



Meta morphosis

Biocon 5.0













The metaverse, which will encompass a set of interconnected virtual worlds, is going to radically transform every aspect of the human experience. This collective vision of the future, where digital innovation and human interaction intersects, presents an immense innovation opportunity for the healthcare sector. The convergence of powerful technological platforms will give birth to new healthcare ecosystems with the potential to lower costs, widen access and vastly improve patient outcomes.

Biocon 5.0

With the metaverse poised to reshape the world, enterprises will need to undergo the kind of metamorphosis that prepares them to thrive in this brave new future.

This organizational metamorphosis will be multi-dimensional, from acquiring and integrating new skills to creating a culture of continuous innovation, from achieving operational excellence to increasing risk taking agility, from reimagining business models to digital reinvention. The focus of organizational metamorphosis will be on ensuring sustainable performance across operational, financial, environmental, societal, governance and humanitarian facets of our enterprise.

Biocon is an organization that thrives on change. Since our foundation in 1978, we have witnessed a transformational event every decade, enabling us to expand our business and unlock value across segments. From our founding business of enzymes, we gradually evolved into a company making fermentation-based small molecule generics, followed by a rapid metamorphosis into a diversified biopharmaceuticals group with businesses spanning bulk drugs and finished formulations at our Generics vertical, novel biologics and biosimilars at Biocon Biologics, and research services at Syngene.

FY22 marks the beginning of a process of accelerated transformation that will not only take us closer to patients but also steer us into new growth paths. It heralds the emergence of Biocon 5.0 – a technology-enabled, future-ready biopharmaceuticals leader and a well-recognized, global brand, touching a billion lives.



The Emergence of Biocon 5.0



Biocon 3.0

Working Towards Health Equity

Evolving from Enzymes to Research Services to

Biocon 2.0

Biopharmaceuticals

Biocon 1.0

Innovating Enzyme **Technologies**





Biocon started in 1978 as a joint venture with an Irish biotech company to manufacture and export enzymes for the brewing industry globally through its partner.

Subsequently, we developed a solid-state fermentation technology for producing novel bio-enzymes for global customers in the food and pharmaceutical industries. Our focus on innovation led us to develop PlaFractor technology using a unique bioreactor which allowed us to acquire our first patent. We progressed to develop other proprietary fermentation technologies, such as a Pichia pastoris yeast based expression system, for producing a range of specialty enzymes. These enzymes were a new technological intervention to replace polluting chemical processes with eco-friendly enzymatic bio-processes in textiles, paper, leather and starch processing industries. In 1989, Unilever Plc acquired our Irish partners and made Biocon India a part of the Unilever system, allowing us to professionalize rapidly by adopting international best practices. The association with this global conglomerate enabled us to build world-class manufacturing capabilities and a strong quality culture. We also learnt the nuances of building intellectual property. We became the first life sciences company in India to get the ISO 9001 Certification from RWTUV, Germany in 1993. Biocon in its first avatar was an export-driven enzymes company supplying to customers worldwide.

BIOCON WAS LARGELY AN EXPORT-DRIVEN ENZYMES COMPANY SUPPLYING TO CUSTOMERS WORLDWIDE.



Biocon 2.0

Evolving from Enzymes to Research Services to **Biopharmaceuticals**

Biocon had attained leadership in a variety of specialty enzymes by the Nineties.

As the enzymes business grew steadily, we explored the opportunity of starting another business that would emulate the success of India's information technology (IT) services model. We set up a new subsidiary, Syngene, as a 'pure play' research services company catering to the R&D needs of the global pharmaceutical industry. We then applied our recombinant technologies for enzymes to biopharmaceuticals, starting with our proprietary fungal solid-state fermentation technology to produce statins. We used our microbial fermentation platforms to develop immunosuppressants and harnessed our proprietary yeastbased platform to develop the world's first Pichia pastorisderived recombinant human Insulin. This heralded our entry into biopharmaceuticals. Going beyond insulins, we ventured into developing monoclonal antibodies. The combination of research services and biopharmaceuticals made Biocon a unique and diversified biotechnology enterprise.

GOING BEYOND INSULINS, WE VENTURED INTO DEVELOPING **MONOCLONAL** ANTIBODIES.



As early movers in the domain of biologics, we realized that patients in most of the developing world could not afford these advanced therapeutics.

This catalyzed our early entry into biosimilars. We wanted to bring in competition for expensive innovator biologics through our biosimilars for diabetes and cancer. However, the long gestation period for development and the capital intensity of creating new capacity for biosimilars entailed effective management of scientific and regulatory uncertainty and financial risk. To fuel our mission, we unlocked value through an IPO in 2004 and divested our enzymes business in 2007. To bring in complementary skills and experience as well as share risks and rewards, we entered into a global partnership with Mylan (now Viatris) for a range of biosimilar antibodies and insulin analogs. Biocon was aligned to the global imperative of driving greater health equity through its diversified and differentiated pipeline of fermentation-derived complex generics, biosimilars that included insulins & monoclonal antibodies, and novel biologics.

> **TO FUEL OUR** MISSION, WE **UNLOCKED VALUE** THROUGH AN IPO IN **2004 AND DIVESTED OUR ENZYMES BUSINESS IN 2007.**

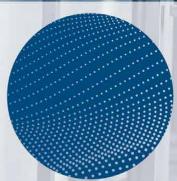


To benefit from our first-mover advantage, we embarked on building global scale and credibility.

We invested in cutting-edge R&D and commercial scale, globally compliant manufacturing facilities across diverse technology platforms spanning insulins, monoclonal antibodies and conjugated recombinant proteins. We established global credibility as a serious biosimilars player through several ground-breaking achievements, starting with the Indian approval for the world's first bTrastuzumab in 2014 and the Japanese approval for bGlargine in 2016. We were the first in the world to obtain U.S. approvals for bTrastuzumab in 2017 and bPegfilgrastim in 2018. Our investments in building global scale have led us to rank among the world's Top 15 biomanufacturing companies. We are among the leading insulin producers worldwide and have one of the largest antibodies manufacturing capacities in South Asia. Our Generics business forward integrated into formulations for our differentiated APIs to capture a bigger share of the value through a direct commercial presence in U.S. and Europe. Syngene's emergence as India's leading contract development and manufacturing company (CDMO) triggered its successful public listing in 2015.

> **OUR INVESTMENTS** IN BUILDING GLOBAL **SCALE HAVE LED US TO RANK AMONG THE WORLD'S TOP 15 BIOMANUFACTURING** COMPANIES.





Biocon 5.0

Building a Company of the Future

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Having emerged as one of the leading global biopharmaceutical companies with consolidated revenues of USD 1.1 billion and a ~15,000-strong workforce, we have started building an organization of the future.