www.biospectrumasia.com

S$ 5.00

# BioSpectrum

the business of Bio & Health Sciences

Volume 20 | Issue 6 | June 2025

ASIA EDITION

# APAC's Alliance-Driven BIOTECH BOOM

"APAC faces a disproportionate burden of vision impairment"
- Serge Zins, Vice President- Asia Pacific, HOYA Vision Care, Japan -30

Upskilling and flexibility are key to staying relevant as Biopharma hiring grows -25

BioSpectrum is an MM ACTIV publication; MCI (P) 025/06/2024

# BioStartUps

Leading Platform for Emerging StartUps

## FIF FOUNDERS INVE$TO₹S FORUM

# Synergy in Biotech: Connecting Visionaries and Venture Capitalists

## 1st August, 2025

## CIDCO Convention Hall, Mumbai

**Early Bird Offer**

**7,500 INR**

**INDUSTRY PARTNER**

HIMEDIA
For Life is Precious

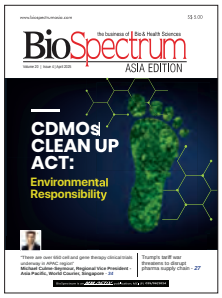
**ECOSYSTEM PARTNERS**

बाइरैक birac | C-CAMP | faba | VENTURE CENTER | cble | ankur capital | kotak Alternate Asset Managers | BIOR Venture Advisors | Indian Healthcare Angels | WRCB

Visit our website for more details

**Contact for more information:**

sakshi.kulkarni@mmactiv.com | vrushti.kothari@mmactiv.com




## Acknowledgement/ Feedback

Thank you for including the comments by Bharat Biotech in your cover story on vaccines.

**Shilpi,** India

---

Thank you BioSpectrum Asia for publishing the interviewing with Orum Therapeutics.

**Jessica,** UK

---

Appreciation to BioSpectrum for carrying the article 'Medical Device Classification and FDA Approval: What Startups Need to Know' in the current issue. Happy to have Venture Center's team contribute in future as well.

**Dr V Premnath,** India

---

Glad that BioSpectrum Asia found our inputs valuable, looking forward for more contributions by Praxis Global Alliance.

**Shivam Bajaj,** India

Vol 20; Issue 6; June 2025

**Publisher & Managing Editor:**
Ravindra Boratkar
**CEO:**
Manasee Kurlekar
manasee.kurlekar@mmactiv.com
**Editorial:**
**Chief Editor:** Dr Milind Kokje
milind.kokje@mmactiv.com
**Advisor - Content:** Vijay Thombre
**Editor:** Narayan Kulkarni
narayan.kulkarni@mmactiv.com
**Executive Editor:** Dr Manbeena Chawla
manbeena.chawla@mmactiv.com
**Assistant Editor:** Nitesh Pillai
nitesh.pillai@mmactiv.com
**Asst. Manager Content Creation and Coordination- APAC Region:**
Hithaishi C. Bhaskar
hithaishi.cb@mmactiv.com
**General Manager - Integrated Marketing & Media Acceleration**
Ankit Kankar
ankit.kankar@mmactiv.com
**Support- Asst. General Manager-HR and Admin:** Asmita Thakar
asmita.thakar@mmactiv.com
**Production & Design:**
MM Activ Sci-Tech Communications
**Executive Production:**
Anil Walunj
**Cover Design:**
Dominix Strategic Design Pvt. Ltd.
**Business Enquiry:**
Ankit Kankar
ankit.kankar@mmctiv.com
**Subscription Services**
**Print Edition:** Saradha Mani
saradha.mani@mmactiv.com
**Digital Edition:** Ankit Kankar
ankit.kankar@mmactiv.com
**News Letter :** Sudam Walekar
sudam.walekar@mmactiv.com
**Database Executive:** Sudam Walekar
**Senior Officer - Media Integration :**
Chaitrali Gajendragadkar
chaitrali.gajendragadkar@mmactiv.com
**Bio Spectrum Jobs:** Poonam Bhosale
poonam.bhosale@mmactiv.com

**MM Activ Singapore Pte. Ltd.**

**Singapore**
**MM Activ Singapore Pte. Ltd.**
Saradha Mani
**General Manager**
#08-08, High Street Centre,
1 North Bridge Road, Singapore - 179094
**Tel:** +65-63369142 / **Fax:**+65-63369145
**Mobile:** +65-90681202
saradha.mani@mmactiv.com

**Asia Pacific & South East Asia**
Ankit Kankar
**General Manager - Integrated Marketing & Media Acceleration**
1st Floor, CIDCO Convention Center,
Sector 30A, Vashi, Navi Mumbai,
Maharashtra-400703.
**Mobile: +91-9579069369**
ankit.kankar@mmactiv.com

**USA**
**BioSpectrum Bureau**
MM Activ Sci-Tech Communications
**Mobile:** +65 90150305
digital@mmactiv.com

**Europe**
**BioSpectrum Bureau**
MM Activ Sci-Tech Communications
**Mobile:** +65 90150305
digital@mmactiv.com

**Taiwan**
**Media Representative:**
Ms Christine Wu
**Image Media Services Company**
2F-2, No. 35, Sec. 2, Flushing South Road,
Taipei 10665, Taiwan
**Tel:** +886-2-87734199
**Fax:**+886-2-87734200
**Mobile**: 886-937890533
**E-mail:** christine@imagemediatw.com
**website:** www.imagemediatw.com

**China**
Erika Cheng
**RFCOMMS**
E101, East Lake Villas, 35 Dongzhimenwai
Main Street, Dongcheng District,
Beijing 100027, P. R. China
**Mobile:** +86 17375668063
**E-mail:** erika.cheng@rfcomms.com

**India**
Sakshi Kulkarni
**Marketing and Communication-Executive**
"NITON", No. 11/3, Block "C", Second Floor,
Palace Road, Bangalore, Karnataka- 560052
**Tel:** +91-80-41131912/13
**Mobile: +91-8767072459**
sakshi.kulkarni@mmactiv.com

**Photo**: istockphoto

**Go Digital:**
To request subscription
email: ankit.kankar@mmactiv.com

Printed and published by Ravindra Boratkar on behalf of MM ACTIV Singapore Pte Ltd.

Printed at Times Printers Private Limited
16 Tuas Avenue 5, Singapore 639340
**Tel :** +65-63112888

Reprinted in India for private Circulation

**Chief Editor: Dr Milind Kokje**

**MCI (P) 025/06/2024**

# Letter from Publisher

**Ravindra Boratkar**
Publisher &
Managing Editor,
MD, MM Activ Sci-Tech
Communications Pvt. Ltd.

***Dear Readers,***

One of the most important aspects of the biotech innovation process is partnerships. COVID-19 acted as a catalyst, spurring partnerships between long-standing players for the first time and speeding up collaboration across the sector. The diversity, frequency, and strategic significance of biotech alliances have increased since then, particularly in the Asia-Pacific (APAC) area. Regional alliances have exploded in the APAC biotech sector in the first half of 2025. There are now 24 partnerships listed, up until May 20, including topics like gene therapy, contract development and manufacturing (CDMO), digital health, antibody-drug conjugates (ADCs), and AI-driven diagnostics.

Over 10 companies from China have entered into alliance in areas such as ADCs, CDMO, AI health, gene therapy, imaging followed by nine South Korean companies in Exosome therapies, diagnostics, digital health and ADCs. Not lagging behind, the firms from Singapore and Taiwan have announced four and three collaborations respectively during the first five months in 2025. Our team has analysed the deals in the APAC region during the period and observed that while global partnerships remain important, APAC-based partnerships are increasingly viewed as faster, more culturally aligned, and better suited to local regulatory and market conditions. These partnerships are poised to grow and further reshape the region's biotech landscape.

The job market for life sciences professionals is unpredictable due to persistent uncertainty, geopolitical tensions, and economic concerns. In 2024, there were more layoffs, cautious market attitude, and increased competition for fewer available positions. Hiring practices are shifting as biopharma businesses reorganise, particularly at the mid and senior levels. The need for executives with certain indispensable training and credentials is also growing in the biopharma sector. There is cautious optimism over the job market, according to our correspondent, but as with many other businesses, staying relevant in the rapidly changing biopharma industry will need upskilling and adaptability.

Cancer is one of the world's top causes of death, and the burden is especially high in Asia, where almost half of the world's population lives. The most common cancers in women are breast and cervical cancers, which are also the most preventable if detected early. A brighter future for Asian women is largely dependent on accurate and reasonably priced cancer screening that is provided via portable devices. In an article, an expert emphasises the necessity of cross-sector stakeholders uniting to prioritise early cancer detection to save more lives.

APAC is emerging as a major centre for Global Capability Centres (GCCs) for the Life Sciences and Healthcare industry in recent years. As per a recent study, the global pharmaceutical and life sciences GCC market is expected to reach $92.4 billion by 2032, with a CAGR of 14.9 per cent. India leads the market with over 100 GCCs. An industry leader explains how countries such as Singapore, Malaysia, and the Philippines with multiple advantages like cost-effectiveness, skilled workforce, and connectivity in the region have become front-runners and emerged as hotspots of GCCs in the region.

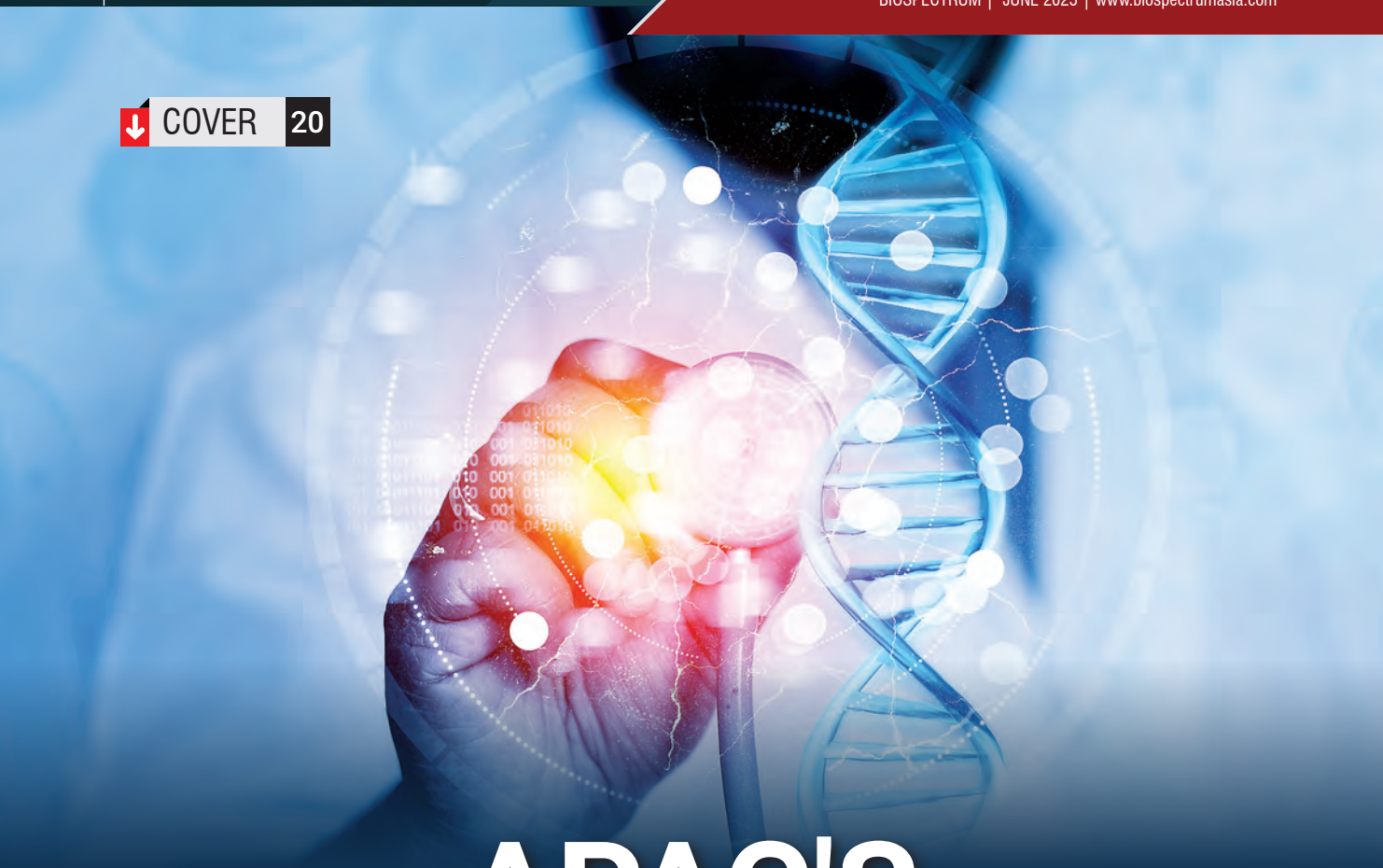
Having witnessed the journey of medical communicator (MedComm) from paper-based literature reviews to AI-assisted content creation, technology has revolutionised our processes but it has not replaced our purpose. An industry leader points out that in an industry built on trust, no algorithm can carry the ethical weight of communication. That responsibility still belongs, and should continue to belong, to us.

***I am sure you will find this edition a great read.***

***Thanks & Regards,***

***Ravindra Boratkar***
***Publisher & Managing Editor***

COVER 20



# APAC'S ALLIANCE-DRIVEN BIOTECH BOOM

Partnerships are a cornerstone of the biotech innovation process. COVID-19 acted as a catalyst, accelerating collaboration across the sector and prompting partnerships between established players for the first time. Since then, biotech alliances have become more diverse, frequent, and strategically important, especially in the Asia-Pacific (APAC) region. Biotech partnerships of APAC differ in a variety of ways from most global collaborations, primarily due to the unique geopolitical and socio-economic landscape of the region. The region has innovation hubs like Japan and South Korea as well as large, high-growth markets such as China and India. As China rapidly scales its biopharma capabilities, it is becoming both a key market and an innovator. This transformation has redefined regional deal-making, shifting the focus from technology transfer to co-development, shared commercialisation, and strategic alignment. APAC biotech deals are no longer early-stage R&D plays, they are beginning to span the full lifecycle, from bench to bedside, including commercialisation milestones. Let's explore further the APAC's wave of regional biotech partnerships during the first five months of this calendar year ie. from January to May 2025.

## Biopharma Jobs



## Speaking With









## GCCs



BioSpectrum the business of Bio & Health Sciences ASIA EDITION

**Scan QR code to access BioSpectrum Asia Digizine**

## Cancer



## MedComms



## MedComms



## REGULARS

# CYBERATTACKS HOLD HEALTHCARE TO RANSOM

**Dr Milind Kokje**
**Chief Editor**
milind.kokje@mmactiv.com

The healthcare sector which has been facing problems due to spurious, fake and bogus drugs has now become vulnerable to one more problem. This new problem is ransomware and it is much costlier. Healthcare seemed to be the second-most attacked sector by ransomware in the first half of 2024 as per the information available now. It is sometimes difficult to know the severity of the problem as institutions and organisations tend to avoid speaking about data leakage, leading to ransomware openly or reporting them. But the global leader in cybersecurity Kaspersky reported that over 57,000 ransomware attacks were detected in Southeast Asia during the first half of 2024. This figure is of attacks on organisations in all sectors, and not alone in healthcare. But this shows that Southeast Asia seems to be a prime target for ransomware due to the contributing factors like the region's strategic position as a finance and technology hub and varying levels of cybersecurity.

Though industries across all sectors are facing ransomware threats, healthcare seems to be suffering the most. The average cost of a data breach is reaching almost 11 million. When it comes to the healthcare sector, the data leaks have doubled in three years despite a 50 per cent increase in tracked leak sites, a Google Threat Intelligence Group report said. Another report by KnowBe4 supported this by saying that the Asia Pacific region's healthcare sector remains a prime target for cybercrimes. In Australia, 22 per cent of all data breaches from July to December 2023 hailed from healthcare compared to 10 per cent from the financial sector. A Singapore-based healthcare information technology provider revealed about ten months ago that it intercepts and blocks about 3,000 malicious emails each day. If this is the situation in just one country in Asia, then it indicates the problem's severity in the region.

Tele consultation, telemedicine, tele diagnosis, etc., have created more data-generating points, which at times could be unsafe for leakage. So, on one hand, huge data is generated, and on the other, several data-generating points are not so secure.

Experts point out more than 200 new internet facing and cloud services are added to the healthcare sector each month, increasing the number of potential entry points of attackers. Hence, the sector's dependence on electronic health records, connected medical devices expose it to high risk of attack.

Another important factor related to the hospital data is that it is of other people who are, in a way, clients of the organisation and not of the organisation itself. The third important factor is the nature of the sensitivity of the data, considering that it is about the health of the people. Several countries have strict laws over the confidentiality of the health-related data of patients, and their violation invites punishments. Patients and their relatives are sensitive to the leakage of their health conditions. Realising this two-way predicament of healthcare institutions, cyber attackers are targeting them in large numbers. At some places, healthcare organisations are coming together and integrating their defences into the platform. But that is just one way. Stricter restrictions over the use of systems, continuous monitoring and upgrading to high-level effective security systems are some other ways to control the attacks, though it may not be possible to ensure total prevention. Such measures are required since patients' confidence in the healthcare institutions for the protection of their data is prime.

The World Health Organisation (WHO) pointed out that the low and middle-income countries spend an estimated $30 billion per year on fake drugs as at least one in 10 medicines is sub standard or spurious. But, more than the financial loss, losing patients' confidence in drugs and their efficacy makes more loss for the healthcare organisations. Stealing data by cyber attackers just compounds the problem. BS

# Dubai launches NABIDH Clinical Portal to enhance healthcare efficiency

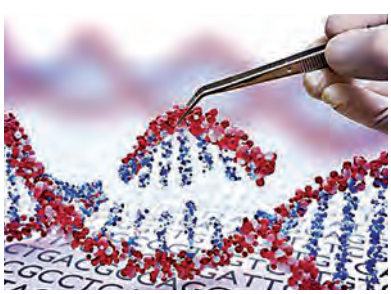
The Dubai Health Authority (DHA) has launched a new training initiative aimed at raising awareness and boosting healthcare professionals' capabilities in using the National Backbone for Integrated Dubai Health (NABIDH) Clinical Portal - a key component of Dubai's digital healthcare transformation strategy. The NABIDH training course provides Dubai-licensed doctors, nurses, dentists, and allied health professionals with comprehensive training on navigating the platform. The 50-minute course includes interactive assessments and is accredited with one Continuing Professional Development (CPD) credit. The course equips healthcare professionals with the knowledge to access and navigate the NABIDH Clinical Portal; Search and retrieve a patient's unified medical record; Understand the key elements of a patient chart; View and download patient summary reports; and Leverage the portal's capabilities for informed clinical decision-making.

# Singapore approves Dupixent as first-ever biologic medicine for COPD

The Health Sciences Authority (HSA) in Singapore has approved Dupixent (dupilumab) for adults as an add-on maintenance treatment for uncontrolled chronic obstructive pulmonary disease (COPD) characterised by raised blood eosinophils who are on a stable combination of an inhaled corticosteroid (ICS), a long-acting beta2-agonist (LABA), and a long-acting muscarinic antagonist (LAMA), or on a combination of a LABA and a LAMA if ICS is not appropriate. Dupilumab is being jointly developed by Sanofi and Regeneron under a global collaboration agreement. In Singapore, Dupixent is the first biologic medicine approved to treat these COPD patients. The prevalence of COPD is estimated to be around 6 per cent of the general population, and it ranks as a leading cause of death. Dupixent has received regulatory approvals in more than 60 countries in one or more indications including certain patients with atopic dermatitis, asthma, chronic rhinosinusitis with nasal polyps, eosinophilic esophagitis, prurigo nodularis, chronic spontaneous urticaria, and COPD in different age populations. More than 1,000,000 patients are being treated with Dupixent globally.

# Japan gives nod to gene therapy for treating Duchenne Muscular Dystrophy

US-based Sarepta Therapeutics, Inc. has announced that the Japanese Ministry of Health, Labour, and Welfare (MHLW) has approved ELEVIDYS (delandistrogene moxeparvovec) for the treatment of Duchenne muscular dystrophy (DMD) under the conditional and time-limited approval pathway in Japan. ELEVIDYS is approved for individuals ages 3- to less than 8-years-old, who do not have any deletions in exon 8 and/or exon 9 in the DMD gene, and who are negative for anti-AAVrh74 antibodies. This is the first global approval to include individuals younger than 4 years of age. The approval is based on the efficacy and safety data for ELEVIDYS, which includes muscle health and longer-term functional results from the ELEVIDYS clinical programmes, including the two-year data from the global Phase 3 EMBARK clinical trial (Study SRP-9001-301). The conditional and time-limited approval pathway in Japan provides for marketing authorisation in Japan for up to seven years for innovative medicines to treat serious conditions. Commercialisation of ELEVIDYS in Japan is through Chugai Pharmaceuticals via its alliance with Roche.



# Korea steps up support for expanding traditional medicine overseas

The Ministry of Health and Welfare (MoHW), government of South Korea and the National Institute for Korean Medicine Development (NIKOM) have selected seven new medical institutions for the Traditional Korean Medicine Overseas Expansion Support Programme, with three for overseas expansion and four for attracting Chinese patients. Since 2024, the MoHW and NIKOM have supported the establishment and growth of traditional Korean medicine clinics overseas, including in

the Philippines and Vietnam. This year, they plan to expand the programme to North America, targeting the United States and Canada. In 2024, the number of foreign patients visiting traditional Korean medicine clinics in Korea reached approximately 33,000, an 85 per cent increase from the previous year and the highest since international patient attraction efforts began in 2009. In response, the government plans to strengthen support for leading institutions with strong capabilities in attracting patients from Southeast Asia and the Middle East and to expand outreach through certified medical tourism agencies.

# Maldives and Malaysia exchange MoUs in healthcare and other sectors

An exchange of Memoranda of Understanding (MoUs), and Exchanges of Notes (EoNs) recently took place between the Government of the Republic of Maldives and the Malaysian government. Dr Abdulla Khaleel, Minister of Foreign Affairs of the Republic of Maldives, and Dr Dzulkefly Ahmad, Minister of Health of Malaysia signed a MoU on Cooperation in the field of health which seeks to enhance collaboration in human resource development, the advancement of health service delivery systems, the promotion of health tourism, and the development of health information technology. In addition, Dr Abdulla Khaleel and Puan Hannah Yeoh, Minister of Youth and Sports of Malaysia, have exchanged an MoU to strengthen cooperation between sports organisations, promote the exchange of sporting events, support the development of sports facilities, enhance the training of athletes and officials, and encourage collaboration in anti-doping, sports medicine, and rehabilitation. Further, Dr Mariyam Shabeena Ahmed, High Commissioner of the Republic of Maldives in Malaysia, and Tuan Khairul Firdaus Akbar Khan, Deputy Minister of Tourism, Arts and Culture of Malaysia have signed the MoU on Cooperation in the field of tourism.

# India announces first-of-its-kind public funded Bio-Foundry at ICGEB

Addressing the "International Centre for Genetic Engineering and Biotechnology" (ICGEB) Board Meeting of Governors recently, Dr Jitendra Singh, Union Minister of State (Independent Charge) for Science & Technology, Government of India, dedicated India's first of its kind public funded DST-ICGEB 'Bio-foundry' in New Delhi. The facility will serve as a platform for scaling up bio-based innovations in collaboration with startups and researchers. ICGEB has 69 member countries and plays a key role in biotechnology-led sustainable global development through research, training, and technology transfer. The Minister described India as the emerging global biotech destination and said, this is the most appropriate venue for such deliberations at a time when India has much to contribute to the world community. Dr Jitendra Singh mentioned the development of India's 1st of its kind Indigenous generation antibiotic for monotherapy in bacterial pneumonia Nafithromycin, backed in part by DBT-BIRAC.

# GHIT Fund invests $4.5 M to develop diagnostics for TB

Japan-based Global Health Innovative Technology (GHIT) Fund has announced an investment of approximately JPY 679 million ($4.5 million) for the development of diagnostics for tuberculosis (TB); in addition to an investment of approximately JPY 15.9 million ($0.1 million) for a drug discovery project for Chagas disease and leishmaniasis (by Kitasato University, Nagasaki University, University of Tokyo, and Drugs for Neglected Diseases initiative (DNDi). The $4.5 million funding is towards a new TB diagnostic development project by US-based diagnostic developer Fluxus, Inc., in partnership with Fujirebio, Inc., a developer of clinical diagnostics in Japan, and Heidelberg University Hospital in Germany. This project will leverage Fluxus' cutting-edge ultrasensitive detection technology to develop and validate a urine-based TB biomarker lipoarabinomannan (LAM) assay on its automated benchtop immunoassay analyser.

# Terumo takes over WuXi Biologics' drug product plant in Germany for EUR 150 M

China-based WuXi Biologics, a leading global Contract Research, Development and Manufacturing Organisation (CRDMO), has entered into an agreement with Terumo Corporation that Terumo will take over WuXi Biologics' drug product (DP) plant in Leverkusen, Germany for EUR 150 million. The transaction is expected to be concluded in 2025, subject to the satisfaction of customary closing conditions. Divesting the Leverkusen facility is a strategic step in aligning with the company's long-term growth to enhance agility, scale diversified solutions for its global clients, and address emerging needs worldwide. This decision will allow WuXi Biologics to exclusively focus on building large-scale global DP manufacturing capacities in Singapore while optimising returns on assets for future growth. As a result, WuXi Biologics has completed the strategic review of all sites and will focus on building and developing its current sites. With over 12,000 skilled employees in China, the United States, Ireland, Germany and Singapore, WuXi Biologics leverages its technologies and expertise to provide customers with efficient and cost-effective biologics discovery, development and manufacturing solutions.

# Minghui Pharma announces oncology agreement worth $185 M with Qilu Pharma in Greater China

Minghui Pharmaceutical, a late-stage clinical biopharmaceutical company, has announced an exclusive licensing and collaboration agreement with Qilu Pharmaceutical for the development, manufacturing, and commercialisation of its B7-H3 ADC (MHB088C) in Greater China (including Mainland China, Hong Kong, Macau, and Taiwan). Under the agreement, Qilu will obtain exclusive rights to MHB088C in the region, while Minghui will

be eligible for total payments of up to 1.345 billion RMB ($185 million), including: 280 million RMB upfront and a near-term milestone payment, 1.065 billion RMB in development, regulatory and sales milestone payments, and up to double-digit royalties on net product sales. Minghui will retain global rights to MHB088C outside Greater China and continue advancing its development in these regions. MHB088C is an innovative B7-H3-targeted antibody-drug conjugate (ADC) developed using Minghui's proprietary SuperTopoi ADC platform. It is distinguished by its potent anti-tumour activity and superior safety profile, significantly expanding the therapeutic window.

# TPG acquires 35% stake in Schott Poonawalla from Serum Institute of India

Schott Pharma, a pioneer in drug containment and delivery solutions, has announced that TPG, a leading global alternative asset management firm, has entered into a binding agreement to acquire a 35 per cent stake in its joint venture Schott Poonawalla from Serum Institute of India (SII). Schott Poonawalla is a joint venture of Schott Pharma and SII, part of the Cyrus Poonawalla Group and a global leader in vaccine manufacturing,

dedicated to providing affordable vaccines worldwide. TPG Growth, TPG's middle market and growth equity platform, is funding the investment, along with Novo Holdings as a co-investor.

Following the transaction, SII will retain a minority stake in the company. With deep healthcare investing experience and local expertise in India, having TPG join the partnership alongside Schott Pharma and Serum Institute of India represents a significant milestone in Schott Poonawalla's growth, equipping the company with additional resources and strategic insight to support its long-term global ambitions.

## Lotus Pharma inks $125 M deal with LENZ Therapeutics to commercialise presbyopia treatment

US-based LENZ Therapeutics, Inc. and Taiwan's Lotus Pharmaceutical have announced an exclusive license and commercialisation agreement for Lotus to commercialise LNZ100 for the treatment of presbyopia in the Republic of Korea and certain countries in Southeast Asia. LENZ Therapeutics is a pre-commercial stage biopharmaceutical company focused on the development and commercialisation of the first and only aceclidine-based eye drop to improve near vision in people with presbyopia. Lotus is a leading global pharmaceutical company focused on commercialising novel pharmaceuticals to provide patients with better, safer and more accessible medicines. Under the terms of the licensing and commercialisation agreement, LENZ will receive up to $125 million in upfront, regulatory and commercial milestone payments, as well as tiered, double-digit royalties on future net sales. Lotus will have exclusive development, manufacturing, registration and commercialisation rights for LNZ100 for the treatment of presbyopia in the Republic of Korea and certain countries in Southeast Asia, including Thailand, Philippines, Vietnam, Malaysia, Brunei, Indonesia and Singapore.

## Lotte Biologics invests $100 M in new ADC manufacturing facility in US

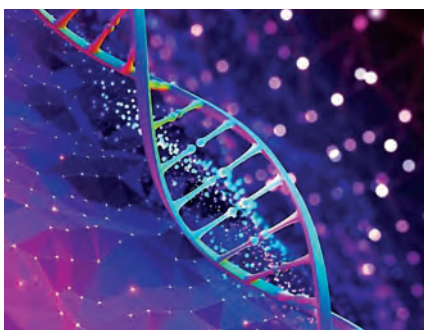
South Korea-based Lotte Biologics has signed a manufacturing agreement with an Asia-based biotech company for the production of a clinical-stage antibody drug conjugate (ADC) candidate. This contract marks the first official step in the full-scale operation of the ADC manufacturing facility at the Syracuse Bio Campus in New York, US, which has been under expansion since 2023. With this, the company is launching its ADC contract development and manufacturing (CDMO) services, designed to meet a wide range of client needs from clinical development to commercial production. It also aims to further enhance the competitiveness of the Syracuse Bio Campus. Building on this order, the company plans to pursue additional client acquisition opportunities while accelerating the expansion of partnerships to offer comprehensive one-stop services for ADC development and manufacturing.

# Oliver Healthcare Packaging opens manufacturing facility in Malaysia

Oliver Healthcare Packaging, a leading healthcare company driving quality and innovation in medical packaging, has opened its new 120,000 square foot manufacturing facility in Johor, Malaysia. The facility will join a growing number of companies operating out of the Johor-Singapore Special Economic Zone and will serve Oliver's growing customer base across Asia-Pacific. The new facility will create various roles across quality, engineering, logistics and supply chain, and build resilience in Oliver's regional operations. Equipped with the latest state-of-the-art equipment and ISO13845, ISO-7 and ISO-8 cleanrooms, the facility will produce high-quality, medical grade packaging such as pouches, lids and roll stock. Oliver will support customer productivity and regulatory efforts in this diverse regional market. The new site has enhancements contributing to a more sustainable working environment through features such as auto sensor energy saving LED lights and a rainwater harvesting system.

# Illumina, OIST to accelerate genomics innovation in Japan

US-based Illumina, a global leader in DNA sequencing and array-based technologies, and the Okinawa Institute of Science and Technology (OIST), an international graduate university in Okinawa, Japan, have announced a Memorandum of Understanding (MoU) to accelerate genomics innovation in alignment with the One World, One Health framework, which recognises the interconnectedness of human, animal, and environmental health. This collaboration will combine Illumina's Next-Generation Sequencing (NGS) technologies and OIST's expertise in multi-disciplinary science from engineering, physics to biology, ecology and marine sciences.



Together, the aim is to foster knowledge sharing, testing and evaluating cutting-edge technologies, facilitate technology disclosures, promote talent development, and collaboration on innovation events. Through this partnership, Illumina and OIST aspire to become a knowledge hub that amplifies the potential of industry-academia collaboration and accelerates the advancement of genomic science in Japan. The aim of the MoU is to accelerate access to genomics in Japan by becoming an epicentre of knowledge that draws on the capabilities of industry, academia, and the public sector.

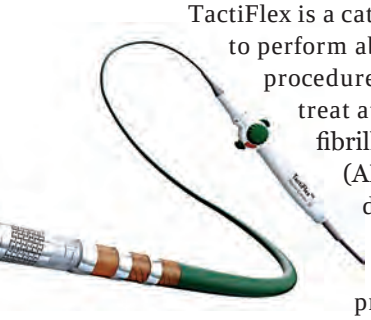
# Curaleaf International launches range of medical cannabis products in Australia

American firm Curaleaf International, part of Curaleaf Holdings, Inc., has announced the launch of Curaleaf branded products in Australia. This announcement marks the expansion of Curaleaf's presence in one of the world's fastest growing medical cannabis markets and underscores its commitment to local collaboration, clinical integrity, and patient care.

The initial product offering, comprising four cannabis flower strains, will be distributed via Canngea, a licensed Australian manufacturer and wholesaler with a wealth of experience in medical cannabis. This partnership supports Curaleaf's vision to be the world's leading cannabis company by consistently delivering superior products and services. Over the coming months, patients and healthcare professionals in Australia can look forward to a broader portfolio and further innovative solutions offered by Curaleaf, including precision-dosed inhalation formats and popular strains already widely prescribed across the UK, Germany, and other key European markets.

# Abbott introduces TactiFlex sensor enabled ablation catheter in India

Abbott, the global healthcare company, has announced the launch of the TactiFlex Sensor Enabled Ablation Catheter, the world's first ablation catheter with a flexible tip and contact force technology. Cardiac ablation is a minimally invasive procedure in which a physician accesses the heart through a blood vessel. The physician will use the catheter to apply energy to the targeted heart tissue to create small scars. These block the faulty electrical signals that cause the irregular heartbeat.



TactiFlex is a catheter used to perform ablation procedures that treat atrial fibrillation (AFib). This device results in reduced procedure times and better safety as compared to the company's previous generation catheters. When used with the EnSite X EP System, doctors can accurately map and identify areas of the heart that need treatment, ensuring precise results and better patient outcomes. Unlike other catheters, the TactiFlex catheter uses a tip design with a laser-cut pattern that flexes when in contact with the heart wall. This helps direct fluid to the treated tissue and allows for more accurate positioning of the catheter – providing up to two-times higher stability in a beating heart – for consistent therapy delivery.

# Sonitus Medical grants BHM commercialisation rights outside of China

Sonitus Medical has entered into a strategic cooperation with BHM, a European manufacturer of bone conduction hearing devices. The two companies will engage in deep collaboration across product development, manufacturing, regulatory approval, marketing, and sales. Under the agreement, Sonitus Medical grants BHM the commercialisation rights outside of China for two innovative bone conduction hearing products developed by Sonitus. BHM, together with its parent company MED-EL, a global leader in implantable hearing solutions, will promote and distribute the products through MED-EL's extensive marketing network, which spans more than 130 countries. The medical-grade bone conduction market for patients with conductive hearing loss, single-sided deafness, and mixed hearing loss is still in its infancy in China, but holds tremendous potential. In China, Sonitus Medical is already the leader in this niche segment. The company is developing innovative, high-quality, non-invasive bone conduction hearing solutions.

# SK bioscience joins Korea's national initiative to develop Avian Influenza Vaccine

SK bioscience has been selected for the Korea Disease Control and Prevention Agency (KDCA)'s Priority Infectious Disease Pandemic Preparedness Rapid R&D Support Programme. This government-led initiative aims to develop vaccines against avian influenza – identified as a high-risk candidate for the next pandemic. SK bioscience has been chosen for its proven technological capabilities as the only domestic company to have commercialised cell-culture-based vaccines for both influenza and COVID-19. Under the programme, SK bioscience and KDCA will co-invest approximately KRW 5.25 billion ($3.7 million) in early-stage development. The company will initiate development of a cell-culture-based avian influenza vaccine, aiming to enter Phase 1/2 clinical trials in the second half of next year. Furthermore, the company plans to foster international collaboration alongside its vaccine development to enhance global public health as the threat of avian influenza is not confined to a single region or country.

## Rznomics partners with Eli Lilly to commercialise RNA-editing therapeutics

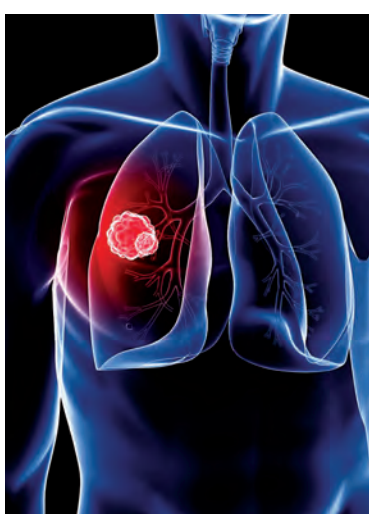
Rznomics Inc., a South Korea-based biopharmaceutical startup specialising in RNA-based therapeutics, has entered into a strategic global research collaboration and licensing agreement with Eli Lilly and Company to develop and commercialise novel RNA-editing therapies using Rznomics' proprietary trans-splicing ribozyme platform. The collaboration focuses on the discovery and development of RNA-editing therapeutics for sensorineural hearing loss. Rznomics will conduct early-stage research according to the jointly approved research plans, while Lilly will assume responsibility for further development and commercialisation. If Lilly exercises all available options under the agreement, the total deal value could reach more than $1.3 billion, as well as separate royalties on product sales. This partnership marks a significant milestone for Rznomics as it seeks to expand its presence in the global biotech arena.

## Turion Labs launches in Singapore to power Southeast Asia's biotech breakthroughs

Turion Labs, a pioneering biotech venture formed by S&S LAB Korea and Future Lestari (Indonesia), has officially launched in Singapore, unveiling a transformative vision to position Southeast Asia as a global innovation engine for medical and life sciences. Designed as the region's first full-stack biotech innovation platform, Turion Labs integrates shared laboratory infrastructure, contract research services (CRO), and regulatory enablement into a unified solution that supports biomedtech ventures from discovery to commercialisation. Turion Labs' first major facility is set to open later this year at the Sinarmas Land Biomedical Hub in BSD City, Indonesia — a newly designated Biomedical Special Economic Zone. This flagship site will host modular labs, pilot-scale research suites, and clinical support services, creating a powerful springboard for biotech development and commercialisation. As part of its long-term strategy, Turion Labs is expanding its presence beyond Singapore and Indonesia, with upcoming projects planned in Thailand, Malaysia, and the Philippines.

## Johnson & Johnson Medtech partners with Qure.ai to boost early detection of lung cancer in India

Johnson & Johnson MedTech, a global leader in surgical technologies and solutions, has onboarded Indian startup Qure.ai, a global leader in artificial intelligence (AI) for healthcare, as a strategic partner to enhance early detection of lung cancer in India. This collaboration brings together cutting-edge AI and medical technology, helping identify lung cancer at its most treatable stage. This initiative is part of Project BreatheEZ, a broader strategic collaboration between Qure.ai and Johnson & Johnson MedTech, and designed to establish AI-led Incidental Pulmonary Nodule (IPN) Detection clinics across leading hospitals in India. These clinics will act as integrated screening hubs, optimising early detection, triaging, and follow-up care for lung cancer patients. As part of this collaboration, Qure.ai's AI technology will be deployed across 10 hub medical centres in India, with an additional 20 supporting spoke sites. The first such clinic has been launched in Thangam Cancer Centre in Namakkal, Tamil Nadu, India.



# ekincare raises strategic investment from MSD IDEA Studio Asia Pacific

ekincare, India's leading artificial intelligence (AI)-powered integrated digital health gateway, has announced the raising of a strategic, undisclosed investment led by global healthcare leader MSD (tradename of Merck & Co., Inc., Rahway, N.J., USA) through MSD IDEA Studio Asia Pacific, an initiative by the MSD Global Health Innovation Fund (MGHIF). The round also saw participation from ekincare's existing investor, HealthQuad, a venture capital fund focused on healthcare innovation. This investment round will empower Indian startup ekincare to advance its mission of revolutionising corporate primary and preventive healthcare through AI-driven, personalised Outpatient Department (OPD) solutions. With this investment, ekincare aims to expand its cashless OPD network and enhance AI-powered analytics to drive better preventive care, chronic disease management, and employee wellness outcomes.

# Gene Solutions and NEWCL forge strategic partnership to advance genetic testing in Taiwan

In a groundbreaking move, Gene Solutions, a Vietnam-based startup in prenatal and oncology genetic testing space, and NEWCL Biomedical Laboratory, Taiwan's pioneering clinical laboratory with LDTs certification, have joined forces to establish an advanced Next-Generation Sequencing (NGS) laboratory in Taiwan. Gene Solutions is set to bring its cutting-edge NIPT tests (trademarked as triSure) and oncology tests (SPOT-MAS early cancer detection, K-TRACK, K-4CARE comprehensive genomic profiling, ctDNA-MRD monitoring) to Taiwan, expanding its footprint in the APAC region. These innovative tests, trusted by millions across Asia, will soon be available to Taiwanese patients, offering unparalleled accuracy and reliability. Combining Gene Solutions' expertise in NGS test development with NEWCL's robust laboratory capabilities, this partnership aims to create one of Taiwan's most advanced NGS laboratories. This facility will cater to the growing demand for sophisticated DNA testing in prenatal care and precision oncology, ensuring Taiwanese patients have access to the latest advancements in genetic testing.

# Genezen and Optieum Biotechnologies focus on CAR-T therapy for glioblastoma

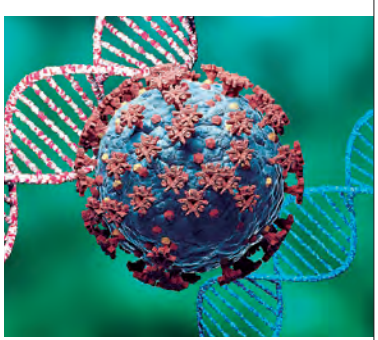
Genezen, a US-based viral vector Contract Development and Manufacturing Organisation (CDMO), and Japanese startup Optieum Biotechnologies, Inc., have announced a partnership for cGMP manufacturing of the lentiviral vector (LVV) construct used in the production of OPTF01, a novel CAR-T therapy for glioblastoma treatment. Derived from Optieum's proprietary Eumbody System, OPTF01 specifically targets Fibroblast activation protein-alpha (FAPα), a protein expressed on both tumour cells and the surrounding pericytes and Cancer-associated Fibroblasts (CAFs). OPTF01 can potentially disrupt the immunosuppressive microenvironment around the tumour while simultaneously attacking the malignant cells within the tumour. Successful development of this therapeutic approach would address a critical unmet medical need for patients with refractory glioblastoma who currently face limited treatment options with poor prognoses, as well as various other solid tumour indications. Under this collaboration, Genezen will provide the technology transfer, process development, and cGMP manufacturing of the LVV construct used in the onward production of the OPTF01 CAR-T product.

# Africa CDC and Unitaid partner to strengthen equitable access to health products in Africa

The Africa Centres for Disease Control and Prevention (Africa CDC) and Unitaid have formed a new strategic partnership to expand the production of essential health products in Africa and improve sustainable access to medicines, diagnostics, and medical oxygen across the continent. The Memorandum of Understanding focuses on scaling up regional manufacturing as a central pillar of Africa's health security and autonomy. Africa bears 25 per cent of the global disease burden yet imports more than 95 per cent of the active pharmaceutical ingredients and 70 per cent of the medicines it consumes. The continent has just 600 health product manufacturing sites for a population of 1.1 billion, compared to about 10,000 in India and 5,000 in China. To help address these gaps and bolster Africa's ability to respond to future pandemics, the partnership will support regional manufacturing of essential medical products such as diagnostics, therapeutics, and oxygen, while also building capacity to produce priority health products and scale up innovative technologies, including those developed in Africa.

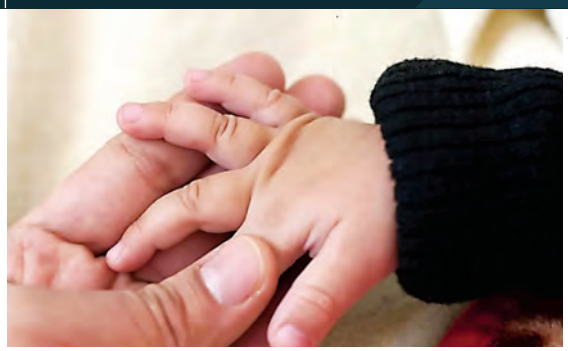
# New partnership in Norway to strengthen pandemic preparedness

The Coalition for Epidemic Preparedness Innovations (CEPI) and the Norwegian Institute of Public Health (NIPH) have bolstered the long-standing relationship between the two organisations by signing a Memorandum of Understanding (MoU) during a recent meeting between NIPH's Director General Guri Rørtveit and CEPI's CEO Richard Hatchett. The strengthened partnership will reinforce the links between CEPI and European Union-wide vaccine coordination projects that NIPH is a member of. It will also facilitate the engagement of Norwegian institutions and networks in the global vaccine development and pandemic preparedness spheres. The two organisations will share data and expertise and contribute to joint training for researchers and students in Norway. CEPI will support NIPH in its role as an advisor to the Norwegian Government regarding vaccines and monoclonal antibodies for outbreaks and pandemics. In addition, CEPI will facilitate collaboration between NIPH and CEPI-supported vaccine developers and networks to help strengthen vaccine development projects in the EU and Norway for the benefit of all.




# US FDA approves first and only at-home self-collection device for cervical cancer screening

Teal Health, a women's health company on a mission to eliminate cervical cancer, has announced the US Food and Drug Administration's (FDA) approval of the Teal Wand, the first and only at-home vaginal sample self-collection device for cervical cancer screening in the United States (US). Cervical cancer screenings, commonly referred to as the Pap smear, are critical to a woman's health, but they are inconvenient and uncomfortable for most. Now women have a new way to screen that is as accurate as going to the doctor's office, comfortable, and done from home. The Teal Wand is a prescription device that will soon be available at getteal.com for individuals aged 25–65 at average risk. The at-home screening includes both the Teal Wand collection kit and an end-to-end telehealth service providing virtual access to Teal medical providers who prescribe the kit, review the results from the lab, and support women throughout their at-home screening experience.



## UK to roll out Avoiding Brain Injury in Childbirth programme

Expectant mothers will receive safer maternity care as a new National Health Service (NHS) programme to help prevent brain injury during childbirth is rolled out across the country. The Avoiding Brain Injury in Childbirth (ABC) programme will help maternity staff to better identify signs that the baby is in distress during labour so they can act quickly. It will also help staff respond more effectively to obstetric emergencies, such as where the baby's head becomes lodged deep in the mother's pelvis during a caesarean birth. The government programme, which will begin from September and follows an extensive development phase and pilot scheme, will reduce the number of avoidable brain injuries during childbirth, helping to prevent lifelong conditions like cerebral palsy.

## PAHO to fortify the Caribbean's fight against AMR

Health leaders, development partners and regional stakeholders recently gathered to launch two synergistic, landmark, regional projects under the United Kingdom (UK) Government's Fleming Fund and jointly implemented by the Caribbean Public Health Agency (CARPHA), the Pan American Health Organization (PAHO), and the UK Health Security Agency (UKHSA). The goal is to strengthen the Caribbean's ability to combat the global crisis of antimicrobial resistance (AMR). The Caribbean Antimicrobial Resistance Alliance (CARA), a partnership between UKHSA and CARPHA, forms part of CARPHA's wider integrated AMR Programme aimed at enhancing the region's capacity to detect and respond to AMR. Through this initiative, CARPHA is strengthening its regional laboratory network, expanding diagnostic capabilities, and improving the collection and use of AMR data. The project will support Member States by expanding reference laboratory services in Trinidad and Tobago, Jamaica, and Saint Lucia, and establishing a digital, region-wide surveillance platform. CARA also promotes regional coordination and best practice sharing, helping to align national efforts and policies to ensure timely, data-informed responses to AMR.

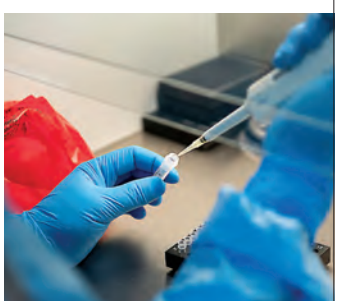
# AIIB and Gavi to advance sustainable health and immunisation financing

The Asian Infrastructure Investment Bank (AIIB) and Gavi, the Vaccine Alliance have signed a landmark partnership agreement to scale and improve sustainable financing for health & immunisation systems across low-income and lower middle-income countries. The letter of intent outlines concrete ways in which the organisations will collaborate on strategic investments in AIIB members that are eligible for Gavi support. AIIB and Gavi will focus on building joint financing initiatives to advance health & immunisation investments &


strengthen health systems, with the goal of achieving enhanced health outcomes and sustainable self-financing. Over the past 25 years, 19 countries have successfully transitioned out Gavi support – including Indonesia & India, both of which are now Gavi donors. Under the agreement, AIIB intends to provide up to $1 billion in financing to support public-sector projects in health which will be complemented with Gavi concessional resources, subject to country demand. The financing will support critical investments including in health systems & immunisation infrastructure strengthening, vaccine procurement & the introduction of high-impact vaccines in middle-income countries. It will also provide targeted assistance to countries that are transitioning out of Gavi support.

# WHO and Medicines Patent Pool announce sublicensing agreement for RDT technology

The World Health Organization (WHO) and Medicines Patent Pool (MPP) have announced a sublicensing agreement between MPP and a Nigerian health technology company, Codix Bio, to start development and manufacturing of rapid diagnostic tests (RDTs) using technology transferred from global in-vitro diagnostics company – SD Biosensor. This agreement will contribute to advancing equitable access to vital diagnostic tools through local production, expanding manufacturing capacity in the African Region. The new RDT technology is especially useful for low- and middle-income countries (LMICs), as it is easy to use in health facilities without requiring additional equipment. Tests are highly sensitive and can generate results within 20 minutes. Codix Bio will initially focus on producing RDTs for HIV, but the technology can also be used for manufacturing tests for malaria and syphilis, among others.

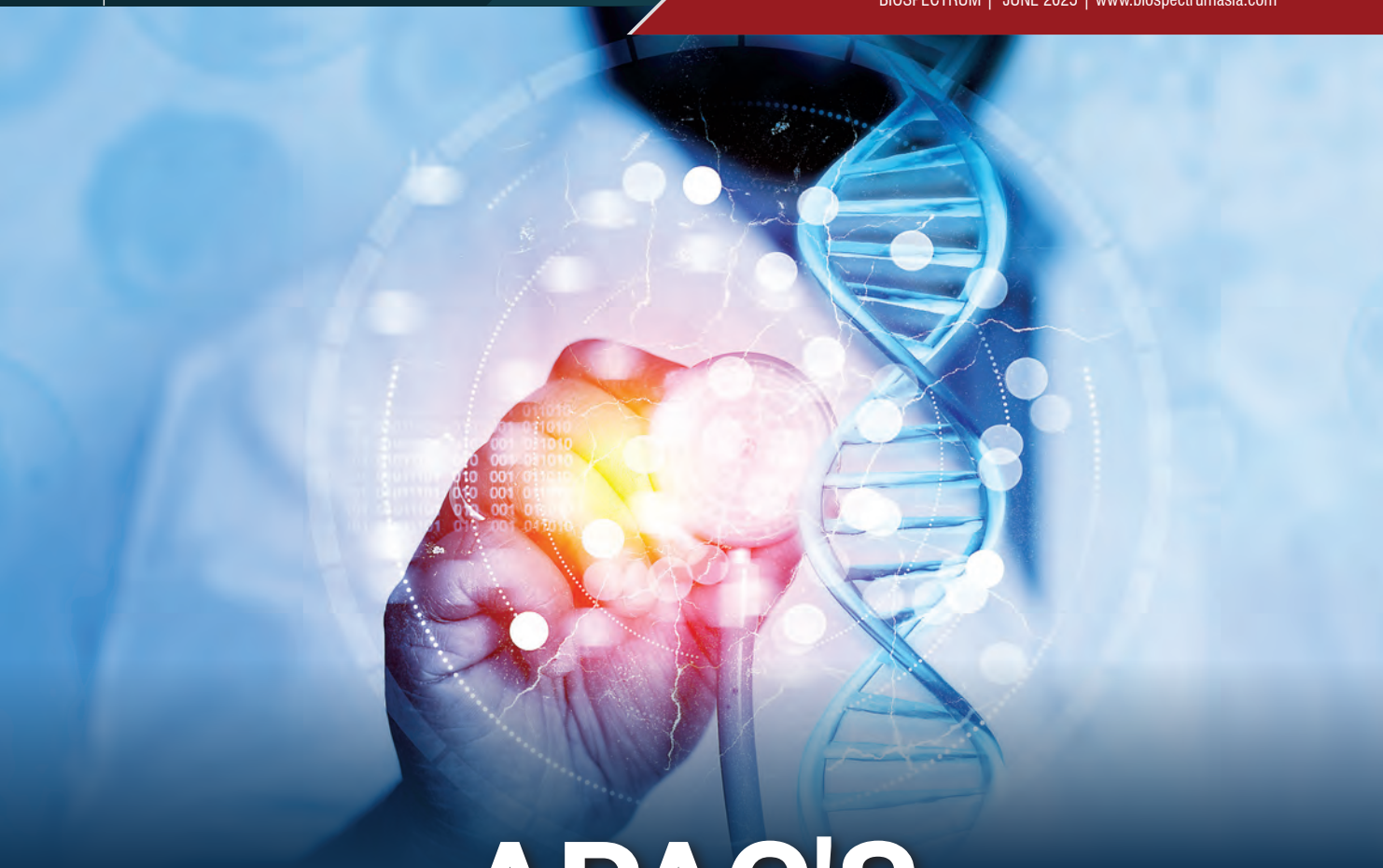


# WHO warns of slowing global health gains

The World Health Organization (WHO) has published its World health statistics report 2025, revealing the deeper health impacts caused by the COVID-19 pandemic on loss of lives, longevity and overall health and well-being. In just two years, between 2019 and 2021, global life expectancy fell by 1.8 years—the largest drop in recent history— reversing a decade of health gains. Increased levels of anxiety and depression linked to COVID-19 reduced global healthy life expectancy by 6 weeks—erasing most of the gains made from lower mortality due to noncommunicable diseases (NCDs) during the same period. The report also summarises global data on progress towards WHO's triple billion targets, revealing impacts of not just the pandemic shock but also a longer trend of slowing progress starting before the pandemic, followed by a slower recovery since. WHO warns that overall progress is under threat and urgent global action is needed to get back on track.

# Nursing workforce grows, inequities threaten global health goals: WHO

The global nursing workforce has grown from 27.9 million in 2018 to 29.8 million in 2023, but wide disparities in the availability of nurses remain across regions and countries, according to the State of the World's Nursing 2025 report, published by the World Health Organization (WHO), International Council of Nurses (ICN) and partners. Inequities in the global nursing workforce leave many of the world's population without access to essential health services, which could threaten progress towards universal health coverage (UHC), global health security and the health-related development goals. The new report provides a comprehensive and up-to-date analysis of the nursing workforce at global, regional and country levels. Consolidating information from WHO's 194 Member States, the evidence indicates global progress in reducing the nursing workforce shortage from 6.2 million in 2020 to 5.8 million in 2023, with a projection to decline to 4.1 million by 2030. But, the overall progress still masks deep regional disparities: approximately 78 per cent of the world's nurses are concentrated in countries representing just 49 per cent of the global population. Low- and middle-income countries are facing challenges in graduating, employing and retaining nurses in the health system and will need to raise domestic investments to create and sustain jobs.



# APAC'S ALLIANCE-DRIVEN BIOTECH BOOM

**Partnerships are a cornerstone of the biotech innovation process. COVID-19 acted as a catalyst, accelerating collaboration across the sector and prompting partnerships between established players for the first time. Since then, biotech alliances have become more diverse, frequent, and strategically important, especially in the Asia-Pacific (APAC) region. Biotech partnerships of APAC differ in a variety of ways from most global collaborations, primarily due to the unique geopolitical and socio-economic landscape of the region. The region has innovation hubs like Japan and South Korea as well as large, high-growth markets such as China and India. As China rapidly scales its biopharma capabilities, it is becoming both a key market and an innovator. This transformation has redefined regional deal-making, shifting the focus from technology transfer to co-development, shared commercialisation, and strategic alignment. APAC biotech deals are no longer early-stage R&D plays, they are beginning to span the full lifecycle, from bench to bedside, including commercialisation milestones. Let's explore further the APAC's wave of regional biotech partnerships during the first five months of this calendar year ie. from January to May 2025.**

In the first half of 2025, up to May 20, the APAC biotech industry has seen a surge in regional partnerships. A total of 24 partnerships have been recorded so far, spanning areas such as antibody-drug conjugates (ADCs), digital health, contract development and manufacturing (CDMO), AI-driven diagnostics, and gene therapy.

China, of course, stands out as the region's most prolific participant in these partnerships. Chinese firms are involved in over half of the collaborations recorded during this period, particularly in areas like ADCs, CDMO services, AI-powered diagnostics, and imaging systems. Companies such as WuXi XDC, Minghui Pharmaceutical, Belief BioMed, and United Imaging exemplify how Chinese biotech and medtech companies are forming both domestic and cross-border alliances to consolidate their leadership in innovation and manufacturing.

South Korea is another key driver of regional partnerships. Korean companies are heavily represented in deals involving new cutting-edge therapies like exosome-based injectables, CAR-T and CAR-NK immunotherapies, and AI-enabled healthcare workflows. Korean players are also frequently aligning with Chinese companies for ADC development, as seen in DAAN Biotherapeutics' deals with both LigaChem and GC Cell.

Singapore, while smaller in biotech output, plays a strategic role as an innovation and research hub. Its institutions, like A*STAR and Duke-NUS Medical School are actively engaged in transferring intellectual property to startups and biotech ventures through licensing deals. Partnerships such as the one between Engine Biosciences and the Experimental Drug Development Centre demonstrate how Singapore is leveraging its scientific base to generate regionally relevant IP for precision oncology and synthetic biology.

Taiwan's activity is most visible in medtech and diagnostics, with companies like Brain Navi and NEWCL forming cross-border alliances. Meanwhile, Vietnam and Malaysia are beginning to make their presence felt, especially in diagnostics and commercial distribution. Vietnam's Gene Solutions, for instance, has partnered with Taiwan's NEWCL to expand access to its non-invasive prenatal testing (NIPT) and oncology diagnostics portfolio across the region.

India too has taken a strategic approach by expanding its commercialisation footprint. Cipla's deal with Taiwan's Formosa grants it rights to market ocular drugs in 11 countries, from South Asia to Latin America and Africa. Dr. Reddy's partnership with China's Henlius Biotech is another example where Indian pharma is leveraging regional innovation to access large global markets, including the U.S. and Europe.

**Let's look at some of the other trends:**

## ADC boom

From a thematic perspective, ADC development is by far the most prominent focus area across the region. Several Korean and Chinese companies are aligning to integrate proprietary ADC platforms with end-to-end development and manufacturing capabilities. This growing interest points to Asia's ambitions to become a global centre for ADC innovation, reducing historical reliance on Western technologies in this complex therapeutic class. The number of deals focused on CDMO and ADCs has surged, underlining two key priorities: accelerating product pipelines and expanding biomanufacturing capabilities within the region.

**Examples:**

- **Porton Advanced (China) and Hualong Biological (China):** End-to-end CDMO support for cell therapy, signifying growing local capabilities in advanced modalities.
- **WuXi XDC's multiple deals (with AbTis, LigaChem) and Samsung Biologics' tie-up with LigaChem:** Focus on ADCs — a hot therapeutic area requiring complex production processes.

These reflect Asia-Pacific's ambition to become not just a consumer of biologics but a global supplier of advanced therapies.

## Digital Health and AI

Digital health and AI-enabled diagnostics form the second major category of collaboration. Chinese and Korean firms are actively embedding AI into healthcare solutions, from lung cancer screening to neurosurgical robotics and health cloud platforms. These partnerships reflect an emphasis not only on technology development but also on large-scale deployment in hospitals and national screening programmes.

**Examples:**

- **Fangzhou and Tencent Health (China):** Integrating open-source AI models into healthcare platforms.
- **PRISM BioLab and Elix (Japan):** Combining protein-protein interaction control with AI for novel drug discovery.
- **Coreline Soft (South Korea) and ParagonCare (Australia):** A cross-border effort to support AI-led lung cancer screening under a national programme.

"Translating innovation into impact requires more than just research collaboration; it demands a deep understanding of how healthcare is practised across the region. Healthcare policies and clinical workflows vary significantly from country to country, and this diversity directly influences how partnerships are structured."

**- Ed Deng,**
Co-founder and CEO of Health2Sync, Taiwan

"Regional biotech collaborations in APAC are uniquely shaped by the region's economic, cultural and innovation landscapes. Unlike global partnerships, which involve broader consortia and complex governance, APAC collaborations focus on targeted alliances between universities and local biotech companies."

**- Prof. Christopher CHAO,**
Vice President (Research and Innovation) of
The Hong Kong Polytechnic University

These cases indicate the region's desire to leapfrog traditional infrastructure gaps by investing in digital-first healthcare systems and drug development tools.

## IP licensing and platform sharing

Licensing deals, especially between academia and startups or within Asia's innovation hubs, are accelerating early-stage development pipelines.

**Examples:**

- **T Cell Diagnostics and Duke-NUS (Singapore):** Point-of-care immunology assays.
- **Engine Biosciences and EDDC (Singapore):** Platform-sharing in precision oncology.
- **A*STAR and MojiaBio:** Sustainable biomanufacturing R&D.

These reflect regional R&D alignment, especially in Singapore, Korea, and Japan- regions with deep translational research capabilities.

## Southeast Asia: An emerging strategic expansion zone

Companies from China, India, and Taiwan are increasingly eyeing Southeast Asia, both as a commercial destination and a strategic R&D base.

**Examples:**

- **Gene Solutions (Vietnam) and NEWCL (Taiwan):** Diagnostic expansion into Taiwan via NIPT and cancer genomics.
- **Cipla (India) and Formosa (Taiwan):** A pan-regional commercialisation deal spanning 11 countries, including SE Asia and Africa.
- **United Imaging (China) and IHH Healthcare (Malaysia):** Diagnostic system integration in a regional hospital chain.

## Intra-national partnerships

Another interesting trend is the rise of intra-national partnerships, especially in China and South Korea. These are not merely consolidations within domestic markets, they're mechanisms to integrate R&D and manufacturing more efficiently and to fast-track clinical development. However, when firms do look to cross-border, it is often for two reasons: to access new markets (as seen in the MediThinQ–Sinopharm deal for distribution in China) or to augment technical capabilities (as in the WuXi XDC–AbTis collaboration for conjugation platform integration).

## Strategic drivers

APAC is a densely packed landscape with over 30 countries and around 60 per cent of the total global population. This expanse of countries brings with it a diverse spectrum of systems to navigate, ranging from culture and language to infrastructure, accessibility and regulation. Entering this market successfully requires extensive knowledge of these fragments. This informs the basis for how partnership strategies and their structures in this region are built.

"Strategically, the goals of regional APAC biotech partnerships frequently centre on achieving targeted market entry and sustainable growth within specific countries in the region. This often involves addressing

"While global collaborations typically aim for widespread commercialisation across multiple major developed markets, APAC-focused partnerships often prioritise gaining a strong foothold within a singular market. This foothold is generally a crucial step to gain broader regional expansion."

**- Bijay Singh,**
Global Head, Healthcare Business Unit, DKSH, Thailand

"Given China's growing influence in biopharma innovation and market scale, companies across the APAC region are increasingly structuring partnerships with milestone-based terms, particularly in the later phases such as commercialisation. These deals often aim to serve global markets like the US and Europe, as well as the rapidly expanding China/APAC region."

**- Leo Lyu,**
Director of Marketing, Chime Biologics, China

prevalent yet unmet medical needs, adapting products to suit local infrastructure and patient affordability, as well as navigating local regulatory landscapes. While global collaborations typically aim for widespread commercialisation across multiple major developed markets, APAC-focused partnerships often prioritise gaining a strong foothold within a singular market. This foothold is generally a crucial step to gain broader regional expansion. For DKSH, these strategies, together with the expertise and insights from local teams, have generated local clinical data and case studies, which have provided valuable information for informing market sentiment and guiding future strategies. Additionally, these targeted footholds in APAC help establish a commercial presence in these fast-evolving, high-potential Asian markets," said Bijay Singh, DKSH's Global Head, Healthcare Business Unit, Thailand.

This differing strategy extends to how it is implemented in terms of structure. Biotech partnerships in APAC tend to be tailored when compared with partnerships built on the global level as they must account for a wide range of differing factors such as the aforementioned regulations or infrastructure.

"These partnerships often focus on the effective integration of local operational capabilities and expertise held by market expansion service providers such as DKSH Healthcare. This can address specific in-country regulatory landscape, supply chain complexities, and go-to-market strategies, which can vary significantly from one APAC nation to another. Additionally, phased approaches are often implemented so that companies can focus on their expansion to one APAC market at a time. For wider APAC plans, firms may also choose a stable central hub like Singapore to manage regional activities," added Singh.

The APAC region has long stood as a dual force in global biopharma—home to deep innovation in countries like Japan and South Korea, and massive, fast-growing markets in China and India.

"In the recent decade, as China is keeping up its biopharma innovation, the dynamics and landscape of the APAC and global biopharma market have been drastically impacted by the size of capital and talent invested in biopharma innovation, as well as the market growth due to the fast-growing GDP. Therefore, the innovation in Japan and Korea has a second choice to partner with Chinese companies to access the huge market in China. And the innovation originated from China could also partner with Japan and Korea biopharma companies to co-develop into global products," said Leo Lyu, Director of Marketing, Chime Biologics, China.

As China cements its dual role as both a biopharma innovator and a massive commercial market, regional deal-making strategies are evolving to reflect a new calculus of risk and opportunity.

"Given China's growing influence in biopharma innovation and market scale, companies across the APAC region are increasingly structuring partnerships with milestone-based terms, particularly in the later phases such as commercialisation. These deals often aim to serve global markets like the US and Europe, as

## No of deals with regard to Therapeutic focus

| Focus Area | Number of Deals | Status |
|---|---|---|
| ADC & Biologics | 7 | China and Korea dominate; high CDMO interest |
| AI/Digital Health | 4 | Diagnostics, remote monitoring, healthcare AI platforms |
| Gene Therapy | 2 | BBM-H901 with Takeda; CAR-T/CAR-NK with DAAN |
| Exosome Therapeutics | 1 | Emerging segment, led by South Korea |
| Diagnostics (NIPT, cancer) | 3 | Led by Vietnam, Singapore, and Korea |
| Orthodontics/ Dental Tech | 1 | Medit–Graphy partnership |
| Surgical Robotics | 1 | Brain Navi–BenQ Medical for neurosurgical robotics |
| Synthetic Biology | 1 | A*STAR–MojiaBio for sustainable manufacturing |

## Leading countries having more deals in APAC

| Country | Number of Companies Involved | Key Focus Areas |
|---|---|---|
| China | 10+ | ADCs, CDMO, AI health, gene therapy, imaging |
| South Korea | 9+ | Exosome therapies, diagnostics, digital health, ADCs |
| Singapore | 4 | R&D, drug discovery, IP licensing, synthetic biology |
| Taiwan | 3 | Medtech, diagnostics, surgical robotics |
| India | 2 | Licensing, commercialisation in emerging markets |
| Vietnam | 1 | Diagnostics (NIPT, oncology) |
| Japan | 2 | AI-based discovery, gene therapy |
| Malaysia | 1 | Imaging partnerships |
| Australia | 1 | AI-based screening |

well as the rapidly expanding China/APAC region. The commercial potential in China helps balance the risks inherent in innovation, prompting continuous shifts in deal structures as China rises in the global biopharma landscape," added Lyu.

It is also a well-known fact that most innovative therapies have emerged from university laboratories. In the APAC region, this has given rise to regional biotech partnerships that thrive on close university-industry collaboration, tailored to local health needs. These collaborations foster innovation clusters that accelerate research translation and strengthen the region's competitive edge.

"Regional biotech collaborations in APAC are uniquely shaped by the region's economic, cultural and innovation landscapes. Unlike global partnerships, which involve broader consortia and complex governance, APAC collaborations focus on targeted alliances between universities and local biotech companies. These partnerships leverage complementary expertise to address region-specific health challenges, such as cancer therapies adapted to local genetic profiles. By emphasising the rapid translation of research into practical applications and nurturing local talent, these regional efforts not only shorten innovation cycles but also build a robust ecosystem that enhances the region's standing in the global biotech industry," said Prof. Christopher CHAO, Vice President (Research and Innovation) of The Hong Kong Polytechnic University.

"But translating innovation into impact requires more than just research collaboration; it demands a deep understanding of how healthcare is practised across the region. Healthcare policies and clinical workflows vary significantly from country to country, and this diversity directly influences how partnerships are structured", said Ed Deng, Co-founder and CEO of Health2Sync, Taiwan. He added, "Our approach is to localise solutions deeply to align with each market's healthcare practices and patient needs. This allows us to serve as a strategic bridge, enabling both global headquarters and local affiliates of pharmaceutical companies to meet their respective objectives. Whether adapting digital therapeutics to local reimbursement models or integrating with national health data systems, the focus is on creating value on the ground and ultimately improving outcomes."

While global partnerships remain important, APAC-based partnerships are increasingly viewed as faster, more culturally aligned, and better suited to local regulatory and market conditions. These partnerships are poised to grow and further reshape the region's biotech landscape. BS

**Ayesha Siddiqui**

# Upskilling and flexibility are key to staying relevant as hiring grows

With ongoing uncertainty, geopolitical tensions, and recession risks, the life sciences job market remains volatile. The year 2024 saw continued layoffs, cautious investor sentiment, and growing competition for fewer job openings. As biopharma companies restructure, hiring patterns are changing, especially at mid and senior levels. What are the current trends, and which sectors are hiring the most? Let's find out.

The biopharma job market has been tough, with widespread downsizing and frequent layoffs across big pharma. But the worst may be over. Hiring activity is picking up, especially in the Asia-Pacific (APAC) region. A quick search on our sister website, BioSpectrum jobs for April and May 2025 shows strong, diverse recruitment across all levels from internships to senior leadership in key hubs like Singapore, Tokyo, Bengaluru, and Shanghai. Demand is high for clinical research, regulatory affairs, medical science liaison, and digital marketing roles, while leadership hiring focuses on strategy, sales, and commercial functions.

"The pharmaceutical sector's job landscape has showcased an improving trend in recent months. For instance, job postings were up by around 8 per cent in April 2025 compared to the previous month. Similarly, March 2025 also saw job postings register a month-on-month growth of more than 25 per cent," said Sherla Sriprada, Senior Business Fundamentals Analyst at GlobalData.

This sustained uptick in hiring reflects how companies are responding to evolving workforce dynamics and talent demands.

"The biopharma job market is experiencing several key trends. High executive turnover, as observed in 2024, continues to influence recruitment needs. Companies are leveraging headquarters and regional resources to supplement local talent with global expertise. They are also focusing on candidates who can learn and grow in dynamic environments, due to cautious attitudes toward job changes and the emergence of younger generations," said Terrence Chen, Manager, Robert Walters China.

Sherla mentions that there have been notable job postings for roles related to clinical trials, regulatory compliance, immuno-oncology, cell & gene therapy, and digital therapeutics. Meanwhile, there is also demand for senior positions and the skills sought for these roles typically include:

- Leadership experience
- Project management and strategic planning
- Understanding of regulatory requirements
- Experience with AI/ML applications in drug discovery
- Familiarity with industry platforms such as Veeva and CRM/data management tools like IQVIA and Symphony
- Experience in implementation of diverse clinical technologies

"Demand is particularly high for specialised talent in areas such as pre-clinical scientists, medical affairs professionals, market access experts, and business development and marketing roles. These roles are crucial for driving innovation, development, and market success in the biopharma industry," said Chen.

This demand is also reflected in the APAC region, where growing investment in biotech is driving hiring in research and regulatory roles.

"We're seeing a transformation in the APAC region, with a strong push to localise operations. There has been major investment in biotech recently, particularly in R&D across China, Korea, Japan, Singapore, and Thailand. This growth has increased hiring, especially in research and regulatory affairs. The need for talent in research is obvious; However, as geographies expand, so does the need to have experts in regulatory affairs who understand local laws and market entry points and liaise closely with their correspondents in other countries to gain approval and get products to the market," said Zenab Nessa, Vice President at EPM Scientific.

While regulatory and research roles remain essential, the talent landscape is also shifting toward more tech-driven and data-centric roles.

"AI in healthcare continues to be a significant area of growth, especially in drug discovery. The new tech is streamlining processes, improving efficiency, and cutting costs. We're seeing a notable uptick in hiring for data science and bioinformatics roles, with clients expanding their search

"The pharmaceutical sector's job landscape has showcased an improving trend in recent months. For instance, job postings were up by around 8 per cent in April 2025 compared to the previous month. Similarly, March 2025 also saw job postings register a month-on-month growth of over 25 per cent."

**- Sherla Sriprada,**
Senior Business Fundamentals Analyst, GlobalData

"Demand is particularly high for specialised talent in areas such as pre-clinical scientists, medical affairs professionals, market access experts, and business development and marketing roles. These roles are crucial for driving innovation, development, and market success in the biopharma industry."

**- Terrence Chen,**
Manager, Robert Walters China

"We're seeing a transformation in the APAC region, with a strong push to localise operations. There has been major investment in biotech recently, particularly in R&D across China, Korea, Japan, Singapore, and Thailand. This growth has increased hiring, especially in research and regulatory affairs."

**- Zenab Nessa,**
Vice President, EPM Scientific

"From the perspective of recruitment supply and demand, available positions are typically aimed at solving specific business challenges and require candidates with proven success and mature experience. The previous trend of rapid promotion to higher roles has largely disappeared."

**- Karl Zhu,**
Business Director, Hays Shanghai & Life Science Lead of Hays China

geographically and increasingly accommodating relocations to meet this demand. Unsurprisingly, cell and gene therapy, biosimilars, and digital health all continue to be sectors with the highest demand for talent," said Zenab.

The biopharmaceutical market is still in a state of contraction, with a significant reduction in biopharma positions. However, experts feel the demand for marketing talent remains, especially for mid-to-senior management roles, whether in top multinational corporations, large domestic enterprises, or innovative pharmaceutical companies.

"With new products and pipelines set to launch, some companies are expanding their marketing teams across different levels. Additionally, as demand in the innovation and internationalisation sectors rises—driven by frequent overseas transactions of innovative drugs (such as ADC and small nucleic acid drug licensing)—business development professionals with global vision and successful transaction experience have become industry focal points," said Karl Zhu, Business Director, Hays Shanghai and Life Science Lead of Hays China.

## Layoffs reshape hiring landscape

2024 was brutal for pharma and biotech jobseekers. All the major pharmaceutical companies announced layoffs, with firms like Pfizer, Johnson & Johnson, Bayer, Bristol Myers Squibb, and others undergoing large-scale workforce reductions. This wave of cuts reflects a period of deep, industry-wide financial restructuring. The trend continued into 2025, albeit at a slower pace, with companies like Eisai and Ono also announcing job cuts. Almost every part of the value chain has been affected from digital operations to research and development.

"Companies across various sectors are undergoing streamlining and flattening of organisational structures, with foreign enterprises particularly focusing on optimising mid-to-senior management positions and non-strategic business lines for the future. From the perspective of recruitment supply and demand, available positions are typically aimed at solving specific business challenges and require candidates with proven success and mature experience. The previous trend of rapid promotion to higher roles has largely disappeared. Instead, more experienced professionals are now accepting lower positions to meet corporate needs," said Zhu.

Middle-level roles across both core and non-core areas have been heavily impacted, with layoffs among mid-to-senior management in non-core functions continuing to escalate.

"Mid-level hiring has seen reduced

opportunities, especially in non-core areas like clinical operations for halted trials, with hiring freezes becoming common. In contrast, startups and SMEs are actively recruiting talented candidates affected by layoffs," said Chen.

Some experts feel the situation is more nuanced, as there remains strong demand for mid and senior-level roles despite heightened competition.

"There is strong demand for mid and senior-level roles, but the market is more competitive due to recent layoffs. With more candidates and fewer roles, professionals need to set themselves apart. One effective strategy is to emphasise the diversity and range of your skill set. Candidates with experience across verticals, like clinical and regulatory, are particularly attractive to employers looking to consolidate hires," said Zenab.

Meanwhile, competition for management roles has also intensified, with companies placing greater emphasis on cost-effectiveness. The number of senior positions has declined, leading to saturation in the demand for functional directors and above.

"For senior positions, there's a focus on securing C-suite executives with expertise in digital transformation or global market access. Additionally, senior roles in business development and post-merger integration have become critical due to ongoing industry consolidation (M&A integration)," said Chen.

That said, "not all leadership hiring is visible on the surface," adds Zenab. "It's also worth noting that many of these senior-level opportunities are part of confidential mandates. Layoffs and restructuring aren't always public, and leadership teams often hire behind the scenes. So, although it may seem that there are fewer advertised roles, it is an important time to lean on your network, connect with trusted talent partners, and keep an eye on the market."

## Skills in demand

In 2025, as technology, data, and AI continue to drive pharmaceutical innovation, companies are increasingly recognising the critical role of talent in this transformation. According to ZS's survey of 127 technology executives at multinational biotechnology, pharma, and life sciences companies, over 60 per cent view upskilling and AI literacy programmes as vital to boosting generative AI adoption. Additionally, about 70 per cent plan to invest in AI literacy and training initiatives for their broader workforces in 2025, with industry leaders like AstraZeneca, Merck, and Johnson & Johnson already making such investments to stay ahead in the evolving landscape.

"Beyond the demand for AI and data science skills, companies are actively seeking candidates with expertise in regulatory affairs, market access, and regulatory submissions. To attract senior leadership talent, companies are focusing on flexibility, offering equity, customised interview experiences, and remote roles that span multiple time zones. Ultimately, what draws top candidates is a sense of purpose and alignment with company goals," said Zenab.

Pharma firms are evolving pipeline and launch strategies. Therefore, deep domain expertise has become critical.

"Additionally, domain expertise is essential for quickly integrating new pipelines, technologies, or products into the market and leveraging existing specialised knowledge," said Chen.

The biopharma industry is also witnessing a surge in demand for leadership talent equipped with specific skills and qualifications.

"Companies are placing a high value on commercial acumen, particularly the ability to navigate pricing pressures such as those from the Inflation Reduction Act (IRA) in the U.S., and to effectively expand into emerging markets like the Asia-Pacific region. Cross-functional leadership is also crucial, with experience in managing global teams, including in hybrid and remote settings, being highly sought after," said Chen.

Furthermore, organisations are investing in robust succession planning and leadership development programmes to ensure continuity and growth in leadership roles.

"Professionals with forward-looking business insights and exceptional team leadership skills are the ideal choice for enterprises, whether driving breakthroughs or maintaining stability. Candidates with extensive industry resources and networks, who can help companies achieve greater efficiency at lower costs, are particularly sought after. In the fields of research and clinical development, senior candidates must possess a relevant educational background and solid academic knowledge, along with extensive experience in research or clinical projects—whether successfully leading a pipeline to market or learning from failed projects. Additionally, strong team management skills and sharp market insight are essential for navigating complex pipeline environments, identifying core trends, and strategically positioning companies for success," said Zhu.

There's cautious optimism for the job market but as with many industries, upskilling and being adaptable will be crucial to staying relevant in biopharma's evolving landscape. BS

**Ayesha Siddiqui**

# "We are developing customised solutions aligned with India's regulatory and market needs"

«
**Jonah Kirkwood,**
Chief Commercial Officer,
Agilent Technologies,
Canada

US- headquartered Agilent Technologies International has opened its first-ever India Solution Center at its LEED Platinum-certified office in Manesar, Haryana. Designed to provide integrated solutions, this strategic investment marks a major milestone in Agilent's global journey, highlighting strong focus on India as a high-growth, innovation-driven market. BioSpectrum took the opportunity to interact with Jonah Kirkwood, Chief Commercial Officer at Agilent, during the launch ceremony on May 8, 2025, to find out more about the company's growth plans in the country. ***Edited excerpts-***

## What are the key objectives of opening the India Solution Center?

The India Solution Center represents a strategic investment by Agilent to meet the growing demand for localised, end-to-end scientific solutions in India. Its primary objective is to deliver customised workflows across life sciences, diagnostics, and applied markets. By addressing critical challenges in areas such as pharmaceuticals, food safety, environmental monitoring, and clinical diagnostics, the center underscores Agilent's commitment to innovation, sustainability, and a customer-centric approach.

## Are you deploying new technologies such as AI and automation at the new center?

Yes, the India Solution Center is equipped with cutting-edge technologies, including automation and advanced lab informatics. These innovations are designed to enhance laboratory efficiency and accelerate digital transformation. By integrating these tools, we aim to streamline workflows, reduce turnaround times, and support data-driven decision-making for our customers.

## What makes the India center unique?

This is Agilent's first-ever Solution Center in India. While we operate similar centers globally, the India Solution Center stands out due to its strong focus on localised solutions tailored to India's unique scientific and regulatory environment; integration of training, research and development, and proof-of-concept demonstrations within a single facility; and a vision to become a collaborative hub for customers, fostering innovation and co-creation.

## How do you plan to strengthen Agilent's presence in India through this facility?

The India Solution Center will play a pivotal role in deepening Agilent's engagement with key sectors such as pharmaceuticals, biopharma, food, and environmental sciences. By offering holistic, scalable, and real-world-ready solutions, the center will serve as a platform for collaboration among researchers, regulators, and industry leaders—driving innovation and knowledge exchange across the ecosystem.

## What are Agilent's plans for India in 2025?

India is undergoing a significant transformation in its life sciences and healthcare sectors, with the pharmaceutical industry poised for substantial growth by 2030. In 2025, Agilent's focus will be on strengthening infrastructure through initiatives like the India Solution Center; developing customised solutions aligned with India's regulatory and market needs; supporting high-growth sectors such as Pharma and Biopharma, where India is emerging as a global leader; driving digital transformation and lab automation to enhance efficiency and meet international quality standards; and collaborating with academia and industry to nurture local talent and foster innovation in genomics, cell analysis, and next-generation therapeutics.

## What are your views on the US pharma tariff and its impact on Agilent's business in India?

For Agilent, this situation reinforces the importance of supporting Indian pharma and biopharma customers through localized innovation at the India Solution Center; closely monitoring policy developments while ensuring supply chain resilience and sustained customer engagement; & leveraging the center to strengthen domestic capabilities in alignment with both Indian and global regulatory standards.

**Dr Manbeena Chawla**
manbeena.chawla@mmactiv.com

# "Vaccine firms and governments remain focused on more traditional vaccine platforms in the near term"

The COVID-19 pandemic helped usher in a new era of vaccines and expanded the roster of modalities that can be applied to address some of the world's most infectious diseases. Manufacturers continue to leverage more modern, leading-edge technologies to develop more advanced vaccine modalities such as mRNA and viral vectors. in an interaction with BioSpectrum Asia, Josephine Cheng, Senior Modality Expert, APAC Process Solutions, Life Science Business of Merck throws light on the evolving vaccine market in Asia-Pacific. ***Edited excerpts:***

« **Josephine Cheng,** Senior Modality Expert, APAC Process Solutions, Life Science Business of Merck, Taiwan

**What trends are shaping the next generation of vaccine manufacturing in the Asia-Pacific (APAC) region?**

Traditional vaccine types such as inactivated viruses and recombinant protein/subunit will remain an important part of the landscape due to a strong history of investment, efficacy, and regulatory success. Most vaccine producers will want to produce different biologic modalities in parallel, even if cautiousness is required for entering a new field. Vaccine manufacturers are actively planning for expansion and next generation vaccine facilities will undoubtedly incorporate the concepts defined by bioprocessing 4.0. A significant barrier is that the manufacturing process will need to be fully digitalized as regulatory authorities rely on data and parameters recorded during production for verification and approval. Most of the vaccine manufacturers; a lot of them are our key customers in the region are also expanding their capabilities towards the novel modalities platforms, in particular mRNA.

**Do you see any challenges with using mRNA technology to make vaccines, especially in APAC?**

The pipelines we see in APAC are mostly in the early stage. About 29 per cent of the global mRNA molecule pipelines originate in APAC. Since the passing of COVID-19, the urgency of rushing into establishing new platforms, and correspondingly the funding for vaccines, has also decreased. That being said, even though the production scale is small at this stage, because vaccine manufacturers are still establishing their capability. mRNA technology is still very promising and it is the modality chosen by the Coalition for Epidemic Preparedness Innovations (CEPI) for future pandemic preparedness because of its broad applicability and speed from identifying the infectious agent to vaccine. Vaccine manufacturers and governments remain focused on more traditional vaccine platforms in the near term, such as inactivated vaccines, while at the same time interested in expanding capability to mRNA technologies to build a sustainable business and continuation of vaccine supply.

**The mRNA Technology Transfer Programme, initiated by the World Health Organization (WHO) and Medicines Patent Pool (MPP) in 2021, was established to tackle global inequities in vaccine manufacturing in response to the COVID-19 pandemic. Could you share a bit more on how this initiative has benefited APAC vaccine production?**

Merck is deeply involved in this MPP-led mRNA technology transfer programme which has 15 global partners to receive platform technology developed at the global centre of excellence in South Africa - Afrigen. In APAC, we have biopharma/bioprocessing companies from countries including Indonesia, Pakistan, Vietnam, Bangladesh and India in the process of getting trained and getting the technology transferred from Afrigen. I see this as one of the most successful mRNA global programmes that is really addressing the needs of local manufacturing. For a lot of these countries, this would be the first time they are setting up mRNA capability. This means in the future, should they want to tackle another pandemic, or local outbreaks, they will have the capability to make mRNA vaccines themselves instead of waiting in line for vaccine donations. This is not only meaningful for the receiving countries, but also improves global health equality. BS

**Ayesha Siddiqui**

# “APAC faces a disproportionate burden of vision impairment”

« **Serge Zins,** Vice President- Asia Pacific, HOYA Vision Care, Japan

World Myopia Day, a part of Myopia Awareness Week observed from May 23 to May 28, 2025, is setting new trends to raise awareness about the increasing prevalence of myopia globally. Studies suggest that 30 per cent of the world is currently myopic and by 2050, almost 50 per cent will be myopic, which is a staggering 5 billion people. The hot spots of myopia are East and South East Asia where countries such as South Korea, Taiwan, Singapore, China and Japan have a prevalence of myopia of 80 to 90 per cent. To gather more understanding about how technology can ease out this burden within the Asian region, BioSpectrum Asia spoke to Serge Zins, Vice President- Asia Pacific at HOYA Vision Care in Japan. ***Edited excerpts:***

## What are the major plans in store at HOYA Vision Care for 2025, for the Asia market?

Asia remains a key market for HOYA Vision Care throughout 2025, playing a central role in our strategic priorities and supporting our mission to advance vision health for everyone. The region has long been essential to our efforts, particularly through the development of our leading myopia management solution, the MiYOSMART spectacle lens.

Developed in partnership with The Hong Kong Polytechnic University (PolyU), this lens uses Defocus Incorporated Multiple Segments (D.I.M.S.) Technology to slow or even stop the progression of myopia. With the clinical study supporting this innovation and having completed its eighth year of follow-up, it stands as the world’s longest-running myopia management spectacle lens study to date and further reinforces the safety and effectiveness of the MiYOSMART lens, and we remain steadfast in our commitment to the unique vision care needs of the Asia market.

MiYOSMART spectacle lenses have not been approved for myopia management in all countries, including the United States, and are not currently available for sale in all countries.

Looking to 2025, our focus is on expanding access to this impactful innovation, ensuring that more children across Asia benefit from its clinically proven, long-term effectiveness and safety.

## Are you planning to launch new products this year in Japan or other Asian countries?

With our history deeply rooted in Japan, HOYA Vision Care remains strongly committed to advancing vision care across Asia. We are actively expanding global access to our innovative products, including MiYOSMART spectacle lenses, and working closely with regulatory bodies worldwide to secure the necessary approvals for their use in myopia management. These efforts reflect our deep commitment to improving the vision health of children throughout Asia.

## What are the emerging trends, challenges, and technological advancements in ophthalmology within the Asia region?

The Asia-Pacific region, home to nearly 51 per cent of the global population, faces a disproportionate burden of vision impairment, as two-thirds of people with moderate-to-severe visual impairment live in East, South, and Central Asia. This highlights the urgent and essential need for innovation and improved access to care.

Beyond product innovation, we continue to actively engage with Eye Care Professionals (ECPs) across Asia, through ongoing educational initiatives hosted on our dedicated platform, to help deepen understanding and awareness of myopia. Our partnerships with global initiatives such as SPECS 2023, along with other educational institutions and research centres, mean we’re dedicated to providing valuable insights to refine our approach to myopia management.

HOYA’s advanced, world-class scratch-resistant coatings enhance lens durability for spectacle

wearers of all ages, including the growing pre-presbyopic and presbyopic populations. Combined with HOYA's latest progressive addition lens (PAL) designs, these superior coatings, available across all price points, effectively meet the evolving vision needs of this expanding demographic.

**Could you please highlight the evolving role of AI and data in eye care diagnostics?**

Artificial Intelligence (AI) and data are increasingly transforming eye care diagnostics, enabling more precise, efficient, and personalised care. HOYA Vision Care's AI-powered visuReal Master system streamlines lens centration, helping ECPs deliver accurate, high-quality fittings.

Now, even the youngest spectacle wearers can benefit from this technology. We recently launched the visuReal MoveAI Kids module, designed to improve centration accuracy for younger spectacle wearers, allowing for enhanced effectiveness of treatment spectacle lenses such as MiYOSMART and contributing to better visual outcomes. Our R&D pipeline continues to explore AI-driven diagnostics, including the potential of highly sensitive, AI-powered eye exams and optical/biometric evaluations to predict and address myopia development before symptoms arise. This includes investigating the eyes of pre-myopic children – those at risk before any impairment sets in – so we can intervene earlier and more effectively.

**How does HOYA Vision Care view the Indian market for its business growth? How do you plan to strengthen your presence in India, in terms of new partnerships, product launches, investments, etc.?**

HOYA Vision Care recognises the Indian market as critically important for our business growth, given its substantial and growing population affected by myopia and other eye conditions. Studies project a significant rise in myopia among urban Indian children, with prevalence rates approaching 50 per cent. This growing concern reinforces our commitment to advancing ophthalmic care in India.

HOYA Lens India recently conducted a vision screening campaign for commercial vehicle drivers, partnering with India Vision Institute (IVI), the Indian Optometric Association (IOA) and All India Optical Federation (AIOF), to provide eye checks and spectacles. We also work with leading global organisations such as the International Agency for the Prevention of Blindness (IAPB) and Orbis International, a leading non-profit dedicated to preventing and treating blindness. Most recently, we launched a three-year partnership with Orbis UK to fund a vital Vision Centre in India. This centre aims to increase access to primary eye care services, including digital screenings, diagnosis and treatments for a range of eye conditions. This type of on-the-ground activity demonstrates HOYA's commitment to proactively improving vision care access in India.

*HOYA Vision Care recognises the Indian market as critically important for our business growth, given its substantial and growing population affected by myopia and other eye conditions. Studies project a significant rise in myopia among urban Indian children, with prevalence rates approaching 50 per cent. This growing concern reinforces our commitment to advancing ophthalmic care in India. HOYA Lens India recently conducted a vision screening campaign for commercial vehicle drivers. We also work closely with Eye Care Professionals in India to enhance their awareness and understanding of myopia, delivered via our dedicated platform.*

We also work closely with ECPs in India to enhance their awareness and understanding of myopia through ongoing education programmes, delivered via our dedicated platform. By fostering public-private partnerships, HOYA has developed research-based campaigns such as 'Confidence through Evidence' that support ECPs in identifying and managing myopia early and effectively. Additionally, we maintain close collaboration with health organisations, educational institutions, universities and research centres to gain valuable insights that inform training and resources, addressing key challenges in myopia management across the country.

On a global scale we are also actively contributing to initiatives such as the World Health Organization's (WHO) SPECS 2030; we're committed to expanding refractive error coverage by 40 per cent by 2030 ensuring universal access to affordable eye care. BS

**Dr Manbeena Chawla**
manbeena.chawla@mmactiv.com

# “APAC now leads global clinical development of multi-specific antibodies, accounting for over 40% of trials”

« **Alex Del Priore,** Senior Vice President – Development & Manufacturing Services, Syngene International, USA

According to market projections, the biologics sector is expected to grow from $451 billion in 2024 to $938 billion by 2034, reflecting a CAGR of 7.6 per cent. While biologics, including vaccines, gene therapies, and monoclonal antibodies, offer targeted, effective treatments for cancer, autoimmune disorders, and rare conditions, these can be complex and costly to produce. Focusing on this market trend, India-headquartered contract research, development, and manufacturing organisation (CRDMO) Syngene International has recently announced the acquisition of its first biologics site in the USA, fitted with multiple monoclonal antibody (mAbs) manufacturing lines. The overall investment in the US facility is estimated around $50 million, including the cost of acquisition ($36.5 million) and expenses to make the facility operational. To find out more about the company’s plans for this acquisition and the current challenges facing the biologics market, BioSpectrum Asia spoke to Alex Del Priore, Senior Vice President – Development & Manufacturing Services, Syngene International. ***Edited excerpts:***

## What are the major plans in store after this acquisition? Is there a phase-wise plan?

Following the acquisition, Syngene has several major plans in store, many of which are already underway. The acquisition significantly expands our manufacturing capacity, increasing the total single-use bioreactor capacity to 50,000 L for large molecule discovery, development, and manufacturing. Hiring for the site is underway.

By adding a US-based facility to its global network, Syngene strengthens its geographic footprint and offers clients greater flexibility. The new facility complements Syngene’s two existing biologics sites in India and its extensive bio-discovery services, providing an end-to-end solution from early development through to commercial manufacturing.

There is a clear phase-wise plan. Currently, the focus is on undertaking site enhancements and qualifying equipment, along with all necessary activities to make the site GMP compliant for mAbs. In the summer, Syngene will host key customers, stakeholders, and the press, with the facility expected to become fully operational for GMP manufacturing in the second half of 2025.

Additionally, the US site enables Syngene to offer domestic supply for animal health products, which is a regulatory requirement for approximately 50 per cent of products approved in the US. More broadly, it opens up Syngene to partnerships with innovators that require a US-based CDMO manufacturing option.

With this addition, Syngene is now equipped with one of the largest biologics R&D teams and commercial-scale manufacturing capabilities operating across India and the US.

## What are the current challenges facing the biologics market globally and in India?

Advances in biotechnology, particularly in cell and gene therapies like CAR-T and CRISPR-Cas9, are revolutionising treatment for complex conditions, offering the potential for long-term remission or cures. Next-generation biologics, including antibody-drug conjugates, bispecific antibodies, and fusion proteins, are expanding the therapeutic landscape, especially in oncology and rare diseases. Regulatory support from bodies such as the FDA and EMA has also played a vital role, with streamlined approvals accelerating market penetration. Additionally, the shift toward personalised medicine is enhancing the demand

for biologics that are more precisely tailored to individual patient profiles.

However, the global biologics industry faces certain challenges. Chief among them are the high costs and complexity associated with biologics development and manufacturing. Unlike traditional small-molecule drugs, biologics are derived from living cells, necessitating sophisticated manufacturing infrastructure and strict regulatory compliance. This complexity increases the risk of contamination and quality issues, adding to the overall cost and difficulty of production.

One of the most promising segments within the Indian biologics market is biosimilars, driven by their affordability and the expiration of patents on major biologic drugs. Indian pharmaceutical companies are capitalising on this opportunity by developing cost-effective biosimilars for both domestic and global markets. Strong government support through initiatives like "Make in India" and the BioE3 policy, along with upgraded regulatory frameworks and increased funding for infrastructure, is further accelerating the sector's expansion. Innovations in biomanufacturing, including advanced cell culture methods and AI integration, are enhancing production quality and efficiency, reinforcing India's position as a competitive global player.

## What strategies have been earmarked to strengthen the company's business in the biologics space, for FY 25-26?

We identified biologics as a strategic growth priority several years ago and have since made sustained investments to strengthen both capability and capacity across discovery, development, and manufacturing. These investments are enabling us to support global clients through integrated, science-led solutions aligned with evolving needs in the large molecule space.

Syngene has one of the largest biologics R&D teams in India, with over 700 scientists dedicated exclusively to this segment. Our capabilities span the full biologics development spectrum: from early-stage research, including the discovery and optimisation of monoclonal antibodies, to cell line and process development, analytical sciences, and clinical-to-commercial-scale manufacturing.

With biologics manufacturing capacity across sites in India and the US, we are well-positioned to support programmes of increasing scale and complexity. Our focus now is on operationalising this expanded capacity and driving utilisation to unlock the next phase of growth. In parallel, we continue to invest in automation, digital tools, and quality systems that reinforce efficiency, compliance, and global delivery standards.

## How do you view the current scenario of mAbs, and what is the future?

Monoclonal antibodies (mAbs) have emerged as a leading therapeutic modality, especially in oncology, infectious diseases, and autoimmune disorders. Offering higher specificity, fewer side effects, and longer half-lives, mAbs are a compelling alternative to traditional drugs. Their expanding role in immunotherapy, particularly for solid tumours and blood cancers, is driving demand for scalable manufacturing and advanced delivery technologies.

Asia Pacific now leads global clinical development of multi-specific antibodies, accounting for over 40 per cent of trials. This shift highlights the need for strong regional development capabilities, faster tech transfers, and agile manufacturing networks to support IND filings and localised supply.

With over 100 new experimental antibodies entering development each year, improving upstream yields, refining purification, and ensuring stability across formats like bispecifics and fragments are critical. AI/ML tools are accelerating molecule design, process prediction, and QC optimisation, while innovations like inhalable or oral delivery are expanding therapeutic options.

Contributing to this momentum, we are actively investing in the mAb space. Recently, we launched a proprietary cell line development platform that integrates transposon technology, high-throughput clone screening, and single-cell imaging to significantly enhance protein production. This platform can reduce development timelines by up to 10 weeks and deliver titers of up to 10 g/L, with broad applicability across mAbs, biosimilars, bispecific antibodies, ADCs, and recombinant proteins—helping accelerate the development and manufacturing of complex biologics.

As therapies grow more complex, better tools for immunogenicity assessment, ADE mitigation, and long-term safety are essential. Companies that combine speed, flexibility, and scientific excellence will lead the next generation of antibody development. BS

**Dr Manbeena Chawla**
manbeena.chawla@mmactiv.com

# Emerging GCC Hotspots in APAC: Spotlight on Singapore, Malaysia, and the Philippines

« **Dr Purav Gandhi,**
CEO and Founder,
Healthark Insights,
India

*The Asia-Pacific (APAC) region is now a top choice for Life Sciences and Healthcare (LSHC) multinationals to establish their Global Capability Centres (GCCs). India leads with over 100 GCCs, while countries like Singapore, Malaysia, and the Philippines offer cost-effective advantages.*

Asia-Pacific is emerging as a major centre for Global Capability Centres for the Life Sciences and Healthcare industry in recent years. As per a recent study, the global pharmaceutical and life sciences GCC market was valued at $23.5 billion in 2023 and is expected to reach $92.4 billion by 2032, with a CAGR of 14.9 per cent. Notably, APAC was observed as the fastest-growing region in the world, with a projected CAGR of 16.3 per cent over the same period.

The main reasons for this advancement are the rapid economic growth in the region and improvements in healthcare infrastructure, which are attracting global LSHC companies to establish their hubs in this region. Across APAC, the local governments are taking various steps and introducing initiatives to facilitate investments from the West. This includes tax exemptions, setting up MedTech and Biotech parks, and similar other initiatives.

Within APAC, India has been a dominant player in the LSHC GCC space, with more than 100 GCCs as of 2024 from prominent companies like Novartis, BMS, Sanofi, and others. However, new locations such as Singapore, Malaysia, the Philippines, Vietnam, Indonesia, and Australia are also emerging as GCC hubs in recent years and many LSHC MNCs have started setting up their GCCs in these countries.

In this article, we will deep dive into LSHC GCC scenario of three emerging countries - Singapore, Malaysia, and the Philippines - that are shaping APAC's future as a LSHC GCC hub, due to multiple reasons like low-cost labour, English-speaking workforce, great connectivity in the region, and R&D infrastructure.

## Singapore: APAC HQ for LSHC Companies

In the last decade, Singapore has become a major location for life sciences and healthcare companies for establishing regional headquarters and hubs of innovation. In 2022, it was ranked among the top 5 locations for life sciences hubs in APAC and had more than 80 hubs from well-known global LSHC companies. Many top market players like Merck, GE Healthcare, Johnson & Johnson, GSK, and Pfizer have established their regional headquarters and R&D centers in Singapore.

For example, Johnson & Johnson's APAC headquarters in Singapore employs over 1,400 employees and promotes innovation through its Leadership Lab, Design Lab, and Human Performance Institute. Moreover, Singapore houses 37.4 million sq. ft. of business parks and manufacturing space for life sciences industry, which includes 7.0 million sq. ft. of leasable space in multi-tenanted R&D and manufacturing buildings.

**Key Drivers Supporting GCC Growth:**

- Singapore has a well-developed R&D environment facilitated by innovation programmes like the Agency for Science, Technology & Research (A*STAR)
- Another advantage of Singapore is its strategic location which offers easy access to ASEAN markets
- Also, it has a skilled, bilingual workforce and a high standard of living which further attracts global companies

**Government Support and Initiatives:**

- With initiatives like RIE 2025 plan, the government has allocated $18.6 billion to boost research, innovation, and enterprises
- Various institutions like Economic Development Board (EDB) & Enterprise Singapore offer funding to facilitate establishment of GCCs for research purposes

● Major industry clusters include Biopolis, Singapore Science Park, and Tuas Biomedical Park

With all these factors and features in place, Singapore has become the first choice for global healthcare and life sciences companies looking to establish their presence in the APAC.

## Malaysia: Medtech Manufacturing and Regulatory Gateway

In recent years, Malaysia is also emerging as a major manufacturing hub in the medical technology sector, competing against mature hubs such as Puerto Rico, Costa Rica and Ireland. Malaysia's MedTech industry comprises over 200 MedTech companies, including 30 multinationals. Notably, 10 out of the top 20 global MedTech companies have established their manufacturing operations in Malaysia.

Moreover, the MedTech industry in Malaysia employs more than 70,000 people and comprises some very prominent companies such as GSK, Roche, Abbott, Toshiba Medical Systems, and B-Braun. For example, B. Braun's manufacturing site in Penang is one of its largest facilities globally and spans 193,000+ sq. meters. This site employs over 7,600 people and serves as the APAC headquarters and is equipped with full R&D capabilities.

**Key Drivers Supporting GCC Growth:**

● Malaysia has a skilled, multilingual workforce available at low cost

● The country also has well-developed healthcare infrastructure, including industrial parks and MSC Malaysia SEC

● It also has a supportive business environment with strong financial sector and extensive trade links

**Government Support and Initiatives:**

● The government had recently introduced National Industrial Master Plan 2030 (NIMP 2030) which places the MedTech sector as a national priority

● The Malaysian government offers incentives like duty exemptions, a 10-year tax holiday, and easy access to ASEAN markets via free trade agreements for foreign drug companies

● Key industry clusters include Penang Science Park, Kulim Hi-Tech Park and Port Klang Free Zone

With strategic government push, Malaysia is emerging as a preferred choice for MNCs seeking high-quality, cost-effective GCC operations.

## Philippines: A Growing Clinical and Shared Services Hub

Apart from Singapore and Malaysia, the Philippines is also slowly emerging as a strategic location for LSHC GCCs in the APAC region. Notably, 14 out of the world's top 20 pharmaceutical companies have their manufacturing facilities in the country. Over the last decade, the Philippine healthcare BPO sector has become a major employer, providing jobs to more than 100,000 people.

Many global LSHC companies have set up their regional hubs or manufacturing facilities in the country, including well-known names like AstraZeneca, BMS, GSK, Abbott, and Novartis. The major advantages which the country offers to these players are government support, thriving R&D efforts, and a strategic geographic location that allows for seamless access to the broader ASEAN region.

**Key Drivers Supporting GCC Growth:**

● Various government initiatives like "Make It Happen in the Philippines" campaign promotes investment in pharma and MedTech sectors

● Government also offers incentives like tax holidays and simplified registration processes for foreign investors

● Key industry clusters include Victoria Industrial Park and UP Manila Science and Technology Park

**Government Support and Initiatives:**

● Various government initiatives like "Make It Happen in the Philippines" campaign promotes investment in pharma and MedTech sectors

● Government also offers incentives like tax holidays and simplified registration processes for foreign investors

● Key industry clusters include Victoria Industrial Park and UP Manila Science and Technology Park

With this, the Philippines is slowly emerging as a hub for manufacturing and clinical research for many global LSHC companies.

## APAC's Expanding Innovation Frontier

The Asia-Pacific region has evolved to become more than just a market for LSHC MNCs. It has become the preferable location for LSHC companies to set up their GCCs for driving functions like manufacturing, clinical trials, operations and R&D. Countries like India, Singapore, Malaysia, and the Philippines have become front-runners in this movement, offering multiple advantages like cost-effectiveness, skilled workforce, and connectivity in the region.

Recently, following the footsteps of these countries, Vietnam, Indonesia, and Australia are also gaining significant traction and are emerging as new GCC locations for LSHC MNCs. Vietnam offers growing digital capabilities and major pharma investments; Indonesia offers highly skilled workforce and strong government support; and Australia offers strong research infrastructure and healthy economic conditions. BS

# Addressing Women's Health with Portable Devices

« **Gauri Navalkar Godse,** Director and CEO, UE LifeSciences, India

*The confluence of innovation, affordability, and accessibility creates a compelling market proposition for healthcare providers, diagnostic chains, corporate wellness programmes, and public health systems alike in cancer care with focus on women's cancer in Asia.*

Cancer continues to be one of the leading causes of death worldwide, and in Asia, where nearly half of the world's population resides, the burden is particularly profound. Among women, breast and cervical cancer are among the most prevalent, yet also the most preventable when detected early. However, vast disparities in healthcare infrastructure, especially in low- and middle-income countries, often delay diagnosis and treatment. It is here that accurate and affordable cancer screening, enabled by portable medical devices, offers transformative potential. This is a critical health issue and also a strategic growth opportunity.

## Addressing a Critical Need in Women's Health

Asia presents a diverse and complex healthcare landscape. In countries like India, Indonesia, and the Philippines, rural populations still face challenges in accessing even basic diagnostic services. The prevalence of late-stage detection in these regions is high, and survival rates are correspondingly low. For breast and cervical cancers, which can be effectively managed if detected early, the lack of early screening is a major contributor to mortality.

Portable screening devices are uniquely suited to address this challenge. Compact, easy-to-use, and powered by battery or mobile technologies, these tools can be deployed outside of traditional hospital settings. From urban clinics to rural health camps, they bring early detection capability to the point of need. In the case of breast cancer, technologies like iBreastExam, a non-invasive, radiation-free device, allow community health workers to perform standardised breast exams without the need for expensive imaging infrastructure. Similarly, portable colposcopes and HPV test kits are changing the game for cervical cancer screening.

The urgency of this need is underscored by the fact that in 2020, nearly half of all breast cancer cases diagnosed worldwide – a staggering 45.4 per cent – were in Asia. This highlights the critical importance of implementing targeted screening and early detection initiatives specifically designed for the diverse populations across the continent.

## Innovation Meets Scale

The opportunity here lies in delivering turnkey solutions that cater to the needs of healthcare enterprises seeking scalable, efficient models. Governments and public health systems, driven by mandates to reduce the cancer burden, are natural partners. Large hospital networks, diagnostic labs, and even insurance companies are exploring integration of portable screening devices into their service portfolios. Furthermore, corporates investing in employee wellness programmes see the value in offering preventive screening as part of their health benefits.

The key is to go beyond device sales. Companies in this space must offer a comprehensive ecosystem: devices, cloud-based data management, artificial intelligence (AI)-enabled decision support, training modules, and service support. This holistic approach ensures adoption, quality assurance, and long-term engagement. Importantly, it creates recurring revenue streams for B2B partners through screening as a service (SaaS) models.

## Localisation and Training: The Asian Context

For success in Asian markets, localisation is critical. Language, cultural sensitivities, and clinical workflows vary significantly across regions. Solutions must be

adapted to meet these realities. Training frontline workers—often female health workers in rural areas—is another cornerstone. By empowering them with the right tools and skills, we can decentralise screening and dramatically increase reach.

Women are more likely to participate in screening programmes when they trust the provider, feel culturally respected, and do not fear pain or stigma. Portable devices help on all fronts. They can be used in privacy, are non-intimidating, and can be operated by women themselves in many cases. B2B models that prioritise training and local community engagement see significantly better uptake.

However, significant barriers hinder widespread screening adoption. Studies across Asia reveal that personal beliefs, fear of pain and embarrassment, religious factors, lack of support, financial constraints, and low health literacy all contribute to lower participation rates. Overcoming these obstacles requires culturally sensitive education campaigns and accessible, affordable screening programmes that address the specific concerns of women in different communities.

## Data Integration and Digital Health

One of the strongest value additions of portable devices is their ability to integrate with digital health platforms. Screening data can be securely stored, analysed, and shared across networks to facilitate referrals and follow-up. AI-based analytics can further enhance diagnostic accuracy, triage urgency, and monitor population health trends.

B2B customers are increasingly seeking solutions that don't just stop at detection but feed into a larger continuum of care. Whether it's linking screening to teleconsultation platforms or integrating results with electronic medical records (EMRs), the future of cancer screening in Asia is undeniably digital.

## The Role of CSR and Public-Private Partnerships

Another critical lever in Asia is the growing role of Corporate Social Responsibility (CSR) and public-private partnerships. Many private corporations are investing in women's health screening as part of their CSR commitments. These initiatives create a unique B2B dynamic, where solution providers can collaborate with both corporate sponsors and implementation partners like NGOs or health ministries. Such models not only enable wide-scale deployment but also generate robust impact metrics that stakeholders value.

Public-private partnerships, especially those aligned with national health missions, are essential to reach underserved populations at scale. The success of such partnerships often depends on demonstrating efficacy, cost-effectiveness, and ease of integration into existing health systems. Portable cancer screening devices score well on all these counts.

## Challenges and the Road Ahead

The devastating impact of breast cancer is underscored by the fact that in 2022, the disease claimed 666,100 lives worldwide, with Asia accounting for a significant proportion of these deaths – an estimated 315,100. This translates to an age-standardised mortality rate of 10.5 per 100,000 in Asia, highlighting the urgent need for more effective interventions to reduce the burden of this disease.

While the promise is real, there are challenges to scale. Regulatory approvals, reimbursement models, and procurement cycles vary across countries and can slow adoption. Additionally, building trust in new technology takes time. It is essential to invest in validation studies, publish impact data, and foster relationships with key opinion leaders.

The experiences of countries like Japan and South Korea, which have established comprehensive breast cancer screening programmes, demonstrate the potential for early detection to improve outcomes. These programmes have been linked to increased diagnoses at earlier stages of the disease. Conversely, countries like India and Bangladesh face significant challenges due to limited resources and infrastructure, highlighting the need for tailored strategies that address specific local contexts.

Despite these hurdles, the trajectory is clear. Asia is poised to lead the way in deploying portable, affordable cancer screening at scale. By aligning innovation with the pressing needs of healthcare systems and the strategic goals, we can build models that are not only profitable but also profoundly impactful.

Accurate and affordable cancer screening, delivered through portable devices, is a cornerstone of a healthier future for women in Asia. From a B2B lens, the opportunity is multifaceted—spanning product innovation, service delivery, digital integration, and community empowerment. As stakeholders across sectors come together to prioritise early detection, we have the chance to transform the narrative around cancer in Asia—from fear and delay to awareness and action.

In doing so, we don't just open new markets—we save lives. And that is the most meaningful return on investment any business can aim for. BS

# Beyond the Algorithm: Why MedComms Still Need Human Pulse

« **Dr Namrata Singh,** Founder & CEO, Turacoz Group, India

*In an industry, now shaped by artificial intelligence (AI)-driven efficiencies and machine-generated drafts, it's natural to wonder: Is the medical communicator (MedComm) becoming obsolete? After all, algorithms can analyse thousands of clinical studies in minutes, format citations instantly, and draft documents that read, at first glance, like they were written by seasoned professionals. Having witnessed the journey of MedComms from paper-based literature reviews to AI-assisted content creation, technology has revolutionised our processes but it has not replaced our purpose.*

The digital transformation of medical communications has been both swift and sweeping. We've moved from highlighters and physical journals to citation managers, machine learning platforms, and natural language generation tools. Modern medical writers now rely on tools that can auto-generate patient narratives or identify trends in vast datasets.

Efficiency gains have been significant. Manuscripts that used to take weeks now get drafted in days. Errors in formatting or consistency have plummeted. Compliance checks that once required multiple rounds of human review are now semi-automated and algorithmically verified.

For today's writers, especially those entering the field, these tools aren't novelties—they're expectations. But while tech has lifted the burden of many repetitive tasks, it has not replaced the cognitive load of storytelling, judgement, or ethical decision-making.

## Where Tech Falls Short

When we ask an AI tool to summarise a meta-analysis on anticoagulants for stroke prevention in atrial fibrillation patients, the algorithm does its job: it lists relative risks, confidence intervals, and safety outcomes with impeccable structure and formatting.

But what it misses is that this particular meta-analysis includes a landmark real-world registry study that shifts clinical interpretation. The registry data, while statistically on par with randomised trials, highlighted differences in patient adherence and bleeding risk across populations not well represented in the original studies. That nuance wasn't in the abstract. It wasn't even front-and-center in the discussion. But to an experienced communicator, it was the most clinically relevant insight.

That's the rub: AI can reproduce what's said—it struggles with what's meant. It doesn't intuitively pick up on subtle but meaningful shifts in treatment paradigms, real-world applicability, or the difference between statistical significance and clinical relevance. It cannot tell when a new data point contradicts a long-standing standard of care, nor can it advise caution where a human would instinctively flag a red flag.

Even more critically, algorithms cannot gauge tone or responsibility. They might present favourable outcomes with overly optimistic language or bury risk information in a way that downplays its impact. But the integrity of scientific communication lies in balance, and striking that balance requires a human voice, grounded in ethics, empathy, and experience.

## The Irreplaceable Human Element

Medical communications is not just about delivering information, it's about making sure it lands.

Consider the medical writer who realises that a statistically insignificant side effect might carry serious implications for elderly patients. Or the editor who rewrites an AI-generated patient leaflet, knowing the original would confuse rather than clarify. These decisions require more than skill. They require empathy, clinical insight, and ethical intuition, none of which come preloaded in an algorithm.

The best communicators bring a unique mix of scientific fluency, audience awareness, and moral responsibility. They understand not just what needs

to be said, but why, how, and to whom. Especially as MedComms expands into patient-directed materials, social media content, and multimedia platforms, that human understanding becomes even more vital.

## The Skill Gap Dilemma

Yet, as we move toward more advanced tools and workflows, a critical challenge remains: the human-tech skill gap. Many experienced medical writers come from life sciences backgrounds. Their strengths lie in evidence synthesis, therapeutic knowledge, and editorial finesse, not in machine learning or API integrations. While they appreciate what AI can offer, they often lack the training to evaluate outputs critically or leverage tools fully.

On the other hand, technology teams building these tools often lack a nuanced understanding of regulatory requirements, medical writing workflows, or ethical boundaries. They build sophisticated systems often without realising they're solving problems that don't exist or complicating ones that do. This disconnect creates a lopsided ecosystem where powerful tools are underutilised, misapplied, or outright resisted.

## MedComms in Asia: A Tale of Divergence

While the MedComms landscape has globally embraced digital transformation, the pace and texture of this shift vary significantly across regions. In Singapore and other Southeast Asian countries, the industry remains a fragmented blend of global best practices and local constraints.

Compare this to the MedComms maturity seen in Japan, the US, or the UK. These markets benefit from a well-established ecosystem of medical writing academies, experienced freelancers, and client organisations that understand the value of strategic scientific communication. Tech adoption in these regions is not just about efficiency, it is embedded into the very DNA of how agencies operate. From automated literature surveillance to advanced content personalisation engines, the integration is deep and deliberate.

In contrast, Singapore and its neighbours are still navigating foundational questions: How do we build local MedComms expertise? How do we balance global compliance demands with local cultural relevance? And how do we ensure that digital tools don't just automate, but also educate and elevate?

Within Singapore's MedComms community, there's a growing appetite for digital tools—but also a cautious pragmatism. Most agencies have adopted standard platforms for reference management, plagiarism checks, and content automation. Tools like EndNote, Grammarly Business, and medical writing plugins for Microsoft Word are table stakes. A few forward-looking agencies are experimenting with AI-driven summarisation tools and automated slide deck generation software.

But fully integrated platforms, those that combine content planning, regulatory compliance, workflow automation, and real-time collaboration—remain rare.

## Balanced Integration is the Way Forward

The future of MedComms is not about choosing between humans and machines—it is about blending the best of both. The ideal workflow is human-led, tech-enabled. Let machines handle repetitive tasks- citation formatting, terminology checks, database mining. But keep interpretation, narrative construction, and ethical oversight firmly in human hands.

For this to work, we need thoughtful collaboration. Writers must communicate their pain points clearly. Developers must design with user empathy. Regulatory professionals must ensure compliance is built into every layer. And leaders must foster a culture where both efficiency and integrity are valued.

Smart agencies in the MedComms space are already embracing this hybrid model. They don't just buy off-the-shelf AI tools, they customise systems based on real-world workflows. They train algorithms on disease-specific content. They bring writers and tech developers to the same table.

Equally, they invest in people. They upskill their writers to use AI critically, not blindly. They ensure teams retain therapeutic specialisation, so contextual knowledge doesn't get lost. And they establish clear policies around when human oversight must override automation.

## Final thought: The Human Pulse Must Remain

As AI grows more capable, the temptation to let it take the lead will grow stronger. But MedComms is not just about processing information, it is about communicating it in a way that's responsible, contextual, and ultimately humane.

Behind every trial result is a patient. Behind every drug monograph is a clinician making hard decisions. And behind every well-written document, there must remain a human pulse.

In an industry built on trust, no algorithm can carry the ethical weight of communication. That responsibility still belongs, and should continue to belong, to us. BS

# MedTech Disruption 2025: Startups Powering the Next Healthcare Leap

« **Ashish Kaul,**
Industry Analyst,
TechVision,
Frost & Sullivan,
India

*As the MedTech industry strides into 2025 and beyond, innovations are transforming the way diagnosis, treatment, and patient engagement are delivered. These advancements are centred around patient-centric care, the convergence of digital technologies, preventive health care, and personalised therapy – all aimed at improving outcomes and maximising patient satisfaction. The article will dive deep into six high-potential technology domains that are gaining global momentum and are set to transform the MedTech industry in the near future.*

Technologies are expected to create a significant impact from 2025 to 2029, redefining how care is delivered to those in need. The technologies covered include: advanced neuromodulation, digital biomarkers, AI-based medical imaging, portable in-vitro diagnostics, intelligent tissue biopsy, and minimally invasive surgery. A new generation of startups are redefining modern healthcare fuelled by innovation and emerging technologies – and is poised to make a significant impact in 2025, with a focus on these six high-impact areas. From the long list of innovative startups, this article features a curated selection of top startups that meet at least one of the following criteria:

- Gained recent regulatory approval for their technology or solution
- Raised funding between 2023 and 2025,
- Are developing a first-in-class product

## Advanced Neuromodulation

Advanced Neuromodulation is a minimally or non-invasive technology that delivers neuromodulation or neurostimulation to the spinal cord, peripheral, vagus, and pelvic nerves for a wide range of indications- including autoimmune diseases, mental disorders, and chronic neuromuscular pain. The technology features miniaturised, low power consumption devices with wireless connectivity, setting it apart from traditional technologies requiring regular battery charging and revision surgeries to replace implants.

**Top startups to watch in advanced neuromodulation space include:**

**1. ShiraTronics, Inc.:** US-based ShiraTronics raised $66 million in an oversubscribed Series B funding round in October 2024 to advance pivotal trials for its Migraine Therapy System, which offers neurostimulation for patients with treatment-resistant chronic migraine. The company is currently seeking premarket approval from the FDA and is planning a commercial launch. The technology addresses a significant unmet need for patients whose chronic migraine attacks disrupt their daily life and who are unresponsive to conventional therapies.

**2. Neuspera Medical:** In July 2024, US-based Neuspera raised $23 million in a Series D funding round to support FDA premarket approval (PMA) of the Neuspera System - a sacral neuromodulation device implanted via minimally invasive procedure. It provides relief from urinary urge incontinence (UUI), a key symptom of overactive bladder (OAB), and also treats peripheral nerve-related chronic pain. This product presents a promising solution for a high demand OAB segment, where frequent urges to urinate disrupt patients' daily routines, work, and social lives.

## Digital Biomarkers

Quantifiable physiological and behavioural data collected via devices such as wearables to predict health outcomes are known as digital biomarkers. These biomarkers enable real-time health monitoring, early disease diagnosis, and effective disease management across a wide spectrum of therapy areas. Digital biomarkers can be broadly categorised into: molecular (e.g.,

blood sugar levels), behavioural, (e.g., voice samples), physiological (e.g., heart rate), and medical imaging (e.g., tissue images). These digital biomarkers help clinicians to make informed decisions and improve patient outcomes. Additionally, digital biomarkers as a technology are gaining notable traction from investors post COVID-19 pandemic.

**1. Acculi Labs:** India-based Acculi Labs raised $1.5 million in a seed funding round in August 2024 to develop its AI-based insights system Lyra. Lyra is a digital biomarker tool that non-invasively uses photoplethysmography (PPG) to provide remote, personalised health assessments to large populations at an affordable cost. Lyra is expected to significantly benefit developing and low-income countries by offering efficient and affordable remote health monitoring tool and playing an instrumental role in the adoption of preventive healthcare.

**2. WELT Corp.:** South Korea-based WELT uses smart Bluetooth-enabled sensors and smartphones in its digital biomarker platform to track metrics such as gait balance, steps interval, foot movements, and ground reaction force – all aimed at predicting health outcomes. The company raised $10.1 million in a Series C funding round in June 2024 and it is currently seeking for co-development and research partners.

**3. Braintale:** France-based Braintale received CE-marked for its brainTale-care digital biomarker platform in March 2023. The platform offers new capabilities for patient monitoring and enhanced data security and supports the development of its white matter biomarkers for drug development. The solution addresses the unmet needs in a complex neurology by supporting early diagnosis, tracking disease progression, and evaluating treatment response in neurological conditions such as demyelinating diseases and neurodegenerative diseases.

## AI-based Medical Imaging

Artificial Intelligence (AI)-based Medical Imaging involves the use of AI technologies for rapid and accurate detection of abnormalities in patients' medical images, supporting clinicians in their decision-making. It enables complex data interpretation and pattern recognition that may be missed due to human limitations.

**1. Qure.ai Technologies:** India-based Qure.ai raised $65 million in Series D funding round in September 2024 to expand the reach of its AI models for AI-based medical imaging. The company has 18 FDA-cleared indications, and its products are Class IIb certified per EU MDR, positioning Qure.ai's technology as the world's most deployed healthcare AI solution. As of 2024, the solutions have been implemented in more than 90 countries across 3000+ sites. Qure.ai's AI-based solutions help overcome key healthcare bottlenecks such as imaging reporting backlogs, low screening uptakes, and global workforce shortages.

**2. DeepTek.ai, Inc.:** India-based DeepTek received CE MDR Class IIb certification for its Chest X-ray AI solution in April 2025. Designed to support physicians in interpreting frontal chest X-rays, the tool detects multiple lung conditions including nodules, lung masses, pneumothorax, and tuberculosis (TB) - including young populations, which currently are not served by conventional AI models. The solution has been already used to screen over 2 million people for TB, supporting multiple public health initiatives worldwide. The Chest X-ray solution is critically important for regions with high TB burden and limited access to radiology experts.

**3. See-Mode Technologies.:** Singapore-based See-Mode Technologies received FDA 510(k) clearance for its AI-based thyroid ultrasound analysis and reporting software in September 2024. The solution automatically classifies thyroid nodules, and is the first FDA- cleared product for both detection and diagnosis for thyroid ultrasound imaging.

## Portable In-vitro Diagnostics

Portable In-vitro Diagnostics refers to the use of smartphone-connected diagnostic platforms that are compact, portable, and wireless, for point-of-care testing to detect infectious and other diseases. These technologies offer cost-effective, clinical-grade tests that require a small sample and can be conducted anywhere - eliminating the location constraint.

**1. Neodocs:** India-based NeoDocs received $2 million in a seed funding round in February 2024 to develop its finger-prick blood test products to self-diagnosing urinary tract infections (UTI) and delivering results directly to patient's smartphone. The solution plays a critical role in the adoption of proactive care by offering an affordable, real-time diagnostic alternative.

**2. Wavely Diagnostics, Inc.:** US-based Wavely Diagnostics is developing first-of-its-kind WavelyDx, which allows patients to remotely evaluate ear infections using smartphones. The company raised $1.35 million in July 2024 to

further develop its digital diagnostics platform for virtual ear infection care in July 2023. WavelyDx is currently the only solution in the market, specifically designed to diagnose childhood ear infections.

**3. Healthy.io Ltd.:** Israel-based Healthy.io is developing smartphone-based urinalysis test - the Minuteful Kidney test - which is FDA 510(k) cleared for home-use. It detects the presence of albumin protein in the urine, indicating early signs of chronic kidney disease. The company raised $50 million in May 2023 to expand the commercialisation efforts in the US. The easy-to-use test, paired with a smartphone app, enables large volume of population to test for kidney disease within the comfort of their homes, fuelling accessibility and equitability of kidney disease diagnostics.

## Intelligent Tissue Biopsy

Intelligent Tissue Biopsy integrates AI, automation, and connectivity to improve tissue sampling, and involves use of data analytics platform to improve diagnostic accuracy of biopsy, eliminating the need for repeated and unnecessary tissue sampling and improving treatment selection for patients.

**1. Biobot Surgical:** Singapore-based Biobot Surgical received CE Certification in January 2025 for its Mona Lisa 2.0, a robotic system designed for efficient and precise prostate biopsy and ablation. The system enables real-time adjustments of prostrate model and needle positioning, supporting accurate diagnostic and therapeutic interventions. Its improved needle trajectory tracking enhances biopsy reliability and reduces the risk of injury to surrounding tissues.

**2. Triopsy Medical, Inc.:** US-based Triopsy Medical received FDA 510(k) clearance for its Integrated Biopsy System in January 2025. The system standardises prostrate biopsy tissue acquisition and transfer. It enables accurate lesion targeting with its patented trochar needle tip and allows easy, distortion-free handling of the tissue samples in the laboratory using its proprietary Biopsy Grip. The solution will also facilitate the creation of a large data repository to support future drug development and surgical treatment innovations.

## Minimally Invasive Surgery

Minimally Invasive Surgery refers to surgical procedures that require small incisions – or in some cases, no incisions - to complete a surgical treatment. These approaches reduce the invasiveness of surgical procedures compared to open surgeries, reducing trauma, accelerating recovery, and improving patient outcomes. Minimally invasive surgery can be categorised into: single-port surgery – requiring single incision for the performing surgical procedure; multi-port surgery – requiring multiple small incision for the surgery; Natural Orifice Transluminal Endoscopic Surgery (NOTES) – Incisionless surgery through human body's natural orifice such as rectum or vagina to perform surgery.

**1. Momentis Surgical:** Israel-based medical device company received FDA 510(k) Clearance for its Anovo robotic surgical platform in October 2024. The platform is designed for single site, abdominal access ventral hernia repair through a single-port. Anovo is the world's first FDA-approved single-port robotics platform for ventral hernia procedures.

**2. Cipher Surgical.:** US-based startup, Cipher Surgical raised $10 million in Series A funding round in April 2025 to accelerate commercialisation of its patented technology, OpClear. The system enhances visualisation during minimally invasive surgery through continuous lens cleaning, helping reduce surgical delays. OpClear not only shortens procedure time but also lowers operating costs.

**3. Ronovo Surgical, Inc.:** China-based medical device company raised $42.1 million in a Series B funding round June 2024 to accelerate the multi-discipline clinical trial for its robotic platform, Carina. The platform offers configurable robotic assistance for laparoscopic surgeries across gynecologic, urologic, and general surgery. The platform addresses current pain points of minimally invasive surgery with limited flexibility to surgeons. Carina platform received regulatory approval in China in March 2025.

## The Path Forward

As the medtech space evolves at a rapid pace, the startups highlighted in this article represent innovations that disrupt their respective domains and drive the industry forward in 2025. From digital biomarkers and AI-based medical imaging to minimally invasive surgery, these startups not only address critical clinical gaps but also reshape how healthcare is delivered globally. While the challenges such as regulatory hurdles, tariff dynamics, funding uncertainties, and scalability remain, these startups' strong vision and groundbreaking solutions position them as key players to watch in 2025 and beyond. BS

# Sim Foundation pledges S$15 M to NTU Singapore to leverage AI in medical education & research

The Sim Foundation has pledged a gift of S$15 million to Nanyang Technological University, Singapore (NTU, Singapore), which will bolster the University's efforts in delivering transformative healthcare through education and research. It will strengthen NTU's Lee Kong Chian School of Medicine's (LKCMedicine) capacity to deliver exceptional medical education and advance its research enterprise, by

leveraging artificial intelligence (AI) in medicine and technology to deliver better healthcare outcomes and develop meaningful medical innovations for patients. It advances LKCMedicine's translational research in two areas: applying AI in medicine and leveraging technology to care for patients in hospitals and at home. The latter provides equitable healthcare service to elderly and underprivileged individuals, ensuring they receive better clinical service while reducing hospital workload. The gift will also be used to further integrate inter-cultural and global dimensions into medical education at LKCMedicine.

# MUHS to pioneer Emotion-AI in Indian healthcare sector

In a landmark step toward advancing holistic healthcare, the academic wing of the Maharashtra University of Health Sciences (MUHS) in India has officially partnered with Nihilent to explore clinical applications of Emoscape, the company's innovative AI-based emotion detection platform. The partnership will allow MUHS to explore clinical applications of Emoscape across a range of disciplines, including non-communicable diseases, paediatric and adolescent care, maternal mental health, pre-surgical counselling, psychiatric conditions and ensuring patient privacy. Through this initiative, MUHS aims to bring emotional diagnostics into mainstream healthcare, aligning with its commitment to delivering comprehensive, patient-centred care. In addition to its clinical applications, the collaboration will facilitate hands-on student engagement through Nihilent's Summer Internship Programme, providing MUHS students with valuable exposure to the intersection of AI and healthcare.

# HKBU and Shanghai Industrial Investment to advance medical education and research

Hong Kong Baptist University (HKBU) and Shanghai Industrial Investment (Holdings) Co Ltd (SIIC) have announced a strategic partnership aimed at leveraging their respective strengths to advance the proposed establishment of Hong Kong's third medical school, contributing to Hong Kong's development into an international hub for medical training, research, and innovation. SIIC and its subsidiary Shanghai Pharmaceuticals Holding Co Ltd (SPH) will also actively participate in HKBU's newly founded Frontier Translational Medical Research Institute, infusing fresh momentum into medical education, innovative research, and technology translation in Hong Kong and the Greater Bay Area (GBA). Supported by an extensive network of local and GBA hospitals, medical professionals, and international organisations, HKBU has submitted a proposal to the Hong Kong SAR Government to establish the third medical school in Hong Kong, focusing on innovative education to train high-quality doctors and meet the clinical needs of a rapidly ageing society through the research institute's focus on innovation, technology translation, and application.

# Ken Shinomiya becomes leader of Asahi Kasei's Healthcare Sector

Asahi Kasei has appointed Ken Shinomiya, President of Asahi Kasei Life Science, as the Leader of its Healthcare Sector succeeding Richard Packer. Under Shinomiya, Asahi Kasei's Healthcare Sector will further advance its portfolio and global presence of pharmaceuticals, life science, and critical care products and services. Having served as Vice President of Strategy at ZOLL Medical Corporation from fiscal 2016 to fiscal 2017, Shinomiya became Head of the Bioprocess Division of Asahi Kasei Medical in April 2019 and President of Asahi Kasei Medical in April 2023. In April 2025, he was named President of Asahi Kasei Life Science, the successor company to the bioprocess business of Asahi Kasei Medical. With operations focused on products and services that support the manufacture of pharmaceuticals, the life science business has grown globally by ascertaining market needs and business opportunities within the pharmaceutical industry.

# Bora Pharma appoints industry veteran JB Agnus as Chief Commercial Officer

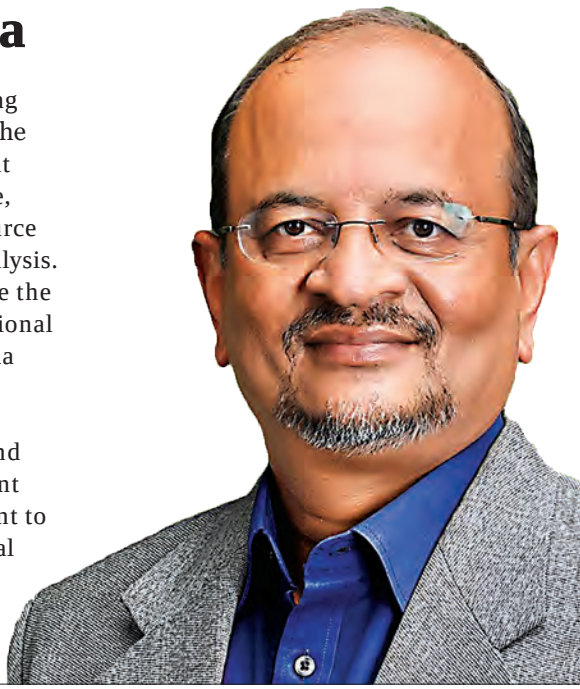
Taiwan-based Bora Pharmaceuticals, a global leader in pharmaceutical manufacturing, has announced the appointment of Jean-Baptiste (JB) Agnus as Chief Commercial Officer. In this role, he will lead Bora's commercial strategy for its sterile injectables and complex small molecule offerings, as well as playing a key role in its M&A and strategic partnership initiatives.

Agnus joins Bora Group from KBI Biopharma, where he led global business development. Prior to that, he held various senior leadership roles in business development at AGC Biologics, Ajinomoto Bio-Pharma Services, Novasep, and Isochem. He holds a bachelor's degree in organic chemistry from Université Paul Sabatier Toulouse III, Toulouse, France, and a master's degree in chemical engineering from Centrale Méditerranée, Marseille, France.

# Olympus appoints Bob White as new CEO

Japan-based medtech company Olympus Corporation has announced the appointment of a Chief Executive Officer (CEO) aimed at accelerating its ongoing transformation efforts in the medtech space. The Board of Directors has decided unanimously to appoint Bob White, a former Executive Vice President and President, Medical Surgical Portfolio for Medtronic, as a successor to Yasuo Takeuchi, Olympus' Director, Representative Executive Officer, President and CEO, effective June 1, 2025. White will also be proposed as a candidate for election to the Board at Olympus' General Meeting of Shareholders scheduled to be held in June 2025. He most recently served as Executive Vice President and President, Medical Surgical Portfolio for Medtronic until April 2024. Before then, he was Senior Vice President and President of Medtronic Asia Pacific, based in Singapore where he had responsibility for APAC as well as Japan. Prior to joining Medtronic, White held leadership positions at GE Healthcare, Merge Healthcare and Healthcare Division, IBM. Throughout his career in the medtech industry, he has played a pivotal role in improving the lives of patients around the world through the transformation of healthcare delivery.

# Dileep Mangsuli becomes Chairman of CTSI, South Asia



Cancer Treatment Services International (CTSI) has announced the appointment of Dileep Mangsuli as Chairman. Mangsuli will take on this strategic leadership role while continuing to serve as Senior Vice President at Siemens Healthineers. With a distinguished career spanning over two decades, Mangsuli has been instrumental in pioneering advancements in digital healthcare technologies. At Siemens Healthineers, he has led initiatives focusing on artificial intelligence (AI), digital twins, and immersive technologies to enhance diagnostic precision and patient care. His leadership has been pivotal in establishing collaborative efforts, such as the AI in Precision Medicine lab at the Indian Institute of Science, aimed at developing open-source AI tools for neuroimaging analysis. At CTSI, Mangsuli will oversee the strategic direction and operational excellence of CTSI's South Asia network, which includes the American Oncology Institute, Citizens Specialty Hospital, and Ampath Labs. His appointment aligns with CTSI's commitment to integrating cutting-edge digital solutions to enhance cancer care and patient outcomes across the region.

# Mark Butler steps in as Minister for Disability in Australia

Mark Butler has been appointed as Minister for Health and Ageing, and the Minister for Disability and the National Disability Insurance Scheme, following his swearing-in on May 13, 2025 as a result of Anthony Albanese's Labor government being re-elected at the 2025 Australian federal election. He takes over the portfolio from Amanda Rishworth, who has been moved to Employment and Workplace Relations. Minister Butler retains the Health and Aged Care portfolio. In Parliament since 2007, Mark Butler has been Minister for Health and Aged Care since 2022. He has previously been Minister for Mental Health, Housing, Homelessness, Social Inclusion and Climate Change. Jenny McAllister was previously Minister for Emergency Management.

# Nandakumar Kalathil steps in as Country General Manager for Agilent India

Agilent has announced the appointment of Nandakumar (Nanda) Kalathil as the Country General Manager (CGM) for Agilent India. With over 25 years of experience in the analytical industry, Nanda brings extensive expertise in leadership, team management, and customer relations. His focus on strategy and business development has been instrumental in shaping enterprise-wide planning initiatives, ensuring alignment with customer needs and market dynamics at Agilent. Nanda has earlier held multiple roles at Agilent, as Director-Strategy and Enterprise Business; Regional Sales Director (Instruments); Sales Director; and Area Sales Manager. Before joining Agilent India, Nanda had been working with Millipore.

# Korea develops retinal therapy to restore lost vision

Researchers at Korea Advanced Institute of Science and Technology (KAIST) have successfully developed a novel drug to restore vision. While recent advancements in retinal disease treatments have successfully slowed disease progression, no effective therapy has been developed to restore already lost vision, until now. The research team at KAIST has successfully induced retinal regeneration and vision recovery in a disease-model mouse by administering a compound that

blocks the PROX1 (prospero homeobox 1) protein, which suppresses retinal regeneration. Furthermore, the effect lasted for more than six months. This study marks the first successful induction of long-term neural regeneration in mammalian retinas, offering new hope to patients with degenerative retinal diseases who previously had no treatment options. The researchers are completing the optimisation of the PROX1-neutralising antibody (CLZ001) and moving to preclinical studies before administering it to retinal disease patients. This research is supported by research funds from the Korean National Research Foundation (NRF) and the Korea Drug Development Foundation (KDDF).

# India designs breakthrough ECG lead system for enhanced diagnosis of atrial arrhythmias

Researchers at National Institute of Technology (NIT) Rourkela, India, have developed an effective upgrade to Electrocardiography (ECG), one of the most commonly used techniques to monitor heart activity. This new system helps in easily detecting subtle electrical signals from the upper chambers of the heart, which are often too indistinct to be seen clearly in regular ECGs. These signals play a key role in identifying abnormal heart rhythms that can lead to serious conditions such as atrial fibrillation which can further lead to stroke. One of the most promising aspects of this work is that it requires no change to the ECG machine itself. The innovation lies entirely in the way the leads are placed, which means the upgrade can be easily adopted in both public and private healthcare settings without additional cost. The research team has also filed a patent application for the Atrial Lead System. The project has received financial backing from the Anusandhan National Research Foundation, Government of India.

# Australia starts world-first immunotherapy trial to treat Type 1 diabetes

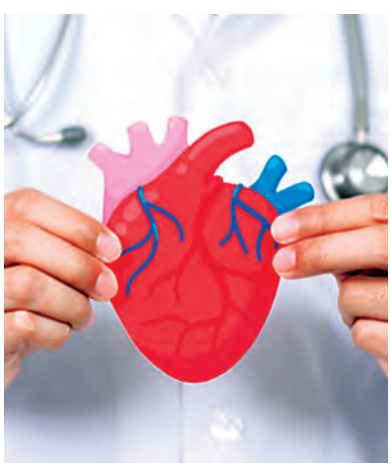
Researchers at The University of Queensland (UQ), Australia have dosed 5 participants in the first clinical trial of a potentially revolutionary immunotherapy drug to treat Type 1 diabetes. Professor Ranjeny Thomas AM from UQ's Frazer Institute has led the development of a targeted immunotherapy drug, ASITI-201, which has been designed to rebalance the body's immune response to protect insulin-producing pancreatic cells. Lead investigator Dr Aakansha Zala said the drug candidate aims to preserve as much pancreatic function for as long as possible in people recently diagnosed with Type 1 diabetes, to reduce the amount of insulin they need to administer. The trial itself is being funded by the Medical Research Future Fund via Australia's national biotech incubator CUREator which helped form spin-out company Liperate Therapeutics, which was established by UQ's commercialisation company UniQuest. The drug's preclinical proof of concept was supported by multiple grants from Breakthrough T1D (formerly JDRF) totalling $2.54 million between 2003 and 2015.

# Hong Kong pioneers novel, needle-free, live-attenuated influenza vaccines

A research team led by the School of Public Health in the LKS Faculty of Medicine, the University of Hong Kong (HKUMed), in collaboration with the Centre for Immunology & Infection (C2i), has achieved a significant breakthrough in developing broadly protective, live-attenuated influenza vaccines (LAIV). These innovative LAIV platforms offer potential to develop universal influenza vaccines that induce a more robust immune response against various virus subtypes, including both human and avian strains. The research team has developed two innovative approaches to create next-generation LAIVs. The first strategy involved inserting a human α-1,3-galactosyltransferase gene into the genome of a human influenza virus. The second approach to developing next-generation LAIVs involved introducing hundreds of silent mutations to a human influenza virus, shifting its codon usage from that of a human influenza virus to that of an avian influenza virus-like pattern. Moving forward, the research team will leverage the international platform of the Hong Kong Jockey Club Global Health Institute (HKJCGHI) for further development, ensuring continued progress and making a global impact in this vital area.

# New Zealand offers test to help more women beat ovarian cancer

New Zealand's University of Auckland researchers are working on developing a new test that could help women access a revolutionary treatment for ovarian cancer. A new type of drug – PARP inhibitors - works extremely well for some women with ovarian cancer. Some PARP inhibitors, such as Olaparib, are available through the public health system. However, current genetic tests to gauge whether a patient would benefit from the drug cost thousands of dollars, so the tests remain available only for the few who can afford them privately. The research team hopes to develop a more affordable test that is widely available through the public health system. The researchers are applying for local and overseas funding for the project.



# New imaging technique in Japan to personalise heart disease treatment

Researchers from the University of Tokyo, Japan have found a way to observe clotting activity in blood as it happens, without needing invasive procedures. Using a new type of microscope and artificial intelligence (AI), their study shows how platelet clumping can be tracked in patients with coronary artery disease (CAD), opening the door to safer, more personalised treatment. This is a new system for monitoring platelets in motion, using a high-speed optical device and AI. The research team applied this technique to blood samples from over 200 patients. Their images revealed that patients with acute coronary syndrome had more platelet aggregates than those with chronic symptoms, supporting the idea that this technology can track clotting risk in real time. One of the most important findings was that a simple blood drawn from the arm, rather than from the heart's arteries, provided nearly the same information. The long-term hope is that this technology will help doctors better personalise heart disease treatment.

## Intco Medical launches Syntex synthetic disposable latex gloves in China

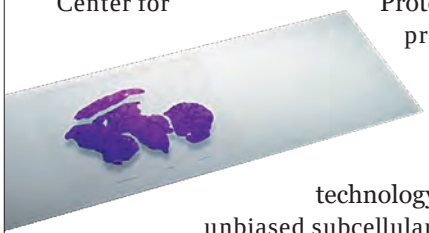
Intco Medical, based in China, has announced the global launch of its exclusive patented Syntex Synthetic Disposable Latex Gloves product. Breaking natural latex boundaries, Syntex redefines glove quality, safety, and performance. Syntex gloves have passed EN455 and EN374 testing and are fully compliant with FDA and EU CE standards, ensuring safety and reliability across a wide range of industries, including healthcare, food processing, and industrial protection. Unlike traditional latex gloves, the new Syntex gloves offer high elasticity, strong puncture and chemical resistance, and a natural-latex-like feel, all while avoiding the allergy risks associated with natural latex. Developed with an exclusive innovative formula that increases average breaking elongation through a 650 per cent stretch, meeting the ASTM D6319 medical glove standard and offering exceptional durability and comfort. Syntex is free of natural latex proteins, drastically reducing allergy risks and cutting reliance on natural rubber plantations.

## Nuclera establishes distribution network across APAC and Middle East

Nuclera, a UK-based biotechnology company accelerating protein expression and optimisation through its benchtop eProtein Discovery System, has established a distribution network across Asia Pacific (APAC) and the Middle East. Marking a key milestone in the company's global commercial strategy, the expansion establishes new regional distribution networks, providing localised technical support for customers in these key markets. In response to the rapidly growing demand for its innovative eProtein Discovery System, Nuclera has formed partnerships with seven channel partners: MineBio Life Sciences (China), Kiko Tech Co. (Japan), CHAYON Laboratories, Inc. (South Korea), Sciencewerke (Singapore), Cold Spring Biotech (Taiwan) and Yair Or Technologies (Israel). These new partnerships follow the recent expansion of the eProtein Discovery System, which now enables discovery of both membrane and soluble proteins. Proteins represent 95 per cent of drug targets designed to combat disease therefore developing reliable and efficient methods to identify how to express soluble and active proteins of interest is a crucial aspect of the drug discovery process.

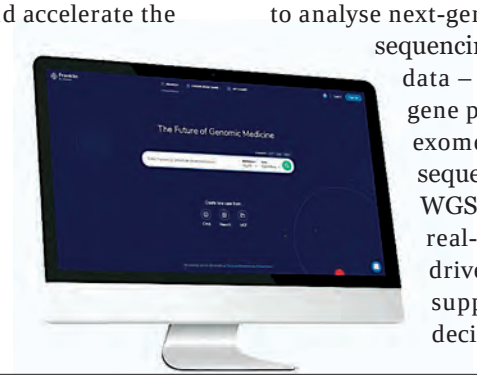
## Syncell unveils new partner network expanding commercial capabilities in Taiwan

Taiwan-based Syncell, a leader in next-generation subcellular protein purification and spatial proteomics analysis, has announced the launch of their preferred partner network. The company's commercial expansion includes new services partners OMAPiX and MS Bioworks. The network also includes new distributor relationships with SCRUM in Japan, DaonBS in Korea and Cold Spring Biotech in China, where the latest instrument was just installed at the National Center for Protein Sciences (Beijing), the largest proteomic research centre in China. Collectively, these initial partners will create new opportunities for laboratories to experience the power of Syncell's Microscoop technology, a first-of-its-kind solution for unbiased subcellular spatial proteomics. The preferred partner network consists of preferred service partners, compatible technology solutions, and distributors beyond Syncell's own focused development efforts. Through the relationship with OMAPiX and MS Bioworks, customers can get seamless, end-to-end Syncell Microscoop studies from cells or tissue samples by engaging directly with OMAPiX, a spatial biology service provider, in collaboration with MS Bioworks for advanced mass spec service and analysis.



# Qiagen enhances clinical genomics portfolio with acquisition of Genoox AI-powered software

Netherlands-headquartered Qiagen has signed a definitive agreement to acquire Israel-based Genoox, a provider of artificial intelligence (AI)-powered software that enables clinical labs to scale and accelerate the processing of complex genetic tests. The acquisition adds Franklin, Genoox's flagship cloud-based community platform, to the Qiagen Digital Insights (QDI) portfolio, strengthening Qiagen's leadership in genetic interpretation for clinical genomics applications. Franklin empowers labs to analyse next-generation sequencing (NGS) data – from targeted gene panels to whole exome and genome sequencing (WES/WGS) - and delivers real-time, AI-driven insights to support clinical decision-making.




Applications range from diagnosing genetic disorders and informing cancer treatments to supporting family planning decisions. The platform is currently used by more than 4,000 healthcare organisations in over 50 countries and has powered more than 750,000 case interpretations to date. Qiagen has acquired Genoox for $70 million in cash and eligible for additional milestone payments of up to $10 million. The acquisition is expected to generate approximately $5 million of sales in 2025 for Qiagen.

# Cariflex opens world's largest polyisoprene latex plant in Singapore

Cariflex, the global market leader in polyisoprene rubber latex for medical-end markets and wholly owned subsidiary of DL Chemical, has officially inaugurated its new polyisoprene latex plant at Jurong Island, Singapore. With an investment of $355 million, the plant is the largest of its kind globally and will significantly expand Cariflex's production capacity to meet growing demand for high-quality synthetic latex used in medical and protective applications. Supported by Singapore Economic Development Board (EDB) and JTC Corporation, the Singapore facility plays a key role in Cariflex's ability to serve Southeast Asia, home to critical manufacturing sites for surgical gloves and condoms. Spanning 6.1 hectares, this plant supports growing demand in these markets as well as others such as non-surgical medical gloves, adhesives, and laminates, further broadening the company's diversification.

# Agilent partners with Ubix Therapeutics to advance transformative cancer research in South Korea

Agilent Technologies Inc. has signed a Memorandum of Understanding (MoU) with Ubix Therapeutics to accelerate highly targeted cancer therapy research and development in South Korea over the next five years. Under this agreement, the two companies will conduct joint research to develop targeted protein degradation (TPD) and antibody-drug conjugate (ADC). This collaboration will combine Ubix's proprietary Degraducer anti-cancer drugs platform which features novel E3 ligase binders with Agilent's cancer research and technology capabilities. Small molecule-induced TPD and ADC are rapidly emerging as a promising approach in precision oncology across the pharma and biopharma industries, with the global TPD market size estimated to reach $4.37 billion by 2034. This novel method invites therapeutic potential in previously undruggable molecular spaces, paving the way to deliver safer and more effective answers for even the most difficult targets in ubiquitin proteasome pathway (UPP) and ligase complex.

# Ensuring Compliance with Surprise Inspections

On May 6, the US Food and Drug Administration (US FDA) announced its intent to expand the use of unannounced inspections at foreign manufacturing facilities that produce foods, essential medicines, and other medical products intended for American consumers and patients. This change builds upon the Office of Inspection and Investigations (OII) Foreign Unannounced Inspection Pilot programme in India and China. It aims to ensure that foreign companies receive the same regulatory oversight and scrutiny as domestic companies.

This announcement came one day after the White House issued an Executive Order instructing the FDA to provide regulatory relief to promote domestic production of critical medicines and improve the FDA's risk-based inspection regime to enhance routine inspections of foreign facilities.

The FDA carries out about 12,000 inspections in the US and 3,000 inspections abroad annually across over 90 countries. While the American manufacturers face surprise inspections, foreign companies often get advance notice, which weakens oversight. Despite this, the FDA discovered major issues during foreign inspections more than twice as often as domestic ones. The inspections help gather real-time information to improve enforcement and protect American families. Each inspection is classified to guide regulatory actions, and even inspections that result in "No Action Indicated" offer valuable insights for consumer safety.

McGuireWoods, a US-based international law firm, noted that the FDA's new policy is a significant development with potentially major implications for drug manufacturing, distribution and research firms in the US and abroad. While the concept of unannounced foreign inspections is nothing new (in 2022 Congress directed the FDA to pilot an unannounced inspection programme in India and China), the FDA's new policy will likely result in substantially more unannounced FDA inspections in China and India, especially given that approximately 40 per cent of all API manufacturing for U.S. prescription drugs takes place in these countries (India (32) and China (8)). Moreover, many drug manufacturers in the European Union, which manufacture approximately 20 per cent of all API for US prescription drugs, may, for the first time, be subject to unannounced FDA inspections.

Drug manufacturers in these countries, including contract drug manufacturing facilities, will have to maintain continuous compliance with cGMP in their day-to-day operations, as they can no longer rely on advance notice to prepare for inspections. Moreover, foreign clinical research organisations are likely to see a spike in unannounced inspections, as these facilities constitute another large area of outsourcing that may dovetail with the administration's efforts to ensure prescription drug safety and shift pharmaceutical operations back to the US.

Baker McKenzie, another international law firm headquartered in Chicago, in its report pointed out that FY 2025 initially saw a decrease in the number of FDA's foreign inspections in China as compared to FY 2024, with 81 inspections. Of these, 76 were drug and 5 were device inspections. Four inspections were classified as Official Action Indicated (OAI), which triggered regulatory or administrative actions. In comparison, the number of inspections in China for drugs and devices sharply increased to 227 in FY 2024 over the preceding three years (i.e., FY 2021-2023), ranging from 8 in FY 2022 to 61 in FY 2023.

Given the FDA's intention to increase unannounced inspections at foreign manufacturing facilities, Baker McKenzie pointed out that it is reasonable to expect a rise in the number of FDA foreign inspections during the remaining months of FY 2025 and continuing into FY 2026.

With this announcement, foreign firms must ensure that their manufacturing sites are inspection-ready for the increasing and unannounced FDA inspections and that personnel are appropriately trained. Firms should also be prepared for increased fees on their foreign manufacturing sites. They should proactively evaluate readiness for such surprise inspections by performing internal audits and focusing on previous findings by the FDA and the GLP, and the cGMP implications.

This expanded approach marks a new era in FDA enforcement, aimed at enhancing public health and safety of Americans. BS

**Narayan Kulkarni**
Editor
narayan.kulkarni@mmactiv.com

PlasmidFactory 25 YEARS

The better way to DNA!

Made in Germany
for global distribution

# Plasmid & Minicircle DNA

## From Research to GMP grade

- CDMO for customized circular and linearized DNA
- DNA for GMP production of viral vectors, RNA & CAR-T cells
- AAV plasmids & minicircles available off- the-shelf

Meet us here:

**ASGCT**
May | New Orleans

**BIO International**
June | Boston

PlasmidFactory®
The Minicircle Company

PlasmidFactory.com

PlasmidFactory GmbH | Meisenstraße 96 | 33607 Bielefeld | Germany

grafeting gmbh