NANOBIOTIX: New Preclinical Immunotherapy Data Show Boosted Anti-Tumor Immune Activation via Triple Blockade of PD-1, LAG-3, and TIGIT When Combined With Radiotherapy-Activated NBTXR3

April 11, 2022

Data presented at the 2022 Annual Meeting of the American Association of Cancer Research

- **New data from an open-label preclinical study in mice evaluating the changes in immune-related genes induced by multiple combinations of NBTXR3, anti-PD-1, anti-LAG-3, and anti-TIGIT showed that groups that received NBTXR3 along with checkpoint inhibitors outperformed all other combinations in efficacy, survival, and induction of long-term anti-cancer memory**
- **This new analysis concluded that NBTXR3 plus a triple blockade of PD-1, LAG-3, and TIGIT (Combination therapy) promotes immune activation at the irradiated site, abscopal responses at non-irradiated sites, and suggests that the Combination therapy may be effective against metastatic cancers**

PARIS & CAMBRIDGE, Mass.--(BUSINESS WIRE)--Apr. 11, 2022-- Regulatory News:

NANOBIOTIX (Euronext : NANO — NASDAQ: NBTX – the " **Company**"), a clinical-stage biotechnology company pioneering physics-based approaches to expand treatment possibilities for patients with cancer, today announced new data from an open-label preclinical study evaluating the combination of first-in-class radioenhancer, NBTXR3, with the triple blockade of PD-1, LAG-3, and TIGIT ("Combination therapy"). The data were published via E-Poster presentation at the 2022 Annual Meeting of the American Association of Cancer Research (AACR), held April 8-13, 2022, by researchers from The University of Texas MD Anderson Cancer Center (MD Anderson).

"We believe that the potential immune priming effect of radiotherapy-activated NBTXR3 could prove to be a game-changer for cancer immunotherapy," said Laurent Levy, co-founder and chairman of the executive board at Nanobiotix. *"Our view is that while new immunotherapy treatment modalities with the potential to improve outcomes for patients continue to emerge, they remain reliant upon an underlying immune response. This new preclinical gene expression data showing that the addition of NBTXR3 enhanced activity in key immune pathways associated with innate and adaptive immunity, and outperformed all other combinations in efficacy, survival, and induction of long-term anti-cancer memory, adds to a growing body of support for NBTXR3 as a product candidate that could potentially help expand the benefits of immunotherapy to larger share of the patients we serve."*

PRECLINICAL DATA ON IMMUNOTHERAPY BLOCKADE PLUS RADIOTHERAPY-ACTIVATED NBTXR3

Previously reported preclinical and clinical data evaluating NBTXR3 in combination with diverse immune checkpoint inhibitors (ICIs) including anti-PD-1, anti-CTLA-4, anti-LAG-3, and anti-TIGIT suggest that, after activation by radiotherapy, the radioenhancer may induce an "immune priming" effect that could help improve and expand the benefits of ICIs to more patients.

This new analysis, presented at AACR, assessed immune gene expression associated with multiple combinations of NBTXR3, anti-PD-1, anti-LAG-3, and anti-TIGIT.

Key Findings Include:

- The Combination therapy outperformed all other tested treatment regimens in efficacy, survival, and induction of long-term anti-cancer memory
- The Combination therapy significantly promoted the upregulation of mRNA transcripts involved in innate immunity, the humoral response, B cell function, dendritic cell function, and antigen processing within primary, irradiated tumors relative to untreated controls
- Within non-irradiated tumors, the Combination therapy produced elevations in multiple immune-related pathways that were significantly higher than those produced by other treatment combinations and these pathways included both adaptive and innate immunity; B, T, natural killer, and dendritic cell function; and antigen processing
- The Combination therapy promoted immune activation at the irradiated site, abscopal immune responses are improved with the addition of LAG-3 and TIGIT to PD-1 and radiotherapy-activated NBTXR3, and the data suggest that the Combination therapy may be effective against metastatic cancers

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About NBTXR3
NBTXR3 is a novel, potentially first-in-class oncology product, composed of functionalized hafnium oxide nanoparticles that is administered via one-time intratumoral injection and activated by radiotherapy. The product candidate's physics-based mechanism of action (MoA) is designed to induce significant tumor cell death in the injected tumor when activated by radiotherapy, subsequently triggering adaptive immune response and long-term anti-cancer memory. Given the MoA, Nanobiotix believes that NBTXR3 could be scalable across any solid tumor that can be treated with radiotherapy and across any therapeutic combination, particularly, with immune checkpoint inhibitors.

NBTXR3 is being evaluated in locally advanced head and neck squamous cell carcinoma (HNSCC) as the primary development pathway. The company-sponsored phase I dose escalation and dose expansion study has produced favorable safety data and early signs of efficacy. In February 2020, the United States Food and Drug Administration granted regulatory Fast Track designation for the investigation of NBTXR3 activated by radiation therapy, with or without cetuximab, for the treatment of patients with locally advanced HNSCC who are not eligible for platinum-based chemotherapy.

Nanobiotix has also prioritized an Immuno-Oncology development program—beginning with a Company sponsored phase I clinical study, evaluating NBTXR3 activated by radiotherapy in combination with anti-PD-1 checkpoint inhibitors for patients with locoregional recurrent or recurrent/metastatic HNSCC and for patients with lung or liver metastases from any primary cancer eligible for anti-PD-1 therapy, either naïve or resistant to prior PD-1 (either primary or secondary as per SITC criteria).

Given the Company's focus areas, and balanced against the scalable potential of NBTXR3, Nanobiotix has engaged in strategic collaborations to expand development of the product candidate in parallel with its priority development pathways. Pursuant to this strategy, in 2019 Nanobiotix entered into a broad, comprehensive clinical research collaboration with The University of Texas MD Anderson Cancer Center to sponsor several phase I and phase II studies to evaluate NBTXR3 across tumor types and therapeutic combinations. In 2021, the Company entered into an additional strategic collaboration agreement with LianBio to support its global phase III study in Asia along with four future registrational studies.

About NANOBIOTIX
Nanobiotix is a late-stage clinical biotechnology company pioneering disruptive, physics-based therapeutic approaches to revolutionize treatment outcomes for millions of patients; supported by people committed to making a difference for humanity. The company's philosophy is rooted in the concept of pushing past the boundaries of what is known to expand possibilities for human life.

Incorporated in 2003, Nanobiotix is headquartered in Paris, France. The company also has subsidiaries in Cambridge, Massachusetts (United States), France, Spain, Germany and Switzerland.

Nanobiotix has been listed on the regulated market of Euronext in Paris since 2012 and on the Nasdaq Global Select Market in New York City since December 2020.

Nanobiotix is the owner of more than 30 umbrella patents associated with three (3) nanotechnology platforms with applications in 1) oncology; 2) bioavailability and biodistribution; and 3) disorders of the central nervous system. The company's resources are primarily devoted to the development of its lead product candidate– NBTXR3 —which is the product of its proprietary oncology platform and has already achieved market authorization in Europe for the treatment of patients with soft tissue sarcoma under the brand name Hensify®.

For more information about Nanobiotix, visit us at www.nanobiotix.com or follow us on LinkedIn and Twitter.

Disclaimer
This press release contains certain "forward-looking" statements within the meaning of applicable securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as "at this time," "anticipate," "believe," "expect," "intend," "on track," "plan," "scheduled," and "will," or the negative of these and similar expressions. These forward-looking statements, which are based on our management's current expectations and assumptions and on information currently available to management, include statements about the timing and progress of clinical trials, the timing of our presentation of data, the results of our preclinical and clinical studies and their potential implications. Such forward-looking statements are made in light of information currently available to us and based on assumptions that Nanobiotix considers to be reasonable. However, these forward-looking statements are subject to numerous risks and uncertainties, including with respect to the risk that subsequent studies and ongoing or future clinical trials may not generate favorable data notwithstanding positive early clinical results and the risks associated with the evolving nature of the duration and severity of the COVID-19 pandemic and governmental and regulatory measures implemented in response to it. Furthermore, many other important factors, including those described in our Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission (the SEC) on April 8, 2022 under "Item 3.D. Risk Factors" and those set forth in the universal registration document of Nanobiotix filed with the French Financial Markets Authority (Autorité des Marchés Financiers – the AMF) on April 8, 2022, each as updated in our Half-Year Financial Report filed with the AMF and the SEC on September 8, 2021 (a copy of which is available on www.nanobiotix.com), as well as other known and unknown risks and uncertainties may adversely affect such forward-looking statements and cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

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