

# The Gujarat Cancer & Research Institute

**(M. P. Shah Cancer Hospital)**

**STATE CANCER INSTITUTE**

(Recognized by Ministry of Health  
& Family Welfare, Govt. of India)



**Annual Report 2019 - 2020**

**Shri Pankaj R. Patel**  
**Chairman, Governing Board, GCRI**

**Members of Governing Board**

**Nominated by  
Govt. of Gujarat**

- Dr. Jayanti Ravi, IAS**  
Principal Secretary, Health & Family  
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Government of Gujarat
- Shri Jai Prakash Shivahare, IAS**  
Commissioner of Health Services,  
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(Expenditure), Government of Gujarat
- Shri M. K. Das, IAS**  
Chairman, GMDC
- Dr. Bharat Amin, MS**  
Nominated by Government of Gujarat

**Nominated by  
Gujarat Cancer Society**

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Executive Chairman,  
Gujarat Cancer Society
- Shri Prashant Kinarivala**  
General Secretary,  
Gujarat Cancer Society
- Shri Kshitish Madanmohan**  
Vice President,  
Gujarat Cancer Society
- Shri Chintan Parikh**  
Vice President,  
Gujarat Cancer Society
- Dr. Devendra Patel**  
Former Director, GCRI

**Nominated by Govt. of India**

- Deputy Director General, Ministry of  
Health & Family Welfare,  
Government of India
- Director (IF), Ministry of Health,  
Government of India

**Dr. Shashank Pandya**  
Director, GCRI  
& Member Secretary

**Purchase Committee Members**

- |   |  |
|---|--|
| <p><b>Shri Prashant Kinarivala</b><br/>General Secretary, Gujarat Cancer Society<br/>Chairman</p> | <p><b>Shri Kshitish Madanmohan</b><br/>Vice President, Gujarat Cancer Society<br/>Member</p> |
| <p><b>Dr. Shashank Pandya</b><br/>Director, GCRI<br/>Member Secretary</p>                         | <p><b>Dr. Pariseema Dave</b><br/>Deputy Director, GCRI<br/>Special Invitee</p>               |
| <p><b>Shri Divyesh Radia</b><br/>Special Invitee</p>  | <p><b>Shri Kaushik Patel</b><br/>Special Invitee</p>   |



'JOINT VENTURE OF GOVERNMENT OF GUJARAT AND  
THE GUJARAT CANCER SOCIETY'

## **THE GUJARAT CANCER & RESEARCH INSTITUTE**

(M. P. SHAH CANCER HOSPITAL)  
Affiliated to B J Medical College

### **STATE CANCER INSTITUTE**

(Recognised by Ministry of Health & Family Welfare,  
Government of India)

**MEMBER OF UICC**



**International Union Against Cancer  
(UICC)**

**ANNUAL REPORT  
2019 - 2020**

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# Our Mission

The mission of the GCRI is to provide state-of-the-art diagnostic and therapeutic services to the patients of all types of origin and financial background suffering from cancer. Its scope also encompasses registering the tumor burden

in the population, prevention through awareness drives, solving local medical problems through research and training of medical students as well as imparting knowledge to the medical fraternity.

## To Fulfil The Mission, GCRI

- Conducts OPD and indoor activities for diagnosis, staging, treatment and monitoring disease progress.
- Renders free or subsidized treatment to needy patients without any distinction of caste, creed or religion.
- Provides training to new generation of doctors as well as practicing fraternity.
- Offers unique experimental and research-oriented diagnosis and treatment services to test new forms of diagnosis and therapy in order to improve quality of life and expected survival of those afflicted with cancer.
- Organizes public education programmes, the diagnostic and blood donation camps, conferences and other scientific meets.
- Displays a permanent Cancer Awareness and Anti-tobacco exhibition and arranges other preventive efforts.
- Runs instruction based Hospice Centre, Home-Hospice Services and Rehabilitation Service.

## Our Vision

GCRI, with a multi-disciplinary close relationship between cancer care, research and education, intends to provide the greatest hope to the patients and the general population whose needs, we endeavour to cater to. It strives to see that fruits of modern science reach up to the last man. GCRI believes that the world class cancer research, state of art therapeutic

efforts and intensive and extensive educational efforts regarding prevention, detection, treatment and palliation in the field of cancer will improve the quality of life of all those who suffer from it. GCRI collaboration believes that with other cancer organisations, research laboratories and pharma-research establishments will bring a better tomorrow.

## Our Core Values

### GCRI is dedicated to

- Scientific attitude and humane approach to diagnosis and treatment of cancer.
- Inquisitiveness, innovation and creativity in the field of research and its translation into day-to-day clinical applications.
- Value oriented as well as information and skill-intensive educational programmes.
- Respect to all schools of thoughts and endeavours for free exchange of ideas with due acknowledgements of contributions by each member of GCRI.
- Simple, effective and targeted awareness programmes for prevention as well as early detection of cancer and anti-tobacco drive directed at the medical profession and population at large.
- Providing hope, sympathy and respect to all those who are terminally ill.

कवचिदर्थं कवचिद्धर्मं कवचित् मैत्रीपरायणम् ।  
कर्माभ्यासं कवचिच्चैति चिकित्सा नास्ति निष्फला ॥

**“Sometimes money, sometimes wisdom, sometimes social support or sometimes work experience is obtained. One’s efforts to alleviate suffering never go un-rewarded.”**

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## GCRI Profile At A Glance

### GCRI - Speciality Hospital for Cancer Regional Cancer Centre

- 650 indoor beds - Largest Cancer Hospital of the country
- 29,499 New Cases
- 3,24,057 Outdoor patients
- 2,39,231 Indoor admissions
- 16,51,913 Laboratory tests
- 1,31,108 Imaging and Radiological investigations
- 18,943 Major and Minor Surgeries
- 49,611 Chemotherapy Treatment
- 16,617 Radiation Treatment

### GCRI - Speciality Medical Education Centre

- DM - Medical Oncology, Oncopathology
- MCh - Surgical Oncology, Gynaecological Oncology
- MD – Microbiology, Radiodiagnosis, Anaesthesiology, Radiotherapy, Palliative Medicine
- DMRE – Radiodiagnosis; DA – Anaesthesiology; DCP – Pathology; DGO – Gynaecological Oncology
- Postgraduate Students – 145 Students
- PhD - Life Sciences & Medical Microbiology – 10 Students
- MSc in Cancer Biology - 40 Students
- Diploma in Medical Laboratory Technologists – 50 Students





## GCRI Profile At A Glance

### GCRI - Research Organisation

- 6 well equipped Research Labs
- 41 on-going Research Projects; 16 Clinical Trials
- Scientists are PhD Guides
- Additional support from - National Cancer Institute (NCI), USA/Germany/IARC/DST/DBT/CSIR/ICMR/DAE/GSBTM/DMER/GUJCOST/GCS/IACA
- Clinical Research hub for National and International drug trials

### GCRI – Community Commitments

- National Registry Programme - ICMR
- Prevention of Cancer - Anti-tobacco Drive & Tobacco Cessation Centre
- Early Detection - Health Checkup & Cancer Detection Camps
- Cancer Awareness: Exhibition, Cancer Information Center
- Hospice Care; Home Service Care
- Poor Patient Support
- Telepathology and Telemedicine Projects
- Patient Care Evaluation Committee
- Sanskar Chowk (Entertainment and Education of Patients and their Relatives)
- Night Shelter for Patient's Relatives

## A. ANAESTHESIOLOGY

**Professor & Head:** Dr Jayshree Thakkar

**Associate Professors:** Dr Dipika Patel, Dr Neeta Gosai, Dr Damini Makwana, Dr Leena Patel

**Assistant Professors:** Dr Kinna Shah, Dr Bijal Shah, Dr Priti Patel, Dr Madhuri Bhade,  
Dr Rekha Solanki, Dr Misha Agarwal, Dr Tanmay Tank, Dr Sheetal Baranda, Dr Kinjal Mistry, Dr Drashti Dave

**Junior Lecturers:** Dr Jenish Patel, Dr Amita Jansari

**Medical Officer:** Dr Pranita Kate

**Fellow:** Dr Richa Sharma



**Clinical Services:** The department provides services of anesthesia for oncosurgical patients. Anesthesia services are provided during peri-operative period, which includes pre-anesthetic checkup and anesthesia fitness, intra-operative management and post-operative care of the patients. Our department provides anesthesia or monitored anesthesia care as per the requirement of the patient and surgeons. Different super specialties like Plastic surgery, Musculo-skeleton surgeries, Urology surgeries, Neuro Oncology, Gynecological surgeries etc. are involved in treatment of cancer. Treatment and care of critically ill patients in ICUs (Surgical, Medical & Neuro Oncology) is part of anesthesia services. These services are provided for all major and minor surgical

procedures, gynecological surgeries, neurological surgeries and day stay surgeries. Anesthesia department also gives services for either providing anesthesia or providing only monitoring care for radiotherapy patients, patients undergoing radiological procedures, invasive procedures in IVTC or CT scan, PET Scan and MRI. Our department takes lead in peripheral venous access as well as central venous access as per requirement of the patient. All emergency calls for resuscitation, Monitored anesthesia and venous access are attended by the departmental staff. The department provides emergency services in all the wards for central / peripheral venous access of the patient.

Details of Work done	Number
Major Operations, DSU OT (Elective+ Emergency surgeries)	5307
Neuro OT Elective + Emergency surgeries	824
Day Stay Unit ( GA+ LA)	7293
CT Scan + MRI + USG Guided Biopsy + PET Scan	553
Intra Cavity Radium + Implant under Anaesthesia	1054
Radiotherapy in pediatric patients under Anaesthesia	591
Interventional Therapy under Anaesthesia ( IVTC)	305
Central venous access + PICC + LP	987

**Academic Activities:**

**Major Achievements:** Dr Dipika Patel is nominated as WDC Active Member of Ahmedabad Medical Association.

Dr Priti Patel is elected as President of ISA in GSB 52<sup>nd</sup> ISACON 2019 (Gujarat state and West zone) held during October 11 - 13, 2019.

Dr Kinna Shah received Innovation Award for best scientific paper presentation at 52<sup>nd</sup> ISACON 2019

(Gujarat state and West zone), Vadodara, during October 11-13, 2019.

Dr Rekha Solanki received Dr H M Desai award for best scientific paper presentation at 52<sup>nd</sup> ISACON 2019 (Gujarat state and West zone), Vadodara, during October 11-13, 2019.

**Training organized:** CPR Training to all first year resident doctors of GCRI on January 28, 2020.



परस्परं भावयन्तः श्रेयः परमवाप्स्य ॥ ३ : ११ ॥  
 श्रीमद्भगवद्गीता  
 परस्पर लावपूर्णा कार्यो करतां रहींते परम कल्याण प्राप्त करशो.  
 श्रीमद् भगवद् गीता

## B. COMMUNITY ONCOLOGY & MEDICAL RECORDS

**Assistant Professor and Head:** Dr Anand Shah

**Medical Officer:** Dr Rohini Patel

**Medical Record Officer:** Himanshu Patel

**Statistical Assistant:** Jayesh Solanki, Vishruti Pandya



**Clinical Services: New O.P.D.:** During the year 2019, a total of 29,499 patients were registered. The documents under various schemes/categories such as Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY), Mukhyamantri Amrutam Yojana (MA Yojana), MA Vatsalya Yojana, Employees State Insurance Scheme (E.S.I.S.), State government employees/pensioners, Lower income group category (L.I.G.), Indian Cancer Society (ICS) fund, Scheduled Castes (SC) & Scheduled Tribes (ST) categories, School Health Programme etc. are verified. Some special radiological and laboratory investigation cards are also issued. Year wise general statistics of hospital is prepared here.

**Old O.P.D.:** It maintains the records of newly registered cases as well as old (follow-up) cases. There were 3,24,057 outdoor patients came for follow up during the year 2019. Pathology reports, Traveling passes (ST/Railway) and stickers are issued here.

Patient's admission-discharge and hospital death registrations works are done. Medical reimbursement work is also carried out. Patient's follow up information are also kept. For patient's convenience, SMS software is implemented. Patient can inform through SMS prior to his/her follow up day so that his/her casefile are kept ready before patient's arrival. Helpline facility through phone call is also started for follow up. Patient can make appointment the day before his/her follow up day by phone call on helpline number. His/her appointment is registered and sms is sent to his/her mobile number. The MRD staffs keep these file ready when patients come for follow up. With due permission from Director, GCRI doctors /researchers may access case files for their research / dissertation study purpose. Computerized medical certificate are issued and forms of Medi-claim policy and Life Insurance policy of expired patients are filled here.

### GENERAL STATISTICS: YEAR 2019

Details	Year 2019
Total new cases registered (Cancer & Non-cancer)	29499
Adult Cases	28266

Details	Year 2019
Pediatric Cases	1233
Total No. of Outdoor Patients visited	324057
New Admission during the year	30364

Details	Year 2019
Inpatient days	239231
Average inpatient stay	7.88
Strength of beds	650
Death During the Year	1823
Haematological Investigations	351994
Biochemical Investigations	993344
Bacteriology Investigations	12249
Serology Investigations	102292
Cytological Investigations	15303
Histological Examinations	101155
Bone Marrow Examinations	5279
Biopsy procedures (Other than Endoscopies & B.M.Bx.)	11350
Total Blood Transfusion given to the patients	18920
Total Plasma/PRP given to the patients	26742
Imaging & Radiological Investigations	
MMR Ba.Swallow & other X-rays	62155
Ultrasound (USG)	24582
CT Scan	29970
MRI	4490
Mammograms	6551
OPG	2333
Colour Doppler	1027
Radiation Treatment	
Brachy Therapy	694
Linear Accelerator	4639
Bhabhatron	1540
Mould prepared for Planning	3018
Simulator treatment Planning	6726
Surgical Operations	
Major	4107
Minor	8138
I.V.T.C.	5834
Neurosurgical Operations	864
Nuclear Medicine (Isotope)	
PET CT SCAN	2334
Isotop Scan	3428
Iodine Therapy	73
HLA Typing	207
Immunohistochemistry Investigations	48130

Details	Year 2019
Cytogenetics	2986
Physiotherapy treatment	31522
Total Number of Chemotherapeutic procedures	49611
Bone Marrow Transplants	43
ECG	24539
Stoma Clinic Patients	2943
Prosthetic Patients	1317
Stem Cell Biology	2000
Molecular Oncology	2150
Palliative Care OPD (New and Old cases)	19717
Patients of Special Investigations	7498
Microbiology Other Tests	7326

**Academic Activities:** The department is a very important section of the Institute. It works largely in three different areas. (a) Cancer Registry Programme, (b) Cancer Epidemiology and (c) Cancer Control Programme.

**(a) Cancer Registry Programme:** Cancer registry plays a major role in ensuring good quality cancer data which can be helpful in cancer care, planning of health service and cancer control programmes. The department has been maintaining both hospital based cancer registry and population based cancer registry under the network of National Cancer Registry Programme (NCRP) - National Centre for Disease Informatics and Research (NCDIR) - Indian Council of Medical Research (ICMR), Bengaluru.

**1. Rural Cancer Registry Ahmedabad district Project:** It has been functioning since the year 2004 with the objective of assessing the magnitude and types of cancers in Ahmedabad rural areas and to calculate estimate of cancer incidence in Ahmedabad district.

**Activities:** Work of cancer data collection from various sources for the year 2018 and 2019 is in progress.

**2. Population Based Cancer Registry Ahmedabad Urban Agglomeration Area:** It has been functioning since the year 2007 with the objective of assessing the magnitude and types of



cancers in Ahmedabad city and to calculate estimate of cancer incidence in Ahmedabad urban area.

**Activities:** Case files abstraction and outside data collection for the year 2018 is completed. Work for the year 2019 is in progress.

**3. Hospital Based Cancer Registry:** The hospital based cancer registry has been functioning since long as per the standards and norms prescribed by the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR). From January 2014, the National Cancer Registry Programme (NCRP) - National Centre for Disease Informatics and Research (NCDIR) - Indian Council of Medical Research (ICMR) sanctioned the project "Hospital Based Cancer Registry and Patterns of Care and Survival Studies on Cancer Breast, Cancer Cervix and Head and Neck Cancers at our Institute. The broad objectives of this study is to assess quality of hospital care and cancer services in covered area and to describe length and quality of survival in relation to anatomical site, clinical stage and aspects of types of treatment and to undertake epidemiological research through short term case control studies.

**Activities:** Case file abstraction and online data entry work for the year 2017 is completed. Case file abstraction and quality checks for the year 2018 is in progress.

**4. Population based cancer survival on cancer of breast, cervix and Head and Neck (Ahmedabad Urban Agglomeration area):** We have become a part of NCDIR-ICMR project titled "Population based cancer survival on cancer of Breast, Cervix and Head and Neck "for PBCR Ahmedabad Urban Agglomeration area in May 2019. The potential benefit of this study is to estimate average survival of female breast and cervical cancer patients and head and neck cancer patients (both sexes) of Ahmedabad urban. It will provide an idea of the effectiveness of the overall cancer control strategy. It gives a baseline data on impact of cancer and its treatment on the population. The study included incident cases of cancer of breast, cervix and head and neck occurred from the year 2012 in Ahmedabad urban agglomeration area should be followed up. The end of the study period is February 28, 2022.

**(b) Cancer Epidemiology:** The statisticians of the department help doctors and researchers for statistical

analysis of their studies. It provides various data to the doctors and researchers for their dissertation / research work. Various statistical data and reports are also provided to the Administration and Government as and when required. This year, a total of 85 GCRI staff requested for data retrieval and 9 GCRI staff were assisted for their statistical analysis work.

**(c) Cancer Control Programme:** The department runs cancer control programme as per the aim and objectives laid down by National Cancer Control Programme, Government of India. The department organizes various cancer awareness and detection camps for primary prevention of cancers by health education especially hazards of tobacco consumption and necessity of genital hygiene for prevention of cervical cancers and secondary prevention i.e. early detection and diagnosis of cancers.

**HPV Vaccine Project:** The Gujarat Cancer and Research Institute is having a collaborative research agreement with International Agency for Research on Cancer (IARC), Lyon, France and working on a project named "Implementation plan for extended follow-up of the participants of IARC- Indian HPV vaccination study to evaluate the effectiveness of one, two and three doses of Quadrivalent HPV vaccine in preventing cervical neoplasias".

**Activities:** As project is in follow-up phase, all activities e.g. extended follow up consent to be signed, cervical cell collection for HPV infection, HC-II genotyping, all these activities are continued as per protocol, In addition, participants are also regularly followed up for their information update e.g. marital status, vital status, migration status, pregnancy data and medical illness, As discussed during PI meeting this year, there will be additional study to start that is 10 years follow-up of randomly selected participants for their sero-response among 1 dose, 2 dose and 3 dose of giving cervical vaccines. This will be the very interesting and important study at GCRI site, as all participants involved have received only one dose of HVP vaccine and they are followed regularly.

**Major Achievement:** Mr. Jayesh Solanki, Statistical Assistant got first rank in Chess competition of Gandhinagar taluka and third rank in Gandhinagar district in 'Khel Mahakumbh - 2019' organized by Government of Gujarat. He had been honoured by Dr. Jayanti Ravi (IAS), Principal Secretary, Health and Family Welfare, Government of



Gujarat for his achievement in Khel Mahakumbh 2019 on Republic Day 2020 function at Medicity, Civil Hospital, Ahmedabad.

**Public Services Offered:** As per the guidelines of National Cancer Control Programme, the department is actively involved in cancer control activities and reaches to the community which addresses primary prevention and early detection of cancer within the community.

**Cancer Awareness Camps:** The department organizes cancer awareness camps with the objectives of promoting awareness about the risks of common cancers and their curability if detected early in the community. During these camps, knowledge on cancer like its causes and natural history, warning signs and symptoms of cancer are explained to the visitors. Self-examination methods are emphasized particularly of oral cavity with need for quitting tobacco. Method of breast self-examination is also propagated among women visitors. Awareness about cancer is created by distribution of publicity material like pamphlets, posters, flip charts, exhibition and audio-visual programmers.

A total of 12 education camps (Cancer Exhibition) were organized during April 2019 to March 2020.

No. of Education Camps during April 2019 - March 2020	12
Number of Visitors	1103

**Cancer Screening Camp with Sanjeevani Rath (mobile cancer screening van) GCRI:** A high tech cancer screening mobile van (Sanjeevani Rath) was launched in the year 2009 to detect the cancer patients in their early stages of the ailment, especially in rural areas. The expert team identifies suspected cases of possible cancer and if needed, refers them to GCRI for further evaluation. This mobile cancer screening van is equipped with advanced mammography machine which is very useful to detect breast cancer - the most common cancer found in women in their very early stage.

A total of 46 Cancer Screening (Sanjeevani Rath, GCRI) camps were organized in various places of Gujarat state during April 2019 to March 2020. Following table shows summary report of Sanjeevani Rath camp activities.

No. of Cancer Screening Camps during April 2019 - March 2020	46
Number of beneficiaries attended	4002
Head and Neck Examinations	1388
Breast Examinations	3417
Cervix Examinations	2815
Other Sites Examinations	20
Suspicious cases referred to GCRI	90
Head and Neck	28
Breast	15
Cervix	47
Other Sites	0

Total Pap test: 2640, Total Mammography: 455

**Cancer Screening Camps with Sanjeevani Rath, Siddhpur**

Cancer Screening Camps during April 2019 - March 2020	4
Number of beneficiaries attended	337
Head and Neck Examinations	115
Breast Examinations	229
Cervix Examinations	142
Suspicious cases referred to GCRI	34
Head and Neck	25
Breast	0
Cervix	9

Total Pap test: 130, Total Mammography: 43

In June 2018, an MOU was signed between Govt. of Gujarat and GCRI for cancer care at Rajkot, after that Saurashtra Cancer Care Center, Rajkot is working as a satellite center of GCRI.

**Cancer Screening Camp with Sanjeevani Rath, Rajkot**

No. of Cancer Screening Camps during April 2019 - March 2020	5
Number of beneficiaries attended	336
Head and Neck Examinations	214
Breast Examinations	256
Cervix Examinations	152
Suspicious cases referred to GCRI	4
Head and Neck	0
Breast	4
Cervix	0
Other Sites	0

Total Pap test: 152, Total Mammography: 83

**Cancer Screening Camps without Sanjeevani**

**Rath:** Department involves in arrangement of cancer detection camps at various places in Gujarat. The objectives of the detection camps are to detect cancers in their early stage especially oral cancers in men and breast and cervical cancers in women. Suspicious cases were referred to GCRI for further diagnostic and therapeutic care.

A total of 9 cancer detection camps were organized across the Gujarat state during April 2019 to March 2020.

Following table shows summary report of cancer detection camps.

No. of Cancer Detection Camps during April 2019- March 2020	9
Number of beneficiaries attended	383
Head and Neck Examinations	25
Breast Examinations	25
Cervix Examinations	308
Suspicious cases referred to GCRI	6
Head and Neck	2
Breast	2
Cervix	2
Other Sites	0

Total Pap test: 284

During this period total 64 camps were organized across the state. District wise distribution is mentioned in following table.

Sr. No.	District	No. of Camps
1	Ahmedabad	15
2	Amreli	01
3	Anand	04
4	Bhavnagar	02
5	Baroda	07
6	Dahod	03
7	Gandhinagar	08
8	Godhara	01
9	Gir Somnath	01
10	Jamnagar	02
11	Mehsana	06
12	Nadiad(Kheda)	02
13	Patan	02
14	Panchmahal	01

Sr. No.	District	No. of Camps
15	Rajkot	04
16	Rajasthan	01
17	Sabarkantha	01
18	Surendranagar	03
<b>Total No. of Camps</b>		<b>64</b>

**Siddhpur Cancer Care Centre:** To provide an excellent cancer care to the people of North Gujarat, the Government of Gujarat set up a Cancer Care Centre at Siddhpur, Patan district in 2012. The radiation unit also started since October 2013 at Siddhpur Care Centre. Every Tuesday and Every Thursday (Restarted since December 2019), GCRI sends an expert team which consist of Oncosurgeon, Gynecologist, Radiotherapist Doctor and other Para medical staff at Siddhpur Cancer Care Centre.

The activities carried out at Siddhpur Cancer Care Centre during April 2019 to March 2020 are as following tables.

**Siddhpur Sanjeevani Rath Camp**

No. of Camps during April 2019 - March 2020	57
Number of beneficiaries attended	585
Head and Neck Examinations	425
Breast Examinations	100
Cervix Examinations	77
Other Sites Examinations	28
Suspicious cases referred to GCRI	113
Head and Neck	91
Breast	7
Cervix	14
Other Sites	1

Total Pap test: 17, Total Mammography: 107

**Follow-up of camp patients:** Community oncology department is doing very noble task of doing regular follow-up of patients who are referred to GCRI during camp for further management. In this year, 10 patients found diagnosed with cancer during screening and they are on treatment.

**Day Celebration:** Department is taking active participation in celebration of different days like World No Tobacco Day, World Cancer Day, National Cancer Awareness Day etc. The objectives of these celebrations are:



- I) To create awareness about cancer among common people
- ii) To motivate people about screening of common cancers (Oral, Breast and Cervix)
- iii) To sensitize people against tobacco hazards.

Following are the reports of various day celebrations organized during April 2019 to March 2020.

**Breast Cancer Awareness Programme:** A breast cancer awareness lecture for patients and their relatives was conducted by Dr. Rohini Patel from Community Oncology Department in the premises of new building of GCRI on April 24, 2019. To spread the breast cancer awareness, pink gas balloons were blown in the sky by the patients and their relatives.

**World No Tobacco Day:** On the occasion of World No Tobacco Day - May 31, an awareness lecture was organized at the Airforce Gandhinagar by Community Oncology Department. More than 50 Air force staff members participated in the event and took pledge to stay away from the tobacco.

**World Cancer Day:** The Gujarat Cancer & Research Institute, Ahmedabad had celebrated the World Cancer Day on February 4, 2020 in a grand way by gathering 100+ cancer survivors. The theme of the world cancer day for three years (2019-21) has been declared as “We can, I can” by Union for International Cancer Control (UICC).

On World Cancer Day, GCRI has organized a community gathering of 100+ cancer survivor patients, who have more than 5-year disease free status at Asmita Bhavan Hall, Civil Hospital Campus, Ahmedabad. We have called Dr. Jyanti S. Ravi, Principal Secretary, Health & Family Welfare department as the chief guest for this occasion. All the patients were felicitated by GCRI dignitaries and were given a Shawl as a memento. More than 20 cancer patients have delivered a speech sharing their own experience about defeating cancer. At the end of the programme, all cancer patients were given a helium balloons which they have blown together, spreading a loud and clear message about cancer victory.



## C. GYNAECOLOGICAL ONCOLOGY

**Professor and Head, Head of Unit I & III:** Dr Shilpa Patel  
**Professor and Deputy Director Head of Unit II & IV:** Dr Pariseema Dave  
**Professor Practicing and Head of Unit II till October 2019:** Dr Ava Desai  
**Professor Practicing and Head of Unit III till June 2019:** Dr Meeta Mankad  
**Professors:** Dr Ruchi Arora, Dr Bijal Patel  
**Associate Professor:** Dr Chetana Parekh  
**Assistant Professor:** Dr Mona Shah



**Clinical Services:** The department offers services in following areas (1) Well Woman Clinic for early detection of gynecological malignancies, especially Pap's smears for cervical cancer. (2) Colposcopy Clinic: The Colposcopy clinic is run with the help of a state-of-the-art Zeiss colposcope with teaching aid. Colposcopies are performed and Colposcopic directed biopsies are taken. Total 81 Colposcopies were performed. (3) Conservative management of pre-invasive cervical cancer by Large Loop Excision of the Transformation Zone (LLETZ). It is one of the first centers in India to have established the facilities of LLETZ, which is considered the best method for the diagnosis and treatment of premalignant cervical

lesions. During the year, 9 Large Loop Excision of the Transformation Zone were performed. (4) Referral Center for diagnosis and management of all premalignant and invasive gynecological malignancies such as cervical cancer, endometrial cancer, trophoblastic disease, ovarian tumors and vulvar carcinoma. Hysteroscopy: Institute has 'Stryker hysteroscope' with monitor for diagnosis and hysteroscopic guided biopsy.

Details of Work Done	Number of Patients
OPD Patients	New case :3198 Old cases :15143
Pap Smear	Pap Smear : 1026 LBC : 1712 Camp : 3125
Cervical Biopsy	1908
Vulval Biopsy	53
Endometrial Aspiration	450
Colposcopy	81

Procedure	Number	
	Unit I & III	Unit II & IV
Radical Hysterectomy + BPLND	03	07
Laparotomy for Ovarian Tumors	158	175
Staging Laparotomy for Endometrial Cancer	29	35
Radical Vulvectomy + Groin Dissection	3	5
Other Major Surgeries	50	72
Total Minor Surgical Procedures	231	
Major Surgeries	537	

**Academic Activities:** Regular lectures and teaching programmes are conducted for Resident Doctors and Fellows in the department in the form of case presentation, and journal presentations. The department also participates in GCRI academic meetings.

**Major Achievements:** **Dr. Shilpa Patel** has served as NBE Assessor for DNB gynaecological oncology. She was invited as faculty at AROICON 2019 held by GCRI at Ahmedabad during November 28 - December 1, 2019.

**Dr. Pariseema Dave** has served as Associate Editor of 'Indian Journal of Gynecologic Oncology' and as Chief Editor of 'Gujarat Cancer Society Research Journal'. She also attended 9<sup>th</sup> Annual Meeting of National Cancer Grid in TMC, Mumbai on March 9-10, 2019 as Delegate. She served as NBE assessor for

DNB gynaecological oncology. She served as Peer reviewer in several national and international PUBMED journals.

**Public Services:** The gynecological department conducts a well woman clinic daily at the hospital especially for early detection of pre-invasive and invasive cervical malignancy. Pap's smears and Colposcopy are performed free of charge. Biopsies are taken at nominal charge.

**Camp Activities:** Camps for early detection are conducted at various places in Gujarat including organizations such as BSF, Air Force, Armed Forces, ECHS Polyclinic Airport, Cost Guard, Gandhinagar etc and distant places like Surendranagar, Nadiad, Porbandar, Rajkot etc. Total 113 camps organized at various places in this year. Total Pap smears taken in camps are 3125.



## D. MEDICAL AND PAEDIATRIC ONCOLOGY

**Professor Emeritus:** Dr Pankaj Shah, Dr Shilin Shukla

**Professor:** Dr Asha Anand

**Professor, Head & Chief of Medical Oncology Unit I:** Dr Harsha Panchal

**Professor & Chief of Medical Oncology Unit II :** Dr Apurva Patel

**Professor & Chief of Medical Oncology Unit III :** Dr Sonia Parikh

**Associate Professor In charge of BMT (Part time practicing):** Dr Sandip Shah

**Assistant Professors:** Dr Akansha Garg, Dr Nitin Joshi, Dr Kajal Shah

**Junior Lecturer - Pediatrician:** Dr Chinmay Doctor

**Psychiatrist:** Dr Rohan Kusumgar

**Gastroenterologist:** Dr Sachet Chandak, Dr Pinakin Shah

**Pulmonologist:** Dr Smit Patel

**Medical Officer - BMT:** Dr Kamlesh Shah, Dr Kinnari Patel



**Clinical Services:** The department of Medical Oncology was established in 1972 and nurtured by stalwarts like Dr. Pankaj M. Shah, Dr. Kirti M. Patel, Dr. Shilin N. Shukla, Dr. Bharat J. Parikh and Dr. Shailesh Talati. The goal of the department is to provide best possible comprehensive medical treatment even to patients with low socio-economical background maintaining scientific attitude and humane approach. It has dedicated medical and pediatric oncology wings, BMT services and clinical trial services.

The department of Medical and Paediatric Oncology provides comprehensive care for adult and paediatric patients with solid tumours and haematological malignancies. Every year approximately 6000 new and refer adult patients are registered under medical department and approximately 55000 patients receive curative or palliative chemotherapy either indoor (127 beds) or in day care center (46 beds). About 18000 minor procedures are performed annually.

The Indumati Kinariwala Paediatric Oncology center was established in 1992 and it was first of it's kind in India to give care to pediatric patients in an ambient environment. Numbers of cancer patients registering in paediatric center per year are approximately 1286. The center also has special OPD for care of central lines (PICC and Hickman catheter).

The Department of Medical Oncology renders services to adult & paediatric patients.

**Indoor Beds:** Adult 76, Paediatric 25, Leukemia 22, BMT 4, Medical ICU 3+2 (Total 132 Beds)

**Academic Activities:** We run Daily afternoon academic session for DM students which include case presentation, journal club and other oncology topics under guidance of faculty, regularly conduct CME on oncology for undergraduate and post graduate students of B.J. Medical College, invite faculty for guest lectures and telecast of lecture series on webcast.

Details of Work Done	Adult patients	Pediatric patients	Total
Clinical cases	63216	16321	79537
New + refer	4933	1158	6091
Old	58283	15163	73446
Procedures: Total	9924	5316	15240
Bone Marrow Aspiration + biopsy	5198	1558	6756
Others (intrathecal, plural & ascitic fluid aspiration)	4726	3758	8484
Chemotherapy: Total	43052	5448	48500
Day care chemo – Room no. 7	42499	5448	47947
Day care chemo special ward	553	-	553
BMT: Total			45
Autologous:			18
APML:3, HD:10, Neuroblastoma :2			
MM:3			
Allogenic			27
AA:6, AML:8, HD:1, Thalassemia Major: 3,			
CML:3, ALL:6			

The Department runs DM Medical Oncology Super-specialty Course attached to B. J. Medical College and Gujarat University. The course started in 1991 with intake of 4 students per year which has increased to 10 students per year since 2010. There are 10 First Year DM Residents, 10 Second Year DM Residents and 10 Third Year Residents.

They actively participate in outdoor services, Chemotherapy planning, Day care procedures, Chemotherapy administration, Indoor Services, Emergency services, documentation – data entry, Case discussions, presentation of clinical topics and publications under guidance and supervision of the Teachers and Faculty. They prepare Dissertations under guidance of their Teachers. They also participate in Clinical Trials, BMT services and Education programs for the Rotators, Undergraduates and New comers.

**Research:** The department has undertaken research projects supported by GCS, ICMR, and Pharmaceutical companies.

**Research Activities:** Clinical trial wing is established since the inception of the full fledged department. There is more than 80 International and 35 National/GCS trails have been conducted. The entire faculty and clinical research staff is ICH-GCP trained. The Department works to ensure that opportunities for collaborative research are maximized

and that research is rapidly and efficiently translated into cutting-edge clinical treatment for cancer patients.

The department conducts regular training for its staff on Good Clinical Practice (GCP) workshop, Regulatory Guidelines, etc.

**Major Achievements: Dr. Harsha Panchal** delivered ‘cancer awareness talk’ on March 4, 2020, at DRM office, Naroda, Ahmedabad. She participated as a judge in the debate in AROICON 2019 held at Gujarat University Convention and Exhibition Centre, Ahmedabad during November 28 to December 1, 2019.

**Dr. Sonia Parikh** participated in Panel Discussion on ‘Oral cancer: Complex Problem but Simple Solution’ at Gujarat University on September 28, 2019. She attended Drager Meeting at Mumbai on July 1, 2019.

**Dr Akanksha Garg** was speaker at masterclass in hodgkin lymphoma, Bombay Hospital, Mumbai on October 19, 2019, at debate TPO-RAs vs splenectomy in chronic ITP, Young Hematologists’ Orientation Programme, SGPGI lucknow during September 14-15, 2019, and at Best of Lugano - 15<sup>th</sup> ICML, Mumbai, during August 3-4, 2019.

**Dr. Kajal Shah** participated as Faculty in 19<sup>th</sup> Annual International Conference RGCON 2020, New Delhi, during February 7-9, 2020.

## E. PALLIATIVE MEDICINE

**Professor & Head:** Dr Priti Sanghavi  
**Associate Professor:** Dr Bhavna Patel  
**Fellow:** Dr Ravi Umarania, Dr Manisha Singh  
**Dietician:** Ms Janki Patel, Ms Jinal Soni



**Inpatient Service:** Department of palliative medicine has been allotted 10 dedicated beds and 20 shared inpatient beds. Bed Occupancy Rate (BOR) is 80%. In-patients from other specialty are referred to us for pain management and symptom control. On rounds, we manage their symptoms and psychosocial issues.

**Outpatient Service:** We see about 80-120 patients per day in our OPD. We provide pain management and symptoms management. Counseling of all patients is done for psychosocial and spiritual issues. We do counseling to patients, family and caregiver regarding breaking bad news, collusion, disease status, prognosis, nursing care, dietary advice and for oral hygiene etc.

**Homecare Service:** We do 2-3 home-visits per day for 5 days a week (GCRI - 3 days and COC - 2 days), for home bound cancer patients residing within city of Ahmedabad and Gandhinagar.

**Hospice Service:** We admit cancer patients requiring palliative care and respite care at hospice, Community Oncology Center, Vasna. We visit our hospice center frequently as per requirement, to see admitted patients and for training of medical and paramedical staffs. There are 20 inpatient's beds at Hospice center. Bed Occupancy Rate of Hospice is 80-90%.

Details of Work Done	Number
OPD: New Patients	5900
OPD: Follow up Patients	14906
Procedures	1112
Indoor Patients attended	1274
Home Visits	318
Admissions to Hospice, Community Oncology Centre, Vasna	408

**Academic Activities:** Department is recognized for Certificate Course on 'Essential of Palliative Care' Part A. It was organized from November 1 to December

31, 2019. Total 14 candidates have received the training.

Department is recognized for 'Hands On' Certificate Course on 'Essential of Palliative Care' Part B for 10 days and dates were different for each candidate. Six weeks hands on training on Pain and Palliative Care have been provided to 3 candidates from September 2 to October 21, 2019. Training for Medical Use of Essential Narcotics provided to 18 candidates in April 2019 and 8 candidates in March 2020.

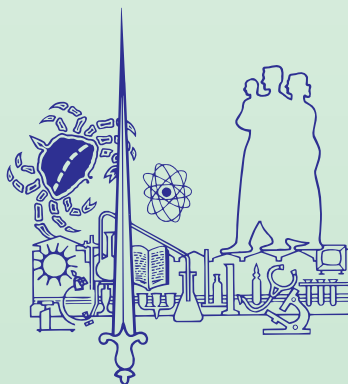
**Major Achievements:** **Dr Priti Sanghavi**, Professor and Head is a member of the committee to revisit the curriculum, the eligibility for the faculty teaching the MD students as well as the requirement and feasibility of DNB (Palliative Medicine) by Indian Association of Palliative care. She is the Editor 'International Journal of Oncological Nursing' (CCNE). She is Expert on advisory panel for Narcotic drugs authorizing and training, Government of Gujarat, India

**Dr Kikato Chishi**, Resident, has been awarded first prize (Team West Zone) in Quiz competition in 27<sup>th</sup> International Conference of Palliative care (IAPCON-2020) held at Gauwati during February 14-16, 2020.

**Research Activities:** Study of Morphine vs Methadone in the pain management of advanced cancer patients. Prevalence of delirium in advanced cancer patients in hospice centre and outcome after palliative intervention.

**Workshop Organized:** A Training workshop on 'Medical Use of Essential Narcotic drugs' for doctors from various institutes of Gujarat was organized in April 2019 and March 2020.

**Public Service Offered:** **Dr Bhavna Patel, Dr Mayur Ghoghari, Dr Kikato Chishi, Himanshu brother and Ms Queenjal Anandi** staff nurse took active part in education and training of nursing students during various training conducted by Department. Various trainings are conducted for the students from Gujarat Vidhyapith for psychological issues in cancer patients. They also took active participation in training of care givers arranged by Sanjivani NGO.



## F. PATHOLOGY

### F1. HISTOPATHOLOGY, CYTOLOGY, BIOCHEMISTRY, HAEMATOLOGY

**Professor & Head:** Dr Priti Trivedi

**Associate Professors:** Dr Dhaval Jetly, Dr Trupti Patel, Dr Biren Parikh

**Assistant Professors:** Dr Beena Brahmhatt, Dr Amisha Gami, Dr Majal Shah, Dr Jyoti Sawhney, Dr Ashini Shah, Dr Vibha Vyas, Dr Jahnvi Gandhi, Dr Nainesh Menat, Dr Shailee Mehta, Dr Rujuta Shah, Dr Satarupa Samanta



**Clinical Services:** The Department of Pathology has been upgraded with various equipments for Clinical Pathological Analysis Report work. It includes various services like Histopathology, Cytology, Haematology, Biochemistry, Blood Bank, Paediatric Oncology Haematology, Vasana Hospice Haematology, Immunohistochemistry and Microbiology. Pathology Department is the heart of our Hospital; central to any cancer management is

tissue diagnosis. Metabolic profile and Haematological alteration in a cancer patient plays a pivotal role in overall outcome. The department is well equipped with highly sophisticated microscopes attached with camera and computer for teaching and record purposes. It provides services of Histopathological diagnosis, frozen section diagnosis, haematological tests, biochemical tests etc. The department has an internet facility for tele-pathology.

Number and type of investigations carried out in various laboratories of Pathology Department during last year are as under.

#### Central Laboratory - Haematology

Details of Work Done	Number
CBC+DC	162169
DC Manually	82302
ESR	4559
Urine Examination	7541
Urine BSBP	7541
PS/Indices	4224
PT	32526
APTT TEST	32368
Plasma Fibrinogen	809
FDP	251
G6PD	357
FHB	4

Details of Work Done	Number
Osmotic Fragility	15
RC	3996
CSF Examination	338
Pleural Fluid	192
Ascitic Fluid	192
Other Fluid	21
Stool Examination	643
Bone Marrow	4687
Bone Biopsy	2315
PAS Stain	899
SUDAN Stain	918
IRON Stain	197



Details of Work Done	Number
LE Cell	1
Sickle Test	27
Sucrose Lysis	101

Details of Work Done	Number
LAPA Stain	0
D-DIMER	291
<b>Total</b>	<b>349484</b>

### Central Laboratory - Biochemistry

Details of Work Done	Number
Blood Sugar	45314
S. Acetone	73
BUN	88678
S. Creatinine	109914
S. Electrolytes	88348
S. Alkaline Phosphatase	57694
S.G.O.T.	74887
S.G.P.T.	74995
S. Total Protein	64152
S. Albumin	61428
S. Bilirubin Total	76228
S. Bilirubin Direct	76228
S. Uric Acid	24347
S. Calcium	33895
S. Magnesium	26942
S. Phosphorus	22700
S. Lactate Dehydrogenase (LDH)	33122
S. Amylase	1299
S. Lipase	269

Details of Work Done	Number
S. Iron ( FE )	625
S. TIBC ( IBCT )	563
S. Cholesterol	1815
Triglyceride	1801
HDL	1750
HbA1C	1788
ADA	170
Fluids	744
24 Hrs. Urinary Protein	12
S. Pro Electrophoresis	786
S. Immunofixation	674
S. IgG	624
S. IgA	608
S. IgM	601
S. Light Chain Kappa, Total	860
S. Light Chain Lamda, Total	855
Methotrexate (MTX)	1582
Cyclosporin (CYCLO)	390
<b>Total</b>	<b>976761</b>

### Endocrinology-Immuno Assay Tests

Details of Work Done	Number
Alpha Fetoprotein (AFP)	2798
Carcinoembryogenic Antigen (CEA)	5248
CA-125	4872
Prostate Specific Antigen (PSA)	1801
CA-19.9	3206
CA-15.3	187
Human Epididymal Protein 4 (HE4)	1164
Human Chorionic Gonadotropin (B- HCG)	1955
Follicle Stimulating Hormone (FSH)	776
Leutinizing Hormone (LH)	382
Prolactin (PRL)	344
Estradiol ( E2)	597
Testosterone (T)	278
Cortisol	316

Details of Work Done	Number
Growth Hormone (GH)	173
Thyroid Stimulating Hormone (TSH)	6700
Total T3	3361
Total T4	3362
Free T3 (FT3)	1322
Free T4 (FT4)	1565
Parathyroid Hormone (PTH)	247
Thyroglobulin (TG)	510
Vitamin B-12	1586
Vitamin D Total	1056
S. Ferritin	790
S. Folate	549
Total IM	45145
CHE	976761
<b>Total</b>	<b>1021906</b>

### Histopathology Laboratory

Details of Work Done	Number
Total number of biopsies	20388
Total slides of biopsies	24188
Total operative specimens	4209
Total slides of operative specimens	78107
Total biopsies & specimens for review	7146
Total number of slides (review specimen and biopsies)	21702

Details of Work Done	Number
Frozen specimens	2613
Number of slides	20333
Number of special stain + cyto block (Including Recut)	23684
Total Number of biopsies and specimens	24597
<b>Total</b>	<b>168014</b>

### Cytology Laboratory

Details of Work Done	Number
PAP smear	2870
FNAC	3753
Fluid cytology + cyto block	4332

Details of Work Done	Number
Outside / camp pap smears	3626
<b>Total</b>	<b>14581</b>

**Academic Activities:** Practical / Theory training to Doctorate students/ Doctors for “DM” degree, post-graduate students / doctors for M.D. degree, Post graduate students / doctors for DCP and post-graduate students / doctors coming from various other hospitals (senior resident). Observers, fellows and rotators come

from various local hospitals. Undergraduate lectures for MBBS students at BJMC. Practical and theory training to post graduates students from Medical Laboratory Techniques Course. Maintenance of patient's record and statistical data analysis is done.



## F2. BLOOD BANK

**Blood Transfusion Officer:** Dr Rima Kusumgar  
**Medical Officer:** Dr Sneha Desai



**Clinical Activities:** Blood Bank collects blood from voluntary and replacement donors in the Hospital and outside Hospital by arranging the outdoor blood donation camps, collecting more than 15,000 Blood Bags per year. Blood grouping of the donors and patients is done and blood is supplied to the patients after cross-matching with latest technology. The Blood Bank is well equipped with all the modern equipment like Fully automated blood grouping and antibody screening machine, Column Agglutination

[Gel-technology], Electro chemiluminescence immunoassay for testing of transfusion transmitted disease testing, Apheresis machines, Blood Irradiator, Fully Automatic Component Separation Machine like: Opti-press, G5 and for leukoreduction of Components which prevents the blood transfusion reactions. In Apheresis procedures routinely plateletpheresis, therapeutic Apheresis and Peripheral Blood stem cell collection being done.

Details of Work Done	Number
<b>Donor Area</b>	
Blood Tapping	12684 + 1822
Replacement Donors	4891
Voluntary Donors	7796
Single Donor Platelet + other apheresis	1822
Outdoor Camps	93
<b>Transfusion</b>	
Whole Blood	250
PCV (Packed Red Cell)	18670
PC (Platelet Concentrate)	19987
FFP (Fresh Frozen Plasma) + Stored Plasma	3491
Single Donor Platelet	1822
Autologus & Allogenic B.M. Collection & Therapeutic Apheresis	65

Tests	For Patients	For Donors
Blood Groups (Automation)	24946	12684
Manual	26034	33862
Coomb's Test (IAT + DAT)		760+760
Du Test for weak antigen		1106
Cross Match		29887
HbsAg		14506
HIV		14506
HCV		14506
VDRL		14506
Malarial Parasites		14506

**Academic Activities :** MD (Transfusion Medicine) students from the BJ Medical College as well as Doctors and Technicians from all over Gujarat are

coming for training of component separation and apheresis procedures. Doctors and technicians from various blood banks come for training of apheresis especially stem cell collection and preservation.

**Major Achievement:** Dr Reema Kusumgar invited as a faculty for various training programmes organized by NACO. She also invited as technical

expert (resource person) by GSCBT for joint inspection of various blood bank for license. She opted training for NABH, Blood Bank assessor. She selected as Election Officer for the ISBTI Election, Gujarat Chapter for year 2020.

**Public Services:** Blood Bank has organized 93 blood donation camps during the year.



### F3. CLINICAL MICROBIOLOGY

**Professor & Head:** Dr Parijath Goswami  
**Assistant Professor:** Dr Foram Patel  
**Junior Scientific Officer:** Dr Nilima Desai



**Clinical Services:** The Head of the department manages mainly the Clinical Laboratory services for diagnosis of infections in cancer patients. The other Non-Clinical important aspects of hospitals are also managed like Infection Control Activities, FICTC (Facility Integrated Counseling and Testing Center) Activities, Biomedical Waste Management (BMW) Activities.

The Department of Microbiology has grown from 192-240 samples per year in 1989 to 1,15,871 samples currently and now it is strengthened by the advanced state of art instruments. This Department looks after the Diagnosis of Infectious diseases caused by bacteria, fungi, viral infections by serodiagnosis, and molecular diagnosis of the infection in cancer patients.

**Antibiograms:** Periodically antibiograms are taken out and issued to clinician for appropriate treatment of infections.

The following is the different samples received in the department:

Test	Test Type	Number
Culture & Antibiotic Susceptibility	Aerobic	4656
	Anaerobic	0
	Fungal	2969
	Blood (aerobic)	3071

Test	Test Type	Number
	<b>Total</b>	10696
Microscopy	Sp. Gram Stain	425
	H. pylori	33
	Z. N. Stain	561
	Pneumocystis Carinii Stain	15
	Stool for Ova/Cyst	0
	Wet preparation	365
	<b>Total</b>	1399
Serology	Widal Test	242
	C-reactive Protein	686
	CMV IgG test	103
	CMV IgM test	106
	HBeAg / anti HBeAg	422
	S. HIV	32415
	S. HBsAg	32514
	S. HCV	32337
	B2 Micro globulin	130
	anti HbS	417
	Hbc IgM	503
	Procalcitonin	2035
	Dengue test	331
	Malaria	322



Test	Test Type	Number
Serology	Clostridium defficile	60
	<b>Total</b>	102623
Molecular tests	CMV	660
	EBV	27
	HBV	177
	HCV	93
	HSV	19
	<b>Total</b>	976
Infection Surveillance	Surveillance in Critical Areas (No. of Times)	<b>177</b>
<b>Total</b>	<b>All Samples</b>	<b>1,15,871</b>

**Non-Clinical Services**

- 1 Dr. Parijath N. Goswami Professor & Head, Microbiology

**Infections Prevention and Control activities in GCRI**

**Infection Control Activities Staff**

- 1 Mrs. Indira Sunil Macwan Infection Control Nurse
- 2 Mr. Arpit Christian Infection Control Nurse

**History of activities of Infection control:** The concept of Infection prevention and control was brought to GCRI in 1992. Late Dr.D.B. Balar was the Head and Dr.Parijat N. Goswami, was the Secretary. The then Director, Dr.D.D. Patel was the Chairman of the HICC (Hospital Infection Control Committee). All Heads of the clinical departments were the members of the committee. A sub committee was formed for active working and problem solving in the institute on day to day basis, which is called Hospital Infection Control Team (HICT). On goingly the structure of the committee has been changing with the new coming directors. Other Directors who chaired the functioning of Infection Control and Prevention are Dr. Pankaj M. Shah, Dr. Shilin N. Shukla and Dr. R.K.Vyas.

**Training:** Ongoing training programs are being conducted for NABL purpose such that the staff is up to date in the knowledge.

**Other activities:** Monitoring practices done by CSSD & TSSU: The checks on surgical instruments cleaning, washing packing and sterilization process are done every day. Sterilization controls are done by using Process Integrator (PI) to make sure sterilization within the packs/dressing trays and drums. Chemical indicators are used to check the set time, pressure and

temperature and Biological Indicator (BI) are used to ensure spores as well as organism kill for sterility check.

For critical areas like OT, DSU, BMT, NICU, SICU, Post-op wards are frequently fumigated and surveillance done as per request.

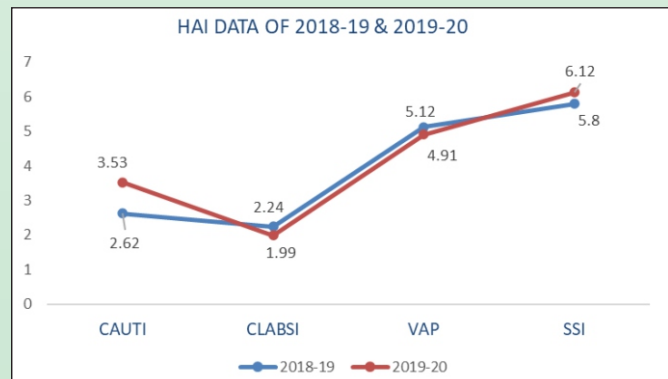
**Quality Indicators of Health care associated Infections (2018-2019 and 2019-2020):**

Overall, the infection rate was almost same in both the years (as per the Chart given below), i.e. 2019 and 2020. There was slight increase by in CAUTI by 0.91 catheter days, there was drop of CLABSI by 0.25 catheter days, drop in VAP by 0.21 ventilator days and increase in SSI by 0.32 %.

To maintain the quality indicators under control all the preventive measures of controlling the infections are being taken care by the Hospital Infection control team by daily rounds of the hospital by the Infection Control Nurses (ICNs) and daily giving feedback to the in charge of the ICC and taking appropriate measures on immediate basis. The CSSD and TSSU are also being monitored daily and any break down in the chain of preventive measures is being attended. Daily data are being collected on the hand hygiene compliance and the Quality Indicators.

**Structure of Biomedical Waste Management Team**

Biomedical Waste Management (BMW) Activities		
Staff –Actively involved		
1	Mrs. Leena Bhatt	Staff Nurse in-charge for monitoring waste management.
2	Mr. Jignesh Patni	Sanitary Inspector
3	Mr. Donald Christian	Sanitary Inspector
4	Staff of Raj Deep Contractor	



In 2008 when rules and guidelines for biomedical waste had become stringent, the then Director, Dr. Pankaj M. Shah, had taken keen interest and activities related to this were formed and followed. The committee for monitoring activities was formed and the rules and regulations are strictly followed since then. Daily rounds are taken to check proper segregation of waste. There are meetings and training which happen throughout the year for smooth running of the activities of waste management. The new biomedical waste management rules (March 2016 and amended rules 2018) have been given by and are as per standards of NABH and GPCB which are in the process of been followed by our institute.

**FICTC** (Facility Integrated Counseling and Testing Center) Active staff involved

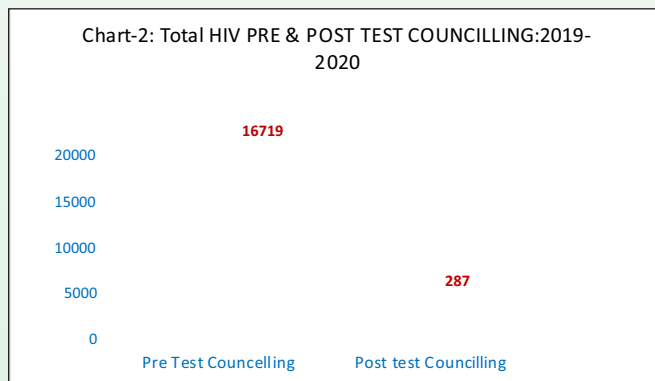
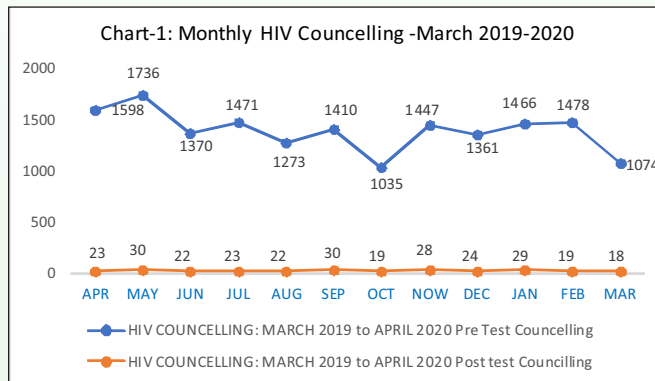
- 1 Mrs. Neelam Chauhan Counselor
- 2 Mr. Krunal Solanki Counselor

HIV counselling and testing services were started in GCRI in March 2015. It is a requirement of a health care facility to have one integrated counselling and testing centre for all groups of people. There is pre and post testing counseling for HIV testing because we are testing HIV for all our admitted patients (Medical, Paediatric, Surgical and Gynaec patients).

FICTC-GCRI is run by qualified and trained Counsellors who provide HIV counselling. Laboratory technician is also trained under the regional NACO centre of Civil hospital. This FICTCs is supported by the National AIDS Control Organization (NACO).

Counsellors: The counsellor is appointed from GCRI staff and he/she is trained from ICTC center of NACO, Civil Hospital. They focus on the following:

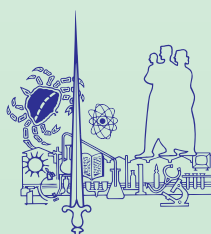
- Pre-test counselling
- If HIV test is positive, Post test counselling of the patient
- Send HIV positive patient to civil hospital for ART treatment



- Maintain records of all counselling done
- Communicate with Civil Hospital ICTC Center
- Be available in the FICTC as per the specified timings
- Ensure that strict confidentiality is maintained
- Ensure that all IEC materials such as posters, etc. are displayed prominently in the FICTC
- Report on a regular basis to Head of FICTC center of GCRI

The above two charts (1 & 2) depicts the HIV Pre test counselling of the patients taking cancer treatment at GCRI and also the Post Counselling.

**Public Services:** Infection Control Surveillance for GCRI. Infection Control Surveillance for Sadvichar Parivar Hospital (Outside GCRI). FICTC for GCRI patients.



## G. RADIODIAGNOSIS

### G1. IMAGING SERVICES

**Professor & Head:** Dr Hitesh Rajpura

**Professor:** Dr Himanshu Soni

**Associate Professor:** Dr Saumil Desai

**Assistant Professors:** Dr Drashty Chauhan, Dr Sanjeev Patel, Dr Sapna Patel

**Junior Lecturer:** Dr Tejal Shah

**Visiting Interventional Radiologist:** Dr Ajay Upadhyay ( 2days / week )

**Visiting Neuro Interventional Radiologist:** Dr Milan Jolapara



**Clinical Services:** The department is fully equipped with 500 MA Siemens X-ray units, OPG machine-Siemens, Siemens IITV guidance Fluoroscopy machine, Mammomat-Mammography machine, Siemens G-50-Doppler Machine, Two Doppler machines of GE - P5, Fuji CR system, Medsynapse-Department networking and data storage system, USG - High end Siemens USG S3000, Portable GE Ultrasonography, CT Somatom 16 Slice, Emotion 6 slice CT scan, Digital Mammography and 3T MRI Machine.

The Department of Radio diagnosis conducts radiological part of health checkup programme at COC vasna. X-ray, mammography and ultrasonography are performed at cheaper rates, for early detection of pathology. Department also support radiological part of various camp and health checkup programme managed by institute. The department also participates in GCRI academic meetings.

Details of Work Done	Number
X-RAY (Plates)	57973
IVP	-
USG	24797
USG Portable	640
CT scan	29518
Mammography	5817
Barium Swallow	98
USG Guided Biopsy	2930
CT Guided Biopsy	1165
Pleural Tapping	684

Details of Work Done	Number
PTBD	98
OPG	1977
RFA	16
CT Block	9
CT Angio	121
SRS	1
CT RT Planning	1350
Loopogram	13
Gastrograffin study	16
Needle localization	1



Details of Work Done	Number
Ascites Tapping	412
MRI	4489
Color Doppler	1059

**Academic Activities:** Regular lectures, case presentation, journal presentation, interesting case discussion conducted for resident doctors in the department.

Details of Work Done	Number
CT STB	17
PTBD Dressing & Checking	127

**Research Activities:** We are maintaining patients data and images. We are generating statistical data and studies which is published in national and international conferences.



## G2. NUCLEAR MEDICINE & PET CT DEPARTMENT

**Assistant Professor & Chief of Nuclear Medicine :** Dr Swati Rachh  
**Medical Officers:** Dr Zalak Pandya, Dr Shalu Kela  
**Nuclear Health Physicist / RSO:** Om Prakash

Details of Work Done	Number
Bone	1711
Cardiac	1
Parathyroid	26
Silography	0
Thyroid scan	193
Hida scan	36
MIBI Thyroid scan	0
DTPA scan	300
DMSA	217
DRCG	0
MIBG	14
EC scan	148
I-131 Whole body/Iodine scan	307

Details of Work Done	Number
DMSA-V scan	0
I-131 Toxicosis (10mci)	23
I-131 therapy	87
GI study	2
Liver scan	0
MUGA Scan	0
GE reflux (Milk)	2
Hynic-toc(octreotide scan)	19
Sentineal node imaging	160
Meckle scan	0
Samarium therapy	0
Lympho scintigraphy	4
PET-CT	2290

## H. RADIOTHERAPY

**Professor & Head:** Dr. U. Suryanarayan

**Professor:** Dr. Ankita Parikh

**Associate Professors:** Dr. Maitrik Mehta, Dr. Sonal Patel Shah

**Assistant Professors:** Niketa Thakur, Dr. Vinay Shivhare



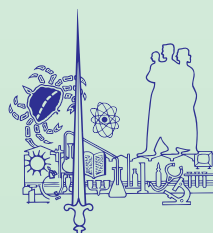
**Clinical Services:** The department runs Daily OPD from 9 a.m. to 5 p.m. Department is fully equipped with four Linear Accelerator with conformal facilities like 3 Dimensional Conformal Radiotherapy, Intensity Modulated Radiotherapy (IMRT), Image Guided Radiotherapy (IGRT), Volumetric Arc Therapy (VMAT), Stereotactic Radiotherapy (SRT), SRS, Extra Corporeal Radiotherapy, One cobalt 60 (Bhabhatron) teletherapy machine, Microselectron HD Brachytherapy machines, One X-ray simulator, One Siemens CT simulator in radiology department.

**Clinical Activities:** The department is treating patients from nearby cities and also from Rajasthan, Madhya Pradesh, Maharashtra and Uttar Pradesh.

**Academic Activities:** Regular lectures on Wednesdays and Fridays participated by all MD resident doctors and faculty and bed side case presentation and discussion daily conducted in the department. There is a departmental mass round every Tuesday and Friday. The department runs CMRT course for Medical Radiotherapy Technicians.

Details of Work Done	Number
New + Referral cases	643 + 6147
Linear Accelerators	4537
Cobalt Teletherapy	1791
Brachytherapy	1807

**Conference Organized :** AROICON 2019 at Ahmedabad was organized by Radiation oncology department. **Dr. U. Suryanarayan** was Organizing chairman of AROICON 2019.



## I. SURGICAL ONCOLOGY

There are six Surgical Oncology Units (I1), and six Superspeciality Oncology Units (I2-I7), which are Plastic Surgery Oncology (I2), Urosurgery Oncology

(I3), Musculoskeletal Onco Surgery (I4), Paediatric Surgery Oncology (I5), Interventional Therapy Centre (I6), and Ophthalmic Surgery (I7).



### General Surgical Oncology

Details of Work Done	Number
Major Surgery	3751
Minor Surgery	1855
Emergency Surgeries	377

### Superspeciality Oncology

Details of Work Done	Number of Surgeries
Plastic Surgery Oncology	90
Uro Oncosurgery	197
Musculoskeletal Oncosurgery	339
Paediatric surgery Oncology	176
Ophthalmic Surgery	5

## II. GENERAL SURGICAL ONCOLOGY

**Director & Professor:** Dr Shashank J Pandya

**Professor:** Dr Rajen Tankshali

**Associate Professors:** Dr Vikas Warikoo, Dr Mohit Sharma, Dr Abhishek Jain, Dr Supreet Bhatt

**Assistant Professors:** Dr Umank Tripathi, Dr Shailesh Patel, Dr Ketul Puj, Dr Priyank Rathod

**Clinical Services:** The department offers services in diagnosis, treatment and palliative care of the patients in the field of Head and Neck, Thoracic, Gastro-intestinal & Colorectal, Hepato-pancreato-biliary, breast and others. In the last year total 3751 major surgeries were performed by General Surgical Oncology. Different surgical teams occupy eight major surgical operation theatres. Day stay unit facilities are provided for biopsy, endoscopic procedure and evaluation of lesion before planning of surgery. The department is involved in diagnostic perioperative care, follow up and care of terminally ill patients.

**Academic Activities:** Regular lectures and teaching programmes are conducted for M.Ch Resident Doctors and Fellows in the department in the form of case presentation, seminar, journal presentation and region wise topic presentations. The department also participates in GCRI academic meetings.

**Research Activities:** Maintenance of patient's records and statistical data analysis is done. The data is presented in national level conferences and published in national/ international journals.



**Conference and Workshop Organized:** ONCOORTHOCON 2019 was a unique international orthopedic oncosurgery conference organized on October 20, 2019. There was workshop on Live Operative sessions i.e. Bone Biopsy & Saw Bone workshop of megaprosthesis. The Organizing Chairman was Dr. Shashank Pandya and Organizing Secretaries were Dr. Abhijeet Salunke, Dr. Jaymin Shah and Dr. Vikas Warikoo. The key highlight of this conference was plenary lecture by Prof. Gurpal Singh (Professor at National University Hospital Singapore) on 'Experience in Orthopedic Oncosurgery'. This conference had lectures by more than 10 national orthopedic onco-surgery faculties. This conference had over 100 national and international delegates. There were 5 oral presentations and 12 e-poster presentation during this conference.

Workshop on Lymphoedema management was arranged on World Lymphoedema Day (6 March 2020) by joint efforts of Surgical Oncology and Physiotherapy.

**Major Achievement:** Dr. Mohit Sharma was awarded with Indo American Cancer Association (IACA) Travelling Fellowship and visited Memorial Sloan Kettering Cancer Institute (MSKCC), New York in July 2019.

**Public Services:** Camps for early detection of cancer are conducted at various places in Gujarat and in the neighbouring states, including organizations such as ONGC, Air Force and Armed Forces etc.

## 12. RECONSTRUCTIVE (PLASTIC) SURGERY

**Visiting Plastic Surgeons:** Dr Hemen Jaju, Dr Hemant Saraiya, Dr Parag Kothari  
**Full Time Plastic Surgeon:** Dr Neerav Maharaja

**Clinical Services:** Apart from attending OPD once a week, reconstructive surgeries are done in main operation theatre twice per week. In this period total 90 surgeries were performed. Reconstructive surgeries for head and neck cancer patients and CFRs with the help of neurosurgeons are done. Screening of patients requiring prosthesis is done in OPD and they are guided about the artificial limbs and body parts. The department offers services to the patients from all over

Gujarat who require reconstruction of lost body parts and guides them about prosthesis.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch. students including dissertation submission and internally case presentations in the institutional clinical meetings.

## 13. UROSURGERY ONCOLOGY

**Visiting Urologist:** Dr. Keval Patel

**Clinical Services:** The department offers services in OPD, operation theatre and day stay unit. In this period total 197 surgeries were performed. They examine, investigate and treat patients of urogenital cancer.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch students including dissertation submission and internally case presentations in the Institutional clinical meetings.

## 14. MUSCULOSKELETAL ONCO SURGERY

**Assistant Professor:** Dr. Abhijeet Salunke

**Clinical Services:** It has two OPD days in a week. The operation theatre of Musculoskeletal Oncology is well equipped with ultra-modern instruments and equipments like oscillating saw, oscillating drill, universal assimilating drill, laminar air flow, radiolucent operation theatre table with all necessary

attachments, Image Intensifier Television (IITV) etc. In this period total 339 surgeries were performed.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch students including dissertation submission and

internally case presentations in the institutional clinical meetings.

**Major Achievements:** Dr Abhijeet Salunke was awarded with Young Surgeon Award by Gujarat Orthopedic Association at Annual Meeting in Rajkot

on February 8, 2020. He was invited to deliver a talk on Reconstruction in Pediatric bone tumors at 14<sup>th</sup> SAARC Federation of Oncologists International Cancer Conference, Kathmandu, Nepal in December 13-14, 2019.

## 15. PAEDIATRIC ONCOSURGERY

**Visiting Paediatric Surgeon:** Dr. Kumar Sumit Pramod

**Full time Pediatric Surgeon:** Dr. Rajan Garg

**Clinical Services:** The department offers its services to paediatric OPD, Day stay Unit and operation theatre for treatment of paediatric cancer patients. The department does the procedure of Hickman catheterization, a very important central catheter, for paediatric patients. The procedure is done under radiological guidance. In this period total 176 surgeries were performed.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch students including dissertation submission and internally case presentations in the institutional clinical meetings.

## 16. INTERVENTIONAL THERAPEUTIC CENTRE (IVTC)

**Full Time Gastroenterologists:** Dr Pinakin Patel, Dr Sachet Chandak

**Visiting Pulmo-Onco Critical Care Specialists:** Dr Keyur Patel, Dr Sujal Patel, Dr Smit Patel

**Clinical Services:** The IVTC department under surgical oncology department is high volume center for endoscopy services and includes advanced endoscopy like ERCP & Pleuroscopy. It conducted around 5465 procedure in period from April 2019 to March 2020 which includes more than 4000 diagnostic endoscopy and 1500 therapeutic

endoscopy as well as more than 400 advanced endoscopy procedure including ERCP. It covers many therapeutic procedures like dilatation, EVL, sclerotherapy, balloon dilations, polypectomy and endoprosthesis deployment. The department has also been imparting training programme for those interested in learning endoscopy.

Details of Work Done	Number
UGI scopy	2096
Colonoscopy	799
RT Insertion / I.L.R.T.	266/1
Dilatation	473
PEG/NJ	5
EVL	164
Glue/Sclerotherapy	20
Endoprosthesis	15

Details of Work Done	Number
ERCP / Stent removal	331/3
Bronchoscopy	1097
Pleuroscopy	17
EUS	101
SVE	30
Achallasia Bal. dil	11
Only biopsy	36

## 17. OPHTHALMIC SURGERY

**Visiting Ophthalmic Surgeon:** Dr. Vaibhavi Trivedi

**Clinical Services:** The Department offers services in OPD, Operation Theatre and Day Stay, thrice per

week. They examine, investigate and treat patients.

Details of Work Done	Number
Surgeries	5

## J. NEURO-ONCOLOGY & NEUROSURGERY

**Head & Full Time Neurosurgeon:** Dr Paresh Mody

**Full-Time Neurosurgeon:** Dr Nikhil Modi

**Part-Time Neurosurgeon:** Dr Navin Patel

**Medical Officers:** Dr K. G. Patel, Dr Pratik Makwana, Dr Nilam Patel



**Clinical Services:** The Department has two operation theatres well equipped with Laminar Air Flow and state of the art anesthesia system, Microscope with C.C.T.V. by Zeiss & Ultrasonic Surgical Aspiration by Valley Lab, IITV, Stereotactic Apparatus, Radio Frequency Lesion Generator, Intensive Care facilities with state of the art cardiorespiratory monitoring system, advanced ventilators and its own dedicated Central Sterile Supply Department. It has a facility of Neuronavigation (I.G.S.) of Medtronic Company, Intraoperative Ultrasound and Intraoperative Neurophysiological monitoring.

The Department is running OPD on Monday and Thursday every week where new patients are examined and the follow up patients are regularly attended in the OPD. The indoor references are regularly attended. The services to the poor patients for neurosurgical diseases are offered. The department also provides emergency services to the patients. The

regular teaching to the Medical Officers and Research Fellow is carried out during the ward round and operation. The clinical meeting of the Institute is being regularly attended by all the medical staff and the presentations are made in the clinical meeting as per the schedule. All the medical staff remains update with reading of the standard neurosurgical text books and journals at the library. The department is also having interactions with other departments of the hospital, e.g. Department of Surgical Oncology, Plastic Surgery, Medical Oncology, Endocrine, Biochemistry, Pathology, Radiation Oncology, Radiology and Physiotherapy. The medical staff is regularly presenting the clinical research paper at the national and international conferences. There is also potential to start DNB courses in the specialty of Neurosurgery at Gujarat Cancer & Research Institute. We have applied for the same under guidance and support of Director and Deputy Director.

Details of Work Done	Number of Patients
Selective	1
Supramajor	529
Major	134
Minor	80
Total	744

## K. SUPPORT SERVICES

### K1 - GENERAL ADMINISTRATION AND HUMAN RESOURCES



This department looks after two important key activities of the Institute. General Administration looks after the day to day general administration aspects related to hospital's administrative procedures like conducting meetings of various committees, executing the decisions taken by the committees, streamlining the administrative processes etc.

General Administration also supports various events arranged by the Institute for different purposes like Cancer Detection Camps, Cancer Awareness Exhibitions, Workshops, Seminars, Lectures, Conferences etc.

Major initiatives taken up by this department is implementing Computerized Grievance and Feedback Management Portal to resolve patients and their relatives' complaints as well as internal maintenance issues of the staff for engineering and computer services. System is interactive and complainant gets immediate response through SMS as well as concern department's Head / Officer or doctor or Matrons also get SMS alert about the complaint. On redressal of the complaints, the same is being updated in the system

and the whole process is being closely monitored by the General Administration for effective use.

General Administration also closely works with the computer section for successful implementation of various modules of software for hospital operations as well as administration.

Ultimately goal of the General Administration is to provide seamless services to the patients as well as employees for efficient delivery of patient care.

#### **Outsourcing Services :**

Human Resource Department looks after the Outsourcing Services, it includes Security Staff, Housekeeping staff, Utility Service Staff & Canteen facilities and diet for patients, and Biomedical Waste Collection. Department also manages Outsourcing Services of other Centers of GCRI (Saurashtra Cancer Care Centre, Rajkot & Siddhpur Cancer Care Center, Siddhpur). Department also looks after the process of tendering, evaluation, billing process of outsourcing services and regular monitoring of outsourcing services.

## HUMAN RESOURCES SECTION



Human Resources Section looks after the process of recruitment of new human resources, promotion, disciplinary action, training, maintenance of human resources' records, retirement process etc.

Human Resources Section also identifies different training programmes for capacity building of human resources in the Institute and appropriate staff

members are deputed to attend training outside the Institute. As a continuous effort of capacity building of staff, regular training programmes of nurses and other staff are also being arranged internally with the help of NGOs and other organizations. Human Resources Section aims at recruiting and retaining best of talents for the Institute's day to day operations.

## SECRETARIAL SERVICES SECTION



General Administration Department is also supported by the Secretarial Services. Secretarial staff which provides support for all general administrative activities like organization of workshops, seminars, conferences, publication of various materials,

preparing agenda and minutes of meeting, circulars, maintenance of important office records, correspondence and public relations with the visitors visiting Institute to meet higher officials as well as Institute's other activities.



## STORE AND PURCHASE SECTION



This section provides efficient services for supply chain management of consumable items required for day to day hospital operations. This section also conducts process of inviting e-tenders and fixing up the contracts as well as efficient management of the contracts. Timely supply and inventory management

in any hospital not only smoothen the day to day operations but also prevents unnecessary stocking of various items. This section continuously strives to improve day to day supply chain management. A new software has been procured to improve the efficiency of inventory management.

## ACCOUNT SECTION



The Functions of the accounting department in organization is very vital. It shows a financial picture, health and stability of the entity. The role and duties of the department include the following:

**Planning:** Prepare, Implement and evaluate Budget. Liaison with Government for budget and their allied matters.

**Money Out:** Making payment to all parties/staff within due date which convert into credit building of the organization.

**Money In:** Processing Incoming Payments and placement of fund for wealth maximization of the organization

**Reporting:** Prepare financial data and reports to comply with applicable laws. Make internal and external reporting in various forms.

**Controls:** To implement financial controls which avoids error, fraud, theft etc and run the organization as per approved policies.

## BIOMEDICAL ENGINEERING SECTION



Biomedical Engineering Section looks after the e-tender process for procuring new equipments, arranging technical committee, tender committee and purchase committee's meetings, contract management for procurement of new equipments, maintaining the schedule for maintenance of different high-tech medical equipments etc. Efficient management of maintenance schedule helps Institute in keeping down time of the different equipments' negligible. The section also supports hospital's different departments in maintenance and troubleshooting of their equipments. This section is also responsible for providing efficient services in day

to day management of operation theatres' equipments. They are also responsible for providing services at Siddhpur Cancer Care Centre and Rajkot Cancer Care Centre managed by Gujarat Cancer & Research Institute under an agreement with Govt. of Gujarat. This section also provides training to Bio-medical engineering students, Diploma Biomedical Engineering students and I.T.I. students coming from different institutes. They also look after the work of AMC/CMC of various equipments for proper functioning of medical equipments. They also maintain records and check list of AMC / CMC for preventive maintenance.

## ENGINEERING AND MAINTENANCE SECTION



Institute's buildings are old and some of the buildings are more than 50 years old which requires continuous

maintenance for civil, electrical, electronics and communication, air conditioning works etc.. This

section looks after the day to day maintenance of civil work, interior decoration, electrical installations, air conditioning, lift maintenance etc. This section also helps Institute in procurement of maintenance services as well as new construction work, electrical installations, air conditioning, communication, CCTV

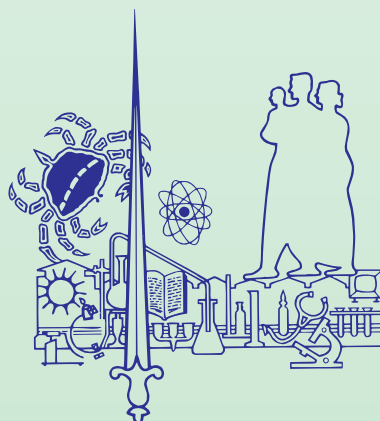
etc. This section also provides efficient services for estate management, doctors hostel and COC, Vasna campus as well as maintenance of Rajkot and Siddhpur Cancer Care Centre.

## INFORMATION TECHNOLOGY SECTION



The Information Technology section is enabler for better patient services. IT team develops an IT strategy that supports the organization's objectives and helps build a strong competitive advantage. IT team also ensures that the right level of IT resource is available to meet changing levels of demand. IT team is focused on adaption of latest technologies, infusing new and cost effective ideas for ease of operations and patient centric facilities.

Our road map is to move towards cloud based computing to minimize on premises IT infrastructure. Business Continuity Planning (BCP) and Disaster Recovery Planning (DR), Network security, Data Security, Data Protection, License compliance, Cloud based email system, Hospital Information Management System are the daily activity of Information Technology section.



## RESIDENT MEDICAL OFFICER SECTION



This section supports following services

- (1) Efficient management of Out Patient Department's services like Clinical Laboratories, Radiology etc.
- (2) Coordination of various services between the Institute, GCS Medical College, Hospital and Research Centre, Community Oncology Centre, Vasna, Home Hospice Service etc.
- (3) They provide guidance and assistance to the patients for their treatment as well as benefit of various government schemes like MA Yojana, MA Vatsalya Yojana, SC / ST scheme, School Health Programme, support by other NGOs, accommodation for patients' relatives around Civil Hospital campus etc.
- (4) They also conduct Patient Care Evaluation Meeting and decisions taken by the committee are conveyed to the management for execution and improvement of patient care services. Efficient support of Resident Medical Officers has helped large number of patients to avail financial assistance benefit of various government schemes for their treatment. We are happy that the largest number of cancer patients taking benefit of MA Yojana, MA Vatsalya Yojana.



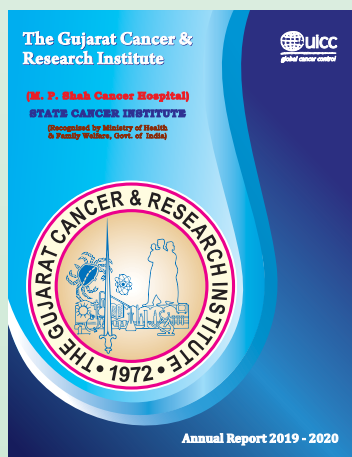
## K2. EDUCATIONAL GRAPHICS & MEDICAL PHOTOGRAPHY

Chief of Photography & Publicity: Rushi Patel



The department plays an important role in catering all the needs of Photography and Graphic work of the institute for the purpose of clinical, educational and public awareness activities. The department has digital in-house production facility of educational material. The annual department workload includes more than 2550 clinical and various institutional activities photographs. Besides this the technical manpower is contributing their expertise in designing institutional publication and printing materials e.g. designing Annual Reports, GCS Research Journal, Certificates

of various courses run by Institute, Website photo and graphic updates, staff identity cards, institutional circulars and cancer awareness posters for mobile exhibition. The department is also involved in facilitating preparation of presentation materials and handouts for scientific meetings. The department also participates in all the GCRI/GCS public awareness campaigns. Department staff also involves in designing community awareness material and make it understandable for lay people.



### K3. LIBRARY & INFORMATION SERVICES

**Librarian:** Nuri Kalita  
**Assistant Librarian:** Jagdish Gohel



**Activities:** The Library and Information Service division disseminates the physical & digital information to all Faculty members, Resident Doctors, Students, Para medical staff, and Research Scientists for support academic, research and patient care activities at GCRI. Bibliographic database of GCRI Library is managed through library automation SOUL 2.0 software with Web OPAC (Open Public Access catalogue) facilities. Through use of Web OPAC facility user can find any catalog information of GCRI Library. The feature of Web OPAC is search facility by specifying Author, Title, Subject and Year of publication or any other field. GCRI digital Library is

focused on the collection of digital objects that includes Institutional repository and online Databases which are used exclusively for library members in the GCRI campus. Institutional repository of GCRI has been created to collect, preserve and dissemination of the scholarly output of GCRI and managed through digital library. The library has played a key role in modern and digital activities by offering online retrieval activities using through Institutional IP and provide more efficient services including EBSCO Oncology full text Journal Database, UpToDate Medical Database (anywhere), Clinical Key, OVID and MEDLINE online retrieval database system.

Resources	Number
<b>Books</b>	
Books (2001 onwards)	1230
E-Books	249
<b>Journals</b>	
Current print journals (International: 35 & National: 9)	44
E-Journals	217
Back bound volumes journals (2001 onwards)	4459
<b>Databases</b>	
<b>EBSCO:</b> online full text e-journals database	115
<b>UpToDate:</b> Online Resources for Clinical Knowledge management Decision Support System	
<b>Ovid:</b> Online Wolters Kluwer LWW E-Journals	31
<b>Clinical Key:</b> E-resources for citation and full text	71



Resources	Number
<b>Audio-Video (CD and DVD)</b>	
<b>E-Books and E-journals</b>	89
Special collection on conference report of Live Surgery	
<b>SELSICON 2011</b>	71
<b>HPB Workshop 2012</b>	11
<b>UGICON -2017</b>	57
<b>Institutional Repository</b>	
PhD Thesis, DM, MCh, MSc, MD-Dissertation and Logbook (Softcopy & Hardcopy)	1015
Question paper for DM, MCH, MD, MLT and M.Sc Cancer Biology Course	2007 onwards
Clinical meeting data (Softcopy)	2010 onwards
Annual report of GCRI and GCS (Softcopy & Hardcopy)	1972 onwards
Statistical data /Cancer registry (Softcopy & Hardcopy)	2005 onwards
GCSMCH quarterly newsletter	2013 onwards
GCS Research journal	2013 onwards
Staff Scientific publication	2014 onwards

**Collection Building:**

GCRI Library is well equipped computer lab having 18 nodes board band internet facility and WiFi facility installed in the Library campus. During the FY 2019-2020 report major collection of GCRI library and Information services are added 78 new Oncology books, 35 Print International Journals & 9 National journals. Continue subscription for the online Medical database UpToDate and EBSCO. Two new computers were installed. The membership of Union for

International Cancer Control Institutional for the FY 2019-2020 was renewed. Access facility to OVID and Clinical Key in hospital campus through Hospital IP by forming part of NCG was given. For promotion of academic integrity through NCG platform GCRI Library support to check plagiarism activity through use of anti-plagiarism software 'iThenticate'. GCRI Library provides regularly E-mail Services to all staffs, residents and academic faculties for new arrival books, Journals and all hospital circular.

Details of Work Done	Number
Library visiting users record for reading and other activities	5931
Digital Library Users	9254
Issue / Return	788
Reprography services for Xerox, Print and Scan	45769
Article on request	55
Email Services (total no of circulated office circular)	328
Database uses statistics for EBSCO :4411 & UpToDate: 47651	52062

Details of Work Done	Number
Collection of Scientific Publication for Research output and Published articles	79
Collection of Thesis / Dissertation / Logbook	90
Research Help (Check plagiarism for Research article and Thesis report)	30
New computer adds in the Library computer lab section	02
Library GCRI regular: 65 and outstation: 3 membership	68

**Academic Activities:** Nuri Kalita, Librarian, has given presentation on October 10, 2019 in the GCRI Library Induction program on how to use various Library materials, Library policies and services to all new admitted DM & MCh Residents. She presented "Use iThenticate Plagiarism software to detect

duplication of research work on February 17-26, 2020. The training sessions was organized for PG teachers and Residents for searching, use and remote login on EBSCO, UpToDate, Clinical Key, OVID and PubMed online Medical Database on February 17-26, 2020.

## K4. NURSING SERVICES

**Matron Grade I:** Ms. Mona Darji



Details of Work Done	Number
Dressing	8501
Hickman Catheter Insertion	130
Port Catheter Insertion	200
Port Needle Insertion	2614
PICC Insertion	350
Certofix Insertion	320
Cavafix Catheter Insertion	-
Removal	417

Paediatric OPD	
Procedure	Total
New Cases	1242
Chemotherapy	5448
BT / PRP	1006
BMBX	1156
BBX	402
CSF	944
IT	2345
Plural Fluid Tapping & Ascitic Fluid Tapping	41

Chemotherapy, Blood Transfusion & Other Procedure Data	
Procedure	Total
Chemotherapy	42499
Blood Transfusion	3692
BMBX	3247
BBX	1951
IT	1720
CSF	863
Pleural Fluid Tapping	525
Ascitic Fluid Tapping	1244
Others	374





## K5. STOMA CLINIC

**Staff Nurse:** Ms. Nilamben Dave



**Clinical Services:** This is the first Stoma Clinic in Gujarat State started on March 4, 1983. In Stoma Clinic two Enterostomal Therapist, CET special qualified are working. The services offered by the department include: (1) Giving pre-operative counselling to the patients and their relatives, (2) Before operation, stoma marking to prevent future problem, (3) Selection of the stoma bags according to stoma size and applying on ostomy patients as well as faecal fistula drainage patients, (4) Giving detail

instruction and advise about stoma bags and stoma management to patients and their relatives and application of stoma bag, (5) Giving Post operative counselling to patients and their relatives, (6) Keeping detail record of Indoor and Outdoor patients like Colostomy, ileostomy, ileal conduit, faecal fistula and drainage, (7) Keeping detail record of various types of stoma bags for indoor and outdoor patients, (8) Teaching nursing students about colostomy care and (9) Keeping the records of cancer care patients.

Details of the Work Done	Number
New Patients	470
Old Patients	2392
Number of colostomy bags	24347



## K6. PHARMACY

**Chief Pharmacist & Store Officer:** Sweta Shah



**Services:** About 451 medicines are dispensed from pharmacy. The Pharmacy Computers are linked with all bill collection counters to know the day-to-day availability stock of medicines in pharmacy. Outdoors patients are supplied Medicines from ground floor Room No.25, and A-Wing of New Building of Gujarat Cancer & Research Institute. Indoor Patients are dispensed medicines from second floor (Dispensing Pharmacy for Indoor Patients) which remain opened from morning 8:00 am. to evening 8:00 pm. Day care patients are dispensed chemotherapy and its supporting drugs near to Chemotherapy ward of B-Wing of New Building of Gujarat Cancer & Research Institute defined as Chemotherapy Pharmacy. Pediatric patients are supplied medicines from Pediatric Pharmacy located at second Floor A-Wing of New Building of Gujarat Cancer & Research Institute. Online Pharmacy Management System has been

implemented successfully for the pharmacy requirement of Siddhpur Cancer Care Centre & Saurashtra Cancer Care Center, Rajkot. Online Ward Indents system is implemented successfully. All Department as well as wards for their Medicines requirement indents are supplied from Main store - first floor above Annapurna canteen. Management of Pharmacy – procurement, distribution and control of all pharmaceuticals used within the institution and for management of personnel within the pharmacy department is controlled by Main Pharmacy Store - first floor above Annapurna Canteen. Patients of MA Yojana, School Health Program and SC/ST category are supplied costly drugs as well as surgical items / Ortho-surgical items free of cost. To provide better services to patients, the pharmacy services hours are remains open from 8.00 am. to 8.00 pm.



## K7. PHYSIOTHERAPY

**Senior Physiotherapist:** Dr. Manali Shah  
**Physiotherapist:** Dr. Vibhuti Shah, Dr. Jasmin Khoja



**Clinical Services:** The department renders services to both indoor and outdoor patients. Indoor services are mainly for postoperative phase who had undergone surgery or for patients who are on ventilators or tracheotomy patients. Outdoor services are mainly consists of preoperative chest physiotherapy, pain relief and rehabilitation. All patients undergoing for major operation are referred to this department. Electrotherapy has various pain relief modalities. Rehabilitation of paraplegics, quadriplegics, amputees, orthopedic condition like total knee replacement, hip replacement, rotationplasty and peripheral nerve injury. The department also treat pediatric group of patients having above problems by giving them quality of treatment which helps them to live near normal life. The patients of trismus, radiation mucositis undergoing for BMT & lymph edema are treated over here.

**Academic Activities:** Clinical teaching to B. Physiotherapy students of different self-finance colleges. Students of Master in Physiotherapy in cancer rehabilitation enrolled for dissertation work under the guidance of Dr. Manali Shah. She delivered a lecture and conducted practical session on lymphedema management for students enrolled for Palliative Care certificate course on October 3, 2019.

**Workshop Organized:** Workshop on Lymphedema Management on World Lymphedema Day was organized on March 6, 2019.

**Public Service:** **Dr. Manali Shah** delivered lectures to students of cancer caregiver course.

Details of Work Done	Number
Indoor patients	24443
Outdoor patients	6023

## K8. PROSTHETIC & REHABILITATION

**Head:** Dr. Hemen Jaju  
**Assistant Medical Sculpture:** Dipan Soni



**Clinical Services:** The department prepares artificial limbs, organs, part of face and other prosthesis from silicone and Acrylic. A total of 1046

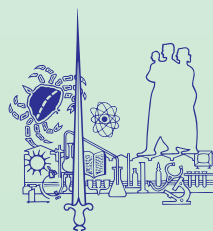
patients registered for prosthesis and of them 532 were new patients and 514 were follow-up patients.

Details of Work Done	Number
Eye Prosthesis	09
Lip Prosthesis	02
Cheek Prosthesis	04
Nose Prosthesis	01
Ear Prosthesis	01
Breast Prosthesis	1031

**Total numbers of prosthesis were 1048.**

**Academic Activities:** Total 26 MDS students attended the department for one month training for maxillo facial external prosthesis. Total 1754 MSc, BSc, GNM nursing students & tutors also come to

learn about External Prosthesis as it is one of the subjects of their curriculum. Patients are also given training of how to use the Prosthesis and are rehabilitated.



## L. Cancer Biology

Department of Cancer Biology was established in 1980 with primary research focus area on Translational Cancer Research. The department has now metamorphosed into 6 state of the art research

laboratories involved in basic and applied research in cancer biology and caters advanced diagnostic services for cancer patients.



**Research Activities:** Since its inception, the department is actively engaged in clinically oriented research projects and has contributed significant data having clinical implications for cancer patients. The major areas of research are Cancer aetiology, Signal transduction, Genomics, Cytogenetics, Pharmacogenomics, Proteomics, Stem cell biology etc. Based on our previous findings and our internationally published data, major ongoing research projects of the department are aimed to explore cancer biology (molecular signatures) with following major objectives:

- Identification of novel mutations/polymorphisms in Indian patient population
- Geographic variation in aetiological factors, genetic profile and proteomics/glycoproteomics profile between patients within India
- Identification of newer drug targets and drug discovery
- To develop Salivaomics approach as Non-Invasive tool for early detection of oral cancer
- Role of cancer biology to help cancer screening programmes at molecular level which is the need of the day in India

**Clinical Services:** More than 200 clinical investigations are done using advanced diagnostics and molecular techniques such as: Immuno-chemiluminescence enzyme assay, Conventional cytogenetics, FISH, Multi-color FISH, PCR, Real Time PCR, ELISA, Immunohistochemistry, Flow Cytometry etc.

**Educational Activities:** The department runs Post-Graduate Degree Courses such as M.Sc. (Cancer Biology), M.Phil. and Ph. D. (Life Science) in affiliation with Gujarat University.

## L1. IMMUNOHEMATOLOGY LAB

**Associate Professor & Head:** Dr. Hemangini Vora  
**Junior Scientific Officer:** Dr. Kruti Rajvik  
**Research Assistants:** Dr. Birva Raiya, Dr. Nupur Patel



**Clinical Activities:** The laboratory is well equipped with three Ventana Benchmark XT automated immunostainer for immunohistochemistry work and FACS Canto 10 colour flow cytometer for leukemia/lymphoma immunophenotyping. Evaluation of immunohistochemical markers for

differential histopathological diagnosis and predictive markers such as ER, PR and Her-2-neu has been carried out at the lab. By Flow Cytometry along with immunophenotyping of leukemia/lymphoma, PNH and CD34 enumeration has also been carried out.

Details of Work Done	Number of Tests	Number of Patients
<b>Immunohistochemistry</b>		
Immunohistochemistry Markers	31315	4524
Estrogen and Progesterone receptors (ER/PR)	2976	1420
Her-2-neu	1477	1404
<b>Total</b>	<b>35768</b>	<b>7348</b>
<b>Flowcytometry</b>		
Immunophenotyping	13759	1156
CD 34 percentage	110	55
PNH	235	47
<b>Total</b>	<b>14104</b>	<b>1258</b>
<b>Research work</b>		
Immunohistochemical markers	600	250
Markers by Flowcytometry	70	44
Array CGH	48	48
Transcriptome array	80	80

**Academic Activities:** The lab staff is involved in teaching of MSc Cancer Biology, MPhil and PhD students. Also participates in Cancer Biology Finishing

School. The division enrolls MSc dissertation students from other colleges, as well as MSc, MPharm, MDS and MD students as observers.

**Academic Activities:** The lab staff is involved in teaching of MSc Cancer Biology, MPhil and PhD students. Also participates in Cancer Biology Finishing School. The division enrolls MSc dissertation students from other colleges, as well as MSc, MPharm, MDS and MD students as observers.

**Research Activities:** The main areas of research include development of cost effective protein panel by CGH array and transcriptome sequencing of triple negative breast cancer (TNBC). Also the study of role of Notch receptors along with certain predictive markers in TNBC is underway. In addition identification of immune cells profile exists in TNBC tumour microenvironment both within the tumour and stromal regions and their clinical significance. A study of inflammation induced lymphangiogenesis in Head and Neck Cancer. In B-ALL, MRD evaluation is in progress.

**Major Achievements:** **Dr Hemangini Vora**, Associate Professor, attended SureMASTR workshop at Agilent Technologies, Niel, Belgium during June 12-16, 2019, and Advances in Clinical Flow Cytometry' held at Hinduja Hospital, Mumbai on July 26, 2019. She delivered a lecture entitled 'Array-CGH and Transcriptome profiling of triple negative breast cancer: GCRI study' in 8<sup>th</sup> Translational Cancer Research Conference at Banaras Hindu University, Varanasi during February 13-16, 2020.

**Ms Grusha Joshi**, Junior Research Fellow, received Best Poster Presentation Award in 8<sup>th</sup> Translational Cancer Research Conference at Banaras Hindu University, Varanasi during February 13-16, 2020.

## L2. TUMOR BIOLOGY LAB

**Assistant Professor and Lab Head:** Dr Nandita Ghosh

**Research Assistants:** Dr Toral Kobawala, Dr Kinjal Gajjar



**Clinical Services:** HLA Typing Tests for determination of Class I and II HLA typing antigen A-B-DR in patients who are recommended for bone marrow transplantation such as thalassemia and blood cancer. It is being performed by PCR SSP analysis, in a 96 well plate format, comprising different allele- or sequence- specific primer sets in each well along with the primers for amplification of sample's internal control. Evaluation of the results is done by agarose gel electrophoresis and subsequently interpreted using online software.

**Academic Activities:** The division participates in various academic activities of the institute. The division is actively involved in conducting lectures and practicals for students of MSc Cancer Biology.

**Research Activities:** At present, the research activities of this division are carried out in colorectal and ovarian cancer with the focus in studying the clinical relevance of multiple biologic markers by fully exploiting the genetic and epigenetic machinery involved in the initiation and progression of cancer

Details of Work Done	Number
<b>Clinical Work</b>	
HLA Typing Tests	217
<b>Research Work : Colorectal and Ovarian cancers</b>	
DNA extraction and PCR-RFLP	150
RNA extraction and Real-time PCR (miRNA)	370
IHC staining for dissertation	180

using recent technologies. It also aims in exploring drug resistance and toxicity biomarkers at molecular level. In colorectal cancer, BRAF and KRAS protein and allelic mutation analysis have been done to identify their clinical significance. Further, the interaction of microRNAs 21 and 221 in CRC as well as miR-200a and miR-200c in epithelial ovarian cancer have been evaluated to identify their subsequent relevance in patient management. Moreover, the role of different molecular markers like-KRAS, BRAF, B-catenin, PIK3CA, ERCC1, IGF-1R, PTEN, p53, as well as miR-200b and miR-141 of miR-200 family will be explored in epithelial ovarian cancer. The prevalence of the mRNA expression profiling of tumor DNA

mismatch repair (hMLH1, hMSH2, hMSH6, and PMS2) genes, methylation status of MLH1 gene and mRNA expression profiling of inflammatory cytokines (TNF, IL-6 and IL-1) will be studied in colorectal cancer patients. The information gained will be valuable for a more reliable estimate of tumor behaviour to predict patients' prognosis, identify individual patients who are at a low risk or high risk of relapse, detection of micrometastasis and monitoring the course of the disease. Subsequent to statistical analysis, the data is presented in national level conferences and published in national/international journals.

**Major Achievements:** Dr. Toral Kobawala, won award for Outstanding Poster Presentation at Carcinogenesis 2019 - Integrated approaches to understand and cure cancer held by Gujarat University, Ahmedabad, during September 27-29, 2019.

Ms. Bansi Ladani received best poster award at 8<sup>th</sup> International Translational Cancer Research Conference at Banaras Hindu University, Varanasi during February 13-16, 2020.

### L3. CLINICAL CARCINOGENESIS LABORATORY

**Senior Scientific Officer & In-charge:** Dr. Trupti Trivedi



**Clinical Services:** Diagnostic test of mutational analysis of IDH1/2 and IDH1R132H and promoter methylation of MGMT by Real-Time PCR from clinical samples of brain tumors since it is essential for molecular classifications and useful for prediction of treatment response.

**Academic Activities:** The laboratory is involved in various academic activities including conference presentations, weekly seminars conducted by the department. Theoretical and practical demonstration of molecular biology techniques for M.Sc. Cancer biology students, dissertation students, Finishing



Details of Work Done	Number of Tests	Number of Patients
<b>Clinical Work</b>		
IDH1/2 mutations	147	45
IDH1 R132H	93	31
MGMT promoter methylation	27	09
<b>Research work</b>		
MGMT promoter methylation by qPCR & dd-PCR	288	229
N-Myc and GAPDH amplification	90	73
ALK mutations	92	87
N-Myc and ALK CNV assay	32	30
IDH1 R132H mutations from plasma samples	31	31
TERT promoter mutation	50	30
BRAF & H3F3A mutations	70	66
Gene expression of PTCH1, SOX-2, CTNNB1, KCNA1, N-Myc, C-Myc, p53, NPR3	680	85

Details of Work Done	Number of Tests	Number of Patients
Protein expression of IDH1 R132H, MGMT, ALK, Nmyc, BRAFv600E, ku-70/80, TERT	164	164
<b>Total</b>	<b>1764</b>	<b>880</b>

School students and observers from various Universities. The laboratory actively participates in Conferences and CME organized by the Cancer Biology Department.

**Research Activities:** During last year total four research projects were proposed based on CNS tumors, including glioblastoma, medulloblastoma, neuroblastoma and brainstem gliomas. The study includes promoter methylation of MGMT gene from primary tumors and/or plasma samples and mutational analysis of IDH1 from tumors/cell free DNA samples, protein expression of MGMT, IDH1 R132H, N-Myc, ALK, BRAFV600E, ATRX, TERT in brain tumor patients. Detection of ALK CNV and N-Myc CNV by dd-PCR in neuroblastoma patients and various gene expression studies for molecular classification of medulloblastoma patients.

## L4. MOLECULAR ONCOLOGY

**Professor & Head, Cancer Biology Department:** Dr. Prabhudas Patel  
**In-charge & Senior Scientific Officer:** Dr. Jayendra Patel  
**Junior Research Assistant:** Dr. Shruti Patel



**Clinical Services:** Quantitative/Qualitative analysis of BCR-ABL fusion gene, PML-RAR fusion gene, JAK-2 V617F mutations and C-Kit mutation are performed by Real-Time Polymerase Chain Reaction. FLT-3 ITD and D835 mutation are carried out by Polymerase

Chain Reaction and restriction fragment length polymorphism method. Moreover, HPV 16 and 18 genotypes are performed by type specific Polymerase Chain Reaction.

Details of Work Done	Number
Real Time PCR for BCR-ABL Fusion Gene	1653
Real Time PCR for PML-RAR Fusion Gene	149
PCR For FLT3-ITD mutation	219
PCR For FLT3 D835 Mutation	219
Real Time PCR For JAK-2 V617F Mutation	76
Real Time PCR For C-KIT Mutation	18

**Academic Activities:** The lab staff members are involved in teaching of MSc Cancer Biology students. Theoretical and practical demonstration of various molecular biology and biomedical techniques were carried out for the students who came as observers from various universities.

**Research Activities:** The laboratory is actively involved in studying tobacco carcinogenesis and other molecular mechanisms involved in oral cancer. Research focus also includes study of glycosylation changes and associated molecular markers as the hallmark of cancer. Studies on prevalence of high risk human papilloma virus infection in cervical cancers in population from Gujarat West India. Further, evaluation of BCR-ABL independent and dependent (T315I mutation) molecular mechanisms in Imatinib resistance CML patients are also carried out. Our research interest also includes development and validation of biomarker panel for oral cancer (buccal mucosa) using high throughput technology. Moreover, our research lab is also working on glycosylation pathway, telomere length analysis, hTERT, antioxidants and interleukins on cancer patients and healthy individual. In GSBTM funded project, Transcriptome analysis of Buccal Mucosa Patients is also undertaken.

Major Achievement: **Dr. Prabhudas Patel** was selected as Executive Committee Member of society for Nutraceuticals and Chronic Diseases. He was elected as Executive Committee Member of Indian Association for Cancer Research for year 2019-2021.

**Ms. Disha Jethva**, Junior Research Fellow was felicitated for delivering motivating speech and outstanding contribution in society welfare in the field of science education on the occasion of Women Empowerment Celebration under the Ministry of Women and Children Development held on August 7,

Details of Work Done	Number
PCR For HPV-16 and HPV-18 Genotyping	04
Droplet Digital PCR for Research work	68
PCR for Research work	2658
Multiplex PCR for Research work	2943
ELISA for Research work	48
HPLC for Research work	64
Transcriptome analysis	130

2019 at Gandhinagar. She was awarded for outstanding poster presentation at Carcinogenesis-2019 Conference at Gujarat University, Ahmedabad during September 27-29, 2019.

**Ms. Kruti Mehta**, Junior Research Fellow was awarded first prize for oral presentation at Carcinogenesis-2019 Conference held at Gujarat University, Ahmedabad during September 27-29, 2019. She was awarded Dr. B. Nagrajan Memorial Lecture Award for oral presentation at 8<sup>th</sup> Translational Cancer Research Conference at Banaras Hindu University, Varansi during February 13-16, 2020.

Ms. Ashi Tobias was awarded best poster presentation at 8<sup>th</sup> Translational Cancer Research Conference at Banaras Hindu University, Varansi during February 13-16, 2020.

**Conference Organized: Dr. Prabhudas Patel** was Organizing Co-chair for Carcinogenesis 2019: Emerging Horizons in Oncology: Molecules to Therapeutics Global Perspectives and Challenges. "Carcinogenesis 2019". It was organized by a joint effort by The Gujarat Cancer & Research Institute, Carcinogenesis Foundation, USA, Manage Health Foundation and Gujarat University at Gujarat University, Ahmedabad, India during September 27-29, 2019. The conference brought together distinguished scientists and budding researchers to discuss and deliberate on the emerging trends and future prospects of prevention and treatment of cancer. There were around 300 delegates from all parts of India as well as from USA, Japan and Switzerland. The scientific programme included pre-conference workshops, keynote addresses, panel discussions, plenary lectures and invited lectures with leading participation of renowned and eminent scientists/clinicians from different distinguished institutes and universities. The conference was a grand success.

## L5. STEM CELL BIOLOGY LAB

**In-charge and Senior Scientific Officer:** Dr Franky Shah  
**Research Assistant:** Dr Apexa Raval  
**Junior Research Assistant:** Dr Jigna Joshi



**Clinical Services:** Lab is actively involved in Molecular diagnostic testing of EGFR exon mutation analysis from clinical samples.

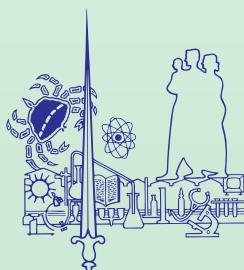
Details of Work Done	Number
EGFR Exon study	175

**Academic Activities:** The lab is involved in teaching of MSc in Cancer Biology students and PhD students. Theoretical and practical demonstration of various molecular biology and tissue culture-based techniques to the observers coming from various universities.

award at 8<sup>th</sup> International Translational Cancer Research Conference held at Banaras Hindu University, Varanasi, during February 13 -16, 2020.

**Major Achievement:** **Dr. Jigna Joshi**, Junior Research Assistant, received Best Young Scientist

**Ms. Mrunalini Gonsai** and **Ms. Nisha Vyas**, MSc Students, received outstanding poster presentation award at Carcinogenesis - 2019 Conference held at Gujarat University, Ahmedabad, during September 27-29, 2019.



## L6. CYTOGENETIC LAB

**Professor & Head, Department of Cancer Biology:** Dr. Prabhudas Patel  
**Senior Scientific Officer & In Charge Cytogenetic Laboratory:** Dr. Pina Trivedi  
**Research Assistant:** Dr. Dharmesh Patel  
**Junior Research Assistants:** Ms. Darshita Patel, Ms. Mahnaz Kazi



**Clinical Services:** Cytogenetics Lab is equipped with the state of art set up for research in the area of clinical cytogenetics. The division is actively engaged in research on various aspects of chromosomal abnormalities. Major clinical services provided by the division are for diagnosis and prognostication of patients with various hematological malignancies. The services are provided to the GCRI patients as well as other cases referred from various other places.

The department is equipped with Metafer, Automatic Metaphase and Interphase Scanning and Capturing System

Details of the Work Done	Number
Conventional Cytogenetic study of leukemia from bone marrow/Peripheral Blood	1189
<b>FISH tests for following genetic rearrangements</b>	
Translocation 9;22	772
Translocation 8;21	274
Translocation 15;17	120
Translocation 16;16/inversion 16	277
Rearrangements of 5q (two different loci)	50
Rearrangements of 7q (two different loci)	53
Copy number of X &/or Y	84
11q MLL	18
Translocation 12;21	02
<b>Solid Tumor FISH</b>	
Her-2 Neu FISH	125

for Karyotyping and FISH (Fluorescence In Situ Hybridization) assays. It has a fully motorized epi-fluorescence microscope (Imager.Z2) from Zeiss, Germany with special filter sets for FISH and multicolor FISH. It has IKAROS software for Karyotyping and ISIS software for FISH from Metasystems, Germany. The system also has facility of automatic spot counting for FISH analysis for hematological malignancies and solid tumor using Metacyte software. It has 7 review stations. For FISH automation, hybridization and, denaturation chamber (Thermobrite, Vysis, USA) helps in rapid and consistent FISH assays. Recently department has procured Epi Fluorescence Microscope for routine diagnostic work.

**Academic Activities:** The Cytogenetic Laboratory enrolled graduate and post-graduate students from universities across India for observership, project work and dissertation. Staff of the Cytogenetic Laboratory is involved in M.Sc. Cancer Biology course for teaching and practical work. Weekly seminars are also conducted in the Laboratory by staff members to discuss recent trends in cytogenetic cancer research.

**Major Achievements:** **Dr. Mahnaz Kazi**, awarded PhD degree for the 'Study of Wnt Signaling Pathway in Breast Cancer' in Life Science subject by Gujarat University under the guidance of Dr. Nandita Ghosh (Co-guide) and Dr. Hemangini Vora (Guide) in August 2019.

**Ms. Nehal Patel**, received prize for poster presentation at Carcinogenesis 2019 - Integrated approaches to understand and cure cancer held by Gujarat University, Ahmedabad, during September 27-29, 2019.

## M. EDUCATIONAL ACTIVITIES

The Institute is engaged in various types of educational and training programmes, like (M1) Activities of the Scientific Research Committee, (M2) Clinical Research Meetings, (M3) Complementary Training Programme to Formal Education, (M4) Formal

Educational Courses, (M5) GCS Research Journal, (M6) Hospital Day Celebration, (M7) Professional Training to Doctors and Scientists, (M8) Professional Training to Paramedics, and (M9) Staff Training - Intramural and Extramural.

### (M1) ACTIVITIES OF THE SCIENTIFIC RESEARCH COMMITTEE



The Scientific Research Committee (SRC) functions throughout the year to promote, facilitate and maintain the basic and applied research in the field of cancer under the chairmanship of Dr. Shashank Pandya, Director and Member-Secretary Dr. Asha Anand of the Scientific Research Committee. All the research activities were scrutinised, approved and monitored by the Scientific Research Committee and also by the Ethics Committee, both of which met regularly every three months or earlier, if needed. At the SRC meeting, scientific details and other routine issues are discussed. The office bearers of Scientific Research Committee also met in the year several times as and when required.

At the annual meeting, in the presence of invited experts, all the new proposals as well as the ongoing

projects were discussed and were approved with budgetary recommendations. Annual Meeting of the Scientific Research Committee was held once. However, there were as a part of the scientific review committee, 4 scientific meetings (April 29 and July 30, 2019 and March 3, 2020) were held. The Ethics Committee Meetings (May 18, September 7, October 26, 2019, and March 14, 2020) were held under the chairmanship of Hon'ble Justice Shri Bankim Mehta, Shri Narayanbhai Patel, and Member-Secretary Dr. Shilin Shukla. Invited members were Dr. Shashank Pandya, Shri Kshitish Madanmohan, Dr. R. K. Dikshit, Dr. Amar Vyas, Dr. Vishal Mishra, Ilaben Vora, Nuri Kalita, Dr. Pariseema Dave, Dr. Asha Anand, Dr. Prabhudas Patel, Dr. Hemangini Vora, Dr. Sonia Parikh and Dr. Franky Shah.

## **(M2) CLINICAL RESEARCH MEETINGS**

Regular bimonthly academic and scientific clinical meetings are arranged at Cama Hall, GCRI, on 2nd and 4th Saturdays. Dr. Franky Shah, Senior Scientific Officer, and Dr. Sonal Patel, Associate Professor, is the coordinator of this activity and during the year, a large number of clinical and research subjects are discussed. Total 11 Journal presentations, 11 Panel Discussion and 1 company presentation were discussed at the

Clinical Meetings from April 2019 to March 2020. Dr. Dipika Patel, Associate Professor of Anaesthesiology and Dr. Bijal Patel, Associate Professor of Gynaecological Oncology are the coordinators of Mortality Morbidity Case Meeting, and 11 Mortality Morbidity Case Meeting were discussed at the Clinical Meetings from April 2019 to March 2020.

## **(M3) COMPLEMENTARY TRAINING PROGRAMME TO FORMAL EDUCATION**

GCRI allows its infrastructural facilities and educative talent to be used by other educational Institutions to give professional training to their students, who come for observership, fellowship, project work, dissertation

work, PhD work, apprenticeship, etc. Total 253 students from 43 institutions had taken benefit of learning and training facility and opportunity provided by us.

## **(M4) FORMAL EDUCATIONAL COURSES**

The institute is affiliated to the BJ Medical College and Gujarat University, Ahmedabad, for subspecialty teaching in the subjects of Medical, Oncopathology, Gynecological Oncology and Surgical Oncology (DM and MCh courses) as well as postgraduate teaching in subjects like Microbiology, Radiodiagnosis,

Anaesthesiology and Radiotherapy (MD, DCP, DMRE, DA courses). The Institute is also recognized for MSc in Cancer Biology, MPhil in Life Sciences and PhD degree from Gujarat University (Life Sciences and Medical Microbiology).

## **(M5) GCS RESEARCH JOURNAL**

GCS Research Journal, a compilation of academic and research work of Research Divisions and Clinical Departments of the Gujarat Cancer and Research

Institute, regularly published by GCS. Dr Asha Anand, Dr Pariseema Dave and Dr Nandita Ghosh were the editors of the bulletin.



## (M6) PROFESSIONAL TRAINING TO DOCTORS AND SCIENTISTS (CONFERENCES, WORKSHOPS)

No.	Conference / Training / CME	Organizers	Date
1	2 <sup>nd</sup> Annual Orthopedic Oncology Conference ONCOORTHOCON 2019	Dr Shashank Pandya Dr Abhijit Salunke Dr Jaymin Shah Dr Vikas Warikoo Surgical Oncology	October 20, 2019
2	41 <sup>st</sup> National Conference of Association of Radiation Oncologists of India AROICON 2019	Dr U Suryanarayan Dr Pooja Nandwani Patel Radiotherapy	November 28 – December 1, 2019
3	Essentials of Palliative Care	Dr Priti Sanghvi Dr Bhavna Patel Palliative Medicine	November 1 – December 31, 2019
4	Lymphedema Management & Lymphedema Awareness Activity	Dr Manali Shah Physiotherapy	March 6, 2020

## (M7) PROFESSIONAL TRAINING TO PARAMEDICS (TECHNOLOGICAL COURSES)

Medical laboratory technology is one of the largest and most important professions that provide allied healthcare. The Technicians are skilled scientist who perform test that aid in the diagnosis and treatment of diseases. As vital member of the healthcare team, they assist physician during diagnosis and treatment of patients.

The main objective of the course is to train technologists and help them to get ample opportunities in a variety of laboratory setting. As there is a healthy demand of well qualified medical laboratory technologist, they can get placements in hospitals and laboratory settings, public health facilities, industrial laboratory and in colleges. Incharge Director **Dr. Shashank Pandya** is the Chairperson, and **Dr. Priti Trivedi**, Professor of Pathology is the Coordinator of the course. All the doctors of the Pathology, Microbiology and Blood Bank are involved in the teaching activities. All junior and senior technologists are involved in the practical training of the students.

It is one year full time course. BSc Microbiology and Biochemistry students are eligible for the course. Total fifty students are selected on the basis of BSc results and entrance test results.

MLT course of training is divided in to two parts: Theory and Practicals. Total 80 lectures are taken by the teaching staff doctors to cover the subject. So far practicals are concerned, each students has two months rotation in each subspecialty like Blood bank, Haematology, Biochemistry, Microbiology (clinical microbiology and immunology), Cytology and Histology. Each student has to work with a technologist on each table in the course of each single rotation where they are given adequate technical knowledge. Students are also expected to complete all the practical's and prepare a journal which at the end of the rotation must be signed by a senior doctor. They have to submit feedback form which includes their work efficiency, sincerity and regularity. This form is filled up by technologist and incharge doctor at end of each rotation. There are two types of assessment of the students, day to day assessment and regular assessment at the end of the year in form of theory and practical examination.

All the teaching activities, MLT course exam schedules and MLT course related activities are monitor by Coordinator. Coordinator reports all the activities of MLT course to the Chairperson and Co-chairpersons regularly.

**(M8) STAFF TRAINING – INTRAMURAL AND EXTRAMURAL**

No	Name	Designation	Division / Department	Subject of Training and Place	Date
<b>Community Oncology &amp; Medical Records</b>					
1	Mr. Vishal Patel Mr. Vahidhusain Mathakiya Mr. Ravi Parmar	Social Workers	DCOMR	Training workshop for staff of Hospital Based Cancer Registries and Patterns of Care and Survival Studies in Regional Cancer Centers at National Cancer Registry Programme, NCDIR-ICMR, ICMR Complex, Bengaluru	August 19-20, 2019
2	Dr. Anand Shah	Assistant Professor	DCOMR	PI meeting for 'Extended follow-up of the participants of IARC-India HPV vaccination study to evaluate the effectiveness of one, two and three doses of quadrivalent HPV vaccine in preventing cervical neoplasia'.	December 2019
				Review meeting of PBCS on Cancers of Breast, Cervix and Head & Neck cancers at NCDIR-ICMR, Bengaluru	February 13, 2020
<b>Gynaecological Oncology</b>					
3	Dr. Nidhi Gupta		Gynaecological Oncology	Clinical Observership at Memorial Sloan Kettering Cancer Centre, New York	September 30 - October 27, 2019
4	Faculties, MCh Residents, Fellows		Gynaecological Oncology	Robotic Surgery, GCRI	August 30–September 6, 2019
5	Faculties, MCh Residents, Fellows		Gynaecological Oncology	Hands on Training of laparoscopy Surgeries, GCRI	September 22 - 24, 2019
<b>Palliative Medicine</b>					
6	Dr Bhavna Patel	Associate Professor	Palliative Medicine	Evidence base management in Cancer, Mumbai	February 28 - March 1, 2020
<b>Blood Bank</b>					
7	Mr. Rajesh Rajvanshi	Jr. Lab Technician	Blood Bank	Hemovigilance program of India ( HvPI)	February 17, 2020
8	Ms. Apexa Modi	Jr. Lab Technician	Blood Bank	NACO training for blood bank technician for 5 days	January 2020
<b>Microbiology</b>					
9	Dipak Parikh Niral Kotadiya Nirali Chauhan	Sahayak Lab Technicians	Bacteriology & Serology of Microbiology	Instruments like mini-Vidas, Vitek-2 compact, ELISA automated system, Bactec-FX40 NABL, CME QAF	2019-20
<b>Radiation Oncology</b>					
10	Dr. Vinay Shivhare	Sr Resident	Radiotherapy	Head and Neck M.G.M.M.C., Indore	Aug 2019
11	Dr. Niketa Thakur	Assistant Professor	Radiotherapy	AROICON 2019, GCRI	28/11/2020



No	Name	Designation	Division / Department	Subject of Training and Place	Date
<b>Radiation Oncology</b>					
12	Dr. U. Suryanarayan Dr. Ankita Parikh	Professor	Radiotherapy	Training of Cyberknife machine, Madison, USA	January 2020
13	Dr. U. Suryanarayan Dr. Ankita Parikh	Professor	Radiotherapy	Training of Tomotherapy Machine Madison USA	February 2020
14	Dr. Heena Rathod Dr. Tejal Chaudhari Dr. Isha Shah	Second Year Resident First Year Resident	Radiotherapy	31 <sup>st</sup> ICRO PG Teaching Programme on GI Malignancy, Faridkot, Punjab	April 27-28, 2020
15	Dr. Shashank Shenoy	Second Year Resident	Radiotherapy	Essential narcotic drugs, GCRI	March 5-7, 2020 March 23-25, 2020
16	Dr. Rajal Shah	Second Year Resident	Radiotherapy	33rd ICRO PG Teaching Program, Pediatric Malignancies, Lucknow	October 12-13, 2019
<b>Surgical Oncology</b>					
17	Dr. Mohit Sharma	Associate Professor	Surgical Oncology	Memorial Sloan Kettering Cancer Centre, New York, USA	July 1 - August 2, 2019
<b>Cancer Biology</b>					
18	Dr Hemangini Vora	Associate Professor	Immuno-hematology Lab	Sure MASTR assay workshop: A Specialized workshop on BRCA1 and BRCA2 by Next Generation Sequencing-NGS by Agilent	June 12-16, 2019
19	Dr Hemangini Vora	Associate Professor	Immuno-hematology Lab	Seminar on Genomic analysis with CGH, Mumbai	February 28, 2020
20	Dr Prabhudas Patel	Professor	Molecular Oncology Lab	Sure MASTR assay workshop: A Specialized workshop on BRCA1 and BRCA2 by Next Generation Sequencing-NGS by Agilent Technologies at Neil, Belgium	June 12-16, 2019
21	Ms. Kruti Mehta	SRF-ICMR, PhD Student	Molecular Oncology Lab	Training program in cancer biology at Indian Institute of Technology (IIT) - Guwahati, Assam	August 5-30, 2019
22	Dr. Kinjal Patel	Research Associate - GSBTM	Molecular Oncology Lab	Seminar on Genomic analysis with CGH, Mumbai	February 28, 2020
23	Dr Nandita Ghosh	Assistant Professor	Tumor Biology Lab	IMPACT 2019 - implicated to Editors, peer reviewers, publishers and professionals involved in medical writing organized at Armed Force Medical College, Pune	September 13-15, 2019
24	Dr. Trupti Trivedi	Senior Scientific Officer	Clinical Carcinogenesis Laboratory	2 <sup>nd</sup> India Droplet Digital PCR Symposium, Courtyard Marriot, Mumbai	September 19, 2019
25	Dr. Jigna Joshi	Junior Research Assistant	Stem Cell Biology Lab	Basics of Bioinformatics at Gujarat Biotechnology Research Centre, Gandhinagar	January 6-10, 2020

## N. LION BHARAT KSHATRIYA COMMUNITY ONCOLOGY CENTRE

**Chief Executive Officer, Community Oncology Centre:** Dr. Geeta Joshi  
**Junior Lecturer in Radiology, Gujarat Cancer & Research Institute:** Dr. Tejal Shah



**Clinical Services:** (A) At Community Oncology Center, we provide health checkup services to health aware people. These health checkup plans are mainly focused on cancer related screening tests to diagnose different types of cancers in early stage. PAP test and mammography are the key features of health checkup plans to diagnose cervical cancers and breast cancers in women.

(B) Hospice Services: 20 Beds, in 5 cottages in campus, are allotted to the cancer patients in advanced stage of disease. They are given palliative

care by doctor and nursing staff. Counseling of patients and caregiver is done to address their psychosocial and spiritual issues. Many activities are planned to rehabilitate them. The aim is to improve Quality of Life of patients and family.

(C) Home Care Services: The Home Care services are provided by a Nursing Staff, Social Worker and Doctor. Patients and caregivers feel confident and supported, when they are looked after by Community Oncology Centre team at home. 96 patients were visited at home.

### A. Health Checkup

Total : 5486

Test	Total No. of Patients	Benign lesions	Suspicious malignancy	Confirmed Malignancy (FNAC/Biopsy)
Mammography	3430	1518	46	40
X - Rays Chest	3641	1669	06	07
USG Abdomen	3233	28	35	04
PAP Test	2404	00	00	00
FNAC at COC	02	00	00	01

## B. Hospice

Hospice Admission	404
Hospice Discharge/DAMA	348
Hospice Death	86
Transfer GCRI	06

### Academic Activities:

- Hands On Training was taken up for 108 GNM, 74 BSc and 22 MSc nursing students at Hospice throughout the year. They were posted at Hospice for two weeks training in batches of 20 students.
- 58 Elderly Care Assistance course participants are given practical training at hospice about nursing care and management, in three batches.
- Community Health Officers Training in Cancer screening, Palliative Care & Hospice was held twice this year. 80 Nurses and AYUSH doctors were participants.
- Hardik Chauhan, Nursing brother from Shree Krishna Hospital, Karamsad, underwent Hands on Training in Care of Hospice patients from November 14-28, 2019.
- Dr Disha, PG student from Dept of Community Medicine, GCSMC Hospital is doing dissertation on Study of QoL of Hospice patients at COC this year.
- “Hamrahi” Project: Two nurses from Australia visited hospice at COC. (APLI) Australia Palliative link International supports the posting of these nurses in India under project “Hamrahi”. They trained our nurses for various nursing care of hospice patients from January 24-31, 2020.

**Major Achievement: Dr Geeta Joshi**, CEO was felicitated for ‘Excellent Social Services (Health)’ by Sadvichar Parivar, Ahmedabad, on March 15, 2020.

**Workshop Organized:** A Training Workshop of Community Workers in “Safe abortion & Cervical Cancer Screening” was organized in collaboration of Chetna NGO, September 13 and 17, 2019.

### Public Services Offered :

- Cancer Exhibition: Community Oncology Centre is having ‘PRAYAS’ - a permanent cancer exhibition located on first floor of main building.

Exhibition Visitor	Total : 7414
• Medical - Para Medical	3417
• School and Colleges	1719
• Others NGO staff and Society	2278

### B. October – Breast Cancer Awareness Month:

On this day “Free Screening” program for BPL families women started with generous donation of Ms Tejal Kalpesh Shah, USA and later on Vanita Mehta Foundation, Mumbai. About 350 women will be benefited under this program.

### C. World Hospice & Palliative Care Day

This year a day long training of faculty of nursing colleges was organized. 30 tutors from various nursing colleges of Ahmedabad participated in the training. It was aimed at strengthening nursing education in palliative care and hospice, so that patients get good nursing care.

### D. “Tere Sur Aur Mere Geet” – A Musical Night evening: January 04, 2020

**GCS, GCRI, GCSMC and COC organized Tere Sur Aur Mere Geet – A Musical Night evening at COC campus. The aim was to acknowledge the kind contributions donors, well-wishers, patients and caregivers in serving cancer patients.**

### E. World Cancer Day: February 04, 2020

Every year World Cancer Day is celebrated at Community Oncology Center by arranging a drawing competition of school children. The aim is to create awareness about ‘Tobacco & Cancer’ in children and prevent them from possible evil of tobacco.

### F. World No Tobacco Day: May 31, 2019

World No Tobacco Day was celebrated at Community Oncology Center. 100 factory workers from Samarth Diamonds, Visnagar and staff members of LJ Institute, Ahmedabad visited the permanent exhibition on Cancer at COC, Vasna. They underwent cancer related health checkup free of cost.

### G. World Environment Day: June 05, 2019

Gujarat Cancer Society believes in contributing towards ‘Green Environment for better health’! As part of this, World Environment Day was celebrated by plantation of 150 plants in campus of Community Oncology Center on June 05 and June 18, 2019.

**H. “Uttarayan” – Patang Mahotsav: January 11, 2020**

Patang Mahotsav is a regular event of Gujarat Cancer Society celebrated every year at COC with ‘Cancer Vijayi’ Children. The children are given cap, goggles and special kites with Cancer and Tobacco messages printed on it.

**I. Cancer Detection Camp at Sarkhej: December 28, 2019**

Cancer can be cured if detected early is the punch line of Gujarat Cancer Society. It believes in early detection as very important part of Cancer Cure and supports

cancer detection camps in rural areas. One of such camp was organized at IKRAA Hospital, Sarkhej, in collaboration with Fight Cancer global, Cancer Aid Society and GCS, by COC staff.

**Research Projects:** Indian Institute of Public Health - IIPH has initiated a project on Prevalence of Human Papilloma Virus - HPV in urban women. For this project, the institute had selected COC as a center for HPV sample collection, last year. Screening of these women for breast cancer is also part of this project. We completed screening of 1000 women of 28 to 48 years of age group from Vasna ward.



## O. OUT - REACH ACTIVITIES

### Cancer Awareness Camps: 12 Camps 12 Places

Intas Company, GCRI New Building, Asarwa, Ahmedabad (24/04/2019); City Civil Court, Bhadra, Ahmedabad (10/05/2019); SMC Air Force Station, Vayushakti Nagar, Gandhinagar (31/05/2019); AOGIN, Gomtipur, Ahmedabad (01/08/2019), Mahagujarat Medical Society, Nadiad (04/08/2019); Gujarat Vidhyapith, Ahmedabad (26/08/2019); Pandit Din Dayal Upadhyay Town Hall, Vadodara (27/08/2019); Behrampura, Ahmedabad (25/09/2019); TRC Campus, Sector 20, Gandhinagar (21/10/2019), Ahmedabad Criminal Court's Bar Association, Law Library, Metro Court, Gheekantha, Ahmedabad (11/11/2019); Swasthya Samuday Kendra, Bhagyesh Nagar, Satadhar Society, Amraiwadi (27/11/2019); Chamanpura, Asarwa, Ahmedabad (11/12/2019)

### Cancer Detection Camps: 09 Camps 09 Places

AOGIN, Gomtipur, Ahmedabad (01/08/2019); BSF Head Quarter, Gandhinagar (04/09/2019); Behrampura, Ahmedabad (25/09/2019); Sector 13/B, Shakti Chowk, Gandhinagar, (09/11/2019); Swasthya Samuday Kendra, Bhagyesh Nagar, Satadhar Society, Amraiwadi (27/11/2019); Chamanpura, Asarwa, Ahmedabad (11/12/2019); Niramay Charitable Trust, Khatrej, Jethlaj, Gandhinagar (15/12/2019); Siddhpur Cancer Care Center, Patan (30/01/2020); Mangalam Hospital, Chandlodiya, Ahmedabad (01/02/2020)

### Cancer Detection Camps with GCRI SanjeevaniRath: 46Camps 44 Places

Kutch Kadva Patidar, Samajvadi, Savli, Baroda (07/04/2019); Military Hospital, Hanuman Camp, Shahibaug, Ahmedabad (14/04/2019); Gayatri Pragyapith, Visnagar (21/04/2019); Sindhu Hospital, Kubernagar (05/05/2019); Shri Umiya Sanatan Samaj Vadi, Vadagam, Dhansura (19/05/2019); Red Cross Bhavan, Police Line Road, Dahod (09/06/2019); Santokba Medical Centre, managed by SRKKF, Lathi, Amreli (16/06/2019); Umiya Bhavan, Sanskriti Pathshala, Petlad, Anand (23/06/2019); Shree Kutch Kadva Patidar Samajvadi, Odhav, Ahmedabad (23/06/2019, 07/07/2019); Shree Kutch Kadva Patidar Samaj, 18 Timbar Market, Harni, Vadodara (14/07/2019); Shree Raj Saubhag Ashram, Saubhagpara, Sayla, Surendranagar (21/07/2019); Sachi Maternity and Sonography Hospital, Jashodanagar, Ahmedabad (28/07/2019); Mahagujarat Medical Society, Nadiad (04/08/2019); Balol PHC, Mehsana (10/08/2019); Shree Kutch Kadva Patidar Samajvadi, Sherpura, Dholka (11/08/2019); Gayatri Shaktipith, Kalol, Gandhinagar (18/08/2019); Kubershwari Mahadev Temple, Manjalpur, Baroda (25/08/2019); Gayatri Shaktipith, Vijapur, Mehsana (01/09/2019); Panchot Trust Hospital, Panchot, Mehsana (05/09/2019); Gayatri Shaktipith, Odhav, Ahmedabad (08/09/2019); Indian Red Cross Society, Dahod (06/10/2019); Kabir Mandir, Manjalpur, Vadodara (13/10/2019); PT Mirani Hospital, Godhra (03/11/2019); Vishvakarma Gujar Suthar Ni Vadi, Jamnagar (16-17/11/2019); Anand Uma Bhavan, Anand (24/11/2019); Gram Panchayat Building, Mogari, Anand (01/12/2019); Primary Girls School, Gamdi, Anand (08/12/2019); Don Bosco High School, Manjalpur, Baroda (15/12/2019); Bharat Vikas Parishad, Ghodasar, Ahmedabad (22/12/2019); Saraswati Kanya Vidhyalaya, Kalikund, Dholka (25/12/2019); Bharat Vikas Parishad & Kalyan Kendra, Ranip, Ahmedabad (29/12/2019); Cottage Hospital, Upleta, Rajkot (04/01/2020); Umiyavadi, Vadodara (05/01/2020); Pramukh Swami Sanskrutik Kendra (Samajwadi), Piplag, Nadiad (11/01/2020); Jiviba School, Ghodasar, Ahmedabad (19/01/2020); Dr. Hiralal C. Sheth Red Cross Bhavan, Dahod (26/01/2020); Jyoti Vidhalay, Ridrol, Gandhinagar (02/02/2020); Sanskruti School, Alkapuri, Sihor, Bhavnagar (02/02/2020); Bhilwara, Rajasthan (09/02/2020); Air Force Station, Vadsar, Gandhinagar (15/02/2020); Raj Saubhag Satsang Mandal Sanchalit Samuhik Arogya Kendra, Sayla, Surendranagar (16/02/2020); Bhrama Kumari, Ohm Shanti Bhuvan, Bajwa, Baroda (23/02/2020); G.M.E.R.S. Medical College and Hospital, Dharpur, Patan (29/02/2020); Station Medicare Centre, HQ SWAC (U), Air Force, Vayu Shakti nagar, Gandhinagar (05/03/2020); Med Store, Military Hospital, Ahmedabad (06/03/2020); Setu Charitable Trust / Arogya Kendra, Kharaghoda, Surendranagar (15/03/2020)

**Cancer Detection Camps with Siddhpur SanjeevaniRath: 04Camps 04 Places**

S.N.D.T Mahila College, Krishnanagar, Bhavnagar.(15/09/2019); Shree Kutch Kadva Patidar Samajwadi, Halol, Panchmahal (22/09/2019); Shree

Umiya Mataji Sansthan, Unjha, Mehsana (26/12/2019); Kukas, Lakhwad, Mehsana (29/12/2019)

**Cancer Detection Camps with Rajkot SanjeevaniRath: 05 Camps 05 Places**

Dhava, Gir Somanth (26/05/2019); Santokba Medical Centre managed by SRKKF, Lathi, Amreli (16/06/2019); Shree Pujit Rupani Memorial Trust 'Killol', Bhavnagar Road, Rajkot (27/07/2019); P.D.U.

Civil Hospital, Rajkot (28/12/2019); Shree Lohana Keshriya Maharajwadi, Kalwad Road, Rajkot (03/02/2020)

**Blood Donation Camps: Places 76 Camps : 83**

Perfect VIP Tecno Solution Pvt Ltd, Prahladnagar, Ahmedabad (05/04/2019); SBI Main Branch Laldarwaja, Ahmedabad (12/04/2019); IIT, Gandhinagar (20/04/2019); Gayatri Vidhyapith, Visnagar (21/04/2019); S. K. Farm House, B/H Rajpith Club, Ahmedabad (27/04/2019); CMS Compny, Vadaj, Ahmedabad (04/05/2019); Ashirwad Farm, Near BRTS Junction, Surat (09/05/2019); Gam Aroda, Sabarkantha (12/05/2019); Norkest Brand Pvt Ltd, Khokhara, Ahmedabad (15/05/2019); RapidOps Solution Pvt Ltd, Sola, Ahmedabad (17/05/2019); Skoda Show Room, Rajkot (18/05/2019,10/10/2019); Vishal Residency, Anand Cross Road, Ahmedabad (19/05/2019); Iscon Impiriyo, Near Star Bazar, Ahmedabad (23/05/2019); Amikunj Society, Nava Naroda (25/05/2019); Kiran Jems, Surat (31/05/2019, Two Camps); Sankalp School, New Nikol, Ahmedabad (08/06/2019); Panba Hospital, Nikol, Ahmedabad (14/06/2019); GCRI, Room No 63, Ahmedabad (14/06/2019); Rameshwar Temple, Gandhinagar (16/06/2019); J.K. Laxmi Cement, Moti Bhojan, Kalol (20/06/2019); Adani Gas Limited, Maninagar, Ahmedabad (24/06/2019); Adani Wilmar Limited, Mithakhali Six Road, Ahmedabad (24/06/2019); Adani Gas Limited, Usmanpura, Ahmedabad (24/06/2019); Shanti Junior School, Motera, Ahmedabad (13/07/2019); Parin Motors, Rajkot (18/07/2019); Bhamasa Hall, Modasa (20/07/2019); Titenium City, Prahladnagar, Ahmedabad (24/07/2019); GIDC, Sanand, Ahmedabad (29/07/2019); Nav Gujarat College, Ahmedabad (31/07/2019); Devnandan Supreme, Vastral, Ahmedabad (04/08/2019); IIM, Vastgrapur, Ahmedabad (11/08/2019); Gayatri Shaktipith, Kalol, Gandhinagar (18/08/2019); Gayatri Shaktipith, Vijapur, Mansa (01/09/2019); Ganesh Bunglows, Thaltej, Ahmedabad (01/09/2019); ITI Gandhinagar (05/09/2019); Katar, Surat (08/09/2019); Gayatri Parivar, Odhav, Ahmedabad (08/09/2019); Rasalpur,

Siddhpur (08/09/2019); Vivekanand College, Raipur, Ahmedabad (12/09/2019); Sukrut-2, Paldi, Ahmedabad (15/09/2019); CEPT University, Navrangpura (17/09/2019); Ganpat University, S.G. Highway (19/09/2019); Daliya Institute, Kanera, Kheda (27/09/2019); Kalapinagar, Asarwa, Ahmedabad (24/09/2019); Nilkanth School, Morbi (29/09/2019); Polytechnic Ambawadi, Ahmedabad (11/10/2019); Swaminarayan Mandir, Gandhinagar (13/10/2019); Gam-Pakhajan, Bharuch (20/10/2019); Borvav, Gir Somnath (31/10/2019); Pet Pooja, Prahladnagr, Ahmedabad (28/11/2019); Latipar, Morbi (12/11/2019); 52 Sarvoday Vidhyamandir, Ramod, Rajkot (30/11/2019); MICA Campus, Guma, Ahmedabad (01/12/2019); Cap Jaimini, Raheja Sez, Koba, Gandhinagar (03/12/2019); Kankariya Karnival, Ahmedabad (28/12/2019,30/12/2019); Vishnu Prasad Granthalay, Vejalpur, Ahmedabad (22/12/2019); Kukash, Mehsana (29/12/2019); Samanvay Hights, Rajkot (29/12/2019); Mukhini Vadi, Isanpur, Ahmedabad (22/12/2019); SKF, Bavla, Ahmedabad (03/01/2020); Gagan Vihar Flat, Khanpur, Ahmedabad (05/01/2020); Atmiya University, Rajkot (22/01/2020); Zoology Department, Gujarat University, Ahmedabad (26/01/2020); Aolhabib Estate, Narol, Ahmedabad (26/01/2020); Shyam Mandir, VIP Road, Surat (26/01/2020); Tankar, Latipar, Morbi (05/01/2020); High Court, Sola, Ahmedabad (28/01/2020); Piramal Enterprise, Matoda, Ahmedabad (29/01/2020); Ridrol, Mansa, Gandhinagar (02/02/2020); L.M. Pharmacy College, Gujarat University (03/02/2020); CRPF Gandhinagar (14/02/2020); Rajpath Club, SG Highway, Ahmedabad (16/02/2020); Swaminarayan Ground, Naranpura, Ahmedabad (25/02/2020, 26/02/2020); Nirma University, S.G. Highway, Ahmedabad (05/03/2020,06/03/2020); Surjit Society, India Colony, Ahmedabad (08/03/2020); Kumar Chatralay, Gulbai Tekra, Ahmedabad (15/03/2020)

## P. FUNCTIONING OF COMMITTEES

### Internal Management Committee

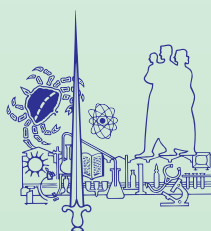
Dr. Shashank Pandya	Chairman, Director
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Bhavna Shah	Member, Professor & Head Anaesthesiology
Dr. Priti Trivedi	Member, Associate Professor of Pathology
Dr. Priti Sanghvi	Member, Professor, Palliative Medicine

### Purchase Committee

Mr. Prashant Kinarivala	Chairman
Dr. Shashank Pandya	Member Secretary, Director
Mr. Kshitish Madanmohan	Member
Mr. Divyesh Radia	Special Invitee
Mr. Kaushik D. Patel	Special Invitee
Mr. Narendrasinh Chavda	Special Invitee

### GCRI Website Committee

Dr. Shashank Pandya	Chairman, Director
Mr. Raju Parikh	Member Secretary, Head IT Section
Ms. Meena Bhatia	Coordinator, Officer on Special Duty, Administration
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Dhruvi Desai	Member, RMO
Dr. Pariseema Dave	Member, Professor, Gynaecological Oncology
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology
Dr. Pooja Nandvani Patel	Member, Associate Professor, Radiotherapy
Dr. Foram Patel	Member, Assistant Professor, Microbiology
Mr. Ratnakar Shrotriya	Member, Medical Record Keeper, IT Section
Mr. Rushi Patel	Member, Chief Photo & Publicity Section
Mr. Jagdish Gohel	Member, Assistant Librarian, Library Section



**Library Committee**

Dr. Shashank Pandya	Chairman, Incharge Director
Dr. Asha Anand	Professor In-charge, Professor & Head, Medical Oncology
Ms. Nuri Kalita	Member Secretary, Librarian
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. U. Suryanarayan	Member, Prof. & Head of Radiotherapy
Dr. Prabhahbai Patel	Member, Professor & Head, Cancer Biology
Dr. Dhruvi Desai	Member, RMO
Dr. Trupti Trivedi	Member, Senior Scientific Officer, Cancer Biology

**GCS Research Journal Committee**

Dr. Shashank Pandya	Chairman, Director
Dr. Asha Anand	Editor, Professor & Head, Medical Oncology
Dr. Pariseema Dave	Editor, Professor, Gynaecological Oncology
Dr. Nandita Ghosh	Editor, Assistant Professor, Cancer Biology
Dr. Prabhahbai Patel	Associate Editor, Professor & Head, Cancer Biology
Dr. Nayan Jain	Associate Editor, Dean, Life Sciences, Gujarat University
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology
Dr. Harsha Panchal	Member, Professor of Medical Oncology

**Govt. Scheme Implementation Committee**

Dr. Shashank Pandya	Chairman, Director
Dr. Janmesh Shah	Member Secretary, Assistant Professor, Community Oncology
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Dipak Rathod	Member, RMO Class - I
Dr. Dhruvi Desai	Member, RMO
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Mr. Himanshu Patel	Member, Medical Record Officer



### ICS Cancer Cure Fund

Dr. Shashank Pandya	Chairman, Director
Mr. Bhadresh Shah	Member Secretary, Accounts Officer
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Apurva Patel	Member, Professor, Medical Oncology
Dr. Dhruvi Desai	Member, RMO
Dr. Janmesh Shah	Member, Assistant Professor, Community Oncology
Mr. Himanshu Patel	Member, Medical Record Officer

### Patient Care Evaluation Committee

Dr. Shashank Pandya	Chairman, Director
Dr. Dhruvi Desai	Member Secretary, RMO
Mr. Divyesh Radia	Member
Ms. Mona Darji	Member, Matron Grade - I
Ms. Manisha Katara	Member, Matron Grade - II

### Fire Safety Committee

Dr. Shashank Pandya	Chairman, Director
Mr. Divyaraj Jadeja	Member Secretary, Electrical Engineer(Maintenance), Engineering Section
Dr. Dipak Rathod	Member, RMO Class - I
Dr. Dhruvi Desai	Member, RMO
Dr. Jayendra Patel	Member, Senior Scientific Officer, Cancer Biology
Mr. Jayapal Nair	Member, PS to Director
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section
Mr. Sanjay Patel	Member, Electrical Engineer, Engineering Section
Mr. Arpit B. Christian	Member, Assistant Staff Brother, Nursing Section

### Disaster Management Committee

Dr. Shashank Pandya	Chairman, Director
Ms. Mona Darji	Member Secretary, Matron Grade - I
Dr. Dipak Rathod	Member, RMO Class - I
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Mr. Sanjay Patel	Member, Electrical Engineer, Engineering Section
Mr. Om Prakash	Member, Nuclear Health Physicist, Nuclear Medicine
Mr. Divyaraj Jadeja	Member, Electrical Engineer (Maintenance), Engineering Section
Mr. Jayapal Nair	Member, PS to Director

**Women's Development Cell**

Dr. Meeta Mankad	Chairperson, Professor, Gynaec Oncology
Ms. Meena Bhatia	Member Secretary, Officer on Special Duty, HR Section
Dr. Foram Patel	Joint Secretary, Assistant Professor, Microbiology
Dr. Pooja Nandwani Patel	Member, Associate Professor, Radiotherapy
Dr. Kinna Shah	Member, Assistant Professor, Anesthesiology
Dr. Rima Kusumgar	Member, Assistant Professor, Blood Bank
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology
Ms. Mona Darji	Member, Matron Grade - I
Ms. Shivani Rajput	Member, Financial Assistant, Account Department
Ms. Ketki Kathiyara	Member, Biochemist, Blood Bank

**SC / ST Cell**

Mr. Narendrasinh Chavda	Chairman, Hospital Administrator
Ms. Mona Darji	Member Secretary, Matron Grade - I
Dr. Dhruvi Desai	Member, RMO
Dr. Rekha Solanki	Member, Assistant Professor, Anesthesiology
Ms. Manisha Katara	Member, Matron Grade – II
Mr. Vijaykumar S. Ninama	Member, Biochemist, Blood Bank

**Internal Complaints Committee**

Dr. Pariseema Dave	Chairperson, Professor, Gynaec Oncology
Dr. Hemangini Vora	Co-chairperson, Associate Professor, Cancer Biology
Ms. Meena Bhatia	Member Secretary, Officer on Special Duty, HR Section
Dr. Geeta Joshi	C.E.O., COC Vasna
Mr. Narendrasinh Chavda	Member (Legal), Hospital Administrator
Dr. Himanshu Soni	Member, Associate Professor, Radiology
Ms. Mona Darji	Member, Matron Grade - I
Ms. Pratima Desai	Member, NGO, Social Worker (External)

**Information Technology Committee**

Dr. Shashank Pandya	Chairman, Director
Mr. Narendrasinh Chavda	Member Secretary, Hospital Administrator
Mr. Raju Parikh	Assistant Member Secretary, Head IT Section
Mr. Haren Shah	Hon. External IT Advisor (Invitee)
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Mr. Jayapal Nair	Member, PS to Director
Mr. Ratnakar Shrotriya	Member, Medical Record Keeper, IT Section

### Hospital Infection Control Committee

Dr. Shashank Pandya	Chairman, Director
Dr. Parijath Goswami	Member Secretary, Professor & Head, Microbiology
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Apurva Patel	Member, Professor, Medical Oncology
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Jayshree Thakker	Member, Associate Professor, Anaesthesiology

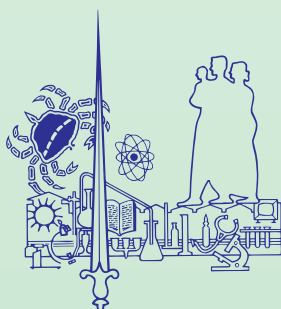
### Committee to Review - Out Source Services

Mr. Narendrasinh Chavda	Chairman, Hospital Administrator
Mr. Hitesh Bihola	Member Secretary, HR Officer, HR Section
Dr. Dhruvi Desai	Member, RMO
Ms. Mona Darji	Member, Matron Grade - I
Ms. Meena Bhatia	Member, Officer on Special Duty, Administration
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Dr. Sanskar Dave	Member, Assistant Hospital Administrator, Legal Section

### Institutional Review Committee Dissertation / Thesis / Publication / Conference Presentation

Dr. Shashank Pandya	Chairman, Director
Dr. Harsha Panchal	Member Secretary, ( Clinical-Dissertation & Thesis), Medical Oncology
Dr. Nandita Ghosh	Member Secretary, ( Research-Dissertation & Thesis), Cancer Biology
Dr. Trupti Trivedi	Member Secretary, (Publications & Presentation), Cancer Biology
Mr. Narendrasinh Chavda	Member ( Legal), Hospital Administrator
Mr. Kshitish Madanmohan	Member (NGO representative, Social Worker), Secretary GCS
Dr. Amar Vyas	Member, Department of PSM, BJMC
Dr. Bhavna Shah	Member, Professor & Head Anesthesiology
Dr. Hemant Shukla	Member, Professor, Surgical Oncology
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Pariseema Dave	Member, Professor, Gynaecological Oncology
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology
Dr. Priti Sanghvi	Member, Professor, Palliative Medicine
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology
Dr. Himanshu Soni	Member, Associate Professor, Radiodiagnosis
Dr. Trupti Patel	Member, Assistant Professor, Pathology
Dr. Foram Patel	Member, Assistant Professor, Microbiology
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology

<b>Scientific Research Committee</b>	
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Dr. Asha Anand	Member Secretary, Professor & Head, Medical Oncology
Dr. Hemangini Vora	Assistant Member Secretary, Associate Professor, Cancer Biology
Dr. Sonia Parikh	Assistant Member Secretary, Associate Professor, Medical Oncology
Dr. Devendra Patel	Member, Former Director, Professor Emeritus
Dr. Pankaj Shah	Member, Vice President, GCS
Dr. Kirti Patel	External Member, Dean, GCS Medical College
Dr. Shilin Shukla	Member, Former Director, Professor Emeritus
Dr. Geeta Joshi	Member, C.E.O., COC Vasna
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Sunil Trivedi	External Member, Professor, Senior Scientific and Academic Coordinator, Ahmedabad
Dr. Rakesh Rawal	External Member, Professor, Life Science, Gujarat University, Ahmedabad
Dr. Sandip Shah	Member, P.T. Associate Professor & Incharge of BMT
Dr. Shilpa Patel	Member, Professor & Head, Gynaec Oncology
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Parijath Goswami	Member, Professor & Head, Microbiology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology
Dr. Priti Trivedi	Member, Associate Professor, Pathology
Dr. Saumil Desai	Member, Associate Professor, Radiology
Dr. Ava Desai	Member, Professor, Gynaec Oncology
Dr. Bhavna Shah	Member, Professor, Anaesthesiology
Dr. Foram Patel	Member, Assistant Professor, Microbiology
Dr. Nandita Ghosh	Member, Assistant Professor, Cancer Biology
Dr. Trupti Trivedi	Member, Senior Scientific Officer, Cancer Biology
Dr. Jayendra Patel	Member, Senior Scientific Officer, Cancer Biology
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology
Dr. Pina Trivedi	Member, Senior Scientific Officer, Cancer Biology



<b>Ethics Committee</b>	
Hon'ble Justice Shri Bankim N. Mehta (Rtd.)	Chairman
Mr. Narayanbhai R. Patel	Vice Chairman
Dr. Shilin N. Shukla	Member Secretary
Dr. Prabhobhai Patel	Assistant Member Secretary
Dr. Pariseema Dave	Assistant Member Secretary
Shri Kshitish Madanmohan	Member
Dr. R. K. Dikshit	Member
Dr. Amar Vyas	Member
Dr. Sonia Parikh	Member
Dr. Franky Shah	Member
Dr. Vishal Mishra	Member
Mr. Suresh R. Shah	Member
Mrs. Ila U. Vora	Member
Mr. Jayeshkumar Solanki	Member
Ms. Nuri Kalita	Member

<b>Serious Adverse Event Committee (SAE) (A sub-committee of GCRI / GCS Ethics Committee)</b>	
Dr. Shashank Pandya	Chairman, Director
Dr. Pooja Nandvani Patel	Member Secretary, Radiotherapist
Dr. Asha Anand	Member, Medical Oncologist
Dr. Harsha Panchal	Member, Medical Oncologist
Dr. Sonia Parikh	Member, Medical Oncologist
Dr. Pariseema Dave	Member, Professor, Gynec Oncologist

<b>Ethics Committee For Compensation (A sub-committee of GCRI / GCS Ethics Committee)</b>	
Mr. Narayanbhai R. Patel	Chairman, Senior Advocate
Dr. Pariseema Dave	Member Secretary, Professor, Gynecological Oncology
Mr. Kshitish Madanmohan	Member

**Institutional Committee for Stem Cell Research (IC-SCR)**

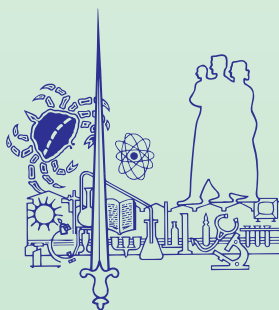
Dr. Kirti M. Patel	Chairman, Dean, GCSMC
Dr. Apruva Patel	Member Secretary , Professor, Medical Oncology
Dr. Franky Shah	Assistant Member Secretary, Senior Scientific Officer, Cancer Biology
Dr. Sandip Shah	Member
Dr. Maitrey Gajjar	Member
Dr. Haresh Doshi	External Member
Dr. Rakesh Rawal	External Member
Mr. Kshitish Madanmohan	Member
Dr. Amar Vyas	Member
Ms. Ilaben Vora	Member

**Annual Report Preparation Committee**

Dr. Shashank Pandya	Director, GCRI
Dr. Hemangini Vora	Associate Professor, Cancer Biology
Dr. Trupti Trivedi	Senior Scientific Officer, Cancer Biology
Mr. Rushi Patel	Chief Photo & Publicity Section
Mr. Mahendrasinh Kumpavat	Stenographer, Secretariat Section

**NABL Accreditation Committee**

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Dr. Biren Parikh	Coordinator, Assistant Professor, Pathology
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Dr. Nandita Ghosh	Member, Assistant Professor, Cancer Biology
Dr. Rima Kusumgar	Member, Assistant Professor
Mr. Mahesh Ahir	Member, Civil Engineer
Mr. Sanjay Patel	Member, Electrical Engineer



### NABH Accreditation Committee

Dr. Shashank Pandya	Chairman, Director
Mr. Narendrasinh Chavda	Co-chairman, Hospital Administrator
Dr. Parijath Goswami	Co-ordinator, Professor & Head, Microbiology
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Harsha Panchal	Member, Professor of Medical Oncology
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology
Dr. Priti Sanghvi	Member, Professor of Palliative Medicine
Dr. Vikas Warikoo	Member, Associate Professor, Surgical Oncology
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Jayshree Thakkar	Member, Associate Professor, Anaesthesiology
Dr. Rasna Tiwari	Member, Associate Professor, Nuclear Medicine
Dr. Pooja Nandvani Patel	Member, Associate Professor, Radiotherapy
Dr. Dhruvi Desai	Member, R.M.O
Dr. Rima Kusumgar	Member, Assistant Professor, Blood Bank
Dr. Janmesh Shah	Member, Assistant Professor, Community Oncology
Dr. Satish Pelagade	Member, Radio Physicist
Dr. Sanskar Dave	Member, Assistant Hospital Administrator
Dr. Manali Shah	Member, Sr. Lecturer in Physiotherapy
Ms. Meena Bhatia	Member, O.S.D., HR Section
Mr. Raju Parikh	Member, Head IT
Mr. Samip Dave	Member, Chartered Accountant, Account Section
Ms. Princy Christian	Member, Bio Medical Engineer (Electronic Engineer)
Ms. Mona Darj	Member, Matron Grade - I
Mr. Dipan Soni	Member, Assistant Medical Sculpture, Prosthesis Section
Mr. Arpit Christian	Member, Infection Control Nurse
Ms. Nuri Kalita	Member, Librarian
Mr. Arvind Kotadia	Member, Chief Pharmacist cum Store Officer
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section

### Hospital Waste Management Committee

Dr. Shashank Pandya	Chairman, Director
Dr. Parijath Goswami	Member Secretary
Dr. Foram Patel	Assistant Member Secretary
Ms. Mona Darji	Member
Ms. Leena Bhatt	Member
Ms. Veena Patel	Member
Mr. Akshay Dave	Member

**Q. RESEARCH ACTIVITIES**
**Q1. Conference Presentation - International  
April 2019 - March 2020**

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Surgical Oncology</b>				
1	Dr. Manish Sadhwani	Role of post mastectomy radiotherapy in T1, T2 lesions with 1-3 positive lymph nodes: A retrospective study of 101 cases	17 <sup>th</sup> Annual Meeting of the Japanese Society of Medical Oncology (JSMO)	18-20 July 2019, Kyoto, Japan
2	Dr. Aditya Kunte	Molecular profiling of Pancreatic adenocarcinoma		
3	Dr. Pavan Karella	Elective neck dissection in salvage surgery: A single institutional experience	45 <sup>th</sup> Annual Meeting of Korean Cancer Association & 5 <sup>th</sup> International Cancer Conference	20-21 June 2019, Seoul, Korea
4	Dr. Akhil Palod	Incidence of Supracarinal lymph node positivity in operated case of total esophagectomy short term results from a tertiary center	European Society for Medical Oncology Asia Congress	22-24 Nov 2019, Singapore

**Conference Presentation - National  
April 2019 - March 2020**

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Anaesthesiology</b>				
1	Dr. Dipika Patel	Nasogastric tube guided awake blind nasal endotracheal intubation- video presentation (Oral)	Airway 2020-The Airway Congress of AMF	22-23 Feb 2020, New Delhi
2	Dr. Mohit Rathod	Comparison of erector spine plane block and serratus anterior plane block for postoperative analgesia in patients undergoing breast surgery (Oral)	9 <sup>th</sup> National Conference of the Academy of Regional Anesthesia of India	4-6 July 2019, Coimbatore, Tamilnadu
<b>Clinical Carcinogenesis</b>				
3	Dr. Trupti Trivedi	Significance of "IDH" mutation in brainstem glioma (Guest Speaker)	A Symposium on Molecular Pathology of Neuronal and Glial Cell Disease and Combating Strategies	20-21 Aug 2019, Chennai
4		Deciphering molecular signature for management of glioma patients (Guest Speaker)	8 <sup>th</sup> Annual Conference of Molecular Pathology Association of India	10-12 Jan 2020, Jaipur



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
5	Ms. Neha Bhalala	Detection of MGMT Promoter methylation and IDH mutation in glioma using dd-PCR: One step back or one step forward? (Poster)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi
<b>Cytogenetics</b>				
6	Dr. Pina Trivedi	Cytogenetic heterogeneity in chronic lymphocytic leukemia (Oral)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi
7	Ms. Darshita Patel	Relevance of cytogenetics analysis and gene expression in acute myeloid leukemia (Poster)		
8	Ms. Priya Varma	Cytogenetics abnormalities in chronic myeloid leukemia: A single-centre experience (Poster)		
<b>Immunoematology</b>				
9	Dr. Kruti Rajvik	Altered metabolism of p53, BCL-2 and serum LDH in lung cancer (Poster)	39 <sup>th</sup> Annual Conference of Indian Association for Cancer Research	5-7 Feb 2020, Thiruvananthapuram, Kerala
10	Ms. Grusha Joshi	Immunohistochemical characterization of basal like phenotype of triple negative breast cancer from Western India (Poster)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi
<b>Medical Oncology</b>				
11	Dr. Sherin Mathew	Clinical profile and induction outcomes in adult and pediatric APML (Oral)	42 <sup>nd</sup> Icon Conference	13-15 March 2020, Hyderabad
<b>Microbiology</b>				
12	Dr. Parijat Goswami	Terminal Sterilization-need of two hour Soaking or terminal sterilization (Guest Speaker)	Science of Terminal Sterilization 2019	11 May 2019, Mumbai
13	Dr. Foram Patel	Retrospective analysis of Co-Infection due to HIV/ HBV and HIV/HCV in cancer patients from regional cancer hospital in Ahmedabad, Gujarat (Poster)	3 <sup>rd</sup> International Science Symposium on HIV & Infectious Diseases	12-14 Oct 2019, Chennai
<b>Molecular Oncology</b>				
14	Dr. Prabhudas Patel	Targeting aberrant glycosylation with Nutraceuticals: A novel approach for better cancer management (Guest Speaker)	4 <sup>th</sup> International Conference On Nutraceuticals And Chronic Diseases (INCD) 2019	23-25 Sep 2019, IIT-Guwahati, Assam

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
15	Dr. Prabhudas Patel	Exploring tumor microenvironment of HPV associated cervical cancer (Guest Speaker)	Indian Association for Cancer Research (IACR-2020)	5-7 Feb Thiruvananthapuram, Kerala
16		Insight into Molecular mechanism of HPV infected cervical cancer (Guest Speaker)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi
17	Ms. Kruti Mehta	Altered glycosylation in cancer: Can nature be the remedy? (Oral)		
18	Ms. Ashi Thobias	Human papilloma virus footprints in western region of india (Poster)		
19	Ms. Bharati Rathod	Clinical significance of BCR-ABL gene expression and T315I mutation in CML patients (Poster)		
20	Ms. Disha Jethva	Expression of multidrug resistance in lung cancer (Poster)	Indian Association for Cancer Research (IACR-2020)	5-7 Feb Thiruvananthapuram, Kerala
<b>Nuclear Medicine</b>				
21	Dr. Swati Rachh	Thyroid cancer- What's new? (Guest Speaker)	51 <sup>st</sup> Annual Conference of Society of Nuclear Medicine India	12-15 Dec 2019, Mumbai
22		Sentinel node imaging and biopsy in early breast cancer: An institutional experience from GCRI for the year 2018-2019 (Oral)		
<b>Palliative Medicine</b>				
23	Dr. Priti Sanghavi	Steps towards implementation of NDPS Act (Guest Speaker)	National Conference of Indian Association of Palliative Care	14-16 Feb 2020, Guwahati
24	Dr. Kikato Chishi	Treatment of severe mucositis pain with ketamine hydrochloride mouthwash in cancer patient (Oral)		
<b>Pathology</b>				
25	Dr. Sunitha S	Thigh mass in a patient with malignant pleural mesothelioma, metastasis at an unusual site (Poster)	Indian Musculo Skeletal Oncology Society	6-8 March 2020, Bangalore
26	Dr. Nagarjun BR	Spectrum of myelodysplastic syndrome and its transformation to AML (Poster)	1 <sup>st</sup> International Symposium On Bone Marrow Failure Disorders	3-4 Feb 2020, Tamilnadu
27	Dr. Jyoti Sawhney	Pathology of iron deficiency anemic recent advances (Guest Speaker)	60 <sup>th</sup> Annual Conference of The Indian Society of Haematology and Blood Transfusion (Hematocon-2019)	7 Nov 2019, New Delhi

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Radiotherapy</b>				
28	Dr. Maitrik Mehta	Influence of the pretreatment host immune inflammatory state and response to radiation therapy in high risk adenocarcinoma of the prostate: A validation study from NRG oncology/RTOG 0521 (Guest Speaker)	Best of ASTRO India Annual Meeting 2018	29-30 June 2019, Kolkata
<b>Stem Cell Biology</b>				
29	Dr. Apexa Raval	Emerging roles of miR-10b and miR-21 as prognosticator in breast cancer (Poster)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi
30	Dr. Jigna Joshi	An in-silico genetics revealing single nsSNP in PTCH1 gene associated with hedgehog signaling (Oral)		
31	Dr. Nutan Badgajar	Identification and in-silico analysis of functional SNPs of human MUTYH protein associated with familial adenomatous polyposis: A comprehensive study (Oral)		
32	Ms. Bhoomi Tarapara	Clinical and genetics characteristics of hereditary breast and ovarian cancer patients in western indian population (Poster)		
33	Mr. Hitarth Patel	Identifying the targets of Hedgehog signaling pathway using bioinformatics analysis: A signaling cross-talk in oral cancer (Poster)		
<b>Surgical Oncology</b>				
34	Dr. Abhijeet Salunke	Rodded sarcoma (Guest Speaker)	6 <sup>th</sup> Indian Musculoskeletal Oncology Society, IMSOS	6-8 March, 2020 Bangalore
35		Reconstruction in femur tumors with total femur and distal femur megaprosthesis (Guest Speaker)	Frontiers in Onco Surgery	18 May 2019, Nashik
36		Recent advances in orthopedic oncology (Guest Speaker)	Central Zone Orthopedic Association Conference (CEZCON)	11-13 Oct 2019, Raipur
37		Reconstruction in pediatric bone tumors (Guest Speaker)	14 <sup>th</sup> SAARC Federation of Oncologists International Cancer Conference	12 -15 Dec 2019, Kathmandu, Nepal
38		Recent advances in orthopedic oncology (Guest Speaker)	18 <sup>th</sup> Indore Orthopedic Association Conference	20-22 Feb 2020, Indore

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
39	Dr. Ketul Puj	Sentinal lymph node biopsy in early breast cancer: An institutional experience (Guest Speaker)	Association of Breast Surgeons of India ABSICON-2019	31 Oct 2019, Jaipur
40	Dr. Ajay Kumar	Role of single agent carboplatin with radiotherapy as a neoadjuvant therapy in patients of squamous cell carcinoma esophagus compared to standard doublet chemoradiotherapy regime	National Conference of Indian Association of Surgical Oncology NATCON IASO-2019	19-22 Sep 2019, Kolkata
41	Dr. Ronak Vyas	Early results of uniportal VATS lung surgeries from a tertiary cancer centre from Western India		
42		Minimally invasive three stage esophagectomy done in left lateral decubitus position using 3D thoracoscopy for esophageal carcinoma-an excellent alternative robotic esophagectomy		
43	Dr. Kunal Nandy	Minimally invasive three stage esophagectomy done in left lateral decubitus position using 3D thoracoscopy for esophageal carcinoma-an excellent alternative robotic esophagectomy	Indian Society of Oncology-Indian Society of Medical & Pediatric Oncology Conference	1-3 Nov 2019, Indore
<b>Tumor Biology</b>				
44	Ms. Bansi Ladani	Immunohistochemical localization of KRAS and BRAF and its clinical utility in patients with colorectal cancer (Poster)	8 <sup>th</sup> International Translational Cancer Research Conference	13-16 Feb 2020, Varanasi

**Conference Presentation - State  
April 2019 - March 2020**

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Anaesthesiology</b>				
1	Dr. Dipika Patel	Lung isolation technique- A focused learning session on oncoanaesthesia (Guest Speaker)	52 <sup>nd</sup> Annual National Conference of Indian Society of Anesthesiologists & 15 <sup>th</sup> Annual Conference of ISA	11-13 Oct 2019, Vadodara
2	Dr. Priti Patel	Palliative care - Role of anaesthesiologist (Guest Speaker)		

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Anaesthesiology</b>				
3	Dr. Madhuri Bhade	Perioperative anaesthetic management of patients with pacemaker and implantable cardioverter defibrillator (Guest Speaker)	52 <sup>nd</sup> Annual National Conference of Indian Society of Anesthesiologists & 15 <sup>th</sup> Annual Conference of ISA	11-13 Oct 2019, Vadodara
4	Dr. Rekha Solanki	A comparative study of intraperitoneal nebulization versus instillation of Ropivacaine and morphine for postoperative analgesia in laparoscopic surgery (Oral)		
<b>Blood Bank</b>				
5	Dr. Rima Kusumgar	Haemovigilance Scope, Terms, Definitions and case illustration (Guest Speaker)	CME on Hemovigilance Program of India	24 Feb 2020, Rajkot
<b>Clinical Carcinogenesis</b>				
6	Ms. Nirali Shukla	Clinical impact of IDH1 R132H, p53, MGMT and BRAF mutations in brain stem and thalamic gliomas (Oral)	International Conference on Molecular Medicine MOLMED- 2019	25-27 Sep 2019, Charusat, Anand
7	Ms. Neha Bhalala	Deciphering MGMT Promoter methylation in glioma using droplet digital PCR (Poster)	Carcinogenesis 2019	27-29 Sep 2019, Ahmedabad
8	Ms. Charmi Jyotishi	Significance of ATRX and TERT in molecular classification of glioma (Poster)		
<b>Community Oncology Centre, Vasna</b>				
9	Dr. Geeta Joshi	Integrating pain & palliative care (Guest Speaker)	Annual National Conference of Indian Society for Study of Pain	7-9 Feb 2020, Ahmedabad
<b>Cytogenetics</b>				
10	Ms. Hiral Mandalia	Assessment of Her2 gene amplification by fluorescence in situ hybridization: a novel therapeutic approach in gastric cancer (Poster)	Carcinogenesis 2019	27-29 Sep 2019, Ahmedabad
11	Ms. Nehal Patel	Cytogenetic biomarkers in chronic lymphocytic leukemia (Poster)		

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Gynaecological Oncology</b>				
12	Dr. Bijal Patel	Challenges & opportunities for cancer screening implementation : Available evidence and indian guidelines for population based cancer screening program (Panelist)	Association of Radiation Oncologists of India, AROICON- 2019	28 Nov - 1 Dec 2019, Ahmedabad
13	Dr. Garima Pandey	Female urogenital melanoma: Analysis from a regional cancer institute (Poster)		
14		Prognostic nutrition index & its significance in advanced epithelial ovarian cancer (Poster)		
<b>Immunoematology</b>				
15	Dr. Birva Raiya	Role of eight color flow MRD assay in monitoring of B-ALL (Poster)	Carcinogenesis-2019	27-29 Sep 2019, Ahmedabad
16	Ms. Grusha Joshi	Clinical significance of ALDH1A1, CD133 and OCT4 in breast cancer patients and its association with EMT (Poster)		
17	Ms. Nikita Bhatt	Flowcytometric analysis of leukemic blasts-as primary screening tests for BCR/ABL Gene rearrangement in B-ALL (Poster)		
18	Ms. Bhoomi Prajapati	Influence of NK cells during epithelial to mesenchymal transition in oral cancer (Poster)		
19	Dr. Amol Kotalwar	Study of the clinical profile and induction outcome of arsenic trioxide in low risk acute promyelocytic leukemia at tertiary care cancer institute from western India (Oral)		
20	Dr. Shripad Kausadikar	Paediatric AML induction Outcomes with BFM 93 protocol: A single centre experience from Western India (Oral)	Indian Co-operative Oncology Network ICON Conference	13-15 Sep 2019, Ahmedabad
21	Dr. Vaibhava Srivastava	A study of response to neo adjuvant chemotherapy in various subtypes of breast cancer (Oral)		
<b>Medical Oncology</b>				
19	Dr. Amol Kotalwar	Study of the clinical profile and induction outcome of arsenic trioxide in low risk acute promyelocytic leukemia at tertiary care cancer institute from western India (Oral)	Indian Co-operative Oncology Network ICON Conference	13-15 Sep 2019, Ahmedabad
20	Dr. Shripad Kausadikar	Paediatric AML induction Outcomes with BFM 93 protocol: A single centre experience from Western India (Oral)		
21	Dr. Vaibhava Srivastava	A study of response to neo adjuvant chemotherapy in various subtypes of breast cancer (Oral)	Annual Conference of Association of Radiation Oncologists of India- AROICON-2019	28 Nov-1 Dec 2019, Ahmedabad

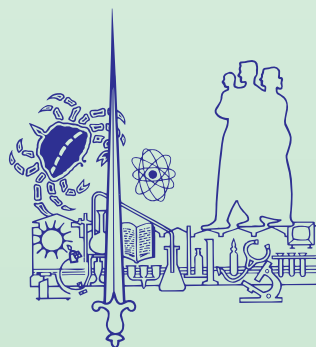
Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Medical Oncology</b>				
22	Dr. Duncan Khanikar	Clinicopathological profile and short treatment outcomes in lymphoplasmacytic lymphoma (Oral)	Qure Hematology Conference	18-19 Jan 2020, Ahmedabad
23	Dr. PetaRavindra Kumar	Hematopathological profile and outcome after all type induction in acute leukaemia of ambiguous lineage (Oral)		
<b>Microbiology</b>				
24	Dr. Parijat Goswami	Hospital Environment and Infections (Guest Speaker)	Environment and Health and Disease	7 April 2019, Ahmedabad
25		Participated in Live Webinar (Guest Speaker)	Center for Infectious disease Research and Policy Value of Diagnostics in Antimicrobial Stewardship	5 Nov 2019, Telemedicine Centre, GCRI, Ahmedabad
<b>Molecular Oncology</b>				
26	Ms. Kruti Mehta	Aberrant sialylation (glycosylation) plays a significant role in oral cancer progression (Oral)	Carcinogenesis-2019	27-29 Sep 2019, Ahmedabad
27	Ms. Ashi Thobias	Prevalence of human papilloma virus (HPV) infection in cervical cancer patients from western region of India (Poster)		
28	Ms. Disha Jethva	Clinical relevance of tobacco exposure in oral cancer (Poster)		
29	Ms. Bharati Rathod	Study of podoplanin expression and lymphovascular density in oral squamous cell carcinoma (Poster)		
<b>Nuclear Medicine</b>				
30	Dr. Swati Rachh	Panel- Role of imaging in carcinoma cervix – diagnosis to treatment (Guest Speaker)	Annual Conference of Association of Radiation Oncologists of India- AROICON-2019	29 Nov 2019, Ahmedabad
<b>Palliative Medicine</b>				
31	Dr. Priti Sanghavi	Integration of palliative care in oncology (Guest Speaker)	Annual Conference of Association of Radiation Oncologists of India- AROICON-2019	1 Dec 2019, Ahmedabad
32		Legal aspect of the use of the Narcotics (Guest Speaker)	National Conference of Indian Association of Study of Pain	8-10 Feb 2020, Ahmedabad

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place		
<b>Pathology</b>						
33	Dr. Ashini Shah	Breast cancer: Clinical and laboratory perspective (Panelist)	Carcinogenesis-2019	27-29 Sep 2019, Ahmedabad		
34	Dr. Jyoti Sawhney	Management of acute lymphoblastic leukemia (Panelist)	Annual Conference of Association of Radiation Oncologists of India-AROICON-2019	28 Nov-1 Dec 2019, Ahmedabad		
35	Dr. Amisha Gami	Head & neck tumors (Panelist)				
<b>Radiology</b>						
36	Dr. Darshan Thummar	Imaging finding of melorheostosis- uncommon benign sclerosing bone disease (Poster)	Annual Orthopedic Oncology Conference ONCOORTHOCON-2019	20 Oct 2019, Ahmedabad		
37		Osteosarcoma of rib- uncommon presentation of common bone tumor (Poster)				
38	Dr. Dheeman Sarkar	X-ray imaging findings of chondrosarcoma (Poster)				
39		Role of MRI in characterization of primary long bone tumors on 3T MRI scanner (skyra) using multiplanner (T1W, T2W, STIR and DWI with contrast) sequences (Oral)				
40	Dr. Akhilesh Patel	Role of radiological imaging in diagnosing of benign fibrous histiocytoma (Poster)				
41	Dr. Dishu Shah	Role of radiological imaging in hereditary multiple exostosis (Poster)				
42	Dr. Yashpal Chauhan	X-ray and ct imaging of non-ossifying fibroma of left tibia (Poster)				
43	Dr. Shivaraj M L	Case discussion of atypical presentation of multiple myeloma of right shoulder on x-ray (Poster)				
44	Dr. Divya Patel	Role of radiological imaging in diagnosing posterior fossa neoplasm in pediatric patients (Oral)			73 <sup>rd</sup> Annual Conference of the Indian Radiological and Imaging Association IRIA-2020	23-26 Jan 2020, Gandhinagar
45		Role of radiological imaging in diagnosis of neurofibromatosis type II- A rare genetic syndrome (Poster)				
46	Dr. Dishu Shah	Role of chest x-ray and HRCT thorax in interstitial lung disease (Oral)				



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Radiology</b>				
47	Dr. Dishu Shah	Role of x-ray and CT imaging of primary adrenal mature teratoma (Poster)	73 <sup>rd</sup> Annual Conference of the Indian Radiological and Imaging Association IRIA-2020	23-26 Jan 2020, Gandhinagar
48	Dr. Yashpal Chauhan	Role of TVS in assessment of abnormal uterine bleeding in perimenopausal age group (Oral)		
49		Pre-treatment calcification in lymphoma involving mesenteric nodes with clinical & histo-pathology correlation-A rare finding (Poster)		
50	Dr. Shivaraj M L	Role of MDCT in pancreatic malignancies (Oral)		
51	Dr. Vipul Kamaliya	CT angioportogram and volumetry in focal liver lesions: it's role in surgical planning and virtual hepatic resection (Oral)		
<b>Physiotherapy</b>				
52	Dr. Manali Shah	Lymph edema management & care (Guest Speaker)	Indian Co-operative Oncology Network Conference	12 Sep 2019, Ahmedabad
<b>Radiotherapy</b>				
53	Dr. Niketa Thakur	Clinical prognostic factors and treatment outcome for survival in pts of small cell carcinoma cervix (Poster)	Annual Conference of Association of Radiation Oncologists of India-AROICON-2019	28 Nov-1 Dec 2019, Ahmedabad
<b>Stem Cell Biology</b>				
54	Dr. Franky Shah	Breast cancer: Clinical and laboratory perspectives (Panelist)	Carcinogenesis-2019	27-29 Sep 2019, Ahmedabad
55	Mr. Shrenik Patel	Utility of miR-21 and its target gene expression in cancer diagnostics and therapeutics (Poster)		
56	Ms. Mrunalini Gonsai, Ms. Nisha Vyas	Cancer stem cells genetic reprogramming: A hope-map to eradicate cancer (Poster)		
57	Ms. Vimal Bharwad, Ms. Janki Barot	Liquid Biopsy: hopes and challenges (Poster)		
<b>Surgical Oncology</b>				
58	Dr. Abhijeet Salunke	Orthopediconcosurgery (Panel discussion)	Association of Radiation Oncologists of India, AROICON-2019	28 Nov - 1 Dec 2019, Ahmedabad
59		A to Z of radiology (Guest Speaker)	OncoOrthocon 2019	20 Oct 2019, Ahmedabad

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
<b>Surgical Oncology</b>				
60	Dr. Abhijeet Salunke	Essential of radiology in bone tumors reconstruction following curettage (Guest Speaker)	Surat Orthopedic Association Conference	24 Nov 2019, Surat
61		Expandable megaprosthesis: Early experience (Guest Speaker)	Ahmedabad Orthopedic Association Oncodiaries	4-5 Jan 2020, Ahmedabad
62		Rodded sarcoma cryosurgery in orthopedic oncosurgery (Guest Speaker)	Gujarat Orthopedic Association Conference	7-9 Feb 2020, Rajkot
63	Dr. Jaymin Shah	Curettage in bone tumors (Guest Speaker)	OncoOrthocon 2019	20 Oct 2019, Ahmedabad
64		Megaprosthesis international radiology in orthopedic oncology (Guest Speaker)	Surat Orthopedic Association Conference	24 Nov 2019, Surat
65	Dr. Kunal Nandy	Methods of chest wall reconstruction –our institute experience	41 <sup>st</sup> Indian co-operative oncology network (ICON)	13-15 Sep 2019, Ahmedabad
<b>Tumor Biology</b>				
66	Dr. Toral Kobawala	Interaction between TNF and cell adhesion molecules substantiates link between inflammation and thyroid carcinogenesis (Poster)	National Symposium on Basic Translational Research in Cancer Biology	11-12 Sep 2019, Gandhinagar
67	Dr. Kinjal Gajjar	Effectiveness of 5-FU metabolic enzymes in predicting clinical outcome in colorectal cancer (Poster)		
68	Dr. Toral Kobawala	BRAF but not KRAS aids in differentiating Epithelial Ovarian Cancer from benign ovarian tumors (Poster)	Carcinogenesis-2019	27-29 Sep 2019, Ahmedabad
69	Dr. Kinjal Gajjar	Genomic polymorphisms involved in oxaliplatin mechanism predicts clinical outcome in colorectal cancer (Poster)		



## Q2. Publications

### April 2019 - March 2020

<b>Anaesthesiology</b>	
1	Jayshree Thakkar, Priti Patel, Bhavna Shah: Incidence of internal jugular vein valve incompetence through versus low approach for IJV cannulation. <i>Ind J Anesth Analg.</i> 2019; 6: 515-519.
2	Pallavi S, Priti Patel, Jayshree Thakkar: A comparative study of Ondansetron and Palonosetron for prevention of postoperative nausea and vomiting in patients undergoing modified radical mastectomy. <i>Int J Anaesth Res.</i> 2019; 2: 74-83.
3	Jayshree Thakkar, Anupama Tomer, Priti Patel: Role of intravenous paracetamol for peri-operative pain management in head and neck cancer surgeries. <i>Ind J Anesth Analg.</i> 2019; 6: 255-262.
4	Jenish Patel, Jayshree Thakkar, Damini Makawana, Sanobar Khokhar, Saeed Vora, Bavna Shah: Comparative evaluation of intravenous granisetron hydrochloride and intravenous lignocaine hydrochloride to alleviate the pain on propofol injection. <i>Ind J Anesth Analg.</i> 2019; 6: 263-270.
5	Nita Gosai, Rekha Solanki, Bhavna Shah, Pooja Kumar, Rajdip Kubavat: Comparison of Ondansetron HCL, Granisetron HCL and Palonosetron HCL for prevention of postoperative nausea and vomiting following gynaecological surgery under general anaesthesia. <i>Ind J Clin Anaesth.</i> 2019; 6: 102-106.
6	Rekha Solanki, Nita Gosai, Vidhi Solanki, Nishita Shah, Jayshree Thakkar: Hemodynamic stress response with laryngeal mask airway insertion and tracheal intubation in hypertensive patients undergoing mastectomy. <i>Med Int J Anesthesiology.</i> 2019; 11: 13-17.
7	Kashmira Prem, Jenish Patel, Damini Makwana, Jupi Talukdar, Jayshree Thakkar: Comparison of combination of Ketamine hydrochloride and propofol with fentanyl citrate and propofol for patients undergoing endoscopic retrograde cholangiopancreatography. <i>Bali J Anaesthesiol.</i> 2019; 3: 155-160.
8	Rekha Solanki, Tanmay Tank, Jayshree Thakkar, Farishta Pegu, Kinjal Solanki: Hypertonic saline (3%): A safe alternative to mannitol (20%) for brain relaxation in elective craniotomy for supratentorial brain tumor. <i>Med Int J Anesthesiology.</i> 2019; 13: 154-157.
<b>Blood Bank</b>	
9	Rima Kusumgar: Evaluation of a digital haemoglobin analyzer in comparison with hematology cell counter. <i>Natl J Integr Res Med.</i> 2019; 10: 91-92.
10	Rima Kusumgar: Bulk transfer of blood and its component-a single center experience after 2 years of its implementation. <i>Glob. J. Transfus. Med.</i> 2020; 5: 51-53.
<b>Clinical Carcinogenesis</b>	
11	Jigna Joshi, Hemangini Vora, Nandita Ghosh, Rajen Tankshali, Dhaval Jetly, Trupti Trivedi: Non-homologous end joining repair pathway molecules as predictive biomarkers for patients with oral squamous cell carcinoma. <i>J Can Res Thera;</i> 2020, In Press
<b>Cytogenetics</b>	
12	Pina Trivedi, Priya Varma, Dharmesh Patel, Dhara Ladani, Darshita Patel, Mahnaz Kazi, Nehal Patel, Prabhudas Patel: Clinical implications of simultaneous occurrence of variant Philadelphia translocations in chronic myeloid leukemia. <i>J Assoc Genet Technol.</i> 2019;45: 61-65.
13	Priya Varma, Dharmesh Patel, Pina Trivedi, Dhara Ladani, Nehal Patel, Mahnaz Kazi, Darshita Patel, Prabhudas Patel: A comprehensive review of chronic myeloid leukemia- an Indian perspective. <i>J Assoc Genet Technol.</i> 2019;45: 169-174.
<b>Gynecological Oncology</b>	
14	Shilpa Patel, Ruchi Arora, Rajnish Tiwari, Pabashi Poddar, Ava Desai, Meeta Mankad, Harsha Panchal: Management of ultra-high risk gestational trophoblastic neoplasia at a tertiary center in India. <i>Ind J Med Paediatr Oncol.</i> 2020; 41: 345-350.
15	Vinod Dalal, Pariseema Dave, Shilpa Patel, Bijal Patel, Dimpy Begum: Effectiveness of pap smears as predictor in the diagnosis of carcinoma endometrium at a tertiary oncology centre in India. <i>Ind J Gynecol Oncol.</i> 2020; 18: 33.
16	Bijal Patel: Endometrial hyperplasia-diagnosis and management. <i>Preventive Oncol Gynecol.</i> 2019; 25-43.

<b>Gynecological Oncology</b>	
17	Sharayu Mirji, Shilpa Patel, Ruchi Arora, Ava Desai, Meeta Mankad, Sangeetha K, Harsha Panchal: Chemo-resistant gestational trophoblastic neoplasia-a review of cases at tertiary cancer center. <i>Int J Reprod Contracept Obstet Gynecol.</i> 2019; 8: 1620-1625.
18	Amrita Makhija, Bijal Patel, Mangirish Kenkre, Ava Desai, Shilpa Patel, Meeta Mankad, Chetana Parekh: Retrospective analysis of 32 cases of ovarian granulose cell tumours. <i>J Obstet and gynecology of India.</i> 2020; 70:50-56.
<b>Immunoematology</b>	
19	Hemangini Vora: Immuno-Genomics and Score: Stepping for Immune Design. <i>GCS Res Journal.</i> 2019; 21: 1-2.
20	Hemangini Vora, Sonia Parikh, Nupur Patel: Immunohistochemical characterisation of basal like phenotype of triple negative breast cancer from Western India. <i>Int J of Res and Rev.</i> 2019; 6:1-8.
21	Birva Raiya, Hemangini Vora, Pina Trivedi, Biren Parikh: Flowcytometric analysis of leukemic blasts as primary screening tests for BCR/ABL gene rearrangement in B-ALL. <i>Eurasian J Med. Oncol.</i> 2019; 3:191-198.
22	Mansi Desai, Prabhudas Patel, Hemangini Vora: The integrative analysis of gene expression profile to identify gene signature in triple negative breast cancer. <i>Int J of Res and Rev.</i> 2019; 6:1-16.
23	Deepkumari Yadav, Hemangini Vora: Clinical significance of immune cells and T cell subsets in lung cancer. <i>Res Review J Immunol.</i> 2019; 9:14-29.
24	Pooja Rathaur, Shalvi Mehta, Birva Raiya, Hemangini Vora: Role of circulating and tumor associated immune cells infiltration in triple negative breast cancer (TNBC) and their association with inflammatory and hypoxic markers. <i>Int J Current Medical and Pharmaceutical Res.</i> 2020; 6: 5019-5024.
25	Neha Bhalala, Nupur Patel, Hemangini Vora: Clinical significance of IDH1, EGFR, p53 and MIB1 in astrocytoma Patients. <i>Int J Sci Res and Rev.</i> 2019; 8:233-253.
<b>Medical Oncology</b>	
26	Apurva Patel, Mohammed Naseer: Myeloid sarcoma-case series and literature review. <i>GCSMC J Med Sci.</i> Jan-Jun 2020; 11-14.
27	Sonia Parikh, Asha Anand, Vaibhav Srivastav, Harsha Panchal, Apurva Patel, Nitin Joshi, Bhadrash Shastri: Experience with Nilotinib in chronic myeloid leukemia- a retrospective analysis of clinical outcome. <i>Int J Res and Rev.</i> 2019; 6: 478-486.
28	Akanksha Garg, Sandip Shah, Kinnari Patel, Kamlesh Shah, Asha Anand, Harsha Panchal, Apurva Patel, Sonia Parikh: Post-transplant hemophagocytic lymphohistiocytosis in benign hematological disorders- experience of 4 cases with review of literature. <i>Indian J Hematol Blood Transfus,</i> 2020; 36: 674-679.
29	Gaurav Mantri, Sonia Parikh, Asha Anand, Harsha Panchal, Apurva Patel, Sandip Shah, Akash Patel: Rituximab induced late onset neutropenia-case report and review of literature. <i>GCS Res Journal.</i> 2019; 21: 15-18.
30	Varun Nagori, Sonia Parikh, Asha Anand, Harsha Panchal, Apurva Patel: Synchronous occurrence of acute myeloid leukemia and carcinoma of upper alveolus-a rare coexistence. <i>GCS Res Journal.</i> 2019; 21: 26-28.
31	Priyanka Patel, Asha Anand, Sonia Parikh, Akash Patel, Rahul Kulkarni: Primary central nervous system burkitt lymphoma in HIV positive pediatric patient- a rare case report. <i>J Pediatr Neurosci.</i> 2019; 14: 86-89.
<b>Molecular Oncology</b>	
32	Kinjal Patel, Hemangini Vora, Trupti Trivedi, Jayendra Patel, Shashank Pandya, Dhaval Jetly, Prabhudas Patel: Transcriptome profiling and pathway analysis in squamous cell carcinoma of buccal mucosa. <i>Exp. Mol. Pathol.</i> 2020; 113.
33	Kruti Mehta, Kinjal Patel, Shashank Pandya, Prabhudas Patel: Aberrant Sialylation plays a significant role in oral squamous cell carcinoma progression. <i>J. Oral Pathol. Med.</i> 2020; 3: 253-259.
34	Jayendra Patel, Kinjal Patel, Shruti Patel, Bhoomi Tarapara, Apurva Patel, Prabhudas Patel: Clinical relevance of JAK2V617F mutation with lactate dehydrogenase activity in patients with myeloproliferative diseases. <i>GCS Res. Journal.</i> 2019; 21: 11-15
35	Shruti Patel, Bhoomi Tarapara, Kinjal Patel, Prabhudas Patel, Franky Shah: Alterations of Vitamin D and Vitamin D signalling pathway in breast cancer- a preliminary study from Western India. <i>GCS Res. Journal.</i> 2019; 21: 6-14.

<b>Molecular Oncology</b>	
36	Ashi Thobias, Kinjal Patel, Riddhi Gokani, Chetna Parekh, Ava Desai, Jayendra Patel, Prabhudas Patel: Prevalence of human papilloma virus infection in cervical cancer patients from Western Region of India. <i>Ind J. Gynecol Oncol.</i> 2019; 17: 1-6.
37	Kinnari Rajpura, Kruti Mehta, Kinjal Patel, Prabhudas Patel: Significance of altered glycosylation in oral cancer. <i>Int J of Res and Rev.</i> 2019; 6: 391-399.
38	Bhairavi Vajaria, Kinjal Patel, Kruti Mehta, Rasheedunnisa Begum, Prabhudas Patel: Aberrant glycosylation in oral cancer and insights on glycosylation as a hallmark of cancer. <i>Int J of Res and Rev.</i> 2019; 6: 487-495.
<b>Palliative Medicine</b>	
39	Richa Singh, Bhana Patel, Priti Sanghavi, Anandi Queenjal, Himanshu Patel: Effect of palliative care intervention on symptom profile in head neck cancers- <i>GCS Res Journal</i> ; 2019; 2: 16-20.
40	Anandi Queenjal, Himanshu Patel, Richa Singh, Mayur Ghoghari, Kikato Chishi, Bhavna Patel, Priti Sanghavi: Management of malignant fungating wound in palliative care- a nursing perspective. <i>Clin J Oncol Nurs.</i> 2019; 5: 28-34
<b>Pathology</b>	
41	Priti Trivedi, Deepak Goel, Shailee Mehta, Dhaval Jetly: An epidemiological study of paediatric central nervous system (CNS) tumours in GCRI. <i>Ind. J. Pathol Oncol.</i> 2019; 6: 642-646.
42	Priti Trivedi, Deepak Goel, Silky Patel, Dhaval Jetly: ER, PR, MIB1 inde and her2/neu status in 100 cases of breast carcinoma. <i>Tropical J Pathol. Microbiology.</i> 2019; 5: 156-162.
43	Suchita Patel, Dhaval Jetly, Shailee Mehta, Priti Trivedi: Undifferentiated embryonal sarcoma of liver in child-a rare case report. <i>Int. J. Sci. Res.</i> 2019; 8: 7-8.
44	Suchita Patel, Biren Parikh, Priti Trivedi: Histopathological and immunohistochemical study of Hodgkin's lymphoma-an Institutional study. <i>Int. J. Sci. Res.</i> 2019; 8: 1-2.
45	Shalibhadra Shah, Biren Parikh, Ronak Kumari Jain, Rachana Shah: The external quality assessment programme in haematology- GCRI experience. <i>Int. J. Sci. Res.</i> 2019; 8: 6-7.
46	Abhishek Kumar, Biren Parikh, Rachna Shah: Analysis of critical values data at a large clinical biochemistry laboratory in a tertiary care oncology centre. <i>Int. J. Sci. Res.</i> 2019; 8: 1-2.
47	Mauli Joshi, Biren Parikh, Dhaval Jetly, Suchita Patel: Acute myeloid leukemia- correlation of immunophenotyping with morphology. <i>Int. J. Sci. Res.</i> 2019; 8: 22-23.
48	Majal Shah, Deepak Goel, Trupti Patel, Priti Trivedi: Cervical lymph node FNAC- a simple and sensitive tool to diagnosis malignancies. <i>Tropical J Pathol and Microbiology.</i> 2019; 5: 656-662.
<b>Radiology</b>	
49	Saumil Desai: CT evaluation of neck masses-a retrospective study of 100 cases. <i>Int. J. Sci.</i> 2019; 8: 42-45.
50	Saumil Desai, Ashish Kharadi: CT imaging of GIST-retrospective study of 20 cases. <i>Am. J. PharmTech Res.</i> 2019; 9: 27-34.
51	Saumil Desai: Role of CT scan in staging of Ca urinary bladder with HPE correlation. <i>Int. J. Adv. Res.</i> 2019; 7: 313-320.
52	Saumil Desai, Divya Patel: Ca stomach-comparing role of USG and CT scan in staging of the disease. <i>Int. J. Sci.</i> 2019; 8: 45-48.
53	Sapna Patel, Darshan Thummar: Role of computed tomography in the evaluation of renal masses. <i>J. Med. Sci. Clin. Res.</i> 2020; 8: 370-374.
54	Sapna Patel, Darshan Thummar: Catheter fracture-a rare complication of chemotherapy catheter presentation of case. <i>J. Med. Sci. Clin. Res.</i> 2020; 8: 326- 329.
55	Sanjiv Patel, Sapna Patel, Vipul Bhatia, Bhavya Chauhan, Rupal Vadhiya: Ca gall bladder- comparing role of USG and CT scan in staging of the disease. <i>Int. J. Sci.</i> 2019; 8: 15-18.
56	Drashty Chauhan, Jigna Patel, Rupal Vadhiya, Bhavya Chauhan: Role of USG and CT in evaluation of female pelvic pathology. <i>J. Evid. Based Med. Healthc.</i> 2019; 6: 1347-1356.

57	Drashty Chauhan, Rupal Vadhiya, Bhavya Chauhan, Jigna Patel: Role of imaging in salivary glands tumors. <i>J. Evid. Based Med. Healthc.</i> 2019; 6: 1415-1426.
58	Drashty Chauhan, Bhavya Chauhan, Rupal Vadhiya, Jigna Patel: Evaluation of comparative role of CT scan and MRI in local staging of rectal cancer. <i>J. Evid. Based Med. Healthc.</i> 2019; 6: 1365-1372.
<b>Radiotherapy</b>	
59	Amit Kichloo, Ankita Parikh, Sakina Mankada, Ubrangala Suryanarayana: Small-cell carcinoma of nasal cavity and approach to its management: a case report. <i>J Curr Oncol</i> 2019;2:74-78.
60	Amit Kichloo, Jyoti Poddar, Sakina Mankada, Ubrangala Suryanarayana: Chronic myeloid leukemia with isolated central nervous system blast crisis a rare case presentation: <i>Oncol J India.</i> 2019;3: 59-61.
61	Kushboo Jain, Rajan Yadav, Shreena Patidar, Ankita Parikh, Ubrangala Suryanarayana, Maitrik Mehta, Tasneem Nalawala, Tejal Choudhari: Role of adjuvant radiotherapy in Gall bladder cancers: A review of literature: <i>J. Med. Sci. Clin. Res.</i> 2019; 7: 420-424.
62	Kushboo Jain, Ankita Parikh, U. Suryanarayana Kunikullaya: Marginal zone lymphoma of bilateral buccal mucosa: A case report: <i>GCS Res. Journal.</i> 2019; 3:21-23.
63	Shreena Patidar, Niketa Thakur, Sonal Patel Shah, U. Suryanarayana, Khushboo Jain: Steroid cell tumor of ovary: An incidentally diagnosed steroid cell tumor of ovary in a patient of carcinoma endometrium: A very rare finding: <i>J. Med. Sci. Clin. Res.</i> 2019; 7: 714-717.
64	Sakina Mankada, Ankita Parikh, Parag Roy, Amit Kichloo, Ubrangala Suryanarayana: Radiotherapy as a primary treatment modality for squamous cell carcinoma of tongue in a case of xeroderma pigmentosum: <i>J Curr Oncol.</i> 2019; 2:29-32.
<b>Stem Cell Biology</b>	
65	Nutan Badgujar, Bhoomi Tarapara, Franky Shah: Computational analysis of high-risk SNPs in human CHK2 gene responsible for hereditary breast cancer: a functional and structural impact. 2019; 14: 1-18.
66	Jigna Joshi, Apexa Raval, Urja Desai, Vinal Upadhyay, Mansi Bhavsar, Kanisha Shah, Rakesh Rawal, Harsha Panchal, Franky Shah: EGFR mutation analysis in non-small cell lung carcinoma patients: a liquid biopsy approach. <i>Ind J Clin Biochem</i> , DOI:10.1007/s12291-019-00864-7
<b>Surgical Oncology</b>	
67	Mohit Sharma, Ketul Puj, Abhijeet Salunke, Shashank Pandya, Jahanvi Gandhi, Ankita Parik: Malignant peripheral nerve sheath tumor with analysis of various prognostic factors: A single institutional experience: <i>J. Cancer Res. Ther.</i> 2020 (In-press)
68	Ronak Vyas, Abhijeet Ashok Salunke, VikasWarikoo, Jaymin Shah, Mayur Kamani, Kunal Nandy, Sudam Sadangi, Shashank Pandya : Clinical and Oncological Outcome of Chondroblastic Osteosarcoma: A Single Institutional Experience: <i>Indian J Orthop.</i> 2020 <a href="https://doi.org/10.1007/s43465-020-00098-3">https://doi.org/10.1007/s43465-020-00098-3</a> .
69	Manish Sadhwani, Rajan Tankshali, Nikhil Garg: Role of post mastectomy radiotherapy in T1, T2 lesions with 1-3 positive axillary lymphnodes - A retrospective study of 101 cases. <i>Guj Med J.</i> 2019; 74(1): 44-46.
<b>Tumor Biology</b>	
70	Mahnaz Kazi, Hemangini Vora, Kinjal Gajjar, Toral Kobawala, Nandita Ghosh: Frequent methylation of genes encoding wnt pathway antagonists- secreted related protein 1 and dickkopf 3 in invasive breast cancer. <i>Clin Cancer Investig J.</i> 2019; 8: 106-113.
71	Mahnaz Kazi, Hemangini Vora, Kinjal Gajjar, Toral Kobawala, Nandita Ghosh: Clinical significance of WNT acyltransferase- porcupine in breast cancer. <i>GCS Res Journal.</i> 2019; 21: 5-10.
72	Toral Kobawala, Bansi Ladani, Nandita Ghosh: Nutraceuticals and stress. <i>GCS Res Journal.</i> 2019; 21: 24-27.

### Q3. Ongoing Extramural Research Projects April 2019-March 2020

No.	Name of PI	Project Title	Funded by
<b>Clinical Carcinogenesis</b>			
1	Dr. Trupti Trivedi	Detection of MYCN and ALK amplification using dd-PCR from plasma samples of neuroblastoma patients	GCRI
2	Dr. Trupti Trivedi	Detection of MGMT methylation in patients with glioblastoma	GCS/GCRI
3	Dr. Trupti Trivedi	Exploring significance of molecular markers for classification of medulloblastoma tumors	GCS/GCRI
4	Dr. Trupti Trivedi	Establishment of potential biomarkers for the management of brainstem glioma tumors	GCS/GCRI
5	Dr. Trupti Trivedi	Elucidating prognostic markers in glioma: a correlative and a pilot study to differentiate glioma subtypes using liquid biopsy (Completed)	GCS/GCRI
<b>Community Oncology &amp; Medical Records</b>			
6	Dr. Shashank Pandya	Rural cancer registry, Ahmedabad district	National Centre for Disease Informatics and Research, ICMR, Bengaluru
7	Dr. Shashank Pandya	Population Based Cancer Registry - Ahmedabad urban agglomeration area	National Centre for Disease Informatics and Research, ICMR, Bengaluru
8	Dr. Shashank Pandya	Hospital Based Cancer Registry (HBCRs) and patterns of care and survival studies on cancer breast, cancer cervix and head and neck cancers	National Centre for Disease Informatics and Research, ICMR, Bengaluru
9	Dr. Shashank Pandya	Population based cancer survival of cancers of breast, cervix and head & neck-Ahmedabad urban agglomeration area	National Centre for Disease Informatics and Research, ICMR, Bengaluru
10	Dr. Anand Shah	Implementation plan for extended follow-up of the participants of IARC-India HPV vaccination study to evaluate the effectiveness of one, two and three doses of Quadrivalent HPV vaccine in preventing cervical neoplasias	International Agency for Research on Cancer, Lyon, France
<b>Cytogenetics</b>			
11	Dr. Prabhadas Patel	Clinical implications of multidrug resistance proteins in CML patients (Completed)	GCS/GCRI
12	Dr. Dharmesh Patel	Study of PTEN alterations in prostate cancer patients as a prognostic marker (Completed)	GCS/GCRI
13	Dr. Pina Trivedi	Clinical relevance of cytogenetics and molecular markers in acute myeloid leukemia patients	GCS/GCRI
14	Dr. Dharmesh Patel	Clinical significance of molecular cytogenetic studies in acute lymphoblastic leukemia patients	GCS/GCRI
<b>Gynecological Oncology</b>			
15	Dr. Ruchi Arora Dr. Shilpa M. Patel	Risk of ovarian malignancy algorithm (ROMA) utilizing human Epididymis protein -4(HE-4) and CA-125 dual marker combination for prediction of ovarian cancer (Completed)	GCS/GCRI

No.	Name of PI	Project Title	Funded by
<b>Immunohematology</b>			
16	Dr. Hemangini Vora Dr. Sonia Parikh	A study of predictive biomarkers in TNBC Patients (Completed)	GCS/GCRI
17	Dr. Sonia Parikh Dr. Hemangini Vora	A study of assessment of minimal residual disease (MRD) in childhood ALL with multi-color flow cytometry and its correlation with survival	GCS/GCRI
18	Dr. Priti Trivedi Dr. Hemangini Vora	Study of hormonal markers and proliferative markers in pituitary adenoma	GCS/GCRI
19	Dr. Birva Raiya	A study of inflammation induced lymphangiogenesis in head and neck cancer	GCRI
20	Dr. Hemangini Vora Dr. Prabhudas Patel Dr. Nandita Ghosh Dr. Pina Trivedi	Development and validation of biomarkers and drug targets by molecular profiling of triple negative breast cancer	GSBTM
21	Dr. Kruti Rajvik Dr. Hemangini Vora	Evaluation of HKII and LDH isoenzymes LDHA and LDHB in lung cancer patients	GCS/GCRI
22	Dr. Nupur Patel Dr. Hemangini Vora	Role of notch receptors in triple negative breast cancer	GCS/GCRI
<b>Medical Oncology</b>			
23	Dr. Shashank Pandya	A phase III randomized controlled study of injection Proluton (hydroxyl progesterone caproate) as single dose preoperative therapy in patients with high risk operable breast cancer	Tata Memorial Centre
24	Dr. Shashank Pandya	Randomized controlled trial to assess blockade of voltage gated sodium channels during surgery in operable breast cancer	Tata Memorial Centre
25	Dr. Harsha Panchal	A phase III randomized, open-label, multi-center, global study of medi 4736 in combination with Tremelimumab therapy versus standard of care platinum-based chemotherapy in first-line treatment of patients with advanced or metastatic non-small-cell lung cancer (NSCLC) (Neptune)	Astrazeneca PharmaIndiaLtd
26	Dr. Harsha Panchal	A study of Palbociclib in combination with Letrozole as treatment of post-menopausal women with hormone receptor-positive, her2-negative advanced breast cancer for whom letrozole therapy is deemed appropriate	Parexel (Pfizer)
27	Dr. Harsha Panchal	A randomized, double-blind, placebo-controlled, phase 3 study to compare NSAI (Anastrozole Or Letrozole) plus Abemaciclib, A Cdk4 and Cdk6 inhibitor, or plus placebo, and to compare Fulvestrant plus Abemaciclib or plus placebo in postmenopausal women with hormone receptor-positive, Her2-negative locoregionally recurrent or metastatic breast cancer	Eli Lilly & Company
28	Dr. Harsha Panchal	Reditux™ registry to compare effectiveness, safety, and resource utilization of reditux™ vs. the reference medicinal product to treat diffuse large B-cell lymphoma and chronic lymphocytic leukaemia in routine clinical practice	Dr. Reddy's Laboratory
29	Dr. Harsha Panchal	A single arm, multicentric, open label, efficacy and safety study of docetaxel lipid suspension for injection of Intas Pharmaceuticals limited, India in patients with metastatic castration resistant prostate cancer	Intas (Lambda)

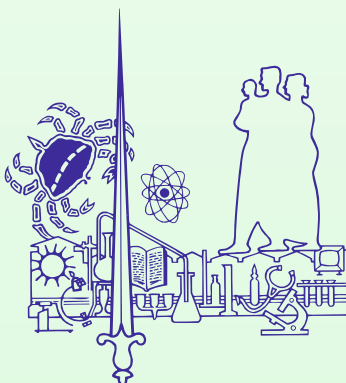


No.	Name of PI	Project Title	Funded by
<b>Medical and Paediatric Oncology</b>			
30	Dr. Harsha Panchal	A global, multicenter, three arms, open-label randomized study to evaluate the efficacy and safety of nano somaldocetaxel lipid suspension compared to taxotere® (docetaxel injection concentrate) in triple-negative breast cancer patients with locally advanced or metastatic breast cancer after failure to prior chemotherapy	Intas (Lambda)
31	Dr. Harsha Panchal	A Phase II Randomized, multi-center, double-blind, global study to determine the efficacy and safety of Durvalumab plus Olaparib combination therapy compared with Durvalumab monotherapy as maintenance therapy in patients whose disease has not progressed following standard of care platinum-based chemotherapy with Durvalumab in first-line stage IV non-small cell lung cancer (ORION)	Covance/Astrazeneca
32	Dr. Apurva Patel	A phase III multicenter, randomized study of oral ldk378 versus standard chemotherapy in previously untreated adult patients with Alk rearranged (Alk-positive), stage IIIb or iv, non-squamous non-small cell lung cancer	Novartis
33	Dr. Apurva Patel	An open label, single arm, multicentric, phase IV study to evaluate the safety and efficacy of Bevacizumab of Intas Pharmaceuticals limited in approved indications	Intas (Lambda)
34	Dr. Sonia Parikh	A prospective, multicenter, randomized, open-label, active-controlled, two-parallel groups, phase 3 study to compare the efficacy and safety of Masitinib at 7.5 mg/kg/day to dacarbazine in the treatment of patients with non-resectable or metastatic stage 3 or stage 4 melanoma carrying a mutation in the juxta membrane domain of c-kit	Maya Clinic
35	Dr. Sonia Parikh	A phase IV study to investigate the safety and efficacy of Regorafenib in Indian patients with metastatic colorectal cancer	Siro (Bayer)
36	Dr. Priti Sanghavi	A multi-centre, randomized, double blind, parallel-group, comparative clinical trial to evaluate the safety and clinical equivalence of generic Clotrimazole troche/lozenges USP, 10mg (Unique Pharmaceutical laboratories, India) to Clotrimazole troche/lozenges ® 10mg (roxane laboratories inc., USA) in subjects with oropharyngeal candidiasis	Thing Pharma
37	Dr. Sonal Patel Shah	A two arm, randomized, multicentric, open label, efficacy and safety study of Docetaxel lipid suspension (DLS) for injection of Intas Pharmaceuticals Limited, India in non-small cell lung cancer patients	Intas (Lambda)
38	Dr. Akanksha Garg	A randomised, double-blind, parallel-group, phase III study to compare the efficacy, safety, and immunogenicity of proposed Rituximab Biosimilar (DRL_RI) with Mabthera® in subjects with previously untreated, stage II-IV, cluster of differentiation (CD) 20-positive, low tumor burden follicular lymphoma	Parexel (Dr. Reddy's)
<b>Microbiology</b>			
39	Dr. Parijat Goswami	Prevalence of New Delhi Metallo Beta lactamase in Acinetobacterspecies	GCS/GCRI

No.	Name of PI	Project Title	Funded by
<b>Molecular Oncology</b>			
40	Dr. Prabhudas Patel	Significance of Galactin-3 in association with glycosylation in oral cancer	ICMR
41	Dr. Prabhudas Patel Dr. HemanginiVora Dr. Trupti Trivedi Dr. Jayendra Patel	Development and validation of biomarker Panel for early detection and enhanced management of oral (Buccal Mucosa) cancer	GSBTM
42	Dr. Chetana Parekh Dr. Kinjal A. Patel	Prevalence of HR-HPV infections in cervical cancer patients	GCS/GCRI
43	Dr. Harsha Panchal Dr. Shruti Patel	Clinical significance of T315I mutation and role of glycosylation in Imatinib resistant CML patients	GCS/GCRI
44	Dr. Jayendra Patel	Study of tobacco exposure associated biomarkers in oral cancer	GCS/GCRI
45	Dr. Bijal Patel Dr. Prabhudas Patel	VEGF family expression in cancer cervix and its prognostic significance (Completed)	GCS/GCRI
46	Dr. Chetana Parekh Dr. Prabhudas Patel	Prevalence of high risk HPV type 16 and 18 in cervical cancers in population from Gujarat, West India (Completed)	GCS/GCRI
<b>Palliative Medicine</b>			
47	Dr. Priti Sanghavi	Point prevalence of dyspnea, quality, and effect of dyspnea management in ambulatory patients with advanced cancer: A multi-center Study	GCRI
48	Dr. PritiSanghavi Dr. Bhavan Patel Dr. Richa Singh Queenjal Anandi Himanshu Brother Pooja Solanki	Setting up a structure to prioritize home based palliative care visits	Stanford Medicine- NCG, Tata Trusts
<b>Radiation Oncology</b>			
49	Dr. Ankita Parik Dr. Preeti Sanghavi	To evaluate generic Clotrimazole/ Roxane with oropharyngeal Candidiasis	Thing Pharma
<b>Stem Cell Biology</b>			
50	Dr. Franky Shah	Development and validation of amplicon panel for hereditary breast and ovarian cancer in Indian population (a collaborative project between GBRC-GCRI)	GSBTM
51	Dr. Franky Shah	Assessment of PD-1 and PD-L1 as biomarkers in lung cancer	GCRI
52	Dr. Apexa Raval	Identification and evaluation of potential microRNA target genes in breast cancer	GCRI
53	Dr. Jigna Joshi	Evaluation of patched (PTCH) and smoothened (SMO) proteins in oral cancer	GCS/GCRI
<b>Tumor Biology</b>			
54	Dr. Nandita Ghosh Dr. Rajan Tankshali	Exploring the clinical importance of molecular biomarkers involved in EGFR-induced and K-Ras mediated signaling pathways in colorectal cancer patients	GCS/GCRI
55	Dr. Nandita Ghosh Dr. Pariseema Dave	To explore the clinical value of molecular markers in epithelial ovarian cancer- A preliminary study	GCS/GCRI
56	Dr. Nandita Ghosh	Clinical significance of expression of inflammatory response genes and DNA repair genes in colorectal carcinoma	GCS/GCRI
57	Dr. Toral Kobawala	Exploring the role of miR-200 family in ovarian cancer patients	GCRI

## R. LIST OF EQUIPMENTS 2019 - 2020

Sr. No.	Name of the Equipment	Department	Qty	Company	Total Cost
1	Electro Hydraulic Surgical Operation Theatre Table	BT OT	1	M/s. New Era Marketing	13,57,000
2	Digital Radiography	Radiology	1	M/s. Carestream Health India Pvt. Ltd.	1,89,24,944
3	Programmable Temperature Controlled Slide Processing System (Hybrite)	Cancer Biology	1	M/s. Diagnostic Biosystems (India)	4,13,000
4	Advanced Digital Medical Linear Accelerator with accessories and 3rd Party items	Radiotherapy	1	M/s. Varian Medical Systems International AG	16,31,00,000
5	Grossing Station	Histopathology	3	M/s. Hybrid Biomedical Equipments & Allied Technologies	36,81,600
6	Cobalt- 60 High Dose Rate Brachytherapy Remote after Loading System	Radiotherapy	1	M/s. Elekta Ltd.	3,25,23,516
7	Biosafety Cabinet	Medical Oncology	3	M/s. KIM Micro Systems	10,62,000
8	Dose calibration I-131 Therapy	Nuclear Medicine	2	M/s. Meditronix Corporation	19,10,978
9	TLD Reader with accessories	Medical Physics, RT	1	M/s. Sweta Electronics	36,00,000
10	Latest wide bore Computed Tomography (CT) simulator system	Radiotherapy	1	M/s. Siemens Health Care GmbH	5,86,50,508.35
11	Refrigerated Centrifuge	Central Lab, Pathology	1	M/s. Bionix labsystems Pvt. Ltd.	7,37,500
12	-80°C Deep Freezer	Cancer Biology	2	M/s. Bionix labsystems Pvt. Ltd.	27,14,000





**S. BALANCE SHEET**



**THE GUJARAT CANCER & RESEARCH INSTITUTE**

(M. P. SHAH CANCER HOSPITAL)  
Affiliated to B J Medical College

**FINANCIAL STATEMENT  
(BALANCE SHEET)  
2019 - 2020**

**Civil Hospital Campus, Asarwa, Ahmedabad 380 016, Gujarat, INDIA**

**Tel: 079-22688000 (Hunting); Fax: 079-22685490**

7th Floor, Heritage Chambers  
B/h. Bikanerwala, Off S.M. Road,  
Nr. Azad Society, Nehru Nagar, Ahmedabad-380 015.  
Phone : (B) 079 - 2647 2000 E mail : contact@mmsco.in  
Website : www.mmsco.in

**MUKESH M. SHAH & CO.**

CHARTERED ACCOUNTANTS

AHMEDABAD • MUMBAI • BANGALORE

**INDEPENDENT AUDITOR'S REPORT ON THE FINANCIAL STATEMENTS**  
**TO THE TRUSTEES/MEMBERS OF The Gujarat Cancer and Research Institute, Ahmedabad**  
[A Trust registered under the Bombay Public Trust Act, 1950, F/451/Ahmedabad dtd. 29.01.1972]

**Opinion**

We have audited the accompanying financial statements of **The Gujarat Cancer and Research Institute, Ahmedabad** ("the Trust"), which comprise the Balance Sheet as at 31st March, 2020, the Statement of Income and expenditure Account for the year then ended, and a summary of the significant accounting policies and other explanatory notes.

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the Balance Sheet, of the state of affairs of the Trust as at 31st March, 2020; and
- (b) in the case of the Statement of Income & Expenditure Account, of the Excess of Income over Expenditure for the year ended on 31st March, 2020.

**Basis for Opinion**

We conducted our audit in accordance with Standards on Auditing (SAs). Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the ethical requirements that are relevant to our audit of the financial statements, and we have fulfilled our other responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

**Responsibilities of Management and Those Charged with Governance for the Financial Statements**

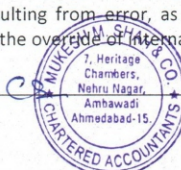
Management is responsible for the preparation of the financial statements in accordance with The Bombay Public Trust Act, 1950 ("the Act") and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process.

**Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.



7th Floor, Heritage Chambers  
B/h. Bikanerwala, Off S.M. Road,  
Nr. Azad Society, Nehru Nagar, Ahmedabad-380 015.  
Phone : (B) 079 - 2647 2000 E mail : contact@mmsco.in  
Website : www.mmsco.in

**MUKESH M. SHAH & CO.**

CHARTERED ACCOUNTANTS

AHMEDABAD \* MUMBAI \* BANGALORE

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.
- We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

#### Report on Other Legal and Regulatory Requirements

As required under section 33(2) of the Bombay Public Trust Act, 1950, we further report that –

- (a) The accounts are maintained regularly and in accordance with the provisions of the Act and the Rules thereunder.
- (b) The Income and Expenses are properly and correctly shown in the accounts.
- (c) The cash balance and vouchers in the custody of the authorised person on the date of audit were in agreement with the accounts.
- (d) Books, Deed, Accounts vouchers and other documents and records required by us were produced before us.
- (e) A register of movable properties of the trust duly certified by the trustee has been properly maintained.
- (f) There are no defects and inaccuracies mentioned in the previous audit report which need to be complied with.
- (g) The Chief Accountant appeared before us and furnished necessary information required by us.
- (h) No properties of funds were applied for any object or purpose other than the object or purpose of trust.
- (i) There are no amounts outstanding for more than 1 year and amount written off were Rs. NIL.
- (j) Tenders were generally invited for repairs and construction work where the amount exceeded Rs. 5,000/-.
- (k) No money of the Trust have been invested contrary to the provisions of Section 35 of the Act.
- (l) We have not come across any case of alienations of immovable property contrary to the provision of section 36 of the act.
- (m) We have not come across any case of alienations of immovable property contrary to the provision of section 36 of the act.

For Mukesh M. Shah & Co.  
Chartered Accountants  
Firm Registration No.: 106625W

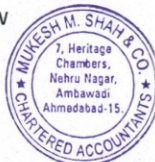
*CS Shah*  
Chandresh S. Shah  
Partner

Membership No.: 042132

Place: Ahmedabad

Date: September, 21, 2020.

UDIN: 20042132AAAAZN8212





THE GUJARAT PUBLIC TRUSTS ACT, 1950  
SCHEDULE VIII [VIDE RULE 17(1)]  
**NAME OF PUBLIC TRUST: THE GUJARAT CANCER AND RESEARCH INSTITUTE**  
Trust No: F/451/AHD Date of Registration: 29.1.1972  
Address of the Trust Office: Civil Hospital Campus, Asarwa, Ahmedabad-380016 Phone No: 22688000  
**Balance Sheet as at 31st March, 2020**  
Bank Account No. of Trust for transactions of Foreign Contribution 3162819081. F.C.R.A No. 041910456 Date: 20.1.2014 Central Bank of India, Chamanpura Br., Civil Hospital Campus, Ahmedabad.

FUNDS AND LIABILITIES	Sch. No.	INR		PROPERTY AND ASSETS	Sch. No.	INR	
		As at March 31,				As at March 31,	
		2020	2019			2020	2019
<b>Trust Funds or Corpus</b>	1			<b>Immovable Properties</b>	5	3,25,29,613	3,25,36,499
Balance as per last Balance Sheet		1,19,55,09,799	1,19,55,09,799	Investments-Fixed Deposits with HDFC Limited		1,00,04,00,000	-
Adjustment during the year		-	-	Furniture, Fixtures & Others	5	1,84,94,29,263	1,03,85,24,684
		1,19,55,09,799	1,19,55,09,799	Loans(Secured or unsecured)		-	-
<b>Other Earmarked Funds:</b>				Good/Doubtful		-	-
Depreciation Fund	5	47,07,46,094	45,00,08,944	Loan Scholarships		-	-
Sinking Fund		-	-	Other Loans		-	-
Reserve Fund		-	-	<b>Sundry Debtors</b>	6	5,10,41,651	99,96,470
Any Other Funds	2	2,86,04,54,726	2,30,94,41,856	<b>Inventories</b>	7	2,19,02,167	1,54,07,069
		3,33,12,00,820	2,75,94,50,800	<b>Advances:</b>	8	-	-
<b>Loans(Secured or Unsecured):</b>				To Trustees		-	-
From Trustees		-	-	To Employees		4,80,768	3,08,676
From Others		-	-	To Contractors		27,06,836	3,15,531
		-	-	To Lawyers		-	-
<b>Liabilities:</b>				To Others		31,23,15,118	12,51,93,188
For Expenses	3	11,19,87,729	16,38,90,292			31,55,02,722	12,58,17,395
For Advances		2,76,28,115	2,27,96,660	<b>Income Outstanding:</b>		-	-
For Rent and Other Deposits	4	6,16,31,627	8,90,38,167	Rent		-	56,000
For Sundry Credit Balances		29,83,12,183	8,98,38,888	Interest		7,70,00,892	8,60,74,860
		49,95,59,654	36,55,64,007	Other Income		-	-
<b>Income and Expenditure Account:</b>				<b>Cash and Bank Balances</b>		7,70,00,892	8,61,30,860
Balance as per Last Balance Sheet		(63,22,98,480)	(65,27,72,586)	(a) In Current & Saving Accounts and Fixed Deposit Accounts	9	1,06,61,49,077	2,37,91,01,584
Add: Surplus as per Income and Expenditure Account		2,01,82,080	2,04,74,106	(b) In F.C.R.A Account No 3162819081 and Fixed Deposit Account	9	48,191	5,84,108
		(61,21,16,400)	(63,22,98,480)	(c) With the Trustee		1,50,297	-
<b>Significant Accounting Policies</b>	12A			(d) With the Cashier		1,06,63,47,565	2,37,98,13,149
<b>Notes to the Financial Statements</b>	12B						
<b>TOTAL</b>		<b>4,41,41,53,873</b>	<b>3,68,82,26,126</b>	<b>TOTAL</b>		<b>4,41,41,53,873</b>	<b>3,68,82,26,126</b>

Notes:  
 (1) Immovable properties are valued at cost.  
 (2) Investments are valued at cost.  
 (3) All the bank accounts stand in the name of the Institute.  
 (4) There are no investments in concerns in which the trustees are interested.  
 (5) The accounts are maintained on mercantile system of accounting.  
 The above Balance Sheet to the best of our belief contains a true account of the Funds and Liabilities and of the Property and Assets of the Institute.

FOR AND ON BEHALF OF TRUSTEES		As per our report of even date attached	
Pankaj R. Patel Chairman & Trustee Civil Hospital Campus, Asarwa, Ahmedabad-380016 Phone No: 22688000	Prashant Kinariwala Trustee	Dr. Shashank J. Pandya Director	For, Mukesh M Shah & Co., Chartered Accountants Firm Reg. No.106625W  (Chandresh S Shah) Partner Membership No. 042132 7th Floor, Heritage Chambers, Bikanerwala, Off S.M Road, Nr Azad Society, Nehru Nagar, Ahmedabad-380015 Phone No: 26472000 Place: Ahmedabad Date: - - 2020



THE GUJARAT PUBLIC TRUSTS ACT, 1950							
SCHEDULE IX [VIDE RULE 17(1)]							
NAME OF PUBLIC TRUST: THE GUJARAT CANCER AND RESEARCH INSTITUTE							
Trust No: F/451/AHD Date of Registration: 29.1.1972							
Address of the Trust Office: Civil Hospital Campus, Asarwa, Ahmedabad-380016 Phone No: 22688000							
Income and Expenditure Account for the year ended 31st March, 2020							
Bank Account No. of Trust for transactions of Foreign Contribution 3162819081. F.C.R.A No. 041910456 Date: 20.1.2014 Central Bank of India, Chamanpura Br., Civil Hospital Campus, Ahmedabad.							
EXPENDITURE	Sch. No.	INR		INCOME	Sch. No.	INR	
		For the year ended March 31,				For the year ended March 31,	
		2020	2019			2020	2019
To Expenditure in respect of properties:				By Income			
Rates, Taxes, Cesses		1,53,26,873	51,52,073	Hospital Income		73,14,91,996	66,87,88,074
Repairs and Maintenance		42,08,292	-	By Rent (accrued/realized)		-	96,000
Salaries		-	-	By Interest (accrued/realized)		-	-
Insurance		-	-	On Securities		-	-
Depreciation	5	10,58,568	12,74,573	On Loans		-	-
Other Expenses		-	-	On Bank Accounts		5,61,64,219	6,46,50,204
		2,05,93,733	64,26,646	By Dividend		-	-
To Establishment Expenses		-	-	By Donations in cash or kind:		-	-
To Remuneration (in the case of math)		-	-	Domestic		-	-
To the head of the math, including his household expenditure, if any.		-	-	International		-	-
To Legal and Professional Expenses		21,79,652	21,45,592	F.C.R.A No. 041910456 Date: 20.1.2014		-	-
To Audit Fees		4,37,900	4,23,500	By Grants from Government of Gujarat	10	94,55,47,574	78,48,31,000
To Contribution and fees		-	-	By Income from Other Sources		2,15,71,422	2,14,72,849
To Amounts Written off:		-	-	By Transfer from Reserve		-	-
(a) Bad Debts		-	-				
(b) Loan Scholarship		-	-				
(c) Irrecoverable Rents		-	-				
(d) Other Items		-	-				
To Miscellaneous Expenses		-	-				
Depreciation	5	2,18,22,020	2,78,28,702				
To Amounts transferred to Reserve of Specific Funds		-	-				
To Expenditure on objects of the Trust:		-	-				
(a) Religious		-	-				
(b) Educational		-	-				
(c) Medical Relief	11	1,68,95,59,826	1,48,25,39,581				
(d) Relief of Poverty		-	-				
(e) Other charitable objects		-	-				
To Surplus Carried over to Balance Sheet		2,01,82,080	2,04,74,106				
Significant Accounting Policies	12A						
Notes to the Financial Statements	12B						
<b>TOTAL</b>		<b>1,75,47,75,211</b>	<b>1,53,98,38,127</b>	<b>TOTAL</b>		<b>1,75,47,75,211</b>	<b>1,53,98,38,127</b>

FOR AND ON BEHALF OF TRUSTEES

Pankaj R. Patel  
Chairman & Trustee  
Civil Hospital Campus, Asarwa, Ahmedabad-380016 Phone No.: 22688000

Prashant Kinarivala  
Trustee

Dr. Shashank J. Pandya  
Director

Place: Ahmedabad  
Date: - - 2020

As per our report of even date attached

For, Mukesh M Shah & Co.,  
Chartered Accountants  
Firm Reg. No.106625W

(Chandresh S Shah)  
Partner  
Membership No. 042132  
7th Floor, Heritage Chambers,  
Bikanerwala, Off S.M Road, Nr Azad Society,  
Nehru Nagar, Ahmedabad-380015 Phone No:  
26472000  
Place: Ahmedabad  
Date: - - 2020



## Acknowledgement

Our sincere thanks and gratitude to:

Shri Acharya Devvrat, His Excellency the Governor of Gujarat

Shri Vijay Rupani, Hon'ble Chief Minister, Gujarat State

Shri Nitin Patel, Hon'ble Deputy Chief Minister, Gujarat State

Shri Anil Mukim, IAS, Chief Secretary, Govt. of Gujarat

Dr. Jayanti S. Ravi, IAS, Addl. Chief Secretary, Health & Family Welfare Dept., Govt. of Gujarat

Shri Jai Prakash Shivahare, IAS, Principal Secretary & Commissioner of Health, Govt. of Gujarat

Shri Roopwant Singh, IAS, Secretary, Finance Dept. (Exp), Govt. of Gujarat

Shri M. K. Das, Chairman, IAS, GMDC, Ahmedabad

Dy. Director General, Dte. General & Health Services

Ministry of Health & Family Welfare, Govt. of India

Director (IF), Ministry of Health & Family Welfare, Govt. of India

Mayor, Ahmedabad Municipal Corporation

Municipal Commissioner, Ahmedabad

Superintendent, Civil Hospital, Ahmedabad

Dean, Govt. Dental College, Ahmedabad

Dean, B. J. Medical College, Ahmedabad

Director General, Indian Council for Medical Research, New Delhi

Officer-Incharge, ICMR, NCRP, Bangalore

Director, NIOH, Ahmedabad

Vice Chancellor, Gujarat University, Ahmedabad

Department of Health & Family Welfare, Govt. of Gujarat

Ministry of Health & Family Welfare, Govt. of India

Director General of Department of Science & Technology, New Delhi

Director General of Department of Biotechnology, New Delhi

Commissioner of Police, Ahmedabad

Gujarat Cancer Society, Ahmedabad

Social Organisations providing helping hand to our day today activities

All staff members of Gujarat Cancer & Research Institute and Gujarat Cancer Society Parivar

Director, Institute of Kidney Diseases & Research Centre

Director, U. N. Mehta Institute of Cardiology & Research Centre

Dean and all staff members of GCSMCH & RC

### Annual Report Preparation Committee

Head of Departments / Units/ Services / Administrative Sections

Dr. Hemangini Vora, Dr. Trupti Trivedi, Mr. Rushi Patel, Mr. Mahendra Kumpavat

# GCRI IN COVID-19 PANDEMIC CARE





# The Gujarat Cancer & Research Institute

**(M. P. Shah Cancer Hospital)**

**STATE CANCER INSTITUTE**

(Recognized by Ministry of Health  
& Family Welfare, Govt. of India)

