

## Synergy Between Indian Biotech and Ireland's Research Ecosystem

31 May 2025 | Views | By Tanaz Buhariwalla, Director, South Asia, IDA Ireland

India, as the "Pharmacy of the World," faces a transformative opportunity to elevate its position beyond manufacturing excellence toward breakthrough innovation. With projections indicating pharmaceutical exports reaching \$350 billion by 2047, the necessity for a resilient, collaborative innovation ecosystem has never been more pronounced. India's pharmaceutical prowess, coupled with robust IT capabilities and growing expertise in digital technologies, offers a formidable foundation. The integration of artificial intelligence (AI) and machine learning (ML) into the research and development value chain promises to revolutionise drug discovery and clinical development processes. Yet, to truly orchestrate this evolution from manufacturing giant to innovation leader, and to accelerate the journey, Indian biotech and pharmaceutical firms require strategic international partnerships that complement their inherent strengths.



Ireland, with its dynamic ecosystem, has quietly but decisively positioned itself as a global nexus for life sciences innovation. The Irish landscape offers a sophisticated blend of advanced research infrastructure, world-class clinical trial capabilities, and complex API and biologics manufacturing facilities. It also hosts a strong presence of global leaders and young innovative companies, aligning perfectly with the aspirational trajectory of Indian pharmaceutical companies.

### Life Sciences Ecosystem

Ireland is the world's third-largest pharmaceutical exporter, with over €100 billion in exports. Its rise as a biotech hub is driven by a strong innovation ecosystem and collaborative environment. Home to 100+ multinational biopharma facilities, Ireland boasts unmatched expertise in pharmaceutical and ATMP manufacturing. Companies like Zoetis are expanding R&D for monoclonal antibodies (mAbs), while MeiraGTx has established a scalable gene therapy manufacturing complex with plasmid DNA production, QC testing, and fill-finish suites, ensuring full control over advanced therapy development.

Cell therapy facilities require a specialised set of skills and a talent base, besides conditions like supplier partner, and agile supply chain, international air connectivity, and access to target markets. Little wonder then, that Takeda decided to expand its existing cell therapy facility in Dublin so that it can supply its products to patients in the EU, US and Canada within 72 hours.

Organisations like the National Institute for Bioprocessing Research and Technology (NIBRT), the Regenerative Medicine Institute (REMEDI), and Molecular Medicine Ireland have played a key role in nurturing Ireland's biotech ecosystem. NIBRT, a world-class institute supporting global pharmaceutical manufacturing, recently opened yet another cutting-edge facility, in collaboration with industry and academic partners. This one is dedicated to early-stage biotherapy research. This initiative focuses on biologics, Cell, Gene, and RNA therapies, bridging the research infrastructure gap for biopharma companies while accelerating innovation through access to advanced instrumentation and expertise. Forward-thinking policies like the Knowledge Development Box and R&D tax credits further support this thriving environment.

As we can see, for Indian firms looking to transcend traditional pharmaceutical boundaries, Ireland offers access to sophisticated technology and specialised expertise in emerging therapeutic frontiers, including biomanufacturing, biosimilars and cell and gene therapy. This advanced technological environment can significantly accelerate the innovation journey of Indian companies seeking to evolve beyond generic manufacturing toward more complex therapeutic domains.

### **Clinical Trials and Research Infrastructure**

One of Ireland's most compelling advantages for Indian biotech firms lies in its rapidly expanding clinical trial infrastructure. With nearly 291 clinical trial sites distributed throughout the country. The creation of specialised research centres, such as the Institute of Clinical Trials at the University of Galway, further enhances Ireland's capabilities in this critical domain.

This robust infrastructure presents Indian biotech companies with unprecedented opportunities to participate in high-calibre clinical research that adheres to the most stringent international standards. By leveraging Ireland's clinical trial ecosystem, Indian firms can ensure their novel treatments meet global safety and efficacy requirements while simultaneously contributing to the advancement of medical knowledge on a global scale.

### **API Production and Innovation Opportunities**

Ireland's thriving Contract Development and Manufacturing Organisation (CDMO) sector, particularly in API manufacturing, offers rich collaborative potential for Indian pharmaceutical companies. Industry leaders like AstraZeneca are making substantial investments in next-generation API facilities in Ireland, incorporating state-of-the-art technologies to accelerate the production of sophisticated small molecules for high-value medicines.

This environment creates a natural synergy with India's strengths in pharmaceutical manufacturing while offering pathways to more sophisticated production techniques. Indian firms can forge strategic alliances with Irish counterparts to adopt cutting-edge technologies in API manufacturing, enhancing their capabilities and global competitiveness. The sector's growth trajectory is further supported by government incentives such as R&D tax credits, creating a conducive environment for innovation-driven research and development.

### **Strategic Benefits for Indian Firms**

For Indian biotech and pharmaceutical companies, Ireland represents more than a potential partnership – it serves as a strategic gateway to the global life sciences ecosystem, particularly the European market. The country offers several compelling advantages: A highly skilled workforce with specialised expertise in biopharmaceutical manufacturing and research; An exemplary regulatory environment that facilitates compliance with EU standards; Direct access to the European Union market, effectively bypassing complex regulatory barriers; and a young, educated population that embraces innovation and supports sustainable growth.

Additionally, Ireland's established credibility with regulatory agencies like the FDA and EMA ensures that Indian firms can navigate the complex regulatory landscape of the European market with greater efficiency. This regulatory expertise is particularly valuable for Indian companies looking to expand their global footprint beyond traditional markets.

The collaborative potential between Indian and Irish entities is already being demonstrated through strategic partnerships like Biocon's engagement with Trinity College Dublin to fund scholarships in genetics research. Such academic-industry collaborations foster innovation and knowledge exchange between the two countries, enhancing India's capabilities in next-generation therapeutics and advanced biotechnology research.

### **The Synergistic Advantage**

The true power of this potential partnership lies in its complementary nature. By combining India's cost-effective manufacturing capabilities with Ireland's advanced research ecosystem, Indian firms can create a powerful synergy that drives both innovation and market expansion. This strategic alignment allows Indian companies to maintain their competitive advantage in manufacturing while accessing Ireland's expertise in cutting-edge research and development, sophisticated clinical trials, and streamlined regulatory compliance.

As global demand for advanced diagnostics and therapies continues to rise, this Indo-Irish collaboration in the life sciences sector stands poised for significant growth. Major investments, such as Eli Lilly's €1.8 billion commitment to new facilities in Ireland, underscore the region's growing importance and highlight the tremendous potential for Indian firms to tap into this ecosystem for global drug discovery and API production.

The harmonised strengths of India's pharmaceutical industry and Ireland's research ecosystem present a compelling opportunity for strategic collaboration. By leveraging Ireland's infrastructure, highly skilled BioPharma workforce, expertise, and market access, Indian biotech and pharmaceutical firms can accelerate their innovation journey, enhance their global market presence, and ultimately contribute to advancing healthcare solutions on a global scale.

Tanaz Buhariwalla, Director, South Asia, IDA Ireland