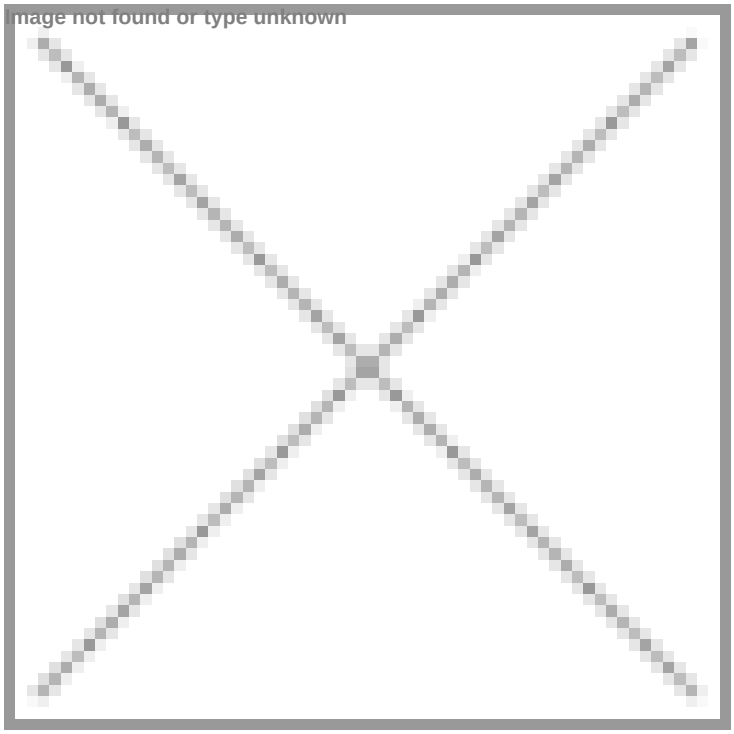
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

China Bans Illumina, Deepening U.S.-China Trade Rift and Reshaping Global Biotech

05 March 2025 | Analysis | By Ankit Kankar | ankit.kankar@mmactiv.com

Beijing bans U.S. gene-sequencing giant from selling in China, fueling local biotech expansion and intensifying geopolitical tensions.



Amid intensifying U.S.-China trade tensions, Beijing has escalated its retaliatory measures by banning U.S. biotechnology firm Illumina, Inc. from importing gene-mapping products into China. The Chinese Ministry of Commerce (MOFCOM) announced the decision on Tuesday, citing violations of market transaction rules and discriminatory practices against Chinese companies.

Illumina, the world's leading producer of gene-sequencing machines, derives approximately 7% of its revenue from China. The ban comes as part of a broader crackdown on American firms, with Beijing adding 10 more U.S. companies to its "Unreliable Entities List" and imposing punitive trade measures on 15 others, including drone maker Skydio, under the pretext of safeguarding national security.

Understanding the "Unreliable Entities List" and Its Implications

China's "Unreliable Entities List" serves as a regulatory tool designed to penalize foreign businesses that, according to Beijing, violate market principles, endanger national security, or engage in actions that harm Chinese firms. Companies placed on this list face severe consequences, including trade restrictions, investment limitations, fines, and potential bans

on operations within China.

For Illumina, a global leader in gene-sequencing technology, this designation presents significant business hurdles. The biotech firm, which derives nearly 7% of its revenue from China, plays a crucial role in genetic research, precision medicine, and oncology diagnostics. A ban on its products could disrupt existing research collaborations and force Chinese institutions to shift to local alternatives like BGI Genomics and MGI Tech, further strengthening China's domestic biotech industry.

Illumina's Response and Industry Reactions

In a formal statement following the announcement, Illumina emphasized its commitment to adhering to Chinese regulations and expressed hope for a resolution through dialogue.

"We respect and abide by Chinese laws and regulations. We also appreciate the Chinese government's long-term support for foreign investors, including Illumina," the company stated.

Industry experts, however, see this as a strategic setback for Illumina, especially at a time when it faces regulatory pressures in the U.S. regarding antitrust concerns and competition from emerging players in the gene-sequencing market. The biotech industry's dependence on cross-border collaboration makes this trade dispute particularly damaging, not just for Illumina but also for scientific researchers and healthcare providers in China.

How China Stands to Gain: Boosting Domestic Biotech Innovation

China's decision to blacklist Illumina is not just about trade disputes—it is about strategic self-sufficiency. Over the past decade, China has aggressively invested in biotech and genomics research, aiming to reduce reliance on U.S. technology. By blocking Illumina, Beijing is effectively pushing domestic biotech firms into a stronger competitive position.

Companies like BGI Genomics and MGI Tech—both major players in DNA sequencing—are expected to capture market share that Illumina leaves behind. This shift aligns with China's Made in China 2025 initiative, which prioritizes biotech as a critical industry for national security and economic growth.

Moreover, by blacklisting PVH Corp. alongside Illumina, China is sending a broader message: foreign companies that fail to comply with Chinese business interests—or align too closely with U.S. policies—will face consequences.

Investor Concerns and Market Reactions

Illumina's stock tumbled immediately after the announcement, reflecting investor anxieties over the company's ability to sustain its international growth strategy. While China contributes a relatively small portion of Illumina's overall revenue, analysts warn that the long-term impact could be more severe if other markets begin adopting similar protectionist measures.

Additionally, the biotech sector, already navigating supply chain disruptions, rising R&D costs, and geopolitical uncertainties, now faces another layer of risk due to growing fragmentation in the global market.

The Bigger Picture: Is Biotech the New Battleground in the U.S.-China Trade War?

The targeting of Illumina and the broader trend of China restricting access to foreign biotech companies signals a deeper shift in global trade dynamics.

Biotechnology is not just a commercial industry—it is a sector with national security implications. Genetic sequencing data has immense value in healthcare, pharmaceuticals, and even biosecurity. The U.S. has long expressed concerns over China's access to genomic data and has placed restrictions on Chinese biotech firms like BGI, citing data privacy risks and potential ties to the military.

By blacklisting Illumina, China appears to be responding in kind—weaponizing biotech trade restrictions as part of the broader economic war.

What Comes Next?

As tensions between Washington and Beijing continue to escalate, the repercussions of this move could extend beyond Illumina. The U.S. might respond with further sanctions on Chinese biotech firms, potentially limiting their ability to access American research collaborations, funding, and advanced sequencing technology.

For Illumina, this may mean shifting focus away from China and investing in markets with fewer regulatory roadblocks, such as India, Southeast Asia, and the European Union. However, given the current trend of economic decoupling, multinational biotech firms will have to rethink their global strategies to navigate the increasingly hostile trade environment.

China’s blacklisting of Illumina is not just a trade dispute—it is a geopolitical maneuver with far-reaching consequences for biotechnology, global commerce, and scientific innovation.

While Chinese firms stand to benefit in the short term, the fracturing of the global biotech landscape could ultimately slow down international research collaborations, drug development, and data sharing—harming the very innovations that drive progress in medicine and healthcare.

With the biotech sector emerging as a critical front in the U.S.-China rivalry, the question remains: Will this be an isolated incident, or is it the beginning of a broader biotech Cold War?