# GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY

#### **RAJYA SABHA**

#### **UNSTARRED QUESTION NO- 2082**

ANSWERED ON 07/08/2025

### PROMOTION OF CANCER RESEARCH AND INNOVATION

2082. DR. KAVITA PATIDAR
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## Will the PRIME MINISTER be pleased to state:-

- (a) whether Department of Atomic Energy, through its grant-in-aid institution, Tata Memorial Centre, has collaborated with Wipro GE Healthcare to promote cancer research and innovation in India;
- (b) whether this collaboration involves development and implementation of Artificial Intelligence (AI) based applications for medical imaging, clinical workflow and advanced visualization tools in the field of 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) Yes, Department of Atomic Energy, through its grant-in-aid institution, Tata Memorial Centre, has collaborated with Wipro GE Healthcare (WGEHC) to promote '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 collaboration 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 are as 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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