ING

THINK Economic and Financial Analysis

May 2026

China's spectacular rise reshapes Asia's pharma future

Follow us
@ING_Economics

Diederik Stadig
Healthcare & Technology Economist
diederik.stadig@ing.com

The future of Asian pharma

The balance of power in the global pharmaceutical industry is shifting east, driven by China's rapid rise as an innovation powerhouse. This growing influence comes against a backdrop of heightened geopolitical tensions and new policy initiatives. Diederik Stadig looks into his crystal ball to map the uneven and complex path ahead for pharma.

China's emergence as a major source of innovation in global pharmaceuticals is reshaping Asia's role in the industry, and challenging the dominance of traditional Western hubs. The region is now driving a growing share of new drug pipelines, with China at the forefront and South Korea developing into a credible second innovation engine.

This is forcing global pharma companies to rethink where they access new drugs, as more innovation comes from markets that are harder to navigate due to regulatory complexity and geopolitical risks. India remains dominant in generics, while Japan risks losing ground without further reform.

The centre of gravity in pharma is shifting east, but the transition will be uneven and increasingly shaped by politics and policy as much as science.

Past: Asia has always been a manufacturing powerhouse

Historically, Asian pharma was built around cost, scale and process efficiency rather than breakthrough innovation. India became central to generics, active pharmaceutical ingredients (APIs) and vaccines, while China became a major supplier of chemical intermediates, APIs and increasingly finished drugs.

Japan, meanwhile, was the region's early innovative pharma market, but largely domestically orientated and shaped by its own pricing and reimbursement system. South Korea, Singapore and Taiwan were smaller, but science-heavy ecosystems that gradually moved into biologics, medtech and clinical research. The past few decades made Asia indispensable to global pharma supply chains, but not dominant in originator innovation.

Present: the continent is increasingly an innovation engine

The big shift is that Asia is now gaining share in innovative pipelines, biotech patents, clinical assets and licensing deals. This is primarily driven by China's spectacular ascent. We estimate that 33% of all new innovative molecules in global pipelines are Chinese this year, up from 4% in 2014. We also estimate that the continent's share of innovative pipelines as a whole is roughly 48% this year. This makes Asia responsible for roughly 90% of global growth in innovative molecules.

Aside from Asia's spectacular innovative ascent, the continent boasts strong demand, underpinned by ageing populations, increased chronic disease, expanding insurance coverage, rising middle classes and greater healthcare access. **We expect** global pharmaceutical sales to reach $2.4tr by 2030, with most growth coming from APAC. By 2027, we expect the region to become the second most important market after North America, slightly ahead of Europe.

Future: the most important innovator?

This raises the question of whether Asia will become the world's dominant pharmaceutical innovator over time. The answer will depend on how developments unfold across the region's key markets – China, South Korea, India and Japan – each following a distinct path with its own opportunities and constraints.

A consistent theme is that Asia's role is expanding from supplying the world to shaping what the world takes. But the road will not be linear. It will depend on how quickly local ecosystems can convert scientific momentum into globally competitive products, how supply chains are reconfigured under tariff and security pressure, and how regulation, capital markets and cross-border partnerships evolve in a more fragmented world.

China: the next Pfizer will be Chinese

China has rapidly become a leading hub for new innovative medicines, overtaking Europe and nearing the US. The country has become an innovation engine particularly in therapeutic areas such as oncology, immunology, antibody-drug conjugates (ADCs), bispecifics and cell/gene therapies. We therefore believe that the next Pfizer will be Chinese.

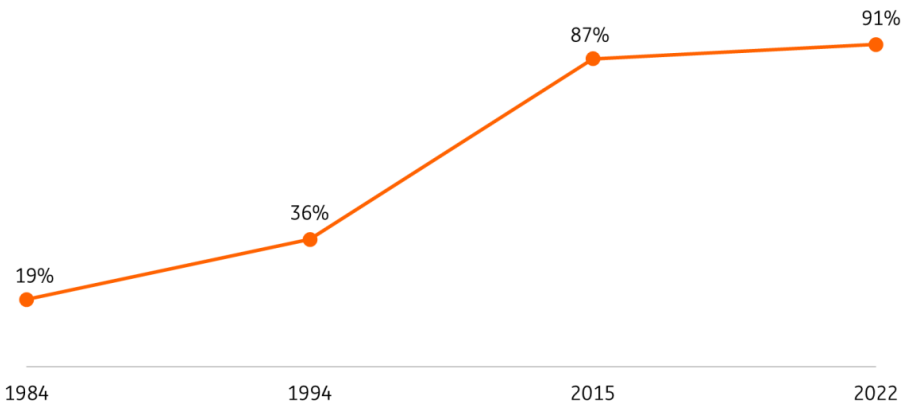
China's biotech ecosystem is rapidly advancing, transforming from a global manufacturing base into a leading source of innovative medicines

Past: manufacturing powerhouse

China's pharma sector was long defined by its manufacturing of low-cost APIs, intermediates and generic manufacturing. As patents on many medicines expired in recent decades, and generics grew to account for more than 90% of prescriptions, China's manufacturing prowess made the country central to global supply chains: it produces roughly 40% of the world's APIs and is therefore critically important for the contents of medicine cabinets globally. However, the country was not traditionally a major source of innovative medicines.

Generics have become much more important in recent decades

Generics as percentage of total US prescription drugs



Source: FDA, ING

Present: an increasingly important biotech hub

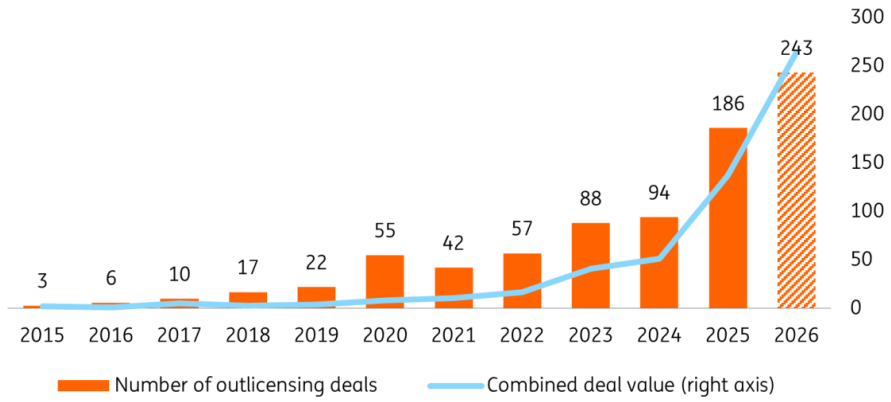
In recent years, China's position has changed significantly, with the country trading up the value chain to be Asia's most important biotech hub, accounting for 75% of all regional venture capital and private equity flows (Bain). We estimate that China alone accounts for roughly 33% of all new innovative molecules in global pipelines this year, which is a 29 percentage point increase from 4% in 2014.

China made this spectacular ascent by investing in fundamental research and its scientific talent pool, leveraging its economies of scale and conducting regulatory reforms. These regulatory reforms were conducted to integrate China into global drug development. They cleared approval backlogs, sped up reviews, and created accelerated pathways for innovative and urgently needed medicines. In addition, clinical trial inspections became more stringent to improve data credibility, while more foreign/multi-regional trial data were increasingly accepted.

These three factors led to a significant increase in outlicensing (i.e. a company that owns a drug asset grants another company the rights to develop, manufacture and/or commercialise that drug) between China and Western biotech and pharma companies. With each new deal adding assets to Western pharma's pipelines, while giving Chinese firms capital and credibility. Despite increased geopolitical tensions, we expect outlicensing to continue increasing. Based on new data from PharmCube, we expect total deal value to eclipse $250bn this year. Meaning a 47% growth rate in average deal value.

Outlicensing to China continues to rise steeply

Number of outlicensing deals by Western drugmakers with Chinese counterparts and total deal value in US$bn (right axis), 2026 forecast

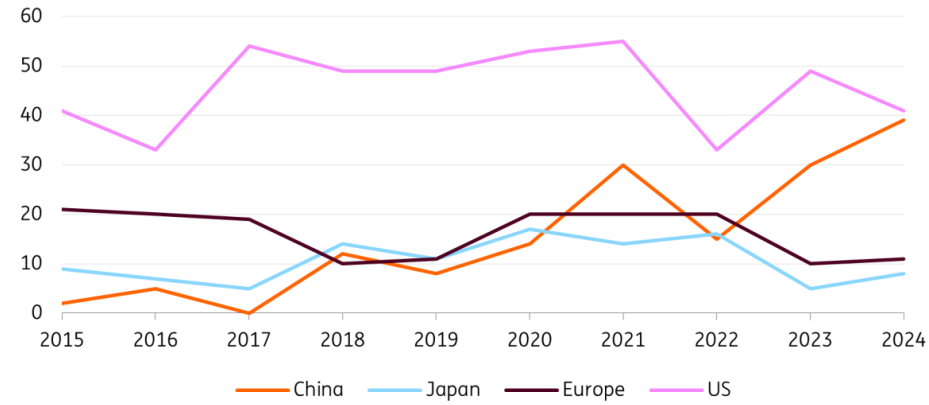


Source: Bloomberg, BMI, ING, Forecast based on PharmCube

In addition to outlicensing, clinical trials have risen significantly (China now surpasses Europe in the percentage of global clinical trials started) and China is even nearing the US in new global drug approvals as a result of its spectacular ascent.

China is nearing the US in global drug approvals

Distribution of first global approvals of innovative drugs, 2015-24



Source: Nature publication, BMI, ING

Future: a global supplier of innovation

China's course is clear: it is already a global powerhouse of innovation and will expand this role in the years to come. It is historically strong in the development of oncology drugs and will become a more important source of ADCs, bispecific, obesity, cell/gene therapies and immunology assets. This is good news for Big Pharma as it looks to refill pipelines ahead of patent cliffs. Our main question is not whether Chinese pharmaceutical companies will reach global scale, but when they will do so without relying on Western partners. China's car industry offers a clear precedent here. We therefore believe that the next Pfizer will be Chinese.

Conversely, all Western pharma companies need a China strategy: will they partner given China's manufacturing prowess, the depth of its scientific talent pool, economies of scale and speed, or will they play defence? China's rise is so undeniable that this is a question pharma boardrooms must answer.

The BIOSECURE Act shows that Washington increasingly views biotech not just as a healthcare sector, but as a strategic industry tied to national security, data security and supply-chain resilience. That will not stop Western pharma from seeking Chinese innovation, but it will make partnerships more complex, selective and politically sensitive – especially where Chinese CROs/CDMOs, genomic data or federally funded US contracts are involved.

In short, China's biotech momentum is real – and the winners across all continents will be those that can navigate politics as well as science while turning a torrent of assets into globally trusted medicines.

South Korea: Asia's second innovation engine

South Korea has been the second most important contributor to the growth of Asian innovation in recent years, outperforming Japan in several areas; however, the country's clinical trial momentum is showing signs of strain, which is something that should be addressed.

South Korea's rapid rise as a leading biosimilars and clinical development hub, now facing growing pressure to sustain its innovation momentum

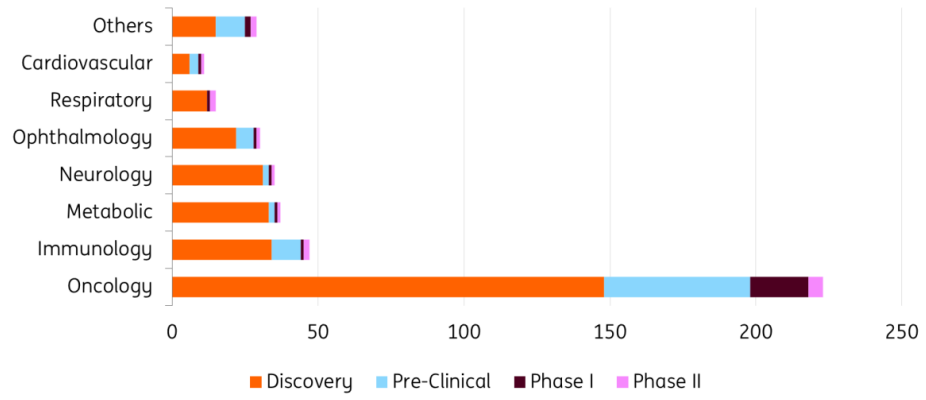
Past: from generics producer to biologics specialist

South Korea's pharma sector started from a relatively modest base, historically focused on generics, biosimilars and manufacturing excellence rather than global originator innovation. The pivot came through deliberate industrial policy: government-backed bio-clusters, rising public-private R&D, and the emergence of globally relevant biologics players such as Celltrion, Samsung Bioepis and Samsung Biologics. Between 2020 and 2022, investment in the biopharmaceutical industry rose by an average 21.6% per year, reaching around $2.9bn (IMAPAC), helping Korea build a reputation as a high-quality biologics and biosimilars hub.

In doing so, the country built a strong track record in several therapeutic areas such as neurologic, metabolic and immunological conditions. Recently, improvements in RNA platforms and cell/gene therapies have been impressive. Yet, oncology remains the main driver of innovation and is far and away the country's most important research area.

Oncology remains Korea's key research area

Research projects funded by the Korean Drug Development Fund (KDDF) by stage and research area



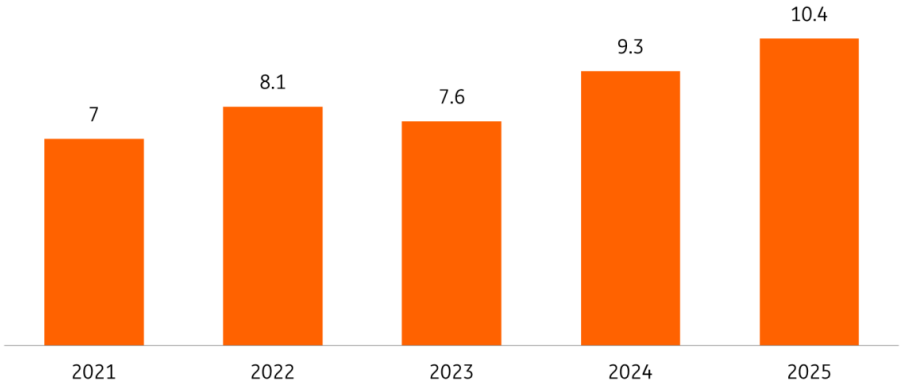
Source: KDDF; ING

Present: Asia's second innovation star after China, but with bottlenecks

South Korea is now one of Asia's most credible biopharma innovators. Its biopharma market is roughly $22bn (IMAPAC), ranking 13th globally, and Seoul was the world's top city for company-led clinical trials in 2022, while South Korea ranked fifth globally as a country. Moreover, South Korean companies discovered more than 1,300 new drug candidates over the past three years, equal to around 10% of the global total, putting Korea ahead of established R&D hubs such as the UK, Switzerland and Japan (Citeline). In short, Korea is a serious hub for clinical development.

In addition, we estimate that Korea's domestic demand rose by a little over 8% last year and will continue to grow at a similar rate for the foreseeable future, driven in large part by population ageing. Furthermore, Korea's pharmaceutical exports reached $10.4bn in 2025, up 11.8% year-on-year. Biopharmaceuticals were the main growth engine, accounting for 62.6% of pharmaceutical exports and rising 18.2% year-on-year, supported by strong demand for biosimilars and growing CDMO orders for Korean manufacturers. Despite geopolitical turmoil and tariffs, the US remained the top export destination.

South Korea's drug exports have risen steeply in the past few years
Korean pharmaceutical export (US$bn)



Source: Korean Health Industry Development Institute; ING

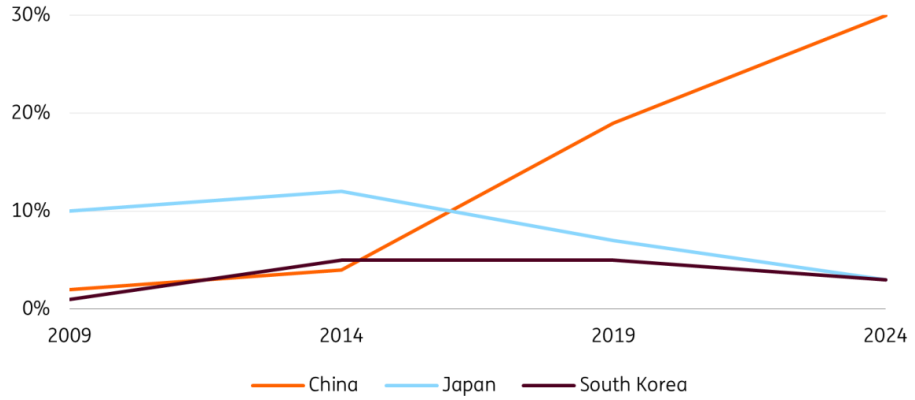
Future: can South Korea retain momentum?

South Korea's government aims to make Korea a top global biopharma power by 2030, with targets including doubling biopharmaceutical exports, developing three blockbuster innovations, and becoming the world's third-ranked clinical-trial market. This ambition is backed by funding: the KDDF plans to support more than 1,200 new drug-development projects by 2030, backed by $1.5bn over 10 years.

Moreover, Roche recently committed $486m over five years to expand clinical trials, transfer expertise and support Korean biotech ventures, while Eli Lilly separately announced a $500m five-year investment to establish Lilly Gateway Labs. Licensing momentum has also improved: South Korean innovator-drug licensing deal value reached $7.86bn in 2025, which is up 113% from 2024.

However, Korea's clinical-trial momentum is showing signs of strain after a significant increase in the past decade. Active clinical trials fell from 2,307 in 2024 to 2,175 in 2025.

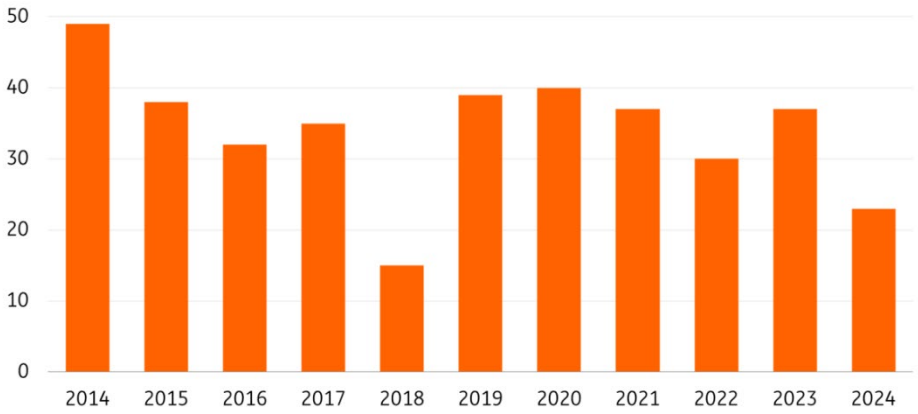
Korea's clinical trial momentum has halted in recent years
Percentage of clinical trials started as percentage of global total



Source: Citeline Trialtrove, IQVIA Institute, ING

New medicine approvals also fell in recent years: to 23 in 2024, a 38% decline from 2023. Regulatory frictions play an important role here: lengthy approval processes, strict patent extension rules and complex reimbursement are a drag on Korea's ambitions.

South Korea's drug approvals have been relatively low recently
Number of new drug approvals in South Korea per year



Source: BMI, ING

In short, South Korea has become Asia's most credible "second innovation engine" after China – strong in biologics capacity, clinical trials, biosimilars, ADCs, cell and gene therapies, and platform technologies. But the country's next phase depends on whether policy can keep pace with ambition: pricing reform, faster approvals, clearer patent protection and a more generous reimbursement will determine whether Korea becomes a true breakthrough-drug originator.

India: From generics giant to innovation powerhouse?

India is the most dominant generics manufacturer in the world. Given the increased importance and complexity of generics and the recent free trade deal with the EU, the sector's outlook is bright. However, India's push into innovation is unlikely to lead to blockbuster innovation in the short term.

India's pharma growth has been built on low-cost generics

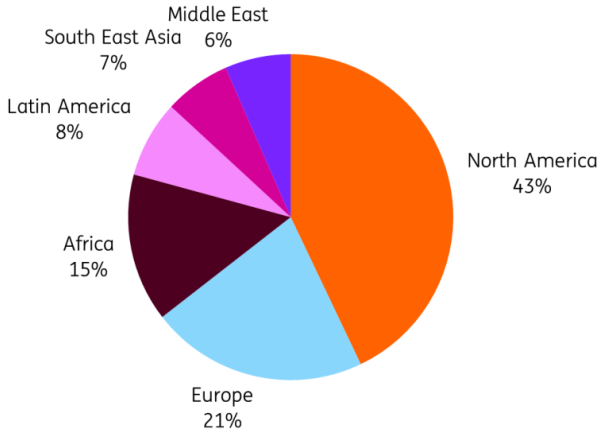
Past: the pharmacy of the world was built on scale, cost and generics

India's pharma rise has been rooted in large-scale, low-cost manufacturing, especially generics, APIs and vaccines. The sector is now the eleventh-largest globally by value, in spite of generics being priced at a fraction of innovative medicines. This shows the scale of the Indian sector. The country supplies roughly 20% of global generic medicines and manufactures around 60,000 generic brands across 60 therapeutic categories. That scale translated into export strength: Indian medicines reach nearly every corner of the globe, as they are supplied to at least 150 countries.

Yet, India's historical model was mostly volume-led rather than innovation-led. The industry became indispensable to global healthcare by producing affordable generics and vaccines, but it remained less prominent in originator drug discovery, high-value biologics and advanced therapeutic platforms.

Indian generics reach every corner of the globe

Indian pharmaceutical sales per market in percentages of total export value



Source: Pharmexcil, ING

Present: the market is still mostly generics, but complexity is increasing

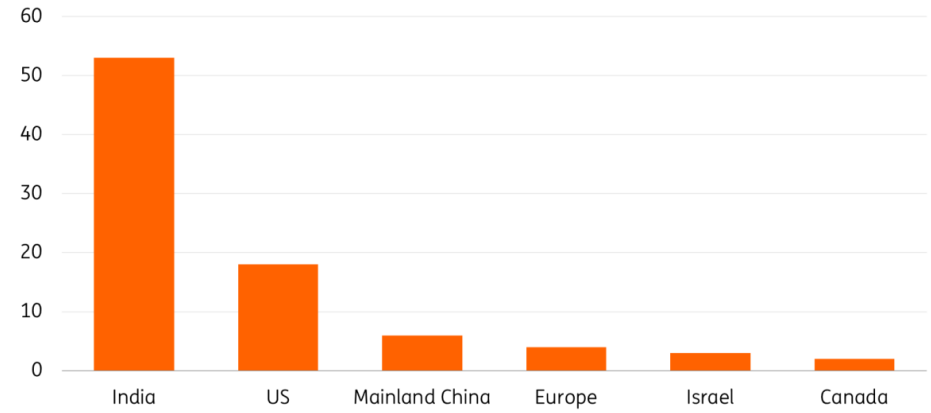
Generics are the backbone of the Indian sector and are a growth market. Internationally, more than 90% of all prescriptions are generics, and fiscal pressure on healthcare budgets of ageing societies means that generic drugs remain in demand. Domestically, generic demand is reinforced by low per-capita healthcare spending, high out-of-pocket payments for medicines and policy support such as Jan Aushadhi Kendra, where unbranded generics are sold at 50-90% below branded alternatives.

Moreover, more blockbuster drugs will come off patent before the end of the decade, one of the latest examples being semaglutide. After Novo Nordisk's active-ingredient patent expired in India, companies including Sun Pharma, Dr Reddy's, Zydus, Glenmark and Natco launched generic versions. Prices for generic semaglutide could be reduced by up to fifteenfold depending on the company, drug and dosage.

Given its economies of scale, India will remain the pharmacy of the world, despite efforts by the Trump administration to increase US generic manufacturing, such as the ANDA Prioritisation Pilot Programme and increasing US FDA compliance requirements. This will accelerate approvals from US manufacturers and increase competition with India-based generic makers. However, not enough to threaten India's dominance. In March 2026, for example, India accounted for a little over 60% of all Abbreviated New Drug Application (ANDA) submissions at the FDA.

India clearly remains the top ANDA submitter

Number of ANDA submissions to the FDA in March 2026



Source: FDA, ING

Future: more complex generics, but blockbuster innovation unlikely

In the coming years, India's pharmaceutical sector growth will be shaped by the global patent cliff. There are major upcoming expirations in cardiovascular, metabolic, oncology and autoimmune drugs between 2026 and 2028, including Eliquis, Januvia/Janumet, Xtandi, Imbruvica, Mavenclad, Opsumit and Pomalyst. When those come off patent, India's pharmaceutical sales will increase steeply.

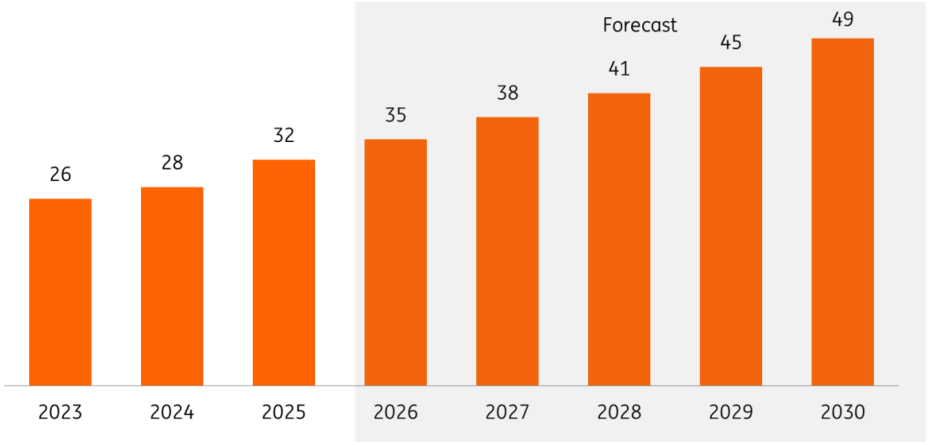
In addition to the patent cliff, there are other factors driving demand, such as the world's appetite for generics, population ageing, and a rise in chronic diseases. Lastly, the free trade deal with the EU will drive additional growth if and when it is ratified. We therefore forecast a 9.0% CAGR for India's pharmaceutical sales.

The Indian sector is expanding into complex generics, biosimilars and speciality products. Sun Pharma's announced $11.8bn acquisition of Organon would add more than 70 products, expand its women's health and established-brands portfolio, and strengthen its biosimilars. The Indian CDMO sector will also see strong growth: we estimate a 9% CAGR until the end of the decade for that sector as well.

India's innovation story is still early, and we do not expect major innovation in the near term. Even though the country attracts a significant number of clinical trials, it lacks the depth in risk capital pools and there are questions about quality and regulatory trust. This means it is unlikely that Indian companies will pursue blockbuster drugs in the near term. Yet, the sector's future is certainly bright.

India's pharmaceutical sales will increase steeply

Indian pharmaceutical sales (US$bn)



Source: BMI, ING

Japan: Asia's Europe?

Japan resembles Europe's pharma challenge: it is an important biopharmaceutical innovation market historically. However, in recent years its share of global drug approvals and clinical trials has declined. An ageing population, limited capital markets depth, conservative regulation and MFN have put innovation prospects under strain.

Japan's healthcare system faces growing pressure from an ageing population, shaping pricing and access decisions for new medicines

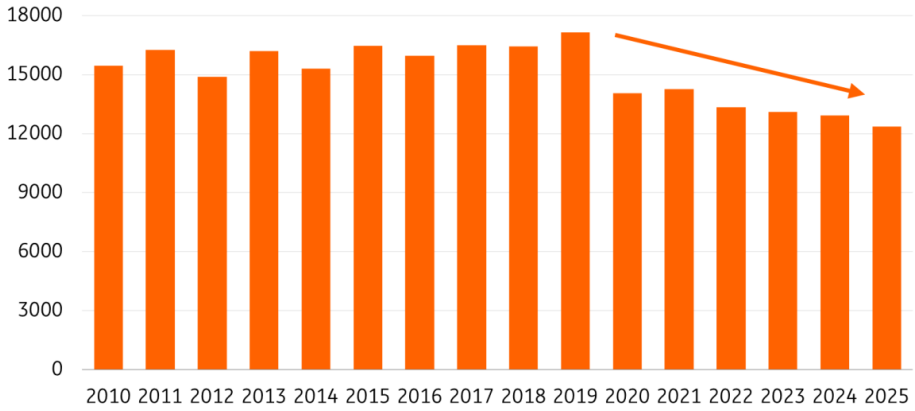
Past: a global innovation heavyweight

Japan used to be one of pharma's premier innovation markets – much like Europe. It combined a large, wealthy domestic market, strong local champions, deep scientific capability and a reimbursement system that historically rewarded high-quality medicines. The industry moved from post-war catch-up to genuine discovery strength, with Japanese companies producing many innovative new drugs from the mid-1980s onwards. At its peak, Japan accounted for more than 25% of the global pharmaceutical market (Tokyo Foundation), and by the mid-1990s, it still represented a major share of global pharma value creation.

So, both have gradually lost ground to the US – and now, increasingly, to China. Why? Because slower access pathways, weaker innovation incentives and relatively shallow capital markets have made them less attractive as launch and investment markets.

Japan's large and growing elderly population has also put fiscal pressure on the country's healthcare system, making it a less appealing destination to launch medicines. Despite efforts by both the government and industry to strengthen Japan's pharma ecosystem, the market remains constrained by an increasingly cost-conscious policy environment. This is reflected in the shrinking National Health Insurance (NHI) price list, which decreased by roughly 30% since 2019: regulators apply tougher standards on both clinical value and cost-effectiveness before adding or maintaining medicines.

Number of pharmaceuticals on NHI price list continues to decrease
Number of drugs included in NHI price list per year



Source: JPMA, BMI, ING

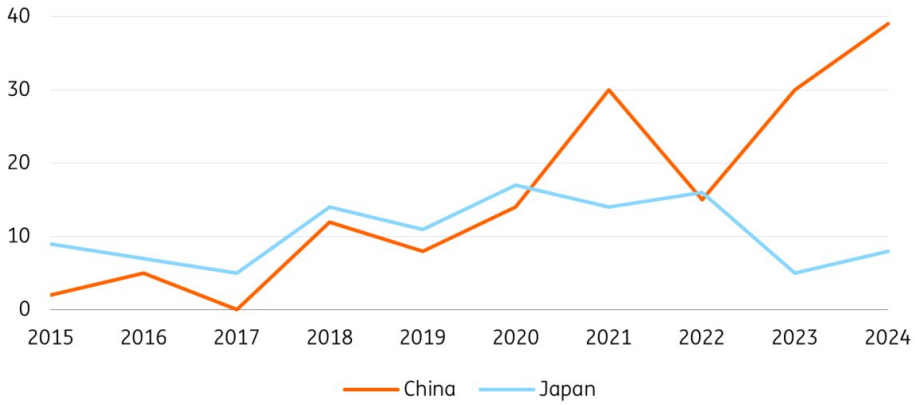
Present: still an innovation hub, but increasingly squeezed

Japan remains the fourth-largest global pharmaceutical market, behind the US, the EU and China, but growth is slower and more policy-constrained. The key problem is not lack of demand, because Japan's ageing population and chronic disease burden support medicine use. However, pricing is constrained. The result is visible in "drug lag" and "drug loss". In 2024, the Pharmaceuticals and Medical Devices Agency (PMDA) reported that 143 products approved in Europe and the US remained unavailable in Japan. Furthermore, 87% of new medicines launched globally since 2014 are available in the US, compared with only 50% through Japan's public NHI system (BMI), while Japanese patients wait an average of 15 months after global launch for reimbursement.

This problem is exacerbated by Trump's MFN policies, where Japan is a key reference country. Historically, low Japanese prices mostly hurt Japan's own market attractiveness. Under MFN, low Japanese prices could also affect US pricing benchmarks. This could create upward pressure on Japanese drug prices, but also more launch risk. If Japan remains a low-price reference country, global pharma may delay launches to avoid contaminating US benchmarks. The US tariff framework adds another incentive for branded pharma companies to prioritise the US market, given that it accounts for roughly two-thirds of branded pharma profits.

That creates Japan's Europe-like dilemma: it wants innovation, but keeps squeezing the economics of innovation. Japan introduced pro-innovation pricing reforms in 2024 – including stronger Price Maintenance Premiums and upward revisions for low-margin essential medicines – but FY2025 and FY2026 reforms continued off-year price revisions and patented-drug price cuts. This risks undermining the government's innovation agenda and is evidenced by fewer clinical trials and relatively modest drug approval numbers in recent years.

Japan's drug approvals have been modest in recent years
Distribution of first global approvals of innovative drugs, 2015-24



Source: Nature publication, BMI, ING

Future: reinvention is possible, but policy must stop pulling in opposite directions

Japan's future depends on whether it can become more than a mature, cost-controlled market. The government clearly understands the problem. Policy initiatives include a 10-year public fund for innovative drug development, the Pharmaceutical Industry Vision, and a roadmap to double private investment in drug-discovery startups by 2028.

Japan is also trying to reduce operational barriers. Reforms include 5-10% pricing premiums for accelerated launch of innovative drugs, efforts to build international-level clinical-trial systems, and the removal of mandatory domestic Phase I trials in some cases. These changes are intended to make Japan more attractive for global R&D and earlier launches.

But the risk is that Japan repeats Europe's mistake: announcing innovation strategies while using reimbursement systems to squeeze margins. Japan is therefore Asia's Europe: historically innovative, scientifically strong and still commercially important, but increasingly held back by pricing pressure, slow access, Trump's policies, relatively shallow capital markets and weaker launch incentives. The upside is that MFN may force Japan to rethink how low it can push prices without losing access to innovation. The downside is that if reform remains partial, Japan risks becoming a market that companies serve late; respected scientifically, but no longer central to the strategy of global pharma companies.

Disclaimer