

Press Release

SyntheticGestalt and Enamine Build the World's Largest Experimentally Validated AI-driven Chemical Data Ecosystem

Tokyo, Japan, and Kyiv, Ukraine — 3 August 2026 SyntheticGestalt, a pioneering AI technology company focused on molecular innovation, and Enamine, the developer of the most extensive, synthetically accessible, and trusted chemical space, today announced a landmark collaboration to create the world's largest *in vitro* validated AI-driven chemical data ecosystem.

Artificial intelligence has become a powerful tool in drug discovery, but it lacks quality data to excel. Enamine has developed a curated database of billions of highly feasible REAL Compounds and has integrated its high-throughput synthesis capabilities with on-site pharmacological and ADME/Tox tests in the proprietary B-REAL discovery platform. This enabled high-speed and affordable data generation. Two companies have forged a strong partnership, leveraging SyntheticGestalt's cutting-edge AI-driven predictive technologies to compress drug discovery timelines that traditionally span years into mere months.

In the new collaboration, with strategic support from GENIAC (Generative AI Accelerator Challenge), a subsidy program by Japan's Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organisation, which is a national agency, SyntheticGestalt will analyze 100 industry-relevant protein targets and prioritize REAL Compounds for synthesis. Enamine will provide fully integrated capabilities of the B-REAL discovery platform, encompassing parallel synthesis, protein production, activity assays, and preclinical *in vitro* validation – all under one roof. The resulting dataset, unprecedented in scale and scope, is expected to be released in 2027, providing the global scientific community, first of all, Japanese pharma partners, with a transformative resource to accelerate drug discovery and innovation.

Koki Shimada, CEO at SyntheticGestalt, commented: *"We founded SyntheticGestalt on a simple conviction: AI should be the primary inventor of new molecules. This collaboration with Enamine turns that conviction into practice, uniting our world-leading molecular foundation model ZAO, born from Japan's deep scientific heritage, with Enamine's unmatched synthesis and validation capabilities. Together, we are building the first data ecosystem where AI predictions are grounded in experimental truth at unprecedented scale. With strategic support from Japan's national innovation agenda, we will generate hundreds of thousands of data points across 100 high-demand protein targets. Japanese pharma and chemical companies will benefit first, but the fusion of our technology and Enamine's platform is designed to reshape the global molecular industry, shifting AI from concept to practical reality."*

"Enamine is proud to partner with SyntheticGestalt on this visionary initiative," added Iaroslava Kos, Director, Business Development at Enamine. *"This collaboration represents a bold step toward redefining how AI and experimental science converge to unlock new frontiers in drug discovery. Together, we are creating a data ecosystem that will empower Japanese researchers with unprecedented tools to drive innovation and deliver solutions to pressing medical and agricultural challenges."*

"The strength of this partnership lies in the iterative synergy between AI and experiment. By anchoring SyntheticGestalt's predictions in Enamine's rapid synthesis and rigorous biological

validation, we are creating a verified ecosystem that accelerates the transition from digital concepts to tangible molecular leads,” emphasized Petro Borysko, Director of Biology at Enamine.

Dmytro Radchenko, Head of Parallel Chemistry at Enamine, commented: *“The true value of REAL Space lies in its immediate chemical accessibility and the massive throughput of our parallel synthesis, which allows us to produce thousands of novel compounds in just a few weeks. By incorporating this vast, tangible diversity into our shared data ecosystem, we ensure that the billions of AI-driven virtual possibilities are rapidly transformed from digital ideas into physical molecules for experimental validation at an unprecedented scale.”*

About Enamine Ltd.

Enamine is the leading provider of chemical compounds and a scientifically driven, integrated discovery Contract Research Organisation for integrated drug discovery (IDD) with unique partnering opportunities in exploring new chemical spaces. The company combines access to in-house-produced screening compounds (4.8 million in stock) and building blocks (375,000 in stock) with a comprehensive platform of integrated discovery services in bioinformatics, biology, and chemistry to advance and accelerate drug discovery efforts. <https://enamine.net/>

About Enamine REAL:

Enamine REAL (REadily Accessible) contains trillions of synthetically feasible molecules that can be synthesized at Enamine extremely fast (3-4 weeks), with high feasibility (over 80%), and inexpensive. The REAL Compounds are created by parallel chemistry through the compilation of 203K in-stock building blocks via 169 well-validated parallel synthesis protocols, underlying Enamine’s approach to design make-on-demand compounds to maximize synthesis success rate. For more information, visit: <https://enamine.net/compound-collections/real-compounds>