

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH RESEARCH**

**LOK SABHA
UNSTARRED QUESTION NO.1860
TO BE ANSWERED ON 30TH JULY, 2021**

STEM CELL RESEARCH

**1860 SHRI C.N. ANNADURAI:
SHRI GAJANAN KIRTIKAR:
SHRI DHANUSH M. KUMAR:
SHRI GAUTHAM SIGAMANI PON:
SHRI SELVAM G:**

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) the details of stem cell research undertaken in the country during each of the last three years and the current year;
- (b) whether the Government is not giving support and encouragement to stem cell treatment/therapy which is effective for treatment of cancer and other life threatening diseases;
- (c) if so, the details thereof and the reasons thereof and the corrective steps taken in this regard;
- (d) whether the Government has not issued adequate financial allocation for stem cell research which has drastically affected stem research in the country, if so, the quantum of funds released during last three years for the State of Maharashtra and Tamil Nadu; and
- (e) whether the Government has issued any guidelines to regulate stem cell research in the country and if so, the details thereof and the action taken by the Government in this regard?

ANSWER

**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY
WELFARE**

(DR. BHARATI PRAVIN PAWAR)

(a) to (c) The Government of India has undertaken stem cell research through various Departments/ Institutions.

Department of Health Research-Indian Council of Medical Research (DHR-ICMR) is supporting biomedical research and stem cell is one of the priority areas promoted through centres for advance research/excellence, task force activities in identified thematic areas, viz. Basic stem cell biology, Cancer stem cell, Translational research and Generation of induced pluripotent stem cells (iPSC), open ended investigator initiated ad-hoc projects and fellowships for past twenty years. Many laboratories have been strengthened through above programmes.

Under Stem Cells & Regenerative Medicine, the Department of Biotechnology (DBT) has implemented projects on embryonic, adult and induced pluripotent stem cells (iPSC). Projects have been supported in areas of basic biology of stem cells; early and late translational research; developing gene editing technology for potential therapeutic applications; creation of animal models for various human diseases and training programmes on various components of stem cells and regenerative medicine. Studies have also been implemented to develop improved methods and techniques for isolating and culturing stem cells from different origin and also to generate induced pluripotent stem cells from various somatic/adult tissues.

Council of Scientific and Industrial Research (CSIR), through its constituent laboratories namely CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi and CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata has undertaken a Sickle Cell Anemia Mission during FY 2017-2020.

(d) Financial assistance for stem cell research activities is being provided by the Government. Details of funds released to the States of Maharashtra and Tamil Nadu during last three years are as follows:-

(Rs. in Crores)

State/UT	Funds Allocated by ICMR	Funds Allocated by DBT
Maharashtra	0.233 (2019)	0.659(2018-19)
Tamil Nadu	0.748(2019)	0.429(2018-19)
Maharashtra	-(2020)	0.981(2019-20)
Tamil Nadu	0.245(2020)	5.606(2019-20)
Maharashtra	0.150(2021)	0.864(2020-21)
Tamil Nadu	- (2021)	6.881(2020-21)

Further, budget released by CSIR during the FY 2017-18 to 2019-20 under Sickle Cell Anemia Mission is as under:

(Rs. in lakh)

Lab	FY 2017-18	FY 2018-19	FY 2019-20
CSIR-IGIB	451.772	467.552	417.49
CSIR-IICB	199.988	119.988	114.99

(e) Government has supported the ethical and scientific conduct of stem cell research through guidelines for stem cell research. These guidelines are available since 2007 and were revised in 2013 and again in 2017 based on the advancement in the field and released as National Guidelines for Stem Cell Research (NGSCR). This document provides guidance to all stakeholders including scientists, clinicians and industry and can be accessed online.
