



NovelStem Increases NewStem Ownership to 33% as NewStem Prepares for First-Half 2021 FDA Filing for Approval of its Stem-Cell Based Anti-Cancer Drug Resistance Diagnostic; NovelStem Initiates Process to Become Publicly-Reporting with S.E.C. and to Up-List its Shares

Boca Raton, FL & Jerusalem, Israel, December 1, 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 today:

- NovelStem has completed the final \$1M tranche of its NewStem investment, increasing its ownership to 33%, following NewStem’s successful, on-time completion of all development milestones set in July 2018.
- NovelStem has commenced a process to become an SEC reporting company and to up-list its shares in order to enhance the Company’s visibility and trading liquidity.
- NovelStem has a \$3.6M market cap based on approximately 49M shares outstanding and a recent closing price of \$0.0725. NovelStem has no debt and enough cash for the next 12 months of operations based on the current run rate of expenses.
- Development affiliate NewStem expects to file for FDA approval for its first diagnostic product in the first half of 2021 and targets the commercial launch of its first diagnostic product in second half 2021.
- NewStem has approximately \$1.7M in cash which is expected to support it through the commercialization of its first product. NewStem wishes to secure one or more strategic partners to support commercialization of its diagnostic solution.

NewStem has developed a novel stem-cell-based technology platform used in the development of diagnostics and therapeutics. Using this technology, NewStem has identified and completed the analysis of resistance to the most frequently prescribed standard-of-care cancer treatments. NewStem is a spinoff of [Yissum](#), The Hebrew University of Jerusalem’s technology-transfer company. NewStem holds intellectual property rights related to stem cells, including genome-wide screening methodologies. Its main patents were filed and allowed in both the United States (September 2020) and the European Union (June 2020).

In the first half of 2021 NewStem expects to file for approval for its first diagnostic product with the [U.S. Food and Drug Administration's Center for Devices and Radiological Health](#). Given the anticipated review and approval timeline, NewStem is well positioned to potentially launch its first commercial diagnostic product in the second half of 2021.

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. These unique cells “provide novel means for studying human functional genomics” (Nature, 2016), and their genetic manipulation “constructed an atlas of essential and growth-restricting genes in human pluripotent stem cells” (Nature Cell Biology, 2018). NewStem’s most advanced solution is a diagnostic

product and database that enables NewStem to predict patients' resistance to certain anti-cancer therapies, allowing for better, targeted personal-oncology treatments with the potential to reduce incidents of anti-cancer drug resistance which occurs in nearly 50% of all cancer cases. NewStem technology has the potential to significantly reduce ineffective treatments, thereby improving patient outcome while also potentially providing hundreds of millions of dollars in savings from unnecessary treatment costs.

NewStem Investment

The \$1.0M investment was funded by the private sale to accredited investors of 6M shares of NovelStem common stock for net proceeds of \$0.6M plus \$0.4M of internal funds. NovelStem now has approximately 49M shares outstanding and approximately 6.5M options with an exercise price of \$0.10. Management believes NovelStem currently has enough cash to fund its contemplated operations over the next twelve months.

Following the NovelStem investment, NewStem has approximately \$1.7M in cash which is believed to be sufficient to support its operations over the next 9 to 12 months, including the anticipated launch of its diagnostic solution in the second half of 2021.

Initiating Public-Reporting to Support Up-listing of NovelStem Shares

In order to increase its visibility and transparency, NovelStem is in discussions with nationally recognized accounting firms to prepare audited financial statements for the past 3 years and to prepare and oversee its ongoing SEC reporting. NovelStem expects to complete this process in mid 2021 at which point it will pursue an up-listing of its common stock from OTC Pink to the OTCQB market, as a first step toward its longer-term goal of a Nasdaq listing.

Jan Loeb, NovelStem's Chairman commented, "Following our prior investments in July 2018 and December 2019, we are excited to expand our ownership in NewStem to 33% by completing the final tranche of our investment agreement. NewStem has made impressive progress advancing their stem-cell diagnostic technology platform over this time, successfully achieving the progress milestones required for our follow-on investments.

"To date NewStem has successfully identified the genetic resistance profiles for a dozen standard of care anti-cancer chemotherapy agents, triggering our final investment milestone. In addition to this impressive progress, NewStem has also progressed two additional collaborations that leverage its technology platform in other applications. One is an externally-funded project in cancer immunotherapy and the other is for COVID-19 genetic research.

"We are proud to have played an integral role in supporting NewStem's substantial progress over the past 2 ½ years which have put it on a streamlined path to initial commercialization. We believe NovelStem provides investors with an exciting opportunity to participate in the growth and value creation potential of NewStem's technology platform across a range of applications. Given the clinical progress and commercialization plans over the next 12 months, we believe it is now appropriate for NovelStem to invest in audited financials and public reporting so that we can move our common stock to a more visible, credible market that can support enhanced liquidity."

NewStem's 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 is advancing its specialized human stem cell-based approach for predicting patients' resistance to cancer therapy, allowing for better, targeted personal-oncology treatments

and related health and cost benefits. NewStem has completed the screening for resistance diagnostics for a dozen standard-of-care cancer treatments, representing a significant portion of treatment protocols.

NewStem has validated 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 now being finalized, which will be followed by the regulatory clearance process, including submitting the results to the FDA in the first half of 2021.

According to NewStem's regulatory strategy approach, the regulatory review process is expected to take several months, following which an anticipated product launch could take place by the second half of 2021.

NewStem's 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). 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. The Azrieli Center for Stem Cells and Genetic Research has received national and international funding for this research, and established collaborations with virology and pulmonology experts in Israel and in China.

NewStem Cancer Immunotherapy Collaboration

In February 2020, a leading NASDAQ biopharma company 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 discovery of new drug targets. The project includes 3 main milestones and is expected to take approximately 12 months. NewStem successfully met the first two milestones and is now conducting experiments to meet the third milestone. Should the research progress to support a successful immunotherapy, NewStem would be entitled to further milestone payments as well as royalties based on sales.

About NovelStem International Corp. www.novelstem.com

NovelStem owns a 33% 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 recently increased its ownership to 33% from 27.3% based upon completion of an additional \$1M investment on top of \$3M that was invested prior, for a total investment of \$4M in NewStem. NovelStem also has a 50% stake 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.

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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