

Unlocking Growth

Singapore's Role in
Advancing Life Sciences
and Medtech Innovation

LEX



Singapore's life sciences and medtech industry has grown significantly in recent years, marked by major increases in manufacturing output, value added and the expansion of its ecosystem



2015

RIE 2015*

- Value added:
~US\$7.0B (life sciences)
~US\$2.0B (medtech)
- # employees:
~6K (life sciences)
~12K (medtech)
- Ecosystem:
~13 biotechs

Focus on building
Singapore's medtech and
life sciences ecosystem

Positioned as regional
commercial hub for MNCs



2020

RIE 2020^

- Value added:
~US\$4.6B (life sciences)
~US\$4.6B (medtech)
- # employees:
~8K (life sciences)
~16K (medtech)
- Ecosystem:
~15 biotechs

Early-stage R&D
investments by MNCs,
shifting from a commercial
hub to a research hub

Focus on building
foundational infrastructure
to hit critical mass for
future growth



2025

RIE 2025#

- Value added:
~US\$5.8B (life sciences)
~US\$5.5B (medtech)
- # employees:
~9K (life sciences)
~17K (medtech)
- Ecosystem:
>60 biotechs

Acceleration of biotech
innovation with increasing
investment in R&D assets

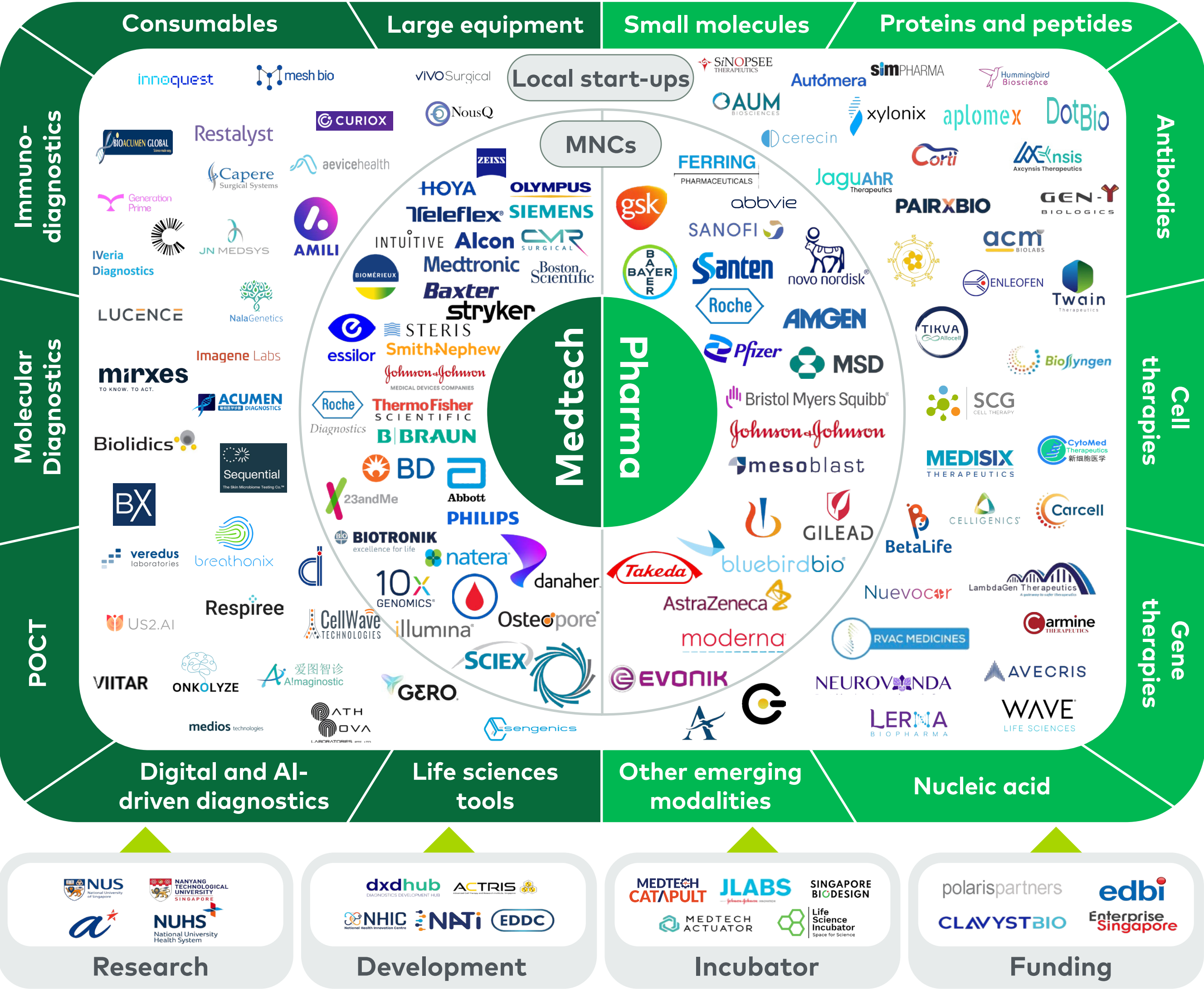
Strengthening of
Singapore's position
as an innovation and
commercialization hub in
biotech and medtech

Note: This infographic uses a foreign exchange rate of US\$1=SG\$1.35; RIE Plan — Singapore's Research, Innovation and Enterprise (RIE) Plan is a five-year strategic roadmap that outlines the country's investment in research, innovation and enterprise to drive economic growth and address national challenges; Value added refers to the net economic contribution of an industry or sector, calculated as total output minus intermediate consumption (e.g., raw materials, utilities and operating costs); MNCs=multinational corporations

*Based on 2014 data; ^based on 2019 data; #based on 2024 data.

Source: SingStats; L.E.K. Consulting research and analysis

The ecosystem comprises a diverse cohort of multinational corporations (MNCs), start-ups and ecosystem enablers such as government agencies, venture capital investors and incubators



Note: POCT=point-of-care testing; AI=artificial intelligence

Singapore's biotech ecosystem is expanding through strong government support and international investments, strengthening its position as a key hub for next-generation therapeutics and R&D



Announced in 2024, AstraZeneca is investing US\$1.5B to establish its first end-to-end ADC production site in Singapore (operational by 2029), and ~800 highly skilled jobs are expected to be created as a result



Announced in 2023, access to Agilent's technology will help scientists in Singapore to develop next-generation therapeutics and discover new applications in cell-based therapies

Biotech



Established in 2022, the collaborations between WuXi Advanced Therapies and A*STAR's Bioprocessing Technology Institute focuses on enhancing R&D in cell and gene therapy, developing talent through Good Manufacturing Practices training programs and positioning Singapore as a biotherapeutics bioprocessing hub

Strategic partnerships between global industry leaders and Singapore's medtech sector are accelerating innovation in personalized healthcare, diagnostics and advanced manufacturing



In 2021, Roche and STCC launched a three-year partnership to develop a clinico-genomic database for personalized cancer care, using genomic profiling to optimize treatments and improve outcomes

Medtech



GenScript and DxD Hub co-developed the cPass™ SARS-CoV-2 Neutralization Antibody Detection Kit, the first to detect neutralizing antibodies without live virus or biosafety facilities. In 2022, GenScript established a 30,000-sq.-ft. facility in Singapore to enhance manufacturing capacity

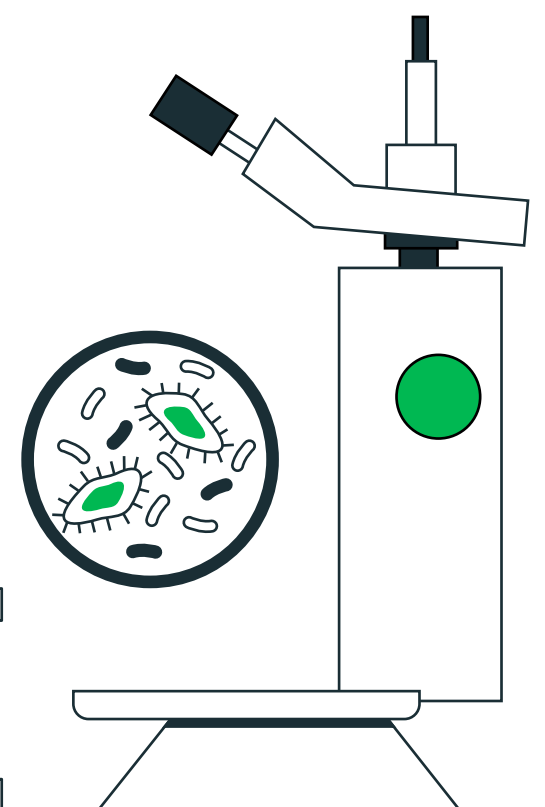
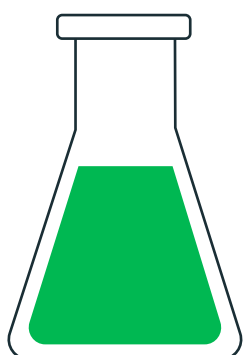
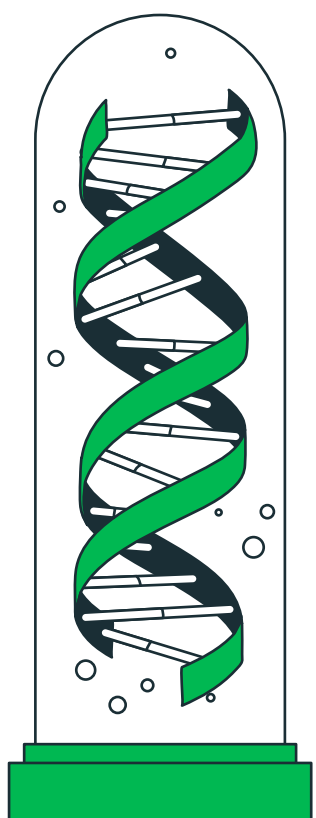
Singapore continues to foster life sciences innovation through initiatives that provide critical resources, infrastructure, and funding to accelerate early-stage biotech and medtech development

Innovation enabler case study

Johnson & Johnson

EDB:
SINGAPORE

In October 2023, Johnson & Johnson and the Singapore Economic Development Board (EDB) launched JLABS Singapore to support early-stage life sciences companies. It provides resources to accelerate innovative medicines, medtech and healthcare solutions



Looking ahead, Singapore continues to enhance its life sciences and medtech ecosystem

RIE 2030 Plan



Singapore's Research, Innovation and Enterprise (RIE) 2030 Plan is currently under development, building upon the foundation of the RIE 2025 Plan, which allocated US\$18.5 billion to sustain the nation's position as a global leader in research and innovation



The RIE 2030 Plan aims to address emerging challenges and opportunities in areas such as artificial intelligence, biotechnology and green technology



A significant focus of the RIE 2030 framework is Precision Health, which involves developing tailored interventions to maximize impact on high-risk groups by integrating clinical, genetic, behavioral and digital data

Singapore's 2025 Budget Plan strengthens its commitment to life sciences, with strategic R&D investments focused on biotech infrastructure, AI adoption and innovation-driven productivity growth

2025 BUDGET PLAN

~US\$3.1B

**~3% of Singapore's
2025 Budget**

has been allocated by the Singapore government into life sciences R&D and innovation — a higher percentage than other advanced and developing nations (e.g., China 2.4%, UK 2.9%, Canada 1.6%)*



National Productivity Fund (NPF) enhancement

An additional US\$2.2 billion has been allocated to the NPF to advance technology and innovation in industries such as biotechnology and precision engineering



Investment in research infrastructure

Estimated US\$0.7 billion is allocated to upgrading research facilities, including a new semiconductor R&D fabrication facility and enhanced biotech infrastructure for biosciences, medtech and life sciences



Enterprise support for AI adoption

A US\$111 million Enterprise Compute Scheme will assist companies in adopting advanced technologies such as AI, which can enhance innovation within the life sciences and medtech

Note: This infographic uses a foreign exchange rate of US\$1=SG\$1.35; GDP=gross domestic product; UNESCO=United Nations Educational, Scientific, and Cultural Organization; AI = Artificial Intelligence.

Source: The Straits Times; Ministry of Finance; Our World in Data; UNESCO Institute for Statistics; L.E.K. research and analysis

To capitalize on the strategic opportunities offered by Singapore's life sciences and medtech ecosystem, your organization should consider the following six questions:

1

What key lessons can be drawn from Singapore's success in developing its life sciences and medtech ecosystem? How can these insights be applied to other global ecosystems?

2

How can Singapore's expanding capabilities support your organization's Asia-Pacific (APAC) regional and global growth strategies?

3

Given recent capability shifts in Singapore and challenges in the APAC region, how should your organization reassess Singapore's strategic role?

4

What opportunities exist for collaboration with Singapore's innovation hubs, research institutions and government agencies?

5

How can your organization actively contribute to the growth of Singapore's life sciences and medtech ecosystem? What role can you play, and what support would you seek from the ecosystem?

6

What are the key investment and business development opportunities in Singapore's life sciences and medtech ecosystem for MNCs and investors?



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