

ACTRIS: Singapore's National Centre for Cell & Gene Therapy

ACTRIS
Advanced Cell Therapy and Research Institute, Singapore



Bridging Asia's biomedical powerhouse to the global cell and gene therapy (CGT) community — from bench to bedside through regulatory-grade manufacturing and open-access collaboration.

SINGAPORE AS GATEWAY TO ASIA-PACIFIC

01

Trusted Base for Regional and Global Development ^[1]

Singapore serves as a base for biotech and pharmaceutical companies for R&D, regulatory coordination, and access to international markets. This is supported by legal transparency, strong IP protection, and political neutrality.

02

Regulatory Connectivity beyond the Domestic Market ^[2]

Singapore's health products regulatory framework has gained international recognition and established work-sharing arrangements with other international counterparts to support more efficient global development pathways.

03

Integrated Environment for Translation and Scale-up ^[1]

Singapore brings together research institutes, translational platforms, clinical centres, manufacturing infrastructure, and industry partners within one ecosystem. This helps companies move more efficiently from discovery to clinical application.

04

Base for Partnership with Global Pharma and Innovators ^[1]

Singapore hosts the regional headquarters of 8 of the top 10 pharmaceutical companies. It also supports public-private partnerships linking multinational companies, start-ups, and public research institutions.

05

A Diversification Node in Asia-Pacific ^[1]

Geopolitical pressures are prompting companies to diversify R&D and manufacturing activities within Asia-Pacific. Singapore offers a stable and trusted location for this, with strong governance and regulatory alignment.

06

Access to Capital and Venture-Building Support ^[1]

Singapore supports biotech growth through public co-investment, venture-building, and industry partnerships. This helps early-stage companies access capital and scale from Singapore into Asia-Pacific.

S\$37B ^[3]

Committed under RIE 2030 for science & technology, including health & biomedical sciences

S\$38B ^[4]

Annual biomedical products manufactured in Singapore (2023), contributing to 2.6% of GDP

~55% ^[5]

Of world's population within 6 hours' flight — Singapore as Asia-Pacific's clinical referral hub

SINGAPORE'S CGT ECOSYSTEM

Translational & Manufacturing-Focused Innovation

National R&D programmes focus on novel targets, manufacturing innovation and de-risking the path from discovery to GMP, accelerating clinical translation of cell therapy assets.

Established Clinical Trial & Treatment Network

Singapore's public healthcare clusters support a high volume of industry-sponsored trials across major centres (e.g., NCCS, NUH, SGH), with established capabilities in advanced therapies and HSCT.

Dedicated Risk-Based Regulatory Framework ^[6]

A dedicated cell, tissue and gene therapy (CTGTP) regulatory framework provides risk-based classification, GMP requirements, expedited pathways, and named-patient access routes to support clinical development.

Early Adoption for Reimbursement Pathways ^[7]

Selected cell therapies assessed to be clinically and cost-effective (e.g., CAR-T products) are supported through public subsidies and private insurance schemes, enabling patient access.

Structured Training Pipeline for Human Capital

Workforce development is supported through professional certification programmes, industry workshops, and academic partnerships (e.g., with NUS), building capabilities in GMP and clinical translation.

Vibrant Ecosystem for Local and Regional Start Up Companies

A significant proportion of biotech companies are focused on cell therapy, with many companies establishing headquarters, joint labs, and clinical & commercial manufacturing facilities in Singapore.

REFERENCE LINKS

^[1] Singapore Economic Development Board (EDB)
<https://www.edb.gov.sg/en/our-industries/biotechnology-pharmaceuticals.html>

^[5] EDB
<https://www.edb.gov.sg/en/why-singapore/an-economic-powerhouse.html>

^[2] Health Sciences Authority (HSA)
<https://www.hsa.gov.sg/announcements/press-release/who-m14>
<https://www.hsa.gov.sg/announcements/news/hsa-who1a2023>

^[6] HSA
<https://www.hsa.gov.sg/ctgtp/guidance-documents>

^[3] National Research Foundation (NRF) - RIE 2030
<https://www.nrf.gov.sg/rie2030/>

^[7] Ministry of Health (MOH)
<https://www.moh.gov.sg/managing-expenses/schemes-and-subsidies/cell-tissue-and-gene-therapy/>

^[4] EDB
<https://www.edb.gov.sg/en/business-insights/insights/how-singapore-is-a-launchpad-to-growth-for-global-biotech-and-pharmaceutical-companies.html>