PEPTIDE NEWS

By Ved Srivastava

SUMMARY

In 2025, the peptide field continued to accelerate across multiple vectors, including strategic corporate deals and licensing of platforms, as well as a stream of clinical advances, most notably in long-acting metabolic peptides and next-generation peptide biologics. It has sharpened the scientific advances in the peptide therapeutics field with sophisticated AI/ML frameworks for de novo peptide design and optimization. Key highlights are discussed below.

BREAKING NEWS

On Nov. 24, 2025, Dayra Therapeutics, a new biotech launched by Versant Ventures, is developing oral macrocyclic peptide drugs for immunological diseases and has formed a research partnership with Biogen. Biogen will provide a $50 million upfront payment. Dayra also secured a $20 million equity commitment from Versant.

On Nov. 13, 2025, Pfizer announced the successful completion of its acquisition of Metsera, Inc., valuing the deal at approximately $7.0 billion and adding a robust peptide portfolio of obesity and cardiometabolic drug candidates to its Internal Medicine pipeline. The acquisition brings MET-097i, a weekly and monthly injectable GLP-1 receptor agonist entering Phase 3, MET-233i, a monthly amylin analog in Phase 1 being evaluated alone and with MET-097i, as well as an oral GLP-1 RA in Phase 1; and additional preclinical nutrient-stimulated hormone therapeutics.

In October 2025:

Novartis announced the acquisition of Avidity Biosciences, a company focused on a new class of therapeutics enabling RNA delivery to muscle. The acquisition will strengthen Novartis's late-stage neuroscience pipeline, and Avidity will expand early-stage precision cardiology programs, possibly as a separate entity.

Rani Therapeutics announced a $1.085 billion collaboration and license agreement with Chugai Pharmaceutical to develop and commercialize an oral biologic using its RaniPill® platform with Chugai's rare and immunologic diseases.

The clinical-stage biotechnology company Peptilogics announced the completion of an $78 million Series B2 financing round. The funding will support the company's Phase 2/3 pivotal trial of Zaloganan (PLG0206), a first-in-class investigational treatment for prosthetic joint infections (PJI).

Johnson & Johnson (J&J) entered discussions to acquire Protagonist Therapeutics, prompting a more than 30% surge in Protagonist's share price on the day. The company's lead candidate, Icotrokinra (JNJ-2113), a hit from mRNA display, 8 non-canonical amino acids, 1.90 kDa, Alog P -0.11, an oral peptide targeting immune-mediated diseases such as plaque psoriasis and ulcerative colitis, is in late-stage clinical development. Protagonist, with a market capitalization of approximately $4.2 billion, is collaborating with J&J, which holds exclusive commercialization rights to Icotrokinra. The negotiations are preliminary, and no definitive agreement has been reached yet.

BUSINESS & COLLABORATION DEALS

The recent surge in strategic alliances and financing underscores growing investor and pharmaceutical confidence in next-generation biologics and peptide discovery. The deal marks a catalyst for 'Investment in Peptide Platforms and Validation of Oral Peptide Therapeutics', which has traditionally been a significant barrier in peptide therapeutics.

In October 2025, Halozyme announced plans to buy Elektrofi (up to $900 million), largely to bolster its drug delivery capabilities (e.g. biologics and peptide therapeutics) using Elektrofi's "Hypercon" platform.

In September 2025, PepGen announced the pricing of a $100 million public offering of 31.25 million shares at $3.20 per share, to advance its FREEDOM-DM1 and FREEDOM2-DM1 clinical trials and next-generation oligonucleotide therapeutic programs.

In August 2025, BioMed X and Novo Nordisk launched a project focused on oral formulations of peptide drugs such as GLP-1 mimetics, specifically designing systems that prolong retention in the lower small intestine to boost absorption.

In July 2025, Unnatural Products, Inc. (UNP), announced a multi-target research and licensing agreement with Argenx that could exceed $1.5 billion in potential research, development and commercial milestones, in addition to an upfront payment and future royalties. The collaboration positions the non-canonical amino acid-driven platform to discover and develop orally available macrocyclic peptide drug candidates for several "undruggable" targets.

In June 2025, Novo Nordisk struck a licensing deal worth up to $812 million with Deep Apple Therapeutics to co-develop drugs targeting cardiometabolic and obesity indications. While Deep Apple's platform is not purely peptide, this is relevant in the broader peptide and metabolic therapeutics space.

In March 2025, Roche and Zealand Pharma signed a $5.3 billion deal for an amylin-based peptide, Petrelintide, 4.2 kDa, comprising 3 non-canonical amino acids, aimed at obesity/weight-loss indications.

In January 2025, AbbVie completed the acquisition of Nimble Therapeutics, a company with an oral peptide IL-23 receptor (IL23R) inhibitor in preclinical development, and proprietary peptide synthesis/optimization platforms. This builds AbbVie a foothold in oral peptide therapeutics for immunology/ autoimmune (e.g. psoriasis) space.

FDA APPROVALS

Regulatory bodies are refining guidance on peptides and continue to approve peptide-based drugs for addressing unmet medical needs.

In October 2025, Wegovy (semaglutide) gained a new indication: accelerated approval in the US for treatment of non-cirrhotic metabolic dysfunction-associated steatohepatitis (MASH).

In September 2025, the synthetic tetrapeptide (D-Arg-Dmt-Lys-Phe-NH2) Elamipretide (Forzinity) was approved by the FDA to improve muscle strength in people with Barth syndrome (for those weighing ≥ 30 kg). It's a mitochondrial cardiolipin peptide binder.

I**n August 2025**, the calcitonin gene-related peptide antagonist Ajovy (fremanezumab-vfrm) got its indication expanded. It is now approved for pediatric episodic migraine in a younger population (4 to < 30 kg).

TECHNOLOGY PLATFORM ADVANCEMENT

AI has moved from hype to practical integration in peptide design workflows.

In October 2025, AstraZeneca entered into a licensing agreement with Algen Biotechnologies to develop gene therapies using Algen's proprietary AI-powered gene-editing platform for targeting immune system-related disorders. The deal is valued at up to $555 million, including upfront and milestone payments.

AstraZeneca also invested in artificial intelligence for drug discovery, following its $5.3 billion partnership with China's CSPC Pharmaceutical, announced in June.

Peer-reviewed studies and industry collaborations published in 2025 demonstrate the application of deep learning, reinforcement learning, and hybrid evolutionary strategies, including the Integration of large language models (LLMs) to design peptides with tunable properties (binding, stability, and aggregation tendency).

In September 2025, the Nature Journal reported "Artificial intelligence-driven approaches for the rational design of peptides with predictable aggregation propensity". This is an example of how ML is now addressing subtle developability issues important for peptide drugs.

OUTLOOK

Deal activities in 2025 show two clear themes: (1) platform consolidation to enable better peptide/biologics drug development and (2) large pharma doubling down on acquisition of peptide biotech and on AI-enabled discovery partnerships.

This year, the U.S. Food and Drug Administration (FDA) continues to intensify oversight of supply-chain integrity and compounding practices involving GLP-1 receptor agonists and other high-demand peptide therapeutics. The FDA addressed shortages, unauthorized imports, and misuse of GLP-1 ingredients in compounding. The FDA's evolving stance reinforces the need for proactive regulatory alignment and supply security in the peptide therapeutics sector.

Looking ahead, we anticipate a marked increase in clinical readouts and impactful peptide-related advancements, coupled with the integration of experimental flow-synthesis and AI-driven design loops into development pipelines by 2026.