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丹中商会 DANISH-CHINESE BUSINESS FORUM

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REPORT

A New Life Science Playbook?

China's role in the global life science sector is changing faster than our current strategies have accounted for

Overview of the Danish life science industry's importance to Denmark

1 of 3 – Danish life science in numbers

Worth DKK 208 billion

Danish life science exports totaled DKK 208 billion in 2025.

Source:
Ministry of Business and Competitiveness

22% of Danish goods exports

Life science accounted for almost one quarter of total Danish goods exports in 2025.

Source:
Ministry of Business and Competitiveness

~83,000 employees

Employment in life science grew by 2% year-on-year from 2024 to 2025 and has increased by 87% since 2013.

Source:
Ministry of Business and Competitiveness

30% of R&D

The medical and pharmaceutical industry accounted for 30% of all Danish Business Enterprise R&D expenses in 2023.*

Source:
The Danish Association of the Pharmaceutical Industry.
**Numbers are subject to revision.*

Overview of the Danish life science industry's importance to Denmark

2 of 3 – key drivers in Danish life science

Pharmaceuticals and biotechnology are the key drivers of Danish gross value-added growth

- Danish gross value added grew by 4.2% in 2024 and 3.8% in 2025. Excluding pharmaceuticals and biotechnology, growth would have been just 1.7% and 2.7%, respectively.

Productivity levels in the Danish life science industry nearly double the national average

- In 2023, life science generated an average value added of DKK 2.5 million per full-time employee against DKK 1.3 million per full-time employee of Danish industry overall. Pharmaceuticals and biotechnology lead the industry with value added of DKK 3.1 million per full-time employee, compared with DKK 1.7 million for medical equipment. Micro-enterprises account for the vast majority of Danish life science companies.

- Life science productivity grew by 27% from 2022 to 2023, significantly outpacing the 17% growth in Danish industry overall.

Pharmaceuticals and biotechnology make up the lion's share of life science exports

- Life science exports increased by DKK 21 billion from 2024 to 2025, corresponding to 11% growth in current prices. Pharmaceuticals and biotechnology account for more than 90% of total life science exports, though more than half of all Danish life science companies operate in medical equipment.

- Danmarks Nationalbank has highlighted Denmark's relatively high exposure to economic developments in China, with pharmaceuticals particularly exposed to Chinese demand.

Source: *Ministry of Business and Competitiveness*

Overview of the Danish life science industry's importance to Denmark

3 of 3 – Danish life science exposure

Denmark stands out in Europe for the economic performance of its life science industry

- Denmark is among the European countries with the highest share of employment in life science. In 2023, the Danish life science industry accounted for 2.19% of total national employment, with two-thirds of life science employees working in pharmaceuticals and biotechnology.
- Productivity growth in Danish industry averaged 12% per year from 2020 to 2024, compared with 1.4% across the EU. Without pharmaceuticals and biotechnology, Danish productivity growth would have been just 3%.
- Denmark has more pharmaceutical and biotechnology companies in the global top 100 than any other European country.

The flipside: Growing international exposure

- The international position of the Danish life science industry and its relative importance to the Danish economy also increase Denmark's exposure to developments in key export markets – particularly China, its largest direct life science export market.
- Danish life science patent applications declined from 2020 to 2024 while patent activity increased in the US and China, and the number of clinical trials in China nearly doubled between 2020 and 2025.
- Recent layoffs in the Danish life science industry add to signs of mounting pressure.

Source: *Ministry of Business and Competitiveness*

Structural shift in the global competitive landscape

1 of 3 – China's industrial policy

Decades of strategic industrial policy have transformed China into a global challenger

- Sustained government efforts to move Chinese companies up the global value chain are increasingly challenging key Danish commercial strongholds. Successive Five-Year Plans coupled with deliberate initiatives, such as Made in China 2025, have spurred the strategic upgrading of China's capabilities across a range of advanced industries, including medicine and medical devices.
- China is expanding R&D investment in life science and related industries as part of its broader dual-circulation strategy.
- China's growing use of modular manufacturing is adding to its structural competitive advantages by streamlining industrial production and significantly reducing the risk of major cost overruns.
- Life science is expected to be among the industries most exposed to a potential 'China Shock 2.0'. China's 15th Five-Year Plan points to continued extensive state support for life science as a core strategic national priority.

Denmark versus China is a matter of regulatory complexity versus state-driven hyper-scaling

- China's industrial model centers on scale. When domestic production capacity exceeds demand, excess output is pushed toward overseas markets offering higher price ceilings and less saturated competition. For many Chinese industries, going global is not optional. It is a structural consequence of ferocious domestic economics.
- Danish life science companies operate within a regulated EU framework that seeks to balance competitiveness with harmonization across 27 Member States.

Structural shift in the global competitive landscape

2 of 3 – geopolitical tensions and competitive asymmetries

Compounding asymmetries are creating structural advantages for Chinese life science

- Cumulative structural asymmetry has translated into higher risk tolerance, longer investment horizons and greater scaling capacity for Chinese challengers, driven by aggressive growth mandates, centralized capital, execution intensity and domestic competitive dynamics.

Assertive US trade policy is adding another dimension to the competitive landscape

- Washington's hardened stance on China is increasing pressure on Danish companies to balance commercial exposure to China with strategic alignment with the United States.

- In life science, the enacted BIOSECURE Act and the proposed Biotech Investment National Security Act indicate a significant expansion of US national-security legislation. Danish companies with commercial links to Chinese entities face increasing scrutiny, adding complexity to market access.

The EU is strengthening its economic defenses against Chinese competitive pressures

- The Foreign Subsidies Regulation and revised Foreign Direct Investment Screening Regulation signal a tightening of the EU's economic-security framework in response to growing geopolitical tensions and market distortions, aiming to address regulatory gaps, critical dependencies and unfair competitive advantages.

- Danish life science companies with commercial and research ties to China face heightened scrutiny of foreign funding, sensitive data sharing, critical supply chains and dual-use research amid efforts to mitigate strategic vulnerabilities.

Structural shift in the global competitive landscape

3 of 3 – navigating between political and commercial interests

Danish life science is caught in a strategic triad

- The hardened stance on China is not a passing phase, but a defining structural feature of contemporary global politics. Commercial exposure to China increasingly intersects with US and EU economic-security concerns, requiring Danish life science companies to navigate competing commercial, regulatory and geopolitical considerations.

- Denmark retains a strong global position in life science, but its competitive edge is diminishing as China closes the gap in key capabilities while consolidating its control across critical parts of the value chain. Danish companies must now make increasingly difficult trade-offs between commercial interests and strategic alignment as European life science finds itself caught in the middle and companies' room for maneuver narrows.

- Geopolitical fragmentation is complicating cross-border licensing, partnerships and investment. Protective measures may buy time for Danish and European life science to adjust to intensifying competitive pressure from China. Maintaining industry leadership hinges on structural transformation.

- Strategic asymmetries cut both ways. The intersection of Chinese strategic demand and Danish technological leadership offers leverage for selective engagement while addressing critical dependencies.

Zooming in on China's pharmaceutical and biotech context

1 of 4 – health has become a national strategic priority

President Xi Jinping has elevated health and life science to a pillar of national development

- A broad reform agenda has rapidly transformed China's life science framework. The landmark 2016 National Health Conference and subsequent Healthy China 2030 blueprint shifted the emphasis of national policymaking from treatment toward prevention, while integrating health into wider economic and social development goals.

- Political prioritization is embedded in China's overarching ambition to restore national strength and global leadership through national rejuvenation.

Key indicators show China rapidly expanding its role in global clinical development

- Commercial clinical trial starts in China nearly doubled from 727 to 1,412 between 2018 and 2023, rapidly closing the gap with the United States, where trial starts declined from 1,850 to 1,719 over the same period.

- China's share of global commercial trial starts rose from 5% in 2013 to 18% in 2023, while the European Economic Area's share fell from 22% to 12%. Across all clinical trials, China now accounts for 29% of global trial starts, compared with 9% in the EEA.

Source: *European Federation of Pharmaceutical Industries and Associations*

Zooming in on China's pharmaceutical and biotech context

2 of 4 – from follower to innovator

China is moving from scale to global innovation leadership

- The shift is even more pronounced in advanced therapeutics. China's share of global commercial cell and gene therapy trials rose from 10% in 2013 to 42% in 2023, while Europe's share fell from 25% to 10%.
- China is also consolidating its position as a global biopharma innovation powerhouse. More than 30% of the global innovative pharmaceutical pipeline is now estimated to originate in China. Oncology has historically anchored China's biopharma innovation, but the pipeline is now diversifying across immunology, neurology and metabolic disease.
- Global big pharma is increasingly sourcing innovation from China, with 40% of assets in-licensed in 2025 coming from Chinese licensors, up from just under 30% the year before. Akeso's First-in-Class cancer therapy illustrates China's growing ability to generate globally relevant innovation.

China's evolving global role combines scale and execution speed with regulatory reform

- Regulatory and institutional reform has reduced development frictions. Greater alignment with global standards, including China's accession to the International Council for Harmonisation, expanded capacity at the Center for Drug Evaluation and sustained government support have helped shorten approval timelines from around 4.5 years in 2018 to about one year by 2023.
- Large treatment-naïve patient pools, dense CRO networks, a growing number of China-headquartered sponsors, advanced digital and data infrastructure, skilled talent and parallelized workflows support rapid trial execution. Early discovery-to-IND cycles are estimated to be 50–70% faster than global benchmarks, although growth is concentrated in single-country trials.

Sources: *European Federation of Pharmaceutical Industries and Associations; IQVIA; McKinsey*

Zooming in on China's pharmaceutical and biotech context

3 of 4 – China looks to anchor innovation at home

China is gaining ground as the EEA loses share across most major trial categories

- Denmark remains one of Europe's strongest clinical research locations, and Europe's loss of global share is less pronounced in multi-country trials. But the broader trend is clear. The EEA is losing relative or absolute ground across most major trial categories – including oncology, biosimilars, rare diseases, cell and gene therapy, pediatrics and immunization – while China is expanding its global share.

China is accelerating efforts to anchor global life science more deeply in its domestic ecosystem

- Revised Regulations for the Implementation of the Drug Administration Law (State Council Decree No. 828) mark the first comprehensive overhaul of China's pharmaceutical regulatory framework in more than two decades. Principal provisions consolidate and formalize existing rules and practices into a binding full-lifecycle framework, while strengthening data protection, market exclusivity and accelerated pathways for innovative drugs, among other key measures.

- Reforms reflect much more than procedural change. They signal a structural shift in how China expects innovative medicines to be developed, approved, supplied and governed, aiming to bolster China's attractiveness as both a development base and a commercial market. Practical implications remain uncertain, however, as implementation is still taking shape through forthcoming implementing rules and evolving regulatory practice.

Sources: *European Federation of Pharmaceutical Industries and Associations; McKinsey*

Zooming in on China's pharmaceutical and biotech context

4 of 4 – European pharmaceutical dependency on China

Critical dependencies remain the name of the game for the pharmaceutical sector

- European pharmaceutical supply chains remain highly exposed to China in upstream production. According to the EU Critical Medicines Alliance, 60–80% of API production for generic medicines has been outsourced to China in recent years. Innovative medicines retain a significant manufacturing footprint in the EU, but account for only 10–20% of the Union List of Critical Medicines, which is overwhelmingly made up of generics.

- India is often portrayed as a potential manufacturing alternative to China, but its own API industry is heavily reliant on Chinese intermediates and key starting materials. China's cost advantages have further drawn significant manufacturing capacity for selected APIs and advanced intermediates from India to China in recent years.

- Economics reinforce critical dependencies. Lower costs, scale advantages, integrated supply chains and less stringent regulatory standards have shifted upstream production toward Asia. Developing, testing, producing and marketing generics is estimated to be 20–40% more expensive in Europe.

- The EU is accelerating efforts to address structural vulnerabilities through measures such as the Critical Medicines Act and the landmark Pharma Package, aiming to rebuild domestic capacity for APIs and critical medicines. But reshoring faces significant economic barriers. Low margins, regulatory pricing and high production costs continue to discourage investment. Around one fifth of analyzed APIs have no manufacturing presence within the EU.

Sources: *Brookings Institution; Critical Medicines Alliance; European Commission*

China's medtech landscape

1 of 2 – localization pressures and market access

China is a major market, but industrial and procurement policies increasingly constrain foreign access

- China accounted for 6.5% of the global medical device market in 2024, compared with 26.4% across Europe. China is a significant two-way trading partner, representing 10.3% of European medical device exports and 14.7% of imports. Today, China represents the second-largest medtech market after the US, though Europe as a regional market remains significantly bigger than China.

- High-performance medical devices were designated a core industry under Made in China 2025. The associated roadmap set a target for domestically produced high-end medical devices to account for 95% of county-hospital procurement by 2030. The European Commission assesses that this would de facto reduce the scope for imported products to near zero in a significant part of China's procurement market. Localization efforts accelerated under the 14th Five-Year Plan, which introduced explicit objectives to replace imported products with domestic supply through various policy measures.

- Public procurement has become a central instrument of localization. The Commission concluded that China operates an overarching 'Buy China' system favoring domestic devices and identified explicit or implicit prohibitions on imported devices or discriminatory requirements in 87% of the tenders examined between 2017 and 2024. Explicit prohibitions were also found to become increasingly prevalent, rising from 36% of relevant tenders in 2022 to 53% in the first half of 2024.

- Volume-based procurement adds further pressure on companies to localize production in China. The Commission found that certain measures governing its design explicitly aim to support domestic suppliers by driving bids to levels that are unsustainable in the long run for profit-oriented companies without state support. For example, cited tenders resulted in average price reductions of 82% for artificial joints.

Sources: *European Commission; MedTech Europe*

China's medtech landscape

2 of 2 – geopolitics, dependency and competitiveness

Market access in China is increasingly conditioned by geopolitics

- In June 2025, the EU restricted Chinese access to its public procurement market for medical devices in response to serious and recurrent discrimination against European suppliers. The measure excludes Chinese companies from tenders worth €5 million or more and limits the share of medical devices originating from China to 50% in relevant contracts. This marked the first application of the EU's International Procurement Instrument since its adoption in 2022.

- China responded with reciprocal restrictions in July 2025, excluding EU companies from government procurement of medical devices with budgets above RMB 45 million and limiting EU-origin medical devices supplied by non-EU bidders to 50% of the contract value. EU companies manufacturing locally in China are exempt from the company exclusion, reinforcing pressure on foreign companies to localize production.

Medtech challenges are less about broad supply dependency and more about competitiveness

- Europe's supply position for medical devices appears markedly stronger than for critical pharmaceuticals. The Commission found no indication of procurement dependencies on China in any medical-device category and estimates that EU manufacturers would need to redirect only 3–4% of current exports to replace Chinese devices potentially excluded under the IPI measure.

- At the same time, Europe's attractiveness as a medtech investment location is under pressure. Slower growth and increasingly negative investment perceptions are linked to several structural challenges, including limited innovation funding, skills shortages, regulatory complexity and fragmented reimbursement pathways. These pressures are particularly acute for an SME-heavy industry characterized by short innovation cycles as Chinese competition and localization pressures intensify.

Sources: *European Commission; Deloitte; MedTech Europe*

Strategic implications for Danish life science

1 of 3 – China is bolstering its position

China's changing role requires a new sense of urgency

- China's role in the global life science ecosystem has changed fundamentally, and the pace of change is accelerating. Today, China is simultaneously a major market, an increasingly capable competitor and a growing innovation hub. Questions for Danish life science are therefore becoming more complex and company-specific, including what role China plays in their global business and whether their China strategy is right for the market that exists today or still reflects the China of yesterday.

- Danish companies retain significant competitive advantages in life science, but it would be a mistake to overstate the extent of our lead over China in specific areas. China is moving rapidly to bolster its attractiveness as a market for innovation and investment, while systematically closing gaps across priority sectors. This should create a greater sense of urgency in both Denmark and Europe around strengthening the conditions for life science competitiveness.

- The automotive industry serves as a stern warning against underestimating the pace at which Chinese competitors can evolve and taking current industry leadership for granted.

Strategic implications for Danish life science

2 of 3 – politics vs. pragmatism

Selective engagement offers a more durable path than disengagement

- Keeping China at arm's length does not merely mean forgoing market opportunities. It also means losing access to competitive intelligence, collaboration opportunities and innovation ecosystems that may shape future strategic positioning. Companies operating from outside China risk finding themselves surprised by capable Chinese competitors entering their home markets.

- We should not be naïve about China. But neither should we turn a blind eye to areas where partnerships can be pursued on equal terms and where both sides can learn from and benefit from one another.

- Successful engagement requires recognizing that markets and relationships are not static but continuously evolving. The objective is not simply to build partnerships for today, but frameworks capable of adapting as both the market and the parties change over time. This requires rethinking how we cooperate, structure partnerships and approach expectations of reciprocal market access.

- Selective engagement should be guided by the value it creates for Danish industry, not by trade volumes alone. Imports of finished modular solutions, for example, may offer limited strategic value if they primarily substitute domestic activity without strengthening Danish capabilities, resilience or competitiveness.

Strategic implications for Danish life science

3 of 3 – commercial strategy intersects with political alignment

Market access is increasingly a strategic choice

- For Danish life science exports, the challenge is linked to a broader shift in the competitive landscape. Market access is increasingly shaped by political alignment and industrial policy decisions in both China and the US. Pharmaceuticals, biotechnology and medtech are being drawn into a broader contest over control, sovereignty and industrial self-sufficiency. ‘Inside China’ and ‘outside China’ are becoming commercially distinct positions, with different procurement access, competitive exposures and regulatory conditions.

- Concerns about IP protection, technology leakage, geopolitical uncertainty and partner risks are legitimate. But particularly for Danish medtech companies seeking meaningful access to the Chinese market, localization will increasingly be a strategic consideration for objectives such as securing procurement access, building manufacturing capability, supporting product development or strengthening distribution.

- Companies without an ‘inside China’ capability risk being progressively confined to a narrowing segment of the market. Specialization alone should not be assumed to provide lasting protection. Once niches reach sufficient scale, domestic competitors can enter rapidly, close technology gaps and compress margins.

CHINA'S NEW FIVE-YEAR PLAN FOR LIFE SCIENCE (SEP. 18)

China sets new targets to strengthen its pharmaceutical industry and accelerate innovation through 2030
On 18 September, China released its new five-year plan for its pharmaceutical industry for 2026-2030. The plan reiterates Beijing's ambitions to substantially upgrade the industry's competitiveness and international influence by accelerating innovation, deepening global cooperation and scaling up industrial capacity, with the goal of achieving systematic breakthroughs across pharmaceuticals and medical devices. Pharmaceuticals are framed as a strategic emerging industry and a priority area for cultivating new growth drivers and building a new national pillar industry.

AI is a core component of the strategy
The plan calls for accelerating the use of AI, quantum computing, supercomputing and computational medicine in drug discovery, alongside specialized large language models and AI agents for medicine. AI applications are envisaged across research, clinical development, manufacturing-process optimization, quality management, distribution and regulation, with pharmaceutical companies encouraged to work with hospitals, research institutes and contract research organizations to develop high-quality industry data sets and trusted health-data infrastructure.

Internationalization is an explicit goal for Chinese drugmakers
The plan explicitly supports Chinese pharmaceutical companies seeking to expand their presence in global markets and deepen their integration into global innovation networks. Domestic companies are encouraged to participate in global pharmaceutical innovation through joint R&D and co-commercialization arrangements. Regulators are tasked with aligning Chinese rules and standards with international practices, while strengthening IP protection and utilization to support the internationalization of Chinese innovative drugs and medical devices.

China seeks to cement its position across the pharmaceutical value chain
The plan calls for strengthening the development of drugs and devices in key segments, including chemical APIs, high-end formulations, vaccines and antibody drugs, alongside medical equipment and traditional Chinese medicine, bolstering China's position in global supply chains.

Caixin; China Daily; Global Times

CHINA'S NEW FIVE-YEAR PLAN FOR LIFE SCIENCE (SEP. 18)

China's 2030 targets translate the strategy into measurable scale

- **≥25% of global first-in-class drugs** to originate in China.
- **≥20% average annual growth** in the innovative drug sector.
- **>10% average annual R&D intensity** among listed pharmaceutical companies.
- **50 pharmaceutical companies** with annual revenue above RMB 10 billion.
- **≥5 Chinese drugs** to achieve global annual sales above US$1 billion.
- **20 pharmaceutical industrial parks** with annual output above RMB 100 billion.
- **≥RMB 3.5 trillion** in combined revenue among pharmaceutical enterprises above the designated scale threshold of an annual main business revenue above RMB 20 million.

The targets build on considerable momentum

- By end-2025, China accounted for around one-third of the global innovative-drug pipeline and ranked first globally in the number of drugs under development.
- Overseas licensing deals involving Chinese innovative drugs surpassed US$120 billion in 2026 to date, up 36% year-on-year.
- Value-added output among pharmaceutical enterprises above the RMB 20 million revenue threshold grew 6.4% year-on-year in the first half of 2026.
- 31 of 38 innovative drugs approved in China in the first half of 2026 were domestically developed.

Caixin; China Daily; Global Times



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