



NovelStem Announces New Research Collaborations for Stem-Cell Technology Platform in Cancer Immunotherapy and COVID-19 Resistance; Reports Progress Identifying Genetic Resistance to Additional Anti-Cancer Treatments

- *Screening of resistance diagnostics completed for twelve standard-of-care cancer treatments representing a significant portion of cancer treatment protocols.*
- *COVID-19 research collaboration initiated to identify genes regulating the virus in order to generate virus resistance and find therapies for the devastating disease.*
- *Selected by leading NASDAQ biopharma to conduct research for development of a potential new cancer immunotherapy biopharmaceutical and the potential discovery of new drug targets.*

Boca Raton, FL & Jerusalem, Israel, April [], 2020 – [NovelStem International Corp.](#) (OTC Pink: [NSTM](#)), a biotechnology company focused on its stem cell-based technology platform, developed by Israel-based affiliate, NewStem Ltd., announced two new collaborations to apply NewStem’s technology platform, one to research a potential cancer immunotherapy drug and another to research genes responsible for COVID-19. NovelStem also announced the identification and completion of analysis of resistance to a dozen standard-of-care anti-cancer treatments.

NovelStem CEO, Jan Loeb, added, “We are very impressed with the pace and expanding scope of NewStem’s development work. They recently completed analysis for a dozen chemotherapy resistance diagnostics, while also expanding their work to include an externally funded drug development research project and a genetic research collaboration around COVID-19. This work underscores the substantial potential value of NewStem’s unique platform to accelerate genetic research, as compared to other approaches, and deliver improved patient care.”

NewStem, a spinoff of [Yissum](#), The Hebrew University of Jerusalem’s technology-transfer company, is 27.3% owned by NovelStem. NewStem’s diagnostic solutions are based on the research of specialized stem cells that carry just one set of chromosomes (haploid cells) by Professor Nissim Benvenisty, Director of the [Azrieli Center for Stem Cells and Genetic Research at the Hebrew University](#). NewStem holds intellectual property rights related to stem cells, including genome-wide screening methodologies.

NewStem CEO, Ayelet Dilion-Mashiah, said, “While NewStem remains focused principally on its genetic-driven personalized diagnostic and therapy for cancer patients, we are excited to expand the application of our novel technology platform to support other drug development programs and revenue streams, including for novel diseases such as COVID-19.”

COVID-19 Research Collaboration

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus strain that causes the pandemic coronavirus disease 2019 (COVID-19), a respiratory illness. Under a collaboration with the Azrieli Center for Stem Cells and Genetic Research at the Hebrew University, using NewStem's haploid human embryonic stem cell platform technology and genome-wide screening methodologies, research was initiated for identifying genes that regulate the pathogenicity of the SARS-CoV-2 virus. This research is intended to help develop methods to generate resistance to SARS-CoV-2 and enable new ways to find therapies for the devastating disease.

Cancer Immunotherapy Collaboration

A leading NASDAQ biopharma company has executed a collaboration agreement with NewStem to fund research utilizing NewStem's technology platform. The research is to support the development of a potential new biopharmaceutical in the field of cancer immunotherapy as well as to pursue the potential discovery of new drug targets. The project is expected to take approximately 12 months. Should the research progress to support a successful immunotherapy, NewStem would be entitled to further milestone payments as well as royalties based on sales.

Cancer Treatment Resistance Diagnostics Program

Drug resistance in tumors is a major cause of cancer treatment failure, yet in nearly 50% of cancer cases this resistance is recognized only after the completion of the first course of treatment. NewStem's diagnostic technology can predict patients' resistance to anti-cancer drugs prior to treatment, potentially allowing for better, targeted cancer treatments and related cost benefits.

NewStem is advancing its specialized human stem cell-based approach for predicting patients' resistance to cancer therapy, allowing for better, targeted personal-oncology treatments with the potential to significantly reduce incidents of anti-cancer drug resistance. NewStem has now completed the screening of resistance diagnostics for a dozen standard-of-care cancer treatments, up from five treatments in mid-2019. The molecules screened represent a significant portion of treatment protocols for cancer cases.

NewStem is validating the performance of its screening results in conjunction with retrospective genetic and clinical data of patients previously treated with anti-cancer drugs. The testing for the chosen drug and indications is expected to be finalized within 6 months and then be followed by the regulatory clearance process.

About NovelStem International Corp. www.novelstem.com

NovelStem has a 27.3% stake in NewStem Ltd. which is advancing its novel stem-cell-based diagnostic technology for predicting patients' resistance to cancer therapies, allowing for better, targeted cancer treatments with the potential to reduce incidents of drug resistance. The technology is also being used for genetic research related to other medical therapies. NovelStem will increase its ownership to 33% based upon completion of an additional \$1 million

investment. NovelStem also owns 50% in Netco Partners, which owns the Net Force publishing franchise.

About NewStem Ltd.

NewStem Ltd. is advancing novel stem-cell-based technology utilized for the development of new diagnostics and therapeutics. The most advanced product of NewStem is a diagnostic predicting patients' resistance to cancer therapy, allowing for better, targeted personal-oncology treatments with the potential to reduce incidents of anti-cancer drug resistance. NewStem is a spinoff of [Yissum](#), The Hebrew University of Jerusalem's technology-transfer company. NewStem's diagnostic solutions are based on the research of human haploid pluripotent stem cells (hHPSCs) by Professor Nissim Benvenisty, Director of the [Azrieli Center for Stem Cells and Genetic Research at the Hebrew University](#). NewStem holds the intellectual property, reagents and experience required for hHPSC isolation, differentiation, genetic manipulation, immunogenicity and tumorigenicity.

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Forward-Looking Statements

Statements in this press release and its hyperlinks may be "forward-looking statements" within the meaning of federal securities laws. The matters discussed herein that are forward-looking statements are based on current board and management expectations that involve risks and uncertainties that may result in such expectations not being realized. Actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements due to numerous potential risks and uncertainties, including, but not limited to, the success of NewStem's research and future commercialization of its diagnostics utilizing human haploid pluripotent stem cells, competition in the area of genetic diagnostics, the ability to retain key personnel involved in research and development, the ability to secure appropriate regulatory approvals, and the ability to fund future investment in NewStem. Such forward-looking statements speak only as of the date on which they are made.

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