

DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science and Technology
Government of India

Call for Proposals on Hemophilia

Hemophilia an X-linked hereditary single gene bleeding disorder, leading to deficiency of coagulation factor VIII (FVIII) or factor IX (FIX), manifests as spontaneous or trauma-induced hemorrhagic episodes in patients, progressing to chronic disabilities like arthropathy & contractures and premature mortality in untreated patients or patients with sub-optimal treatment. The management of hemophilia in developed countries has proceeded through replacement therapy, prophylactic treatment and taking care of post-treatment complications viz. vulnerability to infections like HIV/HCV; development of allo-antibodies called inhibitors that neutralize the replacement proteins (clotting factors); osteoporosis; and recently identified malignancies specifically hepatocellular carcinoma (HCC) in HCV infected patients and non Hodgkin's lymphoma in HIV infected patients.

Even though India has one of the largest numbers of patients with hemophilia (PWH) registered anywhere in the world, >80% of them are still undiagnosed because of lack of awareness and inadequate diagnostic facilities. When it comes to treatment, PWH still do not have adequate options or opportunities within the country. To Indian hemophiliacs, factor concentrates have become available through the public health care system mostly in the last 5 years. While this is a good development, much more needs to be done. The poor availability of diagnostic and treatment facilities along with the lack of awareness about hemophilia amongst primary care physicians and specialists is the major impediment for the management of hemophilia in our country.

Therefore, considering the aforementioned challenges, to find ways to implement viable, practical and sustainable hemophilia care strategies in our country, the Department of Biotechnology invites proposals from Investigators working in this area to submit an application for consideration with the following research priorities.

Priority Areas:

- a. Novel approaches to diagnosis of Hemophilia
- b. Development of recombinant factors or novel therapies
- c. Development of new viral inactivation/removal technologies for plasma products
- d. Development of novel approaches to Immune Tolerance Induction therapy (ITI) to treat inhibitors that may develop during CFC replacement treatment of hemophilia
- e. Genetic evaluation of the full spectrum of hereditary bleeding disorders which are common in the country to help design a comprehensive cost effective diagnostic strategy. This could also be applied to evaluating genotype – phenotype correlations.
- f. Strategies for development of gene therapy approaches for hemophilia

Priority areas are not limited to the above; however, funding priority will be placed on those projects that will lead to a better understanding of molecular basis of disease / better diagnostic approaches and development of novel management strategies particularly CFC and novel therapeutic products. Preference will be given to those proposing a multidisciplinary consortium approach to solving specific unmet needs in this area in the country.

Who can apply?

-) Scientists working in Universities/Academic Institutions/National Laboratories/Industries [Department of Scientific & Industrial Research (DSIR)-Recognized R&D Centre] & Non-Profit Organizations with necessary facilities and strong scientific background in the proposed area.
-) Collaborative projects with industry would be favored for funding.

Proposal contents:

-) A proposal should be well written with clearly defined specific objectives, work plan, expected outcomes in terms of quantifiable targets, tentative budget estimates and biodata of the investigator/s giving details regarding the expertise along-with the list of relevant research papers in the proposed research area.

Mode of Selection:

-) Proposals received will be screened and short listed by an expert committee constituted by the Department. The short-listed proposals would be further considered by the Task Force for funding.

Mode of Submission:

Proposals may be submitted online in the DBT's R&D format through eProMIS (<http://dbtepromis.nic.in/Login.aspx>) under Category of Area-'**Human Genetics and Genome Analysis**', clearly stating '**Proposal against Call for Proposal**'. A separate copy of the same may also be submitted through an email: vinita.chaudhary@nic.in . Any supplementary information/ material that could be useful for consideration of the proposal can also be annexed. Subsequently, two hard copies should also be sent to: Dr. Vinita N. Chaudhary, Scientist 'D', Department of Biotechnology, Block- 2, Room No.816, 8th floor, CGO Complex, Lodhi Road, New Delhi – 110003.

Last date of submission: 15th May 2017