

National BioPharma Mission for Biopharmaceuticals Innovations in India

The Indian biopharmaceuticals industry needs to be globally competitive over the next decade, therefore, target of \$100 billion Biotech Industry has to be achieved by 2025. Biopharmaceuticals industry needs to capture 5% of the global biopharmaceutical market share. In order to provide affordable health care to common masses, the health standards of people has to be raised. To ensure inclusive innovations, there is an immediate need to make consolidated efforts to encourage product discovery, translational research and early stage manufacturing within the country.



BioPharma Mission

The Department of Biotechnology (DBT) Ministry of Science & Technology has initiated the Mission Program entitled “Industry-academia collaborative mission for accelerating discovery research to early development for biopharmaceuticals - Innovate in India (i3) empowering biotech entrepreneurs & accelerating inclusive innovation” in order to strengthening the emerging biotechnology enterprise in India. The DBT’s Biotechnology Industry Research Assistance Council (BIRAC) unit is implementing agency of i3 Program.

To make consistent efforts to take biopharmaceuticals industry to new heights, the National BioPharma Mission (NBM) was initiated in 2017 with a total cost US\$ 250 million out of which 50% money was co-funded by the World Bank. Some of the major objectives of mission are

- Nurturing an ecosystem for set up India’s technological and product development capabilities in biopharmaceutical industry.

- Development of product leads that are at advanced stages, vaccine, biosimilar and medical devices and diagnostics.
- Establishing and strengthening of infrastructure facilities for product development and validation.
- Developing human capital by providing specific trainings and address the skills gap in product development chain.
- Building and improving the technology transfer and intellectual property management capacities and capabilities of country.

Since October 2018, the NBM has helped industry to support the development of 03 vaccines, 02 biosimilars, 04 medical device technologies and 02 facilities. Clinical development of Pneumococcal vaccine has been completed, dengue vaccine (live attenuated) has been advanced from Pre-clinical to clinical stage, and influenza vaccine has been identified as a lead candidate vaccine. Besides, scale-up of insulin glargine for diabetes and Herceptin development for breast cancer preclinical studies have been completed.

Program has successfully helped in moving from design to manufacture for slip ring, useful for diagnostic CT and ring gantry based Radiotherapy equipment. The process for has been scaled up for polyactic acid based indigenous bioabsorbable implants. Indigenous renal care solutions pumps to dialysis machines have moved from design to preclinical testing. Under the mission, fee has been made applicable for GLP analytical facility for biotherapeutics.

The mission was aimed at addressing the key components of the vision outlined in the National Missions like “Make in India” and “Start up India” and also aims to take forward the DBT commitments in the National Biotechnology Development Strategy. The progress made so far has helped in developing some of the significant vaccines, biosimilars, formulations etc.

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