Singapore Biotech Industry
Singapore Bio-tech Industry - Outlook

**Contribution to Singapore Economy**

- 8% of Manufacturing Sector (2012)
- 5% of the Singapore’s GDP (2012)

**Global Position**

- 17th largest pharmaceutical product exporter
- 34th largest importer of Pharmaceutical product.
- 3rd largest most innovative country in biotech.

**Industry Outlook**

The Biotech is one of the major sector of Singapore’s economy. It’s integrated research ecosystem enables companies to access multidisciplinary capabilities in a single location, which improves R&D decision-making and accelerates drug discovery and development. It is currently the 3rd most innovative biotech country after US and Denmark. It contribute to 5% of GDP whereas 8% to manufacturing sector. Singapore’s exports represent 1.38% of world’s Biootech exports. The main importers for Singapore products are – Netherland (19.3%), USA (19%), Japan (12.4%), Belgium (10.9%), Switzerland (6.4%).
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**Trade Data**

**Exports**  
USD 6.84 Billion (2015)  

**Imports**  
USD 2.23 Billion (2015)

**Top Export Destinations**
- Netherlands
- USA
- Japan
- Belgium

**MNCs operating in Singapore**

1. GlaxoSmithKline
2. Novartis
3. Takeda
4. Sanofi-Aventis
5. MSD
6. AB SCIEX
7. Baxter International
8. Becton Dickinson
9. BIOTRONIK
10. Hoya Surgical Optics
11. Life Technologies
12. Medtronic

**Key Growth Drivers of the Industry**

Innovation is one of the major growth drivers of this industry, leading to continuous investment by leading pharma companies and growth in jobs. Second is the integrated research ecosystem which enables companies to access multidisciplinary capabilities in a single location, which improves R&D decision-making and accelerates drug discovery and development. Singapore has free trade agreements with 21 countries giving exporters duty free access to these markets. It has built up a strong scientific foundation with seven research institutes and five research consortia in key fields that include clinical sciences, genomics, bioengineering, molecular/cell biology, medical biology, bio-imaging and immunology. All these factors leads Singapore a biotechnological hub.
Singapore Biotechnology Industry - Incentives

Incentives for Biotechnology

According to the World Bank Doing Business 2016 report, Singapore tops the list for ease of doing business among 189 countries.

- Angel Investors Tax Deduction Scheme (AITD) - It provides a tax deduction for 50% of the investment amount, up to a cap of USD $0.185 Million by individuals.

- The Translational & Clinical Research (TCR) – It is a flagship Programme which provides platform for researchers and clinician scientists to collaborate in solving scientific problems and translate their research into developing quality healthcare solutions for patients. The programme comes with a five-year budget of up to USD $18.40 million.

- The Competitive Research Programme (CRP) - It is a funding scheme that supports a broad base of research ideas, through a competitive bottom-up approach. Each award is for a maximum of USD $7.36 million per programme, over three to five years.

- The Health Services Research Competitive Research Grants (HSR-CRGs) - It is a Ministry Of Health (MOH) research grant established in 2009 to promote the conduct of HSR. It provides a maximum of USD $.74 million over a two-year period.
Singapore Biotechnology Industry – Value Chain

Local Biotechnology Hubs

Singapore is the preferred logistics and supply chain management hub for leading manufacturers across industries, which include Avaya, Diageo, Infineon, LVMH, Novartis, ON Semiconductor.

- Biopolis has facilities (1500 m²) housing highly specialized laboratories and has increased its fermentation and production capacity to 9000 litres.
- Tuas Biomedical Park focuses on the bulk production of products such as anti-hypertension drug Diovan, abdominal discomfort treatment drug Zelnorm and new cancer drug Gleevec. It has the capacity to produce 21000 litres.

These Biomedical parks consist of the following number of companies –
- Biopolis - 26 Companies
- Tuas Biomedical Park – 11 companies
- EDB – 9 Companies

Cluster Wise Biotech Value Chain of Singapore

Region Wise Bio- Parks

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<th>Downtown Core</th>
<th>One north Biopolis</th>
<th>West Tuas Biomedical Park</th>
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| EDB           | •Clinical sciences, •Genomics, •Bioengineering, •Molecular/cell biology, •Medical biology, •Bio-imaging •Immunology. | •Basic drug discovery, •Clinical development •Medical technology research

•Skilled talent, •Research expertise, •Air •Sea logistics.
Singapore government has always seen Biotechnology as its key sector and has invested billions of dollars in the past 20 years and still planning to develop it and do time to time investment in it –

➢ It has invested $12 billion into R&D between 2011 and 2015.
➢ The Singapore Government has used more than $2.74 billion (2011–2015) to enhance its existing biomedical R&D infrastructure, integrate multi-disciplinary research.
➢ The country has also made significant inroads in biologics manufacturing, with Novartis, Baxter, Lonza, GlaxoSmithKline and Roche announcing their investments to set up major biologics facilities that amount to $1.63 billion in capital expenditure.
➢ A key initiative is the GSK-Singapore Partnership for Green and Sustainable Manufacturing. Under the partnership, GlaxoSmithKline (GSK) and EDB awarded more than $8 million of funding to support fourteen green manufacturing research projects.
➢ Singapore has invested $11.91 billion in support of research, innovation and enterprise activities between 2011 and 2015.
➢ Bloomage BioTechnology Corporation Limited together with its subsidiaries, collectively referred to as “the Group”, GIC, Singapore’s sovereign fund, jointly announced an investment agreement- GIC will make a total investment of $84.97 million into the Company.
➢ Lightstone Ventures invests $50 Million Singapore Focused Fund investing in Singapore-based life sciences technologies and companies.
B3Globe Customized Industry Analysis

B3Globe provides a full spectrum of Business/Market Research services, we also provide custom report solutions to our clients tailored for their business landscape, to help them stay ahead of the competition and stay on top of emerging trends.

Tailored Research

Our team focuses on the product-market mix to suit the geography and demography of the market. We dive in deep to extrapolate primary information from the stake holders throughout the value chain. Our ability to map the competitive landscape helps us extract data with surgical precision.

Custom Market Research

Our market research is lured for its accurate industry data that spans more than 200 industries and global markets. Our collaborations with renowned publishers and most respected data source providers help us acquire the most accurate information on demand.

Collaborative Process

We find value in collaborating with our clients in sharing our findings throughout the process. This approach allows our clients to participate and set the direction of the research that is fully aligned with their intentions. Our collaborative strategy makes our research highly adaptable, customized, on-demand and extremely relevant.

Scope of Our Customized Industry Analysis

- Market Definition.
- Industry Classification
- Current Industry Outlook
  - Industry Size – Global/ National/Regional,
  - Contribution to GDP National/Global.
- Industry growth past 3-5 years
- Growth Forecast for 3-5 years.
- Market Drivers
  - Key drivers
  - Restraints
  - Opportunities
- Key Drivers of historical demand
- Applicability of Key drivers in Demand Forecasting.
- Key drivers of future demand and reasonability of the assumptions
- Industry Structure, Industry Life cycle stage.
- Current Business models In the Industry.
- Business Models likely to do well in future.
- National / Global Factors that affect the Industry (PESTEL-analysis).
- Overall capacity in the market.
  - Production
  - Procurement
- Value Chain Analysis
- Demand supply Gap.

- Import & Export scenarios
- Local Market Operators
  - Product Segment wise Producers & Importers
- Overseas markets
  - Top Product segments for Export
  - Top Export markets for respective product segments.
- Number of companies participating in the industry National/Global.
- Market Segmentation
  - Product Wise.
  - Distribution Channel wise.
  - Consumer Segmentation.
  - Competitor Segmentation.
- Porter’s Five Forces Analysis
- Entry Barriers,
- Government policies, incentives & Subsidies for the Industry – National/State Level/Country Level
- Applicable Taxation & legal laws
- Industry Value chain analysis.
- Supply chain, Logistics framework analysis
- Funding avenues for Industry Growth
- M&A activities in the industry – Global/National.
About B3Globe

Business Beyond Boundaries (B3) Globe is the Market Entry division of KPM ASSET. We are a global advisory firm, providing Strategic Consulting, Transaction Execution and other value added Business Solutions to Global mid-market Corporate and Institutions.

B3 Globe is formed with an objective to provide seamless Market Access to Clients who aspire to transcend Geographic Boundaries in search of new Frontiers for growth opportunities across the globe. Over the years, we have built an excellent track record of delivering innovative and result-oriented Solutions across various Geographic and Industries Segments.

Our Services

- Market Research
- Business Readiness Assessment
- Market Entry Support
- Hand Holding Support Services
- Business Opportunities

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