	191	Dr.SajithBabu.T.P	Professor	Surgical Oncology	22.10.2010	23.01.2021
9	490	Harikrishnan.P.G	Staff Nurse Gr-II	Onco Nursing	14.05.2018	08.03.2021
10	236	Rejisha.K	Radiographer	Radiation Oncology	26.09.2011	19.03.2021
11	535	Divya.I.V	Staff Nurse Gr-II	Onco Nursing	13.09.2018	23.03.2021

PERMANENT STAFF RETIRED FROM SERVICE

SL. NO.	ID	NAME	DESIGNATION	DEPARTMENT	DATE OF JOINING	DATE OF RELIEVING
01	62	Liby George	Head Nurse	Onco Nursing	26.03.2001	31.05.2020
02	178	Satheesan.P.M	Security Officer	General Administration	01.07.2009	31.05.2020

PURCHASE DIVISION

DIVISION IN CHARGE: JIJU.T.T.V

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Mr. Jiju T T V	Purchase Officer
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

INTRODUCTION

All purchase matters including purchase of medicines, including local purchases are handled by this division. Purchase procedures are carried out adhering to Store Purchase Rules. The division is headed 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.
- Prepare reports and summarize data including sales reports and book value.
- To support relevant departments with quotations for tenders.
- To monitor and co-ordinate deliveries of items between suppliers to ensure that all items are delivered to the site/store on time.
- To plan and manage inventory levels of materials or products.

MAJOR EQUIPMENT PURCHASED DURING THE PERIOD 2020-2021 ARE AS FOLLOWS:

SL. NO	EQUIPMENT	NAME OF THE SUPPLIER	AMOUNT (IN INR)
Year: 2020-2021			
1	Microwave Ablation System with accessories [Model: Solero Microwave Tissue Ablation (MTA) System; Make: Angiodynamics Inc., USA]	M/s. Access Devices, 28, 12 th Cross, Indiranagar 1 st Stage, Bangalore – 560 038	21,00,000.00
2	Gel System (Make & Model: Br Biochem Horizontal Electrophoresis, Cat. No.: Bc-130-36, Br Biochem Life Sciences Pvt. Ltd)	M/s. Universal Agencies, PalakkalAngadi, Thrissur - 680 001	18,900.00
3	Electrophoresis (Make & Model: BR BIOCHEM DIGITAL POWER SUPPLY, BrPS4003)	M/s. Universal Agencies, PalakkalAngadi, Thrissur - 680 001	58,410.00

4	16 Slice PET-CT with required accessories (Manufacturer: Siemens Medical Solutions USA, Inc., Model: Biograph Horizon)	M/s. Siemens Healthcare Private Limited, 272/688, 5 th Floor, Seethakathi Business Center, Anna Salai, Chennai – 600 006, Tamil Nadu	11,83,00,000.00
5	Gamma Camera (SPECT/CT) with accessories (Model: OPTIMA NM 640)	M/s. Wipro GE Healthcare Pvt Ltd, No.4, Kadugodi Industrial area, Sadaramangala, Whitefield, Bangalore 560 067	USD 5,25,000.00 + Customs Duty + INR 56,00,000.00
6	Refrigerated Centrifuge with required accessories (Model: Sorvall ST8R, Make: Thermo Fisher Scientific)	M/s. KochinInlabEquipments India Pvt. Ltd, 29/2391-d, Vihaan, Chilavannur, Kadavanthra.P.O, Kochi-682020	5,90,000.00
7	PCR Machine with required Accessories (Make & Model: INVITROGEN 3X32 WELL PCR SYSTEM, CAT # 4484073)	M/s. Biovision, 612B, Mattathil, Poickattussery, Chengamanadu - P.O, Nedumbassery, Kochi – 683 578	6,37,200.00
8	Flexitron HDR – 20 Channel Brachytherapy System and standard accessories (current version)	ELEKTA LTD, Linac House, Fleming Way, Crawley, West Sussex, RH10 9RR, United Kingdom	USD 1,57,000.00 + Customs duty
9	Operation Theatre Table with required accessories (Make: Palakkad Surgical Industries Pvt. Ltd, Model: Maximus V2)	M/s. Palakkad Surgical Industries Pvt. Ltd, Petronet Road, Wise Park, Kanjikode East, Palakkad, Kerala, Pin – 678 621	12,10,000.00
10	Electro Diathermy with Ultra Sonic Cutting Unit with accessories [Model: Thunder beat, Make: Olympus Medical Systems India Pvt. Ltd]	M/s. Serum Biologicals, RajagiriThekkenada, Thirunakkara, Kottayam - 686 001	22,00,000.00
11	Smoke Evacuator (Make and Model: IES-3, Erbe Medical, Germany)	M/s. Cygnus Systems, 28/1232-A, HARI, KCRWA-104, K.P. Vallon Road, Kadavnthara, Cochin - 682020	7,34,456.00
12	CCTV Security Surveillance System at Pediatric Block	M/s. Microplus Networking Solutions Pvt. Ltd, SreePushpa Complex, Kama Kodi Nagar, Chennai - 600 087	20,95,592.00
13	Ligasure Probes with accessories (Make: Valley lab)	M/s. India Medtronic Pvt. Ltd, Thali Complex, Near Suriya Gandhi Kalyana	10,75,200.00

MEDICINE /CONSUMABLES &REAGENTS PURCHASE

The entire medicines, consumables, surgical disposables, X-ray films, common drugs, antibiotics, reagents, etc., required for the Centre, 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 the institute website. A pre-bid meeting is conducted with potential suppliers and tenders are floated. Selected firms are to execute a supply agreement with MCC and payment released based on the supply and proper checking of bills. Non-quoted medicines/emergency medicines are repeated tenders purchased from NeethiStores/Local market, subject to availability. The total purchase amount of medicines during the year 2020-21 is Rs. 185295628/- (Rupees Eighteen crore Fifty-two Lakh ninety-five thousand six hundred and twenty-eight only) and the total Purchase Amount of Re-agents& consumables during the year 2020-21 is Rs.4,98,39,773/- (Rupees Four Crore Ninety-eight lakh Thirty-nine thousand seven hundred seventy-three)

PHARMACY DIVISION

PHARMACY IN CHARGE: MR.SUGANDHAM

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Sneha V N	Pharmacist
2	Sugandham	Assistant Pharmacist & Pharmacy I/c
3	Nisha Gangan T V	Assistant Pharmacist
4	Sajitha P	Assistant Pharmacist
5	Nidheesh K	Assistant Pharmacist
6	Sabitha M V	Pharmacy Assistant
7	Bindu K T	Pharmacy Assistant
8	Darley Joseph	Pharmacy Assistant

INTRODUCTION

MCC Pharmacy, due to the peculiar location of the Centre, has much significance in providing medicines for the patients in MCC. As the Centre is situated far away from Thalassery town it is necessary that all required medicines needs to be adequately stocked. Non-availability of medicines in the Pharmacy will force poor patients to travel a long way to Thalassery for availing the medicines. Hence as a matter of policy of the institution, it's the responsibility of the institution to make the medicines available in the pharmacy. At present three Pharmacies are operating in MCC; one main Pharmacy, one IP Pharmacy on the 2nd floor (exclusively for IP patients), and the 3rd one in the Day chemo Ward (exclusively for Chemotherapy patients). The main Pharmacy is having a facility of Cold storage system (Walk-in cooler) for maintaining the potency of Drugs. Separate Narcotic Drugs counter is also provided in the main Pharmacy. A detail of purchases and sales during the year 2020-21 is as below:

Total purchase amount	-	Rs. 185295628/-
Total sale amount	-	Rs. 176271144/-

STORE DIVISION

STORE IN CHARGE: LASITHA

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Lasitha	Store Keeper (General)
2	Viju V S	Store Keeper (Pharmacy)

INTRODUCTION

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, and 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 the 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.

TAPAL SECTION: The 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: SATHEESAN.P.M

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Satheesan P M	Security Officer
1	Babu.M	Driver
2	Nidheesh P.V	Driver
3	RajeevanKarayi	Driver
4	Ratheesahan.V.P	Driver

INTRODUCTION

The security wing of MCC plays a pivotal role in maintaining the overall security of MCC and is headed by Security Officer. He is under the direct supervision of the 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 smooth functioning. Vigilant security measures need to be undertaken as a lot of highly sophisticated and costly state of art equipment and some equipment are installed under Atomic Energy Regulatory Board (AERB) regulations. AERB insists on tight security for this equipment and this Centre comes under the direct supervision of the District Superintendent of Police. Security measures are even tightened up, especially during the COVID-19 breakout, by installing surveillance cameras as and where required. This Division also acts in charge of Drivers and Hospital vehicles and handles the Fires Safety of the Institution.

- Lost and found during the period: 21 incidents
- Visitors at Administration: 982
- Fire incidents during the period: 02

VEHICLES

SL. NO	VEHICLES	NUMBER
1	Bus	02
2	Jeep (Bolero)	01
3	Car (Indica)	01
4	Van (Eeco)	01
5	Omni Ambulance	01
6	Tempo Traveller	02
	Total	08

ENGINEERING AND MAINTENANCE DEPARTMENT



DEPARTMENT IN CHARGE: REENA P C

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Reena .P.C	Engineer –In Charge
2	Devadasan.V.V	Project Engineer
3	Chandran .K	Supervisor Electrical
4	Liji Krishnan	Supervisor Biomedical
5	Shijina .E	Supervisor Civil
6	Susanth.P.P	Electrician
7	Nyju A.C	Electrician
8	Anil Kumar .S	Electrician
9	Rasheed P	Plumber
10	Jinsithlal. O.N	Plumber

INTRODUCTION

The Engineering Wing of MCC has contributed consistently in the progress of the institute and the responsibilities include undertaking of all major and minor building projects including its design & drawings, estimation, execution through a call of tender, supervision, obtaining all regulatory approvals etc and maintenance. Routine maintenance of all hospital buildings and their services along with machinery and equipment in MCC is also taken care of by the Engineering Wing.

Operation and maintenance of Electro mechanical installations in MCC like 11 KV Electrical Substation consisting of 1600 KVA transformer & HT equipment, Diesel Generators, Lift, Telecommunication system, Pump sets & water supply system, sanitary installations, Effluent treatment plant and maintenance of Radioactive equipment, MRI, CT, etc. are part of regular works of the Engineering Wing. AMC of all Hospital equipment and insurance processing of whole Hospital equipment, buildings, roads and other structures under different categories and taking necessary steps to settle claims whenever a damage/ replacement occurs etc. are also handled by the Engineering Wing. They also take care of liaison works

with local authorities like BSNL, KSEB, Electrical Inspectorate, Municipality Self-governing bodies etc. whenever the need arises for any statutory permit/approvals. The Engineering Wing plays a significant role in the smooth functioning on a day-to-day basis as well as various developmental projects of the Institution.

THE FOLLOWING BUILDING WORKS WERE COMPLETED AND INAUGURATED

1. CONSTRUCTION OF GENERAL STAFF QUARTERS

18 Nos individual quarters with Basement floor +5 floors

Plinth area: 2351.38sq.m. The project cost: 900 lakhs

Plinth area of each quarter: 84.46 sq.m



Common Lift, Staircases, Parking area, solar power plant etc.

The work of General Staff Quarters was completed satisfactorily in all respect and inaugurated by the Chief Minister of Kerala through an online function in Feb 2021.

2. CONSTRUCTION OF EXTENSION OF CANTEEN

Basement floor and Ground floor with Plinth area: 366.08 sq.m

The project cost: Rs. 95 Lakhs (including all consultancy charges)



The work of Extension of Canteen facilities was completed satisfactorily in all respect and inaugurated by the Chief Minister of Kerala through an online function in November 2020.

3. CONSTRUCTION OF PAEDIATRIC HAEMATOLOGY ONCOLOGY BLOCK

The project cost: Rs. 11.39 crores

Construction of Pediatric Oncology Block with Plinth area 3450.04sq.m was completed and inaugurated after completing Interior decoration. Pediatric Oncology Block is planned as a child-friendly hospital building and accordingly the furniture, wall, floor ceiling, exterior finishing etc. were designed which are different from a traditional building design. The Chief Minister of Kerala inaugurated the newly constructed Pediatric Oncology Block in November 2020 through an online function and the Child-friendly design of the Pediatric block received lots of praise & appreciation from many dignitaries including the Health Minister. Efforts were made to provide a mini theatre & conference hall with a good quality audio system. Lions Club, Thalassery agreed to sponsor mini theatre & conference hall work from their CSR fund with an estimated cost of Rs.30 Lakhs. Similarly, providing children's park/play area with suitable play equipment is taken up by M/s IOC Ltd through their CSR funds at an estimated cost of Rs.52Lakhs.



4. CONSTRUCTION OF NUCLEAR MEDICINE BLOCK:

Plinth area : 2448sq.m

The Nuclear Medicine Block building is the extension of the Radiology Block and all works were completed satisfactorily. The **CT, SPECT CT etc. were installed and started functioning** and **intervention radiology (Cathlab) also started functioning**. The work has been carried out at an estimated cost of Rs 900Lakhs and inaugurated by the CM during an online function in November 2020. This Nuclear Medicine block building consists of rooms for Cath lab, CT, MRI & MRHIFU, SPECT CT & PET CT etc. and its utility services.



5. CONSTRUCTION OF LABORATORY BLOCK:

Plinth area	: 2306 sq.m
Project Cost	: Rs. 950 Lakhs

This block includes pathology Molecular Cytogenetic, microbiology, and histopathology sections with its laboratories, research facilities, faculty rooms/study rooms/class rooms, machinery/equipment rooms, bio-bank, museum thinkers bay etc. Routine laboratories/pathology activities of MCC are also being handled in this Laboratory Block. All works were completed satisfactorily and the Laboratory Block was inaugurated via an online programme by the Chief Minister of Kerala in November 2020



DETAILS OF NEW FACILITIES AND MODIFICATIONS TO EXISTING FACILITIES

The following achievements/activities were carried out/ projects executed in MCC during the period from 01/04/2019 to 31/03/2020 in addition to above mentioned major works.

Centralized Medical Gas Supply system work consisting of an Oxygen plant, Compressed air plant and vacuum plant etc. in Pediatric Oncology Block, Nuclear medicine block and New OT area were completed in all respect satisfactorily.

The whole biomedical waste is disposed of through IMAGE after collecting it in storage space. Based on the norms of NABH, biomedical waste should be transported by trolley and should keep in separate stores with proper segregation facilities. A storage room was constructed accordingly and started functioning

The Engineering department also finalized technical specifications and tender processing in respect of the Construction of a 400 KLD Water Treatment plant, Power Laundry, 6 no.s Bed cum Passenger Lifts etc. and these works will be commenced soon, as all processes for the same are in final stages.

Nursing Hostel & Student Hostel works show good progress.

Waste water & Sewage water line along with damaged manhole, gully trap/floor trap, etc. needed to be revamped/relayed in the canteen area and the same was taken up and completed satisfactorily. Replacement of floor & wall tiles on the rear side area of the canteen building was also completed improving hygienic environment and services of the canteen.

SETTING UP OF COVID-19 TESTING LABORATORY

As the pandemic started spreading to more and more people, there was a need of setting up new COVID-19 labs across the state. MCC understood the need to support the Government initiative to contain the spread of the pandemic as a social responsibility and planned to set up a COVID-19 lab on the MCC premises. Meanwhile, the Department of Health, Government of Kerala also requested us to examine the feasibility of setting up a COVID-19 lab at MCC premises. It was decided by the authorities to utilize 3 rooms of the old pathological lab area and machinery kept for the treatment of cancer patients to set up a COVID-19 lab at MCC. Due to the lockdown, it was difficult to arrange labor and materials from outside the market. Hence

it was decided to utilize available labor and materials in MCC. The Engineering wing rose to a crisis and managed to setup the COVID-19 lab facility within 24 Hrs. Arranging positive pressure inside the lab area, providing exhaust pipes to the bio safety cabinet, sealing of complete area as a safety precaution etc. were some of the tasks managed with available resources and limited time frame. The Engineering wing spends only a total of Rs.10,000/- (8500/- towards exhaust pipe line work & 1500/- for shifting of AC unit) for setting up this lab facility in 24 Hrs.

Later, it is found that this COVID-19 lab area needed to be handed over for demolition and start a new KIIFB project (phase I) for OP renovation. Hence it was needed to shift this facility to a suitable location as the closing of the COVID-19 lab while the number of patients is going up is not advisable and starting of the prestigious KIIFB project can't be delayed. Accordingly, the COVID-19 lab facility has been shifted to the Cord Blood Bank area within 48 hours, once the decision for shifting the lab was conveyed by the authorities. Presently, about COVID-19, 250 samples are being tested daily at this facility and contributing to the government's fight against the dreaded virus.

SETTING UP OF CASUALTY

At MCC, there was no specific area has been designated as a casualty, for the past 20 years. We were using beds at day chemo or spare beds in the surgery ward to be utilized as Casualty beds. However, during the final visit of the NABH assessment team, they insisted that MCC should have a designated Casualty area and it should be near the main entrance area. Hence, the Engineering wing, which was functioning near the main entrance area has been shifted to the basement floor and a full-fledged 3 bedded Casualty unit has been setup in that area and it is functioning normally at a designated place near the main entrance now as per the NABH norms. Due to the present COVID -19 scenario, all new and old patients coming to MCC need to be screened before allowing entry inside the hospital. The number of patients coming daily to MCC also increased in recent times. Hence an OP section has been setup near the Casualty area and functioning normally at present.

NEW TELE COBALT MACHINE

The Cobalt Machine installed at MCC in 2005 was replaced with new machine. The government has approved the procurement and installation of a new Tele Cobalt Machine through KMCL. The work was awarded to M/s Team Best Theratronics, Chennai as a turnkey project. Since the vinyl flooring carried out by the firm was found to be inferior and levelling of the flooring was inadequate, we didn't take over the machine and asked them to rectify the defects immediately. However, M/s TBT failed to attend to the defect rectification and the commissioning of the newly installed machine was delayed very badly for many months. MCC was very much in need to utilize this newly installed Tele Cobalt Machine to treat patients. Hence, it was decided to carry out this rectification work at the risk and cost of M/s TBT. The agency was informed accordingly and work was taken up through M/s ULCCS Ltd. Now, rectification works are completed

KIIFB PROJECTS

1. KIIFB PROJECT – PHASE I

The project includes two parts namely (i) Construction of the RT block and (ii) Renovation of the OP block. The project commenced in June 2020 after a delay of several months due to various reasons. The Estimated cost of the project is ₹81.69 Cr and is being executed through M/s BSNL as SPV and work is awarded to M/s CheriyanVarkey Construction Pvt. Ltd. Site preparation work for the RT block construction like cutting of trees, disposal of excavated earth etc. were arranged by MCC after obtaining necessary approval/permission from the statutory authorities. In respect of OP block renovation work, the existing HDU, ICU, Female & Male surgery ward, Feeding room, Dialysis room etc. from the 1st-floor area needed to be shifted along with medical gas pipe line system, Air-conditioning units, Power supply, UPS supply, Hot water supply etc. to a suitable location, which was achieved as per the target dates and 1st floor of OP block building handed over to M/s BSNL for carrying out renovation works. At present 80% of the Renovation works on the 1st floor of the OP block are completed and RT block construction works are at the footing stage.

2. KIIFB PROJECTS – PHASE II

Name of project: Malabar Cancer Centre new block - Development of MCC as Post Graduate Institute of Oncology Sciences and Research

Plinth area : 50,044 sq.m

Administrative Sanction Amount: ₹ 562.245 Crores

SPV : WAPCOS.

FACILITIES INCLUDED

Underground Parking, Stack parking/Entry-General Public, Transfusion medicine/Cellular Therapy/Pre-Operative ward, Palliative Care Department/Pre-Operative block, Medical Oncology/Wards/M.I.C.U/ Medical H.D.U, Post-Operative Block/I.C.U/H.D.U/Critical Care Department (Surgical), O.T Complex(10+1 robotic)/Anesthesia Dept. /Recovery Area,(Services/MEP/ELEC/HVAC/Dormitory/Maintenance/ Intensive Chemotherapy/Hematology Depts./BMT Wing (17 rooms), (Bio-Chemistry/Microbiology Department/Community Oncology Department /Surgical /Ocular /Nutrition Oncology Department, (Resident Quarters/I.R.B/Oncology Nursing Department /Library Block), Research Labs/Incubation center / VIP Suite / Dining/ Auditorium (300 pacs)/Work shop, Administrative Dept./ Directors Office/ H.I.T/VIP Lounge/ Symposium Halls/ Exam Halls. Equipping and furnishing also included in the project

The Engineering wing actively provided all necessary feedback/data to M/s WAPCOS for finalizing the design of the project as well as finalizing the scope of works to be included in the Phase – II project. Facilitating the design team for site visits and providing needful information about the existing facilities for incorporation into the project also were taken care of by the Engineering wing. The Phase – II Project is in the final phase of approval at KIIFB and is anticipated for commencement of work.



DEPARTMENT OF ONCOLOGY NURSING



DEPARTMENT HEAD: SREELATHA P NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Abhina S S	Staff Nurse
2	Abhilash.K.K	Staff Nurse
3	Aiswarya K S	Staff Nurse
4	Ajaya Kumar V D	Staff Nurse
5	Ajith.N	Staff Nurse
6	Akash Surendran	Staff Nurse
7	Ameer Sanchani O	Staff Nurse
8	Aneesha S	Staff Nurse
9	Anjana g N	Staff Nurse
10	Anjana.S.R	Staff Nurse
11	Anju baby	Staff Nurse
12	Ansil.M	Staff Nurse
13	Anuthara R	Staff Nurse
14	Archana.V.Hari	Staff Nurse
15	Asha Gopi	Staff Nurse
16	Asha john b	Staff Nurse
17	AshamolM A	Staff Nurse
19	Athira k Chandran	Staff Nurse
20	Bhavadas	Staff Nurse
21	Bhavya.K.K	Staff Nurse

22	Bijeesh Mohan	Staff Nurse
23	Bijitha P	Staff Nurse
24	Bindhu Raman	Staff Nurse
25	Blassy P	Staff Nurse
26	Chithira.B	Staff Nurse
27	Deepa Mathew	Staff Nurse
28	Depu Raj	Staff Nurse
29	Divya C M	Staff Nurse
30	Eana S	Staff Nurse
31	Fathimath Suhra	Staff Nurse
32	Haseenamol .K A	Staff Nurse
33	JaleemaLawarance	Staff Nurse
34	Jayakrishna prabhu	Staff Nurse
35	Jayasree	Staff Nurse
36	Jemy Mathew	Staff Nurse
37	Jibin K V	Staff Nurse
38	Jincy Xavier	Staff Nurse
39	Jisha K	Staff Nurse
40	Jisha P	Staff Nurse
41	Jitha Joseph	Staff Nurse
42	Jithin T P	Staff Nurse
43	Jolly	Staff Nurse
44	Kastoori	Staff Nurse
45	Kavitha C N	Staff Nurse
46	Liby George	Staff Nurse
47	Ligy Jose	Staff Nurse
48	Maneesh	Staff Nurse
49	Manjima.T	Staff Nurse
50	Manju Mathew	Staff Nurse
51	Maya P K`	Staff Nurse
52	Meera .R.NAIR	Staff Nurse
53	Naseema.P.P	Staff Nurse
54	Navami .T .C	Staff Nurse
55	Navya.T.K	Staff Nurse
56	Neha.S	Staff Nurse
57	Nidhina.K.P	Staff Nurse

58	Nimmy P V	Staff Nurse
59	Nirmala Nallacherry	Staff Nurse
60	Nisha.A .R	Staff Nurse
61	Prajina. E	Staff Nurse
62	Prasanth. C. Das	Staff Nurse
63	Praseeda	Staff Nurse
64	Praseetha .M	Staff Nurse
65	Rajalekshmi.V	Staff Nurse
66	Remya Raveendran	Staff Nurse
67	Reshmi.B	Staff Nurse
68	Rinsha P K	Staff Nurse
69	Rishana.K	Staff Nurse
70	Roni Antony	Staff Nurse
71	Sabeena Mathew	Staff Nurse
72	Sabitha K	Staff Nurse
73	Sabitha.C.S	Staff Nurse
74	Sabitha.M.S	Staff Nurse
75	Sachithra E	Staff Nurse
76	Sajika	Staff Nurse
77	Sajina N	Staff Nurse
78	Sajitha. P	Staff Nurse
79	Saritha. K .R	Staff Nurse
80	Saritha. N	Staff Nurse
81	Satheesh .M	Staff Nurse
82	Seena. E	Staff Nurse
83	Seena Mathew	Staff Nurse
84	Shabina Palliparavana	Staff Nurse
85	Shaija. E	Staff Nurse
86	Shamseer	Staff Nurse
87	Sheeba.S	Staff Nurse
88	Sheeja Nellikka	Staff Nurse
89	Sheena C	Staff Nurse
90	Sherjin A J	Staff Nurse
91	Shibimol Thomas	Staff Nurse
92	Shiji P	Staff Nurse
93	Shiji Poullose	Staff Nurse

94	Shijila V	Staff Nurse
95	Shimna Sebastian	Staff Nurse
96	Shiniraj R	Staff Nurse
97	Shiny A F	Staff Nurse
98	Shiras	Staff Nurse
99	Sibi K Daniel	Staff Nurse
100	Sijo Augustine	Staff Nurse
101	Silja Kurian	Staff Nurse
102	Simimol	Staff Nurse
103	Sindhu N R	Staff Nurse
104	Sindhu S	Staff Nurse
105	Sindhu.M	Staff Nurse
106	Sini S S	Staff Nurse
107	Sivakumar.G.S	Staff Nurse
108	Smitha Grace	Staff Nurse
109	Smithamol D	Staff Nurse
110	Soumya Jose	Staff Nurse
111	Soumya Mathew	Staff Nurse
112	Soumya P G	Staff Nurse
113	Sreeja Kumari G	Staff Nurse
114	Sreeja.K	Staff Nurse
115	Sreejisha P	Staff Nurse
116	Sreenivas	Staff Nurse
117	Srelatha T N	Staff Nurse
118	Srijil A	Staff Nurse
119	Sujatha K	Staff Nurse
120	Suma Devi	Staff Nurse
121	Sumi.P	Staff Nurse
122	Sunera Rajan	Staff Nurse
123	Sunitha Kumari S	Staff Nurse
124	Tessy Jose	Staff Nurse
125	Vijina K	Staff Nurse
126	Vineeth Krishnan	Staff Nurse
127	AncyM.Panickar	Staff Nurse

SL. NO	NAME	DESIGNATION
1	Abitha.C.A	Nursing Assistant
2	Agimol Dominic	Nursing Assistant
3	Biju Prasad	Nursing Assistant
4	Bindhu K M	Nursing Assistant
5	Deepa Prabha O B	Nursing Assistant
6	Dhanya E	Nursing Assistant
7	Dhanya P M	Nursing Assistant
8	Jerry A	Nursing Assistant
9	Jinshi R S	Nursing Assistant
10	Jiji.P.S	Nursing Assistant
11	Kalamol A B	Nursing Assistant
12	KavithaPrakash	Nursing Assistant
13	Lethiamma P R	Nursing Assistant
14	Mary I C	Nursing Assistant
15	Mercy John	Nursing Assistant
16	Midhun Gopalakrishnan	Nursing Assistant
17	Neethu B S	Nursing Assistant
18	Nisha T	Nursing Assistant
19	Prajina E K	Nursing Assistant
20	Ragi Sandhya	Nursing Assistant
21	Rehana T	Nursing Assistant
22	Rekha Muraleedharan	Nursing Assistant
23	Santhini Chandran	Nursing Assistant
24	Sajina.K.K	Nursing Assistant
25	Shamla N	Nursing Assistant
26	Shibila K	Nursing Assistant
27	Shibu S	Nursing Assistant
28	Shobitha L	Nursing Assistant
29	Silna.K.K	Nursing Assistant
30	Sreejith S	Nursing Assistant
31	Suma.S	Nursing Assistant
32	Surya C	Nursing Assistant
33	Zeenath Battantavida	Nursing Assistant
34	Indu.P	Nursing Assistant
35	Neena.A.P	Nursing Assistant

INTRODUCTION

The Department aims at high-quality nursing care for the patients and community. The main stratum of the workforce in MCC is constituted by well-trained professional nurses. There are various nurse-led clinics such as CVAD, Stoma care, Lymphedema etc. Given the COVID-19 outbreak onco-nursing department planned and implemented strategies to fight COVID as per the guidelines of the COVID cell of the institute.

It includes

- Screening of all patients, relatives, and staff on daily basis.
- COVID sampling for all suspected patients and staff.
- A well-equipped isolation room with a ventilator facility was set up in the ward.
- In order to tackle any emergency related to the corona outbreak, COVID-19 RRT onco-nursing group was created.
- Provided training to all the staff nurses and Residency oncology nurses regarding ventilator care and management of a patient on a ventilator.
- Prepared informative videos about donning and doffing of PPE do have and don'ts during COVID-19 and staff awareness then circulated these videos among all staff.
- Training on infection control policies for all hospital staff by the infection control team.
- Information regarding webinars and online classes was provided and started online classes for nurses were through the clinical nursing education unit.
- A quarantine facility for hospital staff was arranged on the hospital premises.

NURSING INSERVICE EDUCATION PROGRAMMES (NIELP)

In-service education programs have been carried out throughout the year to upgrade the standard of nursing care and solve practical issues. The following classes were conducted at MCC.

- CVAD care and management classes are given to all nursing staff.
- An overview of the new insurance policy Karunya Arogya Suraksha Padhathi (KASP)
- National accreditation board hospital standard (NABH)
- Infection control measures during COVID-19.
- Best practices in iv cannulation on 24.01.2019
- The clinical Nursing Education unit was started to improve the professional competency of nurses. The topics were selected and planned for giving classes for nurses every week.
- The patient education cell started functioning in November 2019.
- Online classes started and staff attended webinars related to COVID-19 and management.

ACTIVITIES AND ACHIEVEMENTS

Online classes started for Nurses and Nursing trainees conducted regularly.

A training programme regarding the care of CVAD, 7 demonstrations of Chemoport access by BARD.

INFECTION CONTROL NURSE ACTIVITIES

Infection control nurse conducted various sessions for newly recruited nurses and housekeeping staff on hospital infection control practices, biomedical waste management, spill management and needle stick injury. Individual area rounds were conducted by ICN daily and onsite training programmes were conducted in clinical areas. Surveillance of environmental culture and sterility samples are taken on a monthly basis and report distributed to all perspective areas and take action according to hospital policy. Special training to all hospital staff regarding COVID-19 was also carried out.

INDEPENDENT DIVISIONS

CLINICAL RESEARCH & BIostatISTICS DIVISION

DIVISION IN CHARGE: MAYA PADMANABHAN

ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Maya Padmanabhan	Lecturer
2	Riyas M	Lecturer

NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Viju V	Clerk/ Cashier/ Typist

INTRODUCTION:

The Division of clinical research and Biostatistics assist to develop, disseminate and apply biostatistical and analytical methods for research in the health sciences, encompassing both research design and analysis. The division is responsible for smooth facilitation of clinical research, organizing training in clinical research methodology, institutional review board- scientific committee, Ethics committee meetings, Scientific advisory and research advisory committee meetings etc. They act as a clinical trial unit for the institution. Apart from this, academic matters of the institution are also taken care of by the division.

The division supports the conduct of clinical data management for clinical trials in compliance with ICH-GCP, regulatory requirements. It caters to the needs of all the faculty, scientific staff, and students in the Institute in teaching and research.

STATISTICS

SI. NO	MEETING NAME	NO. OF MEETING CONDUCTED
1	Scientific Advisory Committee (SAC)	1
2	Research Advisory Committee (RAC)	1
3	Institutional Review Board –Scientific Review Committee (IRB-SRC)	12
4	Institutional Ethics Committee (IEC)	4
5	Academic Monitoring Cell (AMC)	12

1. ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

- Friday classes, Research Methodology workshop

2. FUNCTIONS, CONFERENCE & WORKSHOP DETAILS

- CReDO workshop from 3rd March to 7th March 2020 at Mumbai
- Kerala Cancer Grid Second meeting
- IIAP Kerala chapter formation meeting
- NCG-webinar series
- Webinar Series on “Research Methodology”, Cooperative Institute of Health Sciences, Thalassery, 13th to 16th Oct 2020

3. ONGOING RESEARCH PROJECTS

- BIRAC -CTN Project
- Costs emerging from the incidence of severe health outcome, and its impact on wealth: An analysis of cancer patients from Northern Kerala
- Markov Chain Modeling of Multiple Myeloma: A Disease Progression Model
- Retrospective Analysis of Breast cancer in younger women: An experience from tertiary care cancer center of south India

4. PUBLICATIONS - BOOKS / JOURNALS

- Knowledge, Perception, and Attitudes of General Population towards Cancer and Cancer Care: A Cross-Sectional Stud -Accepted for publication (Cancer Research, Statistics, and Treatment, Maya Padmanabhan, Dr.Satheesan B, Muhammed Sha, Riyas M)

HEALTH INFORMATION TECHNOLOGY DIVISION

DIVISION IN CHARGE: RANJITH M K NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Ranjith M K	System Manager
2	Bavina C	Junior System Analyst

INTRODUCTION:

The Health Information Technology Division, under the Department of Cancer Registry and Epidemiology commenced in the year 2012. Currently, the division is under the direct supervision of the Director.

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 implementation of information systems to support both clinical and business operations and achieve more effective and cost-beneficial IT operations. The division led to the implementation of the hospital policy for information and associated computer technology. It undertakes broad system development and research and has responsibilities for organizational change to support the new system.



MAJOR ACTIVITIES /PROJECTS

1. Administration & Management of e-Hospital Software implemented at MCC.
2. Implemented e-Office project.
3. Implemented eSanjeevani OPD five days a week.
4. Updating and maintaining the official website of MCC.
5. Server and Database Administration, Management, and Maintenance
6. Desktop Computers (200+), laptops, Printers (80+), Scanner, Projectors, Local Area networks (40+Switches & 12 Racks), Network devices, UTM, etc. Maintenance and support
7. Maintenance of CCTV Security Surveillance System, PA system & Wi-Fi Connectivity

8. Designed, developed, and Implemented e-Palliative Software
9. Managing Virtual Tumor Board (NCG), Virtual Consultations, and Telemedicine
10. Support for Online meetings, Online Classes, etc.
11. Developed & Implemented online examination facilities and online career applications.
12. Developed & Implemented IntraMCC software for issuing various certificates
13. Developed & Implemented File Movement Tracking Software System
14. Implemented Bio-medical Asset and Maintenance Management System
15. Implemented Mobile Application for MPBCR Data Collection
16. Implemented Mobile app for PBCR Data collection
17. Implemented Canteen Billing and Management Software
18. Implemented e-Procurement Project
19. Official E-mail to all Employees
20. Managing, Administrating, and providing support for Online Birth & Death Registration, Centralized Procurement and Rate contract System(CPRCS), Government e-Market (GeM), HR & Pay Role Management Software, Online Registration System through ORS portal, etc.
21. Implemented Biometric Punching System and Proximity ID card.
22. Interfaced Biochemistry Analyzers with e-hospital
23. Patient support through OPPAM Whatsapp Group and Social media
24. Managing National Knowledge Network (NKN), National Cancer Grid MPLS LAN, and NMECT connectivity.
25. Implemented, Guidelines for Computer Users at MCC, Guidelines for Computer Users at MCC, IT equipment and communication network maintenance Plan, etc.

PSYCHO-ONCOLOGY DIVISION

DIVISION IN CHARGE: JISHA ABRAHAM

ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Jisha Abraham	Lecturer

NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Sobhith V K	Medical Social Worker

INTRODUCTION:

Division of Psycho-oncology focuses on providing psycho-social interventions for patients and families from cancer diagnosis to survivorship and palliation, thereby improving their Quality of Life. It also provides alcohol and tobacco de-addiction counseling for the patients. Apart from this, the division deals with stress management and recreational activities of the staff dealing with cancer patients. Research related to psycho-social aspects of cancer patients and families was also carried out in the division. The division combines Psychiatry, Psychology, and Medical Social work aspects into Cancer. The division is directly under the Director.

ACTIVITIES ORGANIZED/ CONDUCTED/ COORDINATED :

- Division released four videos on the YouTube Malabar Cancer Centre channel; to manage the COVID-19 related Psycho-social concerns. The topics include **Acceptance, Attitude, Sleep hygiene, and Stress management**.
- Division coordinated “Covid wellness group” under Sub collector, Thalassery to provide tele counselling sessions for those individuals affected and quarantined due to Covid-19.
- World Mental health Day Observance (Virtual) on 10/10/20. Talk for health care workers by Dr. Subathra Jeyaram “**Be Calm and Stress**”
- World Mental Health Day talk by Ms. Jisha for the webinar by Govt College Nadapuram on “**Mental health in Covid Era**” on 10th October
- Ms. Jisha: Moderator for Mega mind: Know your worth webinar organized by BSc Nursing and BSc MRT students of INSeR and MCC on 30th October.
- Faculty for KCCC webinar series on the topic “cancer: Individual, family and society” on 23rd January 2021.

STUDENTS SUPPORT AND GUIDANCE PROGRAM (SSGP):

The staff was actively coordinating the student support activities of Malabar Cancer Centre College, the Lecturer in psycho-oncology being the nodal officer of the programme. The division is giving psycho-social support to students in need as referred by the concerned faculties.

Sessions were conducted through Zoom on **Stress management** for the BSc MRT students to manage their stress during Covid times and online learning.

CLINICAL ACTIVITIES

2020-21	Pre-Treatment Counselling sessions	GET WELL Clinic	Genetic Counselling sessions	Psycho-oncology consultation (Referrals)	In Patient Counselling	Discharge Counselling	Trainees (MSW)
Total	120	42	148	342	1074	722	2

- Individual staff consultations: Division was supporting the staff of the hospital by providing psychological support to deal with their personal and work-related stress, especially those affected or quarantined due to covid-19.
- The division started the functioning of GET WELL CLINIC for geriatric patients (above 70 years) in January 2021. Team includes Psycho-oncologist/Medical Social Worker/ occupational therapist/ Staff Nurse.

ACADEMICS

1. Mr. Sobhith completed a 3-month Diploma in Community Mental health from NIMHANS Digital Academy from 26th August to 25th Nov 2020.
2. Faculty for Webinar series on Psycho-oncology in special populations conducted by Tata Memorial Hospital, Mumbai on 24th October (Jisha).
3. Lectures on Psychology and Sociology for students of BSc Nursing, BSc MRT, and Post Basic Diploma Oncology Nursing.

RESEARCH:

1. Fatigue, perceived stress, anxiety, and depression among adult survivors of hematological malignancies: a cross-sectional study (data collection completed).
2. Perceived stress and coping among oncology health care workers during covid -19 pandemic: a cross-sectional study from a tertiary centre (data collection completed).

RESEARCH, PUBLICATIONS, COMMITTEES & COURSES

RESEARCH

Research in Malabar Cancer Centre is conducted as per the ICMR guidelines and academic research guidelines specific to the institution are prepared. 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 interdisciplinary research. The Institutional Review Board is responsible for overseeing 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. 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

1. The Scientific Review Committee (SRC)
2. 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 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 they 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	Professor, Dept. of surgical Oncology
2	Dr.Sangeetha K Nayanar	Professor, Department of Clinical Lab service & Translational Research
3	Dr. Chandran K Nair	Professor, Department of Clinical Hematology & Medical Oncology
4	Dr. Sajith Babu T P	Professor, Dept. of surgical Oncology
5	Dr.Geetha M	Associate Professor, Department of Radiation Oncology
6	Dr. Parthiban Rudrapathy	Associate Professor, Division of microbiology
7	Dr.Pramod Sankar S	Associate Professor, Department of Dentistry & Rehabilitation
8	Dr.Satheesh Babu	Associate Professor, Department of Imageology
9	Dr. Nived K	Associate Professor, Department of Onco-Anesthesiology
10	Dr.Sithara Aravind	Associate Professor, Division of Oncopathology

11	Dr.Vineetha Raghavan	Associate Professor, Department of Clinical Hematology and & Medical Oncology
12	Dr.Mohandoss M	Associate Professor, Division of Transfusion medicine and Blood bank
13	Dr.Nizham M Parekutty	Associate Professor, Dept of surgical Oncology
14	Dr.Manuprasad	Associate Professor, Department of Clinical Hematology and & Medical Oncology
15	Mrs. Maya Padmanabhan	Office bear, Division of Clinical Research & Biostatistics
16	Mr.Riyas M	Office bear, Division of Clinical Research & Biostatistics

RESEARCH PROPOSALS

SL. NO	TITLE OF THE STUDY	PI, CO-PI, CI	DEPT.	IRB NO. & DATE
1	A study on the pattern of loco-regional recurrence and its relation to the irradiated volume in patients with carcinoma breast receiving adjuvant radiotherapy	Dr.Greeshma	ROG	1/11/2020
2	adjuvant radiotherapy in early stage oral cancers (arest) – a prospective randomized control trial	Dr.Sajith Babu	SOG	11/14/2020
3	An audit of efficacy and toxicity of Neoadjuvant Paclitaxel and Trastuzumab in Her 2 positive locally advanced Breast Cancer	Dr.Vinin N	ROG	6/13/2020
4	An audit of treatment package time in oral cavity cancer patients treated with adjuvant radiotherapy at Malabar Cancer Centre	Dr.Akhil P Suresh	ROG	1/11/2020
5	Anaemia in Multiple Myeloma Patients undergoing autologous haematopoietic stem cell transplant influences CD34 cell collection yield and RBC transfusion requirements during Peri-Transplant and Post-Transplant Period	Dr. Mohandoss M	Bloodbank	6/13/2020
6	Analysis of Percentage Depth Dose and Beam Profiles for Multileaf Collimated Small Fields with Different Jaw Settings Beam Focal Spot Offset Determination for Linear Accelerators: A Phantomless Method	Mrs. Lisha Jose	Radiation Physics	9/12/2020
7	Assessment of incidence and causative factors of post-Laryngectomy stricture	Dr.Sandeep Vijay	SOG	5/30/2020
8	Association Between Mammographic Microcalcification and HER 2 Positivity in Breast Carcinoma-2 Year Retrospective Analysis From a Tertiary Cancer Centre	Dr.T.V Satheesh Babu	Imageology	1/11/2020

9	Beam Focal Spot Offset Determination for Linear Accelerators: A Phantomless Method		Radiation Physics	9/12/2020
10	Cancer related fatigue, perceived stress, and anxiety among	Mrs. Jisha Abraham	Psycho-oncology	2/22/2020
11	Carcinoma endometrium-effect of delay in adjuvant RT on survival –a retrospective analysis	Dr.Geetha M	ROG	2/1/2020
12	Chemotherapy drug wastage and its financial impact – A retrospective audit from a tertiary cancer centre	Dr.Praveen	CHMOG	6/13/2020
13	Clinical outcome of patients with Medullary Carcinoma Thyroid–a retrospective analysis	Dr. Sajith Babu	SOG	5/30/2020
14	Clinical outcome of patients with head and neck cancer who underwent reconstruction with free microvascular flaps in comparison to patients who underwent reconstruction with loco-regional flaps.	Dr.Sajith Babu	SOG	10/31/2020
15	Clinical profile & outcome of leptomeningeal involvement in solid tumors. Retrospective study	Dr.Manuprasad M	CHMOG	2/22/2020
16	Collision Tumours of Thyroid- Clinicopathological and Molecular Profiling of a Rare Entity	Dr.Sithara	Pathology	8/20/2020
17	Comparison of Pathologic outcome of laparoscopic Vs Open rectal surgery in a tertiary cancer centre	Dr.Nizham M P	SOG	10/31/2020
18	Correlation between measured creatinine clearance and calculated creatinine clearance in head and neck cancer patients	Dr. Joneetha	ROG	6/13/2020
19	Determination of Recombination Correction Factor in Flattening Filter Free Beams using Various Protocols	Mrs.Resmi K Bharatan	Radiation Physics	8/20/2020
20	Determining the association between COVID 19 and cancer: An observational study	Dr.Satheesan B	SOG	5/30/2020
21	Developing a histologic risk stratification score to predict survival in cervical squamous cell carcinoma- A cross-sectional study at a tertiary cancer center in Kerala	Dr. Sithara Aravind	Pathology	3/14/2020
22	Diagnostic Accuracy of Signal Intensity Ratio in In-Phase and Opposed-Phase Imaging for the Characterization of Benign and Malignant Vertebral Lesions	Dr.Satheesh Babu T V	Imageology	7/11/2020
23	Diagnostic Yield of Bronchoalveolar Lavage(BAL) in Patients with Hematological Malignancy Having Lung Infiltrates	Dr.Priya Jayarajan	Respiratory Medicine	7/11/2020

24	Does delay in treatment due to chemotherapy toxicity influence outcome among adolescent and adult acute lymphoblastic leukemia patients treated with curative intent at Malabar Cancer Centre between 2011-2017?	Dr.Praveen Kumar	CHMOG	2/22/2020
25	Does Intensity of Blood Transfusion Influence Clinical Outcome in Adolescent and Adult Acute Lymphoblastic Leukemia	Dr.Mohandoss M	Bloodbank	6/13/2020
26	Donor vein suitability using a vein assessment tool for double platelet product apheresis	Dr.Mohandoss M	Bloodbank	7/11/2020
27	Dosimetric Analysis Of Multiple Treatment Planning Techniques For Synchronous Bilateral Breast Carcinoma	Mrs.Lisha Jose	Radiation physics	1/11/2020
28	Dosimetric Comparison of Flattened and Flattening Filter Free Beams in VMAT Treatment Plans of Head & Neck Cancers	Mrs. Silpa Ajay Kumar	Radiation physics	1/11/2020
29	Dosimetric Comparison of Monte Carlo and Anisotropic Analytical Radiotherapy Treatment Planning Algorithm in Air Cavity Region	Mrs.Suja C	Radiation Physics	8/20/2020
30	Dosimetric Study On Breathing Adapted Radiotherapy	Mrs. Suja C A	Radiation physics	2/1/2020
31	Evaluation of Hemolysin test as a tool to screen high titre group O platelet aphaeresis donors	Dr.Mohandoss M	Blood bank	2/1/2020
32	Extended Spectrum Beta-Lactamase Producing Gram Negative Bacilli in Urine Specimen of Cancer Patients at a Tertiary Care Cancer Center- A Prospective Study	Dr. Sajani Samuel (PI)	Microbiology	3/14/2020
33	Factors Predicting Speed of fall of PSA value after Treatment of Prostate Cancer	Mrs. Maya Padmanabhan	CRB	9/12/2020
34	Hematology cancer consortium registry	Dr.Chandran K Nair	CHMOG	5/30/2020
35	Identifying the interacting protein of b3a2 and b2a2 subtypes	Dr.Vipin Gopinath	Molecular Oncology	2/22/2020
36	Immunomorphological and cytogenetic appraisal of Ewing's sarcoma: An institutional experience	Dr.Aswathi Krishnan	Oncopathology	5/2/2020
37	Immunotherapy in Advanced Solid tumors -a multicentre retrospective study from India	Dr.Manuprasad	CHMOG	9/26/2020
38	Impact of COVID 19 On Academic And Family Related Stress Among Nursing And Paramedical Students At Malabar Cancer Centre	Mr. Binu Babu	Nursing	10/31/2020

39	Impact of Derived Hematological Parameters from Automated Analyser on Overall and Event-Free Survival Among Colorectal Cancer Patients	Dr.Sindhu ER (PI)	Biochemistry	3/14/2020
40	Impact of extend of pathological extranodal extension of oral cancer patients –retrospective 4-year study from a tertiary cancer centre	Dr.Kandathil Joseph Philip	Pathology	5/2/2020
42	Impact of time from symptom onset to treatment (TST) in AML patients undergoing standard induction chemotherapy	Dr.Chandran K Nair	CHMOG	5/2/2020
43	Induction Related Mortality Score in Acute Myeloid Leukemia: Prospective Validation Study Acronym: HCC pRISM S(HCC RISK Mortality Score)	Dr. Chandran K Nair	CHMOG	7/11/2020
44	Knowledge and practice of newly registered cancer cases at Malabar cancer centre, Thalassery. On prevention of COVID -19 pandemic during rapid rise period of the COVID-19 outbreak	Divya L	Nursing	10/31/2020
45	LAMP-based, point-of-care (POC) rapid and low-cost diagnostic test for COVID-19	Dr.Saravanan M	Microbiology	5/30/2020
46	Linguistic Validation of Malayalam Version of Distress Thermometer for Parents (DT-P) and It's Feasibility Among Parents of Children with Cancer	Dr.Jithin TK	CHMOG	9/12/2020
47	Markov Chain Modeling of Multiple Myeloma: A Disease Progression Model	Mr.Riyas	CRB	7/11/2020
48	Methicillin-Resistant Staphylococci prevalence in cancer patients at a tertiary care cancer centre – A Retrospective study	Dr. Saravanan (PI)	Microbiology	3/14/2020
49	Neo-adjuvant short-course radiotherapy followed by delayed surgery in carcinoma rectum, during COVID Crisis- A study from a tertiary cancer centre	Dr.Arun P Narendran	ROG	6/13/2020
50	NODAL POSITIVITY IN HIGH-GRADE ENDOMETRIAL CARCINOMA	Dr.Ashitha	SOG	11/14/2020
51	Outcomes and toxicity of posfesterol in metastatic castration-resistant prostate cancer	Dr.Manuprasad	CHMOG	5/30/2020
52	Outcomes of Different Treatment Modalities in Autoimmune Haemolytic Anaemia	Dr.Chandran K Nair	CHMOG	1/11/2020
53	A pattern of care in non-small cell lung cancer in the second-line setting in India - a multicentre study from India	Dr.Manuprasad	CHMOG	11/14/2020

54	Perceived Stress and Coping among Oncology Health Care Workers During Covid -19 Pandemic	JishaAbhraham	Psycho oncology	8/20/2020
55	Phase 2 going to phase 3 randomized study for the evaluation of docetaxel and triple metronomic as second-line therapy in head and neck cancer.	Dr.Manuprasad M	CHMOG	2/1/2020
56	Postoperative troponin elevation and its clinical outcome in patients undergoing cancer surgery at a tertiary cancer centre	Dr.Jashma	Anesthesiology	5/2/2020
57	Prognostic factors and outcomes following salvage surgery for locoregional recurrence in patients with oral cavity squamous cell carcinoma	Dr. Anoop A	SOG	7/11/2020
58	Prognostic factors of recurrence and/or death in colorectal cancer who underwent initial curative treatment at Malabar Cancer Centre-A progressive three-state model study	Mrs.Bindhu T	Cancer registry	2/22/2020
59	Quality of Life in Cancer Patients who have undergone intestinal stoma in the treatment of cancer	Dr.Biji M S	Palliative Medicine	9/26/2020
60	Response-Adapted Management of Childhood Classical Hodgkin Lymphoma (cHL) and Early Response Assessment by Positron Emission and Computerized Tomography (PET-CT) to allow Omission of Radiotherapy in Indian Children Treated with a Standard of Care Intensified Chemotherapy Regimen	Dr.Jithin TK	CHMOG	9/26/2020
61	Survival of Stage III & Stage IV Oral Squamous Cell Carcinoma Patients Treated with Surgery During July 2013- July 2017	Dr.Sajith Babu	SOG	5/2/2020
62	survival outcome of stage iv epithelial ovarian cancer treated with curative intent at a tertiary cancer centre	Dr.Ashitha	SOG	11/14/2020
63	Synchronous metastasis in carcinoma rectum patients with extramural venous invasion	Dr.T.V Satheesh Babu	Imageology	2/1/2020
64	The survival outcome of Medullary Ca Thyroid patients	Dr.Raveena Nair	SOG	5/30/2020
65	Transfusion Risk Prediction for Perioperative Blood Transfusion in Ovarian Cancer Patients with Post NACT and Interval Cytoreduction Surgery	Dr.Mohandoss M	Bloodbank	8/20/2020
66	Treatment compliance in geriatric patients treated with radical radiation therapy in head and neck malignancy	Dr.Joneetha Jones	ROG	1/11/2020

67	Tumors of foot and ankle-clinical experience and challenges in treatment	Dr.Satheesan B	SOG	10/31/2020
68	Unusual bacterial isolates and its Antimicrobial Susceptibility Profile causing bloodstream infections in Cancer patients in a Tertiary Cancer Centre: - A Retrospective Study.	Dr. Sajani Samuel (PI)	Microbiology	3/14/2020
69	Use of central venous access devices for chemo therapy-An experience from a tertiary cancer center	Dr.Praveen Kumar	CHMOG	2/1/2020
70	Utility assessment of Day 14 Bone Marrow Response in AML Induction – A retrospective study	Dr.Manuprasad	CHMOG	5/2/2020
71	Utility of preoperative MRI in predicting chemotherapy-induced necrosis in pediatric and adolescent Osteosarcoma	Dr.T.V Satheesh Babu	Imageology	2/1/2020
72	Validation of SARS CoV-2 RT-PCR testing using combinatorial tapestry pooling of samples: a multi-center study	Dr.Parthiban R	Microbiology	5/30/2020

SCIENTIFIC ADVISORY COMMITTEE (SAC)

The 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.

SL NO	NAME	ADDRESS	DESIGNATION IN THE COMMITTEE
1.	Prof. Kanjaksha Ghosh	Former Director, National Institute of Immune Hematology, ICMR	Chairman
2.	Dr.ManojMurahekar	Director, National Institute of Epidemiology, Chennai	Member
3.	Dr. Mohanasankar Sivaprakasam	Director, HTIC, Associate Professor, Dept. 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.R.M.Pandey	Professor & Head, Dept of Biostatistics, AIIMS, New Delhi	Member
6.	Dr.Moni Kuriakose	Director, Cochin Cancer Centre	Member
7.	Satheesh C Raghavan	Professor, Department of Biochemistry, Indian Institute of Science, Bangalore	Member
8.	Dr.ManjuSengar	Professor, Department of Medical Oncology, Tata Memorial Hospital, Mumbai	Member
9.	Dr. R. Swaminathan	Professor and Head Department of Epidemiology, Biostatistics and Cancer Registry & Assistant Director, Cancer Institute (WIA), Chennai	Member
10.	Dean, Research	KUHS (Official nomination)	Member
11.	Director	Malabar Cancer Centre	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 Distict, Puttaparthi, 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, 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

INSTITUTIONAL ETHICS COMMITTEE

Constituted as per ICMR guidelines in August 2013. The IEC meets once every three months and/or as and when required

SL NO	NAME	POSITION	AFFILIATION	GENDER	EXPERTISE
1	Dr. T. N. Babu Ravindran	Chairman	Senior Medical Consultant, Indira Gandhi Co-Operative Hospital, Manjodi, Thalassery, Kannur	Male	Medical consultant
2	Dr. Sangeetha K. Nayanar	Member	Professor & Head Department of Clinical service & Translational Research, Malabar Cancer Centre, Thalassery, Kerala	Female	Basic Medical Scientist
3	Dr. Balakrishnan Valliyot	Clinician	Professor of Medicine, Head, Centre for Medical Research & Non-communicable diseases, Academy of Medical Sciences, Pariyaram, Kannur,	Male	Medicine
4	Dr. Jeeja M.C	Basic Medical Scientist	Additional Professor, Department of Pharmacology Govt, Medical College, Idukki, Kerala	Female	Pharmacologist
5	Dr. Biju George	Clinician	Additional Professor in Community Medicine, Govt. Medical College, Kozhikode, Kerala	Male	Community Medicine
6	Adv. Preethi Parambath	Legal expert	Addl. Govt Pleader & Public Prosecutor, Kannur District Court, Thalassery, Kerala	Female	Legal expert
7	Adv. John Joseph	Legal Expert	Advocate, near District Court, Thalassery "Thalackal" House Nangarath Peedika, Temple Gate P.O., Thalassery, Kerala PIN- 670 102	Male	Legal Expert
8	Dr. K. R. Vasudevan	Clinician	Consultant Physician "ARCHANA", Kovilakam Road, Nilambur (P.O), Malappuram, Kerala	Male	Medical consultant
9	Rev. Fr Thomas Thengumpally	Social Scientist	Chancellor Archdiocese, Arch Bishop House, Thalassery, PB No. 70 Kerala	Male	Social Scientist
10	Mr. G.V. Rakesh	Lay Person	Correspondent Mathrubhumi Daily G.V. House, Ponniam P.O., Thalassery, Kannur, Kerala	Male	Lay Person
11	Managing Trustee, Salil Sivadas Foundation, Social Scientist	Social Scientist	Managing Trustee, Salil Sivadas Foundation, "Salil Bhavan", P.O. Sivapuram, Dist. Kannur, Kerala	Female	Social Scientist

IEC STUDY

NO	STUDY TITLE	PI	DEPARTMENT/DIVISION
1	Validation of SARS CoV-2 RT-PCR testing using combinatorial tapestry pooling of samples: a multi-center study	Dr.Parthiban R	Microbiology
2	LAMP-based, point-of-care POC rapid and low-cost diagnostic test for COVID-19	Dr.Saravanan M	Microbiology
3	Haematology cancer consortium registry	Dr.Chandran K Nair	Clinical Hematology & Medical Oncology
4	Induction Related Mortality Score in Acute Myeloid Leukemia: Prospective Validation Study Acronym: HCC pRISM S(HCC RISK Mortality Score)	Dr. Chandran K Nair	CHMOG
5	Donor vein suitability using a vein assessment tool for double platelet product apheresis	Dr.Mohandoss M	Bloodbank
6	Diagnostic Accuracy of Signal Intensity Ratio in In-Phase and Opposed-Phase Imaging for the Characterization of Benign and Malignant Vertebral Lesions	Dr.Satheesh Babu T V	Imageology
7	Perceived Stress and Coping among Oncology Health Care Workers During COVID -19 Pandemic	JishaAbraham	Psycho oncology
8	Collision Tumours of Thyroid- Clinicopathological and Molecular Profiling of a Rare Entity	Dr.Sithara Aravind	Pathology
9	Linguistic Validation of Malayalam Version of Distress Thermometer for Parents (DT-P) and Its Feasibility Among Parents of Children with Cancer	Dr.Jithin TK	Clinical Hematology & Medical Oncology
10	Response-Adapted Management of Childhood Classical Hodgkin Lymphoma (cHL) and Early Response Assessment by Positron Emission and Computerized Tomography (PET-CT) to allow Omission of Radiotherapy in Indian Children Treated with a Standard of Care Intensified Chemotherapy Regimen	Dr.Jithin TK	Clinical Hematology & Medical Oncology
11	Quality of Life in Cancer Patients who have undergone intestinal stoma in the treatment of cancer	Dr.Biji M S	Palliative Medicine
12	Adjuvant radiotherapy in early-stage oral cancers (arest) – a prospective randomized control trial	Dr.Sajith Babu	SOG
13	A prospective, multicenter, randomized, double-blind Phase III study to compare the efficacy and safety of Biosimilar Bevacizumab of Enzene Biosciences Ltd. versus Innovator Bevacizumab both in Combination with CAPEOX in Patients with Metastatic Colorectal Cancer.	Dr. Praveen Kumar Shenoy	CHMOG
14	Economic Burden of Breast Cancer on Households in Kerala	Dr.Geetha M	Radiation Oncology
15	The expectation of Parents Having Children with Newly Diagnosed Cancer	Dr.Jithin T K	Clinical Haematology& Medical Oncology

16	The proportion of individuals returning to work after curative cancer therapy	Dr.Biji M S	Palliative
17	A Prospective Study On Nutritional Outcome In Patients With Cancer Of Oral Cavity Undergoing Curative Treatment	Dr Satheesan B	Surgical Oncology

PUBLICATIONS

1. Gastrectomy with D2 Lymphadenectomy for Carcinoma of the Stomach in a Stand-alone Cancer Centre in Rural India, **Nizamudheen Mangalasseripareekutty**, Sachin Kadam, Basavaraj Ankalkoti, Bindu Anilkumar, May 2020, Indian Journal of Surgical Oncology 11(8952)
2. Comparison of abo antibody levels in apheresis platelets suspended in platelet additive solution and plasma, KC Gayathiri, **Murugesan M**, Nayanar SK, Malodan R, Padmanaban M.. Hematol Transfus Cell Ther 2020; June. doi:10.1016/j.htct.2020.03.008.
3. Histobiologic comparative analysis is insufficient to differentiate the second primary from metastasis in bilateral breast cancer, Sithara Aravind, **Deepak Roshan V.G**, Vinin N.V, Sangeetha K. Nayanar, Oncology and Radiotherapy 1 (52) 2020: 156-159
4. Impact of active tuberculosis on treatment decisions in cancer, **Chandran K. Nair**, Manu Prasad Avaronnan, Praveen Kumar Shenoy, Vineetha Raghavan, Priya Jayarajan, Parthiban Rudrapathy, Karthickeyan Duraisamy, Satheesan Balasubramanian, Current Problems in Cancer, mUS1Ga; September 22, 2020; 1:35
5. The organ at risk doses in hypofractionated three-dimensional conformal radiotherapy in carcinoma breast following breast conservation surgery, **Joneetha Jones**, Vinin NV, Geetha Muttath, Nabeel Yahiya, Shoaib Nawaz, Arun P Narendran, Ayisha Reja, Oncology and Radiotherapy, 1 (52) 2020: 001-00
6. Preliminary Experience with Induction Chemotherapy In Head and Neck Malignancy from A Tertiary Cancer Centre, **Joneetha Jones**, Vinin N V, Linda Rag, Geetha M, Arun Narendran, Shoaib Nawaz and Nabeel Yahiya, International Journal of Pharma and Bio Sciences, ijpbs 2020
7. A Study on Influence of Donor Hematocrit on the Procedural Parameters of Concentrated Single Donor Platelets Collected by Two Apheresis Devices, Gayathiri K. Chellaiya, **M. Murugesan**, Sangeetha K. Nayanar, Indian J Hematol Blood Transfus (2020) 36:135-140
8. Clinicopathological Pattern Of Central Nervous System Tumors: A Five Year Retrospective Study At A Cancer Centre, Dr. Sunitha Gattigorla, **Dr. Sithara Aravind**, Dr. Sangeetha K Nayanar, d Dr. Arun Narendran, ijpbs 2020
9. Angiosarcoma like Squamous Cell Carcinoma of the Oral Cavity— Report of Rare Subtype of Squamous Cell Carcinoma, James S, **Aravind S**, Nayanar KS, Annals of Clinical and Medical Case Reports. 2020; 4(3): 1-3.
10. Incipient Warthin tumor of intraparotid lymph node in a patient with squamous cell carcinoma of the external auditory canal: An incidental finding, Deepak Pandiar, **Sithara Aravind**, Sangeetha K. Nayanar, Sajith Babu, National Journal of Maxillofacial Surgery, Volume 11, Issue 1, January-June 2020
11. Nodal metastasis from papillary thyroid carcinoma (PTC) with no evidence of primary tumor in the thyroid gland: Case report and literature review, **Sithara Aravind**, Deepak Pandiar, Sangeetha K. Nayanar, Sajith Babu, Oral Oncology 105 (2020), 104761
12. An audit of Organ at Risk (OAR) constraints achieved for carcinoma of the nasopharynx treated with intensity-modulated radiotherapy, Greeshma KE, Geetha Muttath, Joneetha Jones, Nabeel Yahia, Vinin N V, Arun P Narendran, Akhil P Suresh, Oncology and Radiotherapy 15 (6) 2021: 10-15
13. Recurrent hyperhemolytic transfusion reaction in myelodysplastic syndrome- A case-based approach, Merline Augustine, Mohandoss Murugesan, Chandran K. Nair, Vineetha Raghavan, Sangeetha K. Nayanar, Transfusion and Apheresis Science
14. Case report and strategies to mitigate passive hemolysis with platelet transfusions in children, Merline Augustine, Mohandoss Murugesan, Kaduveetil Gopinathan Gopakumar, T. K. Jithin, Asian J

Transfus Sci 2021

15. Modeling pre-donation testing strategies in platelet donations - Approach from low throughput apheresis blood center from India, Mohandoss Murugesan, Maya Padmanaban, Riyas Malodan, Gayathiri K Chellaiya, Sangeetha K Nayanar, Asian J Transfus Sci [serial online] 2020 14:131-136
16. Primary Small Cell Neuroendocrine Carcinoma of Urinary Bladder: Case Series of a Rare Entity, NoushadAryadan, Sithara Aravind, Akhil Suresh, Sangeetha Keloth Nayanar, Journal of Clinical and Diagnostic Research. 2020 Dec, Vol-14(12): ER01-ER03
17. Dynamic analysis of serum Ca-125 levels during neoadjuvant chemotherapy in patients with advanced epithelial ovarian cancer: a retrospective study, Adarsh Dharmarajan, A. Remya, Aswathi Krishnan, Int J Reprod Contracept Obstet Gynecol. 2021 Jan;10(1)
18. Re-staging surgery in endometrial cancer: an audit on its value, SanjayBadesara, Ashitha R. Gangadharan, Rambeer Singh, Adarsh Dharmarajan, Int J Reprod Contracept Obstet Gynecol. 2020 Dec;9(12):4898-4902
19. Microbiological Profile and Antibiotic Susceptibility Pattern of Uropathogens Isolated among Cancer Patients at a Tertiary Care Cancer Centre, South India, Saravanan Murugesan, M.Sc, Ph.D., Sajani Samuel, Ph.D., and Parthiban Rudrapathy, Ph.D., ijpbs 2020
20. Sajani S, Parthiban R, Saravanan M, Sarath KE. Changing Trends in Antimicrobial Resistance among Gram-negative Bacilli isolated from Respiratory tract of Cancer Patients at a Tertiary Cancer Centre: A 4-year Retrospective Study.(2021). Int J Pharm Sci.;12(2):b114-123.
21. Parthiban Rudrapathy, Athira KV, Sajani Samuel and Saravanan Murugesan. Phenotypic Detection of Metallo- Beta-Lactamase (MBL) Producing Gram Negative Bacteria and their Prevalence in a Tertiary Care Cancer Centre. International Journal of Pharma and Bio Sciences. ISSN 0975-6299.
22. Saravanan Murugesan, Sujina Tk, Sajani Samuel, Sarath KE, Parthiban Rudrapathy. Methicillin-Resistant Staphylococci Prevalence in Cancer Patients at a Tertiary Care Cancer Centre – A Retrospective Study. Asian J Pharm Clin Res, Vol 14, Issue 7, 2021, 82-85.
23. Rudrapathy P, Samuel S, Murugesan S. Microbiological profile and Antibiotic resistance of bloodstream infections among cancer patients at a tertiary care cancer centre in North Kerala, India. National Journal of Laboratory Medicine (Accepted). (DOAJ)
24. Sajani Samuel, Neeraja.O, Parthiban R, Saravanan M, and Sarath K.E. Distribution of resistant genes encoding extended-spectrum beta-lactamases in enterobacteriaceae isolated from various clinical samples in a tertiary care cancer centre- NJLM - National Journal of Laboratory Medicine (Accepted). (DOAJ)
25. Sajani Samuel, Vismaya, Parthiban R, Saravanan M, and Sarath K.E. ESBL Prevalence in Urine Specimens of Cancer Patients at a Tertiary Care Cancer Centre in Kerala - International Journal of Biosciences. (DOAJ)
26. Breast cancer in young women of age 35 years and below:Initial experience at a tertiary cancer center in South India,Sithara Aravind, Geetha Muttath, Fathima Bincy, Mohandoss Murugesan, Sangeetha K Nayanar, Satheesan Balasubramanian,Oncology and Radiotherapy 15 (9) 2021: 1-6
27. Knowledge, perception, and attitude of the general population toward cancer and cancer care: A cross-sectional study,Maya Padmanabhan, Satheesan Balasubramanian, EK Muhammed Sha, Riyas Malodan;Cancer Research, Statistics and Treatment,2021, Vol 4, Issue 2, 251-255
28. Perceived stress and coping among oncology health care workers(OHCW) during the COVID-19 pandemic in a tertiary cancer centre in India; M Padmanabhan,J.Abhraham,S.Balasubramanian V K Sobith, World Cancer Research Journal 2022

OTHER COMMITTEES:

SL NO	NAME OF COMMITTEES
1	Academic Council
2	Administrative Committee
3	Building Committee



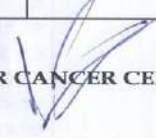
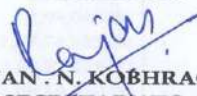

4	Canteen Core Committee
5	Internal Complaint Committee
6	CSR Committee
7	Patient Welfare Committee
8	Technical Committee
9	Stock Verification Committee
10	Pre-bid Committee
11	Radiation Safety Committee
12	Waste Management Committee
13	Library Committee

COURSES AT MCC:

SL NO	COURSE	DURATION	UNIVERSITY/ BOARD
1	B. Sc MRT, (Medical Radiology Technology)	4 Years	Kerala University of Health Sciences
2	Basic Certificate Course in Community Palliative Nursing(BCCCPN)	6 weeks	Institute of Palliative Medicine, Kozhikode
3	Certificate Course in Community Palliative in Auxiliary Nursing Course(CCPAN)	3 Months	Institute of Palliative Medicine, Kozhikode
4	Fellowship in Head and neck oncology	1 Year	Institutional fellowship
5	Fellowship Programme in High Precision Radiotherapy	1 Year	Institutional fellowship
6	Fellowship in Gyneec Oncology	2 Years	Institutional fellowship
7	Fellowship in Oncopathology	2 Year	Institutional fellowship
8	Fellowship in Head & Neck Pathology		
9	Fellowship in Nutrition Oncology	1Year	Institutional fellowship
10	Indian Association of Palliative Care Courses		
11	Distance education course in Cancer Pain and Palliative Medicine		
12	Post Basic Diploma in Oncology Nursing	1 Year	Kerala Nursing Midwifery Council

SL. NO.	COURSES OFFERED	DURATION IN YEARS	NUMBER OF CANDIDATES PER YEAR
1	DNB surgical oncology	3	4
2	FHNO fellowship	2	1
3	Oral oncology fellowship (institutional)	2	1
4	Gynaecologic oncology fellowship	2	1
5	Fellowship in nutrition and dietetics	1	1

AUDITOR'S REPORT 2020-21

MALABAR CANCER CENTRE SOCIETY THALASSERY, KANNUR			
CONSOLIDATED BALANCE SHEET AS AT 31ST MARCH 2021			
PARTICULARS	Schedule No.	FY : 2020 -2021	FY: 2019-2020
I. FUNDS & LIABILITIES			
1. Trust Funds			
a. Capital Fund	1	1,29,28,02,183.37	94,70,32,964.00
b. Grant in Aid- Capital Grant (Pending Utilisation)	2	10,62,31,205.58	31,43,12,354.00
c. Funds & Schemes	3	5,32,28,127.06	4,10,43,787.04
		1,45,22,61,516.01	1,30,23,89,105.04
2. Current Liabilities			
a. Sundry Creditors		16,53,09,006.00	11,58,95,506.00
b. Income Received in Advance		21,91,806.02	14,41,913.30
c. Provision for Expenses	4	3,05,05,816.00	1,90,00,656.00
d. Other current liabilities	5	15,60,16,612.61	9,93,45,692.66
		35,40,23,240.63	23,56,83,767.96
TOTAL		1,80,62,84,756.64	1,53,80,72,873.00
II. PROPERTY & ASSETS			
1. Property , Plant & Equipment			
a. Tangible assets	6	70,43,21,102.90	81,10,33,369.00
b. Capital Work In Progress		57,04,41,846.89	34,35,43,250.00
		1,27,47,62,949.79	1,15,45,76,619.00
2. Current assets			
a. Deposits ,Advances & other current assets	7	12,44,75,155.43	1,70,84,919.00
b. Cash and cash equivalents	8	8,90,24,944.95	9,33,25,107.00
c. Closing stock	9	9,96,10,744.04	5,46,57,521.00
d. Sundry Debtors		21,84,10,962.43	21,84,28,707.00
		53,15,21,806.85	38,34,96,254.00
TOTAL		1,80,62,84,756.64	1,53,80,72,873.00
<i>Significant accounting policies and Notes on Accounts</i>	26	-	-
As per our report of even date attached			
For RSM & ASSOCIATES CHARTERED ACCOUNTANTS FRNo. 2813S  PAUL JOSEPH K FCA PARTNER M.No.26816 UDIN : 22026816AAAAAAG1358 		For MALABAR CANCER CENTRE  Dr. B. SATHEESAN DIRECTOR  Dr. RAJAN . N. KOBHRAGADE IAS PRINCIPAL SECRETARY TO GOVERNMENT Health & Family Welfare Ayush Department Chairman of the Executive Committee  K.S USHA Additional Secretary to Govt. Finance Department	
Place: COCHIN Date : 30.12.2021			

**MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR**

CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2021

.No:	PARTICULARS	Schedule No.	FY : 2020 -2021	FY : 2019 -2020
I.	<u>INCOME</u>			
	Revenue from Hospital operations	10	38,77,21,409.00	34,30,23,008.00
	Grant In Aid - Revenue Grant	11	10,51,78,000.00	10,14,57,000.00
	Rental Income	12	18,54,409.00	23,59,980.00
	Income from Training and Teaching	13	1,02,72,626.00	1,50,18,554.00
	Other Income	14	27,84,900.47	21,77,947.00
	Pharmacy Collection		17,62,71,144.00	17,19,01,022.00
	Penal Liquidation Charges		3,71,801.00	11,71,630.00
	Interest Income		17,19,809.00	1,87,90,557.00
	Canteen Sales		2,04,56,111.00	2,19,55,822.00
	Donations & Contributions			25,60,443.00
	<u>Project fund utilised</u>			
	HBCR - NCDIR -ICMR Project		8,13,706.00	-
	NCDIR - E-MOR Project Fund		6,06,296.00	-
	YIPB Project		1,66,428.00	-
	BIRAC - Lamp Based Study		55,533.00	-
	SARS Cov-2RT-PCR- clinical Study		1,99,777.00	-
II	Total Income		70,84,71,949.47	68,04,15,963.00
III	<u>EXPENDITURE</u>			
	Pharmacy consumption	15	13,11,67,959.01	13,28,52,416.00
	Employee Benefit Expenses	16	42,41,15,675.00	32,03,54,409.00
	Consumables/ Treatment Expenses	17	5,51,52,807.58	10,46,52,979.00
	Energy Charges	18	2,58,58,183.00	2,47,83,572.00
	Programme Expenses	19	1,24,672.00	3,49,116.00
	Rates & Taxes	20	38,74,750.20	10,87,232.00
	Vehicle Expenses	21	18,62,474.00	15,21,420.00
	Course Conducting Expense	22	4,70,637.40	9,84,900.00
	Printing & Stationary	23	13,26,497.37	10,15,139.00
	Canteen Purchase & Expenses	24	1,51,37,397.00	1,09,27,356.00
	Other Expense	25	27,15,029.00	1,31,82,400.00
	Advertisement Expenses		6,47,358.00	6,49,116.00
	Repairs & Maintenance		29,18,013.00	23,32,178.00
	Travelling Expenses		1,32,946.00	10,91,134.00
	Rent Paid		9,75,000.00	10,80,334.00
	Bank Charges		1,19,272.98	2,02,550.22
	Legal & Professional Charges		2,98,040.00	6,66,858.00
	Cleaning & Laundry Expenses		1,57,74,612.00	1,19,58,339.00
	AMC Charges		3,80,27,929.00	2,17,07,455.00
	Security Service Charges		1,09,18,130.00	1,12,44,806.00
	Subsidy given to patients		88,24,387.00	-
	Audit Fee		2,06,500.00	3,87,600.00
	Depreciation	6	11,40,18,515.00	13,36,28,855.00
	<u>Project Expenses</u>			
	<u>HBCR - NCDIR -ICMR Project</u>			
	Salary & Allowances		7,00,526.00	-
	Printing & Stationery		92,954.00	-
	Postage & Communication		4,992.00	-
	Computer Consumables		15,234.00	-



NCDIR -E-MOR Project Fund			
Salary & Allowances		5,99,790.00	-
Printing & Stationery		6,506.00	-
YIPB Project			
Salary & Allowances		1,66,428.00	-
BIRAC - Lamp Based Study			
Advertisement Expenses		5,533.00	-
Salary & Allowances		50,000.00	-
SARS Cov-2RT-PCR- clinical Study			
Salary & Allowances		93,377.00	-
Covid -19 Combo Kit		1,06,400.00	-
IV	Total Expenditure	85,65,08,524.54	79,66,60,164.22
V	Excess of Expenditure over Income (II-IV)	14,80,36,575.07	11,62,44,201.22
	<i>Significant accounting policies and Notes on Accounts</i>	26	

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 28135

PAUL JOSEPH K FCA
PARTNER
M.No.26816
UDIN : 22026816AAAAAG1358



Place: COCHIN
Date : 30.12.2021

For MALABAR CANCER CENTRE

Dr. B. SATHEESAN
DIRECTOR

Dr. RAJAN N. KOBHRAGADE IAS
PRINCIPAL SECRETARY TO GOVERNMENT
Health & Family Welfare Ayush Department
Chairman of the Executive Committee

K.S USHA
Additional Secretary to Govt.
Finance Department

**MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR**

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2021

Sl.No:	PARTICULARS		FY : 2020 -2021
I.	RECEIPTS		
	<u>Opening Balance</u>		
	Cash in Hand	5,84,609.00	
	Cash at Bank	4,81,83,128.91	4,87,67,737.91
	<u>Corpus Funds</u>		
	Grant Received from Govt		28,00,00,000.00
	<u>Receipts from Funds & Schemes</u>		
	BIRAC -CTN project	40,55,000.00	
	BIRAC - Lamp based Study	6,30,000.00	
	HBCR - NCDIR - ICMR Project	7,33,839.00	
	Medical Librarian	16,000.00	
	NCDIR -E- MOR Project Fund	5,73,673.00	
	Plasma Fractionation Fund	10,69,143.00	
	SARS Cov-2RT-PCR - Clinical Study	4,20,160.00	
	Training Fund - KSACS	10,000.00	
	Patients Welfare fund	3,07,866.05	
	Patients' Account (PMNRF)	94,07,797.00	
	Prime Minister's National Relief Fund	1,00,000.00	
	YIPB Project	7,41,312.00	
	Academic & Seminar Expenses Fund	2,73,700.00	1,83,38,490.05
	<u>Income Received</u>		
	Income from Training & Teaching	1,01,02,277.00	
	Revenue from Hospital Operations	19,75,85,855.00	
	Interest income	12,92,198.00	
	Rental Income	1,96,358.00	
	Canteen Sales	1,52,37,412.00	
	Hostel Fee Collected	1,46,500.00	22,45,60,600.00
	<u>Other Income</u>		
	Agriculture Income	4,616.00	
	Certificate Fee	6,300.00	
	Fine & ID fee	16,350.00	
	Income from Ambulance Service	11,520.00	
	Income from sale of Bus Coupon	6,59,603.00	
	Income from sale of Tender forms	5,14,400.00	
	Income from xerox	1,14,822.00	
	Miscellaneous Income	12,601.47	
	RTI Fee collected	964.00	
	Sale of Sand ,Scrap & Trees	10,32,997.00	
	Van Hire Charges Collected	750.00	23,74,923.47
	Grand Received from Govt		10,51,78,000.00
	GST & Flood Cess Collected		1,09,077.00
	Income received in Advance		1,51,33,876.82
	Caution Deposit received		11,55,000.00
	Advance received		4,91,13,424.70
	EMD Received		29,42,505.00
	Security Deposit received		3,07,853.95



	Insurance Charges Collected		14,500.00
	Donation received for Canteen		19,64,947.00
	Income Tax Refund		20,62,119.00
	Term Deposit Matured		10,58,39,546.44
	Receipt from Debtors (Net)		33,36,15,448.95
	Branch Transfers		
	Malabar Cancer Centre	22,00,000.00	
	MCC - Canteen	43,24,736.00	
	MCC - Nursing College	68,04,500.00	1,33,29,236.00
	TOTAL		1,20,48,07,286.29
II	<u>PAYMENTS</u>		
	<u>Funds Utilised</u>		
	Medical Librarian	13,101.00	
	Patients' Account (PMNRF)	2,89,494.00	
	Academic & Seminar Expenses Fund	1,19,708.00	4,22,303.00
	Payment to Creditors (Net)		38,79,38,480.00
	Bank Loan recovered remitted		3,92,500.00
	EMD Refunded		44,60,071.00
	Security Deposit refunded		6,09,073.00
	Caution Deposit refunded		7,25,690.00
	Term Deposits		15,85,66,376.00
	Advance given		3,96,32,250.00
	Tax Deducted at Source		3,20,568.00
	<u>Capital Expenditure</u>		
	Plant & Machinery	28,12,019.58	
	Capital Work in Progress	12,21,86,218.89	12,49,98,238.47
	<u>Indirect Expenses</u>		
	GPAI Renewal Premium Paid	1,79,000.00	
	Employee Benefit Expenses	31,23,64,778.00	
	Vehicle Running & Maintenance	4,61,162.00	
	Ambulance Charges	12,300.00	
	Energy Charges	2,46,38,810.00	
	Telephone Charges	23,906.00	
	Rent	1,67,000.00	
	Visiting Consultant Charges	7,33,954.00	
	Statutory Payments	3,26,31,512.00	
	Printing & Stationery	34,654.00	
	Repairs & Maintenance	8,70,850.00	
	Travelling & Conveyance	78,623.00	
	Advertisement Charges	65,279.00	
	Bank Charges	10,238.57	
	Consumables & Other Treatment Expenses	3,59,694.00	
	Course Conducting Expenses	4,07,858.70	
	Legal & Professional Charges	19,540.00	
	Programme Expenses	16,800.00	
	Rates , Fees & Tax	38,71,486.20	
	Canteen Purchase	43,37,672.00	
	Canteen Expenses	2,48,218.00	



<u>Other Expenses</u>		
Cable Subscription Charges	5,000.00	
Insurance Charges Paid	7,16,954.00	
Meeting Expenses	1,07,278.00	
General Expenses	2,50,720.00	
Postage & Communication	3,34,402.00	
Water Charges	56,216.00	38,30,03,905.47
<u>Branch Transfers</u>		
Malabar Cancer Centre	1,11,54,736.00	
MCC - Canteen	23,96,354.00	
MCC - Nursing College	9,85,049.40	
MCC - Creche	1,76,747.00	1,47,12,886.40
<u>Closing Balance</u>		
Cash in Hand	6,99,615.00	
Cash at Bank	8,83,25,329.95	8,90,24,944.95
TOTAL		1,20,48,07,286.29
<i>Significant accounting policies and Notes on Accounts</i>		

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 28135

PAUL JOSEPH K/FCA
PARTNER
M.No.26816
UDIN : 22026816AAAAAG1358



Place: COCHIN
Date : 30.12.2021

For MALABAR CANCER CENTRE

Dr. B. SATHEESAN
DIRECTOR

Dr. RAJAN . N: KOBHRAGADE IAS
PRINCIPAL SECRETARY TO GOVERNMENT
Health & Family Welfare Ayush Department
Chairman of the Executive Committee

K.S USHA
Additional Secretary to Govt.
Finance Department

PATIENT WELFARE ACTIVITIES

The Patient Welfare Committee was constituted for the smooth functioning of our Patient Welfare Activities and has attributed a boost to our patient services and management. The Committee consists of Doctors of different specialties, representatives from the Administrative section, Social Scientists, and Nursing personnel. The Committee coordinates the welfare activities of the patients who are undergoing treatment at this Centre. It promotes raising the fund for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. The majority of the staff members generously donate to this fund. This fund is utilized for the treatment/investigations of 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 IDBI,
Thalassery Branch:**

Account Number	Bank	Branch	IFSC Code
1154104000017958	IDBI	Thalassery	IBKL0001154

Patients Free Food Scheme

Recently MCC had started a “Patients Free Food Scheme” for all patients in MCC, irrespective of their financial status. MCC is looking forward for financial assistance as donations from individuals, corporate institutions, State owned Corporations, in this regard. Since November 2008, this programme has been running successfully. However as more and more patients are visiting the Centre the funds kept for this purpose are likely to be exhausted. In this regard MCC hereby request for financial aid to run this charity work and seek help from likeminded people and organizations to join hands for this noble venture.

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

Account Number	Bank	Branch	IFSC Code
30469577061	State Bank of India (SBI)	Thalassery	SBIN0000926

For further details Contact:

Shri. Rajesh A.K,
Administrative Officer,
Malabar Cancer Centre, Thalassery
Mobile: (+91) 9496048800
Phone: 0490 2355881, Fax: 0490 2355880
E-mail: mcctly@gmail.com, aomcctly@gmail.com
Web: www.mcc.kerala.gov.in

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.

Per the provisions contained in 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.

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