



ImmunityBio Announces Phase I Trial of COVID-19 Vaccine Candidate in South Africa as New Variants of SARS-CoV-2 Spread

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Plans to study COVID-19 subcutaneous and oral, room-temperature capsule vaccine to protect against escape mutants

- ImmunityBio to conduct initial trial of its human adenovirus (hAd5) COVID-19 vaccine candidate in South Africa, where the 501Y.V2 strain has been recently identified
- Recent computer modeling by ImmunityBio revealed that an E484K mutation when combined with the N501Y (UK mutation) resulted in conformational changes in the South African 501Y.V2 virus strain, which may lead to resistance to antibodies and convalescent serum
- ImmunityBio's vaccine candidate—in subcutaneous, oral and sublingual formulations—activates virus-specific T-cells and generates memory B cells with neutralizing antibodies, which may potentially protect against emerging SARS-CoV-2 antibody resistant mutations
- ImmunityBio's vaccine has shown evidence of protection after subcutaneous and oral administration in non-human primates challenged with SARS-CoV-2
- Unlike other adenovirus-based COVID-19 vaccine candidates, ImmunityBio's uses a second-generation Ad5 platform designed to raise anti-SARS-CoV-2 immune responses even in Ad-immune individuals, meaning subjects can receive the vaccine multiple times, if necessary
- Phase I trial recruitment is set to begin in February in Cape Town, South Africa with subcutaneous doses to be followed by trials using sublingual doses and room temperature-stable oral capsules

CULVER CITY, Calif., January 19, 2021—ImmunityBio, Inc., a privately-held immunotherapy company, today announced it has received authorization from the South Africa Health Products Regulatory Authority (SAHPRA) to begin a Phase I clinical trial of its hAd5 T-cell vaccine, the company's novel COVID-19 vaccine candidate, which will be administered subcutaneously. The same vaccine is currently being tested in a similar Phase I trial in the U.S., with no safety concerns identified to date. With the goal of creating longer-term protection from the virus, hAd5-COVID-19 targets both the mutation-prone outer spike protein (S) and the more stable inner nucleocapsid (N) protein, activating antibodies, memory B cells, and T-cells against the coronavirus (SARS-CoV-2).

This novel vaccine candidate is delivered subcutaneously and via a room-temperature oral capsule formulation and has the potential to serve as a universal T-cell boost to current vaccines or address mutations where other vaccines might fail, including the 501Y.V2 variant, which has been found in patients in South Africa. This increases the urgency that a range of COVID-19 vaccines be available to the global population where [mutations](#) are rapidly occurring.

Patrick Soon-Shiong, M.D., Chairman and CEO of ImmunityBio stated, "We are excited about the potential of our COVID-19 vaccine candidate and the issues it could solve globally. Unlike antibody-based vaccines, T-cell-based vaccines kill the infected cell, preventing virus replication, and could provide long-term immune memory to recipients. Pursuing a vaccine that does not rely solely on targeting the S protein where the mutations are occurring is of critical importance as multiple variants of the SARS-CoV-2 virus have appeared globally, with concentrated outbreaks beginning in South Africa."

Dr. Soon-Shiong continued, "After leveraging this concept in our novel COVID-19 oral vaccines, we saw complete protection to a viral challenge in our non-human primate data. These exciting results have catalyzed our interest in pursuing human trials of the oral vaccine in South Africa. We believe this T-cell vaccine approach to mutational changes could also be explored for other infectious diseases such as influenza, potentially obviating the need for annual injections."

Prof. Tulio de Oliveira, a professor and geneticist at the Nelson Mandela School of Medicine in Durban, "Our scientists at the Network for Genomic Surveillance in South Africa (NGS-SA) have discovered that the 501Y.V2 spread much faster than previous variants in South Africa. We are also finding that patients who recovered from the first wave of COVID-19 may no longer be protected from the new local SARS-CoV-2 variants. These mutations are now rapidly spreading through the rest of Africa and the world. We are hopeful that by teaming up with ImmunityBio, the now rampant 501Y.V2 variant in our country can soon be eliminated and protected against for good. We are excited to be working with the scientific team at ImmunityBio to study the effects of a T-cell vaccine in patients infected with the 501Y.V2 variant now rampant in our country."

"I'm pleased to study this next-generation adenovirus vaccine platform for COVID-19 at the University of Cape Town. This is the third adenovirus-based COVID-19 vaccine to enter trials in South Africa. Understanding sensitivities related to adeno vaccine platforms in South Africa, we have taken the utmost care in designing our trial," said Dr. Amy Ward, principal investigator of the Phase I trial.

"This Phase I trial and the planned development strategy for this vaccine are critical for us in South Africa towards addressing the health and social crisis that COVID-19 has caused in our country and the threat posed by the spread of new variants. The possibility of oral capsules for boosting doses is very exciting. ImmunityBio has engaged with government agencies and indicated a commitment to ensuring this vaccine is available in South Africa. Hence, the importance that we evaluate it here from Phase I trials onwards" said Dr. Graeme Meintjes, Professor and Second Chair in the Department

of Medicine at the University of Cape Town and a co-investigator on the trial.

About the T-Cell-Based Vaccine Candidate

Developed by ImmunityBio and manufactured by NantKwest, Inc. (NASDAQ: NK), this second generation hAd5-vector vaccine is unique in targeting both spike (S) and nucleocapsid (N) SARS-CoV-2 proteins potentially generating B and T cell memory to the COVID-19 antigens and long-term immunity to the virus. Most of the COVID-19 vaccines approved by the FDA or in late-stage clinical trials deliver only the spike protein on the surface of the virus, which has already mutated several times. Another unique characteristic of the hAd5 design is it uses a second-generation Ad5 platform that was developed to raise anti-SARS-CoV-2 immune responses even in Ad-immune individuals, meaning subjects can receive the vaccine multiple times, if necessary. The stimulation of anti-Ad5 immune responses is attenuated with the second-generation platform in comparison with the first-generation platforms, due to additional genetic deletions. Phase I trials have been initiated in the U.S. and recruitment is set to begin in February in Cape Town, South Africa with subcutaneous doses to be followed by trials using sublingual doses and room temperature-stable oral capsules.

Joint Collaboration Agreement with NantKwest

Under the terms of a definitive agreement announced on August 24, 2020, ImmunityBio and its affiliate NantKwest agreed to share equally the costs of development, manufacturing, marketing and commercialization of the products each is developing related to COVID-19, including the hAd5 vaccine candidate. Should a product be commercialized successfully, the companies have agreed to a 60-40 percent split of net profits, with the larger share going to the company that developed the product. The agreement also details the structure of shared governance of the joint collaboration.

NantKwest Transaction

As previously announced, on December 21, 2020, ImmunityBio entered into an agreement to combine in a stock-for-stock transaction with NantKwest. The combination, which is expected to close in the first half of 2021, will create a leading immunotherapy and cell therapy company focused on oncology and infectious disease.

About ImmunityBio

ImmunityBio, Inc. is a late-clinical-stage immunotherapy company developing next-generation therapies that drive immunogenic mechanisms for defeating cancers and infectious diseases. The company's immunotherapy platform activates both the innate (natural killer cell and macrophage) and adaptive (T-cell) immune systems to create long-term "immunological memory." This novel approach is designed to eliminate the need for high-dose chemotherapy, improve upon the outcomes of current CAR T-cell therapies, and extend beyond checkpoint inhibitors.

ImmunityBio's platform is based on the foundation of three separate modalities: antibody cytokine fusion proteins, synthetic immunomodulators, and second-generation human adenovirus (hAd5) vaccine technologies.

Anktiva™ (ImmunityBio's lead cytokine infusion protein) is a novel interleukin-15 (IL-15) superagonist complex and has received Breakthrough Therapy and Fast Track Designations from the U.S. Food and Drug Administration (FDA) for BCG-unresponsive CIS non-muscle invasive bladder cancer (NMIBC). The company is also in Phase 2 or 3 trials for indications such as first- and second-line lung cancer, triple-negative breast cancer, metastatic pancreatic cancer, recurrent glioblastoma, and soft tissue sarcoma in combination with the company's synthetic immune modulator (Aldoxorubicin).

ImmunityBio is also developing therapies, including vaccines, for the prevention and treatment of HIV, influenza, and the coronavirus SARS-CoV-2 with its second-generation human adenovirus (hAd5) vaccine technologies.

About NantKwest

NantKwest ([NASDAQ: NK](https://www.nantkwest.com)) is an innovative, clinical-stage, immunotherapy company focused on harnessing the power of the innate immune system to treat cancer and infectious diseases. NantKwest is the leading producer of clinical dose forms of off-the-shelf natural killer (NK) cell therapies. The activated NK cell platform is designed to destroy cancer and virally-infected cells. The safety of these optimized, activated NK cells—as well as their activity against a broad range of cancers—has been tested in phase I clinical trials in Canada and Europe, as well as in multiple phase I and II clinical trials in the United States. By leveraging an integrated and extensive genomics and transcriptomics discovery and development engine, together with a pipeline of multiple, clinical-stage, immuno-oncology programs, NantKwest's goal is to transform medicine by bringing novel NK cell-based therapies to routine clinical care. NantKwest is a member of the NantWorks ecosystem of companies. For more information, please visit www.nantkwest.com.

Forward-Looking Statements

This communication contains forward-looking statements relating to the proposed transaction involving NantKwest, Inc. ("NantKwest") and ImmunityBio, Inc. ("ImmunityBio"), including financial estimates and statements as to the expected timing, completion and effects of the proposed transaction and statements relating to NantKwest and ImmunityBio's future success in improving the treatment of various diseases and illnesses, including, but not limited to COVID-19 and cancer. Statements in this communication that are not statements of historical fact are considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are usually identified by the use of words such as "anticipates," "believes," "continues," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "seeks," "should," "will," and variations of such words or similar expressions. These forward-looking statements are neither forecasts, promises nor guarantees, and are based on the current beliefs of NantKwest's management and ImmunityBio's management as well as assumptions made by and information currently available to NantKwest and ImmunityBio. Such statements reflect the current views of NantKwest and ImmunityBio with respect to future events and are subject to known and unknown risks, including business, regulatory, economic and competitive risks, uncertainties, contingencies and assumptions about NantKwest and ImmunityBio, including, without limitation, (i) inability to complete the proposed transaction because, among other reasons, conditions to the closing of the proposed transaction may not be satisfied or waived, (ii) uncertainty as to the timing of completion of the proposed transaction, (iii) potential adverse effects or changes to relationships with employees, suppliers or other parties resulting from the announcement or completion of the proposed transaction, (iv) the outcome of any legal proceedings that may be instituted against the parties and others related to the potential transaction between NantKwest and ImmunityBio, (v) possible disruptions from the proposed transaction that could harm NantKwest's or ImmunityBio's respective business, including current plans and operations, (vi) unexpected costs, charges or expenses resulting from the proposed transaction, (vii) uncertainty of the expected financial performance of the combined company following completion of the proposed transaction, including the possibility that the

expected synergies and value creation from the proposed transaction will not be realized or will not be realized within the expected time period, (viii) the ability of each of NantKwest or ImmunityBio to continue its planned preclinical and clinical development of its respective development programs, and the timing and success of any such continued preclinical and clinical development and planned regulatory submissions, (ix) inability to retain and hire key personnel, and (x) the unknown future impact of the COVID-19 pandemic delay on certain clinical trial milestones and/or NantKwest's or ImmunityBio's operations or operating expenses. More details about these and other risks that may impact NantKwest's business are described under the heading "Risk Factors" in NantKwest's most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission ("SEC") and in subsequent filings made by NantKwest with the SEC, which are available on the SEC's website at www.sec.gov. NantKwest and ImmunityBio caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. NantKwest and ImmunityBio do not undertake any duty to update any forward-looking statement or other information in this communication, except to the extent required by law. No representation is made as to the safety or effectiveness of these product candidates for the therapeutic use for which such product candidates are being studied.

Certain information contained in this communication relates to or is based on studies, publications, surveys and other data obtained from third-party sources and NantKwest's and ImmunityBio's own internal estimates and research. While NantKwest and ImmunityBio believe these third-party sources to be reliable as of the date of this communication, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this communication involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while NantKwest and ImmunityBio each believes its own internal research is reliable, such research has not been verified by any independent source.

No Offer or Solicitation

This communication is not intended to and does not constitute an offer to sell or the solicitation of an offer to buy, sell or solicit any securities or any proxy, vote or approval in any jurisdiction pursuant to or in connection with the proposed transaction or otherwise, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be deemed to be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act.

Additional Information and Where to Find It

In connection with the proposed transaction, NantKwest intends to file a registration statement on Form S-4 with the SEC, which will include a prospectus and joint proxy / solicitation statement of NantKwest and ImmunityBio (the "solicitation statement/prospectus"). NantKwest may also file other documents regarding the proposed transaction with the SEC. This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. This communication is not intended to be, and is not, a substitute for such filings or for any other document that NantKwest may file with the SEC in connection with the proposed transaction. **BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS AND SECURITY HOLDERS ARE URGED TO CAREFULLY READ THE ENTIRE REGISTRATION STATEMENT AND SOLICITATION STATEMENT / PROSPECTUS, WHEN THEY BECOME AVAILABLE, AND ANY OTHER RELEVANT DOCUMENTS FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION.** Investors and security holders will be able to obtain free copies of the registration statement and solicitation statement/prospectus and other documents filed with the SEC by NantKwest through the website maintained by the SEC at www.sec.gov. In addition, investors and security holders will be able to obtain free copies of the prospectus and other documents filed with the SEC on NantKwest's website at www.ir.nantkwest.com.

Participants in the Solicitation

NantKwest and certain of its respective directors and executive officers may be deemed to be participants in the solicitation of proxies from stockholders of NantKwest in connection with the proposed transaction under the rules of the SEC. Investors may obtain information regarding the names, affiliations and interests of directors and executive officers of NantKwest in NantKwest's proxy statement for its 2020 annual meeting of stockholders, which was filed with the SEC on April 24, 2020, as well as its other filings with the SEC. Other information regarding the participants in the proxy solicitation and a description of their direct and indirect interests, by security holdings or otherwise, will be included in the registration statement, solicitation statement / prospectus and other relevant materials to be filed with the SEC by NantKwest regarding the proposed transaction (if and when they become available). You may obtain free copies of these documents at the SEC's website at www.sec.gov. Copies of documents filed with the SEC will also be available free of charge from NantKwest using the sources indicated above.

Contacts

Investors

Sarah Singleton
844-696-5235, Option 5

Media

Andrew Siegel / Greg Klassen
Joelle Frank, Wilkinson Brimmer Katcher
212-355-4449

Amy Jobe, Ph.D.
LifeSci Communications
315-879-8192
ajobe@lifescicomms.com