ImmunityBio Announces Collaboration with BeiGene on Confirmatory Phase 3 Trial of ANKTIVA® and PD-1 Checkpoint Inhibitor Combination in Non-Small Cell Lung Cancer

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- Confirmatory trial builds on results of QUILT 3.055, a Phase 2 trial demonstrating ANKTIVA rescued T cells and activity of checkpoint inhibitors (CPIs) in patients with non-small cell lung cancer (NSCLC), who progressed on CPI therapies
- QUILT 3.055 showed prolonged overall survival in these second- and third-line NSCLC patients exceeding historical survival rates following chemotherapy
- ImmunityBio anticipates submitting a biologics license application (BLA) in 2025 for this indication based on the QUILT 3.055 data
- The ImmunityBio patent for ANKTIVA and CPI combinations extends to 2035

CULVER CITY, Calif.--(BUSINESS WIRE)--Jan. 29, 2025-- ImmunityBio, Inc. (NASDAQ: IBRX) today announced it has entered into a collaboration and supply agreement with BeiGene, Ltd. (to be changed to BeOne Medicines, Ltd.), a global oncology company, to conduct a confirmatory randomized Phase 3 clinical trial (ResQ201A-NSCLC), combining BeiGene's tislelizumab, a PD-1 checkpoint inhibitor (CPI), and ImmunityBio's ANKTIVA (nogapendekin alfa inbakicept-pmln). The Phase 3 ResQ201A-NSCLC study (NCT06745908) aims to confirm the efficacy and safety of combination ANKTIVA plus CPI therapy previously demonstrated in the trial QUILT 3.055 and provide evidence of the potential for these two immunotherapeutic agents to improve overall survival in patients with advanced or metastatic NSCLC who have acquired resistance to immune CPI therapy.

The Phase 3 trial design is based on the synergistic potential already demonstrated in the QUILT 3.055 study that a CPI and ANKTIVA, an IL-15 superagonist, prolongs overall survival (OS) in the study population compared to historical controls in this setting. In Phase 1 and 2 studies, ANKTIVA has demonstrated the capability of rescuing T cells, and thus CPI efficacy, through the molecule’s unique mechanism of action. ANKTIVA is the first FDA approved molecule that has demonstrated the ability to increase lymphocytes via its proliferative IL-15 stimulatory action. ANKTIVA stimulates the proliferation of natural killer cells and CD4+ and CD8+ T cells, which in turn restores MHC-1 presentation, allowing T cells to regain their cytotoxic activity, and thereby rescue CPI activity.

Multiple Phase 1 and 2 studies have demonstrated prolonged overall survival with this combination approach, in comparison to historical results with chemotherapy in this patient population. [1,2] In these multi-site trials, the combination of ANKTIVA plus the CPI, with no intervening therapy when the patient progressed on the CPI, demonstrated a median OS (mOS) of 17.1 months (95% CI: 4.6, NR) in patients with PD-L1 ≥ 50% and a mOS of 19.6 months (95% CI: 6.2, NR) in patients who relapsed on checkpoint inhibitor. QUILT 3.055 confirmed these findings with a mOS of 14.1 months (95% CI: 11.7, 16.3), as presented at World Lung on Oct 2024.[3, 4]

The mechanism of the rescue of NSCLC patients who had failed checkpoint inhibitors is through the MOA of ANKTIVA in which NK cells and T cells are proliferated with rescue of lymphocytes and MHC-I. Proliferation of lymphocytes has been observed In healthy volunteers, and is due to the unique mechanism of ANKTIVA as an IL-15 agonist as described on the package insert. [5,6] On the basis of these findings, ImmunityBio intends to file a BLA for ANKTIVA + checkpoint inhibitor in second / third line NSCLC patients who have progressed on CPI therapy.

ImmunityBio will conduct this confirmatory Phase 3 trial globally across multiple sites; when fully enrolled, it is expected to include 462 participants.

“The challenge oncologists face in the next five years is how to manage the many patients who do not respond to CPI therapy after an initial response,” said Dr. Patrick Soon-Shiong, Founder, Executive Chairman and Global Chief Scientific and Medical Officer of ImmunityBio. “Currently, options are limited for these second- and third-line patients with NSCLC whose cancer continues to progress on CPIs. The finding that these ‘cold’ tumors, which have evaded T cells, can now be rendered ‘hot’ through the activation of natural killer cells with ANKTIVA, is exciting. To our knowledge, ANKTIVA is the first approved cytokine to address low white cell count (lymphopenia), which occurs following chemo-immunotherapy and radiotherapy. On the basis of ANKTIVA’s mechanism of action of proliferating T cells as well as NK cells, ANKTIVA has the potential to serve as the foundational cytokine to address loss of activity in the multiple tumors in which CPIs are approved.”

According to the American Cancer Society, lung cancer is the second most common cancer in the U.S. In 2025, it is estimated that 226,650 new cases of lung cancer will be diagnosed in the U.S. and 124,730 deaths will be attributed to the disease. NSCLC accounts for about 87% of all lung cancer diagnoses, and there are very few successful treatment options for these patients once the cancer spreads beyond the lungs.

“ImmunityBio and BeiGene share a similar vision to advance the next generation of oncology immunotherapies to address unmet needs. We are excited to explore the potential of our PD-1 inhibitor, tislelizumab, in combination with ANKTIVA,” said John V. Oyler, Co-Founder, Chairman and CEO of BeiGene. “I’ve admired Dr. Soon-Shiong’s bold approach to medicine and look forward to working with him and his team as the ResQ201A-NSCLC study gets underway. Together, we hope to help metastatic lung cancer patients who may have few options left.”

The primary endpoint of the study is overall survival, with secondary endpoints including disease control rate, progression-free survival, objective response rate and safety.

For more information about the trial, please visit www.Immunitybio.com.

About ANKTIVA®

The cytokine interleukin-15 (IL-15) plays a crucial role in the immune system by affecting the development, maintenance, and function of key immune cells—NK and CD8+ killer T cells—that are involved in killing cancer cells. By activating NK cells, ANKTIVA overcomes the tumor escape phase of clones resistant to T cells and restores memory T cell activity with resultant prolonged duration of complete response.

ANKTIVA is a first-in-class IL-15 agonist IgG1 fusion complex, consisting of an IL-15 mutant (IL-15N72D) fused with an IL-15 receptor alpha, which binds with high affinity to IL-15 receptors on NK, CD4+, and CD8+ T cells. This fusion complex of ANKTIVA mimics the natural biological properties of the membrane-bound IL-15 receptor alpha, delivering IL-15 by dendritic cells and drives the activation and proliferation of NK cells with the generation of memory killer T cells that have retained immune memory against these tumor clones. The proliferation of the trifecta of these immune killing cells and the activation of trained immune memory results in immunogenic cell death, inducing a state of equilibrium with durable complete responses. ANKTIVA has improved pharmacokinetic properties, longer persistence in lymphoid tissues, and enhanced anti-tumor activity compared to native, non-complexed IL-15 in-vivo.

ANKTIVA was approved by the FDA in 2024 for BCG-unresponsive non-muscle invasive bladder cancer CIS with or without papillary tumors. For more information, visit ImmunityBio.com (Founder's Vision) and Anktiva.com.

About ImmunityBio

ImmunityBio is a vertically-integrated biotechnology company developing next-generation therapies and vaccines that bolster the natural immune system to defeat cancers and infectious diseases. The Company's range of immunotherapy and cell therapy platforms, alone and together, act to drive and sustain an immune response with the goal of creating durable and safe protection against disease. Designated an FDA Breakthrough Therapy, ANKTIVA is the first FDA-approved immunotherapy for non-muscle invasive bladder cancer CIS that activates natural killer cells, T cells, and memory T cells for a long-duration response. The Company is applying its science and platforms to treating cancers, including the development of potential cancer vaccines, as well as developing immunotherapies and cell therapies that we believe sharply reduce or eliminate the need for standard high-dose chemotherapy. These platforms and their associated product candidates are designed to be more effective, accessible, and easily administered than current standards of care in oncology and infectious diseases. For more information, visit ImmunityBio.com (Founder's Vision) and connect with us on X (Twitter), Facebook, LinkedIn, and Instagram.

About BeiGene

BeiGene, which plans to change its name to BeOne Medicines Ltd., is a global oncology company that is discovering and developing innovative treatments that are more affordable and accessible to cancer patients worldwide. With a broad portfolio, it is expediting development of its diverse pipeline of novel therapeutics through its internal capabilities and collaborations. It is committed to radically improving access to medicines for far more patients who need them. Its growing global team of over 11,000 colleagues spans five continents. To learn more about BeiGene, please visit www.beigene.com and follow it on LinkedIn, X (formerly known as Twitter), Facebook and Instagram.

References:

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6. https://www.accessdata.fda.gov/drugsatfda_docs/label/2024/761336s000lbl.pdf

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, such as statements regarding the clinical supply agreement with BeiGene in connection with the proposed RESQ201A-NSCLC clinical trial as described herein, ImmunityBio's intent to submit a BLA for second- and third-line treatment of NSCLC patietns who are progressing on checkpoint inhibitors, ImmunityBio's plan to conduct RESQ201A-NSCLC as a confirmatory registrational trial globally, anticipated site and patient enrollment for RESQ201A-NSCLC, market data, clinical trial data and potential results to be drawn therefrom, the development of therapeutics for cancer and infectious diseases, potential benefits to patients, potential treatment outcomes for patients, the described mechanism of action and results and contributions therefrom, potential future uses and applications of ANKTIVA and use in cancer vaccines and across multiple tumor types, and ImmunityBio's approved product and investigational agents as compared to existing treatment options, among others. Statements in this press release that are not statements of historical fact are considered forward-looking statements, which are usually identified by the use of words such as "anticipates," "believes," "continues," "goal," "could," "estimates," "scheduled," "expects," "intends," "may," "plans," "potential," "predicts," "indicate," "projects," "is," "seeks," "should," "will," "strategy," and variations of such words or similar expressions.

Statements of past performance, efforts, or results of our preclinical and clinical trials, about which inferences or assumptions may be made, can also be forward-looking statements and are not indicative of future performance or results. Forward-looking statements are neither forecasts, promises nor guarantees, and are based on the current beliefs of ImmunityBio's management as well as assumptions made by and information currently available to ImmunityBio. Such information may be limited or incomplete, and ImmunityBio's statements should not be read to indicate that it has conducted a thorough inquiry into, or review of, all potentially available relevant information. Such statements reflect the current views of 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 ImmunityBio, including, without limitation, (i) whether the FDA and/or other regulatory agencies will accept or approve the clinical trial strategy and regulatory pathway as described herein, (ii) whether the FDA will accept the BLA and other regulatory submissions referenced herein for filing, (iii) whether the FDA will ultimately approve such BLA and submissions and the risks and uncertainties associated with the regulatory review process and timing thereof, (iv) risks and uncertainties regarding third party collaborations and supply agreements and performance outside of ImmunityBio's control, (v) whether clinical trials will result in registrational pathways and the risks and uncertainties regarding the regulatory submission, review and approval process, (vi) whether clinical trial data will be accepted by regulatory agencies, (vii) the ability of ImmunityBio to continue its planned preclinical and clinical development of its development programs through itself and/or its investigators, and the timing and success of any such continued preclinical and clinical development, patient enrollment and planned regulatory submissions, (viii) potential delays in product availability and regulatory approvals, (ix) ImmunityBio's ability to retain and hire key personnel, (x)

ImmunityBio's ability to obtain additional financing to fund its operations and complete the development and commercialization of its various product candidates, (xi) potential product shortages or manufacturing disruptions that may impact the availability and timing of product, (xii) ImmunityBio's ability to successfully commercialize its approved product and product candidates, (xiii) ImmunityBio's ability to scale its manufacturing and commercial supply operations for its approved product and future approved products, and (xiv) ImmunityBio's ability to obtain, maintain, protect, and enforce patent protection and other proprietary rights for its product candidates and technologies. More details about these and other risks that may impact ImmunityBio's business are described under the heading "Risk Factors" in the Company's Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) on March 19, 2024 and the Company's Form 10-Q filed with the SEC on November 12, 2024, and in subsequent filings made by ImmunityBio with the SEC, which are available on the SEC's website at www.sec.gov. ImmunityBio cautions you not to place undue reliance on any forward looking statements, which speak only as of the date hereof. ImmunityBio does not undertake any duty to update any forward-looking statement or other information in this press release, except to the extent required by law.

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