Department of Radiation Oncology

Our Mission:

- The RCC, a centre of excellence in patient care, Medical education and research was established in 1999 and Upgradation of existing Regional Cancer Centre as State Cancer Institute of 138 Crores Project is in full swing and expected to complete in May 2020, with state of the art cancer treatment facilities with all modern Radiotherapy equipments like two Linear Accelerators, high and low energy, CLINAC Ix low energy (6 MV) LINAC and Varian TRUE Beam 6, 10. 15 MV LINAC and Ir ¹⁹² 24 channels Gamma med plus Ix Varian Brachytherapy machine along with CT Simulator, PET CT, MRI and Cyclotron for department of Radiation Oncology.
- The Radiation Oncology department dedicated for cancer patients, providing the best possible quality of preventive, diagnostic, therapeutic, rehabilitative, palliative and supportive services under one roof to achieve best treatment outcomes.
- The Radiation Oncology department comprise of dedicated team of doctors, nurses, technicians, counselors, social workers, data managers and other helping staffs. The team provides medical, nursing and palliative care for patients as well as emotional support and guidance to members of the patients' families to help them cope with the crisis.



Faculty/SR/Staff:

Faculty/SR/Stan:				
S. No.	Faculty Name	Designation		
1.	Dr. Rajiv Ranjan Prasad	Professor & Chief (State Cancer		
		Institute)		
2.	Dr. Rajesh Kumar Singh	Professor & Head		
3.	Dr. Seema Devi	Additional Professor		
4.	Dr. Dinesh Kumar Sinha	Associate Professor		
5.	Dr. Richa Madhawi	Associate Professor		
6.	Dr. Shraddha Raj	Assistant Professor		
7.	Dr. Kunal Kishor	Assistant Professor		
8.	Dr. Prince Kumar	Senior Resident		
9.	Mrs. Sashi Prabha Sinha	In-Charge Sister		
10.	Mrs. Savita Kumari-I	In-Charge Sister		
11.	Mrs. Mala Rani	Senior Nursing Officer		
12.	Mrs. Jamuna Lakra	Nursing Officer		
13.	Mr. Laxuman Singh Meena	Nursing Officer		
14.	Mr. Ravindra Singh Khichar	Nursing Officer		
15.	Mr. Lalit Kumar	Technical Grade-I Radiotherapy		
16.	Mr. Braj Kishore Kumar	Technical Grade-I Radiotherapy		

17.	Mr. Devesh Kumar Srivastave	Technical Grade-II Radiotherapy
18.	Mr. Mukesh Kumar	Office Attendant

Clinical Expertise:

- 1. **Radiation Oncology** Radiation therapy uses high-energy radiation to kill or shrink cancer cells. Charged particles, x-rays and gamma rays are radiations used for killing the cancer cells. The radiation therapy can be given through an external beam or internally.
- 2. Our Radiation Oncologist plan meticulously for better outcome minimizing the chance for any side effects. Our physicists ensure complete safety while performing the radiation therapies. Radiation Oncologist may prescribe radiation therapy before, during, or post-surgery depending on the treatment plan. Our team of expert oncologists formulate a consensus and personalized treatment plan through joint clinics.

Academic activities:

- Organised CME on "World Cancer Day 2019" on 04th February 2019 at Orientation Hall, Bihar Museum.
- Organised on "Oncocon 2019" on 17th & 18th August 2019 at Ranchi, Jharkhand.
- Organised CME on "Breast Cancer Update 2019" on 18th October 2019 at IGIMS.

Registered Patients(2018-19):

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OPD New Registration	6800		
OPD Old Registration	44098		
Emergency Registration	194		
Radiotherapy	959		
Chemotherapy	15584		
Procedures	273		

Specialty Clinics:

- Head & Neck Clinic
- Breast Cancer Clinic
- Uro- Onco Clinic
- Psycho- Onco Clinic
- Gyn-Onco Clinic
- Retinoblastoma clinic

Research:

Prof. (Dr.) Rajesh Kumar Singh- Principle Investigator

- A Randomized, Multiple dose Multicenter, Comparative, parallel Study to evaluate the efficacy, safety and pharmacokinetic characteristics of intravenous infusion of trastuzumab (Test, Hetero) and reference Medicinal Product (Reference Roche) in combination with standard chemotherapy in Patients of HER2-positive Metastatic Breast Cancer (TRUMAB Study)
- A Randomized, Multiple dose Multicenter, Comparative, parallel Study to evaluate the Pharmacokinetic, Pharmacodynamic, Efficacy and Saftey of Subcutaneous Injection of Denosumab (Hetero) and Reference Medicinal Product(Denosumab, Amgen Inc.) in patients with bone metastases from soild tumours.

Dr. Dinesh Kumar Sinha, Assosciate Professor, Radiation Oncology, Principle Investigator Sub-Investigator, Dr. Richa Madhawi, Assosciate Professor, Dr. Shraddha Raj, Assistant Professor & Dr. Kunal Kishor, Assistant Professor

- MYL-1402O-3001: Multicentre, Double-Blind, Randomized, Parallel-Group Study to Assess the Efficacy and Safety of MYL-1402O Compared With Avastin®, in the First –line treatment of Patient with Stage IV Non-Squamous Cell Lung Cancer
- KCP-330-023, BOSTON: A Phase 3 Randomized, Controlled, Open-label Study of Selinexor, Bortezomib, and Dexamethasone (SVd) Versus Bortezomib, and Dexamethasone (Vd) in Patients with Relapsed or Refractory Multiple Myeloma (RRMM)
- KCP-330-009, SADAL: A Phase 2b Open-label Study of Selinexor (KPT-330) in Patients with Relapsed/Refractory Diffuse Large B-Cell Lymphoma (DLBCL)
- PROTOCOL NO.: 0063-17
 - A global, multicenter, three arms, open-label randomized study to evaluate the efficacy and safety of Nanosomal Docetaxel 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.
- RedituxTM Registry to Compare Effectiveness, Safety, and Resource Utilization of RedituxTM v-s the Reference Medicinal Product to Treat Diffuse Large B-Cell Lymphoma and Chronic Lymphocytic Leukaemia in Routine

Clinical Practice. Protocol no RI-02-003.

Thesis:

• Thesis as co-guide- Oxidative Stress levels in Head and Neck Cancer Patients. Dr Richa Surit, Dr Ravi Shekhar, Dr Dinesh Kumar Sinha, Dr Uday Kumar.

Training:

- Observership training (IMRT, IGRT) completed at TMH, Mumbai from 30.10.2019 to 20.11.2019 by Dr. Dinesh Kumar Sinha Assosciate Professor, Radiation Oncology
- Observership training (IMRT, IGRT) completed at TMH, Mumbai from 30.10.2019 to 20.11.2019 by Dr. Richa Madhawi, Assosciate Professor, Radiation Oncology.
- Dr. Shraddha Raj Assistant Professor, Radiation Oncology is undergoing in short term observership training at AIIMS, Reshikesh from 22.07.2019 to 22.01.2020
- Observership training in Management of nursing care services in a comprehensive oncology care completed at TMH, Mumbai from 15.11.2019 to 14.12.2019 by Mrs. Shashi Prabha Sinha, Senior Nursing officer, Radiation Oncology.
- Observership training in Nursing care of patient on chemotherapy, Radiation, Surgery, Chemotherapy port care etc. Completed at TMH, Mumbai from 15.11.2019 to 14.12.2019 by Mr. Laxman Singh Meena, Nursing officer, Radiation Oncology.
- Observership training in 3DCRT,IMRT, and IGRT, Advance mould room techniques and QA and QC including radiation Oncology safety completed at Medanta Cancer institute, New Delhi from 15.02.2019 to 30.03.2019 by Mr. Lalit Bhushan, Radiotherapy Technician Gr-I & Mr. Devesh Kumar Srivastava, Radiotherapy Technician Gr-II & from 01.04.2019 to 15.05.2019 by Mr. Braj Kishor Kumar, Radiotherapy technician Gr-I Department of Radiation Oncology

Department Achievements:

- MD Radiation Oncology course (4 Seats) approved by MCI to start session from 2020-2021.
- Bachelor of Medical Radiotherapy Technology course approved by AERB
- Diploma in Medical Radiotherapy Technology (DMRT) Course.
- Inclusion of Faculty from Oncology and other super speciality departments in Integrated MBBS teaching approved in college council meeting.
- Contribution in development of Patients Case Record File, hard copy and electronic Data record keeping system in our department.
- To start Medical Physics Internship duration of one year for four students.
- Creation of State Cancer Institute Logo.


