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# BiomX Announces Publication in the Journal, Bioinformatics

*Development of Exodus Algorithm Overcomes Limitations in Identifying and Quantifying the Genomes of Genetically Related Microorganisms*

BRANFORD, Conn. & NESS ZIONA, Israel--(BUSINESS WIRE)-- BiomX Inc. (NYSE American: PHGE) ("BiomX" or the "Company"), a clinical-stage microbiome company advancing novel natural and engineered phage therapies that target specific pathogenic bacteria, today announced the publication of a scientific paper titled "**Exodus: Sequencing-based Pipeline for Quantification of Pooled Variants**" in the journal, *Bioinformatics*. The research was conducted by scientists at BiomX and is available online at <https://doi.org/10.1093/bioinformatics/btac319>.

The paper specifically relates to overcoming the limitations of Next Generation Sequencing ("NGS") in identifying and quantifying genetically-related microorganisms after they are pooled together in either natural or designed samples. BiomX researchers have developed a reference-based Python algorithm, *Exodus*, for quantification of genomes, including those that are highly similar, when they are sequenced together in a single mix. Applying the Exodus algorithm, researchers were able to generate both empirical and *in-silico* next generation sequencing data of mixed genomes with median error rates between 0% and 0.21% as a function of the complexity of the mix. Importantly, no false negatives were recorded, which BiomX believes demonstrates that Exodus' likelihood of missing an existing genome is very low, even if the genome's relative abundance is low and similar genomes are present in the same mix.

"The development of the Exodus algorithm immediately improves our ability to detect and quantify known virus variants in samples or verification of the proper composition of our phage cocktails therapeutics," said Iddo Weiner, head of data science at BiomX. "By leveraging Exodus across all of research programs, we can consistently generate hyper-accurate NGS data for our single mix analyses, thereby providing us with a more detailed genetic understanding of our phage product candidates. In addition, because of the open-source nature of the algorithm, we also expect to see researchers external to BiomX utilize Exodus to conduct analysis on various genome-related projects."

## About BiomX

BiomX is a clinical-stage microbiome company developing both natural and engineered phage cocktails designed to target and destroy bacteria in the treatment of chronic diseases, such as cystic fibrosis, atopic dermatitis, inflammatory bowel disease, primary sclerosing cholangitis, and colorectal cancer. BiomX discovers and validates proprietary bacterial targets and customizes phage compositions against these targets.

Additional information is available at [www.biomx.com](http://www.biomx.com), the content of which does not form a

part of this press release.

## **Safe Harbor**

This press release contains express or implied “forward-looking statements” within the meaning of the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as: “target,” “believe,” “expect,” “will,” “may,” “anticipate,” “estimate,” “would,” “positioned,” “future,” and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. For example, when BiomX discusses the potential accuracy and benefits of Exodus, BiomX is making forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on BiomX management’s current beliefs, expectations and assumptions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of BiomX control. Actual results and outcomes may differ materially from those indicated in the forward-looking statements. Therefore, investors should not rely on any of these forward-looking statements and should review the risks and uncertainties described under the caption “Risk Factors” in BiomX’s Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on March 31, 2021 and additional disclosures BiomX makes in its other filings with the SEC, which are available on the SEC’s website at [www.sec.gov](http://www.sec.gov). Forward-looking statements are made as of the date of this press release, and except as provided by law BiomX expressly disclaims any obligation or undertaking to update forward-looking statements.

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