Synthace Unveils First Life Sciences R&D Cloud Addressing Complexity, Speed & Reproducibility for Scientists

First Ever No-Code Platform Lowers Barriers to Automated Biological Experimentation and Insight Sharing

LONDON--(BUSINESS WIRE)-- Synthace, a leading life sciences software company, today announced the first life sciences R&D cloud that includes a no-code software platform addressing the largest barriers to innovation that R&D life scientists currently face. With the release of this new platform, Synthace is also the first vendor to enable scientists to automate experimentation and insight sharing in a unified, global R&D environment. Scientists can now focus on asking the most impactful questions and unlock the true potential of biology.

To solve humanity's hardest problems, such as delivering breakthrough therapies or alternative food sources, the life sciences industry is under tremendous pressure to simultaneously overcome biology's complexity, accelerate speed to scientific insight, and ensure the reproducibility of experiments. Synthace alleviates these challenges by empowering scientists to improve and accelerate decision-making with more statistically powerful, automated experiments that can minimize human error. Furthermore, Synthace's cloud platform leverages intelligent, dynamic automation to produce the highest quality data sets that are primed for machine learning (ML) and other advanced analyses to lead to better insights. With Synthace, the life sciences can now benefit from a quantum leap in experimentation capabilities, accelerating development timelines that would have previously been impossible.

Customers Accelerate R&D with Synthace

Ipsen has been using Synthace to automate the design and construction of therapeutic candidates. With Synthace, Ipsen produced approximately 90 constructs five times faster than previous methods, substantially increasing the number of molecules entering the screening cascade. The platform also achieved a 10-fold reduction in costs associated with DNA synthesis.

Karen Bunting, Director of Protein Sciences at Ipsen commented, "Synthace sits very well at the beginning of our drug discovery process. It allows us to explore larger drug design space by simplifying planning and production of multiple molecule variants with combinatorial construct assembly. These throughput improvements help us deliver well-tolerated and effective therapeutic solutions more rapidly to our patients."

Microsoft Research also uses Synthace to automatically generate biological data at a volume that allows its ML algorithms to rapidly improve. As part of reporting on advancements in programming biological systems, a member of its Biocomputation Group noted: "Synthace really comes into its own when we're performing experiments with complex layouts like combinatorial construct assembly and design of experiments. When we're building 12 constructs at a time, Synthace automates all the planning that would go into setting up such an experiment and allows it to become routine."

A New Paradigm for Life Sciences R&D

Biopharmaceuticals represents one of the few global industries that not only weathered the pandemic relatively unscathed but is also undergoing a new period of innovation. Biopharma organizations are developing everything from COVID-19 vaccines and treatments to cell and gene therapies and antibody-drug conjugates that can change the course of rare diseases.* In order for this R&D to continue at the brisk pace that the world expects, advanced cloud technologies that simultaneously address complexity, speed, and data reproducibility have to meet the growing market demand.

"With the launch of our new life sciences R&D platform, we're one step closer to realizing our bold vision of transforming the way life scientists can solve humanity's most pressing problems," commented Guy Levy-Yurista, Ph.D., CEO of Synthace. "Automated experimentation and insight sharing in a global R&D environment is already enabling our customers to achieve their goals. With Synthace, they're accelerating new therapeutics to market even faster, creating a better future for us all."

Synthace Life Sciences R&D Cloud

The platform provides end-to-end management of the experimental lifecycle, from design through execution to data visualization and knowledge transfer. Synthace adheres to FAIR principles to support interoperability with other major lab informatics platforms to ensure streamlined data management for all of its customers.

Only the Synthace Life Sciences R&D Cloud delivers:

- Complete experimental design, planning and automation, requiring no coding expertise. Scientists can define more informative and impactful experiments that would otherwise be impossible to run and easily implement Quality by Design (QbD) and Design of Experiments (DOE).

- Seamless, cloud-based data capture, processing, and visualization. R&D teams can deliver deeper and faster insights from fully contextualized, machine learning-ready data sets that are automatically generated from the laboratory.
- Minimal deployment and onboarding. Customers experience rapid time-to-insight through Synthace's out-of-the-box platform features and pre-validated protocols for common applications such as ELISA and high-throughput purification, helping them shorten R&D cycles and study more candidates per program.

Visit www.synthace.com/platform to learn more about the Synthace Life Sciences R&D Cloud.

About Synthace

Synthace is a life sciences software company enabling life science the way it should be done. Delivering a life sciences R&D cloud to scientists who want to innovate faster, the Synthace platform seamlessly automates experimentation and insight sharing so that scientists can focus on asking the most impactful questions to unlock the true potential of biology. Top global pharmaceuticals, high-growth biotech companies, leading CDMOs, and innovators in artificial intelligence all turn to Synthace to discover solutions to humanity's hardest problems. To learn more about how Synthace is transforming life sciences for a better future visit www.synthace.com.

*Source: 2021 healthcare and life sciences investment outlook, KPMG.