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Syngene International invests in dedicated peptide laboratory and advanced automation in Bengaluru

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Accelerating hit-to-lead timelines, and strengthening end-to-end drug discovery and development services



Syngene International, a global contract research, development, and manufacturing organization (CRDMO), has announced site upgrades to accelerate drug discovery and development, helping clients bring novel therapies to market faster.

The investments included a dedicated, state-of-the-art peptide laboratory in Bengaluru and the integration of advanced automation across DMPK (Drug Metabolism and Pharmacokinetics) and Direct-to-Biology (D2B) workflows in Hyderabad—boosting scalability, cost-efficiency, and data quality to accelerate therapeutic innovation.

The dedicated peptide laboratory is designed to produce a wide range of molecules, including linear peptides, cyclic peptides, and peptide-drug conjugates, and supports synthesis scale-up to 800 mmol (millimole). With six automated peptide synthesizers operating in parallel and equipped with robotic arms, the lab reduces project timelines by weeks or even months while ensuring consistent results. It also features integrated Solid-Phase Peptide Synthesis (SPPS), High-Performance Liquid Chromatography (HPLC), and Liquid-Phase purification, and coupled with Quality Control (QC) laboratories provide innovators with a seamless transition from discovery to development.

In parallel, Syngene has made an automation-driven transformation in the DMPK operations. The automation includes Robotic systems for high-throughput sample preparation that reduces turnaround times from five days to three and improves cost efficiency by 30%, and triples sample capacities, providing clients access to critical data much faster. The D2B platform further accelerates hit-to-lead and lead optimization by combining rapid compound design, miniaturized synthesis, and high-throughput screening — saving at least a week for 24-compound sets and several weeks for larger sets.