



Metagenomi Presents Novel, Highly Specific and Efficient Adenine Base Editors for Broad Genome Editing at ESGCT

10.24.24

Metagenomi Adenine Base Editors (ABEs) demonstrated over 95% genome targetability

Simultaneous ABE triplex editing resulted in over 95% protein knockdown in primary T-cells

ABE demonstrated highly specific on-target deamination with no detectable translocations and no significant genomic composition differences

ABE triplex editing had no adverse effects on cell viability, expansion, or other measures of cell health

EMERYVILLE, Calif., Oct. 24, 2024 (GLOBE NEWSWIRE) -- Metagenomi, Inc. (Nasdaq: MGX), a precision genetic medicines company committed to developing curative therapeutics for patients using its proprietary gene editing toolbox, today presented a poster (P0533 Poster Session III) titled "[Efficient and specific genome editing with metagenomics-derived base editor for human therapeutic applications](#)" at the European Society of Gene and Cell Therapy (ESGCT) 31st Annual Congress in Rome, Italy.

"Base editors are powerful gene editing tools that are able to modify genes through single nucleotide changes, including multiplexed gene editing applications without risk of translocations. Our ABEs display critical attributes necessary for successful multiplexed gene editing with remarkable targetability, efficiency, precision and tolerability," said Brian C. Thomas, PhD, CEO and founder of Metagenomi. "We remain focused on advancing our base editors for *in vivo* genome editing programs, while pursuing partnerships to advance *ex vivo* cell therapy applications."

Today's poster presentation described the following key advantages of the Metagenomi ABE platform:

Targetability: Metagenomi's ABE is targetable to over 95% of the human genome's base pairs, a significantly wider range of sites than first-generation SpCas9 base editors. This expanded scope provides unparalleled flexibility in addressing complex gene target locations.

Efficiency: The ABE platform achieved over 95% reproducible and durable triplex protein knockdown in primary T-cells, confirming its highly efficient application for multiplex gene editing. This platform is also compatible with various non-viral methods of site-specific template-integration in a simultaneous step, including CAR, engineered TCR, and/or regulatory genes leveraging a Metagenomi nuclease. This enables a potent all-in-one editing solution for the development of next-generation cell therapies.

Specificity: The ABE demonstrated highly specific on-target deamination with minimum-to-no indel formation. Genome-wide analyses confirmed no detectable translocations and no significant genomic composition differences when compared to unedited cells. This precision minimizes the risk of unintended genetic alterations, positioning the company's ABE for long-term therapeutic applications.

Tolerability: Metagenomi's ABE triplex protein knockdowns exhibited excellent tolerability in cells, with no adverse effects on cell viability, expansion, or changes in stress-related gene expression observed post-editing. Tolerability is especially critical in multiplex editing of primary T-cells, where maintaining cell health is vital for therapeutic efficacy.

About Metagenomi

Metagenomi is a precision genetic medicines company committed to developing curative therapeutics for patients using its proprietary, comprehensive metagenomics-derived toolbox. Metagenomi is harnessing the power of metagenomics, the study of genetic material recovered from the natural environment, to unlock four billion years of microbial evolution to discover and develop a suite of novel editing tools capable of correcting any type of genetic mutation found anywhere in the genome. Its comprehensive genome editing toolbox includes programmable nucleases, base editors, and RNA and DNA-mediated integration systems (including prime editing systems and clustered regularly interspaced short palindromic repeat associated transposases). Metagenomi believes its diverse and modular toolbox positions the company to access the entire genome and select the optimal tool to unlock the full potential of genome editing for patients. For more information, please visit <https://metagenomi.c>

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. Such statements, which are often indicated by terms such as "anticipate," "believe," "could," "estimate," "expect," "goal," "intend," "look forward to," "may," "plan," "potential," "predict," "project," "should," "will," "would" and similar expressions, include, but are not limited to, any statements relating to our growth strategy and product development programs, including the timing of and our ability to conduct IND-enabling studies, make regulatory filings such as INDs, statements concerning the potential of therapies and product candidates, statements concerning the timing of data presentations and publications, and any other statements that are not historical facts. Forward looking statements are based on management's current expectations and are subject to risks and uncertainties that could negatively affect our business, operating results, financial condition, and stock value. Factors that could cause actual results to differ materially from those currently anticipated include: risks relating to our growth strategy; our ability to obtain, perform under, and maintain financing and strategic agreements and relationships; risks relating to the results of research and development activities; risks relating to the timing of starting and completing clinical trials; uncertainties relating to preclinical and clinical testing; our dependence on third party suppliers; our ability to attract, integrate and retain key personnel; the early stage of products under development; our need for substantial additional funds; government regulation; patent and intellectual property matters; competition; as well as other risks described in "Risk Factors," in our most recent Form 10-K and our most recent 10-Qs on file with the Securities and Exchange Commission. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law, and we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

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