

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.3704
TO BE ANSWERED ON 12.08.2015

SUPPLY OF LUTETIUM-177

3704. KUNWAR HARIBANSH SINGH:
SHRI GAJANAN KIRTIKAR:

Will the PRIME MINISTER be pleased to state:

- (a) whether Radio Pharmaceutical Division of Bhabha Atomic Research Centre (BARC) has supplied Lutetium - 177 DOTATATE medicine for neuroendocrine tumors cancer patients in All India Institute of Medical Sciences (AIIMS) hospital;
- (b) if so, the effect of the above medicine to neuroendocrine tumor patients particularly with regard to pancreatic neuroendocrine tumors with liver" metastatic;
- (c) the procedure/cycle followed in this treatment;
- (d) whether the said medicine has timely been supplied by the BARC to AIIMS in accordance with the cycle of medicine prescribed to the patients;
- (e) if so, the details thereof and if not, the reasons therefor; and
- (f) the steps taken/being taken by the Government for timely and adequate supply of this medicine to AIIMS and other central hospitals so that the patients are not put to any hardship?

ANSWER

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

- (a) Bhabha Atomic Research Centre (BARC) through Board of Radiation & Isotope Technology (BRIT) supplies pharmaceuticals grade Lutetium-177 CHLORIDE ($^{177}\text{LuCl}_3$) to AIIMS which is used for the preparation of Lutetium - 177 DOTATATE. Preparation of Lutetium - 177 DOTATATE is being carried out by Hospital Radiopharmacy of AIIMS.
- (b) Lutetium-177 DOTATATE is reported to be effective in the treatment of pancreatic neuroendocrine tumors with liver metastasis.
- (c) The exact procedure/cycle followed in this treatment is specific to patient's condition and is decided by the Nuclear Medicine Physician depending upon the extent of metastasis, age, body weight and patient medical conditions.
- (d)&(e) The production schedule of this radiopharmaceutical ingredient is normally decided based on the requirement of the hospitals. As per the production schedule, AIIMS is regularly procuring this radiopharmaceutical ingredient through Board of

Radiation and Isotope technology (BRIT). In the year 2015, AIMS has asked pharmaceutical grade $^{177}\text{LuCl}_3$ on 13 occasions as per the following details.

Details of ^{177}Lu activity supplied by IP&AD to AIIMS, New Delhi in the year 2015.

Date	Activity (mCi)
05-01-2015	2000
19-01-2015	1300
23-02-2015	1650
10-03-2015	1350
30-03-2015	1400
07-04-2015	1134
27-04-2015	1350
05-05-2015	1900
25-05-2015	1200
01-06-2015	1300
29-06-2015	1500
06-07-2015	1500
27-07-2015	1450

- (f) The Dhruva reactor in BARC is geared up to meet the increased production of Lu-177 required for the preparation of the radiopharmaceutical to meet the growing demand of AIIMS as well as other nuclear medicine centres of India.
