

The Department of Biotechnology's CRUK Cancer Research Initiative

Cancer Research United Kingdom and the Department of Biotechnology (DBT), Government of India have partnered to establish a £10 million, 5 year research initiative focused on finding affordable approaches to cancer. The innovative proposal aims to build the scientific strengths of India and UK, and will catalyse a bilateral multidisciplinary research effort to address the key challenges in affordability in cancer.

The bilateral advisory panel has set seven research challenges under the theme of affordable approaches to cancer and invited both countries to join hands to tackle such challenges. The seven challenges are discussed in detail.

1. **Prevention:** Under this challenge, initiative will try to identify and quantify cancer risk factors for better understanding of regional variations in incidence, enabling new approaches to cancer prevention. It is considered to be the first step for development of cancer prevention programmes that can be locally optimised. Identifying and quantifying cancer risk factors will provide policy-makers with information on measures to reduce cancer incidence and provide the public with accurate information on reducing their personal risk of cancer.
2. **Early Detection:** Programme will also help in devising affordable screening tools to improve early detection of cancer. Availability of affordable and non-invasive tools for early detection of cancer earlier will have a significant impact on survival, quality of patient's life, and economic feasibility to all people in both countries.
3. **Early Diagnosis:** program also aims at identifying affordable approaches to improve early diagnosis of symptomatic cancers. Early detection will have high impact by reducing cancer mortality among patients, and will help in optimising scarce healthcare resources and funds.
4. **Computational Approaches:** Development of computational approaches will help in reducing the cost of cancer care delivery in both countries.
5. **Small Molecule Treatments:** Identification of novel and affordable treatment approaches for hard to treat cancers such as oral, gall bladder, oesophageal and

nasopharyngeal using small molecules can be of great help to patients. Such bilateral approach between India and the UK could allow existing knowledge, expertise and assets to be leveraged both in India and UK.

6. **Treatment:** Improvements in the affordability of effective cancer treatments is the need of hour. This research challenge aims to optimise the affordability of effective cancer treatments to improve access and overall cancer outcomes.
7. **Children's and Young People's Cancer:** Program also aims at developing approaches to improve long-term quality of life in children and young people with cancer.

The DBT and Cancer Research UK's bilateral research initiative for affordable approaches to cancer will be implemented in phase wise manner. Phase I will help in identifying core challenges in cancer, Phase II will help in establishing new research partnerships, and the Phase III will deal with program awards. Till December, 2019, the bilateral initiative has successfully completed its Phase I.

DBT, Cancer Research UK and DBT Welcome Trust India Alliance have now signed a tripartite agreement that sets out the terms and conditions by which the India Alliance will undertake grant funded activities for the second and the third phase of the India-UK affordable approaches to cancer initiative.

Dr. Bilqeesa Bhat
Project Scientist,
bhat.bilqeesa3000@gmail.com