

BenchSci Announces Launch of ASCEND™ – a First-of-its-Kind ‘Map’ of All Disease Biology that Aims to Transform Pharmaceutical Research

The SaaS solution is powered by proprietary machine-learning technology that reads and interprets data like a PhD scientist

TORONTO, January 31, 2023 – BenchSci, a world leader in AI solutions for drug discovery, today announced the launch of its latest technology, ASCEND™ by BenchSci, helping remove barriers that result in 98 percent of pharmaceutical research investment that fails to reach patients. The intuitive software platform empowers scientists to discover biological connections, dramatically reduce trial-and-error experimentation and uncover risks early to move the most promising projects forward faster.

ASCEND harnesses BenchSci's proprietary machine learning technology that is trained by scientists to extract experimental evidence from internal and external sources. Using curated ontology datasets, it makes connections across experiment outcomes to create the first commercially available, unbiased and evidenced-based map of the underlying biology of disease.

Top pharmaceutical companies that were early adopters of ASCEND found significant improvements to their portfolio performance including:

- 40% of projects identified a new indication to explore or an additional target gene not previously considered
- 33% of projects identified a safety or efficacy risk early to improve R&D productivity
- Retrospective analysis unveiled that scientists could have uncovered insights and dramatically reduced unnecessary experiments to accelerate pre-clinical programs by a minimum of 40% improvement in this phase of drug development

“BenchSci has developed a technology with the potential to transform the speed and success of preclinical research,” said Philip Tagari, Vice President of Research at Amgen. Mr. Tagari and his team worked closely with BenchSci to shape the technology over two years. Today, all therapeutic area preclinical teams at Amgen can leverage this novel platform to advance their work. “With ASCEND, BenchSci has developed a unique approach to extracting and connecting scientific evidence from within and outside Amgen. Based on results across many programs, we are excited to continue to provide ASCEND by BenchSci broadly

across the organization to catalyze our research. Amgen's work with BenchSci has helped place Amgen at the forefront of leveraging AI enterprise-wide as we advance new medicines for patients most in need."

ASCEND, an end-to-end enterprise-wide SaaS solution, guides scientists at every stage of preclinical research by:

- Augmenting target selection, due diligence and hypothesis generation
- Developing optimal investigative approaches to test hypotheses and design experiments that yield definitive results and reduce trial-and-error
- Identify safety and efficacy risks to support successful IND (investigational new drug) submission and clinical translation

On average, 98 percent of pharmaceutical experimental research projects, including the respective time, materials, and brainpower deployed in the quest for novel medicines, fail to reach patients. This costs the industry billions in R&D investment annually and delays new medicines for patients in need. The increasing complexity of disease biology makes finding novel discoveries challenging. Scientists have been underserved for decades without major advancements in tools and technology to efficiently navigate the magnitude of scientific data and evidence. Building on the success of its AI-Assisted Reagent Selection application, which helps scientists select reagents with 40% increased efficiency, the team at BenchSci asked themselves how they could bring that same productivity to extract breakthrough insights and connect the wealth of data to accelerate all aspects of preclinical research.

"At BenchSci, we share our partners' visions to help bring hope to patients faster. Our role in solving this enormous challenge is to develop and train technology that can change the world through the eyes and mind of scientists," explained Liran Belenzon, CEO and Co-Founder of the Canadian-based BenchSci. "It's not simply the proprietary AI that's revolutionary. What's remarkable about ASCEND is the unification of cutting-edge technology, a depth of experience in disease biology and our collaboration with leading pharmaceutical companies that has created the potential to advance the speed and success of better medicine to patients."

In addition to the data and evidence from over 15 million publications that are continuously updated, ASCEND also incorporates internal experiment data securely for each customer, yielding a powerful and proprietary view of the organization's unique biological insights from across its research history available only to them. This approach not only helps scientists understand the biological feasibility of new or existing pursuits, but also how to most effectively test them.

This announcement follows BenchSci's launch of its AI-Assisted Reagent Selection application in 2015 currently leveraged by 16 of the world's top 20 pharma companies and at 4,500 research facilities globally. BenchSci has raised \$100M in funding to date and is backed by top-tier investors including Inovia Capital, TCV, F-Prime, Gradient Ventures (Google's AI fund), and Golden Ventures.

For more information about ASCEND and BenchSci, visit [BenchSci.com](https://www.benchsci.com).

About BenchSci

BenchSci is a world leader in AI solutions for drug discovery. We help pharma organizations transform their R&D portfolio by surfacing the underlying biology of all diseases to revolutionize research and exponentially advance the speed and success of better medicine to patients. Backed by top-tier investors including iNovia Capital, TCV, F-Prime, Gradient Ventures (Google's AI fund), and Golden Ventures, our platform accelerates science at 16 top-20 pharmaceutical companies and over 4,500 leading research centers worldwide. We're a Deloitte Technology Fast 50TM and Fast 500TM winner, a certified Great Place to Work®, and a top-ranked company on Glassdoor.

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