

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

**LOK SABHA
STARRED QUESTION NO. 190
TO BE ANSWERED ON THE 12TH DECEMBER, 2025**

TREATMENT OF SICKLE CELL ANEMIA

†*190. SHRI GAJENDRA SINGH PATEL:

Will the **MINISTER OF HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether a successful treatment/therapy for Sickle Cell Anemia has reportedly been discovered by the Yale University in the United States of America and if so, the details thereof; and
- (b) whether the Government proposes to provide treatment/therapy to patients of Sickle Cell Anemia across the country in consultation with the said University and if so, the details thereof?

**ANSWER
THE MINISTER OF HEALTH AND FAMILY WELFARE
(SHRI JAGAT PRAKASH NADDA)**

(a) & (b) A Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO LOK SABHA
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(a) & (b) As per news reports, two gene therapies for Sickle Cell Disease (SCD) have recently been approved by the U.S. Food and Drug Administration (FDA). These gene therapies have been researched by the doctors of the Yale University (United States of America).

In November 2025, Government of India launched an indigenously developed CRISPR-based gene therapy for Sickle Cell Disease (SCD), named BIRSA-101, through the Ministry of Science & Technology. The therapy has been developed by CSIR-Institute of Genomics & Integrative Biology (CSIR-IGIB), and a technology-transfer agreement has been signed with the Serum Institute of India (SII) for production and future scale-up. The initiative aims to provide an affordable, accessible treatment for affected populations—particularly tribal and high-burden regions—and aligns with the national vision of a “Sickle Cell-Free India by 2047. ”

Further, under the National Sickle Cell Anaemia Elimination Mission (NSCAEM), which aims to provide affordable, accessible and quality care to SCD patients, screenings are conducted at all health facilities from District Hospitals upto Ayushman Arogya Mandir (AAM) level across the country to identify Sickle Cell diseased patients and carriers. Hydroxyurea, a drug which is used for management of Disease, has been included in National Health Mission (NHM) Essential Drugs List at Sub-Health Centres, Primary Health Centres (PHC)/ Urban PHC, Community Health Centres (CHC) and District Hospitals for SCD treatment. Patients living with SCD are provided with the following services/ facilities for improving their quality of life through AAMs:

- Free of cost Hydroxyurea drug is provided.
- Follow-up of diseased individuals at frequent intervals.
- Counseling regarding lifestyle management, pre-marriage and pre-natal decisions.
- Nutritional supplementation support through distribution of folic acid tablets.
- Conducting yoga and wellness sessions.
- Management of crisis symptoms and referral to higher facilities.

This Ministry provides technical and financial support to the States/UTs for conducting screenings and procurement of drugs for sickle cell anaemia, based on the proposals received in the form of Programme Implementation Plans (PIPs) under NHM.
