

Unwise to Restrict Investment in China's Biotech Sector



By GONG Qian & HU Dingkun

John Moolenaar, chairman of the U.S. House Select Committee on China, recently wrote to U.S. Secretary of Treasury Scott Bessent, urging him to add biotechnology as a prohibited technology under the Comprehensive Outbound Investment National Security Act of 2025.

The letter particularly cited a partnership worth up to 15.2 billion USD between U.S.-based Bristol Myers Squibb (BMS) and China's Hengrui Pharma as a typical example of U.S. capital and technology flowing into China's biotechnology industry.

Chinese biotech firms have gained robust global traction in recent years.

The total value of China's out-licensing deals for innovative drugs hit nearly 136 billion USD in 2025, according to the National Medical Products Administration (NMPA). In the first quarter of 2026, such out-licensing transactions surpassed 60 billion USD, nearly half of the total deal value in 2025, as per the NMPA.

Rapid advances in China's biomedical technologies and the country's distinctive innovation- friendly industrial ecosystem are key factors behind the sector's growing appeal to international investors. According to a report by CBRE in April 2025, pharmaceutical and medical technology patent applications in



The medicine developed by Chinese biotech company Akeso is exhibited at the 8th China International Import Expo in Shanghai, 2025. (PHOTO: VCG)

China surged by 379 percent over the past decade. According to pharmaceutical data provider Citeline's report in March, China's share of global drug development is nearly 30 percent.

BioPharma Dive, a biopharma industry news outlet, reported that China's licensing deal boom is rooted in its efforts to upgrade biotech capabilities by upping investment in technological innovation. Chinese cities like Shanghai and Suzhou boast abundant skilled R&D professionals and hundreds of homegrown biotech companies that employ them. Clinical trial enrollment is speedy, while

staffing and supply chain costs are lower, helping companies move drugs along more cost-effectively.

U.S. drugmakers stand to reap substantial prospective financial gains from investing in China's biotech space. For instance, the antibody ivonescimab was developed by Chinese biotech company Akeso. In 2022, U.S.-based Summit Therapeutics was licensed to secure certain overseas commercial rights.

Though Merck's blockbuster immunotherapy Keytruda has been called "the pharmaceutical industry's most lucrative single product" currently, a study

shows ivonescimab outperformed Keytruda in a Phase III trial.

Investment and joint R&D partnerships between Chinese and U.S. biomedical enterprises deliver tangible health benefits to patients in both nations and across the globe. Partnerships such as those between Hengrui Pharma and BMS, or Akeso and Summit Therapeutics, are largely focused on difficult-to-treat or rare diseases in cancer, metabolic disorders and autoimmune. Scientific achievements generated through such collaborations create commercial value and technological progress for companies while also expanding access to more effective therapies and offering new hope for patients.

Efforts by several U.S. lawmakers to tighten restrictions are unlikely to bring Sino- U.S. biotechnology cooperation to a halt. Just days after Mooleenaar's letter, U.S. pharma giant Pfizer and China's Innovent Biologics agreed to a global licensing and collaboration deal worth up to 10.5 billion USD to develop 12 early- stage cancer medicines, Reuters reported.

As the world's two leading biotech powerhouses, China and the U.S. bear a shared responsibility to deepen collaboration for the future of global public health. From both the commercial and global governance perspectives, moves to restrict U.S. biotech investment in China are shortsighted and extremely unwise, reflecting an overreach of national security rhetoric among certain U.S. politicians who politicize normal commercial cooperation.

AI Era Unleashes New Cybersecurity Imperatives

Opinion

By LI Linxu

With the revised Cybersecurity Law coming into force this January, an AI security framework was introduced for the first time, setting a higher bar for AI security development.

"In the AI era, cybersecurity is a foundational industry whose market scale expands in tandem with the proliferation of digital intelligence transformation," said Qi Xiangdong, chairman of cybersecurity company Qi-Anxin Technology Group, in his keynote speech at the 2026 Beijing Cybersecurity Conference.

Institutions predict that by 2030, China's digital economy will exceed 80 trillion RMB, and its AI-driven core industries will reach 12.6 trillion RMB — presenting a hundred- billion- level growth opportunity for cybersecurity.

While technologies like AI continue to drive high-quality development, they have simultaneously amplified security risks.

This dynamic is fundamentally recalibrating the global cybersecurity landscape, catalyzing a wave of urgent, high-stake demands.

Since the start of this year, the continuous revelations of large language models (LLMs)' vulnerability-mining capabilities have triggered fluctuations in the cybersecurity sector.

Such fluctuations vividly reflect the widespread anticipation, uncertainty and anxiety surrounding AI, presenting the cybersecurity industry with both novel challenges and fresh opportunities.

According to Qi, as digital intelligence transformation scales up, three core demands — practical security, data security and full- stack security — are surging in tandem.

By 2027, 45 percent of enterprises will adopt AI- based risk and compliance solutions to guard against non-compliant behaviors from internal sources or associated third parties, and the investment scale of China's data security market is projected to reach approximately 20.5 billion RMB, according

to a report from the International Data Corporation.

The explosion of AI applications is also driving a massive surge in full-stack security demands.

Golden growth opportunities with the highest potential lie in AI-native security, scenario-specific security, application security, LLM security and embodied AI security.

Cybersecurity in the age of AI is a complex challenge, requiring capabilities that seamlessly cover all digital and intelligent blind spots.

"To this end, building an integrated, defense- in- depth endogenous security system represents the inevitable path for upgrading cybersecurity in the AI era," Qi said.

Data Network Protects Qinghai-Xizang Plateau

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In addition, a dynamic security management mechanism covering the full life cycle of data was established, giving each data set a unique digital object identifier, facilitating the accurate sourcing of data.

Making data "live"

Apart from safely storing the data, TPDC also spared no effort to allow the data to release its scientific values.

It has over 140,000 registered users. In 2025, the data downloaded exceeded 2,100 TB, and the webpage had been visited over 165 million times. In addition, two thirds of the data is fully open and can be downloaded without registration, while 27 percent of the downloads are done internationally.

Feng Min, researcher at ITP and deputy director of TPDC, said TPDC repeatedly ranked first in the assessment of data centers in the geoscience field by third-party evaluation agencies.

TPDC was also the first in the national data center system to introduce a peer review mechanism. Experts open

data, examine methods, evaluate precision and give feedback, Feng said, adding that this is like doing academic review for data.

Thanks to the strict quality control, TPDC's data began to play a key role in high-level scientific research.

Taking research on Tibetan Plateau lakes as an example, scientists have a more accurate grasp of the changes in the number, area and volume of lakes with TPDC's data products, generating a series of high-level achievements.

The first set of 75-year long-term near-surface meteorological driver data for China, developed by TPDC, has become a key dataset for research on climate change in the Tibetan Plateau and for engineering safety assessments. The global surface solar radiation data provides a crucial basis for the evaluation of new energy resources.

In addition, the data has been used in national major projects like the construction of the Sichuan-Xizang Railway, hydropower projects in the lower reaches of the Yarlung Zangbo River, and in responses to glacial lake out-

burst floods.

AI empowers decision making

How to ensure AI truly understands the complicated process of the Earth system remains a challenge, Li said. This is also the direction the TPDC researchers chose to follow.

In terms of data product development, TPDC has established a composite production model integrating multi-source observations, AI-enabled intelligent fusion, and physics-based model assimilation.

The value of data products depends on whether they can be directly used by scientists, Feng said. "AI helps us address efficiency issues in data generation under complex conditions, but every product still requires calibration using real-world data and expert oversight."

TPDC aims at a more challenging goal, modeling and digital twin of the Earth system, and proposed a "unified AI-driven Tibetan Plateau observation, data and model framework."

The model explores the introduction of multi-agent reinforcement learn-

ing methods, enabling multiple agents to simulate and project the evolving dynamics of rising temperatures, glacier melting, lake expansion and human adaptation in a virtual environment. This enables decision- making support for Earth system prediction and disaster early warning.

"Different from general large language models, we emphasize more the model to play a role in the prediction of the Earth system and decision making," Li said.

Looking into the future, TPDC is collaborating with other research teams to explore the integration of data assimilation, reinforcement learning and causal analysis within a digital twin of the Earth, with the goal of gradually building a digital twin platform capable of simulating and predicting changes in the plateau Earth system.

"We hope data not only records what happens on the plateau, but also can provide scientific basis for understanding the plateau's changing mechanism and responding to uncertainties in the future," Li said.

Voice of the World

China's River Governance: Shaping Greener Waterscapes

By QI Liming

China has made steady progress in protecting its ecosystem. Over the past decade, the ecological management of rivers, lakes and seas has evolved from concept to systematic practice.

The Yangtze River is a shining example. The regions along the river have advanced their water environment governance, aquatic ecosystem restoration, water resource protection, green industrial transformation and shoreline remediation.

China's efforts to protect and manage its water resources have received praise from members of the international community who have personally witnessed the achievements of the water management and the benefits brought about by the improvement of water quality.

Erik Solheim, former head of the United Nations Environment Programme, visited the Sanjiangyuan National Park in Qinghai province in northwest China in May. This is where the three massive rivers — the Yellow River, the Yangtze River and the Lancang River — originate and his video on X has been viewed more than 17,000 times.

Alexander Samuel Rhea, an American teacher at Qinghai Minzu University, visited the Yushu Tibetan autonomous prefecture in Qinghai in 2023. Yushu is located in the core area of the source of the three rivers. "The local people's awareness of ecological protection impressed me greatly," Rhea said. "The herdsmen not only picked up garbage voluntarily but also told me about the significance of protecting

the ecological environment of the three rivers' source."

Sukonna Gonsalves, a Bangladeshi student in China's Jiangsu University of Science and Technology, said the Yangtze is not just a rushing river, but also a green connection that integrates into the daily life of people.

"Standing on the bank of the Yangtze in Zhenjiang (a city in Jiangsu province in eastern China), I witnessed the busy traffic of cargo ships in the river, the lush greenery along the banks, and the clean and spacious walkways. People were strolling, cycling and resting along the riverbank. The development of the city and the protection of the environment complement each other," she said.

Osam Khan, a Pakistani student at Anhui University of Technology, said he often takes a walk in the Binjiang cultural park in Ma'anshan, a city in Anhui province, east China. "When I looked through old photos, I realized that this stretch of coastline was once occupied by numerous docks and sand quarries," he said. "Now, it is like a 'large living room' that the city has opened towards the Yangtze River. People live peacefully by the river."

Richard, a Zambian studying at Nanjing Normal University of Special Education, said the Swallow Promontory Park of Nanjing in Jiangsu used to be a heavy chemical industrial base. "Now, after the relocation and renovation of the enterprises, the riverbank is a lush green area, and this has awakened the long- standing riverbank culture. I was fortunate to record and witness this transformation."



Rivers of Yushu Tibetan autonomous prefecture in Qinghai province, February 1, 2026. (PHOTO: XINHUA)

Hi-Tech

AI Agent Makes Traffic Lights Smarter

By GONG Qian

At ZKBRAIN, a technology enterprise based in Haidian district, Beijing, an AI agent optimizes traffic signal timing at road intersections in real time, as displayed on its large demonstration screen.

In pilot zones, the agent can generate 200 sets of signal timing plans within 50 seconds to enable smarter traffic lights and smoother road traffic.

Leveraging 3D modeling, spatial intelligence and digital twin technologies, the agent creates digital replicas of on-road vehicles and pedestrians. AI cameras capture real-time traffic conditions, while proprietary algorithms enable precise traffic signal control, shifting the traffic management paradigm from vehicles adapting to fixed signals to traffic signals responding to real-time traffic flows.

Powered by the smart AI system, some problems in urban transportation have been effectively addressed.

For instance, traffic signals at intersections gain autonomous decision-making capabilities. Traditional traffic lights

follow fixed, round-the-clock timing schedules, leaving vehicles to wait passively for signal changes. Such static control proves inefficient, causing wasted green-light time and prolonged vehicle queues during red-light cycles.

By monitoring real-time traffic flows through roadside sensors, the AI agent significantly reduces unnecessary vehicle waiting time and enhances overall road throughput. It autonomously adjusts green-light durations according to real-time traffic conditions; for example, green lights can be extended by one to 15 seconds during traffic congestion to meet actual vehicle passage demands. So far, the system has been deployed at 19 intersections across Haidian district.

To address the high supervision costs and excessive reliance on police manpower in traffic violation management, the AI agent provides real-time early warning and tracking for common traffic violations, including illegal lane changes by motor vehicles and red-light running by non-motor vehicles. This improves traffic management efficiency and reduces law enforcement costs.