## GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION NO- 1662

ANSWERED ON 30/07/2025

## **CANCER RESEARCH AND INNOVATION**

1662. SHRI MANOJ TIWARI

Will the PRIME MINISTER be pleased to state:-

- (a) the manner in which the Government through its grant-in-aid institution, Tata Memorial Centre, is leveraging its collaboration with Wipro GE HealthCare to advance cancer research and innovation in the country;
- (b) whether this partnership includes the development and implementation of AI-based applications for medical imaging, clinical workflows and advanced visualization tools in oncology; and
- (c) if so, the details thereof?

## **ANSWER**

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) Department of Atomic Energy, through its grant-in-aid institution, Tata Memorial Centre, has collaborated with Wipro GE Healthcare (WGEHC) for 'Cancer Research & Innovation'. The aim is for development and validation of emerging technologies & digital platforms in Oncology including AI-based applications for medical imaging and clinical workflows, hardware & software for advanced-visualization tools to post-process & analyses medical images, vetted data annotations for application-development.
- (b) Yes, this partnership includes development and implementation of AI based applications for medical imaging, clinical workflows and advanced visualization tools in oncology.
- (c) The various research initiatives that will be undertaken under this collaboration especially in the field of implementation of AI/ML based application as are follows:
  - i) Research in MRI:

New sequences are deployed in Tata Memorial Hospital to facilitate cutting edge research to enhance diagnosis and biology interpretation of cancers.

## ii) Other Proposals:

- 1. Differentiating Tumor Recurrence from Radiation Necrosis in High-Grade Gliomas Using ASL and 3D MRS
- 2. Prospective Study on the Role of CEST Imaging in Neuro-Oncology.
- 3. Prediction of Metastatic Nodes Using Deep Learning in Head and Neck Cancers.
- 4. Qualitative and quantitative comparison of image quality between single shot-EPI and multishot-EPI DWI in head neck malignancies.
- 5. MR Contour DL for Radiation Therapy Planning using GE MR Contour DL for automated breast and chest wall segmentation in RT planning. GE Integration using AI-based auto-contouring of targets.

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