

Video Interview: Successful Pilot-Scale Run with Cayman Chemical Validates eXoZymes' Technology and Scalability

LOS ANGELES, CA, UNITED STATES, March 18, 2026 /EINPresswire.com/ -- Today, [eXoZymes Inc.](https://www.exozymes.com) (NASDAQ: EXOZ) ("eXoZymes") - a pioneer of AI-enhanced enzymes that transforms abundant feedstock into valuable nutraceuticals and novel medicines - announced an important validation and de-risking milestone for its cell-free biomanufacturing platform: An independent partner, [Cayman Chemical](https://www.caymanchemical.com), successfully ran eXoZymes' technology at pilot scale and achieved results consistent with - and in some cases exceeding - earlier internal runs.

eXoZymes is a [B2i Digital Featured Company](https://b2idigital.com/exozymes-1). See their full profile at <https://b2idigital.com/exozymes-1>.

Link to the video interview: <https://exozymes.twentythree.com/interview-cayman-chemical-validates>

Using eXoZymes' tech transfer package, Cayman Chemical advanced the protocol from a one-liter setup to a 100-liter pilot run, operating the reaction, downstream processing, and analysis independently. During the run, the team encountered real-world conditions - including pH variation and precipitation - which often cause enzyme-based processes to fail. Despite this, the reaction continued to perform reliably and delivered strong results, ultimately producing more than 500 grams of pharma-grade N-trans-caffeoyltyramine (NCT) at 99.6% purity, a result that is difficult to obtain in biomanufacturing without extensive purification steps. Additionally,



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Damien Perriman, Chief Commercial Officer at eXoZymes

the 99% conversion of feedstock to end product highlights a level of efficiency that is challenging to achieve and maintain in traditional biomanufacturing.

For Cayman Chemical, the outcome stood out based on prior experience as highlighted by Patrick Westcott, Director of Catalog Chemistry Production at Cayman Chemical: “I’ve performed a lot of cell-based enzymatic biocatalysis over the years; it is a critical component of what we do at Cayman. One common aspect of this work is a drop in efficacy during scale-up. Anytime you move up in scale orders of magnitude, a process changes enough that it is considered a different process altogether.”

Westcott, continues, “During the experiment, from the first sample that we took the analysis showed over a 99% conversion rate. There was some concern because I thought that that maybe was a little bit too high. So, we decided to take a second sample to see if it maintained a similar conversion rate. And we were a little surprised to find out that we actually did achieve this 99% conversion in our first 100-fold scale up of their process. That was very much an aha moment for us!”

“This pilot run is an important validation of our cell-free platform, demonstrating that it performs reliably at scale and delivers strong results in the hands of an external partner. The fact that this project reached pilot scale in less than a year underscores our ability to move R&D at a disruptive pace - and just as importantly - it meaningfully reduces platform execution risk by showing that our technology can be transferred and operated successfully beyond our own labs.” states Chief Commercial Officer at eXoZymes, Damien Perriman, and continues, “With more than 500 grams of pharma-grade NCT now available from this run, we are actively engaging partners interested in evaluation, formulation development, and potential commercialization.”

Formulation can be shipped to partners

With isolated high-purity NCT now produced at pilot scale, eXoZymes is actively engaging with partners interested in formulation development, product validation, and application-specific testing. The availability of high-purity material enables partners to move beyond feasibility studies and into hands-on evaluation under relevant conditions. Companies seeking to explore potential use cases, assess performance, or initiate collaborative development discussions are invited to contact eXoZymes to request samples and discuss next steps, right here:

<https://exozymes.com/partners>

About Cayman

Cayman Chemical helps make research possible by providing products and services to scientists worldwide. Cayman's collection includes high-quality biochemicals, assay kits, antibodies, and proteins, empowering researchers to understand the biological mechanisms of health and disease and develop new therapies. Cayman's expert scientists also offer custom synthesis, purification, and characterization of biochemicals ranging from small drug-like heterocycles to complex biolipids, and fatty acids, and are highly skilled in all aspects of assay and antibody development, protein expression, crystallization, and structure determination. In addition, Cayman offers a wide range of analytical services using LC-MS/MS, HPLC, GC, and many other techniques. Cayman performs generic drug development and production in both Ann Arbor, Michigan and Neratovice, Czech Republic.

Learn more at www.caymanchem.com

About eXoZymes

Founded in 2019, the company has developed a biomanufacturing platform that - as a historic first - offers the tools and insights to design, engineer, control and optimize nature's own natural processes to produce highly valuable natural products, via a commercially scalable, sustainable, and abundant alternative: exozymes.

Exozymes are advanced enzymes enhanced through bioengineering and AI to thrive in a bioreactor without using living cells. Exozymes can replace toxic petrochemical processes and inefficient biochemical extraction with sustainable and scalable biosolutions that transform abundant feedstock into valuable nutraceuticals and novel medicines.

By freeing enzyme-driven chemical reactions from the limitations imposed by cells, exozyme biosolutions eliminate the scaling bottleneck that has hampered commercial success in the synthetic biology (SynBio) space, making exozymes the next generation of biomanufacturing.

While the company, eXoZymes Inc., has introduced "exozymes" as a scientific concept, they are not trademarking the concept, as they view it as a new nomenclature for wide adoption for this next generation of biomanufacturing that eXoZymes aims to pioneer and be the market leader of.

Learn more at exozymes.com

eXoZymes Safe Harbor

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looking statements contain these identifying words. All statements other than statements of historical facts included in this press release regarding the company's strategies, prospects, financial condition, operations, costs, plans and objectives are forward-looking statements. Actual results could differ materially for a variety of reasons. You should carefully consider the risks and uncertainties described in the "Risk Factors" section of eXoZymes' quarterly reports on Form 10-Q, annual reports on Form 10-K, and other documents filed by eXoZymes from time to time by the company with the Securities and Exchange Commission. These filings identify and address important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and eXoZymes assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. eXoZymes does not give any assurance that it will achieve its expectations.

Media:

David Shapiro

B2i Digital, Inc.

+1 212-579-4844

david@b2idigital.com

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