

Dedicated Service  
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**KIDWAI MEMORIAL  
INSTITUTE OF ONCOLOGY,  
CANCER RESEARCH AND TRAINING CENTRE**



**ANNUAL REPORT  
FOR THE YEARS – 2019 & 2020**



**“Cancer Prevention is Better than Cure”**

**Dr.M.H.Marigowda Road, Bengaluru-560 029**

**Website : <https://kmio.karnataka.gov.in>**

**2021**

## Some of the symptoms that cancer may cause include :

### Breast changes

- Lump or firm feeling in your breast or under your arm;
- Nipple changes or discharge;
- Skin that is itchy, red, scaly, dimpled, or puckered.

### Bladder changes

- Trouble urinating
- Pain when urinating
- Blood in the urine

**Bleeding or bruising**, for no known reason

### Bowel changes

- Blood in the stools
- Changes in bowel habits

**Cough** or hoarseness that does not go away

### Eating problems

- Pain after eating (heartburn or indigestion that doesn't go away)
- Trouble swallowing
- Belly pain
- Nausea and vomiting
- Appetite changes

**Fatigue** that is severe and lasts

**Fever or night sweats** for no known reason

### Mouth changes

- A white or red patch on the tongue or in your mouth
- Bleeding, pain, or numbness in the lip or mouth

### Neurological problems

- Headaches
- Seizures
- Vision changes
- Hearing changes
- Drooping of the face

### Skin changes

- A flesh-colored lump that bleeds or turns scaly
- A new mole or a change in an existing mole
- A sore that does not heal
- Jaundice (yellowing of the skin and whites of the eyes)

**Swelling or lumps** anywhere such as in the neck, underarm, stomach, and groin

**Weight gain or weight loss** for no known reason

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(2021)**

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**BASAVARAJ BOMMAI**  
CHIEF MINISTER



BENGALURU-560 001

No: CM/MS/08/2021

Date: 17/08/2021

**MESSAGE**

I am pleased to note that Kidwai Memorial Institute of Oncology, Bengaluru which is also recognized as Regional Cancer Centre is bringing out its annual report.

Bengaluru has the distinction of comprising internationally acclaimed Medical Institutions. Kidwai Memorial Institute of Oncology is India's leading tertiary Cancer Centre, academic and research centre. The trail it has left behind in the field of sciences is exemplary.

The Institute has evolved into a Tertiary Cancer Institute providing modern multidisciplinary total patient care, treating more than 3 lakh patients annually who are usually from very poor socio-economic strata. It is commendable that the institute is recognized as a charitable institute by the Endowment Department of Karnataka, considering its commitment for services to poor cancer patients. It is praiseworthy that the charges levied for cancer investigations and treatment is well within the reach of poor patients.

I am sure that the institution will continue its remarkable service in the future. I hope that the annual report will document the programmes and all other activities of the institute.

I wish the Kidwai Memorial Institute of Oncology all the very best in its endeavour of providing best care to cancer patients.

  
(BASAVARAJ BOMMAI)



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Dr. K. SUDHAKAR



ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಹಾಗೂ  
ವೈದ್ಯಕೀಯ ಶಿಕ್ಷಣ ಸಚಿವರು  
ಮತ್ತು ಚಿಕ್ಕಬಳ್ಳಾಪುರ ಜಿಲ್ಲಾ ಉಸ್ತುವಾರಿ ಸಚಿವರು  
ಕರ್ನಾಟಕ ಸರ್ಕಾರ  
Minister for Health & Family Welfare,  
Medical Education  
and Chikkaballapur District In-Charge  
Government of Karnataka

Date: 19-08-2021

Ref: HFW& MEM/129 /2021

**:Message:**

Kidwai Memorial Institute of Oncology offers state of the art cancer care to patients not only from all parts of Karnataka and neighbouring states but to others from far off states such as West Bengal as well. The Institute established a trust, the Kidwai Cancer Drug Foundation where anti-cancer drugs are made available prices that are 40 - 60% less than the MRP. Recently the pharmacy facilities has been extended with the establishment of AMRIT (a scheme of Government of India) which is providing medicine at a reasonable price to the patients.

Flow of help to needy patients comes from various schemes of the Govt. of Karnataka and Govt. Of India, such as the Ayushman Bharath, Suvarna Arogya Suraksha Trust (VAS), Rashtriya Arogya Nidhi (RAN), Chief Minister's Medical Relief Fund, Poor Patients Welfare Fund, Children's Welfare Fund. Many Corporate bodies/Philanthropists have extended generous support in building infrastructure for patient care like the entire Surgical Block with OPDs, Wards and Minor OT housed in the second floor of the Outpatient Block built by Sri Dharmashala Manjunatheswara Trust at the cost of 6 crores. The Dharmashala which houses 250 patients along with 250 attendants was built by the Corporation of Bangalore and was augmented by the Dharmashala built and donated to us by Infosys Foundation at the cost of Rs.3 crores. An exclusive Paediatric Block has been built by the Kapoor family. Another floor was recently added to this block by the State Bank of Mysore with a cost of 1.5 crores under Corporate Social Responsibility funds. This Paediatric Block has been renovated with Paediatric ICU and ready for services. BEL under CSR funds has donated a State of art facility Cancer Detection Bus at the cost of Rs. 2 Crores and this Facility will be used for Cancer Screening and Detection programmes. Besides this, several organisations and individuals have made immense contributions indeed a noble gesture to cancer afflicted patients. The Institute remain grateful for their contribution towards a worthy social cause.

Government of Karnataka is extending support to procure a PET scan and to establish state of art Bone Marrow Transplant (BMT) facility at Kidwai Computerization of all activities of Hospital which will make it Paperless with the help of e-hospital software developed by NIC, Upgrading the newly constructed five Operation Theatres with state of art facilities with the help of funds from Infosys Foundation,. The State of Art Molecular Oncology laboratory has been established in the campus which has been functioning round the clock during the current Pandemic with facilities for RT-PCR testing for COVID-19. A separate Psycho-Oncology Unit has been functioning with the facility being outsourced and is extending the services for providing information and counselling to the patients. A well planned Bio medical waste management has been functioning.

I offer my best wishes to the Institute and hope it will grow from strength to strength

  
(DR. K. SUDHAKAR)





**T.K. ANIL KUMAR, I.A.S.,**  
Principal Secretary to Government  
Health and Family Welfare Department  
(Medical Education)



Tel 080-22032455  
080-22280910  
E-mail [secyme-hfw@karnataka.gov.in](mailto:secyme-hfw@karnataka.gov.in)  
Room No.610, 6<sup>th</sup> Floor  
4<sup>th</sup> Stage, M.S. Building  
Dr. B.R. Ambedkar Veedhi  
Bengaluru-560001

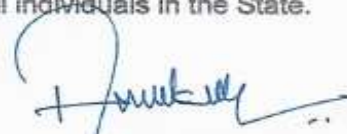
### **MESSAGE**

Health is a fundamental right of every citizen. Constitutionally health is a State subject and thus the State government has a vital role to play in protecting and promoting health of its citizens. Over the years the Government of Karnataka has implemented several policies, programmes and schemes for improving health status of the population. The State has also pioneered various health initiatives (health insurance schemes, telemedicine and others) that served as models for other States in the country. Government's policy of having a medical college in every district of the State has not only increased health work force but has also rendered secondary and tertiary health services to be accessible and affordable to the population. During Covid-19 pandemic, our efforts were accelerated to meet the demand for healthcare.

Despite achieving significant improvement in health status, we still need to focus on emerging health issues like non-communicable diseases, mental health and injuries along with consolidating our gains in communicable diseases and maternal and child programme related control efforts. Health impact of climate change needs serious attention. We also have realized that health and other departments need to come together to protect and promote health of the population, since health determinants are to be addressed jointly by many sectors.

To address the above concerns and to move forward there is a need for providing a strategic vision and direction to the State efforts. Recognizing this, the State Government has constituted the Karnataka Health Vision Group under the chairmanship of Dr G Gururaj, former Director of NIMHANS and Senior Professor of Epidemiology to develop a roadmap for strengthening health systems, programmes and services in the State. The report brought out by the Karnataka Health Vision Group, with the efforts and contribution of several subject experts belonging to varied disciplines from across the State, is very comprehensive and provides strategic focus and direction to the efforts taken up by the State in the sector.

I take this opportunity to congratulate everyone who has directly and indirectly contributed to the development of this report. The Health department will take appropriate steps to take this report forward. I also strongly urge all departments to consider health in all their policies and work in coordination with the Health department to ensure best possible health for all individuals in the State.

  
(T.K. Anil Kumar)

## DIRECTOR'S MESSAGE



It is my pleasure and privilege to write a foreword for the Institute's Annual Report, especially to unveil the performance of Institute.

This Annual Report contains detailed information about the services rendered to the patients, activities of various departments, research and development activities at the institute and courses and training programs conducted in the field of Oncological sciences.

For over 60 years, the KMIO has grown from a private humanitarian venture in the early 1950&60`s to a Regional Cancer Centre in 1980`s, delivering Tertiary Medical Care to thousands of Cancer patients from our State and different parts of our Country and abroad. KMIO has strived hard to help lakhs of patients along the way who are grappling with the ill effects of cancer. KMIO has been able to provide vital and compassionate support for poor cancer patients.

The medical fraternity of KMIO are committed and dedicated to excellence in patient care, teaching and research. KMIO`s commitment to cancer care, research, education and awareness has a long been acclaimed and KMIO`s unique tradition of providing exceptional patient care, medical education, and research opportunities to benefit both the community at large and physicians in training is also acknowledged by many.

Over the last few decades there is a increase in the number of Cancer patients, With the limited staff & financial resources the Doctors & staff of KMIO have been multitasking and striving hard to deliver good treatment to our patients.

We have accomplished so much, but there is still so much more to do, and never before has there been such an immediate urgency for your help. It is through the generosity of our many donors and the dedication of caring individuals & groups that we have been able to endow the numerous patient welfare programmes and improve the institute's infrastructure etc. Dear friends, KMIO simply could not exist without your help.

KMIO have been an integral part of the community for over 60 years and shall remain committed to making a difference in the fight against this dreaded disease. Donations to the Institute are exempted from Income Tax under section 80(g) and under section 35(i) (ii) of Income Tax Act, 1961.

Thank you,

**Dr. C Ramachandra**

Director

## MISSION, VISION AND VALUES OF KMIO

### Mission

Our MISSION is to provide STATE-OF-THE-ART Cancer Care Services to the poor and needy Cancer Patients by -

- 1) Delivering specialized cancer care services;
- 2) Providing training and preparing the next generation of cancer professionals;
- 3) Ensuring that people suffering from cancer are treated effectively through our services;
- 4) Providing awareness to patients and patient's attenders regarding cancer risk factors associated with to habits like tobacco usage, alcohol consumption, dietary habits, etc.;
- 5) To improve the health and healing of cancer patients.

### Vision

Our VISION for the Institute is as follows:

- 1) To be Cancer Centre of Excellence in the Country.
- 2) To establish a state-of-the-art Multi-disciplinary OPD Infrastructure for Ambulatory and Laboratory cancer care.
- 3) To establish a state-of-the-art Patient Ward Infrastructure for cancer treatment.
- 4) To establish a state-of-the-art OT Complex.
- 5) To establish a state-of-the-art Community Oncology Centre (COC) Infrastructure.
- 6) To establish a state-of-the-art Nursing College Infrastructure.
- 7) To upgrade and modernize Student Hostels.
- 8) To revamp the existing Blocks in the Institute through redevelopment and renovation.
- 9) To increase the availability of medical equipments such as PET CT, MRI and CT Scan to reduce patient waiting time for diagnosis.
- 10) To strengthen Academics in the Institute by introducing New Oncology courses and by improving the already existing Oncology courses.
- 11) To strengthen the Translational and Clinical Research Programme.
- 12) To establish Private and Insurance Patient Block and Facilities.
- 13) To upgrade and modernize PCC Kalburgi from Tertiary Cancer Care Centre and Regional Cancer Centre.
- 14) To establish a robust Information and Communication Technology (ICT) system in the Institute.
- 15) To improve quality, safety and security related infrastructure and framework for patients, attenders, staff, infrastructure, etc.
- 16) To transform into Environmental Friendly Institute.
- 17) To establish Peripheral Cancer Centers at other Districts.

### Values

Our Values are as follows:

- 1) **Quality:** To strive to exceed expectations of care seekers by committed delivery of quality of services
- 2) **Compassion:** To provide comprehensive care with dignity, concern, kindness and respect
- 3) **Teamwork:** To develop and implement strategies to foster an atmosphere of trust, collaboration, openness and cooperation
- 4) **Community Relationships:** To understand the needs of community to foster growth and development to serve their needs
- 5) **Stewardship:** To optimise resources for betterment of cancer care in the hospital.



## ABOUT KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BENGALURU

Kidwai Memorial Institute of Oncology (KMIO), Bangalore is a Regional Cancer Centre (RCCs). KMIO is a recognized exclusive tertiary cancer care center cum academic and research institutes, delivering modern health care by groups of trained professionals and paraprofessionals coming together as interdisciplinary teams and has facilities for advanced medical investigation and treatment. KMIO was accorded RCC status on 1st Nov 1980 by Government of India and is a member of UICC and recognized by WHO. KMIO is State Government Autonomous Institute. The Indian Council of Medical Research has recognized this referral Institution as a research organization.

Kidwai Memorial Institute of Oncology commemorates the memory of one of the most distinguished sons of India. Shri Rafi Ahmed Kidwai, who played a great role in the freedom struggle and later worked shoulder to shoulder with other national leaders in strengthening the roots of democracy and secularism in our country. The then Governor of Bombay donated 23 acres of the Campus land and Rs.1.00 lakh for the Radiotherapy machine.

KMIO was conceived by the City Fathers as far back as 1957 as a private venture, it was the taking over of the project by the Government of Karnataka in 1971 that finally set the ball rolling to the Inauguration of the institute on 26th June 1973. The Government of Karnataka by an order on 27th December 1979, converted the institute into an autonomous Institution, to enable it not only to mobilize resources and expertise

from other national and international agencies but also, consequent thereof, to develop and grow further into a pioneer and model in the field of Oncology in Karnataka. The Institute was registered on 8th January 1980 as an independent body. Dr.M.Krishna Bhargava took charge as first Director of the autonomous institute on 23rd January 1980. Monday the 21st April 1980 was a momentous day for the Institute, Shri B. Shankaranand, Union Minister for Health and Family Welfare, Government of India, formally inaugurated the autonomous Kidwai Memorial Institute of Oncology.

The Kidwai Memorial Institute of Oncology has, with its autonomous status, finally evolved into a Tertiary Cancer Institute providing modern multidisciplinary total patient care, conducting medical/clinical research, promoting cancer education programs both at the institute and in the community and initiating planned epidemiological studies in this part of the country. The autonomy of the Centre confers maximum centralized administrative and management authority over planning and execution, budgets, allocations staff appointments and procedures ensuring thereby the most important attribute of such a Centre—the excellence in quality of all work rendered.

The Institute stands poised today on the threshold of a future with an endless potential and promise in the service of cancer patients in particular and in cancer control in general in the State of Karnataka and in the Country.





## SERVICES OFFERED

### Surgical Oncology

Department of Surgical Oncology is constituted by 3 surgical units. Each unit is headed by Professors with vast experience and updated surgical skills. A major proportion of patients will receive treatment in the department be it in the form of radical surgery or palliative surgery. The Surgical Oncology Department is actively involved in training M.Ch Super Specialty Post Graduate Students. There is an intake of 15 M.Ch PG students every year. Department follows a rigorous teaching programme such as Subject Seminars, Journal Clubs and case discussions covering all aspects of the subject ranging from basic Oncology to intricacies of management of specific cancers and evidence based patient care. Practical training in advanced surgical skills is imparted extensively between the three units and additional postings in other departments. The department also plays a role in inspiring and finessing young minds enrolled in M.S General Surgery post graduate courses all over Karnataka during their peripheral postings at our institute by teaching them the concepts of Surgical Oncology. The Department of Surgical Oncology is also involved in both theoretical and practical training of B.Sc. O.T Technology students affiliated to RGUHS. Each year 10 students are admitted through selection by Karnataka Examination Authority.

### Blood Bank

It has facility to provide blood transfusion services, to train medical and Para-medical personnel in related areas and to function as an apical medical and research department in the

state in this field. Voluntary blood donation and routine preparation of blood components. Strict adherence to quality control at all phases of donor selection, donor room procedures, screening and processing of blood, and serological procedures for grouping and typing of blood are followed. The facility is licensed by the Drugs Controller of India.

### Anesthesiology & Pain Relief

The Department offers Anaesthesia and Pain relief services for cancer treatment which includes Cancer Surgery - curative, reconstructive, and palliative using advanced technology and equipments. The operation theatre complex consist of eight state of art fully equipped operation theaters rooms with 10 bedded, ICU. We have 15 bedded step down ICU to take care of post operative patients.

### Biochemistry

It is a comprehensive department involved in patient care, teaching and research. A spectrum of routine clinical chemistry investigations with special chemistry tests like tumor markers are being carried out in the department for patient care. Equipped with state of the art machines like spectrophotometric, chemiluminescence based auto-analysers, PCR, RT-PCR caters approximately 10,00,000 tests annually. To ensure the quality reports released, regular internal quality control and external quality control programs are undertaken.

The department is actively engaged in several teaching programs. The



Undergraduate programs for Allied Health Sciences (AHS) like B.Sc. Medical Laboratory Technology course, Postgraduate programs like Ph.D. affiliated to Rajiv Gandhi University of Health Sciences (RGUHS). In addition, guidance and facilities are extended to Postgraduate Medical and Dental students for their dissertation work. A number of undergraduate and post graduate non-medical students from other universities are regularly posted for training programs

### **Community Oncology**

This Department is Conducting : Screening and detection for various cancers; Daily check-up for women and men; Training programmes for medical personnel about awareness and early detection; Anti-tobacco campaigns; Health camps all over Karnataka. Dept. has a Mobile Cancer Detection Unit.

### **Epidemiology And Biostatistics**

It includes both Population Based Cancer Registry of Bangalore and Hospital Based Cancer Registry and are included under the network of National Cancer Registry Programme of India (ICMR) The faculty is involved in Teaching covering topics on Epidemiology and Biostatistics for various Super speciality, Post graduate medical courses and also Para medical courses such as Nursing and students of Allied Science courses offered by the Institute. The statistical consultation is offered to the students in the data analysis of their Dissertation/Doctoral thesis.

### **Gynaecological Oncology**

The Department is involved in the Prevention, early detection, investigations, diagnosis, treatment both surgery and chemotherapy, follow up and palliative care of women with Gynaecological Cancers. The Department is actively involved in clinical research. The Department is allotted 6 operations days in a week where a variety of Gynaecological Surgeries, including Laparoscopic surgeries and Robotic surgeries are performed.

### **Head And Neck Onco-Surgery**

Head and Neck Surgery is done for Tumors of the Mouth; Pharynx (Throat); Larynx (Voice Box); Esophagus; Thyroid Gland; Parathyroid Gland; Parotid and Other Salivary Glands; Soft Tissue Tumors; Bone Tumors; Tumors of the Dentoalveolar Structures, Nasal Cavity and Sinuses, Base of the Skull, Ear Canal and Temporal Bone, Nerves and Blood Vessels of the Neck; Skin Cancers; Melanoma.

The Dept. is equipped with state of the art Robotic Surgery machine, CO2 laser machine, High end operating microscope, Micro-drill, Xenon head light, provides minimally invasive endoscopic laser surgery, organ preservation surgery, Supra-major surgery with plastic reconstructive surgery with all the major free micro vascular flap surgery,



The minor OT is used for Nasal endoscopic biopsy, Direct laryngoscopic biopsy, Dressings throughout the week. OPD is equipped with modern ENT examination tables, 0 0 nasal endoscopes, 90 0 Hopkins endoscopes with recording features.

### Medical Oncology

The Department of Medical Oncology is responsible for diagnosing and treating all cases of hematological malignancies as well as administering chemotherapy to solid tumors in various settings. The Dept. is committed to improving the diagnosis and treatment of adult patients with cancer. To meet this mission there is a broad range of basic Research, Clinical Research, Patient Care and Teaching activities. The Department has its own medical minor O.T., where all the minor procedures such as Bone Marrow Aspirations / Biopsis, Ascitic and Pleural Tapping, Trucut Biopsy etc, are carried out under full aseptic precautions. The Department also provides Specialist clinics for autologous stem cell transplantation for malignancies like Non-Hodgkin's lymphoma, Hodgkin's lymphoma, and multiple myeloma.

### Microbiology

Microbiology Department is diagnosing majority of opportunistic infections seen in immunocompromised patients, some of them using the latest molecular tools. Routine tests include identification of bacteria, fungi and parasites & antibiotic sensitivity of bacterial

isolates, relevant serological investigation and identification of opportunistic pathogens which are commonly encountered in a cancer center. In addition, the Department has the expertise to offer molecular diagnosis for some of the common infections in cancer patients: The department has facilities for human immunology based work including cell culture, Magnetic Associated Cell Sorting. Nonisotopic InSitu Hybridization (NISH) and Realtime PCR is being done presently for detection and quantitation of viruses in various clinical specimens. The department is actively involved in microbiological surveillance of the brachytherapy unit, OT and ICU routinely. Bone marrow transplant room surveillance and water analysis are performed whenever required and random sterility checking of blood units and collection bags are performed. The department is involved in infection monitoring, MRSA screening and at regular intervals, surveys the antibiotic resistance patterns amongst organisms isolated at our center. The department perform water analysis, testing the efficacy of disinfectants, food handlers testing for carrier status, etc.

### Nuclear Medicine

This Department has Dual Head Gamma Camera with 5 isolation wards for radioactive treatment and conducting all gamut of investigation. With advent of PET CT and recent newer treatment, Nuclear Medicine has come to forefront in the management of Oncology patients. Shortly, the Dept. is getting state of art PET CT and SPECT CT with new 6 bedded isolation wards. Dept. has planned to start post graduate



teaching program in : DNB Nuclear Medicine for Doctors; and, BSc Nuclear Medicine for Technical personal.

### **Radiation Oncology**

Radiation Oncology is one of the main specialties in catering services to the patients attending KMIO. It has adequate Radiation Therapy, Teletherapy, Brachytherapy facilities. The department actively participates in Multidisciplinary clinics, teaching and research activities at KMIO. As both the numbers of cancer patients and the percent who receive radiation therapy is increasing, the Institute has made efforts in creating the necessary medical and paramedical training infrastructure to train and create the specially trained necessary manpower. The Dept. has adequately skilled and trained radiotherapy staff for each of these machineries like fulltime radiation oncologists, radiation physicists, radiation therapy technologists or radiotherapists, nurses, and support personnel.

### **Pathology**

The Dept. of Pathology has grown from strength to strength and has the following Units under its umbrella, viz Unit of Histopathology, Unit of Cytology, Unit of Haematology, Unit of Cytogenetics and the recently formed Unit of Oncopathology. The Dept. of Pathology caters to most of the routine Pathology investigations and also specialised tests like immunohistochemistry, FISH, conventional Cytogenetics and Flow Cytometry. A molecular Pathology laboratory will also be established shortly. The academic courses such as

(i) M.D. Pathology; Fellowships in Tumour Pathology; and B.Sc. in Medical Laboratory Technology are available in the Dept. Postgraduate students (MD Pathology) from all over the state are posted regularly for oncopathology training.

### **Molecular Oncology**

Molecular oncology is an interdisciplinary medical specialty at the interface of Bio-chemistry and oncology that refers to the investigation of the chemistry of cancer and tumors at the molecular scale. Also the development and application of molecularly targeted therapies.

### **Palliative Medicine**

The Dept. is providing Palliative care services and is one of the pioneers in obtaining and dispensing oral morphine solution. Many patients had the privilege of pain control with oral morphine solution and continuing care. The palliative care networks with hospice and home care services in Bangalore. At present it has a multi-disciplinary team of doctors, nurses, pharmacist, social worker and volunteers. It has out-patient services which functions 6 days a week and has 20 beds for inpatients. With a good team and support of large number of dedicated volunteers the department has expanded to incorporate, a day care Centre as a recreational services for patients and caretakers in a day of every week

### **Pediatric Oncology**

Pediatric Oncology is functioning as a separate Department from December 2008. The Department treats about 450





– 500 new Childhood cancer every year, which include both Hemetological Cancers and Solid Tumers.

### **Radiodiagnosis**

The Department of Radiodiagnosis from its inception, continues to play an important and significant role in the over-all health care and academic activities of the Institute. The department is well equipped with Imaging Equipment including X-Ray machines, mammography, Ultrasonography, colour Doppler, Whole Body CT Scanners and MRI. Throughout the year patients are referred for Investigation from all over Karnataka State as well as from neighbouring states. Tests are performed mainly for malignant disorders, but non-malignant conditions are also evaluated. Institute patients, staff members and referral patients from other hospitals are being regularly investigated.

### **Radiation Physics**

The department provides medical physics support to Radiation Oncology, Nuclear Medicine, Radio-diagnosis departments of KMIO and Regional Centre for Radiopharmaceuticals, BRIT, KMIO campus. Ph.D degree is being pursued in the department in various challenging topics in the field. The department conducts M.Sc. (Radiation Physics) programme affiliated to Rajiv Gandhi University of Health Sciences, Karnataka and approved by Atomic Energy Regulatory Board (AERB), Mumbai with intake of 5 students per year. Classes are conducted by the expert faculty members of the department for

M.D. (Radiotherapy), D.M.R.T., M.Sc. (Nursing), B.Sc. Radiotherapy Technology and Radio- Diagnosis technology programmes. The department is also recognized as one of the approved centers by AERB to conduct one year Internship programme for Medical Physics students as partial fulfilment of their curriculum for appearing for Radiological Safety Officer (RSO) examinations conducted by AERB.

### **Psycho-oncology**

Psycho oncology is an interdisciplinary area bringing together mental health and oncological fields to analyse the psychological, behavioural and social aspects of cancer. Cancer is an illness that comes with an unavoidable amount of distress from the beginning of its diagnosis further continuing into the treatment stages, and at the palliative care stage. It is important to look into the emotional, social and behavioral changes that occur in a patient and their caregiver's lives which will need psychological support from professionals such as psychiatrists, clinical psychologists, psychological counselors, and psychiatric social workers. Providing cancer patients and caregivers with coping strategies, adjustment techniques, stress management, pain management, relaxation techniques, and other emotional support. Supporting psychological wellbeing will not only improve the quality of life but also help the patient in having a more positive outlook and optimistic attitude towards the process and treatment.



### Amrit pharmacy

AMRIT is a unique initiative of the Ministry of Health and Family Welfare (MoHFW) with HLL Lifecare Ltd being nominated as the implementation agency. AMRIT stands for Affordable Medicines and Reliable Implants for Treatment. One can purchase medicines and implants at a discount of up to 60 per cent from AMRIT Pharmacy. AMRIT reflects Govt. of India's strong commitment to reduce the cost of treatment which benefits lakhs of patients. AMRIT retail pharmacy is located within KMIO campus, Bangalore This facility was inaugurated by Dr. C. Ramachandra, Director, KMIO on 20<sup>th</sup> October 2020.

### Laboratory Facilities

**Routine Investigation :** Routine blood test for biochemical parameters like, Blood sugar, RFT, LFT, LDH, Calcium, Uric acid, Cholesterol & Electrolytes like Sodium and Potassium

**Special Investigation :** Thyroid Function Test- T3,T4 & TSH, Thyroglobulin, Anti TG, Anti TPO

**Tumor Markers :** CEA, PSA, AFP, CA 125, BHCG, CA 19.9

**All investigations with respect to molecular oncology**

### Dietary Service

The Dietary Service is one of the important supportive services of the hospital catering to Nutritional support to the patients undergoing treatment at KMIO. The Dietary Department is Headed by Dr.V.B.Gowda, Prof. & HOD, Dept. of Anaesthesia.

Apart from the Dietician in the department there are 9 staff working including supervisor, cooks and cleaners with an objective of providing hygiene and nutritional food to our patients every day. Dieticians do regular ward round and prepare chart for each and every patient after assessing their need and daily requirement of calories. As per patients need whether liquid diet, semi-solid, solid or diabetic diet are provided.

### Library and information centre

The Library & Information Centre, KMIO is a specialised library in the field of Oncological Sciences. The Library catering to the needs of Doctors, faculty, research fellows, Scientific/ technical staffs, Students of Super specialities, Postgraduate and Undergraduates medical and para medical students. The library is acting as a referral center for oncology throughout South India to the medical, faculty & Oncology professionals.





## KMIO PROFILE AT A GLANCE (2019-20)

- 19,764 New Cases
- 3,48,327 Follow-up Visits
- 1260 Daily Average Patients Visits
- 15,665 In-Patients admissions
- 16,581 Pathology reports
- 90,618 Imaging studies
- 8077 Nuclear medicine studies
- 1,43,361 Hematology laboratory investigation
- 14624 Cytopathology cases
- 65,187 Microbiology investigations
- 9,51,697 Biochemistry routine Investigation
- 37,846 Special investigations including tumour marker (Biochemistry)
- 25,720 Units of Blood products issued
- 4,400 Immune histochemistry
- 2,248 Cytogenetics, FISH & RTPCR based diagnostic studies
- 63,731 Patients were treated with External radiotherapy
- 555 Brachytherapy procedures
- 5,167 Surgical and endoscopic procedure
- 17,435 were administered chemotherapy (Day care ward)
- 27 Residents in Medical, Paediatrics and Surgical, H&N, Gynae Oncology Super specialty course
- 50 Nursing colleges Students (Post Basic diploma, UG and PG courses)
- 25 Residents in Anesthesia, Pathology and Radiotherapy Postgraduate courses
- 60 Cancer detection Camps and Cancer education programmes



**PERFORMANCE STATISTICS-2019**

New Registration	
New Registration	19764
Follow-Up	348327
Out Patient	368091
Admission	7019
Readmission	8646
Toatal Inpatient	15665
Discharge	14601
Hospital Death	1009

Surgical Oncology	
Minor Surgery	933
Major Surgery	4234
Total Surgery	5167

Radiation Oncology	
External RT	5757
Brachy Therapy	1834
TPS	7591

Medical Oncology	
Day Care	5326
Chemotherapy Inpatient	4883
Death	451

Paediatric	
No. of Cases Registered	762
Treatment Performed	1380
Death	109

Nuclear Medicine	
Thyroid Scan	95
Bone Scan	3811
GFR	3653
Liver Scan	1
Renal Scan	5
RAI 131 Large dose scan	27
Muga Scan	3
Brain Scan	13
Salivary cintigraphy	0
Toxic Therapy with RAI 131	120
Palliative therapy	3
CA Thyroid – Spl.Investigation	324
Imaging	22
<b>Total</b>	<b>8077</b>

Radiology	
Conventional Radiography	27191
Ultrasonography/Colour Doppler	19850
Mamography	2304
C.T Scan	28189
MRI Scan	5576
ECO	5188
CT RT Planning	2129

Pathology Histopathology	
Biopsy	6688
No. of Blocks	3936
Review Cases	5433
Frozen	524
<b>Histopathology</b>	<b>16581</b>
<b>Fish</b>	<b>240</b>
IHC marker	4400
Her2/Neu test by Fish	158
EWSR1 test by fish	54
<b>IHC and Fish</b>	<b>4558</b>



Cytology	
Fnac Regular	2499
Usg –Fnac	3028
Ctg – Fnac	392
Ascitic Fluid	649
Pleural Fluid	577
Csf	3463
Sputum	12
Urine	77
Nipple Discharge	10
Bronchial Aspirate	193
Gynae Hospital	1368
Gynae Cd Camp	1460
Miscellaenous	49
Review Slides: Fnac	809
Gynae	10
Others	78
<b>Total</b>	<b>14674</b>

Haemetology	
Haemogram	96724
ESR	326
BMA	3364
BMBx	2393
RS	183
Cytochemistry	74
HB FP (PS)	26875
BT CT	482
Clinical Urine	511
FCM	939
PT APTT	4940
APIT	4940
240Hrs Lab CBC	1610
<b>Total</b>	<b>143361</b>

Cytogenetics	
BMA	1885
PBL	102
FNA	199
FISH	52
Pleural Fluid	6
<b>Total</b>	<b>2244</b>

Microbiology	
Investigations- Culture	<b>2019</b>
Urine	1229
Stool	800
Sputum	1817
Ent	970
Pus and Mis.	1701
Blood	3728
AFB Urinte/Sputums/PUS	281
Fungal culture	1244
PFPCR	9
HIV	17802
HBsAg	17803
HCV	17803
<b>Total</b>	<b>65187</b>

Biochemistry	
Glu	75735
UREA	96437
CREA	97211
TP	77852
ALB	78749
ALP	77823
BIL	77896
AST	78016
ALT	78016
LDH	12722
CAL	41659
CHOL	1731
UA	9280
Na	74285
K	74285
D.BIL	
<b>Total</b>	<b>951697</b>



<b>Special Invesitgations tumour markers</b>	
<b>AFP</b>	2684
CEA	4323
CA125	4165
PSA	1232
T3	6252
T4	6252
TSH	6576
TG	1300
ATG	946
ATPO	142
BHCG	1498
Ca19.9	2479
<b>Total</b>	<b>37849</b>



### Performance Statistics-2020

Registration	
New Registration	13973
Follow-Up	243823
Out Patient	257796
Admission	4244
Readmission	5300
Total Inpatient	9544
Discharge	9043
Hospital Death	634

Surgical Oncology	
Minor Surgery	803
Major Surgery	2169
Total Surgery	2972

Radiation Oncology	
Teletherapy	63731
Brachy Therapy	555
Simulation	3848
Minor OT/PV	3611

Medical Oncology	
Day Care	1511
Chemotherapy Inpatient	2972
Death	233

Paediatric	
No. of Cases Registered	539
Treatment Performed	1197
Death	60

Nuclear Medicine	
Thyroid Scan	32
Bone Scan	2672
Renogram/GFR	2403
Liver Scan	8
Renal Scan	0
Muga Cardiac Study	27
Large Dose Scan	5
Brain Scan	4
Salivary cintigraphy	0
Toxic Therapy	42
32 P/ Sm therapy	2
CA Thyroid	175
Imaging only	175
<b>Total</b>	<b>5545</b>



Radiology	
X-Ray and Radiography	14449
Ultrasound	6924
U/S FNAC	2249
U/S Biopsy	693
Mamography	1778
U/S Breast	143
CT Scan	23132
CT FNAC	206
CT Biopsy	190
CT RT Planning	162
MRI	4925
Echo	2335
DSA	116
<b>TOTAL</b>	<b>57302</b>

HAEMOGRAM	
ESR	61763
BMA	1986
BMBX	1386
RS	98

Pathology -Histopathology	
Biopsy	4887
No. of Specimen	2591
Review Case	3421
frozen	395
<b>Total</b>	<b>11294</b>
fnac regular	1437
USG - FNAC	2060
CTG - FNAC	223
Peritoneal Fluid	581
Pleural Fluid	405
Pericardiac Fluid	22
CSF	2562
sputum	4
urine	36
nipple discharge	15
bronchial aspirate	46
gynae hospital	787
gynae cd camp	683
review slides: fnac	555
Gynae	10
Others	62
<b>TOTAL</b>	<b>9488</b>

CYTOCHEMISTRY	
HB FP (PS)	16125
BT CT	213
CLINICAL URINE	257
FCM	653
PT	4066
APIT	4066
240Hrs Lab CBC	8900
<b>TOTAL</b>	<b>99717</b>
BMA	1246
PBL	74
FNA	103
FISH	71
PLEURAL FLUID	3
Acitic Fluid	2
<b>TOTAL</b>	<b>1499</b>





Microbiology - Investigations	
Urine	705
Stool	376
Sputum	713
Ent	400
Pus and Mis.	1112
Blood	1741
AFB	713
Fungal culture	136
PFPCR	610
HIV	1741
HBsAg	12734
HCV	12730
<b>Total</b>	<b>43975</b>

Special Investigations tumour markers	
AFP	2039
CEA	3588
CA125	3259
PSA	925
T3	3961
T4	3961
TSH	4227
TG	782
ATG	588
ATPO	100
BHCG	1123
Ca19.9	2037
<b>TOTAL</b>	<b>26590</b>

Biochemistry Routine Investigations	
Glucose	55578
UREA	68818
CREA	69036
TP	56674
ALB	57024
ALP	56635
BIL	56597
AST	56611
ALT	56611
LDH	7839
CAL	30120
CHOL	1307
UA	5736
Na	55877
K	55877
<b>Total</b>	<b>690340</b>

HEAD AND NECK ONCOLOGY	
Major Operations	658
Minor Operations	7772
<b>Total</b>	<b>8430</b>

Department of Oral Oncology	
Major Operations	189
Minor Operations	2280
<b>TOTAL</b>	<b>2469</b>

Gynec Oncology	
Major Operations	449

Blood Bank	
Total Blood Collected	6961
Total Blood Issued	8612
Issues PRBC	6018
Issues - FFP	4011
Issues - Platelets	6582
Issues - WB	247
Issues - SDP	250
COOMB's Test	255
Screening for HIV, HBsAg,	6207
BGRH of Patients / Donors	8052
<b>Total</b>	<b>31622</b>



## DEPARTMENT OF SURGICAL ONCOLOGY



**Dr.C.Ramachandra**  
Director & Professor



**Dr.Ravi Arjunan**  
Professor & HOD

The Department of Surgical Oncology is involved in the evaluation, diagnosis, treatment (mainly surgical), follow up and palliative care of patients with cancer of breast, thyroid, lung Gastrointestinal system, genitourinary system, Bone and soft tissue, skin, as well as mediastinal tumors. Endoscopic procedures are performed on 11 OPD days.



The Department is also involved in training of M.Ch Surgical oncology residents (In OPD, Wards, and in operation theatres) .MS General Surgery students, teaching of Bsc OT technology students. The Department consists of three units headed by Professors. Each unit has 2 OPD days and 4 operation theatre days in a week (Minor, major and supra major surgeries and minimal access surgeries are performed regularly)

Department has a set of outpatient rooms and each unit has wards with 30 beds. The outpatient rooms in addition to the examining rooms have rooms for teaching sessions, endoscopy room, and a Minor OT (where minor procedures like pleural fluid tapping, Intercostal drainage tube insertion, biopsies, abdominal paracentesis, drain removal and dressings are done on regularly).

### Academic Activities :

- Seminars on every Monday.
- Case presentations on every 3rd Saturday.
- Multi disciplinary seminars.
- Classes for post graduates posted to the Department every day in the afternoons.
- Journal club on alternate Friday.



### Conferences/ Seminars /Workshops Conducted By The Department :

Conducted CME on BREAST CANCER in month of October.

### Courses Offered :

The Department undertakes training for M.Ch. degree in Surgical Oncology. Every year 15 candidates are selected by entrance examination conducted by NEET.

The course is of 3 years duration. During the course, the students are exposed to all types of treatment for solid tumors. Apart from this, they have special postings during which they are posted to Radiation Oncology, Pathology, and Medical Oncology for 15 days each and various other oncology Departments like Head and Neck Oncology / Oral Oncology /Gynaecological Oncology for 3 months each and other Oncology institutes like Tata memorial hospital, Adyar cancer institute for 15 days each.

B.Sc OT Technology course is offered which is for a period of three years followed by 6 months of internship.

M.S (General surgery) postgraduate students from various medical colleges in Karnataka are posted in the Department for oncology exposure as part of their training programmers.

### Papers Published :

Achieving margin negative resection-doing less is justified: oncological outcomes of wedge excision of liver in gallbladder cancer (GBC) surgery.

Patkar S, **Patil V**, Acharya MR, Kurunkar S, Goel M.

Chin Clin Oncol. 2019 Aug;8(4):38. doi: 10.21037/cco.2019.07.07. Epub 2019 Aug 7

Preparedness of the cancer hospitals and changes in oncosurgical practices during COVID-19 pandemic in India: A cross-sectional study.

Singh HK, **Patil V**, Chaitanya G, Nair D.

J Surg Oncol. 2020 Dec;122(7):1276-1287. doi: 10.1002/jso.26174. Epub 2020 Aug 25.

Vein resection without reconstruction (VROR) in pancreatoduodenectomy: expanding the surgical spectrum for locally advanced pancreatic tumours.

Kulkarni RV, **Patil V**, Bhandare MS, Chaudhari VA, Shrikhande SV.

Langenbecks Arch Surg. 2020 Nov;405(7):929-937. doi: 10.1007/s00423-020-01954-4. Epub 2020 Aug 1



Robotic Complete Mesocolic Excision with Central Vascular Ligation for Right Colon Cancer: Surgical Technique and Short-term Outcomes.

**Ramachandra C, Sugoor P, Karjol U, Arjunan R, Altaf S, Patil V, Kumar H, Beesanna G, Abhishek M.**

Indian J Surg Oncol. 2020 Dec;11(4):674-683. doi: 10.1007/s13193-020-01181-9. Epub 2020 Aug 1.

Robotic Total Mesorectal Excision for Rectal Cancer: Short-Term Oncological Outcomes of Initial 178 Cases.

**Ramachandra C, Sugoor P, Karjol U, Arjunan R, Altaf S, Srinivas C, Prakash BV, Patil V.**

Indian J Surg Oncol. 2020 Dec;11(4):653-661. doi: 10.1007/s13193-020-01212-5. Epub 2020 Sep 8.

Outcomes of Cancer Surgery During the COVID-19 Pandemic: Preparedness to Practising Continuous Cancer Care.

**Ramachandra C, Sugoor P, Karjol U, Arjunan R, Altaf S, Halkud R, Krishnappa R, Chavan P, Siddappa KT, Shetty R, Pallavi VR, Rathod P, Shobha K, Sabitha KS.**

Minimally Invasive Surgery for Pelvic Exenteration in Primary Colorectal Cancer.

Kumar NA, Sasi SP, Shinde RS, Verma K, **Sugoor P**, Desouza A, Engineer R, Saklani A.

JLS. 2020 Jul-Sep;24(3):e2020.00026. doi: 10.4293/JLS.2020.00026

Lymph Node Ratio as a Prognostic Marker in Pancreatic Cancer Survival: A Systematic Review and Meta-Analysis.

Karjol U, Chandranath A, Jonnada P, Cherukuru S, Annavarjula V, Morla SA. Cureus. 2020 Aug 6;12(8):e9597. doi: 10.7759/cureus.9597.

Prognostic Role of Tumor Budding in Carcinoma Tongue: A Systemic Review and Meta-Analysis.

Karjol U, Jonnada P, Annavarjula V, Cherukuru S, Chandranath A, Anwar A. Cureus. 2020 Jul 21;12(7):e9316. doi: 10.7759/cureus.9316.

Lymph Node Ratio as a Prognostic Marker in Rectal Cancer Survival: A Systematic Review and Meta-Analysis.

Karjol U, Jonnada P, Chandranath A, Cherukuru S. Cureus. 2020 May 10;12(5):e8047. doi: 10.7759/cureus.8047.

Bladder Metastasis from Breast Cancer: A Systematic Review.

Karjol U, Jonnada P, Cherukuru S, Chandranath A. Cureus. 2020 Mar 25;12(3):e7408. doi: 10.7759/cureus.740



Statistics of the department such as no. And types of investigations carried out patients treated, new cases, followup cases, operations (Surgery & Minor OT), etc. for the calendar year 2019 to 2020.

Departmental Statistics	
No of Surgery	2636
Minor OT Biopsy	1820
Taping	1310
ICD	1090
Colonoscope	950
OGD/ Endoscope	1100
Bronchoscope	870

New cases	Follow up cases	Total
4300	19160	23460
Supra Major	Major	Minor
101	1150	1129

Totally 167 and 379 Robotic and Laproscopic Surgeries performed respectively.

#### Faculty and Staff :

Sl.No.	Name	Designation
1	Dr.C.Ramachandra	Professor
2	Dr.RaviArjunan	Professor
3	Dr.SyedAltaf	Professor
4	Dr.C.Srinivas	Associate Professor
5	Dr.Ashwathappa	Associate Professor
6	Dr.Prakash B V	Associate Professor
7	Dr.Arun H.N	Assistant Professor
8	Dr.UdayKarjol	Assistant Professor
9	Dr.PavanSugoor	Assistant Professor
10	Dr.K.V.Manjunath	Assistant Professor
11	Dr.Vijay Raj S Patil	Assistant Professor
12	Dr.Yeshwanth .R	Assistant Professor
13	Dr.HarishKumar.H	Assistant Professor
14	Dr.Zubair Ahmed	Senior Resident

(Six new Assistant professors were recruited via interview conducted in month of June and July )



**DEPARTMENT OF ANAESTHESIA & PAIN RELIEF**



**Dr. Namrata Ranganath**  
Professor and HOD

The Department was set up in 1981. Over the years, along with the development of medical sciences, the department has set up high standards in patient care, education and research. All clinical departments are anchored to this specialty. The Department offers Anaesthesia and Pain relief services for cancer treatment which includes Cancer Surgery - curative, reconstructive, and palliative using advanced technology and equipments. Our operation theatre complex consist of eight state of art fully equipped operation theatres rooms with 10 bedded, ICU. We have 15 bedded step-down ICU to take care of post-operative patients.

**Related Statistics of the Operations performed during 2019**

	<b>Male</b>	-	<b>Female</b>
Major Surgeries -	1862	-	2372
Minor Surgeries - .	470	-	463
Total Surgeries Performed-	5167		
	<b>ICU - 4234</b>		

**Ongoing Research Projects in the Department**

- Comparison between different doses of intravenous dexmedetomidine for ease of intubation and maintenance of anaesthesia without muscle relaxant in carcinoma breast patients undergoing modified radical mastectomy
- Intranasal Dexmedetomidine as premedicant for patients with Head & Neck cancers undergoing Direct laryngoscopic evaluation : a prospective randomized study
- Effect of Intravenous Vitamin C and N Acetyl Cysteine on Postoperative Pain and Opioid Consumption after Laparoscopic Gynaecologic Oncology Surgery: A Comparative Randomized Controlled Trial.
- Effect of Intravenous Dexmedetomidine and Propofol Infusion for Tubeless Intravenous Anaesthesia for Microlaryngoscopy Procedures in Head and Neck Surgeries Anaesthetic management of Juvenile Nasopharyngeal Angiofibroma: Our experience in the last Decade
- Does Robot Assisted Lower abdominal oncological surgeries affect the determinants of early extubation: our early experience
- Does Pre operative multimedia video allay anxiety in oncoanaesthesia?
- Efficacy of Intraperitoneal Instillation Of Ropivacaine VS Placebo For Post Operative Analgesia in Laparoscopic Gynaecological Cancer Surgeries- A Prospective Randomised Controlled Study
- Airway Management in Oral Oncosurgeries – A Prospective Observational Study
- Use of Virtual Endoscopy in Airway Management of Head & neck Onco surgeries





- “Outcomes of music as complementary medicine under general anaesthesia in patients undergoing visceral cancer surgeries - a prospective randomised clinical study”
- To compare the accuracy of two measurements using different anatomical facial landmarks for determining appropriate size of oropharyngeal airway: a prospective cross over study.
- Factors influencing the intubation techniques in base of tongue tumors- A prospective study in a tertiary cancer hospital.
- A prospective comparative study assessing airway sealing pressure in Baska mask using two different techniques.
- Analysis Of factors associated with difficult intubation in oral cancer surgery - a prospective randomized study
- comparison of fresh gas flows for optimal oxygenation and ventilation in robot assisted lower abdominal onco-surgeries

**Publications published by the staff of the Department**

1. Shashidhar Gowdra Sugandarajappa , N Sneha , Namrata Ranganath Comparison of Two Doses of Chlorprocaine for Spinal Anaesthesia in Brachytherapy Procedures: A Randomised Clinical Study Journal of Clinical and Diagnostic Research. 2020 Sep, Vol-14(9): UC12-UC16
2. Gifty Susan Philip , GS Shashidhar , Namrata Ranganath Effects of Low Dose Dexmedetomidine Infusion on Intraoperative Haemodynamic Stress Response in Patients Undergoing Oral Oncological Surgeries: A Randomised Control Study Journal of Clinical and Diagnostic Research. 2020 Oct, Vol-14(10): UC05-UC10
3. Arathi B H\*, Ramamani P V Reduction in consumption of opioid analgesia post operatively after transversus abdominis plane block in patients undergoing radical hysterectomy. MedPulse International Journal of Anesthesiology, Print ISSN: 2579-0900, Online ISSN: 2636-4654, Volume 15, Issue 2, August 2020
4. Arathi B H, Sangeetha Effect of single bolus dose of dexmedetomidine for attenuation of extubation response following general anaesthesia - A clinical study MedPulse International Journal of Anesthesiology, Volume 14, Issue 3 June 2020
5. Lakshman K, Philip JH, Ravikiran HM, Ranganath N. Foreign body obstructing fresh gas flow through disposable breathing circuit. Indian J Anaesthesia 2019;63(4):73-75.
6. Rachana ND, Mamatha HS, Sumitha C S, Kavitha Lakshman, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6 (Part - I): 1191-1196.
7. Mamatha HS, Rachana ND, Kavitha Lakshman, Sumitha CS, Namrata Ranganath Comparison of Intravenous Dexmedetomidine Alone and Combination with Midazolam as Premedication in Patients Receiving Spinal Anaesthesia; Indian Journal of Anesthesia and Analgesia 2019; 6(Part - I): 1165-1170.
8. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.



9. Sumitha CS, Kavitha Lakshman, Mamatha HS, Rachana ND, Rashmi NR, Namrata Ranganath Can Bedside Assessment Tests Predict Difficult Intubation in Oral Cancer Surgery Patients: A Prospective Observational Study; Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1207-1214.
10. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.

**Participation in conference / seminars / workshops during the year 2019**

**Dr.Namrata Ranganath**

**Professor & HOD**

**Dept of Anaesthesiology & Pain Relief**

- Attended Neonatal & Pediatric Advance Life Support Prog (NALS & PALS) at Indira Gandhi Institute of child health Bangalore. January 2019
- PG EXCEL 2019- Rajarajeshwari Medical College Bangalore 9,10<sup>th</sup>feb 2019-case discussion on facio maxillary trauma and judged free papers session.
- BE ORATE-2019 faculty for case posted for lobectomy and viva station of capnography, pulse oximeter, BIS.
- JOINT SECRETSRY for International Robotic Oncology workshop in Colo rectal Cancer and Gynaecological cancer held on April 19,20th 2019 at KMIO, Bangalore.
- ISA MEET at JSS Medical College Mysore on 11<sup>th</sup> may 2019-Delivered a lecturer on Practical challenges in oncoanaesthesia
- Organizing chair person of Jet Ventilation and Fiber Optic Intubation work shop. KMIO July 2019

- International conference of Indian College of Anaesthesiologists ICACON 2019 5-8<sup>th</sup>September Delhi“Minimizing Perioperative Lung Injuries”
- “Pharmacology of Airway” National Airway conference -6-8<sup>th</sup>Sept 2019 at K.S.Hegde Medical academyMangalore,
- Moderator for Panel Discussion on Geriatric Oncoanaesthesia-Pushing the Boundary !!! at SOAPCCON 20-22<sup>nd</sup>September 2019 ,HYDERABAD. 2019.
- ISACON 2019 [Gujarat and West zone]11,12,13thoctober 2019 Baroda. Speaker onChallenges in Oncoanaesthesia , work shop in oncoanaesthesiaspeaker-Anaesthesia for oncosurgery -Is it different, Predicting and managing difficult airway in Head and Neck Surgeries, Anaesthesia for Mediastinal surgeries.
- Attended USG guided workshop on upper limb blocks 2019
- ISACON 2019 Bangalore,scientific committee member,chairperson of oncoanaesthesia session,speaker -pro-con session Recurrence and survival in gastrointestinal cancer surgeries-Epidural Block is the safe bet, judge –posters
- 1st national conference of the Society Of Oncoanaesthesia And Perioperative Care[SOAPCCON] in TATA MEMORIAL CENTRE [17-19<sup>th</sup>AUGUST] MUMBAI, Moderator-Panel discussion on management of head and neck surgeries,
  - Panelist in oncoanaesthesia an emerging super speciality?
- BCLS AND ACLS COURSE from St. Johns medical college, Bangalore.
  - PALS Course obtained from Indira Gandhi Institute of Child Health, Bangalore.

**Dr.V.B.Gowda**

**Professor, Dept of Anaesthesiology &**

**Pain Relief**

- ISACON 2019
- ISSPCON 2019



**Dr.Arathi.B.H**

**Associate Professor.**

**Dept of Anaesthesiology & Pain Relief**

- Chairperson for a scientific session in ISACON 2019
- Faculty in “ Difficult Airway preconference workshop” Conducted in ISACON 2019
- Scientific chairperson for “ JET VENTILLATION” workshop organized by Kidwai Memorial Institute of Oncology
- Scientific chairperson and Faculty for “Head and Neck CME” conducted at Kidwai Memorial Institute of Oncology, Bangalore
- Scientific chairperson for “Thoracic Anaesthesia CME” conducted at Kidwai Memorial Institute of Oncology, Bangalore
- Invited Faculty in various CMEs and Conferences
- Judge for e-Poster session in ISACON 2019

**Dr.Shashidhar.G.S**

**Associate Professor.**

**Dept of Anaesthesiology & Pain Relief**

- SOAPOCCON 2019- HYDERABAD
- CAUPRA 2019- DELHI
- CHAIRPERSON for a scientific session in ISACON 2019 BENGALURU
- JUDGE for e-Poster session in ISACON 2019
- FACULTY in workshop Conducted on Difficult Airway in ISACON 2019
- JOINT SECRETARY of organising team in JET VENTILLATION workshop 2019 conducted by Kidwai Institute of Oncology
- Member of ORGANISING committee ISACON 2019- BENGALURU

- USG guided workshop on UPPER LIMB BLOCKS 2019

**Dr.Rashmi.N.R**

**Associate Professor..**

**Dept of Anaesthesiology & Pain Relief**

- Chairperson for a scientific session in ISACON 2019
- Judge for e-Poster session in ISACON 2019
- Was a Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organising team in JET VENTILLATION workshop conducted by Kidwai Institute of Oncology
- Was a part of Scientific Committee for Head and Neck CME conducted at Kidwai Memorial Institute of Oncology, Bangalore
- Has been part of PG Quiz Conducting teams in various CMEs and Conferences

**Dr. Henjarappa.K.S**

**Associate Professor..**

**Dept of Anaesthesiology & Pain Relief**

- Chairperson for a scientific session in ISACON 2019
- Judge for Young Anesthesiologist session in ISACON 2019
- Judge for “All By Myself” session in ISACON 2019
- Faculty in “ Difficult Airway preconference workshop” Conducted in ISACON 2019
- Treasurer for “ JET VENTILLATION” workshop organized by Kidwai Memorial Institute of Oncology
- Treasurer and Faculty for “Head and Neck CME” conducted at Kidwai Memorial Institute of Oncology, Bangalore
- Treasurer for “Thoracic Anaesthesia CME” conducted at Kidwai Memorial Institute of Oncology, Bangalore



- Invited Faculty in various CMEs and Conferences

**Dr.Kavitha Lakshman**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- ISACON 2019
- Was a Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organising team in JET VENTILLATION workshop conducted by Kidwai Institute of Oncology
- Attended USG guided workshop on UPPER LIMB BLOCKS 2019
- Attended CUSA, usg workshop on regional anaesthesia in AIIMS, Delhi, 2019

**Dr.Sumitha.C.S**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- FCCS course in Critical care
- Pain & Palliative course
- Basic Life support & Advance Cardiac Life Support course
- Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organizing team in JET VENTILLATION workshop conducted by Kidwai Memorial Institute of Oncology.
- Gave lecture on Laser anesthesia in Head & neck Anesthesia conference

**Dr.Rachana.N.D**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- SOAPCCON 2019
- ISACON 2019
- Was a Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organising team in JET VENTILLATION workshop conducted by Kidwai Institute of Oncology

- Attended USG guided workshop on UPPER LIMB BLOCKS 2019

**DR.Mamatha.H.S**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- SOAPCCON 2019
- ISACON 2019
- Was a Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organising team in JET VENTILLATION workshop conducted by Kidwai Institute of Oncology
- Attended USG guided workshop on UPPER LIMB BLOCKS 2019
- Attended Neonatal & Pediatric Advance Life Support Prog (NALS & PALS) at Indira Gandhi Institute of child health Bangalore.

**Dr.Yadhuraj.M.K**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- Was a part of Organizing team in PERIOPERATIVE PEDIATRIC LIFE SUPPORT conducted by ASPA(Asian Society of Pediatric Anesthesia ) at Indira Gandhi Institute of child health Bangalore.
- Was a Faculty in workshop Conducted on Difficult Airway in ISACON 2019
- Was a part of organizing team in JET VENTILLATION workshop conducted by Kidwai Institute of Oncology.
- Attended Neonatal & Pediatric Advance Life Support Prog (NALS & PALS) at Indira Gandhi Institute of child health Bangalore.
- ACLS and BLS

**Dr.Roopa B.O**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**





**ISACON 2019**

- Was a part of workshop Conducted on Difficult Airway by Kidwai in ISACON 2019

**Dr.Namratha G.C**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

- Was a part of organising team in PGEXCEL 12019
- ISACON 2019
- ESSENTIAL PAIN MANAGEMENT INSTRUCTOR workshop 2019
- Was a part of workshop Conducted on Difficult Airway in ISACON 2019

**Dr.Punita Priya .S**

**Assistant. Professor.**

**Dept of Anaesthesiology & Pain Relief**

**ISACON 2019**

Attended difficult airway workshop conducted by Kidwai Institute of Oncology

**Papers published in National and International Journals , along with Title of the paper, authors name, and name of the journal.**

**Scientific Publication :**

**Dr. NAMRATA RANGANATH**

1. Shashidhar Gowdra Sugandarajappa , N Sneha , Namrata Ranganath Comparison of Two Doses of Chloroprocaine for Spinal Anaesthesia in Brachytherapy Procedures: A Randomised Clinical Study Journal of Clinical and Diagnostic Research. 2020 Sep, Vol-14(9): UC12-UC16
2. Gifty Susan Philip , GS Shashidhar , Namrata Ranganath Effects of Low Dose Dexmedetomidine Infusion on

Intraoperative Haemodynamic Stress Response in Patients Undergoing Oral Oncological Surgeries: A Randomised Control Study Journal of Clinical and Diagnostic Research. 2020 Oct, Vol-14(10): UC05-UC10

3. Rachana ND, Mamatha HS, Sumitha C S, Kavitha Lakshman, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6) (Part - I): 1191-1196.
4. Mamatha HS, Rachana ND, Kavitha Lakshman, Sumitha CS, Namrata Ranganath Comparison of Intravenous Dexmedetomidine Alone and Combination with Midazolam as Premedication in Patients Receiving Spinal Anaesthesia; Indian Journal of Anesthesia and Analgesia 2019; 6(Part - I): 1165-1170.
5. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.
6. Sumitha CS, Kavitha Lakshman, Mamatha HS, Rachana ND, Rashmi NR, Namrata Ranganath Can Bedside Assessment Tests Predict Difficult Intubation in Oral Cancer Surgery Patients: A Prospective Observational Study; Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1207-1214.
7. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile





Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.

**Dr. ARATHI B H**

1. Arathi B H, Ramamani P V Reduction in consumption of opioid analgesia post operatively after transversus abdominis plane block in patients undergoing radical hysterectomy. MedPulse International Journal of Anesthesiology, Print ISSN: 2579-0900, Online ISSN: 2636-4654, Volume 15, Issue 2, August 2020
2. Arathi B H, Sangeetha Effect of single bolus dose of dexmedetomidine for attenuation of extubation response following general anaesthesia - A clinical study MedPulse International Journal of Anesthesiology, Volume 14, Issue 3 June 2020

**Dr. SHASHIDHAR G S**

1. Gifty Susan Philip , GS Shashidhar , Namrata Ranganath Effects of Low Dose Dexmedetomidine Infusion on Intraoperative Haemodynamic Stress Response in Patients Undergoing Oral Oncological Surgeries: A Randomised Control Study Journal of Clinical and Diagnostic Research. 2020 Oct, Vol-14(10): UC05-UC10
2. Shashidhar Gowdra Sugandarajappa , N Sneha , Namrata Ranganath Comparison of Two Doses of Chloroprocaine for Spinal Anaesthesia in Brachytherapy Procedures: A Randomised Clinical Study Journal of Clinical and Diagnostic Research. 2020 Sep, Vol-14(9): UC12-UC16

**Dr. HENJARAPPA K S**

**DR. KAVITHA LAKSHMAN**

1. **Lakshman K**, Philip JH, Ravikiran HM, Ranganath N. Foreign body obstructing

fresh gas flow through disposable breathing circuit. Indian J Anaesthesia 2019;63(4):73-75

2. Rachana ND, Mamatha HS, Sumitha cs, **Kavitha Lakshman**, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6\$) (Part - I): 1191.-1196
3. Mamatha HS, Rachana ND, **Kavitha Lakshman**, Sumitha CS, Namrata Ranganath; Comparison of Intravenous Dexmedetomidine Alone and in Combination with Midazolam as Premedication in Patients Receiving Spinal Anaesthesia Indian Journal of Anesthesia and Analgesia 2019; 6(Part - I): 1165-1170
4. **Kavitha Lakshman**, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath ; Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective Observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145

**DR SUMITHA C S**

1. Rachana ND, Mamatha HS, Sumitha C S, **Kavitha Lakshman**, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6) (Part - I): 1191-1196.
2. **Kavitha Lakshman**, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the



- Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.
3. Sumitha CS, Kavitha Lakshman, Mamatha HS, Rachana ND, Rashmi NR, Namrata Ranganath Can Bedside Assessment Tests Predict Difficult Intubation in Oral Cancer Surgery Patients: A Prospective Observational Study; Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1207-1214.
  4. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.
  3. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.
  4. Sumitha CS, Kavitha Lakshman, Mamatha HS, Rachana ND, Rashmi NR, Namrata Ranganath Can Bedside Assessment Tests Predict Difficult Intubation in Oral Cancer Surgery Patients: A Prospective Observational Study; Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1207-1214.
  5. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.

#### **Dr. RACHANA N D**

1. Rachana ND, Mamatha HS, Sumitha C S, Kavitha Lakshman, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6) (Part - I): 1191-1196.
2. Mamatha HS, Rachana ND, Kavitha Lakshman, Sumitha CS, Namrata Ranganath Comparison of Intravenous Dexmedetomidine Alone and Combination with Midazolam as Premedication in Patients Receiving Spinal Anaesthesia; Indian Journal of Anesthesia and Analgesia 2019; 6(Part - I): 1165-1170.

#### **Dr. MAMATHA H S**

1. Rachana ND, Mamatha HS, Sumitha C S, Kavitha Lakshman, Namrata Ranganath; Comparative Study of the Effect of Dexmedetomidine v/s Fentanyl on Intraoperative Hemodynamic Response in Robot Assisted Lower Abdominal Onco-Surgeries in Steep Trendlenburg Position; Indian Journal of Anesthesia and Analgesia 2019;6) (Part - I): 1191-1196.
2. Mamatha HS, Rachana ND, Kavitha Lakshman, Sumitha CS, Namrata Ranganath Comparison of Intravenous Dexmedetomidine Alone and Combination with Midazolam as Premedication in Patients Receiving Spinal Anaesthesia;



- Indian Journal of Anesthesia and Analgesia 2019; 6(Part - I): 1165-1170.
3. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1140-1145.
  4. Sumitha CS, Kavitha Lakshman, Mamatha HS, Rachana ND, Rashmi NR, Namrata Ranganath Can Bedside Assessment Tests Predict Difficult Intubation in Oral Cancer Surgery Patients: A Prospective Observational Study; Indian Journal of Anesthesia and Analgesia 2019;6(a) part - I): 1207-1214.
  5. Kavitha Lakshman, Sumitha CS, Rachana ND, Mamatha HS, Ravikiran HM, Namrata Ranganath Evaluation of the Anaesthetic Management of Juvenile Nasopharyngeal Angiofibroma in a Tertiary Cancer Care Hospital: A Five Year, prospective observational Study Indian Journal of Anaesthesia and Analgesia 2019;6(a) part - I): 1140-1145.

### Faculty and Staff :

Sl.No	Name	Designation
1	Dr.Namrata Ranganath	Professor and HOD
2	Dr.V.B.Gowda	Professor
3	Dr.Arathi .B.H	Associate Professor
4	Dr.Shashidhar .G.S	Associate Professor
5	Dr.Rashmi .N.R	Associate Professor
6	Dr.Henjarappa .K.S	Associate Professor
7	Dr.Kavitha Lakshman	Assistant Professor
8	Dr.Sumitha.C.S	Assistant Professor
9	Dr.Rachana .N.D	Assistant Professor
10	Dr.Mamatha .H.S	Assistant Professor
11	Dr.Yadhuraj .M.K	Assistant Professor
12	Dr. Roopa B.O	Assistant Professor
13	Dr. Namratha .G.C	Assistant Professor
14	Dr.Punita Priya .S	Assistant Professor
15	Vijayalakshmi.P	Anaesthesia technician
16	Krishnamurthy.C	Anaesthesia technician
17	Raju.V	Anaesthesia technician
18	Ankappa	Anaesthesia technician
19	Raju C	Anaesthesia technician
20	Naveesh.T.M	Anaesthesia technician



## ACADEMIC CELL



**Dr.C.Ramachandra**  
Director & Principal

The Academic Cell has been in existence since 1987. The main objective and functioning of the Academic Cell is to facilitate continuing Medical Education in the speciality of Oncology. The Institute imparts training in various discipline sub specialties of Oncology to Post Graduate, Undergraduates, interneers, nurses and Scientists of allied Sciences from various Medical/Paramedical Institutions in the State / Country.

### Courses offered :

In recognition of the facilities available at the Institute for Diagnosis, treatment and Research on Cancer patients, various Post Graduate, Undergraduates, and Diploma courses are offered and these courses are affiliated / Recognised by Rajiv Gandhi University of Health Sciences, Medical Council of India and National Board of Examinations.

### I. Post Graduate (Super Speciality) Courses

Courses	No. of Seats
1. M.Ch (Surgical Oncology) -	15
2. M.Ch (Gynec Oncology) -	03
3. M.Ch (Head & Neck) -	01
4. D.M (Medical Oncology) -	06
5. D.M(Peadiatric Oncology)-	02
6. DM (Onco Pathology) -	02

### II. Post Graduate and Diploma Courses

1. M.D. (Radiotherapy) -	09
2. M.D. (Pathology) -	04
3. M.D. (Microbiology) -	04
4. M.D. (Anesthesia) -	03
5. Diploma in Radiotherapy -	03

### III. Fellowship Programme

1. Gynaec onco surgery -	02
2. Paliative Care -	04
3. Onco-Imaging -	04
4. Tumor Pathology -	04
5. Head & Neck Cancer Surgery -	02
6. Oral Oncosurgery -	04

### IV. PG Allied Health Science Course

1. M.Sc. Radiation Physics -	05
2. M.Sc. Medical Imaging Technology-	10
3. M.Sc. Nursing -	02



**V. Undergraduate Courses**

1. B.Sc. Medical Technology - 10 (Medical Laboratory Technology)
2. B.Sc Medical Technology- 10 (Imaging Technology)
3. B.Sc Medical Technology- 10 (Radiotherapy)
4. B.Sc. Operation Theatre Technology
5. B.Sc. Anaesthesia Technology - 10
6. B.Sc. Nursing - 40

The selection of students for the Superspeciality courses D.M and M.Ch, Post Graduate course MD in Radiotherapy, MD Pathology, MD Microbiology, MD Anaesthesia and Diploma in Radiotherapy (DMRT) are done on Selection of through NEET-SS, NEET-PG All India basis, selection of Fellowship through written test and Interview by Institute. Selection of UG & PG in Allied Sciences through KEA. All Post Graduate (including Super Speciality), Diploma (DMRT) students are paid monthly stipend as per the rules of State Govt.

The departments of Pathology, Biochemistry, Microbiology and Radiation Physics are recognized for Ph.d programmes under RGUHS. Many students are pursuing for Ph.D in these departments.

In addition, the Government of India has recognized this Institute as one

of the Institute of National Excellence and has been deputing Medical persons for W.H.O. fellowships for higher education and training in cancer treatment and research. It has among its primary objectives, the promotion of a high standard patient care and aims to provide top notch integrated training programmes

in the Oncological Sciences. The Institute has initiated a programme of Professional education, technology and expertise transfer through short term education/training programmes for under graduates, post graduate students from medical colleges/institutions/ nursing colleges of Karnataka as well as from other states of the country. In additions students persuing Post Graduate studies various disciplines such has Biotechnology, Nursing, Social Work etc. are posted short term for Orientation classes / as Observers / trainees to the respective departments. The Doctors and Health Workers of MHFWS, Govt. of Karnataka are also trained by the institute with the main objective of imparting knowledge in prevention, diagnosis and treatment of cancer in early stage in their respective areas. The Academic Cell liaisons these activities between the Institute and other Institutions Medical Colleges.

**Staff Position :**

Sl.No	Name	Designation
1	Dr. Sandeep Kumar Asso.Prof. Dept. of Bio Chemistry	Officer-in-Charge (Officiating basis)
2	Sri. S.G. Surendra Murthy	Asst. Social Scientist
3	Smt. H. Virgina Venkateshwari	First Division Assistant
4	Smt. Renuka .R	Store clerk cum Typist





## DEPARTMENT OF BIOCHEMISTRY



**Dr.G.Ramesh**  
Prof. & HOD

The department of Biochemistry is a comprehensive department involved in patient care, teaching and research. A wide spectrum of clinical chemistry investigations including tumor markers are being routinely carried out in the department for the out-patients and in-patients of our hospital and also patients referred from other centers. The department is well equipped with State of art analyzers (for routine work) and has a regular quality control program to ensure the accuracy of laboratory results reported. Our laboratory does more than 8,00,000 tests annually. Turn around time for all the investigations is 3 hours. House keeping and waste management is done as per the Institute waste management policy.

### Academic Activities :

The department is actively engaged in several teaching programs. The 3 years B.Sc. Medical Laboratory Technology course is being conducted under the Rajiv Gandhi University of Health Sciences. Undergraduate and postgraduate medical students and students enrolled in the super specialty Oncology courses of the Medical University and from neighboring

institutes are regularly posted to the department for training.

In addition, the department extends facilities and guidance to postgraduate medical and dental students for their dissertation work. A number of undergraduate and post graduate non medical students from Bangalore University and other outside universities are regularly posted to the department for summer training programs.

### Research Activities :

Our laboratory is recognized by the Bhabha Atomic Research Centre for carrying out in vitro radioisotope work. The department is recognized by the Rajiv Gandhi University of Health Sciences, Karnataka State, to carry out research work for doctoral program. Our faculty members are recognized guides and have students registered for Ph.D. in Medical Biochemistry. Currently five candidates are working for their Ph.D. degree in department of Biochemistry under the RGUHS. The lab is well equipped for molecular research work.

### Research

#### Activities | Projects | Completed

#### Projects, Ongoing And New Projects

**Investigating galectin based  
potentiation of malignant ovarian  
cells within an ascites  
microenvironment**

*Supported by RGUHS*



### Ongoing projects :

“Role of the Cytoplasmic E-Cadherin Fragment in Ovarian Carcinoma and development of plasma based methylation biomarker panel for early diagnosis and prognosis.” (RGUHS).

“Role of DNA methylation in predicting response to chemotherapy & understanding signalling pathways involved in ovarian carcinoma.” (RGUHS).

“Aberrant promoter hypermethylation of tumor suppressor genes in endometrial carcinoma- correlation with clinicopathological parameters(RGUHS)



### Training activities :

- The department has been recognized by the RGUHS, Bangalore for the Ph.D program. Currently there are four students who have registered for a Ph.D under the RGUHS.
- Till Date 13 students have been awarded PhD from Bangalore University & RGUHS.
- Summer research programs have been conducted for the graduate and Post Graduate students of different Universities.

### Publications :

1. Kumar S, Swamy SN, Premalatha CS, Pallavi VR, **Gawari R**. Aberrant promoter Hypermethylation of RASSF1a and BRCA1 in circulating cell-free tumor DNA serves as a biomarker of ovarian carcinoma. *Asian Pacific journal of cancer prevention: APJCP*. 2019;20(10):3001.
2. Gera S, Kumar S, S, Swamy SN, Bhagat R, Vadaparty A, **Gawari R**, Bhat R, Dighe RR. Follicle-stimulating hormone is an autocrine regulator of the ovarian cancer metastatic niche through notch signaling. *Journal of the Endocrine Society*. 2019 Feb;3(2):340-57.
3. Sandeep Kumar, Noopur Nelson Manisha Roy Govardhan Khaleel Pallavi **Ramesh**. Is Locally Advanced Cancer Cervix Associated With Hypoalbuminemiaand Increased



- Granulocyte And Lymphocyte Ratio? Volume-8 | Issue-3 | March-2019 | PRINT ISSN No 2277 – 8179
4. Kumar S, Roy M, Nelson N, Govardhan G, Khaleel K, R. P, **G. Ramesh**. Pre-treatment de-ritis ratio as a marker for cervical cancer: a study at regional cancer centre. Int J Med Res Rev [Internet]. 2019Jun.30 [cited 2020Nov.27];7(3):162-9
  5. **Thriveni K**, Raju A, Kumar RV, Krishnamurthy S, Chalubarayaswamy R. Patterns of Relative Telomere Length in Associated with hTERT Gene Expression in the Tissue of Breast Cancer Patients Clin Breast Cancer.2019;19:27-34.
  6. **Sandeep Kumar**, Noopur Nelson Manisha Roy Govardhan Khaleel Pallavi Ramesh. Is Locally Advanced Cancer Cervix Associated With Hypoalbuminemia and Increased Granulocyte And Lymphocyte Ratio? Volume-8 | Issue-3 | March-2019 | PRINT ISSN No 2277 – 8179
  7. **Kumar S**, Roy M, Nelson N, Govardhan G, Khaleel K, R. P, G. Ramesh. Pre-treatment de-ritis ratio as a marker for cervical cancer: a study at regional cancer centre. Int J Med Res Rev [Internet]. 2019Jun.30 [cited 2020Nov.27];7(3):162-

DEPARTMENT OF BIOCHEMISTRY STATISTICS FROM THE MONTH OF JAN'2019 TO DEC'2019 (Routine Investigations)																
Month	Glu	UREA	CREA	TP	ALB	ALP	BIL	AST	ALT	LDH	CAL	CHOL	UA	Na	K	Total
Jan	6090	7252	7324	5973	6015	5966	5977	5982	5982	1088	2972	139	735	5474	5474	72443
Feb	5690	6938	7000	5682	5763	5685	5688	5691	5691	1024	2957	109	714	5206	5206	69044
Mar	6517	8043	8112	6595	6696	6596	6605	6611	6611	1040	3437	111	754	6085	6085	79898
Apr	5652	7537	7578	6132	6220	6138	6140	6147	6147	1096	3221	108	794	5691	5691	74592
May	6368	8156	8204	6505	6560	6504	6514	6517	6517	1132	3554	81	835	6208	6208	79863
Jun	5693	7577	7614	5992	6070	5994	5989	5999	5999	976	3172	78	693	5659	5659	73164
Jul	6802	8838	8894	7105	7212	7105	7105	7142	7142	1092	3798	79	641	6636	6636	86227
Aug	6802	7894	7940	6325	6397	6321	6332	6346	6346	991	3493	77	631	6070	6070	77315
Sep	5903	8038	8103	6284	6334	6273	6287	6296	6296	932	3213	84	629	6103	6103	76877
Oct	6441	8573	8667	6803	6881	6790	6796	6812	6812	866	3648	58	754	6727	6727	83355
Nov	6769	8652	8747	6967	7039	6965	6969	6977	6977	882	3725	70	692	6987	6987	85405
Dec	6753	8264	8353	6814	6887	6811	6819	6821	6821	928	3794	62	734	6764	6764	83389
Control	675	675	675	675	675	675	675	675	675	675	675	675	675	675	675	10125
Total	75735	96437	97211	77852	78749	77823	77896	78016	78016	12722	41659	1731	9280	74285	74285	951697



Markers) (Jan 2019 To Dec 2019)					
Month	AFP	CEA	CA125	PSA	T3
Jan	228	374	304	104	475
Feb	220	334	260	98	468
Mar	212	346	370	89	481
Apr	219	328	339	86	423
May	220	360	373	100	522
Jun	223	340	344	88	554
Jul	217	322	339	85	579
Aug	191	324	298	90	478
Sep	168	310	299	80	491
Oct	161	306	300	81	417
Nov	195	303	289	74	512
Dec	180	321	300	86	502
Control	250	350	350	170	350
Total	2684	4323	1465	1232	6252

Continue.....

Month	T4	TSH	TG	ATG	ATPO
Jan	475	511	123	101	8
Feb	468	493	106	71	5
Mar	481	518	105	70	8
Apr	423	450	85	63	3
May	522	547	110	82	7
Jun	554	573	92	66	6
Jul	579	602	115	83	9
Aug	487	496	89	58	7
Sep	491	521	81	57	4
Oct	417	436	85	50	9
Nov	512	550	83	70	8
Dec	502	529	86	75	8
Control	350	350	170	100	60
Total	6252	6576	1300	946	142

Continue.....

Month	BHCG	Ca19.9	Total
Jan	109	203	3015
Feb	114	189	2826
Mar	118	206	3004
Apr	107	206	2732
May	106	220	3171
Jun	108	213	3164
Jul	124	193	3247
Aug	117	187	2813
Sep	109	187	2799
Oct	109	160	2501
Nov	118	162	2876
Dec	109	180	2878
Control	150	170	2820
Total	1498	2476	37846

SPECIAL INVESTIGATIONS (TUMOUR MARKERS) (JAN 2020 TO DEC 2020)				
Month	GLU	UREA	CREA	TP
Jan	6953	8588	8645	7032
Feb	6497	8161	8220	6611
Mar	5194	6425	6447	5338
Apr	1956	2495	2503	2102
May	3879	4683	4692	3902
Jun	5100	6223	6237	5118
Jul	2667	3344	3352	2808
Aug	3427	4268	4279	3555
Sep	4291	5643	5647	4499
Oct	4379	5525	5534	4474
Nov	5023	6033	6049	4976
Dec	5537	6755	6756	5584
Control	675	675	675	675
Total	55578	68818	69036	56674

Continue.....

Month	ALB	ALP	BIL	AST
Jan	7100	7018	7026	7024
Feb	6678	6606	6606	6615
Mar	5368	5328	5331	5331
Apr	2112	2103	2104	2103
May	3931	3900	3901	3903
Jun	5141	5111	5114	5119
Jul	2822	2805	2805	2808
Aug	3576	3547	3546	3545
Sep	4515	4494	4492	4489
Oct	4491	4477	4468	4468
Nov	4995	4976	4958	4960
Dec	5620	5595	5571	5571
Control	675	675	675	675
Total	57024	56635	56597	56611

Continue.....

Month	ALT	LDH	CAL	CHOL
Jan	7024	883	3908	73
Feb	6615	834	3751	67
Mar	5331	649	2916	58
Apr	2103	322	1172	25
May	3903	567	1958	49
Jun	5119	689	2666	71
Jul	2808	406	1587	34
Aug	3545	470	1903	32
Sep	4489	574	2244	67
Oct	4468	535	2150	48
Nov	4960	581	2443	63
Dec	5571	654	2747	45
Control	675	675	675	675
Total	56611	7839	30120	1307



Continue.....

Month	UA	Na	K	Total
Jan	642	6911	6911	85738
Feb	579	6523	6523	80886
Mar	476	5220	5220	64632
Apr	273	2082	2082	25537
May	415	3920	3920	47523
Jun	552	5035	5035	62330
Jul	247	2745	2745	33983
Aug	297	3532	3532	43054
Sep	346	4431	4431	54652
Oct	353	4423	4423	54216
Nov	412	4906	4906	60241
Dec	469	5474	5474	67423
Control	675	675	675	10125
Total	5736	55877	55877	690340

**Special Investigations Tumour Markers-2020**

Month	AFP	CEA	CA125	PSA
Jan	181	334	333	87
Feb	229	370	295	87
Mar	164	294	250	65
Apr	70	128	90	36
May	167	293	234	65
Jun	149	292	287	65
Jul	75	134	119	31
Aug	123	218	210	45
Sep	157	277	294	70
Oct	146	283	257	58
Nov	162	294	264	79
Dec	166	321	276	67
Control	250	350	350	170
Total	2039	3588	3259	925

Continue...

Month	T3	T4	TSH	TG
Jan	553	553	597	113
Feb	505	505	537	86
Mar	343	343	359	44
Apr	78	78	84	6
May	250	250	270	40
Jun	358	358	380	61
Jul	134	134	147	15
Aug	207	207	232	31
Sep	233	233	252	32
Oct	268	268	289	49
Nov	318	318	339	53
Dec	364	364	391	82
Control	350	350	350	170
Total	3961	3961	4227	782

**Faculty and Staff :**

Sl.no	Name	Designation
1	Dr.G.Ramesh	Prof. & Head
2	Dr.K.Thriveni	Asso.Prof.
3	Dr.Sandeep Kumar	Asst. Prof
4	Mr.S.P. Vajra Kumar	Asst.Reseach Scientist
5	Smt.N.C.Vijayalakshmi	Chief Lab.Tech:
6	Mr.Syed Abdul Jameel	Senior Med.Lab.Tech.
7	Mr.D.Narasimulu	Senior Med.Lab.Tech.
8	Mr.Shivaswamy	Senior Med.Lab.Tech.
9	Mr.K.B.Lingaraju	Jr.Med.Lab.Technologist
10	Smt.G.S.Shivarathnamma	Jr.Med.Lab.Technologist
11	Smt.S.K.Kavitha	Jr. Med.Lab.Technologist





DEPARTMENT OF BLOOD BANK & IMMUNO HAEMATOLOGY



**Dr.C.Ramachandra**  
Director & Professor

Department of Immunohematology and blood transfusion provides supportive care to all the patients who visit the hospital. On an average of 10,000 blood units of blood are collected and around 18000 are issued annually. Almost 96%-98% component separation occurs in the department. As it is a cancer setup, maximum requirement lies of platelets and hence the component separation done is optimum so as to ensure maximum uptake and safety to the patient. components like fresh frozen plasma and platelet concentrate are issued to the patients undergoing chemotherapy and surgical intervention.

- Regular teaching sessions and hands on sessions are conducted for staff and also for students in

order to have better understanding in blood science.

- Regular blood donation camps are conducted and motivation of blood donors is carried out. The maximum efforts are undertaken to ensure that all the blood collection is collected from voluntary non-remunerated blood donors. the blood bank is a regular participant of EQAS TRANSFUSION MODULE for external quality assessment, carried out by CMC, Vellore.



- From march 2019, Blood Bank, KMIO received license for the preparation of single donor platelets (plateletpheresis). Since then all the patients of KMIO are receiving SDP without extra efforts.
- In December 2019, to mark the occasion of World AIDS Day, KSAPS(Karnataka state AIDS prevention society) and DAPCU (District AIDS project control unit) felicitated KMIO, blood



bank as “The Best Blood Bank for 2019” – in terms of maximum VOLUNTARY BLOOD DONATION.

CME for safe blood transfusion and rational use of blood, organized by NIMHANS, Blood Bank

(b) Dr. Dholakiya Spruha K and Dr. Satish Babu: Workshop regarding NAT facility to Government of Karnataka held At Bowring.

**Participation at conference/seminars/workshops :**

(a) Dr. Dholakiya Spruha K :

Collections, Issues-Units For The Year Of January 2019 To December 2019										
MONTH	COLLECTIONS BBC+CAMPS	OUTSIDE-RECEIVED								
		PRBC-WB/PLT		PRBC	WB	PLT	FFP	HIV	HCV	HBSAg
January	511	399	986	312	196	312	350	0	0	3
February	1305	390	1233	958	340	958	500	1	0	7
March	945	70	883	707	305	707	757	0	0	3
April	763	288	441	480	280	480	464	0	0	3
May	674	193	658	477	192	477	738	1	0	4
June	986	326	946	936	46	936	512	1	1	2
July	1310	221	451	938	360	938	536	0	0	12
August	977	359	1132	719	253	719	358	1	0	4
September	756	451	1647	521	233	521	240	0	0	2
October	789	322	1115	561	221	561	392	0	0	7
November	835	260	1390	529	267	529	373	0	0	4
December	766	126	816	603	261	603	379	2	0	2
<b>Total</b>	<b>10789</b>	<b>3403</b>	<b>11698</b>	<b>7741</b>	<b>2954</b>	<b>7741</b>	<b>5599</b>	<b>6</b>	<b>1</b>	<b>53</b>

**Total of Issues Blood = 14132**

Random Donor Platelet = 19626

Fresh Frozen Plasma = 5599

No. of camps-81

Total unit issued- **39357**

**Collections, Issues-Units For The Year Of January 2020 To December 2020**

Month	PRBC	FFP	PLATELETS	WB	SDP	COOMB'TEST	Screening for HIV, HBsAg, HCV, MP, Syphilis	BGRH of Patients/Donors	Total
Jan	691	443	691	33	21	32	732	825	3468
Feb	875	371	875	30	29	25	911	1002	4118
Mar	395	298	395	12	34	24	443	512	2113
Apr	219	94	219	1	13	13	236	302	1097
May	591	171	591	17	12	17	617	700	2716
Jun	724	158	724	116	38	31	883	905	3579
Jul	247	199	230	0	7	18	278	542	1521
Aug	404	404	404	0	23	21	427	490	2173
Sep	571	571	571	10	18	18	581	648	2988
Oct	443	443	443	10	16	15	443	602	2415
Nov	634	634	847	10	14	19	654	722	3534
Dec	224	224	622	8	25	22	795	802	2722
<b>Total</b>	<b>6018</b>	<b>4010</b>	<b>6612</b>	<b>247</b>	<b>250</b>	<b>255</b>	<b>7000</b>	<b>8052</b>	<b>32444</b>

**Total Blood Collected = 6961 Units      Total Blood Issued = 8612 Units**

**Faculty and Staff :**

Sl.no	Name	Designation
1	Dr. Dholakiya Spruha K	Assistant professor
2	Dr. Deepa S Anand	Senior Medical Officer
3	Dr. Satish Babu	Assistant Surgeon
4	Smt. Madevi	Asst. Social Welfare Officer
5	Sri Venkateshmurthy	Chief Lab. Technologist
6	Smt. B.K.Shanthi	Staff nurse
7	Smt. Tara	Staff nurse
8	Mis. Deepika	Staff nurse
9	Sri Prakash	Staff nurse
10	Sri Annaso	Staff nurse
11	Sri G. Krishnamurthy	Sr. Lab. Technologist
12	Sri Ashwath Reddy	Jr. Lab. Technologist
13	Smt. Amrutha	Jr. Lab. Technologist
14	Sri Rathan Kumar	Jr. Lab. Technologist
15	Sri Adiseshamurthy	Jr. Lab. Technologist



## DEPARTMENT OF COMMUNITY ONCOLOGY



**Dr. C. Ramachandra**  
Director & HOD

The essential components of Cancer Control Programme are Education, Prevention, Early detection, diagnosis, Treatment, Follow-up, after care and rehabilitation which form the three areas of prevention namely Primary, Secondary and Tertiary prevention.



Early detection and diagnosis are pre-requisite for adequate treatment of pre-cancer and early cancers. The aim of early detection and diagnosis is to examine and identify men, women and children who are generally asymptomatic and apparently healthy. The department of Community Oncology (erstwhile Mobile Cancer Education and Detection –MCEDU) has been established at the Kidwai Memorial Institute of Oncology since 1983. Initially the department consisted of two units viz; Base Unit

### Objectives :

The Main objectives of the department are,

- 1) To increase awareness among community through following means for prevention and early detection of cancer
  - a) through community outreach programs,
  - b) by involving citizens, citizen groups, NGOs, etc.
- 2) To enable ASHA workers, PHCs, CHCs, TLHs, DLHs, TCCC, NGOs, participating private hospitals, etc. to undertake screening (both opportunistic and systematic screening) for early detection of cancer.
- 3) To provide training and capacity building to ASHA workers, PHCs, CHCs, TLHs, DLHs and TCCC in the State for prevention, early detection, screening, diagnosis and treatment of cancer.
- 4) To develop and implement IT systems, software, tools, etc. required for effective implementation of State level Community Cancer Services for awareness, training, implementation, monitoring, evaluation, research and improvement.
- 5) To establish a State Level Center of Excellence Office at Kidwai Cancer Institute for Community Cancer Services.



Village Health & Sanitation Committee, ASHA and local volunteers will be involved in awareness creation in the community.

**Linkages with Tertiary Cancer Centre (TCC) :**

The District is to be linked with nearby TCC, which will provide specialize services for early detection of Cancer at CHC level through camp approach. The TCC will further investigate the suspected cases of Cancer detected in the camp to confirm the diagnosis. The confirm cases will be given appropriated treatment at TCC. The financial support for the treatment will be given under the programme or through other scheme. In the camp, the following activities proposed to be carried out:

- Screening of target population for early detection of Cancer
- Clinical and laboratory examination of suspected cases referred by health facilities.
- Follow of already confirmed cancer cases
- Onsite hands-on-training of health care providers in cancer screening

**Awareness Programs :**

About a week Community awareness campaign will be organized just prior to the camp to create awareness in the community about the early warning signals of cancer, date, Time, place of screening camp to ensure maximum community participation, mobilization of target population to report for screening. Various local approaches for creating awareness will be used such as person to person contact, miking, nukkad natak, wall writings, posters etc. Local NGOs and



**Training :**

The Health Care Providers such as doctors (including Gynaecologist & general surgeon), staff nurse and ANMs / ASHAs / ASHAs will be provided one day capsular training at district level on early warning signals of Cancers, Self and clinical examination of breast, and VIA technique for cancer cervix. Services of medical college will also be taken in training and organization of camp for screening.

The department in collaboration with Voluntary organizations conducts Cancer Education an Detection camps in various places (mostly in rural areas) of Karnataka and also neighbouring states. These camps are conducted as part of secondary prevention where the mass is screened through opportunistic screening programs by the team of specialised doctors. Considering the community work the Institute has been doing, Bharath Electronics Limited(BEL) under their CSR programme, donated a Hi tech Cancer detection Bus at the cost of 2crore Rupees during 2019. This bus is equipped with State of Art gadgets such as Digital X-ray machine, multi probe Ultrasound machine, Blood Analyser, Gynaec examination table, Colposcope, ECG apparatus and Bio Toilet inside the bus. This bus is used for screening people for early detection





through camps. On an average the department conducts 6-8 camps and around 250-300 people are screened in each camp. The specialists from various departments of the Institute take part in the screening activities.

In addition to the above bus, another vehicle equipped with Mammography machine donated by America Kannada Koota Association (AKKA) also participates in the screening activities with the intention of screening Women for detection of Breast Cancer. People attending these camps are primarily screened for detection of Cancer cervix through PAP smear, Breast Cancers using clinical breast examination followed by Mammography and Ultrasonography (wherever indicated) and Oral examination for identifying oral cancers. The experts from the institute participate in creating Cancer Awareness among the people through lectures and these programmes are regularly conducted at High Schools and Colleges, Garment factories and through the camps organised by various NGO's. Lot of education materials have been developed by the department and this includes Audio-Visuals Aids and exhibition materials. Experts contribute for creating awareness among general public through Print and Electronic media. Flip charts, Pamphlets, Video films have been developed for this purpose. During these lectures various topics such as burden of cancer, causes of cancer, warning signs and symptoms for cancer, harmful effects of the tobacco and alcohol use, importance of healthy diet and personal hygiene are covered. Those cases suspected /detected during camps are further referred to Kidwai for further investigations/treatment. In addition several community projects have been proposed as part of cancer control activities with the strategies as mentioned below.

In addition to the above staff, Doctors, Nursing Staff, Technicians and Supportive staff will be posted on rotation basis from various departments on the camp days. Faculty from the concerned departments will participate in the Awareness programme as and when required.

### **Opportunistic screening through existing health system :**

#### **Cancer Cervix :**

All women aged 35 to 50 years visiting district hospital/sub-district hospital/community health centre will be screened for cancer cervix using VIA technique by trained gynaecologist, staff nurse and ANMs / ASHAs / ASHAs. All suspected cases will be referred to TCC for final diagnosis and management.

#### **Breast Cancer :**

All women visiting district hospital/sub-district hospital/community health centre/Sub-centre may be taught breast self examination (BSE) to examine their breast once a month, within a week after the menstrual period with the flat of the hand. Any woman with the signs and symptoms should be ruled out of breast cancer by the doctors at PHC and above by Clinical Examination as described in the protocol to detect Cancer Breast.

#### **Oral Cancer :**

Pre-cancerous lesions or conditions are local or generalized disturbances that predispose to malignancy in a particular site associated with reverse smoking, beedi smoking and sub- mucous lesions. These conditions are amenable to early diagnosis and treatment.

All habitual tobacco users visiting hospital/sub-district hospital/community health centre/Sub-centre may be taught Self Examination of oral cavity. All doctors and nurses should be trained in examination of oral cavity for any lesion. The Health Care Providers at CHC and above should examine all persons especially habitual tobacco users for any lesion in oral cavity. Oral cavity includes lip, anterior 2/3 of tongue, floor of mouth, buccal mucosa, gingival mucosa and hard palate and as per the protocol.

To expand the Preventive Oncology activities it has been proposed to upgrade the department to fulfilled Centre for Public Health



Department Of Community Oncology: Details of Cancer Detection Camps Conducted from January					
Sl.No.	Date of	Organiser/Venue	Place	Number	No.of
1	04-01-2019	Lion's Club, Sagar/ Sringeri	SAGARA	45	29
2	05-01-2019	Lion's Club, Sagar/ Sringeri	SAGARA	81	
3	06-01-2019	Sri Ramadas, Ex-Health	MYSURU	13	12
4	20-01-2019	Subrahmanyannagar	BENGALURU	48	11
5	02-02-2019	Sri Venkateshwara	HALEBUDHANUR	4	2
6	03-02-2019	MDA College,	HARAPANAHALLI	17	16
7	15-02-2019	Siddarth Medical College	TUMAKURU	19	19
8	16-02-2019	Sri H.D.Revanna, Hon'ble	HASSAN	11	-
9	17-02-2019	Sri Ramdas, MLA/	MYSURU	41	29
10	27-02-2019	MEHS High School	DODDA MARALAVADI	19	19
11	01-03-2019	KudurR	MAGADI	3	3
12	24-02-2019	Organised by Sri Ramdas,	MYSURU	62	14
13	03-03-2019	Organised by Sri Ramdas,	MYSURU	35	28
14	05-03-2019	Sri Ashwathnarayana	BENGALURU	16	13
15	10-03-2019	Jayanagar Eye Hospital	BENGALURU	99	87
16	07-03-2019	Dist. Health and Family	BENGALURU	37	14
17	03-03-2019	Anekal Taluk Health	THATTANAHALLI/ ANEKAL	34	2
18	10-03-2019	S.S.R. COLLEGE	KALKERE/BENGALURU	2	2
19	23-03-2019	Rural College, Kanakapura	AREHOSAHALLI	21	21
20	24-04-2019	Bant's Assoiation/Bant's	BENGALURU	24	15
21	26-03-2019	Laughing Club,	BENGALURU	48	20
22	28-03-2019	New Horizon Engineering	BENGALURU	41	33
23	30-03-2019	Lokhande's Hospital	BENGALURU	8	8
24	11-05-2019	NSS Unit, Nimhan's	JIGINI/ BENGALURU	41	11
25	18-05-2019	Vidhana Soudha	BENGALURU	63	41
26	26-05-2019	Sagar Chandramma	BENGALURU	7	7
27	15-06-2019	BBMP P.U.College/	BENGALURU	44	11
28	21-06-2019	Gnanabharathi Layout	BENGALURU	9	9
29	23-06-2019	Lion's Club, Bylappanahalli	KOLARA	12	10
30	30-06-2019	Channamanakere	BENGALURU	19	15

**Staff of the Department :**

Sl.No	Name	Designation
1	Dr. C. Ramachandra	Director & Head
2	Dr. C. Ramesh	Professor and HOD Dept. of Epidimeiology
3	Dr. A. Mahantesh	Assistant Surgeon
4	Dr. A. Sathyanarayana	Section Officer
5	Smt. Vidya	Cytotechnician



**DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS**



**Dr.C.Ramesh**  
Prof. & HOD

The Department of Epidemiology and Biostatistics comprises of both the Hospital Based Cancer Registry and Population Based Cancer Registry. The Hospital Based Cancer Registry of the dept. collects information on each and every patient registered at Kidwai Memorial Institute of Oncology in a pre-devised questionnaire devised for the purpose by the National Cancer Registry Programme Project of the Indian Council of Medical Research. The Population Based Cancer Registry collects information on each and every resident (of Bangalore) cancer patient diagnosed/treated at any of the Hospitals/Nursing Homes/Pathology laboratories in addition to the vital statistics divisions of the Bangalore Urban agglomeration area apart from the base Institution (KMIO). The Hospital Based Cancer Registry provides information on the magnitude of cancer problem of a given hospital in terms of various types of cancers, the treatment particulars and its outcome etc., which enables the Institution to plan for the management/control of the cancer disease. The data collected by the PBCR provides magnitude of cancer in a given community (i.e. Bangalore) in terms of rates in addition to types of cancers and trends of disease over the period based on which one can plan control measures, estimation of cancers in a given region. The Data abstracted is subjected to quality checks using the software developed and

provided by National Cancer Registry Programme (ICMR) and data is widely published in national and International Publications / forum. The data from PBCR is included in Cancers Incidence in Five Continent Volumes published by IARC. The information so collected has helped registries to generate hypothesis enabling initiation of epidemiological studies for finding out possible causative factors for different cancers.

A total number of 19764 new cases have been registered during the year 2019 and 348327 follow-up visits have been recorded. In other words, about 63 new cases and about 1000 follow-up patients visits KMIO daily for treatment. The Hospital has bed strength of 575.



**Leading sites of cancers in HBCR : 2019**

**Males :** Oral cancers continue to be the most common form of cancers among males and accounts for 16.4% of the total cancers in males. Among Oral cancers, cancer of the Mouth is the most predominant site of cancer accounting for over 54 % of the oral cancers. The (other common cancers among males in order are Pharyngeal cancers (9.37 %), Lung Cancers (8.7%), Esophagus (6.0%), Larynx (5.57%), Stomach (5.5%)

**Females :** Cancer of the cervix uteri continues to be the most predominant site of cancer and accounted for 22.58 % of all



cancers in females. Cancer of the breast is the second most common site (19.23 %) followed by cancers of oral cavity (10.76 %), ovary (6.73%) and thyroid (4.3%). Over the years, a gradual increase in the proportion of cervical cancers and a marginal but steady increase in the numbers and relative proportion of breast cancers is observed.

Tobacco related cancers account for 35.6% of all cancers and males accounted for 51% of total male cancers and 20.6 % of all cancers in females in the HBCR

Among Males, Oral and Pharyngeal Cancer together account for 54.2 % and Esophagus cancer for 12.6%. Among females, more than fifty percent of TRCs are Oral and Pharyngeal more than 59 % followed by Esophagus (19.5%) and Lung (12.1%). Together in both sexes, the Tobacco Related Cancers accounted for 35.6%



### Population Based Cancer Registry

The Population Based Cancer Registry at Kidwai Memorial Institute of Oncology (KMIO) was established during June 1981 with the main objective of assessing the magnitude and type of various cancers in Bangalore, and to provide a framework for controlling the impact of cancer in the community apart from carrying out research investigations on cancer aetiology through epidemiological studies. This registry was included under the network project of the National Cancer Registry Programme (NCRP) of Indian Council of Medical

Research (ICMR) and the actual registration of cancer cases commenced from 1<sup>st</sup> January 1982.

Bangalore is the capital of the Indian state of Karnataka, located on the Deccan Plateau in the south-eastern part of Karnataka, Bangalore is well known as a hub for India's information technology sector.

As a large and growing metropolis, Bangalore is home to many well-recognized colleges and research institutions in India. Numerous public sector industries, software companies, aerospace, telecommunications and defense organizations are located in the city. Bangalore is also known as the Silicon Valley of India because of its position as the nation's leading IT exporter. A demographically diverse city, Bangalore is a major economic and cultural hub.

Bangalore lies in the southeast of the Indian state of Karnataka. It is in the centre of the Mysore Plateau at an average elevation of 900 m (2953 ft ) and located at 12.97°N 77.56°E. Bangalore experiences a tropical climate with distinct wet and dry seasons. Due to its high elevation, Bangalore usually enjoys a more moderate climate throughout the year, although occasional heat waves can make things very uncomfortable in the summer. The coolest month is December with an average temperature of 15.4°C and the hottest month is April with an average high temperature of 32.8°C. Bangalore receives rainfall from both the northeast and the southwest monsoons.

The registry covers Bangalore Urban District which consists of Bruhat Bangalore Mahanagara Palike (BBMP) which consists of 198 wards and 38 death registration units; Bangalore Urban District has an area of 741km<sup>2</sup> with an estimated population of 11,883,000 as of 2019.

### Incidence Patterns In Bangalore

#### Incidence Cases :



All new cases of cancer diagnosed in a defined population during a specified period of time are considered as incident cases. Hence all new cases of cancer diagnosed in the defined area of Bangalore Urban District during the year 2019 (1<sup>st</sup> Jan to 31<sup>st</sup> Dec) formed the incident cases. A total number of 218225 cases of cancers collected from Bangalore since the

beginning of Cancer Registry from 1982 through 2019. Compared to the cases registered during the year of commencement of the registry in 1982 the number of cancer cases in Bangalore was increasing overall 640% change was observed in 2019 compare to base year in males 500% and in females 700% change observed.

**Incidence Over the Years-PBCR, Bengaluru**

Year	Incident cases			AAR/100000	
	Male	Females	Total	Male	Females
1982	973	1167	2140	90.7	117.5
1983	918	1087	2005	83.5	105.8
1984	934	1093	2027	81.8	105.9
1985	1030	1074	2104	88.7	98.9
1986	1056	1186	2242	87.4	105.9
1987	1191	1351	2542	99.3	118.4
1988	1291	1437	2728	102.5	121
1989	1336	1435	2771	100.8	114.2
1990	1379	1640	3019	101.9	128.4
1991	1407	1692	3099	103	131.9
1992	1505	1661	3166	100.8	117.6
1993	1612	1858	3470	103.4	126.3
1994	1451	1679	3130	87.3	106.8
1995	1606	1794	3400	92.2	110.8
1996	1486	1730	3216	82.3	97.2
1997	1500	1717	3217	82.7	99.3
1998	1625	1868	3493	87.0	103.4
1999	1707	2011	3718	86.1	103.5
2000	1896	2199	4095	94.4	110.9
2001	1938	2261	4199	93.3	112.9
2002	2008	2359	4367	96.7	116.1
2003	2039	2445	4484	96.5	116.1
2004	2157	2735	4892	95.2	120.2
2005	2430	2827	5257	102	118.6
2006	2655	3282	5937	108.6	133.5
2007	2971	3665	6636	117.4	143
2008	3068	3717	6785	118.3	132.2
2009	2961	3682	6643	109.6	134.4
2010	3284	3947	7231	116.9	139.4
2011	3550	4164	7714	123	142.1
2012	3929	4645	8574	114.3	135.6
2013	4501	5230	9731	125	146.5
2014	4796	5957	10753	126.5	157.3
2015	5162	6636	11798	128.9	161.8
2016	5528	7315	12843	131.3	166.3
2017	5894	7994	13888	133.7	170.7
2018	6260	8673	14933	136.1	175.2
2019	6626	9352	15978	138.5	179.7
2020	6992	10031	17023	140.9	184.2





### **Cancer Registration System :**

Since the Cancer Registration System is active, the registry staff visit various sources of registration namely, all Government Hospitals, Private Hospitals, Nursing Homes, Diagnostic Labs besides Base Institution(KMIO) and Death Registration Units in the defined area and actively pursue and collect information on cancer cases reported and interview the patients wherever possible.

At KMIO each and every patient registered will be interviewed at their first presentation to the hospital and collect socio-demographic details in the first stage. Later, the case records of these patients are obtained to the registry to extract information on clinical variables such as method of diagnosis, stage of the disease, site of cancer, treatment details, etc. (only for KMIO cases). The inclusion criteria for registration of cases is that patients who have lived in the defined areas of Bangalore Urban District for a minimum period of one year at the time of first diagnosis of cancer.

### **Cancer Incidence Reporting System :**

Cancer incidence is defined as the occurrence of new cancer cases in a defined population during a specified time period diagnosed between 1st January 31st December of every year in the registry area. Incidence reflects the number of primary tumors rather than the number of individuals with cancer. All malignant tumors including those where the pathologist may have merely suspected a malignant change are registered. Cases under code 'O' (benign) or '1' (uncertain whether benign or malignant or borderline malignancy) or '2' (carcinoma in situ) are not included in our files. Cancer cases where the death certificate is the only source of information are however included.

### **Major Sources Of Registration :**

During the recent years 2015 onwards, 19% of the incident cases were registered from the base Institution (KMIO) and 81% of the cases were registered from other major hospitals and sources. Bangalore being one of the fastest growing city in the country



particularly in view of the development that took place in the field of information technology, many high-tech hospitals have come up where the facilities for diagnosis and treatment for cancer is available.

Further, The Bangalore Development Authority is expanding its area every year wherein several Health Care facilities are added. The Registry staff makes efforts to identify the new Hospitals/Nursing Homes that have come up in such developed areas has to be covered. Presently, the Registry visits all the major hospitals and nursing homes in addition to the Death Registration Units and Diagnostic Laboratories.

### Leading Sites Of Cancer :

The leading sites of cancer among males and females are shown in table-4.1. Among males, cancer of the lung continues to be the most predominant site of cancer constituting 10.1% of the total male cancers followed by cancers of the stomach (6.9%), prostate (6.4%), esophagus (5.4%) and Liver (4.3%). Among females, cancer of the breast is the most common cancer constituting 27.9% of the total female cancers followed by cancer of the cervix (12.0%), ovary (6.4%), Mouth (3.8%) and Lung (3.8%). Altogether, the first ten leading sites of cancers among males and females accounted for 52.6.0% and 67.1% respectively

CHILDHOOD CANCERS (0-14 YEARS)	
Year	2019
Childhood Cancer	224
Total Cases	15978
Percentage	1.4

**Bengaluru Cancer Incidence Projection Using 2012-2014 Incidence Rates, Bengaluru****Males :**

Desc	CR	2015	2016	2017	2018	2019	2020
Lip	0.1	5	5	6	6	6	6
Tongue	4.1	216	224	233	243	253	263
Mouth	4.1	216	224	233	243	253	263
Salivary Gland	0.3	16	16	17	18	18	19
Tonsil	0.9	47	49	51	53	55	58
Oth. Oropharynx	0.9	47	49	51	53	55	58
Nasopharynx	0.5	26	27	28	30	31	32
Hypopharynx	2.8	147	153	159	166	172	179
Pharynx Unspecified	0.4	21	22	23	24	25	26
Oesophagus	5.2	274	285	296	308	320	333
Stomach	6.7	352	367	381	397	413	429
Small Intestine	0.3	16	16	17	18	18	19
Colon	3.3	174	181	188	195	203	211
Rectum	3.1	163	170	176	184	191	199
Anus & Anal Canal	0.2	11	11	11	12	12	13
Liver	4.1	216	224	233	243	253	263
Gallbladder etc.	1.4	74	77	80	83	86	90
Pancreas	1.7	89	93	97	101	105	109
Nose, Sinuses etc.	0.3	16	16	17	18	18	19
Larynx	2.8	147	153	159	166	172	179
Lung etc.	9.8	516	536	558	580	604	628
Other Thoracic Organs	0.4	21	22	23	24	24	25
Bone	1	53	55	57	59	62	64
Melanoma of Skin	0.2	11	11	11	12	12	13
Other Skin	0.8	42	44	46	47	49	51
Conn. & Soft Tissue	1.5	79	82	85	89	92	96
Breast	0.8	42	44	46	47	49	51
Penis	0.7	37	38	40	41	43	45
Prostate	6.2	326	339	353	367	382	397
Testis	0.4	21	22	23	24	25	26
Kidney etc.	1.6	84	88	91	95	99	103
Renal Pelvis	0.1	5	5	6	6	6	6
Ureter	0	3	3	3	3	3	3
Bladder	2.2	116	120	125	130	136	141
Uns.Urinary Organs	0.1	5	5	6	6	6	6
Eye	0.1	5	5	6	6	6	6
Brain, Nervous System	3.7	195	202	211	219	228	237
Thyroid	2	105	109	114	118	123	128
Adrenal Gland	0	0	0	0	0	0	0
Sec.unsof lymph node	0	0	0	0	0	0	0
Sec.uns of Res&Dig	0	0	0	0	0	0	0
Sec.uns of Oth sites	0	0	0	0	0	0	0
Hodgkins Disease	1	53	55	57	59	62	64
NHL	3.7	195	202	211	219	228	237
Multiple Myeloma	1.6	84	88	91	95	99	103
Lymphoid Leuk.	1.9	100	104	108	113	117	122
Myeloid Leukaemia	2.8	147	153	159	166	172	179
Leukaemia Uns	0.4	21	22	23	24	25	26
Other and Uns	10.6	558	580	603	628	653	679
<b>All Sites</b>	<b>96.8</b>	<b>5092</b>	<b>5297</b>	<b>5510</b>	<b>5732</b>	<b>5962</b>	<b>6202</b>



**Female :**

ICD10	Desc	2015	2016	2017	2018	2019	2020
C00	Lip	5	5	5	6	6	6
C01-02	Tongue	59	61	64	66	69	72
C03-06	Mouth	234	244	254	265	276	288
C07-08	Salivary Gland	15	15	16	17	17	18
C09	Tonsil	13	14	14	15	16	16
C10	Oth. Oropharynx	10	10	11	11	11	12
C11	Nasopharynx	15	15	16	17	17	18
C12-13	Hypopharynx	39	41	42	44	46	48
C14	Pharynx Unspecified	9	10	10	11	11	11
C15	Oesophagus	200	208	217	226	236	246
C16	Stomach	200	208	217	226	236	246
C17	Small Intestine	10	10	11	11	11	12
C18	Colon	137	142	148	155	161	168
C19-20	Rectum	122	127	132	138	144	150
C21	Anus & Anal Canal	15	15	16	17	17	18
C22	Liver	84	87	91	95	99	103
C23-24	Gallbladder etc.	83	86	90	94	98	102
C25	Pancreas	57	60	62	65	67	70
C30-31	Nose, Sinuses etc.	10	10	11	11	11	12
C32	Larynx	24	25	26	28	29	30
C33-34	Lung etc.	229	239	249	259	270	282
C37-38	Other Thoracic Organs	10	10	11	11	11	12
C40-41	Bone	39	41	42	44	46	48
C43	Melanoma of Skin	5	5	5	6	6	6
C44	Other Skin	34	36	37	39	40	42
C47+49	Conn. & Soft Tissue	59	61	64	66	69	72
C50	Breast	1708	1780	1854	1932	2012	2096
C51	Vulva	20	20	21	22	23	24
C52	Vagina	29	31	32	33	34	36
C53	Cervix Uteri	732	763	795	828	862	898
C54	Corpus Uteri	234	244	254	265	276	288
C55	Uterus Unspecified	34	36	37	39	40	42
C56	Ovary etc.	390	407	424	442	460	479
C57	Other Female Genital	5	5	5	6	6	6
C58	Placenta	4	4	4	5	5	5
C64	Kidney etc.	43	44	46	48	50	52
C65	Renal Pelvis	1	1	1	2	2	2
C67	Bladder	34	36	37	39	40	42
C69	Eye	10	10	11	11	11	12
C70-72	Brain, Nervous System	122	127	132	138	144	150
C73	Thyroid	229	239	249	259	270	282
C74	Adrenal Gland	4	4	4	5	5	5
C77	Sec.unsof lymph node	0	0	0	0	0	0
C78	Sec.uns of Res&Dig	0	0	0	0	0	0
C79	Sec.uns of Oth sites	0	0	0	0	0	0
C81	Hodgkins Disease	34	36	37	39	40	42
C82-85,C96	NHL	107	112	117	121	126	132
C90	Multiple Myeloma	68	71	74	77	80	84
C91	Lymphoid Leuk.	49	51	53	55	57	60
C92-94	Myeloid Leukaemia	98	102	106	110	115	120
C95	Leukaemia Uns	10	10	11	11	11	12
Oth.uns	Other and Uns	405	422	440	458	477	497
<b>Total</b>	<b>All Sites</b>	<b>6105</b>	<b>6361</b>	<b>6627</b>	<b>6904</b>	<b>7193</b>	<b>7493</b>



**KARNATAKA CANCER INCIDENCE PROJECTION USING 2012-2014 INCIDENCE CRUDE RATES,  
BENGALURU-Males**

District	2015	2016	2017	2018	2019	2020	2021
BELGAUM	2467	2497	2527	2558	2590	2622	2654
BAGALKOTE	974	987	1000	1014	1028	1042	1057
BIJAPUR	1160	1181	1203	1225	1248	1271	1295
BIDAR	886	897	908	919	930	942	954
RAICHUR	989	1002	1016	1031	1045	1059	1074
KOPPAL	721	732	743	755	766	778	790
GADAG	540	544	549	554	559	564	569
DHARWAD	958	971	984	997	1011	1024	1038
UTTARA KANNADA	721	725	729	733	737	741	746
HAVERI	826	835	843	852	861	869	878
BELLARY	1353	1382	1413	1444	1476	1509	1542
CHITRADURGA	844	851	859	866	873	881	888
DAVANAGERE	988	995	1003	1011	1019	1026	1034
SHIMOGA	872	877	882	887	892	897	902
UDUPI	570	578	586	594	603	612	622
CHIKMAGALUR	547	546	545	545	544	543	543
TUMKUR	1329	1334	1338	1343	1348	1353	1358
BANGALORE-URBAN	5681	5906	6141	6386	6640	6905	7181
MANDYA	889	891	893	895	898	900	902
HASSAN	870	873	876	880	883	887	890
DAKSHINA KANNADA	1048	1061	1075	1089	1104	1120	1136
KODAGU	266	266	266	266	266	266	266
MYSORE	1536	1555	1574	1594	1614	1634	1655
CHAMARAJANAGARA	507	509	512	514	517	519	522
GULBARGA	1351	1373	1395	1418	1442	1465	1489
YADGIR	621	634	647	660	674	688	702
KOLAR	787	796	804	813	822	831	840
CHIKKABALLAPURA	640	646	652	658	664	670	676
BANGALORE RURAL	523	531	540	549	557	567	576
RAMANAGARA	541	544	547	550	552	555	559
<b>KARNATAKA</b>	<b>32000</b>	<b>32518</b>	<b>33051</b>	<b>33599</b>	<b>34163</b>	<b>34742</b>	<b>35339</b>





## FEMALES

District	2015	2016	2017	2018	2019	2020	2021
BELGAUM	3100	3141	3182	3224	3267	3311	3355
BAGALKOTE	1241	1259	1277	1295	1313	1332	1351
BIJAPUR	1433	1460	1488	1516	1545	1575	1605
BIDAR	1091	1106	1120	1134	1149	1164	1179
RAICHUR	1271	1290	1309	1328	1348	1367	1388
KOPPAL	917	931	945	960	974	989	1004
GADAG	685	692	698	705	712	719	726
DHARWAD	1207	1225	1244	1263	1283	1303	1323
UTTARA KANNADA	910	915	921	927	933	939	944
HAVERI	1019	1030	1042	1053	1065	1077	1089
BELLARY	1716	1756	1796	1838	1880	1924	1969
CHITRADURGA	1063	1074	1084	1095	1106	1118	113
DAVANAGERE	1243	1255	1267	1279	1291	1304	1316
SHIMOGA	1129	1138	1147	1155	1164	1173	1182
UDUPI	796	804	813	823	833	844	856
CHIKMAGALUR	716	717	717	718	719	720	720
TUMKUR	1691	1700	1708	1717	1725	1734	1744
BANGALORE-URBAN	6672	6939	7216	7506	7808	8122	8450
MANDYA	1137	1141	1144	1147	1150	1153	1157
HASSAN	1131	1136	1141	1146	1151	1156	1162
DAKSHINA KANNADA	1378	1396	1414	1433	1453	1474	1496
KODAGU	354	354	355	356	357	358	359
MYSORE	1963	1991	2020	2050	2079	2110	2141
CHAMARAJANAGARA	652	657	661	666	670	675	680
GULBARGA	1683	1711	1740	1769	1799	1830	1861
YADGIR	791	807	824	842	859	878	896
KOLAR	993	1004	1015	1026	1037	1048	1060
CHIKKABALLAPURA	801	809	817	825	833	841	849
BANGALORE RURAL	639	649	660	671	682	693	705
RAMANAGARA	686	690	695	699	704	709	714
<b>KARNATAKA</b>	<b>40109</b>	<b>40775</b>	<b>41461</b>	<b>42166</b>	<b>42892</b>	<b>43639</b>	<b>44408</b>



**KARNATAKA CANCER PREVALENCE PROJECTION USING 2007-2011 INCIDENCE CRUDE RATES,  
BENGALURU-MALES**

District	2015	2016	2017	2018	2019	2020	2021
BELGAUM	6660	6741	6824	6908	6993	7079	7166
BAGALKOTE	2629	2665	2701	2738	2776	2814	2853
BIJAPUR	3131	3189	3248	3308	3370	3432	3496
BIDAR	2391	2421	2451	2481	2512	2544	2575
RAICHUR	2669	2707	2744	2782	2821	2860	2900
KOPPAL	1947	1977	2007	2037	2068	2100	2132
GADAG	1457	1470	1483	1496	1509	1522	1536
DHARWAD	2588	2622	2657	2693	2729	2766	2803
UTTARA KANNADA	1945	1957	1968	1979	1991	2002	2014
HAVERI	2230	2253	2276	2300	2324	2348	2372
BELLARY	3652	3732	3815	3899	3985	4073	4163
CHITRADURGA	2280	2299	2318	2338	2358	2378	2398
DAVANAGERE	2667	2687	2708	2729	2750	2771	2793
SHIMOGA	2353	2367	2380	2394	2408	2422	2436
UDUPI	1540	1560	1581	1604	1628	1653	1681
CHIKMAGALUR	1476	1474	1472	1471	1469	1467	1466
TUMKUR	3589	3601	3614	3627	3640	3653	3666
BANGALORE-URBAN	15338	15947	16581	17241	17929	18644	19390
MANDYA	2400	2406	2412	2417	2423	2429	2435
HASSAN	2348	2357	2366	2375	2384	2394	2404
DAKSHINA KANNADA	2829	2865	2903	2942	2982	3024	3067
KODAGU	718	718	718	718	718	718	718
MYSORE	4146	4198	4250	4303	4357	4412	4469
CHAMARAJANAGARA	1368	1375	1381	1388	1395	1402	1409
GULBARGA	3646	3706	3767	3829	3892	3956	4021
YADGIR	1677	1711	1747	1783	1820	1858	1897
KOLAR	2126	2148	2172	2195	2219	2243	2267
CHIKKABALLAPURA	1727	1743	1759	1776	1792	1809	1826
BANGALORE RURAL	1412	1434	1457	1481	1505	1530	1555
RAMANAGARA	1461	1468	1476	1484	1492	1500	1508
<b>KARNATAKA</b>	<b>86400</b>	<b>87799</b>	<b>89238</b>	<b>90717</b>	<b>92239</b>	<b>93805</b>	<b>95416</b>



**FEMALES**

District	2015	2016	2017	2018	2019	2020	2021
BELGAUM	8369	8480	8592	8706	8821	8939	9057
BAGALKOTE	3351	3398	3447	3496	3546	3597	3649
BIJAPUR	3868	3942	4017	4094	4172	4251	4332
BIDAR	2947	2985	3023	3062	3102	3142	3183
RAICHUR	3432	3482	3534	3586	3639	3692	3747
KOPPAL	2476	2514	2552	2591	2631	2671	2712
GADAG	1849	1867	1886	1904	1922	1941	1960
DHARWAD	3259	3309	3360	3411	3464	3517	3572
UTTARA KANNADA	2456	2472	2487	2503	2518	2534	2550
HAVERI	2751	2781	2812	2844	2876	2908	2940
BELLARY	4633	4740	4850	4962	5077	5195	5315
CHITRADURGA	2870	2899	2928	2957	2987	3017	305
DAVANAGERE	3357	3389	3421	3453	3486	3520	3553
SHIMOGA	3049	3072	3096	3119	3143	3167	3191
UDUPI	2149	2171	2195	2221	2249	2279	2311
CHIKMAGALUR	1933	1935	1937	1939	1941	1943	1945
TUMKUR	4567	4589	4612	4635	4659	4683	4708
BANGALORE-URBAN	18015	18734	19485	20266	21081	21930	22814
MANDYA	3071	3079	3088	3097	3106	3114	3123
HASSAN	3054	3067	3080	3094	3107	3122	3136
DAKSHINA KANNADA	3721	3769	3818	3870	3924	3980	4038
KODAGU	955	957	959	962	964	966	969
MYSORE	5301	5377	5455	5534	5615	5697	5781
CHAMARAJANAGARA	1761	1773	1785	1798	1810	1823	1835
GULBARGA	4543	4620	4698	4778	4858	4941	5024
YADGIR	2135	2180	2226	2273	2321	2370	2420
KOLAR	2682	2710	2740	2769	2799	2830	2861
CHIKKABALLAPURA	2163	2184	2205	2226	2248	2270	2293
BANGALORE RURAL	1726	1754	1782	1811	1842	1872	1904
RAMANAGARA	1851	1863	1876	1888	1901	1914	1928
<b>KARNATAKA</b>	<b>108294</b>	<b>110093</b>	<b>111944</b>	<b>113849</b>	<b>115808</b>	<b>117825</b>	<b>119900</b>



**KARNATAKA CANCER INCIDENCE PROJECTION USING 2012-2014 INCIDENCE CRUDE RATES,  
BENGALURU-MALES**

ICD10	Desc	CR	2015	2016	2017	2018	2019	2020
C00	Lip	0.1	33	34	34	35	35	36
C01-02	Tongue	4.1	1355	1377	1400	1423	1447	1472
C03-06	Mouth	4.1	1355	1377	1400	1423	1447	1472
C07-08	Salivary Gland	0.3	99	101	102	104	106	108
C09	Tonsil	0.9	298	302	307	312	318	323
C10	Oth. Oropharynx	0.9	298	302	307	312	318	323
C11	Nasopharynx	0.5	165	168	171	174	176	179
C12-13	Hypopharynx	2.8	926	941	956	972	988	1005
C14	Pharynx Unspecified	0.4	132	134	137	139	141	144
C15	Oesophagus	5.2	1719	1747	1775	1805	1835	1866
C16	Stomach	6.7	2215	2251	2288	2326	2365	2405
C17	Small Intestine	0.3	99	101	102	104	106	108
C18	Colon	3.3	1091	1109	1127	1145	1165	1184
C19-20	Rectum	3.1	1025	1041	1058	1076	1094	1113
C21	Anus & Anal Canal	0.2	66	67	68	69	71	72
C22	Liver	4.1	1355	1377	1400	1423	1447	1472
C23-24	Gallbladder etc.	1.4	463	470	478	486	494	502
C25	Pancreas	1.7	562	571	580	590	600	610
C30-31	Nose, Sinuses etc.	0.3	99	101	102	104	106	108
C32	Larynx	2.8	926	941	956	972	988	1005
C33-34	Lung etc.	9.8	3240	3292	3346	3402	3459	3517
C37-38	Other Thoracic Organs	0.4	131	133	136	138	140	143
C40-41	Bone	1.0	331	336	341	347	353	359
C43	Melanoma of Skin	0.2	66	67	68	69	71	72
C44	Other Skin	0.8	264	269	273	278	282	287
C47+49	Conn. & Soft Tissue	1.5	496	504	512	521	529	538
C50	Breast	0.8	264	269	273	278	282	287
C60	Penis	0.7	231	235	239	243	247	251
C61	Prostate	6.2	2050	2083	2117	2152	2188	2225
C62	Testis	0.4	132	134	137	139	141	144
C64	Kidney etc.	1.6	529	537	546	555	565	574
C65	Renal Pelvis	0.1	33	34	34	35	35	36
C66	Ureter	0.0	16	17	17	17	18	18
C67	Bladder	2.2	727	739	751	764	776	790
C68	Uns. Urinary Organs	0.1	33	34	34	35	35	36
C69	Eye	0.1	33	34	34	35	35	36
C70-72	Brain, Nervous System	3.7	1223	1243	1263	1284	1306	1328
C73	Thyroid	2.0	661	672	683	694	706	718
C81	Hodgkins Disease	1.0	331	336	341	347	353	359
C82-85,C96	NHL	3.7	1223	1243	1263	1284	1306	1328
C90	Multiple Myeloma	1.6	529	537	546	555	565	574
C91	Lymphoid Leuk.	1.9	628	638	649	659	671	682
C92-94	Myeloid Leukaemia	2.8	926	941	956	972	988	1005
C95	Leukaemia Uns	0.4	132	134	137	139	141	144
Oth.uns	Other and Uns	10.6	3504	3561	3619	3679	3741	3804
<b>Total</b>	<b>All Sites</b>	<b>96.8</b>	<b>32000</b>	<b>32518</b>	<b>33051</b>	<b>33599</b>	<b>34163</b>	<b>34742</b>



**Females**

ICD10	Desc	CR	2015	2016	2017	2018	2019	2020
C00	Lip	0.1	32	33	33	34	34	35
C01-02	Tongue	1.2	385	391	398	404	411	419
C03-06	Mouth	4.8	1539	1565	1591	1618	1646	1674
C07-08	Salivary Gland	0.3	96	98	99	101	103	105
C09	Tonsil	0.3	87	89	90	92	93	95
C10	Oth. Oropharynx	0.2	64	65	66	67	69	70
C11	Nasopharynx	0.3	96	98	99	101	103	105
C12-13	Hypopharynx	0.8	256	261	265	270	274	279
C14	Pharynx	0.2	61	62	63	64	65	67
C15	Oesophagus	4.1	1315	1336	1359	1382	1406	1430
C16	Stomach	4.1	1315	1336	1359	1382	1406	1430
C17	Small Intestine	0.2	64	65	66	67	69	70
C18	Colon	2.8	898	913	928	944	960	977
C19-20	Rectum	2.5	802	815	829	843	857	872
C21	Anus & Anal Canal	0.3	96	98	99	101	103	105
C22	Liver	1.7	550	559	569	578	588	599
C23-24	Gallbladder etc.	1.7	545	554	563	573	583	593
C25	Pancreas	1.2	375	382	388	395	402	409
C30-31	Nose, Sinuses etc.	0.2	64	65	66	67	69	70
C32	Larynx	0.5	160	163	166	169	171	174
C33-34	Lung etc.	4.7	1507	1532	1558	1584	1611	1640
C37-38	Other Thoracic	0.2	64	65	66	67	69	70
C40-41	Bone	0.8	256	261	265	270	274	279
C43	Melanoma of Skin	0.1	32	33	33	34	34	35
C44	Other Skin	0.7	224	228	232	236	240	244
C47+49	Conn. & Soft	1.2	385	391	398	404	411	419
C50	Breast	35.0	11221	11408	11600	11797	12000	12209
C51	Vulva	0.4	128	130	133	135	137	140
C52	Vagina	0.6	192	196	199	202	206	209
C53	Cervix Uteri	15.0	4809	4889	4971	5056	5143	5232
C54	Corpus Uteri	4.8	1539	1565	1591	1618	1646	1674
C55	Uterus	0.7	224	228	232	236	240	244
C56	Ovary etc.	8.0	2565	2608	2651	2696	2743	2791
C57	Other Female	0.1	32	33	33	34	34	35
C58	Placenta	0.1	26	27	27	28	28	29
C64	Kidney etc.	0.9	279	284	289	294	299	304
C65	Renal Pelvis	0.0	9	9	9	9	9	10
C67	Bladder	0.7	224	228	232	236	240	244
C69	Eye	0.2	64	65	66	67	69	70
C70-72	Brain, Nervous	2.5	802	815	829	843	857	872
C73	Thyroid	4.7	1507	1532	1558	1584	1611	1640
C74	Adrenal Gland	0.1	26	27	27	28	28	29
C77	Sec.unsof lymph	0.0	0	0	0	0	0	0
C78	Sec.uns of	0.0	0	0	0	0	0	0
C79	Sec.uns of Oth	0.0	0	0	0	0	0	0
C81	Hodgkins Disease	0.7	224	228	232	236	240	244
C82-	NHL	2.2	705	717	729	742	754	767
C90	Multiple Myeloma	1.4	449	456	464	472	480	488
C91	Lymphoid Leuk.	1.0	321	326	331	337	343	349
C92-94	Myeloid	2.0	641	652	663	674	686	698
C95	Leukaemia Uns	0.2	64	65	66	67	69	70
Oth.uns	Other and Uns	8.3	2661	2705	2751	2798	2846	2895
<b>Total</b>	<b>All Sites</b>	<b>125.1</b>	<b>40109</b>	<b>40775</b>	<b>41461</b>	<b>42166</b>	<b>42892</b>	<b>43639</b>





Department/Unit wise patient load – 2019						
UNIT	New Cases	Follow – up	Total	Admission	Discharge	Deaths
SUR	8380	36637	45017	4117	3842	253
MED1	1339	37264	38603	2753	2484	264
MED.2	972	27589	28561	2591	2399	190
PAED.	762	22000	22762	1380	1291	109
GYNA.	1228	21606	22834	951	899	44
H&N	3370	17379	20749	925	860	44
ORAL	1305	12578	13883	496	482	17
RT1	974	50283	51257	858	829	22
RT2	752	45213	45965	535	514	22
RT3	630	45223	45853	459	415	32
NM	19	7519	7538	161	172	0
PRC	33	25036	25069	439	414	12
TOT.	19764	348327	368091	15665	14601	1009

Leading Sites of Cancer Females				
10 leading sites	2018		2019	
	No	%	No	%
Female				
Cervix Uteri	1249	22.59	1301	22.58
Breast	1064	19.24	1108	19.23
Oral	595	10.76	620	10.76
Ovary	373	6.75	388	6.73
Thyroid	239	4.32	249	4.32
Leukaemia	218	3.94	232	4.03
Esophagus	209	3.78	217	3.77
Brain, Nervous system	145	2.62	151	2.62
Corpus Uteri	136	2.46	142	2.46
Stomach	130	2.35	135	2.34
ALL OTHERS	1172	21.19	1218	21.14
	5530	100	5761	100

\* Estimation Based on 2017 data

Department/Unit wise patient load – 2020 (1.1.2020 to 31.12.2020)						
Uniy	New Cases	Follow – up	Total	Admission	Discharge	Inpatient Deaths
SUR	5983	23536	29519	2645	2462	192
MED1	783	30830	31613	1646	1538	139
MED.2	635	27101	27736	1326	1258	94
PAED.	539	14167	14706	1197	1159	60
GYNA.	872	15601	16473	623	600	28
H&N	2594	10989	13583	668	656	36
ORAL	726	5699	6425	252	227	7
RT1	734	33302	34036	398	384	23
RT2	553	30446	30999	324	322	14
RT3	504	28726	29230	254	239	20
NM	18	4680	4698	55	55	0
PRC	32	18746	18778	156	143	21
TOT.	13973	243823	257796	9544	9043	634

### Estimated Cancers of Oral Cavity:

Oral Cancers - 2019						
Oral Cancers	Male		Female		Total	
	No.	%	No.	%	No.	%
Lip	16	2.1	17	2.7	33	2.3
Base of Tongue	109	14.2	18	2.8	127	9.1
Tongue	229	29.7	77	12.2	305	21.8
Gum	24	3.1	31	5.0	55	4.0
FOM	24	3.1	6	0.9	30	2.1
Palate	47	6.1	24	3.9	72	5.1
Oth.Mouth	321	41.6	456	72.6	777	55.6
Total	771	100	628	100	1399	100

Leading Sites of Cancer-Males				
Leading Males	Males 2018		Males 2019	
	#	%	#	%
Oral	710	16.3	773	16.38
pharynx	407	9.4	442	9.37
Lung	381	8.8	414	8.77
Esophagus	260	6	282	5.98
Larynx	243	5.6	263	5.57
Stomach	239	5.5	260	5.51
Brain	211	4.9	229	4.85
Hypopharynx	200	4.6	217	4.6
NHL	156	3.6	168	3.56
Leukaemia	153	3.5	166	3.52
ALL OTHERS	1398	32.2	1521	32.23
<b>Total</b>	<b>4345</b>	<b>100</b>	<b>4719</b>	<b>100</b>

\* Estimation Based on 2017 data

ESTIMATED TOBACCO RELATED CANCERS 2019									
Tobacco related sites	Males			Females			Total		
	No	Percent to		No	Percent to		No	Percent to	
		TR C	ALL Sites		TR C	ALL Sites		TR C	ALL Sites
ORAL CAVITY	771	34.5	17.7	602	56.2	11.6	1373	43.8	14.8
PHARYNX	442	19.7	10.2	86	8	1.7	528	16.9	5.7
ESOPHAGUS	282	12.6	6.5	209	19.5	4	491	15.7	5.3
LUNG	414	18.5	9.5	130	12.1	2.5	544	17.4	5.9
LARYNX	263	11.8	6.1	27	2.5	0.5	290	9.3	3.1
URI. BLADDER	66	2.9	1.5	18	1.7	0.3	84	2.7	0.9
ALL TRC	2238	100	51.5	1072	100	20.6	3310	106	35.6
ALL SITES	4719			5761			9295		



Estimated Cancer cases by Broad Age Group By Sex: 2020						
Age Group (in yrs.)	Male		Female		Total	
	No.	%	No.	%	No.	%
0 -14	164	5	129	3.1	293	4
15 -34	336	10.3	401	9.7	737	10
35 -64	1820	55.9	2789	67.3	4609	62.2
65 +	938	28.8	828	20	1766	23.8
<b>Total</b>	<b>3258</b>	<b>100</b>	<b>4147</b>	<b>100</b>	<b>7405</b>	<b>100</b>

Oral Cancer Distribution 2020-HBCR-Bengaluru						
Oral Cancer	Male		Female		Total	
	No.	%	No.	%	No.	%
Lip	11	2.1	12	2.7	23	2.4
Base of Tongue	75	14.3	13	2.9	88	9.1
Tongue	158	30.2	55	12.3	213	22
Gum	17	3.3	22	4.9	39	4
Floor of Mouth	17	3.3	4	0.9	21	2.2
Palate	33	6.3	18	4	51	5.3
Oth. Mouth	212	40.5	323	72.3	535	55.2
<b>Total</b>	<b>523</b>	<b>100</b>	<b>447</b>	<b>100</b>	<b>970</b>	<b>100</b>

Ten Leading Sites of Cancer - Male - 2020 *		
ICD-10	#	%
Oral	523	16.1
Pharynx	305	9.4
Lung	285	8.7
Esophagus	195	6
Larynx	182	5.6
Stomach	180	5.5
Brain, Nervous	158	4.8
Hypopharynx	150	4.6
Leukaemia	116	3.6
Prostate	96	2.9
All Others	1068	32.8
<b>TOTAL</b>	<b>3258</b>	<b>100</b>

Estimated Tobacco Related Cancers 2020									
Tobacco related Sites	Males			Females			Total		
	No.	Percent to		No.	Percent to		No.	Percent to	
		TRC	ALL Sites		TRC	ALL Sites		TRC	ALL Sites
Oral Avity	523	34	16.1	447	56.2	10.8	970	41.6	13.1
Pharynx	305	19.9	9.4	61	7.7	1.5	366	15.7	4.9
Oesophagus	195	12.7	6	157	19.7	3.8	352	15.1	4.8
Lung	286	18.6	8.8	97	12.2	2.3	383	16.4	5.2
Larynx	182	11.8	5.6	20	2.5	0.5	202	8.7	2.7
Uri.Bladder	45	2.9	1.4	14	1.8	0.3	59	2.5	0.8
<b>ALL TRC</b>	<b>1536</b>	<b>100</b>	<b>47.1</b>	<b>796</b>	<b>100</b>	<b>19.2</b>	<b>2332</b>	<b>100</b>	<b>31.5</b>
<b>All Sites</b>	<b>3258</b>			<b>4147</b>			<b>7405</b>		

Ten Leading Sites of Cancer - Female - 2020 *		
ICD-10	Total	%
Cervix Uteri	937	22.6
Breast	798	19.2
Oral	447	10.8
Ovary	280	6.8
Thyroid	179	4.3
Esophagus	157	3.8
Brain, Nervous	109	2.6
Corups Uteri	102	2.5
Stomach	97	2.3
Larynx	96	2.3
ALL OTHERS	946	22.8
<b>TOTAL</b>	<b>4147</b>	<b>100</b>

### Research Activities Projects (Ongoing) :

1. Hospital Based Cancer Registry - Pattern of Care and Survival Studies of Cancers of Breast, Cervix and Head and Neck Cancers” - Project under National Cancer Registry Programme funded by Indian Council of Medical Research, New Delhi (On going since 2006).

2. Study on “Study on Population Based Survival for Cancers of



Breast, Cervix and Head & Neck”, National Centre for Disease Informatics & Research (NCDIR) – ICMR (Ongoing since 2019)

3. Setting up of Hospital Based Cancer Registry under Regional Cancer Centre/TCCC/SCI, Scheme of Ministry of Health and Family Welfare –Multicentric Study” Ministry of Health & Family Welfare, Govt. of India ) Under NCDIR (Ongoing since 2019)

4. Patterns of Care and Survival Studies on cancers in Childhood, Lymphoic and hematopoietic malignancies, other Gynaecological cancers (other than Cancer Cervix)”, National Centre for Disease Informatics & Research (NCDIR) – ICMR

### Paper Publications By Staff Of The Department

1. Joseph B, Kumar RV, Champaka G, Shenoy A, Sabitha K S, Lokesh V, **Ramesh C, Vijay C R**. Biological tailoring of adjuvant radiotherapy in head and neck and oral malignancies – The potential role of p53 and eIF4E as predictive parameters. Indian J Cancer 2019;56:330-334.
2. Time Interval between Self-detection of Symptoms to Treatment of Breast Cancer; Shivaraj
3. Nallur Somanna, Murthy Nandagudi Srinivasa, **Ramesh Cheluvayaswamy**, Nea Malila; Asian

Pac J Cancer Prev, 21 (1), 169-174, June 2019

4. Road Map to good quality childhood Anti cancer procurement policy and mechanism of reporting of suspected sub-standard drugs;
5. T. Avinash, L. Appaji, C. Ramachandra, **C. Ramesh**, S. Prabha, R. Chandran, KMIO, Bangalore, India. Abstracts/pediatric Hematology Oncology Journal 4(2019), S12-S20
6. Compilation of Rare pediatric Malignancies – A twenty year experience from an Oncology Institute in South India;
7. Aarathi Viswanathan, Maneya Padma, Arunkumar, Nuthankumar, Avinash Thumalapalli, **C.Ramesh**, B.S.Arunakumari, L. Appaji; Dept. of Pediatric Oncology, KMIO; bstracts/pediatric Hematology Oncology Journal 4(2019), S12-S20
8. Biological tailoring of adjuvant radiotherapy in head and neck and oral malignancies – The potential role of p53 and eIF4E as predictive paramerers
9. Bindhu Joseph, Rekha V Kumar, G. Champaka, Ashok Shenoy, K S Sabitha, V. Lokesh, **C. Ramesh**, C R Vijay;
10. Time from Self-Detection of symptoms to seeking definitive care among cervical cancer patients;
11. Shivaraj Nallur Somanna, Srinivasa Nandagudi Murthy, **Ramesh Cheluvayaswamy**, Nea Malila; Asian Pac J Cancer Prev, 21(11), 3301-3307, 2020



**Faculty and staff :**

Sl.No.	Name	Designation
1	Dr.C.Ramesh	Professor & Head of the Department
2	C.R.Vijay	Assistant Professor
3	Dr.D.J.Jayaram	Senior Investigator
4	B.J.Kumudini	Assistant Social Scientist
5	T.Venkatesh	Research Officer (Upto June 2019)
6	K.Venkatesh	Statistical Assistant
7	C.Kumar	Data Entry Operator
8	P.Manjunath	Assistant Social Scientist
9	C.S.Dayananda	Assistant Social Scientist
10	C.Kumar	D.E.O. (Posted to Academic Cell from Oct. 2019)



## DEPARTMENT OF GYNAECONCOLOGY



**Dr. Pallavi V.R**  
Prof. & HOD

The Department of Gynaecologic Oncology is involved in the Prevention, early detection, investigations, diagnosis, treatment both surgery and chemotherapy, follow up and palliative care of women with Gynaecological Cancers. The Department is actively involved in clinical research.

The Department consists of a set of outpatient rooms and inpatients wards (Special and General wards). The outpatient rooms in addition to the examining rooms have rooms for teaching sessions and Minor OT.

The outpatient clinic of the department runs 6 days a week (Monday to Saturday).

The OPD clinic involves consulting patients – newly registered, Pre – operative, post operative, adjuvant chemotherapy for Gynaecological patients and follow up. OPD is opened on all working days (9:00am to 4: 00pm) and general holidays (9:00am to 1:00pm).

The Department is allotted 6 operations days in a week where a variety of Gynaecological surgeries, including Laparoscopic surgeries and Robotic surgeries are performed



### STATISTICS OF THE DEPARTMENT - 2019

New cases	Follow up cases	Total	Admissions
1152	21615	22767	951

### STATISTICS OF THE DEPARTMENT - 2020

New cases	Follow up cases	Total	Admissions	Re-Admissions	Total	Discharge	Deaths
872	15601	16473	312	311	623	600	28





Procedure performed-2019	
Procedure	No.
Major Operations	659
Colposcopy	94
Leep	13
Vulva Scopy	4
Abdominal Tapping	637
Pleural Aspirations	75
Pap Smear	1152
ECC, EB	200
Cervical Biopsy	634
ICD	13

**Courses Offered :**

**❖ M.ch. Programme :**

M.Ch. Programme in Gynec Oncology started in the Department from the year 2014. Every year three candidates are selected by entrance examination conducted by the Rajiv Gandhi University of Medical Sciences.

The course is of 3 years duration. During the course, the students are exposed to comprehensive treatment for gynecological malignancy – both surgery and chemotherapy. Apart from this, they have special postings during which they are posted to radiation Oncology, Pathology and various other oncology Departments / GI surgeries / urological surgeries.

MCh Surgical oncology students are posted in the department for Gynaecological oncology exposure as part of their training programmers.

M.S (Obstetrics and Gynaecology) postgraduate students from various medical colleges in Karnataka are posted in the Department for oncology exposure as part of their training programmers.

**Academic activities :**

The academic activity of the department includes :

- Seminars on every Mondays
- Seminars / case presentations on every Saturdays
- Multi disciplinary seminars
- Classes for post graduates posted to the Department every day in the afternoons.
- Journal club once / twice monthly

**Mch Trainees :**

**❖ Final Year Batch M.ch. Trainees**

- Dr.Kavitha Mahadevappa (2016 batch)



- Dr.Yamini Kansal (2017 batch)
- ❖ **1<sup>st</sup> Year Batch MCh Trainees :**
- Dr.Shruthi Shivadas (2019 batch)
- Dr.Neha (2019 batch)
- Dr.Rajatharangini (2019 batch)

❖ **Fellowship programme :**

Fellowship Trainee Programme started in the Department from the year 2019 by RGUHS (No.KMIO/AC/Fellowship/1306 2019, Dated 03.09.2019)

**Fellowship trainees :**

- Dr.Punyashree R.M (Joined from 03.09.2019 to 2021)
- Dr.Esha.R. Shanbhag (Joined from 03.09.2019 to 2021)



**Participation in conference/seminars/workshop for 2019 – 2020.**

**Dr.Pallavi.V.R (Professor and HOD)**

CME on Gynaecological Pathology, KMIO, Bangalore on 02.01.2019

Preventive Oncology Workshop at AICOG, Ramaiah Advanced Learning Centre, Bengaluru on 8<sup>th</sup> January 2019

The National conference – An update on GTD & Gynaecological Oncology,

Kovalam, Kerala from 15<sup>th</sup> to 17<sup>th</sup> March 2019

The Gynaec Oncology Surgical Workshop at KIMS, Hubballi on 31<sup>st</sup> August 2019

Cancer Awareness programme at NMKRV College for Women on 7<sup>th</sup> September 2019

Organizing Hands on Training to Medical officers and Staff Nurses under National Urban Health Mission (NUHM) on 12.09.2019

Permission to attend the Gynae Cancer / Health Awareness talk in WIPRO-Bangalore on 27.09.2019

8<sup>th</sup> Annual conference Association of state chapter – Association of Gynaecologic, Oncologic, Oncologists of India, (KSC –AGOI) on Bengaluru 13.10.2019

The Gynaecologic Annual Conference (AGOICON-2019) on 15<sup>th</sup>&16<sup>th</sup> November 2019 at Vellore, Tamil Nadu on 15<sup>th</sup> & 16<sup>th</sup> November 2019

AOGIN India 2019 Conference on 13<sup>th</sup> – 15<sup>th</sup> December 2019 at Kochi, Kerala

**Dr.Praveen Shankar Rathod (Associate Professor)**

The Preventive Oncology Workshop at Ramaiah Advanced Learning Centre, as part of AICOG, Bengaluru , on 8<sup>th</sup> - 12<sup>th</sup> January 2019

The CME Program by Apollo cradle Hospital, Jayanagar on 23<sup>rd</sup> January 2019

A live operative workshop and CME by Lakecity Hospital in Association



with the obstetric and Gynaecological society, Bhopal on 6<sup>th</sup> & 7<sup>th</sup> April 2019

The Annual IAGE Conference at Ahmedabad on 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> June 2019

The 30<sup>th</sup> KSOGA Conference at Ballari on 13<sup>th</sup>, 14<sup>th</sup> & 15<sup>th</sup> September 2019

The Association of Gynaecologic Oncologists of India Annual Conference (AGOICON-2019) at CMC, Vellore, Tamil Nadu on 14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> November 2019

The 14<sup>th</sup> Annual national conference “AMASICON” 2019 at Nagpur on 7<sup>th</sup> - 10<sup>th</sup> November 2019

**Dr.Shobha.K (Assistant Professor)**

The Gynaecologic Annual Conference (AGOICON -2019) at Vellore, Tamil Nadu on 14<sup>th</sup> & 16<sup>th</sup> November 2019.

**Awards & scholarships :**

**Dr.Pallavi.V.R (Professor and HOD)**

Hamsa Jyothi Award  
Best Scientific Paper Presented at International satellite Symposium and operative workshop on Gynaecological Oncology,

**Dr.Shravanthi (Resident surgeon)**

1<sup>st</sup> Prize for a Oral Paper presentation by YGOG 2019

**Dr.Yamini Kansal (MCh Student)**

First Prize for Video Presentation on Laparoscopic Para aortic Lymph node dissection in YGOG 2019

Dr.Yamini / Dr. Tejas/ Dr.Sravanthi  
2<sup>nd</sup> Prize for a All India / National Quiz competition at YGOG 2019

**Faculty and Staff :**

Sl.No.	Name	Designation
1	Dr.Pallavi.V.R	Professor & HOD
2	Dr.Praveen.S.Rathod	Assistant Professor
3	Dr.Shobha.K	Assistant Professor
4	Dr.Rajashekar	Assistant Professor



**DEPARTMENT OF GENERAL DUTY DOCTOR**



**Dr.C.Ramachandra**  
Director & HOD

The first place of interaction between the patients reporting for the first time and the institute is at General Duty place. GDD is the place where the patient comes in contact with the physicians and staff of the Hospital. First impression are important and have an important bearing and whether the patient in continue treatment here and given a good report of it to other with

similar diseases GDD (OPD) is functioning smoothly Department have always dispersed all duties towards patient care sincerely Department is bound and dedicated to do our duty sincerely to maintain the reputation and the image of the Institute General Duty Doctor’s duties and responsibilities are as follows :

- 1) Attending New cases / referral cases
- 2) New cases include Vajapayi Arogyashree cases and other Govt. Scheme cases and staff clinic includes Staff of the Institute.
- 3) Attending Follow-up cases
- 4) Running Staff clinic
- 5) Attending calls from OPD/ Ward and Treatment room.

**Statistics :**

Statistics: Case Details		
Sl.No.	Case Details	Number of cases
1	New Cases	19,764
2	Hospital Registration	18,600
3	Follow Up Case	10,200

**Facilty and Staff :**

Sl.No	Name	Designation
1	Dr. Chandramouli S	Assistant Surgeon
2	Dr.Prathiba K	Senior Medical Officer
3	Dr.Arunkumar .B. Modi	Assistant Surgeon



## DEPARTMENT OF HEAD AND NECK



**Dr. Rajshekar Halkud**  
Prof. & HOD

The term "Head and Neck Cancer" encompasses a wide range of tumours that occur in several areas of the head and neck region, Head and Neck Surgery for Tumours of the Mouth; Pharynx (Throat); Larynx (Voice Box); Oesophagus; Thyroid Gland; Parathyroid Gland; Parotid and Other Salivary Glands; Soft Tissue tumours; Bone Tumours; Tumours of the Dent alveolar Structures, Nasal Cavity and Sinuses, Base of the Skull, Ear Canal and Temporal Bone, Nerves and Blood Vessels of the Neck; Skin Cancers; Melanoma. Our treatment philosophy is based on multi-disciplinary team approach emphasizing on organ preservation and restoration of form and function by advanced reconstructive surgery, and rehabilitative services. Our team consists of internationally renowned

physicians in the field of head and neck oncology and state-of-art infrastructure. All patients are evaluated by senior consultants for the most optimal treatment options, and are discussed in a multidisciplinary tumour board if required to determine optimal treatment plan. Facilities available in the department of Head and Neck Oncology The Head and Neck Surgical Oncology has nine operating rooms doing major surgical work on all working days in a week department is equipped with state of the art Robotic Surgery machine, CO2 laser machine, High end operating microscope, Micro-drill, Xenon head light, provides minimally invasive endoscopic laser surgery, organ preservation surgery, Supra-major surgery with plastic reconstructive surgery with all the major free micro vascular flap surgery,





**The Details surgical procedure performed during 2019 are as follows :Department of Head and Neck**

Month	Major Operations		Minor operations		Total Operations	
January	66	27	486	114	552	141
February	58	21	529	126	587	147
March	62	29	631	130	693	159
April	65	15	578	134	643	149
May	78	21	712	144	790	165
June	55	26	598	159	653	185
July	70	30	706	152	776	182
August	64	22	690	229	754	251
September	54	29	719	306	773	335
October	64	28	732	314	796	342
November	63	24	758	325	821	349
December	49	19	244	104	293	123
<b>Total</b>	<b>748</b>	<b>291</b>	<b>7383</b>	<b>2237</b>	<b>8131</b>	<b>2528</b>

**Faculty and Staff :**

Sl.No.	Name	Designation
1	Prof: Rajshekar Halkud	Professor and Head
2	Prof: Krishnappa R	Professor
3	Dr. Purushottam Chavan	Associate Professor
4	Dr. Siddappa K T	Associate Professor
5	Dr. Samskruthi Murthy	Assistant professor
6	Dr. Rathan Shetty K.S	Assistant professor
7	Dr. Rakesh	AD-HOC Assistant Prof Plastic Surgeon.
8	Dr. Veena G .Ganag	Senior Resident and M.Ch Student
9	Dr. Krishna Prasad	Senior Resident and M.Ch Student
10	Dr. Greshma	Fellow in Head and Neck Oncology and Senior Resident
11	Dr. Aruna Dosapati	Fellow in Head and Neck and Senior Resident
12	Dr. Sunayana.R.Sarkar	Fellow in Head and Neck and Senior Resident
13	Dr. Deeksha	Fellow in Head and Neck and Senior Resident
14	Dr. Vignesh .J	Fellow in Head and Neck and Senior Resident
15	Dr. Shruti satish	Fellow in Head and Neck and Senior Resident
16	Dr. Sneha Poojary	Senior Resident surgeon in Head &Neck Surgery
17	Dr. Diviya	Senior Resident surgeon in Head &Neck Surgery
18	Dr. Vinayak Kurle	Senior Resident surgeon in Head &Neck Surgery





**DEPARTMENT OF LIBRARY AND INFORMATION CENTRE**



**Dr.C.Ramachandra**  
Director & HOD

The Library & Infomation Centre, KMIO is a specialised library in the field of Oncological Sciences. The Library catering to the needs of Doctors, faculty, research fellows, Scientific/technical staffs, Sudents of Super specialities, Postgraduate and Undergraduates medical and para medical students. The library is acting as a referral center for oncology throughout South India to the medical, faculty & Oncology professionals.

The library is kept open between 10.00 A.M. to 8.00 P.M.

**Library Resources :**

Particulars Collection

- a) Text Books Oncology & allied science 4344
- \* Bound Journals 6259
- \* Current Periodicals for 2010 (Jan-Dec) 5
- b) International scientific publications
- \* World Health Organization 320
- \* International Union Against Cancer (UICC)
- \* International Agency for Research on Cancer (IARC) 344
- \* Thesis and Dissertation 50
- \* Scientific/Technical Reports (National & International) 200
- G, Database (Oncology & Allied Science) 70

**Library Users :**

Doctors, Faculty, Scientific/Technical, Students- 1. Super Speciality for Oncology  
2. UG & PG, 3. DNB, 4. MD 5. Fellowship Trainees and Oncological Professionals.

**Professional Information Services :**

Lending  
Reference Service  
Reprographic Services  
Indexing & CAS Services  
Inter Library Loan

**Future Plans :**

1. To Upgrade Computer Based Information System & Services
- 2 A Campus-wide Network connecting the library to the various Departemnt within KMIO
- 3 Setting up of high-speed and reliable internet access infrastructure  
For developing a specialized Internet Community of Oncologists  
For accessing and sharing all global and local information  
Resources in the area of Oncology.
4. Setting up specialized databases in the area of Oncology that  
Can later act as a National Host Cancer Center .
5. Electronic journals for Oncology and creating National  
Archive of these journals.
6. New library building to establish  
Oncology information resources  
and services



## DEPARTMENT OF MEDICAL ONCOLOGY



**Dr. Lokanatha Dasappa**  
Prof. & HOD

The Department of Oncology is responsible for diagnosing and treating all cases of hematological malignancies as well as giving chemotherapy to majority of the solid tumors in various settings. The Department of Medical Oncology is committed to improving the diagnosis and treatment of adult patients with cancer. To meet this mission there is a broad range of basic Research, Clinical Research, Patient Care and Teaching.

The consultants of this Department are Qualified and highly experienced. Their efforts by committing themselves to patient care has resulted in improved survival rates and reduced Morbidity's.

The Department practices high dose rate chemotherapy, day care therapy. The Nursing Staffs as well as the junior doctors are well versed in caring for patients with long term Venous Access Devices and Implantable Codes.

The Department of Medical Oncology consists of 7 faculty members and 18 Post Graduate students (D.M. Medical Oncology). The Department runs out patient clinic services were every day about 200 to 250 patients visit the OPD per day. At a time, around 100 in-patients are admitted for chemotherapy, management of complications and for work-up.



For every new patient, after a diagnosis is established, there is Departmental meeting for planning of treatment. The Department has its own medical minor O.T. were all the minor procedures such as Bone Marrow Aspirations / Biopsy , Ascetic and Pleural Tapping, True Cut Biopsy etc, carried out under full aseptic precautions.

The Department also provides Specialty for autologous cell transplantation for malignancies like non-Hodgkin's lymphoma, Hodgkin's lymphoma, and multiple myeloma.



**Related Statistics of the Department for 2019**

Out – Patients Details			
Unit	Male	Female	Total
Unit – I	17204	21399	38603
Unit - II	12972	15589	28561

In-Patients Details			
Unit	Male	Female	Total
Unit – I	1536	1199	2735
Unit – II	1410	1181	2591

Discharges			
Unit	Male	Female	Total
Unit – I	1374	1110	2484
Unit –II	1279	1120	2399

Deaths			
Unit	Male	Female	Total
Unit – I	155	106	261
Unit – II	124	66	190

**Related Statistics of the Department for 2020**

OUT – PATIENTS DETAILS			
Unit	Male	Female	Total
Unit – I	14444	17169	31613
Unit - II	12728	15008	27736

IN-PATIENTS DETAILS			
Unit	Male	Female	Total
Unit – I	971	675	1646
Unit – II	727	599	1326

Discharges			
Unit	Male	Female	Total
Unit – I	925	613	1538
Unit –II	689	569	1258

Deaths			
Unit	Male	Female	Total
Unit – I	68	71	139
Unit – II	56	38	94



**Academic activities :**

The academic activities of the department includes:

- ❖ Seminars on every Tuesdays
- ❖ Case presentations on every Wednesday
- ❖ Journal club on every Thursdays



- ❖ Multi-disciplinary seminar on every Fridays
- ❖ Short seminars on every Saturday
- ❖ Multi-disciplinary Clinic on every Thursdays Morning

**Courses offered :**

The Department provides prestigious D.M. degree in Medical Oncology. Every year 6 candidates are selected by NEET Entrance.

The course is of 3 years duration. The examinations are held in the month of June- July. The examinations are conducted in 2 parts, the first part comprises of a written examination for 90 marks. The paper contains 90 multiple choice questions. Around 5 candidates are selected on the basis

of merit list of this theory examination. The second part comprises interview of 10 marks. The final merit list is made by adding both theory and interview marks. Candidates are selected on the basis of final merit list.

During the course, the students are exposed to all kinds of treatment for all solid tumors and hematological malignancies. Apart from this, they have special posting during which they are posted in pediatric oncology, hematology, and various other oncology Departments.

M.D.Medicine students from various medical colleges in Karnataka are getting trained in oncology during their special posting to KMIO.

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr D. Lokanatha	Professor & H.O.D
2	Dr Linu Abraham Jacob	Professor
3	Dr.Suresh Babu.M.C	Associate Professor
4	Dr.K.N.Lokesh	Associate Professor
5	Dr.Rajeev	Assistant professor
6	Dr.A.H.Rudresh	Assistant professor
7	Dr.K.N.Lokesh	Assistant professor
8	Dr.Smitha.C.Saldhana	Assistant Professor
9	Shri Para Shiva Murthy	ECG technician
10	Shri B.S. Govind Raju	ECG technician



## DEPARTMENT OF MICROBIOLOGY



**Dr.B.G.Sumathi**

Prof. & HOD

The Department of Microbiology at Kidwai Memorial Institute of Oncology, Bangalore came into existence in 1980 to cater to the diagnosis of infections in cancer patients. The department has grown from a basic Bacteriology laboratory to a full-fledged Microbiology Department capable of diagnosing majority of opportunistic infections seen in immunocompromised patients, some of them using the latest molecular tools. On an average, the department gets about **53000** samples for serology and about **12000** samples for culture annually. The department is involved in the care of cancer patients by offering services using state of the art instruments at par with best hospitals and laboratories. Routine tests include identification of bacteria, fungi and parasites & antibiotic sensitivity of bacterial isolates, relevant serological investigation and identification of opportunistic pathogens which are commonly encountered in a cancer center. In addition the Department has the expertise to offer molecular diagnosis for some of the common infections in cancer patients: e.g. Invasive Fungal

Infection, *Toxoplasma gondii*, *Cytomegalovirus*, *Pneumocystis jirovecii*, *Epstein Barr virus* etc.

The department has facilities for human immunology based work including cell culture, Magnetic Associated Cell Sorting. Nonisotopic *InSitu Hybridization* (NISH) and Real time PCR is being done presently for detection and quantitation of viruses in various clinical specimens. The department participates in a national external quality assurance programme and also maintains internal quality control for the tests routinely performed. The department is actively involved in microbiological surveillance of the brachytherapy unit OT and ICU routinely. Bone marrow transplant room surveillance and water analysis are performed whenever required and random sterility checking of blood units and collection bags are performed once a month. The department is involved in infection monitoring, MRSA screening and at regular intervals, surveys the antibiotic resistance patterns amongst organisms isolated at our center which helps guide the antibiotic policy in patients especially those on chemotherapy. The department is capable of performing water analysis, testing the efficacy of disinfectants, food handlers testing for carrier status, etc.





The department has organized various CME programmes for postgraduates in Medical Microbiology under the aegis of the Karnataka Chapter of Medical Microbiology. The faculty members of the department have also been invited to deliver Guest lectures pertaining to opportunistic infections and various other related topics at various Institutes around the country. The department has been associated with research work within the Institute and in collaboration with other prestigious Institutes and associations like National Center for Biological Sciences, Bangalore. and multicentre studies involving premier cancer Institutes across India.



Over the past 25 years, the department has the honour of diagnosing and reporting rare opportunistic pathogens; some of these case reports being published in national and international journals. The department gets referrals from all over the city for diagnosing some of these rarer opportunistic pathogens and has attained the distinction of a center for diagnosing opportunistic infections in immunocompromised patients. The department also offers teaching to the students of B.Sc. Medical Laboratory Technology, B.Sc. Anaesthesia Technology, B.Sc. Operation Theatre, B.Sc. Radiodiagnosis, B.Sc. Radiotherapy, M.Sc. Nursing Oncology courses. Teaching of Medical graduates and postgraduates from other Institutes is also part of the teaching curriculum of the department. The department has been recognized for Ph.D and M. D courses, under the Rajiv Gandhi University of Health Sciences, Bangalore. Department also has the honour of having three MD (Microbiology) candidates registered under MCI and Dr. Sumathi B.G. Prof. & Head, Department of Microbiology.





Statistics ( January To December 2019)													
Type of	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Investigation													
<b>Culture</b>													
Urine	101	101	91	103	112	97	80	112	129	108	101	94	1229
Stool	48	68	87	72	73	72	78	66	70	67	53	46	800
Sputum	144	108	207	132	128	129	133	142	163	186	181	164	1817
ENT	60	80	72	79	81	85	76	80	87	72	95	103	970
Pus & Mis.	140	108	124	124	133	103	176	153	144	161	182	153	1701
Blood	286	314	336	358	322	326	339	275	336	303	263	270	3728
<b>AFB URINE/SPUTUM/PUS</b>													
	23	19	22	18	16	11	28	27	29	28	29	31	281
<b>Mycology</b>													
Fungal	67	67	112	102	95	74	86	124	117	121	159	120	1244
PF PCR	0	5	1	1	1	0	1	0	0	0	0	0	9
<b>Serology</b>													
HIV	1576	1396	1553	1445	1590	1490	1612	1379	1300	1440	1495	1526	17802
HBsAg	1575	1396	1553	1445	1591	1489	1612	1381	1301	1440	1495	1525	17803
HCV	1570	1396	1553	1443	1590	1487	1612	1374	1299	1440	1495	1524	17803
<b>Total</b>													<b>65187</b>

Statistics (January to December 2020)													
Type of Investigations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
<b>Culture</b>													
Urine	103	88	71	43	63	62	26	45	51	53	47	53	705
Stool	59	51	67	11	15	41	13	19	23	21	27	29	376
Sputum	179	147	96	28	25	29	20	24	33	34	38	60	713
ENT	93	68	54	6	15	34	12	26	24	25	22	21	400
Pus & Mis.	175	167	123	39	56	89	42	59	77	82	99	104	1112
Blood	301	258	197	82	122	158	84	71	108	118	110	132	1741
AFB URINE/SPUTUM/PUS	28	25	14	2	8	5	1	4	8	10	14	16	135
<b>Mycology</b>													
Fungal culture	134	124	76	11	26	46	15	33	32	29	46	38	610
<b>Serology</b>													
HIV	1444	1546	1116	470	1121	1234	454	743	1089	1007	1250	1260	12734
HBsAg	1442	1546	1116	470	1121	1234	452	743	1089	1006	1250	1261	12730
HCV	1430	1546	1116	470	1121	1234	452	743	1089	1006	1250	1261	12718
<b>Total</b>	<b>5388</b>	<b>5566</b>	<b>4046</b>	<b>1632</b>	<b>3693</b>	<b>4166</b>	<b>1571</b>	<b>2510</b>	<b>3623</b>	<b>3391</b>	<b>4153</b>	<b>4235</b>	<b>43974</b>

**Research Publications :**

**Sinha M, Keerthana Sundar, C. S. Premalata, et al.** Pro-oncogenic, intra host viral quasispecies in Diffuse large B cell lymphoma patients with occult Hepatitis B Virus infection. *Scientific Reports (Nature)*. 2019;9:14516.

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr.B G sumathi	Professor & Head of the Department
2	Dr.vijaykumar B R	Associate Professor
3	Dr.mahua sinha	Assistant Professor
4	Dr.harsha Vardhana.S	Assistant Professor
5	Dr. Sahana shetty N S	Assistant Professor
6	Mohammed Shafiulla	Assistant Research Scientist
7	Kumarswamy S R	Assistant Research Scientist
8	Smt. B C Jayasumangali	Chief Lab Technologist
9	Sri H Shivalingaiah	Graduate Technologist
10	Sri K J Varghese	Jr. Lab Technologist
11	Sri Mahendra K M	Jr. Lab Technologist
12	Smt. Chaithrashree	Jr. Lab Technologist
13	Sri Parashuram Y Koti	Jr. Med. Lab Technologist
14	Sri Ramachandra	Ward Attender
15	Sri Narasimhaiah	Lab Attender
16	Sri. Lokesh R	Animal House Attender



**DEPARTMENT OF NUCLEAR MEDICINE**



**Dr. Harish B**  
Associate Professor & In-charge

The department of nuclear medicine started in the year 1984, is catering to both diagnostic and therapeutic radionuclide services to the medical institutions ,including Kidwai Memorial Institute Of Oncology , in the state and also from neighbouring states .

The department of Nuclear Medicine continues to function as a major centre for the management of thyroid carcinoma with Radioactive Iodine 131 therapy procedures and also in the management of functional thyroid disorders including thyrotoxicosis

patients , palliative therapy with radionuclides for painful bone metastasis

With lutetium, strontium , phosphorus is being used .

The department is recognized for Radiation Safety Officer level III training programme by Atomic Energy Regulatory Board , Radiation Safety Division, Mumbai .



**Annual Statistics For The Year 2019 (01.01.2019 To 31.12.2019)**

1. Thyroid scan	95
2. Bone scan	3811
3. Renogram G.F.R studies	3653
4. Liver scan	01
5. Renal scan	05
6. Large dose scan with RAI 131	27
7. Muga cardiac scan	03
8. Brain scan	13
9. Salivary Scintigraphy	00
10. Toxic therapy	120
11. Palliative therapy	03
12. Ca thyroid	324
13. Imaging only	22
<b>Total number</b>	<b>8077</b>



Annual Stastics for the year 2020 -Nuclear Medicine													
Investigations/ Scan	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Thyoid	8	7	2		1	2	3	2	1	3	1	2	32
Bone	329	345	257		217	304	111	177	205	248	239	240	2672
Renogram/ GFR	289	236	189		179	247	289	183	192	187	205	207	2403
Liver scan	1	2	0					1	1	1	2		8
Renal Scan	0												0
Large Dose Scan	0							1		1	2	1	5
Muga Cardiac Study	3	2	0	0	3	3	2	1	2	6	2	3	27
Brain Scan	1	0									1	2	4
Salivary Scintigraphy	0	0											0
Spl.Investigations	0	0											0
Toxic therapy	12	8	3	0	1	3	1	1	3	3	6	1	42
32 P/Sm Therapy	1	0										1	2
Ca Thyroid Therapy	29	25	28	1	12	19	7	14	4	11	11	14	175
Imaging Only	29	25	28	1	12	19	7	14	4	11	11	14	175
<b>Total</b>	<b>702</b>	<b>650</b>	<b>507</b>	<b>2</b>	<b>425</b>	<b>597</b>	<b>420</b>	<b>394</b>	<b>412</b>	<b>471</b>	<b>480</b>	<b>485</b>	<b>5545</b>

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr.Harish .B	Associate professor
2	Dr.K.S.Venkatesh Murthy	Assistant professor
3	Smt.Rajini.H.J	Nuclear Medicine Technologist
4	Nagaiah.A	Nuclear Medicine Technologist
5	Jagadish	Nuclear Medicine Technologist
6	Smt.Preetaleela bai	Graduate Laboratory Technician
7	Vacant	X ray technician
8	Vacant	Senior typist
9	Smt. Saritha Muthanna	Staff nurse



## DEPARTMENT OF ORAL ONCOLOGY



**Dr.K.S.Sabitha**  
Prof. & HOD

Department Of Oral Oncology, Kidwai Memorial Institute Of Oncology, Bengaluru caters to the need of oral cancer patients from all across the country. The department runs OPD as well as minor and major OT throughout the week. New cases, follow up of old cases are done in OPD.

In minor OT dressing, biopsies, extraction and various minor surgical procedures are being performed where as major cases are taken up in major OT. The department also provides learning opportunities to post graduates as well as Mch students posted in the department from various parts of the country. In addition, the department also runs fellowship program to teach new budding surgeons, various aspects of oral cancer.

Department of Oral Oncology was established in the Year 1973.

### Teaching programme :

- In addition to attending to Oral Cancer patients, the department conducts Fellowship course in Oral Oncology awarded by RGUHS.
- Hands on training to MCh Surgical Oncology post graduate students.
- Training post Graduate students in MDS Oral and Maxillofacial surgery

**Research :** Department is conducting Research project in screening & treatment methodology in Oral cancer.

### The details of surgical procedure performed during 2019 are as follows

MONTH	MAJOR OPERATIONS		MINOR OPERATIONS IN MAJOR OT		TOTAL OPERATIONS	
	M	F	M	F	M	F
JAN	25	33	209	296	234	329
FEB	23	29	165	299	188	328
MAR	28	30	248	258	276	389
APR	28	28	175	342	203	370
MAY	25	20	173	321	198	341
JUN	15	26	188	265	203	291
JULY	25	22	233	407	258	429
AUG	31	23	176	367	207	390
SEPT	16	17	173	316	189	333
OCT	19	27	152	264	171	291
NOV	20	17	151	309	171	326
DEC	14	14	170	286	184	300
<b>TOTAL</b>	<b>269</b>	<b>286</b>	<b>2213</b>	<b>3831</b>	<b>2482</b>	<b>4117</b>



The details of surgical procedure performed during 2020 are as follows :

Department of Oral Oncology - No. of Surgeries						
Month	Major Operations		Minor operations		Total Operations	
	M	F	M	F	M	F
January	16	23	185	209	201	232
February	10	18	107	284	117	302
March	8	10	123	209	131	219
April	0	1	38	86	38	87
May	3	6	36	80	39	86
June	6	15	35	88	41	103
July	2	6	33	49	35	55
August	6	15	14	77	20	92
September	2	3	17	146	19	149
October	7	5	30	93	37	98
November	9	5	58	94	67	99
December	7	6	80	109	87	115
<b>Total</b>	<b>76</b>	<b>113</b>	<b>756</b>	<b>1524</b>	<b>832</b>	<b>1637</b>

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr.K.S Sabitha	Professor and Head of the Department
2	Dr.Nadimul Hoda	Assistant Professor
3	Dr Rajani.B.C	Assistant Professor





## DEPARTMENT OF PALLIATIVE MEDICINE



**Dr.K.B.Lingegowda**  
Professor and Head

Palliative care services was started as a sub-unit by Department of Anaesthesiology in the year 1988. The unit started with a doctor, nurse and a pharmacist as a team. The unit has the credit of being one of the pioneers in obtaining and dispensing oral morphine solution as early as 1988, since then many patients had the privilege of pain control with oral morphine solution and continuing care.

In the year 2009 it branched into a separate department as Department of Palliative Medicine. In the last two decades the department has taken care of 50,000 patients needing palliative care services. The palliative care networks with hospice and home care services in Bangalore. At present it has a multi-disciplinary team of doctors, nurses, pharmacist, social worker and volunteers. It has out-patient services which functions 6 days a week and has 20 beds for inpatients. With a good team and support of large number of

dedicated volunteers the department has expanded to incorporate, a day care centre as a recreational services for patients and caretakers in a day of every week

### Academic activities :

Essentials of Palliative Care Course which is conducted twice a year, recognized by Indian Association of Palliative Care.

Fellowship programme for post MBBS/MD/MS for one year since 2014 affiliated to Rajiv Gandhi University of Health Sciences.

Initiation to start MD in palliative care is under process.

Out-reaches programmes (camps) to remote rural areas to deliver awareness of palliative care services.

National and International workshops.

Department has to its credit of hosting two International Conferences in the year 2000 and 2013.

Kidwai Memorial Institute of Oncology with the Government of Karnataka has launched the Karnataka State Policy (3<sup>rd</sup> State to introduce) in the year 2017 to ensure Palliative Care services to reach all the areas in Karnataka and to make the availability of essentials drugs of palliative care.

### Statistics :



Patient Statistics-2019			
Month	Number Of Patients Visited Opd	Number Of New /Referred Patients	Number Of Patients Started On Oral Morphine Solution
JANUARY	1174	247	84
FEBRUARY	1117	291	60
MARCH	1082	278	74
APRIL	1077	241	65
MAY	1083	258	59
JUNE	1108	256	63
JULY	1160	324	68
AUGUST	1164	249	44
SEPTEMBER	985	183	42
OCTOBER	978	241	56
NOVEMBER	1281	251	43
DECEMBER	1098	249	52
<b>TOTAL</b>	<b>13307</b>	<b>3068</b>	<b>710</b>

Total Number Of Patients Admission, Discharges And Death At Palliative Care Ward-2019			
Month	Admission	Discharge	Death
JANUARY	44	43	1
FEBRUARY	48	46	2
MARCH	47	43	4
APRIL	52	51	1
MAY	44	44	0
JUNE	35	33	2
JULY	55	55	0
AUGUST	33	32	1
SEPTEMBER	29	26	3
OCTOBER	47	46	1
NOVEMBER	49	41	8
DECEMBER	43	43	0
<b>TOTAL</b>	<b>526</b>	<b>503</b>	<b>23</b>

**Faculty and Staff :**

SL. NO.	NAME	DESIGNATION
1	Dr.K.B.Lingegowda	Professor and Head
2	Dr.Shivalingappa Basavaraju	Assistant Surgeon
3	Dr.Mala S .N	Assistant Surgeon
4	Smt. Saroja. G	Pharmacist
5	Smt .Juliet Anand	Staff Nurse



## DEPARTMENT OF PATHOLOGY



**Dr. Premalata C.S**  
Prof. & HOD

The Department of Pathology is one of the biggest departments in Kidwai with a total permanent staff strength of 50. It forms the backbone on which cancer therapy is based.

The department offers mainly diagnostic services for cancer in Surgical Pathology, Haematopathology, Cytopathology and Cytogenetics, with a limited infrastructure for cancer research. The department is recognized by MCI for MD Pathology subspecialty course by sanctioning 4 seats and in addition RGUHS recognized fellowship course (4 seats) for duration of 1 ½ years is also run by the Department. MCI in the year 2019 recognized the Department for DM Oncopathology Superspecialty course (2 seats), only the third Institute to get recognition in India.



The various sections under Pathology department are:

1. Histopathology
2. Cytopathology
3. Cytogenetics
4. Haematology

The details of each section is enclosed.



### Histopathology Unit :

In the histopathology section, the sample load is around 16,581 annually inclusive of referred slides from other hospitals for opinion. Frozen section is being done as a routine. This facilitates an accurate diagnosis in cases where there is a diagnostic problem and in grey zone areas. Immunohistochemistry with around 100 markers and FISH with 8 probes are being done when necessary to provide accurate diagnoses and subcategorisation and for prognosis of cancers.

The unit has external quality control participation (EQAS) with the National Cancer Grid (NCG EQAS) conducted by TATA Memorial Hospital, Mumbai for Diagnostic Surgical Pathology, Minimum Data Set Reporting (MDSR), Tissue Processing & IHC.



**Achievements :** Staff of surgical pathology are well trained in Oncopathology. In addition, most of them have specialized training in molecular techniques both in India and abroad. MCI in the year 2019 recognized the Department for DM Oncopathology Superspeciality course (2 seats), only the third Institute to get recognition in India.

**Conferences/ Seminars/ Workshops Conducted By The Department**

Conducted CME on “Gynaecological Pathology – an

Update” organized by the Department of Pathology at Kidwai Memorial Institute of Oncology , Bangalore on 2<sup>nd</sup> January 2019 .

Statistics for the year 2019 – Histopathology				
Mont	No of	No. of	Revie	Froze
Jan	639	258	441	45
Feb	537	350	469	37
Mar	584	371	471	41
Apr	467	265	446	46
May	573	367	447	40
June	527	302	437	42
July	572	399	539	47
Aug	557	375	454	38
Sept	504	318	433	43
Oct	553	322	399	46
Nov	590	320	434	45
Dec	585	289	463	54
<b>Total</b>	<b>6688</b>	<b>3936</b>	<b>5433</b>	<b>524</b>

Annual Haematology Investigation Annual Statistics From The Month Of Jan-Dec 2020														
SI	TEST	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
1	Haemogram(Five	7950	7886	6100	2350	4246	5637	2310	3607	4951	4969	5573	6184	61763
2	Esr	20	20	5	2	20	10	25	32	20	15	20	15	204
3	Bma	244	223	206	117	156	205	102	72	178	145	172	166	1986
4	Bmbx	180	144	146	83	112	129	58	73	114	88	121	138	1386
5	Rs	8	18	8	4	3	5	7	6	9	11	7	12	98
6	Cyto Chemistry	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Fp(Ps)	2034	2030	1692	763	1182	1422	855	1053	1160	1241	1267	1426	16125
8	Bt Ct	30	35	3	-	25	10	10	20	15	20	25	20	213
9	Clinical	30	30	10	5	30	12	15	25	30	20	30	20	257
10	Fcm	72	54	71	36	63	71	22	41	57	57	58	51	653
11	Pt	513	526	433	149	352	375	202	237	245	335	350	349	4066
12	Aptt	513	526	433	149	352	375	202	237	245	335	350	349	4066
13	24hrs Lab Cbc	750	600	350	200	550	850	1800	800	700	750	800	750	8900



FISH Test Statistics-2019							
Sl.No	Month	HER2	EWSR1	SS 18	N-MYC	C-MYC	Total Cases
1	JAN	17	6	-	-	-	23
2	FEB	11	7	-	-	-	18
3	MA	16	6	-	-	-	22
4	APR	10	4	-	-	-	14
5	MA	10	1	-	-	-	11
6	JUN	19	5	-	-	-	24
7	JUL	13	2	-	-	-	15
8	AU	8	5	6	1	01	21
9	SEP	19	6	8	2	-	35
10	OCT	8	2	2	-	-	12
11	NO	13	4	3	1	-	21
12	DEC	14	6	2	2	-	24
<b>Total Cases</b>		<b>158</b>	<b>54</b>	<b>21</b>	<b>06</b>	<b>01</b>	<b>240</b>

Statistics for the year 2020 – Histopathology					
Month	No of	No. of	Review	Frozen	Total
Jan	538	342	453	45	1378
Feb	544	347	409	55	1355
Mar	470	328	328	48	1174
Apr	108	13	124	nil	245
May	352	124	275	11	762
June	496	256	314	38	1104
July	180	124	162	17	483
Aug	281	175	188	28	672
Sept	384	185	254	27	850
Oct	491	179	265	35	970
Nov	498	245	306	38	1087
Dec	545	273	343	53	1214
<b>Total</b>	<b>4887</b>	<b>2591</b>	<b>3421</b>	<b>395</b>	<b>11294</b>

**NOTE :** 1. Cases taken for standardisation/Academic purpose.

a. SS18 - 7 , N-MYC - 4 , C-MYC- 1, HER2- 1 , EWSR1- 2

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr. C.S. Premalata	Professor & Head
2	Dr. Usha Amirtham	Associate Professor
3	Dr. Champaka.G	Associate Professor
4	Dr. Akkamahadevi Patil	Associate Professor
5	Dr. Suma M.N	Associate Professor
6	Dr. Geeta V. Patil Okaly	Associate Professor
7	Dr.Akshatha C	Associate Professor (Joined on 30.7.2019)
8	Mr. Prashantha Kumar	Asst. Research Scientist
9	Dr. Ashok Kumar	Asst. Research Scientist (joined on 29.5.2019)
10	Smt. Jagadevi	Chief Lab. Technician
11	Mr. Lokesh Babu	Graduate Med. Lab. Technologist
12	Sri. Srinivasa	Sr. Lab. Technician
13	Smt. Shobha B.R	Jr. Lab. Technician
14	Smt. Syeda Zarthaj Hashmi	Jr. Lab. Technician
15	Smt. Shilpa B	Jr. Lab. Technician
16	Sri. Srinivasamurthy	Jr. Lab. Technician
17	Somashekhar S	Jr. Lab. Technician (joined on 29.1.2019)
18	Kiran Kumar P.S	Jr. Lab. Technician (Joined on 08.02.2019)
19	Smt. Rekha Vani S	Data Entry Operator
20	Sri. Gangaiah B.M	Data Entry Operators



**Research Activities, Department of Pathology**

**Ongoing Projects**

**Dr. C.S. Premalata**

- Principal Investigator: Mantle cell lymphoma: subtyping into prognostic groups based on immunohistochemistry by using the antibodies SOX 11, Cyclin D1, CD5 and Ki 67, Clinicopathological correlation and detection of t(11, 14) by Fluorescent in situ hybridisation(FISH). Funded by

**Dr. Usha Amritham**

- Guide for the ongoing PhD research project: “Exploration of aberrations in ESR1 gene and its clinical significance in hormone receptor positive progressive breast cancers”, at Kidwai Memorial Institute of Oncology, Bangalore. – Dr. Shanthala S, Asst. Professor of Pathology
- Co-guide for the ongoing Ph.D research Project : Investigating the aberrant promoter hypermethylation of tumor suppressor genes in endometrial carcinomas: Correlation with diseases characteristics’. – Dr.

Nagarathna , Dept. of Biochemistry, BMC.

**Dr.Champaka G**

- Principal Investigator “ VNOCI project in collaboration with IISc, Bangalore from Kidwai.

**Dr. Akkamahdevi Patil**

- Co-Principal Investigator – ‘Tuberous Sclerosis Complex (TSC)-related cell signalling in the pathogenesis of Hepatocellular carcinoma’ – Collaboration Research Project , RGUHS(KMIO)-IISC, Bengaluru . Doing Study on FNA material
- Principal Investigator – “Evaluation of BRCA1 dysfunction by estimation of BRCA1 and its repressors by multimodality testing in high grade serous ovarian carcinoma- RGUHS Project

**Dr. Suma M.N**

- Co- investigator in - Feasibility studies towards using multifunctional nanoprobes for cervical cancer specific multimodal therapeutics, Collaborative project funded from RGUHS collaborated with IISC, Bangalore- status-completed 2017-2019
- Co- investigator in PD-1 and PDL-1 in Indian women with breast Cancer and correlation with the PI3K/AKT/AMPK pathway- Collaborative project funded from RGUHS collaborated with IISC,





Bangalore- status-completed 2017-2019

- Molecular sub-typing of endometrial cancer using micro-RNA. Collaborative project between RGUHS and Centre for Human Genetics (2018-2019).



### Participation at Conference / Seminar / Workshops

#### Dr. C.S. Premalata

- 2<sup>nd</sup> January 2019 participated as Faculty in CME on “Gynaecological Pathology – an Update” organized by Kidwai Memorial Institute of Oncology , Bangalore.
- 12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as Faculty in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of Medical Oncology, Kidwai Memorial Institute of Oncology , Bangalore.
- 18<sup>th</sup> January 2019 participated as a Delegate in CME on “Soft Tissue Pathology” organized by Dept. of Pathology, St. John’s Medical College, Bangalore.
- 23<sup>rd</sup> March 2019 participated as a Delegate in CME on “Perspectives on Digital Pathology” organized by HCG Hospital, Bangalore
- 22<sup>nd</sup> November 2019 attended the Revised National Tuberculosis Control Programme (RNTCP) Training Programme organized by BBMP at Kidwai Memorial Institute of Oncology , Bangalore.
- 3<sup>rd</sup> August 2019 participated as a Delegate in CME on “Trends and Bends in Breast Pathology” organized by Kempegowda Institute of Medical Sciences, Bangalore
- 27<sup>th</sup> to 29<sup>th</sup> September 2019 participated as a Delegate in the Workshop on “Biomarkers in breast cancer” / & A Panoptic Breast Pathology” organized by Dept. of Pathology, TATA Memorial Centre, Maharashtra.
- 23<sup>rd</sup> and 24<sup>th</sup> August 2019 participated as a Delegate in CME on “Update in Pathology – Recent trends and concepts” organized by Sri Manakula Vinayagar Medical College and Hospital, Pondicherry

#### Dr. Usha Amirtham

- 2<sup>nd</sup> January 2019 participated as Faculty in CME on “Gynaecological Pathology – an Update” organized by Kidwai Memorial Institute of Oncology , Bangalore.
- 12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as Delegate in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept.



of Medical Oncology, Kidwai Memorial Institute of Oncology , Bangalore.

- 22<sup>nd</sup> November 2019 attended the Revised National Tuberculosis Control Programme (RNTCP) Training Programme organized by BBMP at Kidwai Memorial Institute of Oncology , Bangalore.
- 27<sup>th</sup> to 29<sup>th</sup> September 2019 participated as a Delegate in the Workshop on “Biomarkers in breast cancer” / & A Panoptic Breast Pathology” organized by Dept. of Pathology, TATA Memorial Centre, Maharashtra.
- 13<sup>th</sup> September 2019 CME on Lung as a Faculty (Guest Lecture) in Siddhartha Medical College, Vijayawada, 2019
- As a Faculty in the CME on Cervix conducted by Radiation Oncology, KMIO – 2019.
- 19<sup>th</sup> September 2019 participated as Faculty in CME on “Breast Cancer” organized by Kidwai Memorial Institute of Oncology , Bangalore.

### Dr. Champaka G

- 12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as Delegate in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of Medical Oncology, Kidwai Memorial Institute of Oncology , Bangalore

- International Conference on Dermatopathology and soft tissue Pathology held at MVJ Medical College, Bangalore, 8<sup>th</sup> and 9<sup>th</sup> March 2019

### Dr. Akkamahadevi Patil

- International Conference on Dermatopathology and soft tissue Pathology held at MVJ
- Medical College, Bangalore, 8<sup>th</sup> and 9<sup>th</sup> March 2019

### Dr. Suma M.N.

- Faculty in CME in Gynaecological pathology- conducted by Kidwai memorial Institute of Oncology on 2nd January 2019
- Attended as delegate and was invited to judge Oral paper presentation ” at the International Conference on Dermatopathology & Soft tissue Pathology held at MVJMC & RH on 8<sup>th</sup> & 9<sup>th</sup> of March 2019.
- Guest speaker on the topic- Pathologist’s current concepts on endometrial hyperplasia, conducted by KSC- AGOI at Sagar chandramma Hospital, Bengaluru on 10 April 2019
- Guest speaker on “IHC in gynaec oncopathology” in the CME on Gynaec Oncopathology- An update conducted by Department of pathology, Father Muller Medical College, Mangalore-on 15th November 2019



### Dr. Ashwini Nargund

- CME on Soft tissue Pathology, 18<sup>th</sup> Jan 2019, St. Johns Medical College, Bangalore
- CME on Pediatric ALL – An update 21<sup>st</sup> June 2019, KMO, Bengaluru
- 12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as Delegate in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of Medical Oncology, Kidwai Memorial Institute of Oncology, Bangalore.
- CME on Breast Pathology. Spoke on : One stop Cytology clinic for breast lesions – What is new? KIMS, Bangalore, August 3<sup>rd</sup>, 2019

### Dr. Geeta V. Patil Okaly

- 12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as Delegate in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of Medical Oncology, Kidwai Memorial Institute of Oncology, Bangalore.
- CME in breast cancer KMC/CME/460/2019 dated 19.10.19

### Paper published in National and International Journals along with Paper, Authors name, Name of Journal

#### Dr. C.S. Premalata

- Babu G, Asati V, Lakshmaiah KC, Lokanatha D, Jacob LA, Babu S, Lokesh KN, Rudresh AH, Rajeev LK, Saldanha S, Chethan R, Koppaka D, **Premalata CS.** [Every distant deposit is not a metastasis: Synchronous primaries do exist.](#) Indian J Cancer. 2019 Jan-Mar;56(1):70-73. doi: 10.4103/ijc.IJC\_637\_17.
- Suresh B, Asati V, Lakshmaiah KC, Babu G, Lokanatha D, Jacob LA, Lokesh KN, Rudresh AH, Rajeev LK, Smitha S, Anand A, Patidar R, **Premalata CS.** [Primary gastrointestinal diffuse large B-cell lymphoma: A prospective study from South India.](#) South Asian J Cancer. 2019 Jan-Mar;8(1):57-59. doi: 10.4103/sajc.sajc\_52\_18.
- A. H. Rudresha, Pravin Ashok Khandare, D. Lokanatha, Abraham Jacob Linu, M. C. Suresh Babu, K. N. Lokesh, L. K. Rajeev, Carol Saldanha Smitha, Vaibhav Baburao Amale, **C. S. Premalata,** Mulchandani Nikita. [HIV/AIDS-related lymphoma: perspective from a regional cancer center in India](#) Blood Res. 2019 Sep; 54(3): 181–188. Published online 2019 Sep 25. doi: 10.5045/br.2019.54.3.181



**Dr. Usha Amirtham**

- A rare case of Langerhans Cell Sarcoma in a child mimicking a Lymphoma, Akkamahadevi Patil, Champaka G, Chennagiri S Premalata , Rekha V Kumar, Usha Amirtham, **Malathi Mukunda Pai** , Padma M, JMSCR Vol.07:Issue 01;Page 1146-1149|January 2019
- Dr. Lokanatha , Linu Abraham Jacob, MC Suresh Babu, K.N. Lokesgh, Ramakrishna Sai, A.H. Rudresha, L.K. Rajiv, Smitha Saldanha, M.N. Suma. A Usha. Primary adrenal Leiomyosarcoma : An extremely rare mesenchymal tumor. Indian Journal of Paediatr Oncol 2019-20 Sept 27; 40-559-62

**Dr. Champaka G.**

- Gastric metastasis from breast cancer : A report of two cases and review of literature. K. S. Rachan Shetty, Varun Reddy, K.C. Lakshmaiah, G. Champaka, K. Govind Babu [JCRT, Dec 2, 2019 IP: 201999.40.170
- A rare case of Langerhans Cell Sarcoma in a child mimicking a Lymphoma, Akkamahadevi Patil, Champaka G, Chennagiri S Premalata , Rekha V Kumar, Usha Amirtham, **Malathi Mukunda Pai** , Padma M, JMSCR Vol.07:Issue 01;Page 1146-1149|January 2019
- Malathi Mukunda Pai, Neelam Sharma, Akkamahadevi Patil, Champaka Gopal. Fine Needle Aspiration Cytology of Salivary Gland lesions: A Revised

Classification Based on “Milan System” – 4 years experience of Teritary care. Cancer center of South India Journal of Cytology, 2019, Indian Academy of Cytologists, Published by Wolters Klunier-Medknow.

- Bindhu Joseph, Rekha V. Kumar, G. Champaka, Ashok Shenoy et al. Biological tailoring of adjuvant radiotherapy in head and neck and oral malignancies. The potential role of p53 and eIF4E as predictive parameters. Indian Journal of cancer, Vol 56, No.4, October-December 2019, pp 330-334.

**Dr. Akkamahadevi Patil**

- Image Guided Fine Needle Aspiration Cytology of Thymic Lesions – A Four years study : **Malathi Mukundapai**, Smrita Singh, Akkamahadevi Patil, Ashwini Nargund, Anuradha Kapali; The Indian Journal of Chest Diseases & Allied Sciences 2019;61;19-23
- E74 like ETS transcription factor 3 (ELF3) is a negative regulator of epithelial – mesenchymal transition in bladder carcinoma. Kirti Gondkar, Krishna Patel, Shobha Krishnappa, Akkamahadevi Patil, Bipin Nair, Gopinath Meenakshi Sundaram, Ton Tuan Zea, Prashant Kumar Cancer Biomark. 2019, 25 (2): 228-232
- A rare case of Primary Leptomeningeal Precursor B cell Lymphoblastic Lymphoma in a paediatric patient- case report and literature review. Malathi Mukunda Pai,



Ashwini Nargund, Akkamahadevi Patil, Padma Maneya, Madhumathi Davanam Sathyanarayan, JMSCR vol 07, Issue 06, June 2019.

- A rare case of Langerhans Cell Sarcoma in a child mimicking a Lymphoma, Akkamahadevi Patil, Champaka G, Chennagiri S Premalata , Rekha V Kumar, Usha Amirtham, Malathi Mukunda Pai , Padma M, JMSCR Vol.07:Issue 01;Page 1146-1149||January 2019
- Malathi Mukunda Pai, Neelam Sharma, Akkamahadevi Patil, Chamapaka Gopal. Fine Needle Aspiration Cytology of Salivary Gland lesions: A Revised Classification Based on “Milan System” – 4 years experience of Teritary care. Cancer center of South India Journal of Cytology, 2019, Indian Academy of Cytologists, Published by Wolters Klunier-Medknow.

#### Dr. Suma M.N.

- Synchronous primary cancer of the thyroid and breast: A case report and literature review in Pathology Update: Tropical Journal of Pathology and Microbiology, Vol 5, Issue 7, July 2019. Dr Rakshitha H M, **Dr Suma M N**, Dr Ravi Arjunan, Dr Malathi M, Dr Priya D, Dr Premalata C S
- A SUV39H1- low chromatin state characterises and promotes migratory properties of cervical cancer cells in Experimental cell Research 378(2019)

206-216. Calvin Rodrigues, Chitra Pattabhiraman, Anjali Vijaykumar, Reety Arora, **Suma Mysore Narayana**, Rekha V kumar, Dimple Notani, Patrick Varga- Weisz, Sudhir Krishna

#### Dr. Ashwini Nargund

- A rare case of Primary Leptomeningeal Precursor B cell Lymphoblastic Lymphoma in a paediatric patient- case report and literature review. Malathi Mukunda Pai, Ashwini Nargund, Akkamahadevi Patil, Padma Maneya, Madhumathi Davanam Sathyanarayan, JMSCR vol 07, Issue 06, June 2019.
- Dr. Rakshitha H.M., Dr. Suma M.N., Dr. Ravi Arjunan, Dr. Malathi M, Dr. Priya D., & Dr. Premalata C.S. (2019). Synchronous primary cancer of the thyroid and breast. Pathology Update: Tropical Journal of Pathology and Microbiology, 5(7), 461-465.

#### • Dr. Geeta V. Patil Okaly

- Okaly GV, Panwar D, Lingappa KB, Kumari P, Anand A, Kumar P, et al. FISH and HER2/neu equivocal immunohistochemistry in breast carcinoma. Indian J Cancer2019; 56:119-23.
- Kirti Gondkar , Krishna Patel , Geeta V. Patil Okaly , Bipin Nair , Akhilesh Pandey, Harsha Gowda1, and Prashant Kumar : Dickkopf Homolog 3 (DKK3) Acts as a Potential Tumor Suppressor in Gallbladder Cancer. Frontiers in oncology, 29 October





### Cytopathology Unit

The Cytology unit was started in the year 1974, it offers cytodagnostic services to all patients of Kidwai, and also to those referred from other hospitals and Institutions. It also caters to cancer detection camps conducted by Community Oncology department of KMIO in various parts of Karnataka and neighbouring states.

The Cytology unit handles and average of 12,000 specimens per year, half of which are Fine needle aspiration cytology specimens comprising of routine FNA, ultrasound and CT guided FNA. The other half includes Gynaec Cytology and Non-gynae Cytology consisting of fluid Cytology, brushing and washings from various sites (Statistics enclosed)

The department also offers short term technical training to Cytotechnicians, Cytotechnologists, Pathologists and post graduates in the department of Pathology and Gynaecology. The unit has external quality control participation with the Indian Academy of Cytologists.

Statistics for the Year 2019 Cytology													
Type	J	F	M	A	M	J	J	A	S	O	N	D	T
Fnac	1	1	2	2	2	2	2	1	1	1	2	1	24
U S	2	2	2	2	2	2	2	2	2	2	2	2	30
CTG	3	4	4	2	3	3	3	3	3	2	3	2	39
Ascit	5	5	5	4	7	4	6	4	5	4	6	5	64
Pleur	5	5	5	4	5	3	6	5	2	3	4	4	57
C S F	2	2	3	2	3	2	3	3	2	2	2	2	34
Sput	1		2			6	3						12
Urin	1	2	5	1	1	3	5	2	5	8	9	5	77
Nipp				1		3	1		1	1	1	2	10
Bron	3	3	1	1	6	1	1	8	1	1	3	1	19
Gyne	1	1	1	1	1	1	8	8	8	1	1	1	13
Gyne	5	7	1	1	5	1	7	3	1	2	3	1	14
Peric	8	2	8	3	1		5	1	2	4	4	3	41
Misc				1	3	2	1			1			8
Revi	6	8	7	7	7	6	7	6	6	5	6	6	80
	1	1			3		2		1			2	10
	8	8	9	5	8	6	5	4	5	3	7	1	78
Total	1	1	1	1	1	1	1	1	1	1	1	1	14

### Research Activities, Department of Pathology

#### Ongoing Projects

#### Dr. Malathi M

Principal Investigator – ‘**High Productivity, Portable Screening tool for Cervical Cancer**’- Developing a portable screening tool for screening cancer cervix in collaboration with a soft ware company- Co-PI-Mr. Adarsh Natarajan, Aindra Systems Pvt. Ltd. Bangalore - 560078

Principal Investigator –‘**Tuberous Sclerosis Complex (TSC)-related cell signalling in the pathogenesis of Hepatocellular carcinoma**’ – Collaboration Research Project , RGUHS(KMIO)-IISC, Bengaluru . Doing Study on FNA material

#### Participation at Conference / Seminar / Workshops

#### Dr. Priya D.

Attended as faculty in CME in “Gynaecological Pathology-An Update” in KMIO held on 2-1-2019

Attended as delegate in CME in “Minimalist Pathology-2019” in Amrita institute of medical





sciences held on 9-11 February 2019

Attended as faculty in CME “Pediatric ALL- An Update” in KMIO held on 21-06-2019

Attended as faculty in CME “breast cancer” in KMIO held on 19-10-2019

Attended as delegate in CME “Navigating challenges in the path of Gyn-Oncology” in SSCHRC held on 8-2-2020

Attended as distinguished speaker in preconference CME “Updates in lung pathology” in Govt Siddhartha medical college, Vijayawada held on 13-09-2019

Attended as delegate in CYTOCON 2019 in PGI Chandigarh held on 7-10<sup>th</sup> November 2019

Attended flow cytometry workshop in CYTOCON 2019 in PGI Chandigarh held on 7-10<sup>th</sup> November 2019

### **Dr. Sowmya Alashetty**

Attended CME in breast cancer on 19.10.2019

### **Paper published in National and International Journals along with Paper, Authors name, Name of Journal**

#### **Dr. Malathi M.**

Image Guided Fine Needle Aspiration Cytology of Thymic Lesions – A Four years study: **Malathi Mukundapai**, Smrita Singh, Akkamahadevi Patil, Ashwini Nargund, Anuradha Kapali; The Indian Journal of Chest Diseases & Allied Sciences 2019;61;19-23

A rare case of Primary Leptomeningeal Precursor B cell Lymphoblastic Lymphoma in a paediatric patient- case report and literature review. Malathi Mukunda Pai, Ashwini Nargund, Akkamahadevi Patil, Padma Maneya, Madhumathi Davanam Sathyanarayan, JMSCR vol 07, Issue 06, June 2019.

A rare case of Langerhans Cell Sarcoma in a child mimicking a Lymphoma, Akkamahadevi Patil, Champaka G, Chennagiri S Premalata, Rekha V Kumar, Usha Amirtham, **Malathi Mukunda Pai**, Padma M, JMSCR Vol.07:Issue 01; Page 1146-1149||January 2019

**Dr. Priya**

Dr. Rakshitha H.M., Dr. Suma M.N., Dr. Ravi Arjunan, Dr. Malathi M, Dr. Priya D., & Dr. Premalata C.S. (2019).

Synchronous primary cancer of the thyroid and breast. *Pathology Update: Tropical Journal of Pathology and Microbiology*, 5(7), 461-465.

<https://doi.org/10.17511/jopm.2019.i07.08>

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr. Balu S	Professor
2	Dr. Malathi M	Associate Professor
3	Dr. Priya D	Asst. Professor
4	Dr. Sowmya Alashetty	Asst. Professor (joined 11.9.2019)
5	Smt. J. Kalavathi	Cytotechnologist
6	Sri Lukas K	Cytotechnologist
7	Smt. Mahalakshmi N	Graduate Medical Technologist
8	Smt. Umamaheshwari	Cytotechnician
9	Smt. Anjushree H	Jr. Lab. Technician (Joined on

**Haematology Unit :**

The Haematology unit performs haemograms for all cancer patients and those attending Cancer Detection Clinic. These include 80-120 pediatric and 150-250 adult haemograms per day. The division

takes part in the external quality assurance program conducted by AIIMS, New Delhi. 10-20 bone marrow aspirates and biopsy are processed and reported. These include new cases and follow up of haematological malignancies. Detailed characterization of leukemias with the full range of cytochemistry is being done. Flow Cytometry for acute and chronic leukaemias is being done. In addition, clinical pathology tests are performed. Teaching of DNB (Path), B.Sc. (MLT) and MD (Path) students is under taken

The Haematology unit performs haemograms for all cancer patients and those attending Cancer Detection Clinic. These include 80-120 pediatric and 150-250 adult haemograms per day. The division takes part in the external quality assurance program conducted by AIIMS, New Delhi. 10-20 bone marrow aspirates and biopsy are processed and reported. These include new cases and follow up of haematological malignancies. Detailed characterization of leukemias with the full range of cytochemistry is being done. Flow Cytometry for acute and chronic leukaemias is being done. In addition, clinical pathology tests are performed. Teaching of DNB (Path), B.Sc. (MLT) and MD (Path) students is under taken



Annual Statistics from The Month Of Jan-Dec 2019													
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
Haemogram	7794	7707	8107	7754	7984	8025	9070	8063	8003	8285	8012	7920	96724
Esr	40	45	30	20	20	20	30	29	25	20	23	24	326
Bma	297	261	315	287	302	267	287	287	234	263	302	262	3364
Bmbx	172	176	174	182	297	263	186	183	158	244	192	166	2393
Rs	17	27	16	11	16	15	7	13	10	18	13	20	183
Cyto	25	20	10	10	-	-	2	3	4	-	-	-	74
Fp(Ps)	2144	2093	2246	2282	2303	2272	2470	2269	2381	2115	2250	2050	26875
Bt Ct	45	45	40	35	45	40	45	52	45	35	30	25	482
Clinical	40	50	38	40	53	48	50	45	40	38	35	34	511
Fcm	68	68	86	94	92	72	64	76	63	88	83	85	939
Pt	340	365	390	398	436	380	350	356	404	522	480	519	4940
Aptt	340	365	390	398	436	380	350	356	404	522	480	519	4940
24hrs Lab Cbc	-	-	-	-	-	-	-	-	-	510	500	600	1610
Total	11322	11222	11842	11511	11984	11782	12911	11732	11771	12660	12400	12224	143361

## Research Activities, Department of Pathology

### Ongoing Projects

#### Dr. Shankaranand B.

Comparative study of microwave and conventional decalcification method in a tertiary care cancer centre as a guide to Nikitha B.S. in 28<sup>th</sup> March, 2019

Comparative study of automated with conventional histology staining techniques in 28<sup>th</sup> March 2019 with Hemashree V.

### Participation at Conference / Seminar / Workshops

#### Dr. Shankaranand B.

Revised National tuberculosis Control Programme at KCI on 22.11.2019

CME in Breast Cancer at KCI on 19.10.19

### Papers published in national and international journals

#### Dr. H.V. Ragavendra

Kavitha B.L., Mangalagowri M, Obula Reddy C, Mahadeva Prasad, Madhumathi D.S., Raghavendra V., Lakshmaiah K.C., Prasanna Kumari. Chromosomal Abnormalities in Multiple Myeloma: An observational study from South



India, Indian Journal Cancer 22.  
Educational Research 2019; 7(1):19-

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr.Raghavendra HV	Professor
2	Dr.Namrata N.R	Associate Professor
3	Dr.Shankaranand B	Associate Professor
4	Mr.Jayadev Naik	Asst. Research Scientist
5	Smt. Swetha M	Asst. Research Scientist (joined on 29.5.2019)
6	Mr.Mahesh S	Graduate Medical Lab. Technologist
7	Sri Mohan Kumar	Graduate Medical Lab. Technologist
8	Smt.Sarojamma	Sr. Lab. Technician
9	Mrs.Madhushree	Jr. Lab. Technician
10	Mr. Vinayak Kumbar	Jr. Lab. Technician (joined on 2.2.2019)

**Cytogenetics Unit :**

The cytogenetics facility at Kidwai Memorial Institute of Oncology was established in 1989 as a subsection of the Pathology department. Major contributions were made to the establishment of chromosomal changes in patients with various forms of haematological malignancies and solid tumors. The facility offers cytogenetic analysis of haematological malignancies and solid tumors to the department of medical, paediatrics and surgical oncology departments in the form of routine diagnosis for the patients on therapy to see the cytogenetic response. Also, we receive samples of clinical cases from other referral hospitals. GTG banding is used routinely for karyotyping,. Visual and automated karyotyping is routinely in practice. The unit is involved in substantial research activities and

publications in national and international journals. In addition, training is offered periodically in the above subject by qualified and resourceful staff.

**Achievements :**

Chromosomal analysis has been performed and diagnosis of the disease is made on over 1550 cases in 2014 and 1521 cases in 2015 till date, on bone marrow, peripheral blood and FNA samples. In addition, the Unit has academic achievements in publishing 4 papers in reputed journals.

At present, a research project has been sanctioned from Vision Group on Science and Technology, Government of Karnataka.



Statistics For The Year -2019

Statistics For the Year -2019								
SAMPLE	BMA	FNA	PBL	FISH	PLEURAL FLUID	ASCITIC FLUID	PERI-TONIAL FLUID	TOTAL SAMPLE
JAN	146	15	7	4	-	-	-	168
FEB	164	19	10	2	-	-	-	193
MAR	170	19	10	1	-	-	-	199
APR	166	17	1	0	-	-	-	184
MAY	155	20	11	0	-	-	-	186
JUNE	154	17	5	5	-	-	-	181
JULY	167	17	6	5	1	-	-	196
AUG	157	17	14	6	2	1	-	197
SEP	141	14	10	7	1	1	1	175
OCT	161	13	6	6	1	-	-	187
NOV	150	17	7	8	1	1	-	184
DEC	154	14	15	5	-	-	-	188
<b>TOTAL</b>	<b>1885</b>	<b>199</b>	<b>102</b>	<b>52</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>2248</b>

**Research activities and projects :**

**Ongoing Projects**

**Dr. Shanthala S.**

Ongoing PhD research project: “Exploration of aberrations in ESR1 gene and its clinical significance in hormone receptor positive progressive breast cancers”, at Kidwai Memorial Institute of Oncology, Bangalore.

12<sup>th</sup> – 13<sup>th</sup> January 2019 participated as a Faculty in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of Medical Oncology, Kidwai Memorial Institute of Oncology , Bangalore.

21<sup>st</sup> June 2019 participated as Faculty in CME on “Pediatric ALL – An update” organized by Kidwai Memorial Institute of Oncology , Bangalore.

**Participation at Conferences/ Seminars/ Workshops :**

**Dr.Kavitha.B.L**

2<sup>nd</sup> January 2019 participated as Faculty in CME on “Gynaecological Pathology – an Update” organized by Kidwai Memorial Institute of Oncology , Bangalore.

17<sup>th</sup> February 2019 participated as delegate in CME on “The Hematology Horoscope: Cytogenetics and Molecular Studies” organized by P.D. Hinduja Hospital and Medical Research Centre, Bangalore.

**Dr. Shanthala S.**

19<sup>th</sup> September 2019 participated as Faculty in CME on “Breast Cancer” organized by Kidwai Memorial Institute of Oncology , Bangalore.

12<sup>th</sup> – 13<sup>th</sup> January 2019 participated in the conference on “Lymphocon 2019 – An international update on Lymphomas” organized by Dept. of



Medical Oncology, Kidwai Memorial Institute of Oncology, Bangalore.

19<sup>th</sup> September 2019 participated as Faculty in CME on “Breast Cancer” organized by Kidwai Memorial Institute of Oncology, Bangalore.

21<sup>st</sup> June 2019 participated as delegate in CME on “Pediatric ALL – An update” organized by Kidwai Memorial Institute of Oncology, Bangalore.

17<sup>th</sup> February 2019 participated as delegate in CME on “The Hematology Horoscope: Cytogenetics and Molecular Studies” organized by P.D. Hinduja Hospital and Medical Research Centre, Bangalore.

Workshop on Fundamentals on Mass spectrometry – based proteomics for Beginners (July 15-17<sup>th</sup> 2019)

### Papers published in national and international journals :

#### Dr. Kavitha B.L.

Shanthala S, Obula Reddy C, Kavitha BL, Padma M, Lokanatha D and Prasanna Kumari, 2019. “Landscape of additional chromosomal abnormalities in Philadelphia chromosome positive acute lymphoblastic leukemia: 5year experience of a regional cancer centre in South Asia”, International Journal of Current Research. 2019;11(04): 3542-3545.

Shanthala S, Obula Reddy C, Kavitha BL, Balu S, Appaji L, Prasanna Kumari. Cytogenetic Exploration of Ewing Sarcoma with Emphasis on

Variant Translocations: A 12-Year Study at a Regional Cancer Centre in South Asia. (2019) Intl J Cancer Oncol 6(1): 13-18.

Kumari P, Mangalagowri M, Kavitha BL, Obula Reddy C, Shanthala S, et al. A rare presentation of Ph chromosome: idic der(22q11) in blast crisis chronic myeloid leukemia. J Blood Disord Transfus 2019;10(1):414.

Kavitha B.L., Mangalagowri M, Obula Reddy C, Mahadeva Prasad, Madhumathi D.S., Raghavendra V., Lakshmaiah K.C., Prasanna Kumari. Chromosomal Abnormalities in Multiple Myeloma: An observational study from South India, Indian Journal Cancer Educational Research 2019; 7(1):19-22.

#### Dr. Shanthala S.

Shanthala S, Obula Reddy C, Kavitha BL, Padma M, Lokanatha D and Prasanna Kumari, 2019. “Landscape of additional chromosomal abnormalities in Philadelphia chromosome positive acute lymphoblastic leukemia: 5year experience of a regional cancer centre in South Asia”, International Journal of Current Research. 2019;11(04): 3542-3545.

Shanthala S, Obula Reddy C, Kavitha BL, Balu S, Appaji L, Prasanna Kumari. Cytogenetic Exploration of Ewing Sarcoma with Emphasis on Variant Translocations: A 12-Year





Study at a Regional Cancer Centre in South Asia. (2019) Intl J Cancer Oncol 6(1): 13-18.

Kumar P, Mangalagowri M, Kavitha BL, Obula Reddy C, Shanthala S, et al. A rare presentation of Ph chromosome: idic der(22q11) in blast crisis chronic myeloid leukemia. J Blood Disord Transfus 2019;10(1):414.

**Smt. Mangalagowri M.**

Kumar P, Mangalagowri M, Kavitha BL, Obula Reddy C, Shanthala S, et al. A rare presentation of Ph chromosome: idic der(22q11) in blast crisis chronic myeloid leukemia. J Blood Disord Transfus 2019;10(1):414.

Kavitha B.L., Mangalagowri M, Obula Reddy C, Mahadeva Prasad, Madhumathi D.S., Raghavendra V., Lakshmaiah K.C., Prasanna Kumari. Chromosomal Abnormalities in Multiple Myeloma: An observational study from South India, Indian Journal Cancer Educational Research 2019;

7(1):19-22.

**Dr. Subhan Ali R.**

R SA, G Shilpa, HA Mohamed, B E Chaitra, Francis R, Role of fine needle aspiration cytology as a diagnostic tool in lymphadenopathy with utility of CBNAAT in tuberculous lymphadenopathy. Arch Cytol Histopathol Res 2019;4(1):61-64

**Courses Offered :**

- a. M.D (4 seats) in Pathology .
- b. DM Oncopathology (2seats).
- c. Fellowship in Tumor Pathology.

In addition MD Pathology students of Medical Colleges from all over Karnataka are posted in the Department of Pathology for Oncopathology experience.

**Faculty and Staff :**

Sl.No.	Name	Designation
1	Dr. B. L.Kavitha	Associate Professor & Head of Cytogenetic Unit
2	Mrs. M. Mangalagowri	Assistant Professor
3	Dr. Shanthala S	Assistant Professor
4	Mr. Subhan Ali R	Assistant Professor (joined on 11.9.2019)
5	Mr. M. Mahadevaprasad	Assistant Research Scientist
6	Smt. Shilpa K.A	Assistant Research Scientist (joined on 29.05.2019)
7	Mr. B.K. Prabhakar	Sr. Lab. Technologist



## DEPARTMENT OF PAEDIATRIC ONCOLOGY



**Dr.M.Padma**  
Professor & I/c HOD

Pediatric Oncology is functioning as a separate unit in the Department of Medical Oncology from July 1992, At the 41<sup>st</sup> Meeting of Governing Council held on 29<sup>th</sup> December 2008 it was created as Department of Pediatric oncology.

The department provide comprehensive care to all pediatric cases (below the age group of 15 years) and register 450 – 500 new childhood cancer cases every year.



### Academic Activities :

The department offers Super Speciality Course D.M. in Pediatric Oncology with an intake of 2 students per year, selected through NEET Exam conducted by Central Government.

The Department trains D.M. students in Medical Oncology and Post-graduate students posted from various medical colleges of Karnataka.

### Conferences/Seminar/Workshops Conducted By The Department :

CME on Paediatric ALL an update: Conducted in JUNE 2019.

CME on Retinoblastoma an update : Conducted in MAY 2019.

### Academic - Doctors/ Residents/ Registrars/ Students

Dr. Jyothi .M  
Dr. Pooja .G.C  
Dr. Prerana S Nesargi  
Dr. Aarthi .S  
Dr. Saksham Singh  
Dr. Veena  
Dr. Abhishek Kumar  
Dr. Dr. Krunal .M. Shah

### Medical Education - Teaching And Learning

(Lecture/Seminar/Symposium/CME) Scheduled as per MCI/RGUHS)



Daily ward rounds and discussion for DM students, Fellowship and Paediatric Postgraduates. Weekly case discussion / Journal club / Seminar.



**Research Activities/Projects Completed  
Projects Ongoing And New Projects  
Undertaken During This Period (2019  
To 2020)**

Epidemiology and clinical features of retinoblastoma : A tertiary care centre experience in India. **Maneya Padma, Nuthan kumar, Prerana S, Aruna kumari, Appaji L., Aarthi Vishwanathan.** South Asian J cancer. 2019.

Tuberculosis co-existence in Paediatric Hodgkin lymphoma- A tropical country experience. **Maneya Padma, Nuthan kumar, Jyothi munireddy, Arun Kumar, Pooja gujjal chebbi, S. Chennagiri Premalata.** South Asian Journal of Cancer. 2019

National Childhood Cancer Comprehensive management policy- A Road Map. **Arunkumar AR, Arunakumari BS, Ramachandra C, Vijay CR, Ramesh C, Appaji L, Avinash T, Noopur Nelson, Govardhan HB.** Onkologia I Radioterapia. 2019

Effect of yoga on the symptoms response in pediatric brain tumor in patients undergoing chemo and radiotherapy. **Govardhan HB, Noopur**

**N, Ibrahim K, Arunkumar, Manisha R, Divyashree SJ et al.** Onkologia Radiotherapia. 2019;1(46): 034-038

Pattern of admissions into paediatric intensive care unit in a tertiary care cancer centre. **Padma Maneya, Nuthan Kumar, Arun kumar, Pooja gujjal chebbi, Jyothi M., Aarthi Vishwanathan, Prerana Nesargi, Akkineni Veena, Saksham Singh, Appaji L.** International journal of current research.2019, 11,(06), 4264-4626

Clinical outcomes of critically ill children with cancer admitted to the pediatric intensive care unit of a regional cancer centre in a developing country. **Padma M, Jyothi M., Pooja Gujjal Chebbi, Nuthan Kumar, Appaji L, Arunakumari B.S.** International Journal of current research.2019,11(06), 4629-4632

Barriers in ensuring adherence to treatment in Pediatric Oncology: experience from a tertiary care center in a developing country. **Padma M., Pooja Gujjal Chebbi, Jyothi M., Nuthan Kumar M.K., Arun Kumar A.R., Arunakumari B.S., Appaji L.** International journal of current research.2019,11(06), 4615-17.

**Papers presented in state/ national/ international conferences : nil**

**Posters presented in state/ national international conferences :**

Avinash T, Bhoopathy D. Road Map to Integrated Paediatric Oncology Palliative Care Services. 26<sup>Th</sup> International Conference of Indian Association of Palliative Care;2019 Feb 8-9; Kochi: KE



Avinash T, Ramachandra C. Road map to good quality childhood anti-cancer

procurement policy and mechanism of reporting of suspected sub-standard drugs. 22<sup>ND</sup> Annual Paediatric Haematology Oncology Conference; 2019 Sep 6-8; Varanasi: UP



**Participation At Conference / Seminar/Workshops During The Year (2019-2020)**

Phocon 2019: Varanasi - Dr Nuthan Kumar M.K, Assistant professor, attended the Conference

**Faculty and Staff :**

Sl.No	Name	Designation
1	Dr.M.Padma	Professor & I/c HOD (Retired on 30.06.2019))
2	Dr.A.R.Arun Kumar	Assistant Professor
3	Dr.T.Avinash	Senior Medical Officer
4	Dr.B.S.Aruna Kumari	Professor (Retired on 30.04.2014 & Joined as a Adhoc Basis on 01.10.2014)
5	Dr.L.Appaji	Professor (Retired on 31.3.2015 & Joined as a Adhoc Basis on 06.05.2015)
6	Dr.Nuthan Kumar M.K	Assistant Professor
7	Dr. Prakruthi S. Kaushik	Assistant Professor(Reported the Duty on 21.08.2019)

Statistics			
Year Of 2019 (01.01.2019 To 31.12.2019)			
	Female	Male	Total
New Registration	466	296	762
In-Patients	860	1113	1380
Discharges	801	490	1291
Death	65	44	109

Year of 2020 (01.01.2020 to 31.12.2020)			
	Male	Female	Total
New Registration	300	239	539
In-Patients	702	495	1197
Discharges	676	483	1159
Death	41	19	60



## DEPARTMENT OF RADIATION PHYSICS



**Dr.M.Ravikumar**  
Professor and HOD

The Department of Radiation Physics, Kidwai Memorial Institute of Oncology is organized to extend services related to the scientific aspects of applications of ionizing radiations in therapeutic and diagnostic Oncology. The important areas involve radiation Physics related to patient treatment and care, with particular relevance to delivery of radiation dose in radiotherapy for optimal clinical outcome. Utmost care is taken to avoid delivery of incorrect radiation dose or incorrect spatial distribution of radiation dose in the treatment volume. The different aspects of Medical physics are Radiological Dosimetry, Radiation Treatment Planning in external beam and Brachytherapy, Quality Assurance (QA) of radiation delivery which includes QA of the treatment delivery machines, radiation detecting and measuring instruments etc.



Imparting medical physics and radiological physics training are also looked after by trained medical physics faculties. The Radiation safety Officer (RSO) approved by the Atomic Energy Regulatory Board (AERB), Mumbai is responsible for the Surveillance of overall radiological safety in the safe use of sealed and unsealed radioisotopes in the Institute.



Dr. S.Sathiyan and Dr. Shwetha B are AERB approved RSO's in the Institute. They submit Annual Status information on the issues related to Radiation safety to Regulatory Authority (AERB) on annual basis in the form of reports, on the proper functioning of radiotherapy machines, radiation dose inter comparison results,





safe use of radiation sources and waste disposal of unsealed radioisotopes used for diagnosis and therapy. The personnel monitoring of all the radiation workers of the Institute is carried out using Thermo luminescent (TLD) Dosimetry badges, which are measured and maintained by M/S Avantech Laboratories, Chennai and annual dose reports are scrutinized.



The department is recognized to carry out research in the field of Radiation Physics by Rajiv Gandhi University of Health Sciences, Karnataka- the first of its kind in the entire state. The department conducts M.Sc. (Radiation Physics) programme affiliated to Rajiv Gandhi University of Health Sciences, Karnataka and approved by Atomic Energy Regulatory Board (AERB), Mumbai with intake of 5 students per year. Classes are conducted by the expert

faculty members of the department for M.D. (Radiotherapy), D.M.R.T., M.Sc. (Nursing), B.Sc. Radiotherapy Technology and Radio-Diagnosis technology programmes. The department is also recognized as one of the approved centers by AERB to conduct one year Internship programme in Medical Physics as partial fulfillment of their curriculum for appearing for Radiological Safety Officer (RSO) examinations.

Under the central government SCI (State Cancer Institute) project the institute got sanctioned with 4 more state of the art linear accelerators (3 – Elekta Versa HD and 1 Infinity) which are capable of treating SRS, SRT, IGRT, Gating and IMRT cases have been commissioned and got AERB regulatory approvals. Two more HDR (one with Cobalt source and the other with Iridium Source) machines, two dedicated 16 slice CT Simulator (M/S. Philips), Permanent implant brachytherapy unit and respective QA, Dosimetric equipment also ordered and installation is under process..





Annual Statistics - 2019	
	TOTAL
<b>Clinac - Dhx</b>	
3dcrt Technique	226
Boost Treatment (3D)	11
Imrt Technique	58
Boost Treatment (IMRT)	4
<b>Clinac-Dbx</b>	
3dcrt Technique	432
Boost Treatment (3D)	38
Imrt Treatment	242
Boost Treatment (IMRT)	62
<b>Unique</b>	
3dcrt Technique	376
Boost Treatment (3D)	34
Imrt Treatment	261
Boost Treatment (IMRT)	55
<b>Manual Planning</b>	
Manual Calculation	882
Special Technique	12
<b>Contouring (2d)</b>	
Manual Contouring	62
Remarking	42
Mould Room Tech.	
<b>Orfit Mould</b>	
Electron Cutout	24
Customised Blocks	63
<b>Sci Building - Elekta</b>	
La1 Linear Accelerator	513
La2 Linear Accelerator	426
La3 Linear Accelerator	505
La4 Linear Accelerator	563

IATION PHYSICIS - ANNUAL STATISTICS - 2020	
CLINAC - DHX	Total
3DCRT Technique	266
Boost treatment (3D)	15
IMRT Technique	36
<b>CLINAC-DBX</b>	
3DCRT Technique	368
Boost treatment (3D)	22
IMRT TREATMENT	126
Boost treatment (IMRT)	37
<b>UNIQUE</b>	
3DCRT Technique	185
Boost treatment (3D)	15
IMRT TREATMENT	371
Boost treatment (IMRT)	127
<b>MANUAL PLANNING</b>	
Manual calculation	359
<b>MOULD ROOM TECH.</b>	
Orfit mould	813
Electron cutout	5
Customised Blocks	3
<b>SCI BUILDING – LA1, LA2, LA3, LA4 (ELEKTA)</b>	
3DCRT	275

IATION PHYSICIS - ANNUAL STATISTICS – 2020	
IMRT	1081
VMAT	769
SRS	1
SRT	2
SBRT	3
<b>BRACHYTHERAPY HDR</b>	
ICBT	374
OVOIDS	52
Sorbo	55
ISBT	40
Surface Mould	3
Implants	0
ILBT	4
<b>MANUAL BRACHYTHERAPY</b>	
ICBT	53
OVOIDS	4

**Faculty and Staff :**

Sl No.	Name	Designation	Qualification
1	Dr. M. Ravikumar	Prof. and HOD	M.Sc., Dip.R.P., Ph.D. (Retired on
2	Dr. K. M. Ganesh	Professor - HOD from 01.06.2019.	M.Sc (Med.Phy)., Ph.D., FUICC
3	Dr. S. Sathiyaraj	Professor	M.Sc., Dip.R.P., Ph.D.
4	Dr. Shwetha .B	Associate Professor	M.Sc, Dip.R.P, Ph.D
5	Dr. C. Varatharaj	Associate Professor	M.Sc., M.Phil., Dip.R.P., Ph.D
6	Dr. P. Senthil Manikandan	Asst Professor	M.Sc (Med Phys)., Ph.D.
7	Dr. P. Sathiyaraj	Asst Professor	M.Sc (Med Phys)., Ph.D.
8	Mr. D. Gowtham Raj	Asst. Physicist	M.Sc (Med Phys).,
9	Mrs. B. Rekha Reddy	Asst. Physicist	M.Sc, Dip.R.P, Ph.D
10	Mr. C. Sivarajan	Asst. Physicist	M.Sc (Med Phys).
11	Ms. Sushma N	Asst. Physicist	M.Sc (Med Phys).
12	Mr. Mageshraj K	Asst. Physicist	M.Sc (Med Phys).
13.	Ms. Shivamma	Asst. Physicist	M.Sc (Med Phys).



## DEPARTMENT OF RADIO DIAGNOSIS



**Dr. Raghuram. P**  
Professor & HOD

The Department of Radiodiagnosis from its inception, continues to play an important and significant role in the overall health care and academic activities of the Institute. The department is well equipped with Imaging Equipment including X-Ray machines, mammography, Ultrasonography, colour Doppler, Whole Body CT Scanners and MRI. Through out the year patients are referred for Investigation from all over Karnataka State as well as from neighbouring states. Tests are performed mainly for malignant disorders, but non-malignant conditions are also evaluated. Institute patients, staff members and referral patients from other hospitals are being regularly investigated. The department is staffed with well-qualified and trained personnel.



### ACADEMIC ACTIVITIES :

1. The department is accredited centre for DNB Radio diagnosis for three primary
2. and three post DMRD candidates. The Department has a full fledged Seminar room and library.
3. Regular teaching programmes are conducted with practical discussions of radiographs
4. Ultrasound CT and MRI.
5. B.Sc., Medical Imaging Technology (Radiodiagnosis) Course is conducted by the department.
6. Several batches of students are going through this course, which is of 3 Years duration.
7. M.sc., Medical Imaging Technology (Radiodiagnosis) Course is run by the department.
8. Several Students are going through this course, which is of 2 Years duration
9. Post Graduate, Under Graduate Students from various Medical, Dental and Nursing Colleges trained in
10. various departments of Institute including Radiodiagnosis. Post Graduate students of various
11. departments in the Institute Vis., M.ch (Surgical oncology) MD (Radiotherapy) DM (Medical Oncology) Other
12. B.Sc., Courses also have regular postings in the department of Radiodiagnosis.
13. Radiologists and Technicians are given specialized training specifically in



Ultrasonography, CT and MRI.



Statistics - 2019

Sl.No	TYPE OF Investigations	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
1	Chest	1923	1753	2393	1900	2084	1732	2038	1770	1576	1677	1721	1779	22346
2	Neck	168	189	221	184	264	201	318	258	247	259	308	283	2900
3	Ba.Swallow	11	16	16	16	10	11	6	08	05	05	15	15	134
4	Extremities	77	69	104	65	101	81	119	107	123	138	47	57	1088
5	TL Spine	36	39	23	16	38	41	38	16	07	39	34	17	344
6	Skull	13	16	21	9	20	17	10	12	05	23	12	16	174
7	PNS	03	03	04	02	13	03	04	01		06	05	02	46
8	Others	36	24	6	32	38	22	Nil	01	Nil	Nil	Nil	00	159
9	Ultrasound	1109	1092	1152	1178	1254	1422	1589	1883	1915	1637	1147	956	16334
10	U/S FNAC	269	452	416	235	212	275	189	134	120	304	322	300	3228
11	Mammography	194	181	184	100	129	222	207	190	199	250	227	221	2304
12	U/S. Breast	24	18	18	21	38	32	30	13	18	50	09	11	282
13	C.T.Scan	2188	2134	2154	2238	2620	2558	2892	1892	1830	2112	2757	2418	27793
14	CT FNAC & Biopsy	147	120	129	31/23	32/30	39/25	33/30	32/27	58/63	18+4	33/17	21/17	396
15	CT RT Planning	175	215	287	204	210	279	354	251	45	35	63	11	2129
16	MRI	465	396	249	535	539	426	393	463	436	314	667	693	5576
17	Echo	400	457	431	455	346	396	490	467	444	427	495	380	5188
18	DSA	16	13	16	17	23	23	14	08	09	20	21	17	197



### STATISTICS – 2020

Type of Investigations	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEP	OCT	NOV	DEC	TOTAL
X-rays & Radiography	2181	2087	1700	653	557	1780	644	1103	1335	1315	1535	1646	16536
Ultrasound	909	975	571	237	571	620	200	437	603	453	726	622	6924
U/S FNAC	316	291	286	5	245	230	14	164	26	203	223	246	2249
U/s Biopsy	200	56	54	5	24	25	18	30	195	30	30	26	693
Mammography	233	227	127	4	11	157	46	77	134	149	150	363	1678
U/S. Breast	24	17	10	4	5	21	6	7	13	9	16	11	143
C.T.Scan	3107	2812	2095	903	1625	2085	895	1382	1493	2104	2252	2379	23132
CT FNAC	32	32	18	Covid19	13	8	6	7	31	15	17	27	206
CT Biopsy	17	30	18	Covid19	9	12	14	9	22	12	21	29	193
CT RT Planning	20	37	31	Covid19	Covid19	5	5	4	6	10	18	26	162
MRI	626	565	530	177	340	587	167	305	465	451	392	320	4925
Echo	538	479	410	Covid19	Covid19	59	0	0	191	204	225	229	2335
DSA	27	23	26	3	3	7	0	3	3	6	9	6	116
<b>Total</b>	<b>8230</b>	<b>7631</b>	<b>5876</b>	<b>1991</b>	<b>3403</b>	<b>5596</b>	<b>2015</b>	<b>3528</b>	<b>4517</b>	<b>4961</b>	<b>5614</b>	<b>5930</b>	<b>59292</b>





### Research Publications :

Rao A, Sharma C, Parampalli R. Role of diffusion-weighted MRI in differentiating benign from malignant bone tumors 2019; 1: 20180048.Original article in BJR/Open ; [https:// doi.org/ 10. 1259/ bjro. 20180048](https://doi.org/10.1259/bjro.20180048).

Rao A, Sharma C, Parampalli R. Role of diffusion-weighted MRI in differentiating benign from malignant bone tumors 2019; 1: 20180048.Original article in BJR/Open ; [https:// doi.org/ 10. 1259/ bjro. 20180048](https://doi.org/10.1259/bjro.20180048).

### Faculty And Staff Details :

SI No.	Name	Designation
1	Dr. Raghuram. P.	Professor & HOD
2	Dr. Madhu.S.D	Associate professor
3	Dr. Anuradha Kapali	Associate professor
4	Dr. Anuradha	Assistant professor
5	Mr.Pape Gowda S.N.	Medical imaging technologist
6	Mrs. Shanthi S.	Medical imaging technologist
7	Mr.Sathya Prasad C	Medical imaging technologist
8	Mr.Anantha Raman	Medical imaging technologist
9	Mr.Sudhir.N.	Medical imaging technologist
10	Mr.Maheshwara Murthy	Medical imaging technologist
11	Mr. Sridhara.K.A	Medical imaging technologist





## DEPARTMENT OF RADIOTHERAPY (RADIATION ONCOLOGY)



**Dr. V. Lokesh**  
Prof. & HOD

Radiation Oncology is one of the major speciality in Cancer Treatment. Radiation Oncology department has been rendering services at KMIO and caters to more than 70% of the patients attending KMIO. The Department of Radiation Oncology is headed by Professor Dr. V. Lokesh M.D, Since 01.09.2016. The Department handles a huge load of Cancer patients with limited staff of consultants, Resident Surgeons, Post Graduate Students and Medical Physicists.



It has sophisticated state of the art Teletherapy like 3DCRT, IMRT, HDR &

LDR Brachytherapy with Brachy-vision & Abacus facilities. The department actively participates in all Routine Patient Care involving Diagnosis, Investigations, Treatment & Follow-up, Palliative Care of the Cancer patients. Multidisciplinary Management, Teaching and research activities are actively pursued by the Department of Radiation Oncology at KMIO. The Department is also generating MD & Diploma (Radiotherapy/ Radiation Oncology) manpower along with the Radiotherapy Technologist as per RGUHS & MCI guidelines.



The Department faculty strived hard to plan and upgrade the department to



handle the future growth of cancer burden , we submitted the State Cancer Institute grant and it has now materialised as the State Cancer Institute Building – Advanced Radiation Oncology Centre in the KMIO campus, with the additional manpower sanctioned the setup is expected to deliver good quality patient care , with radiation safety considerations.



<b>Details Of Patients Treatment In Radiation Oncology : 2019</b>	
Total no. of patients registered in Department	5757
Total no. of patients treated by Tele therapy	3949
Total no. of the patients treated by Brachy therapy	1808

<b>Department of Radiation Oncology - Jan.2020 to Dec.2020</b>	
OPD New	9211
OPD Follow up	22294
Teletherapy	63731
Brachytherapy	555
Simulation	3848
Minor OT/PV	3611

**DETAILS OF PATIENTS TREATMENT IN RADIATION ONCOLOGY : 2020**



### Publications from the Department :



- Palled SR, Tanvirpasha CAR, Naveen T, Sathiyam S, Kadirampatti G, Lokesh V. Magnetic resonance image-based 3D volume interstitial brachytherapy using polyether ether ketone catheters in advanced cervical cancer - a feasibility study. *J Contemp brachytherapy*. 2019 Aug 1;11(4):307–11.



- Nanda R, Katke A, Suneetha N, Thejaswini B, Pasha T, Jagannath KP, et al. A prospective randomized study comparing concurrent chemoradiation with weekly and 3 weekly cisplatin in locally advanced oropharyngeal carcinoma. *South Asian J Cancer*. 2019;8(3):178–82.



- Joseph B, Kumar R, Champaka G, Shenoy A, Sabitha K, Lokesh V, et al. Biological tailoring of adjuvant radiotherapy in head and neck and oral malignancies; The potential role of p53 and eIF4E as predictive parameters. *Indian J Cancer*. 2019 Oct 1;56(4):330–4.



- Joseph B, Ikkurthi V, Farooq N, Nithin K, Vijay CR, Ramesh C, et al. Breast-Conserving Radiotherapy with Simultaneous Integrated Boost—A Dosimetric Comparison of 3DCRT, VMAT and IMRT: Do We Really have a Better Plan? *Indian Journal of Gynecologic Oncology* [Internet]. 2019 [cited 2019];17(2):43.
- Joseph B, Kumar R V, Champaka G, Shenoy A, Sabitha K. S, The eukaryotic initiation factor 4E (eIF4E) as a predictive biomarker in the negative margins of resected head and neck and oral cancers: Is there a role for tailoring adjuvant radiotherapy. *Indian J Pathol Oncol* 2019;6(1):47-51



- Jalali R, Maitre M, Gupta T, Goda JS, Shah N, Krishna U, et al. Dose-Constraint Model to Predict Neuroendocrine Dysfunction in Young Patients With Brain Tumors: Data From a Prospective Study. Vol. 9, Practical Radiation Oncology. Elsevier BV; 2019. p. e362–71.
- Krishna DU, Veda M, Jagannath KP, Naveen, Long term outcomes of Radiotherapy by two different fractionation regimens for IDH negative Glioblastoma in elderly- A Non Randomised Prospective Study. Vol. 7, Journal of Medical Science And clinical Research. Valley International; 2019.
- Naveen T, Krishna ASU, Santosh V, Arivazhagan A, Lokesh V. Subgroup stratification of adult diffuse gliomas and outcomes: an adaptation of the updated WHO classification in a resource-constrained environment. Journal of Radiotherapy in Practice. Cambridge University Press (CUP); 2019. p. 1–4.
- Ghosal N, Sivaraju L, Mahadevan A, Krishna AU, Rao S, Hegde A. Aggressive primary pediatric intracranial malignant melanoma: Sphinx of the tissue diagnosis. Vol. 14, Asian Journal of Neurosurgery. Medknow; 2019. p. 275.
- Ahmed K, Govardhan H, Roy M, Naveen T, Siddanna P, Sridhar P, et al. Cell-free circulating tumor DNA in patients with high-grade glioma as diagnostic biomarker; A guide to future directive. Indian Journal of Cancer . 2019 Jan 1 :56(1):65–9
- Krishna U, Thimmarayappa A, Lokesh D, Chandraraj V. Optimization of radiation therapy in non-functioning pituitary adenoma based on temporal lobe dosimetry. 2019 Jun 22;
- Manjula M. V, Pawar Y. S. Treatment non-compliance and government aided health schemes : a boon or a curse. *Int J Med Res Rev* 2019;7(02):61-64.doi:10.17511/ijmrr. 2019.i02.02
- Poornachandra Tejaswi, Jagannath KunigalPuttaswamy, Lokesh Vishwanath, Poojar Sridhar, Vijay Calmuge Raghu, Saritha Sunny Pullan. Evaluation of Carotid Artery and Carotid Sinus doses in Early stage Carcinoma Glottis with and without bolus. *J Med Sci Clin Res.* 2019 Apr 1;7.
- Poornachandra Tejaswi, Jagannath KunigalPuttaswamy, Lokesh Vishwanath, Poojar Sridhar, Vijay Calmuge Raghu, Saritha Sunny Pullan. Analysing the dose to lacrimal glands in Carcinoma Nasopharynx: Is there a need for Ophthalmic prophylaxis? *J Med Sci Clin Res [Internet].* 2019 Apr 1;7
- Shamsundar S.D, Jagannath K.P, Niveditha S, K. Aradhana, R. Nanda, B. Thejaswini. Prognostic significance of primary tumour volume in nasopharyngeal carcinoma– a single institute study. *Int J Med Res Rev* 2019;7(01):24-29. doi:10.17511/ijmrr.2019.i01.05
- Pasha T, Palled S R, Loni R, Bondel S, Chavan P, et al. High Dose-Rate Brachytherapy in Recurrent High-Risk Head and Neck Cancer, *Rep Radiother Oncol.* 2019 ; 6(1):e98391. doi: 10.5812/rro.98391.
- Poojar S, Loni R, H K KR ,Naveen T, Lokesh V. Impact of Short Versus Long Course Whole Brain Radiation Therapy on Memory Function in Brain Metastasis Patients, *Rep Radiother Oncol.;*2019; 6(1):e95524. doi: 10.5812/rro.95524.





- Viswanath L, Naveen T, Siddanna P, Chetana P, Geethasree M, Sridhar P, et al. Epidermal growth factor receptor (EGFR) overexpression in patients with advanced cervical cancer. J Clin Oncol [Internet]. 2014 May 20 ;32(15\_suppl):e16538–e16538.
- Thimmaiah N, Kalavagunta S, Loni R, Pasha T, Poojar S, Viswanath L. Efficacy, Radiological Response and Local Toxicity in Locally Advanced Head and Neck Squamous Cell Carcinoma Patients (LAHNSCC) Treated with Hypofractionated Accelerated IMRT with Concomitant Simultaneous Integrated Boost (SIB). Reports Radiother Oncol. 2019 Aug 26
- Joseph B, Ikkurthi V, Farooq N, Nithin K, Vijay CR, Ramesh C, et al. Breast-Conserving Radiotherapy with Simultaneous Integrated Boost—A Dosimetric Comparison of 3DCRT, VMAT and IMRT: Do We Really have a Better Plan? Indian J Gynecol Oncol. 2019;17(2):43..

**Faculty and Staff :**

<b>Dr. V.LOKESH M.D.</b> <b>PROF &amp; HEAD OF THE DEPARTMENT</b> <b>DEPARTMENT OF RADIATION ONCOLOGY</b>		
Out Patient Services		
RO Unit 1	RO Unit 2	RO Unit 3
OPD DAYS: MONDAY&THURSDAY	OPD DAYS: TUESDAY & FRIDAY	OPD DAYS: WEDNESDAY & SATURDAY
<b>Dr. V.LOKESH M.D.</b> PROFESSOR & HEAD OF UNIT RO 1 HEAD OF THE DEPARTMENT	<b>Dr. B. THEJASWINI.</b> M.D.PROFESSOR & HEAD OF UNIT RO 2	<b>Dr. T .NAVEEN</b> M.D.PROFESSOR & HEAD OF UNIT RO 2
<b>Dr. BINDHU JOSEPH M.D.</b> ASSOCIATE PROFESSOR  <b>Dr. R SIDDANNA. PALLED M.D.</b> ASSOCIATE PROFESSOR	<b>Dr. R NANDA. M.D.</b> ASSOCIATE PROFESSOR  <b>Dr.ARADHANA.KATKE</b> DMRT DNB ASSOCIATE PROFESSOR	<b>Dr.TANVIR PASHA</b> M.D.ASSOCIATE PROFESSOR
<b>Dr. H B GOVARDHAN. M.D.</b> ASSISTANT PROFESSOR  <b>Dr.IBRAHIM KHALEEL M.D.</b> ASSISTANT PROFESSOR	<b>Dr.R. VINAYKUMAR</b> M.D.ASSISTANT PROFESSOR  <b>Dr.SHAMSUNDAR M.D.</b> ASSISTANT PROFESSOR	<b>Dr. P SRIDHAR.</b> M.D.ASSISTANT PROFESSOR  <b>Dr.UDAYKRISHNA M.D.</b> ASSISTANT PROFESSOR
VARIAN Treatment Planning Room	<b>Dr. Y.S. PAWAR,</b> ASSISTANT PROFESSOR Dr.MANJULA, ASSISTANT PROFESSOR	
ELEKTA Treatment Planning Room	<b>Dr.K P.JAGANNATH M.D.</b> ASSOCIATE PROFESSOR <b>DR. R.A. SUNIL,</b> ASSISTANT PROFESSOR <b>DR.SANJEETH MANDAL.</b> ASSISTANT PROFESSOR <b>DR.D. ASHA LATHA,</b> ASSISTANT PROFESSOR	
BRACHYTHERAPY	<b>DR.NIKHILA,</b> ASSISTANT PROFESSOR <b>DR.NITHIN BHASKAR,</b> ASSISTANT PROFESSOR	



List of Radiotherapy Technologists :

SL NO	NAME	Designation
1	Mr. M.S. Nagesh	Chief RT Technologist
2	Mr. R. Prabhu shankar	Graduate RT Technologist
3	Mr. Venkata ramanappa	Graduate RT Technologist
4	Mr. N. Javaraj	RT Technologist
5	Mr. Gopi Raghunath	RT Technologist
6	Mr. R.G. Hegde	RT Technologist
7	Mr. Santhana Krishna	RT Technologist
8	Mr. Keshava murthy	RT Technologist
9	Mr. D.K. Vishwa kumar	RT Technologist
10	Mr. Bullappanavar Revanappa	RT Technologist
11	Mrs.B.C.Yamunavva	RT Technologist
12	Mr. L.H. Somashekar	RT Technologist
13	Akshay M.Uppin	RT Technologist
14	Poornima.S	RT Technologist
15	Thatiabilash	RT Technologist
16	Meena.V	RT Technologist
17	Maria Francis.V	RT Technologist
18	Deepa.R	RT Technologist
19	Prasad.R.Kamath	RT Technologist
20	Jagan Raj	RT Technologist
21	Hemalatha Rathod	RT Technologist
22	Ashwini.V.L	RT Technologist
23	Renuka.M.Gabbur	RT Technologist
24	Ashwini.K	RT Technologist
25	Shivaprasad.R	RT Technologist
26	Nagappa.M.S	RT Technologist
27	Ashalatha.R	RT Technologist
28	Darshanala Naresh Kumar	RT Technologist
29	Prasanna Kumar.V.S	RT Technologist





## DEPARTMENT OF SOCIAL WELFARE



**Dr.C.Ramachandra**  
Director & HOD

Social Welfare Department is aimed at supporting patients not only at times of acute crisis but during long periods of chronic illness. As counsellor, The SWO'S and ASWO'S Primary goal is to help patients and Family Members Adopt to the stresses of diagnosis and treatment with in today's complex health care system. ASWO's Major focus is to support the optimum adaptation of all patients to their cancer.

### Objectives :

- Enabling the patients to function, physically, socially, emotionally at the highest level possible within the constraints of the disease and treatment.
  - Mobilizing and Potentiating the patients support system
  - To facilitate the patients care of the treatment and rehabilitation during the course of treatment.
  - To patients income assessment and to provide the appropriate care facilities by the SW Department
1. The patients and attender to cope-up with the ailments during there future plans

### Functions :

SWO'S and ASWO'S role is that of dealing with the emotional and social aspects of the illness through the medium of sound relationships with the patients, doctors, Nurses and other para-medical staff.

1. To make patients aware of the treatment.
2. To provide psychological and Emotional problems of the patients and their family members arising from the illness through Individual counselling and family therapy.
3. Bereavement preparation and support
4. Improve Communication and family relationship to foster mutual support among family members.
5. Train voluntaries to serve the needs of patients. Family member and health agencies.
6. Breast rehabilitation and Lymphoedema care
7. Attending to cases referred by concerned unit doctors
8. Pre-Operative counselling
9. Post-Operative counselling
10. Education And awareness program such as cancer detection camp
11. Organizing blood camps.
12. Cultural activities, by Department of Kannada and culture Library play home.



**Finance Assistance From Various Sources**

- Prime minister relief fund
- Chief minister relief fund
- Arogya Bhagya Yojana
- Advances From various government institutes.
- Private funds from donors
- Rastriya Arogya Needhi.
- ESI
- Patient Welfare Fund
- Ayushman Bharath/Arogya Karnataka
- KCMMRF
- Scp/Tsp Yojana
- Jyothi Sanjeevini Shcheme

1. **Prime minister relief fund:-** Recommendations of Treatment Expenditure and this Scheme patients covers from all over india.
2. **Chief minister relief fund:-** Recommendations of Treatment Expenditure and patient get monitory benefit from this Scheme.
3. **Arogya Bhagya Yojana:-** Who are all working under police department and Retired Employees also comes under this scheme. give the treatment on credit basis
4. **Advances From various government institutes:-** Government Institutions other

then Jyothi sanjevini scheme patients and other various private organization comes under this scheme

5. **Private funds from donors;-** Patients getting cheques from various private organization or person for treatment.
6. **ESI:-** who are working in factory's which employees have ESI Benefit that patients comes under this scheme for treatment.
7. **Patient Welfare Fund:-** poor patients who are not having BPL card produced income certificate and get waiving off charges for investigation, surgery and drugs in this fund.
8. **KCMMRF;-** Karnataka chief minister relief fund poor patients who are produced income certificate less then Rs. 20000/- eligible for getting treatment up to Rs.50000/-.
9. **Scp/Tsp Yojana:-** Scheduled cast and scheduled tribe patients who are having caste certificate and income certificate are eligible for getting treatment in this scheme. up to Rs. 1,50,000/- per year.
10. **Rastriya Arogya Needhi:-** who are having BPL card and income certificate that patients comes under this scheme patients covers from all over india.



1. **Vajpayee Arogya Scheme:** this scheme who are have BPL card are eligible and get free treatment.
2. **OPD Works:** opd's Aswo's look often PWF, KCMMS, Reimbursement CMRF&PMRF including counselling, ward Rounds ect,;
3. **Venkateshwara Dharmashala:** Rooms Rounds ,distribution of food fruits over all responsibilities comes under Aswo
4. **HAL:** who are working in HAL that patients get this scheme facilities who bring the approval letter from HAL on credit basis treatment get
5. **Jyothi Sanjeevini Scheme:** who are have KGID No that patients get free treatment for under this scheme

**Staff :**

SL NO	Name	Designation
1	Varadaraju	Social Welfare Officer
2	P.Lingaraju	Social Welfare Officer
3	Shivalinge gowda.M	Social Welfare Officer
4	H.S.Shobha	Assistant Social Welfare Officer
5	D.P.Muthu Naik	Assistant Social Welfare Officer
6	N.Shivalingappa	Assistant Social Welfare Officer
7	Madevi	Assistant Social Welfare Officer
8	L.Annapurnamma	Assistant Social Welfare Officer
9	Jaya Jyothi	Assistant Social Welfare Officer
10	D.Shadaksharaiah	Assistant Social Welfare Officer
11	M.S.Jambaladinni	Assistant Social Welfare Officer
12	R.Muniyappa	Assistant Social Welfare Officer
13	K.G.Umesh	Assistant Social Welfare Officer
14	G. Chandrappa	Assistant Social Welfare Officer
15	Dr.B.Lokesh	Assistant Social Welfare Officer

**Members Of Institutional Scientific Review Board :**

1) The Director,	Chair person
2) Prof. & Head, Dept. of Pathology,	Member
3) Prof. & Head, Dept. of Surgical Oncology,	Member
4) Prof. & Head, Dept. of Medical Oncology,	Member
5) Prof. & Head, Dept. of Pediatric Oncology,	Member
6) Prof. & Head, Dept. of Radiotherapy,	Member
7) Prof. & Head. Dept. of Epidemiology statistics, & Bio Statistics	Member
8) Prof. Dept. of Anaesthesiology,	Member
9) Prof. & Head, Dept. of Gynec Oncology,	Member
10) Associate Prof. Dept. of Biochemistry,	Member
11) Associate Prof. Dep of Pathology,	Member Secretary

**Members Of Ethics Committee :**

Sl.No	Position	Name	Designation
1	Chairman	Dr.Veeranna Gowda	
2	Member Secretary	Dr.C.Ramachandra	Director
3	Memebers of the Committee	1.Dr.Jayanthi Ragunathan	Dean BMCRI
		2.Dr. Rekha V Kumar	Consultant Pathologist Shankara
		3.Dr.Sheshagiri Rao	Prof & Head, Dept of Gen Surgery,
		4.Justice Balakrishna	Former Justice of High court of
		5.Dr.Raghu.T.R	Former Prof & Head, Dept of
		6.Mr.Sunil	Lay Person
		7.Mrs.Vijayalakshmi	Counselor

**Duties & Responsibilities :**

1. This Committee has been constituted to look into ethical issues that arise in the practice of medicine. Based on the merit of each clinical problem an ad-hoc group will be called to part of the Committee for that particular problem.
2. Meetings are convened whenever issues are brought to the notice of the Medical Superintendent.
3. This Committee is meant to establish high ethical standard in clinical practice in our institution.



**KMIO**  
**Annual Accounts**  
**and**  
**Audit Report for the year**  
**2019-20**





## KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY

### Constitution of Governing Council

1. Hon'ble Minister for Medical Education Government of Karnataka, Chairman Members:
1. Principal Secretary to the Government of Karnataka Health & Family welfare Department
1. Secretary to the Government of Karnataka, Dept of Science & Information Technology
1. The Director of Medical Education Government of Karnataka.
1. Director-General of Health Services Government of India , Ministry of Health &F.W ,New Delhi.
1. Chief Executive, Board of Radiation & Isotope Technology, V.N. Purav Marg, Deonar, Mumbai.
1. Sri Puttanna, member of Legislative Council Karnataka Legislature, Vijaynagar, Bangalore
1. Sri.B.C. Sadashivaiah, No.70,17t E main, 6<sup>th</sup> Phase, Koramangala , Bangalore
1. Dr. Srimani Rajagopalan, Banashankari, Bangalore,
1. Smt.N.Savitha, Banashankari, Bangalore
1. Chief Administrative Officer, KMIO
1. The Director KMIO, Bangalore Member-Secretary
1. Additional Chief Secretary to the Government of Karnataka Medical Education Department
2. Government of Karnataka
1. Secretary to Government of Karnataka, Medical Education Department & Member. Finance Department
1. Vice-Chancellor Rajiv Gandhi University of Health Sciences of Karnataka
1. The Director Health & Family Welfare Services Government of Karnataka.
1. The Joint Secretary( NCD) Ministry of Health Government of India, New Delhi
1. Director-General Indian Council of Medical Research Ansari Nagar New Delhi
1. Sri Sri Sri Dr. Shanthaveera Maha Swamiji Chairman Board of Visitors, KMIO, Kolada Mutt Mahasamstahana, Member Governing Council, KMIO, H.Siddaiah Road, Bangalore-560027
1. Smt.Sevanthi M. Hegde, Srinivasnagar, bangalore
1. Sri.N.L. Gangadhar, Kumaraswamy layout , Bangalore
1. Medical Superintendent, KMIO
1. Financial Advisor, KMIO





Constitution of Finance Committee :

Principal Secretary to the Government of Karnataka Finance Department Vidhana Soudha Bangalore.	Chairman
Secretary to the Government of Karnataka Medical Education Department M.S. Building, Bangalore.	Member
Secretary to the Government of Karnataka Planning Department M.S. Building, Bangalore.	Member
Director of Medical Education Government of Karnataka A.R. Circle, Bangalore.	Member
Director of Health & Family Welfare Services Government of Karnataka. Vikasa Soudha Bangalore	Member
Secretary, Health & Family Welfare Department Government of Karnataka. Vikasa Soudha Bangalore	Member
Medical Superintendent, KMIO, Bangalore.	Member
Director, KMIO, Bangalore.	Member- Secretary





# 9, 'KRISHNA KASTHURI', Ashwathnagar,  
R.M.V. II Stage, Bangalore - 560 094.  
Ph. : 23413660, 23513660. Cell : 98450 30630  
Email: ashokmullad@gmail.com

**REPORT OF THE AUDITORS**

1. We have audited the attached Balance Sheet of **KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE** as at 31st March 2020, the related income and Expenditure Account for the year ended on that date annexed thereto. These financial statements are the responsibility of the Institute's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. We conducted our audit in accordance with the auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement(s). An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

3. Further we report that:

(i) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;

(ii) In our opinion, proper books of account as required by law have been kept by the Institute so far as appears from our examination of those books;

(iii) The Balance Sheet, Income and Expenditure Account are in agreement with the books of account;

(vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements together with the notes thereon and attached thereto, give the information required in the prescribed manner and also give a true and fair view in conformity with the accounting principles generally accepted in India:

in the case of the Balance Sheet, of the state of affairs of the Institute as at 31st March, 2020;

in the case of the income and Expenditure Account of the Excess of Income over Expenditure of the Institute for the year ended on that date.

Place: Bangalore  
Dated: 12-02-2021



**MAS & Co.**  
Chartered Accountants  
No. 9, 2nd Floor, 1st Main Road  
Aswatha Nagar,  
Bangalore - 560 094, India

For MAS & CO,  
Chartered Accountants  
Firm Reg.No.007049S

ASHOK SHETTY M  
Partner  
Mem.No. 203498



KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE - 560 029

BALANCE SHEET AS AT 31/03/2020

PARTICULARS	Schedule No.	31-Mar-20		31-Mar-19	
<b>SOURCE OF FUNDS:</b>					
Capital Funds - Institute	A		2,00,66,42,766		1,93,74,49,810
Other Funds - Projects	B		1,05,97,85,269		1,10,02,10,881
<b>TOTAL</b>			<b>3,06,64,28,035</b>		<b>3,03,76,60,692</b>
<b>APPLICATION OF FUNDS:</b>					
<b>FIXED ASSETS</b>					
Gross Block	C	1,37,43,87,017		1,32,36,72,183	
Less: Depreciation		1,03,31,97,691		90,70,82,466	
<b>NET BLOCK OF FIXED ASSETS</b>			<b>34,11,89,326</b>		<b>41,65,89,717</b>
<b>INVESTMENTS AND DEPOSITS</b>					
<b>a) Current Assets Loans, Advances</b>	D		<b>1,87,91,37,632</b>		<b>1,87,23,90,855</b>
Cash & Bank balance	E	86,68,99,408		67,49,90,023	
Sundry debtors	F	12,89,08,905		14,42,16,388	
Loans and Advances	G	9,71,79,339		10,16,46,259	
<b>Total (a)</b>		<b>1,09,29,87,652</b>		<b>92,08,52,670</b>	
Less:					
<b>b) Current Liabilities</b>	H	24,68,86,575		17,21,72,551	
<b>NET CURRENT ASSETS (a-b)</b>			<b>84,61,01,077</b>		<b>74,86,80,119</b>
<b>TOTAL</b>			<b>3,06,64,28,035</b>		<b>3,03,76,60,692</b>

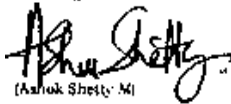
Notes forming part of the financial statements

As per our report of even date  
for and on behalf of

For MAS & Co.

Chartered Accountants

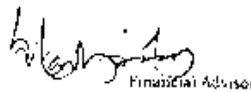
Firm Reg No 0070498

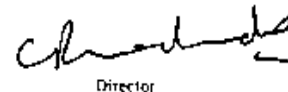
  
(Ashok Shetty) M  
Partner

Mem No 203498

Place : Bangalore  
Date : 12/02/2021

For KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY

  
Financial Advisor

  
Director



**MAS & Co.**  
Chartered Accountants  
No. 9, 2nd Floor, 1st Main Road  
Aswalha Nagar,  
Bangalore - 560 094, India



**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -560 029**

**INCOME AND EXPENDITURE STATEMENT FOR THE YEAR ENDED  
31st MARCH 2020**

PARTICULARS	Schedule No.	2019-20	2018-19
<b>INCOME:</b>			
Grants from GOK Non Plan		1,14,78,05,818	98,74,18,162
Grants-Others	I	4,29,00,000	1,90,00,000
Hospital User Charges	J	44,70,92,041	46,13,61,459
Rental Income	K	26,58,341	21,80,515
Income from Other Activity	L	2,74,37,562	1,88,16,933
Interest on Deposits	M	7,90,98,205	6,35,43,665
Donation and Other Income	N	1,73,01,532	1,31,41,799
<b>Total</b>		<b>1,76,42,93,499</b>	<b>1,56,54,62,533</b>
<b>EXPENDITURE:</b>			
Employee Remuneration & Benefits	O	81,47,73,216	57,19,52,992
Academic Activities	P	6,09,23,362	6,70,27,630
Hospital purchases	Q	32,11,48,096	19,28,29,725
Administrative & Other Expenses	R	21,71,71,329	17,77,92,827
Repairs & Maintenance	S	14,55,81,168	4,87,33,867
PCC Gulbarga expenses	T	3,16,79,572	2,83,66,850
<b>Total Expenditure</b>		<b>1,59,12,76,743</b>	<b>1,08,67,03,891</b>
<b>Excess of Income Over Expenditure (Before Depreciation )</b>		<b>17,30,16,756</b>	<b>47,87,58,642</b>
<b>LESS:</b>			
Depreciation		12,61,15,225	12,27,49,619
<b>Total</b>		<b>12,61,15,225</b>	<b>12,27,49,619</b>
<b>Excess of Income over Expenditure</b>		<b>4,69,01,531</b>	<b>35,60,09,023</b>

As per our report of even date  
for and on behalf of

**MAS & Co**

**Chartered Accountants**

File No. 107149S

*(Ashok Shetty M)*  
Partner

Mcm No. 203498

Place : Bangalore  
Date : 12/02/2021

For KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY



*(Financial Advisor)*  
Financial Advisor

*(Director)*  
Director

**MAS & Co.**  
Chartered Accountants  
No. 9, 2nd Floor, 1st Main Road  
Aswalha Nagar,  
Bangalore - 560 094, India



**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -500 029**

**SCHEDULE:A**

<b>Capital Funds - Institute</b>			
<b>Sl.No.</b>	<b>Particulars</b>	<b>2019-20</b>	<b>2018-19</b>
<b>1</b>	<b>Capital Funds - Opening Balance</b>	1,14,92,69,925	79,32,60,902
	<b>Total</b>	<b>1,14,92,69,925</b>	<b>79,32,60,902</b>
	Add/Less: Earlier year funds adj	23552276	-
	Add: Excesss of Income Over Expenditure	4,69,01,531	35,60,09,023
	<b>Net fund balance as on 31.3.2020</b>	<b>1,21,97,23,732</b>	<b>1,14,92,69,925</b>
<b>2</b>	<b>Grants - Opening Balance</b>	37,57,27,683	20,07,99,829
	Add:Grants Received	1,49,00,000	20,00,00,000
	Add:Interest,Provisions & Others	1,12,74,410	95,88,838
	<b>Total</b>	<b>40,19,02,093</b>	<b>41,03,88,667</b>
	Less:Utilised during the year	1,01,26,095	3,46,60,984
	<b>Net fund balance as on 31.3.2020</b>	<b>39,17,75,998</b>	<b>37,57,27,683</b>
<b>3</b>	<b>Specific Funds - Opening Balance</b>	41,24,52,202	44,62,60,045
	Add:Grants / Donation Received	11,58,00,000	12,60,66,635
	Add:Interest,Provisions & Others	4,92,30,217	3,33,02,432
	<b>Total</b>	<b>57,74,82,419</b>	<b>60,56,29,112</b>
	Less: Payments during the year	18,23,39,383	19,31,76,910
	<b>Net fund balance as on 31.3.2020</b>	<b>39,51,43,036</b>	<b>41,24,52,202</b>
	<b>Grand Total</b>	<b>2,00,66,42,766</b>	<b>1,93,74,49,810</b>



*Chandrasekhar*





**KIDWAI MEMORIAL INSITUTE OF ONCOLOGY, BANGALORE -560 029.**

Schedules Forming Part of Balance Sheet

**SCHEDULE - B : Other Funds - Projects**

<b>Fund Name</b>	<b>31.03.2020</b>	<b>31.03.2019</b>
Dharmashala Revenue	2,38,81,271	1,68,38,160
Dharmashala Free Feeding	27,57,866	32,80,071
Children Welfare Fund	1,13,94,737	1,09,49,912
Patient Welfare Fund	37,04,116	1,01,37,442
Micro Array	-	13,316
Scientific Research	1,59,42,500	1,39,45,105
Foreign Contribution	3,68,478	3,43,760
State Cancer Institute fund	59,76,56,769	68,82,65,953
NPCDCS palliative care-NHM Project	1,36,311	4,91,381
P W Corpus Fund	2,55,45,115	2,55,45,115
Grants for Gulbarga Upgration	36,22,08,545	29,22,08,545
Donation from sbm nimhans	6,25,110	6,25,110
Other Projects	1,55,64,451	3,75,67,010
<b>TOTAL</b>	<b>1,05,97,85,269</b>	<b>1,10,02,10,880</b>

*Chandrasekhar*





**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -560 029**  
**Schedules Forming Part of Balance Sheet**

**SCHEDULE : C**

**Fixed Assets Schedule:**

SL No.	ASSETS	Rate of depreciation	Gross Block				Depreciation			Amount (Rs)			
			Cost as on 1.4.2019	Earlier Year Adj	Addition during the year more than 6 months	Addition during the year less than 6 months	Total Cost as at 31st March 2020	Depreciation AS AT 01.04.2019	Earlier Year Adj	During the Year 2019-20	Total Depreciation as on 31.03.2020	W.D.V.AS AT 31st March 2019	W.D.V.AS AT 31st March 2020
1	Land	-	1,84,132				1,84,132				1,84,132	1,84,132	
2	Buildings	10%	20,89,23,877				20,89,23,877	16,91,98,833		39,72,504	17,31,71,337	3,97,25,044	3,57,52,540
3	Major Equipments	25%	76,81,52,700				76,81,52,700	49,98,59,644		6,70,73,264	56,69,32,908	26,82,93,056	20,12,19,792
4	Hospital Equipments	25%	16,78,70,061		90,51,576	2,74,38,179	20,43,59,816	12,67,86,264		4,06,24,844	16,74,11,108	4,10,83,797	3,69,48,708
5	Computers	40%	51,09,777			88,500	51,98,277	32,68,282		7,54,298	40,22,580	18,41,495	11,75,697
5	Office Equipments	15%	4,81,89,464		79,16,013	5,20,723	5,66,26,200	2,66,04,477		44,64,204	3,10,68,682	2,15,84,987	2,55,57,518
6	Vehicles	20%	1,10,52,461				1,10,52,461	84,20,161		5,26,460	89,46,621	26,32,300	21,05,840
7	Furniture Fittings ,library Books,etc	10%	4,70,48,182		9,88,058	47,11,785	5,27,48,025	3,40,75,046		16,31,709	3,57,06,755	1,29,73,135	1,70,41,270
8	Hospital Equipments (Donation-in-kind)	25%	6,71,41,529				6,71,41,529	3,88,69,758		70,67,943	4,59,37,701	2,82,71,771	2,12,03,828
	<b>Total</b>		<b>1,32,36,72,183</b>	<b>-</b>	<b>1,79,55,647</b>	<b>3,27,59,187</b>	<b>1,37,43,87,017</b>	<b>90,70,82,466</b>	<b>-</b>	<b>12,61,15,225</b>	<b>1,03,31,97,691</b>	<b>41,65,89,717</b>	<b>34,11,89,326</b>

**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -560 029**  
**Schedules Forming Part of Balance Sheet**

**SCHEDULE: D**

**Fixed Deposits: in the name of**

Sl.No.	PARTICULARS	As on 31st March 2020	As on 31st March 2019
1	Children Welfare fund	7,524,864	7,124,521
2	Dharmasala Free Feeding	8,322,351	7,843,488
3	Pension / Gratuity Fund	1,456,719,762	1,463,198,280
4	Scientific Research fund	5,744,630	5,213,873
5	Palliative care	265,365	241,337
6	Patient welfare Corpus Fund	4,148,684	3,898,308
7	Robotic Surgery	63,738,913	60,252,122
8	State Cancer Institute	332,673,063	324,618,926
	<b>Total</b>	<b>1,879,137,632</b>	<b>1,872,390,855</b>



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**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -560 029**  
**Schedules Forming Part of Balance Sheet**

**Schedule : E - Cash & Bank Balances**

Sl. No.	Particulars	As on 31/03/2020	As on 31/03/2019
1	Dharmasala Revenue A/c No10124	1,62,85,542	98,82,417
2	ECS A/c No 3376	3,85,10,994	2,62,27,246
3	GOK / Plan- 2952-Canara Bank	7,05,02,474	82,28,891
4	Revenue A/c SB-10453- Canara Bank	9,26,23,523	5,11,06,326
5	Salary A/c SB-3866- Canara Bank	5,82,47,212	39,08,21,822
6	PCC Gulbarga A/c No 2954	4,47,80,228	2,75,53,316
7	Pension fund A/c No 10135	2,07,01,681	1,57,56,500
8	LC Canara Bank A/c no. 3115	57,04,637	2,04,559
9	Vajpayee Scheme - 103122	33,58,15,483	10,29,23,230
10	105872 - PCC Tumkur	6,99,99,705	-
11	104564 - State cancer Institue	38,23,978	11,68,105
12	Patient Welfare fund A/c No10505	23,57,032	82,90,358
13	KCMMRS A/c No 2748	3,23,46,254	2,06,08,417
14	Scientific Research A/c No 3278	25,90,459	34,90,276
15	Milk Counter A/c No(1753)	5,57,016	6,02,735
16	Canara Bank Current A/C No.000001	5,200	5,200
17	Canara Bank Current A/C No.000003	1,75,297	87,783
18	SBM - Nimhans A/c no. 4126	7,65,278	7,35,386
19	103548 - Rotary Paediatric Chemotherap	5,709	5,518
20	103560 - STSP Fund A/c	31,59,704	20,83,031
21	103561 - SCSP Fund	98,22,795	41,38,092
22	104619 - New Pension Scheme	5,72,80,605	-
23	105240-NHM Project	29,287	3,84,357
24	104566- RGUHS Online gateway	3,63,715	2,42,935
25	104569- RGUHS HBV Micro Biology	4,45,600	4,43,524
	<b>TOTAL</b>	<b>86,68,99,408</b>	<b>67,49,90,023</b>





KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -560 029.

Schedules Forming Part of Balance Sheet

SCHEDULE: F - Sundry Debtors

Sl.No.	PARTICULARS	As on 31st March 2020	As on 31st March 2019
1	Medical Advance to Institutions	-	40,000
2	Sundry Debtors - ESI,CGHS,ITI,HAL etc.	12,89,08,905	14,41,76,388
	<b>Sub Total</b>	<b>12,89,08,905</b>	<b>14,42,16,388</b>

SCHEDULE: G - Loans, Advances & Deposits

	STAFF ADVANCES	31.03.2020	31.03.2019
1	Festival & Travelling and Medical advances	18,38,560	64,679
2	Salary Recoveries	6,41,199	18,56,081
	<b>Sub Total</b>	<b>24,79,759</b>	<b>19,20,760</b>
	<b>OTHER ADVANCES:</b>		
1	Tax Deducted at Source (T.D.S) 13-14	1,22,93,896	1,22,93,896
2	Tax Deducted at Source (T.D.S) 14-15	1,59,52,830	1,59,52,830
3	Tax Deducted at Source (T.D.S) 15-16	-	2,16,76,297
4	Tax Deducted at Source (T.D.S) 16-17	1,67,57,948	1,67,57,948
5	Tax Deducted at Source (T.D.S) 17-18	1,28,35,373	1,28,35,373
6	Tax Deducted at Source (T.D.S) 18-19	1,16,01,223	1,14,55,326
7	Tax Deducted at Source (T.D.S) 19-20	1,65,04,481	-
	<b>Sub Total</b>	<b>8,59,45,751</b>	<b>9,09,71,670</b>
	<b>DEPOSITS:</b>		
6	BWSSB	29,74,728	29,74,728
7	Gas Cylinder	2,49,700	2,49,700
8	IDL deposit	2,000	2,000
9	Milk Counter Guarantee	30,000	30,000
10	KEB-Security Deposit	54,66,071	54,66,071
11	Telephone Deposits	16,330	16,330
12	Telephone Deposits(CTLN)	15,000	15,000
	<b>Sub Total</b>	<b>87,53,829</b>	<b>87,53,829</b>
	<b>Grand Total</b>	<b>9,71,79,339</b>	<b>10,16,46,259</b>





KIDWAI MEMORIAL INSITUTE OF ONCOLOGY, BANGALORE -560 029

Schedules Forming Part of Balance Sheet

**SCHEDULE: H - Current Liabilities**

<b>Sl. No.</b>	<b>PARTICULARS</b>	<b>As on 31st March 2020</b>	<b>As on 31st March 2019</b>
<b>1</b>	<b>Liabilities towards Staff Salary and taxes</b>		
a	TDS and other payable	5,75,683	8,57,866
b	GST Payable	10,22,995	7,88,095
c	Professional Tax	2,07,800	(10,000)
g	GPF Payable	12,000	1,08,000
h	Group Insurance Scheme	(24,638)	2,35,727
i	KGID Payable	15,115	12,425
j	LIC Payable	19,76,980	17,01,696
k	NPS Payable	5,74,24,598	5,81,480
l	PLI Payable	5,06,781	3,13,816
	<b>Total</b>	<b>6,17,17,314</b>	<b>45,89,105</b>
<b>2</b>	<b>Sundry Creditors - Suppliers</b>		
a	Security and Housekeeping	3,64,97,569	1,77,17,013
b	BSNL	-	17,500
c	Deduction on ESI Claims vinayaka	28,64,072	28,64,072
	<b>Total</b>	<b>3,93,61,641</b>	<b>2,05,98,585</b>
<b>3</b>	<b>ADVANCES &amp; DEPOSITS</b>		
a	Advance from patients	24,79,942	82,70,409
b	Cycle Stand deposit	25,250	25,250
c	Earnest Money Deposit	1,50,87,117	2,07,00,117
d	Security Deposit	88,66,608	83,51,217
e	Other Current liabilities	1,43,85,904	12,53,873
	<b>Total</b>	<b>4,08,44,821</b>	<b>3,86,00,866</b>
<b>4</b>	<b>Others</b>		
a	Donations from KSBCI	-	30,00,000
b	Donations from KMF	-	25,00,000
c	KCDF Payable	3,47,518	4,16,709
d	Pre Vas Package	10,46,15,281	10,24,67,286
	<b>Total</b>	<b>10,49,62,799</b>	<b>10,83,83,995</b>
<b>Grand Total</b>		<b>24,68,86,575</b>	<b>17,21,72,551</b>







KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE -500 029  
SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNTS  
FOR THE YEAR ENDING 31st MARCH 2020

**SCHEDULE NO : I - Grants Others**

Particulars	As on 31/03/2020	As on 31/03/2019
KCMMR	2,00,00,000	-
SCSP	1,81,00,000	1,50,00,000
STSP	48,00,000	40,00,000
<b>Grand Total</b>	<b>4,29,00,000</b>	<b>1,90,00,000</b>

**SCHEDULE NO : J - Hospital User Charges**

Particulars	As on 31/03/2020	As on 31/03/2019
Radiodiagnosis	2,06,47,390	1,99,62,477
Nuclear Medicine	44,22,069	58,73,960
Pathology	1,15,40,554	1,09,79,506
Bio-Chemistry	1,35,68,304	1,22,61,640
Surgery	77,69,608	82,23,058
Micro-Biology	29,19,244	27,43,710
Medical Oncology	40,63,058	68,67,130
Cancer Detection Clinic	24,000	19,400
Blood Bank	23,14,505	10,90,775
Radiotherapy	2,29,69,701	2,98,18,355
Medical Records	22,02,010	51,15,155
Jothi sanjevini and other Schemes	33,70,939	-
Radiation Physics	4,51,124	1,72,166
Vajpayee scheme	32,48,14,304	33,53,74,568
Ward Charges & In-patients Settlement,etc	1,26,69,712	1,46,73,607
Other Income	34,02,764	57,58,690
Diet Charges	1,80,333	73,545
Investigation &Others	3,24,072	19,795
Linear Accelerator Or Teletherapy	94,38,350	23,33,922
<b>Grand Total</b>	<b>44,70,92,041</b>	<b>46,13,61,459</b>

**SCHEDULE NO : K - Rental Income**

Particulars	As on 31/03/2020	As on 31/03/2019
Milk Booth	2,08,656	1,79,479
Canara bank rent	5,42,700	5,22,004
Mobile Tower Rent	4,56,800	2,72,027
Generic Drug Store Rent	2,16,000	1,85,797
Hopcoms Rent	1,14,660	98,627
Sulab toilet rent	12,600	10,838
Canteen Rent etc	9,00,000	7,74,160
Xerox Room rent	1,20,000	46,500
Juice centre rent	86,925	91,083
<b>Total</b>	<b>26,58,341</b>	<b>21,80,515</b>







**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY**

**Schedule - B1**

**Dharmashala Revenue  
INCOME & EXPENDITURE**

<b>PARTICULARS</b>	<b>2019-20</b>	<b>2018-19</b>
<b>INCOMES</b>		
Interest Received	29,852	1,77,169
Room & Dormitory Charges	87,79,600	91,27,694
<b>Total</b>	<b>88,09,452</b>	<b>93,04,863</b>
<b>EXPENDITURE</b>		
Repairs & Other expenses	31,342	25,520
Salary Expense	17,35,000	18,54,680
<b>Total</b>	<b>17,66,342</b>	<b>18,80,200</b>
<b>Excess of Income Over Expenditure</b>	<b>70,43,110</b>	<b>74,24,663</b>

**Dharmashala Revenue Fund**

<b>PARTICULARS</b>	<b>2019-20</b>	<b>2018-19</b>
<b>Dharmashala Revenue Fund - Op Bal</b>	<b>1,68,38,160</b>	<b>94,13,497</b>
Earlier year adjustment		-
Add/Less: Excess of Income over Expenditure	70,43,110	74,24,663
<b>Dharmashala Revenue Fund - Cl Bal</b>	<b>2,38,81,270</b>	<b>1,68,38,160</b>





**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY**

**Schedule - B2**

**Dharmashala Free Feeding  
INCOME & EXPENDITURE**

<b>PARTICULARS</b>	<b>2019-20</b>	<b>2018-19</b>
<b>INCOMES</b>		
Interest Received	3,96,767	1,33,920
Donations Received	16,66,681	24,86,028
<b>Total</b>	<b>20,63,448</b>	<b>26,19,948</b>
<b>EXPENDITURE</b>		
Cooking Gas	5,29,760	2,22,489
Groceries	18,95,593	19,83,056
Contingencies	1,60,300	52,843
<b>Total</b>	<b>25,85,653</b>	<b>22,58,388</b>
<b>Excess of Income over Expenditure</b>	<b>(5,22,205)</b>	<b>3,61,560</b>

**Dharmashala Free Feeding Fund**

<b>PARTICULARS</b>	<b>2019-20</b>	<b>2018-19</b>
<b>Dharmashala Free Feeding Fund-Op Bal</b>	<b>32,80,071</b>	<b>25,73,131</b>
Earlier year adjustment		3,45,380
Add/Less: Excess of Expenditure over Income	(5,22,205)	3,61,560
<b>Dharmashala Free Feeding Fund-CI Bal</b>	<b>27,57,866</b>	<b>32,80,071</b>





<b>KIDWAI CANCER INSTITUTE</b>	
<b>FIXED DEPOSITS DETAILS</b>	
8409401000564/6	55,36,321
FD - 8409401000001/48	19,88,544
8409401000606/67	23,58,508
FD-8409302000021/6	53,86,646
FD - 8409401000072/6	5,77,197
TD8409413000012/ 142	88,46,456
TD8409413000012/ 175	1,09,45,885
TD8409413000012/ 176	1,09,45,885
TD8409413000012/ 177	1,09,45,885
TD8409413000012/ 178	1,09,45,885
TD8409413000012/ 179	1,09,45,885
TD8409413000012 / 180	1,09,45,885
TD8409413000012/ 143	1,09,47,490
TD8409413000012/ 144	1,09,47,490
TD8409413000012/ 145	1,09,47,490
TD8409413000012/ 146	1,09,47,490
TD8409413000012/ 147	1,09,47,490
TD8409413000012/ 148	1,09,47,490
TD8409413000012/ 149	1,09,47,490
TD8409413000012/ 150	1,09,47,490
TD8409413000012/ 151	1,09,47,490
TD8409413000012/ 160	1,09,47,490
TD8409413000012/ 161	1,09,47,490
TD8409413000012/ 162	1,09,47,490
TD8409413000012/ 163	1,09,47,490
TD8409413000012/ 164	21,01,034
FD-8409401000461/ 73	42,22,335
FD-8409401000462 /17	1,58,98,928
TD8409307000033/ 31	1,11,27,557
TD8409307000033/32	1,11,27,557
TD8409307000033/ 33	15,15,343
TD8409401000100/ 60	59,59,314
8409401000461/55	1,12,83,373
8409401000461/ 56	1,12,83,373
8409401000461/ 57	1,12,83,373
8409401000461/ 58	1,12,83,373
8409401000461/59	1,12,83,373
8409401000461/60	1,12,83,373
8409401000461/ 61	1,12,83,373
8409401000461/ 62	1,12,83,373
8409401000461/ 63	1,12,79,443
8409401000461/ 64	1,12,79,443
8409401000461/ 65	1,12,79,443
8409401000461/ 66	1,12,79,443
8409401000461/ 67	1,12,79,443
8409401000461/68	1,12,79,443
8409401000461/ 69	1,12,79,443
8409401000461/ 70	1,12,79,443
8409401000461/ 71	1,12,79,443





<b>KIDWAI CANCER INSTITUTE</b>	
<b>FIXED DEPOSITS DETAILS</b>	
8409401000461/ 72	1,04,90,690
FD - 8409401000100/62	18,35,679
FD 8409401000667/ 2	68,25,471
TD8409413000011/10	1,04,81,186
TD8409413000011 /11	28,97,519
TD8409413000011/ 12	1,09,55,539
TD8409413000011/ 13	1,09,55,539
TD8409413000011/ 14	1,09,55,539
TD8409413000011/ 15	1,09,55,539
TD8409413000011/ 16	1,09,55,539
TD8409413000011/ 17	1,09,55,539
TD8409413000011/ 18	1,09,55,539
TD8409413000011/ 19	13,98,675
TD8409413000011/ 20	24,65,790
TD8409413000012/ 181	1,09,45,885
TD8409413000012/ 182	1,09,45,885
TD8409413000012/ 183	1,09,45,885
TD8409413000012/ 184	1,09,45,885
TD8409413000012/ 185	1,09,45,885
TD8409413000012/ 186	1,09,45,885
TD 8409413000012/ 187	1,09,45,885
TD8409413000012/ 188	58,59,918
TD8409413000012/ 189	1,09,45,885
TD8409413000012/ 190	1,09,45,885
TD8409413000012/ 191	1,09,45,885
TD8409413000012/ 243	1,09,41,122
TD8409413000012/ 244	29,84,201
TD8409413000012/ 245	1,09,41,122
TD8409413000012/ 246	1,09,41,122
TD8409413000012/ 247	1,09,41,122
TD8409413000012/ 248	1,09,41,122
TD8409413000012/ 249	1,09,41,122
TD8409413000012/ 250	1,09,41,122
TD8409413000012/ 251	1,09,41,122
TD8409413000012/ 252	1,09,41,122
TD8409401000663/ 10	58,54,985
TD8409401000663/ 6	49,19,056
TD8409401000663/ 7	15,17,555
TD8409401000663/ 8	81,20,123
TD8409401000663/ 9	81,20,123
TD8409413000012/ 201	1,09,45,885
TD8409413000012/ 202	56,38,789
TD8409413000012/ 152	3,31,744
TD8409413000012/ 153	1,65,870
TD8409413000012/23□	4,42,322
TD8409413000012/ 203	4,42,257
TD8409413000012/ 204	1,09,45,885
TD8409413000012/ 205	1,09,45,885
TD8409413000012/ 206	1,09,45,885
TD8409413000012/ 207	1,09,45,885
TD8409413000012/ 158	1,09,47,490
TD8409413000012/ 159	67,45,425
TD8409401000367/8	57,44,629
FD-PWF-8409401000562/ 6	41,48,683





<b>KIDWAI CANCER INSTITUTE</b>	
<b>FIXED DEPOSITS DETAILS</b>	
TD8409413000012/ 141	-3,64,426
Fd-8409301000293/ 56	3,00,56,589
FD8409401000666/ 4	1,05,99,693
FD 8409401000666/ 5	1,05,99,693
FD8409401000666/6	2,50,513
TD8409413000012/ 192	8,84,516
TD8409413000012/ 193	1,09,45,885
TD8409413000012/ 194	1,09,45,885
TD8409413000012/ 195	1,09,45,885
TD8409413000012/ 196	1,09,45,885
TD8409413000012/ 197	1,09,45,885
TD8409413000012/198	1,09,45,885
TD8409413000012/ 199	1,09,45,885
TD8409413000012/ 200	1,09,45,885
8409413000012/ 165	24,32,418
8409413000012/ 166	1,09,45,885
8409413000012/ 167	1,09,45,885
8409413000012/ 168	1,09,45,885
8409413000012/ 169	1,09,45,885
8409413000012/ 170	1,09,45,885
8409413000012/ 171	1,09,45,885
8409413000012/ 172	1,09,45,885
8409413000012/173	1,09,45,885
8409413000012/174	1,09,45,885
TD8409401000655 /2	59,95,377
TD8409413000012/ 221	1,09,45,885
TD8409413000012/ 222	1,09,45,885
TD8409413000012/ 223	1,09,45,885
TD8409413000012/ 224	1,09,45,885
TD8409413000012/ 225	1,09,45,885
TD8409413000012/ 226	1,09,45,885
TD8409413000012/ 227	1,09,45,885
TD8409413000012/ 228	1,09,45,885
TD8409413000012/ 229	1,09,45,885
TD8409413000012/ 230	1,09,45,885
TD8409413000012/ 231	1,09,45,885
TD8409413000012/ 232	1,09,45,885
TD8409413000012/ 233	1,09,45,885
TD8409413000012/ 234	1,09,45,885
TD8409413000012/235	1,09,45,885
TD8409413000012/ 236	1,09,45,885
TD8409413000012/ 237	1,09,45,885
TD8409413000012/ 238	23,21,855
TD8409413000012/239	1,09,45,885
TD8409413000012/ 240	1,09,45,885
TD8409413000012/ 241	1,09,45,885
TD8409413000012/ 242	1,09,45,885
TD8409413000012/ 208	1,09,45,885
TD8409413000012/ 209	1,09,45,885
TD8409413000012/ 210	1,09,45,885
TD8409413000012/ 211	1,09,45,885
TD8409413000012/ 212	1,09,45,885







## ANNUAL ACCOUNTS

### KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, BANGALORE

#### FOR THE FINANCIAL YEAR 2019-20

##### Background :

Kidwai Memorial Institute of Oncology was established in the year 1973, is now situated on a sprawling 23 acres of land, acquired the Autonomous status and was recognized as a Regional Cancer Centre in 1980, subsequent to which the institute has developed from non-discreet cancer hospital to a State of art Cancer centre providing excellent cancer care to the needy and is the second largest Regional cancer centres in India. It is a comprehensive centre for cancer research and offers sophisticated treatments to Cancer Patients along with a Teaching Institution affiliated to Rajiv Gandhi University of Health Sciences, Karnataka and recognised by Medical Council of India and National Board of Examinations. The World Health Organisation (WHO) has recognized this Institute as an “Institute of Excellence” in the field of Oncology and allied sciences. It is a member of UICC (International Union against Cancer).

##### Organisation :

Management of the Institute at the apex level is through the Governing Council, which is headed by the Hon’ble Minister for Medical Education, Government of Karnataka and Director of KMIO as its Member Secretary. In addition, the Government appoints administrator/ bureaucrats/ eminent Scientists and Philanthropists as members of the Governing Council. The Director of the Institute is overall responsible for the day-today Functioning and Management of the Institute.

##### Facilities :

The Institute as a comprehensive cancer centre treats about 20,000 new patients every year with a follow-up of about 3 lakh patients per annum. The institute has a bed strength of 700 and in addition housed 250 patients in Dharmashala (Patients Ambulatory Home). A new in-patient Block built and Donated by Sipani and Daaga with 350 patients has been functioning. The Institute is recognised as a centre of EXCELLENCE by various National and International Organisations. The Institute is actively involved in conducting research in collaboration with premier Institutions like ICMR, Indian Institute of Science and NCBS with funding from ICMR, DBT and DST.







The Institute offers state of the art cancer care to patients not only from all parts of Karnataka and neighbouring states. Flow of help to needy patients comes from various schemes of the Govt. of Karnataka and Govt. Of India, such as the Ayushman Bharath, Suvarna Arogya Suraksha Trust (VAS), Rashtriya Arogya Nidhi (RAN), Chief Minister's Medical Relief Fund, Poor Patients Welfare Fund, Children's Welfare Fund and also from the generous Donation from organisations and individuals. Quite a few infrastructural developments have taken place in this Institute with Corporate Social Responsibility funds.

Many Corporate bodies/Philonthropists have extended generous support in building infrastructure for patient care like the entire Surgical Block with OPDs, Wards and Minor OT housed in the second floor of the Out patient Block built by Sri Dharmasthala Manjunatheswara Trust. The Dharmashala which houses 250 patients along with 250 attendants was built by the Corporation of Bangalore and was augmented by the another Dharmashala built and donated to us by Infosys Foundation.. An exclusive Paediatric Block has been built by the Kapoor family. Another floor was recently added to this block by the State Bank of Mysore under Corporate Social Responsibility funds. BEL under CSR funds has donated a State of art facility Cancer Detection Bus and this Facility will be used for Cancer Screening and Detection programmes. Besides this, several organisations and individuals have made immense contributions indeed a noble gesture to cancer afflicted patients.

As regarding the Academic activities, many Post-Graduate and Super specialty courses in the main specialties and Sub specialties of Oncology are offered and these courses are affiliated to RGUHS and are recognized by the Medical Council of India and the National Board, New Delhi. The institute is also a Training centre for WHO Fellows; PG Students from all over Karnataka/India

### **Department of the Institute :**

The Hospital consists of Departments like

- a) Dept. Of Surgery
- b) Dept. Of Head & Neck
- c) Dept. Of Gynaec. Oncology
- d) Dept. Of Anaesthesiology and Pain Relief
- e) Dept. Of Palliative Medicine
- f) Dept. Of Radiotherapy
- g) Dept. Of Radiation Physics
- h) Dept. Of Medical Oncology
- i) Dept. Of Paediatric Oncology





- j) Dept. Of Radio Diagnosis.
- k) Dept. Of Nuclear Medicine
- l) Dept. Of Pathology
- m) Dept. Of Blood Bank
- n) Dept. Of Microbiology
- o) Dept. Of Biochemistry
- p) Dept. Of Epidemiology and Biostatistics
- q) Social Welfare Department
- r) Clinical Psychology
- s) Academic Cell
- t) Library and Information Centre
- u) Medical Records
- v) Dietary services
- w) Community Oncology
- x) Nursing Staff.
- y) General Duty Doctor

### **Source Of Funds:**

The main sources of funds to the Institute are from:

1. Grants from Government of Karnataka for Plan and Non Plan activities,
2. Hospital Revenue through users fee etc.,
3. Hospital Revenue from PCC Gulbarga;
4. Income through Academic activities

In addition Institute receives donations from individuals, firms, institutions, both private and public sectors organizations and also from voluntary service organizations. Institute undertakes specific donor specific projects to provide better services.

### **Bankers:**

Major funds of the Institute are transacted through Canara Bank, KMIO Extension Counter, Dr. M.H. Mari Gowda Road, Bangalore – 560 029. However deposits are kept in other banks also.





Schedules forming part of accounts for the year ended 31<sup>st</sup> March 2020

## Schedule – U NOTES ON ACCOUNTS

### Significant Accounting Policies

#### 1) Accounting Conventions

The Financial statements are prepared on the basis of Historical cost convention. The method of Accounting adopted is Accrual basis. However - Salary, Gratuity and pension are accounted on cash basis.

#### 2) Inventory valuation

During the year closing inventory is not brought to Books. Explained that major items of stock are consumables and total value of the stock is not significant.

#### 3) Investments

Investments are fixed deposits with bank taken at cost.

#### 4) Fixed Assets

Fixed Assets are stated at cost of acquisition inclusive of inward freight, duties and taxes and incidental and direct expenses related to acquisition and accounted on payment basis. Fixed Assets acquired out of Grants are debited to Grants Account.

#### 5) Depreciation

Depreciation on assets are provided on the written down value method at the rates consistently followed by the hospital followed in the preceding previous years which is not par with Income Tax rates. Fixed Assets acquired out of Grants are debited to Grants Account. Hence no Depreciation is provided on those Assets.

#### 6) Revenue recognition

Institution's revenues other than grants and Income from Vajpayee scheme are recognized on accrual basis.

#### 7) Government Grants / Funds

- a) Grant from Government of Karnataka is the major component of revenue which is accounted on receipt.
- b) Grant from Government of Karnataka is in capital nature and treated as capital receipt and on utilization charged against Grants.





c) Grant Others : Kcmmr, Scsp and Stsp are Given by Government for the treatment of patients under the scheme and treated as Grant Income.

d) Other/ Specific Funds : All other grants received towards specific funds are credited to the same Fund account and utilized for the purpose for which the Grant /Donation received.

### **8) Retirement Benefits Pension / Gratuity :**

**Pension & Gratuity** : No provision is made for Gratuity & Pension. Institute has received Rs. 11,58,00,000/- as Grant towards Pension Fund  
Institute maintains a separate pension fund wherein retirement benefits and pensions are paid through the fund maintained under a separate Bank Account

### **Explanations for notes on Accounts**

#### **1) Grants :**

- a) Capital Plan Grant : During the Financial year 2019-20 Institute received the grant from Govt of Karnataka of Rs. 1.49 Crores (Previous year Rs.31.58 Crores)
- b) Revenue Non Plan Grant: During the Financial year 2019-20 Institute received the Grant from Govt of Karnataka of Rs. 114.78 Crores (Previous year Rs 98.74 Crores)

#### **2) Fixed Assets :**

- i. The Institute is not maintaining Fixed Assets register showing full particulars including quantitative details and situation of fixed assets.
- ii. The Institute is not having a system of periodical verification of its fixed assets by which all fixed assets are verified.

#### **3) Investments :**

Investments include only Fixed Deposits shown at the face value wherein accrued interest is not accounted. However interest is Accounted on Accrual Basis.

#### **4) Bank Accounts :**

Institute maintains separate bank accounts for Plan (capital) , Non Plan (revenue) expenditure and for few funds separate bank accounts are maintained.





**5) Sundry Debtors :**

For Sundry Debtors confirmation of balances or reconciliation statements were not obtained. It is observed that parties have deducted Tax at source (T.D.S) which is not applicable as this is only a re-imburement of medical bills.

**6) Loans Advance and deposits :**

An amount of Rs 1,65,04,480/- has been accounted as tax deducted at source for the year wherein all TDS Certificates are not available on record.

**7) Current Liabilities :**

Confirmation has not been obtained for the items shown under Current liabilities, which includes advance from patients.

The balances in Sundry debtors, loans and advances and Creditors are subject to confirmation.

**8) Interest on bank deposits :**

Interest Income accounted on Accrual basis.

**9) Contingent Liabilities : NIL**

**10) Regrouping :**

The previous year's figures have been recast /regrouped wherever necessary in order to confirm to current year's presentation.





### PHOTOS OF EVENTS

23<sup>rd</sup> August, 2021 – Inauguration of New Infosys OPD Block along with Various other Patient Services at KMIO by Sri Basavaraj Bommai, Honorable Chief Minister of Karnataka. Guests : Dr.K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Govt. of Karnataka with and Dr.C.Ramachandra, Director, KMIO, other Donors



**KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY  
CANCER RESEARCH AND TRAINING CENTRE**  
Dr. M.H. Marigowda Road, Bengaluru - 29

**INAUGURATION OF INFOSYS OPD BLOCK**  
(Donated by Infosys Foundation)  
& Other facilities

On 23<sup>rd</sup> August 2021 at 1.00 p.m.  
at Auditorium, 5<sup>th</sup> Floor, Infosys OPD Block KMIO.

**Inauguration by:**

**SHRI. BASAVARAJ BOMMAI**  
Hon'ble Chief Minister,  
Government of Karnataka

**Dr. K. SUDHAKAR**  
Hon'ble Minister for Health & Family Welfare  
and Medical Education,  
Government of Karnataka

**SMT. SUDHA MURTHY**  
Chair Person  
M/s. Infosys Foundation

**Dr. C. RAMACHANDRA**  
Director, KMIO





23<sup>rd</sup> August, 2021 – Inauguration of New Infosys OPD Block along with Various other Patient Services at KMIO by Sri Basavaraj Bommai, Honorable Chief Minister of Karnataka. Guests : Dr.K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Govt. of Karnataka with and Dr.C.Ramachandra, Director, KMIO, other Donors





23<sup>rd</sup> August, 2021 – Inauguration of Various Patient Services at KMIO by Sri Basavaraj Bommai, Honorable Chief Minister of Karnataka. Guests : Dr.K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Govt. of Karnataka with Dr.C.Ramachandra, Director, KMIO,



20<sup>th</sup> June, 2019 - Inauguration of 5 Operation Theaters Donated by Infosys Foundation by Sri. H D Kumarswamy, Hon'ble Chief Minister of Karnataka, Guests : Smt. Sudha Murthy, Founder of Infosys Foundation, Sri. E Thukaram, Hon'ble Minister of Medical Education, Sri. Shivanand Patil, Hon'ble Minister Health and Family Welfare, Dr. Manjunath, Director. Sri Jayadeva Institute.







18<sup>th</sup> January, 2019 - Foundation Stone Ceremony Bone Marrow Transplant Unit, Guests : Sri. H D Kumarswamy, Hon'ble Chief Minister of Karnataka, Sri. E Thukaram, Hon'ble Minister of Medical Education, Dr. Manjunath, Director. Sri Javadeva Institute.



22nd December, 2018 - Inauguration of R.K.Sipani Block and Dhanraj Daga Block by Sri. H D Kumarswamy, Hon'ble Chief Minister of Karnataka



Dr.Ashwath Naryan, Hon'ble Medical Education Minister, Karnataka visited KMIO



Dr.Ashwath Naryan, Hon'ble Medical Education Minister, Karnataka visited KMIO





Inauguration of Awareness Program on Breast Cancer by  
Smt. Gangambike, Mayor, BBMP.



23<sup>rd</sup> November, 2018 - Donation of Mobile Cancer Detection Bus by B.E.L.  
Guests : Sri M.V.Gowthan, Director, Bharath Electronics Ltd.





23<sup>rd</sup> November, 2018 - Donation of Mobile Cancer Detection Bus by B.E.L.  
Guests : Sri M.V.Gowthan, Director, Bharath Electronics Ltd.



6<sup>th</sup> March, 2019 - Inauguration of Mobile Cancer Detection (Mammography) Bus by  
Sri. H D Kumarswamy, Honorable Chief Minister of Karnataka. Bus Donated by  
Association of Kannada Kootas of America (AKKA)

6<sup>th</sup> March, 2019 - Inauguration of Mobile Cancer Detection (Mammography) Bus by Sri. H D Kumarswamy, Honorable Chief Minister of Karnataka. Bus Donated by Association of Kannada Kootas of America (AKKA)



26<sup>th</sup> February, 2021 - Inauguration of Blood Bank Bus by Sri. B S Yadyurappa, Honorable Chief Minister of Karnataka.





17<sup>th</sup> August, 2020 - Inauguration of Renovated Pediatric ICU by Sri T M Vijay Bhaskar, Chief Secretary Government of Karnataka.



16th December 2020 - Sri T.K.Anil Kumar, Principal Secretary, Department of Health and Family welfare and Medical Education, Government of Karnataka,



21th August, 2020 - Inauguration of Amrit Medical Store at KMIO



15<sup>th</sup> August 2020 - Celebration of Independence Day





15<sup>th</sup> August 2020 - Celebration of Independence Day



3<sup>rd</sup> June 2020 - Donation of One day salary of Rs.19,00,000/- of all Employees of KMIO to Chief Minister Covid Relief Fund



Donation of One day salary of Rs.19,00,000/- of all Employees of KMIO to Chief Minister Covid Relief Fund, - 3<sup>rd</sup> June 2020



21<sup>st</sup> April 2021 - Dr. Ashwath Naryan, Honorable Deputy Chief Minister, Government of Karnataka visited Covid Lab at KMIO





21<sup>st</sup> April 2021- Dr. Ashwath Naryan, Honorable Deputy Chief Minister, Government of Karnataka visited Covid Lab at KMIO



26<sup>th</sup> April 2021 - Inauguration of Covid Swab Collection Booth by Dr. K Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education Minister, Government of Karnataka.



26<sup>th</sup> April 2021 - Inauguration of Covid Swab Collection Booth by Dr. K Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education Minister, Government of Karnataka.



26<sup>th</sup> April 2020 - Donating PPE Kits, Masks and Face Shield by Mr. Tejasvi Surya, Member of Parliament along with Dr. K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Government of Karnataka





26<sup>th</sup> April 2020 - Donating PPE Kits, Masks and Face Shield by Mr. Tejasvi Surya, Member of Parliament along with Dr. K Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Government of Karnataka



26<sup>th</sup> April 2020 - Donating PPE Kits, Masks and Face Shield by Mr. Tejasvi Surya, Member of Parliament along with Dr.K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Government of Karnataka



26<sup>th</sup> April 2020 - Donating PPE Kits, Masks and Face Shield by Mr. Tejasvi, Surya Member of Parliament along with Dr.K.Sudhakar, Honorable Minister for Health & Family Welfare and Medical Education, Government of Karnataka



Dr.C.Ramachandra, Director, KMIO, with Dr.Chandrashekar, Director, Sanjay Gandhi Institute





1<sup>st</sup> November, 2020 - Kannada Rajyothsava at KMIO, Chief Guest, Sri Ramalinga Reddy, MLA BTM Layout.



1<sup>st</sup> November, 2020 - Kannada Rajyothsava at KMIO, Chief Guest, Sri Ramalinga Reddy, MLA BTM Layout.





1<sup>st</sup> January, 2021 – Dr.C.Ramachandra, Director, KMIO releasing NEW YEAR CALENDER Published by Kuvempu Vedike, KMIO



28<sup>th</sup> August, 2020 - Donation of Ventilators to Operation Theater, KMIO, Guests : Mrs. Neera Singh Dy. General Manager and Mr. Jitendra, Senior Manager, Bharat



7<sup>th</sup> March, 2020 - Lamp Lighting and Oath Taking Ceremony, Guests :  
Dr.A.N.Yellapa Reddy, Environmentalist, Retired IFS and Former Secretary,  
Department of Science and Environment,



8<sup>th</sup> March, 2020 - Womens Day Celebration at KMIO, Guest : Dr. Kalpana  
Gopalan, Additional Chief Secretary, Youth Empowerment and Sports  
Department, Government of Karnataka.



16th December 2020 - Sri T.K. Anil Kumar, Principal Secretary, Department of Health and Family welfare and Medical Education, Government of Karnataka, visited KMIO.





# State of the Art Equipments and Facilities in KMIO





# Green & Clean Campus of KMIO

