

April 11, 2022



Beyond Cancer™ Announces New Preclinical Data Presented at American Association for Cancer Research (AACR) Showing Ultra-High Concentration Nitric Oxide Therapy Anti-Tumor Effect

Data suggests ultra-high concentration gaseous NO (gNO) induced both innate and adaptive immune cell populations, and a decline in immune suppressor cells, which are indicative of an anti-tumor immune response

Supports the hypothesis for the observed rejection of secondary tumors in gNO-treated mice

Results provide foundation for further development as a potential therapy for solid tumors, with initiation of a first-in-human study expected in Q2 2022

GARDEN CITY, N.Y., April 11, 2022 (GLOBE NEWSWIRE) -- Beyond Cancer, Ltd., an affiliate of Beyond Air, Inc. (NASDAQ: XAIR) that is focused on developing ultra-high concentration nitric oxide (UNO) for the treatment of solid tumors, today announced promising new *in vivo* and *in vitro* data that support the potential of the company's novel gaseous nitric oxide (gNO) therapy to treat various types of solid tumors. These data were presented at the American Association for Cancer Research (AACR) Annual Meeting 2022.

"We are excited to present these new data that further support the mode of action for our gNO therapy to treat solid tumors and induce an innate and adaptive immune response. In addition, these new data show a dose dependent response in the ability of gNO to kill various types of cancer cells," stated Dr. Selena Chaisson, Chief Executive Officer and Director. "These new preclinical data for our gNO therapy provide support for the continued advancement of this program, which is on track to initiate a first-in-human study in the first half of 2022."

The *in vivo* study (abstract 1283) assessing the mode of action following a single 5-minute gNO treatment provided data showing an effect on the primary tumor 14 days post treatment. These data show that intratumoral injection of concentrations of gNO at 20,000 and 50,000 ppm led to increased recruitment of T cells, B cells, macrophages and dendrocytes to the primary tumor. An elevated number of T cells and B cells were also detected in the spleen and blood 21 days following gNO treatment. In addition, at the same timepoint, a marked reduction in the number of myeloid derived suppressor cells was seen in the spleen.

Results from the *in vitro* study (abstract 1848) show that exposure of six different cancer cell lines – including human ovarian and pancreatic and mouse lung, melanoma, colon, and breast– to ultra-high concentrations of gNO ranging from 10,000 ppm to 100,000 ppm for up

to 10 minutes resulted in a dose-dependent cytotoxic response. The higher concentration doses of gNO lead to near instant cell death, while the lower concentration doses required a longer exposure period to elicit cell death. Cell viability was assessed using two assays: XTT and clonogenic assay. After one minute of exposure to 25,000 ppm gNO, less than 10% viability was observed in all cell lines.

“We believe that together with the known ability of nitric oxide to activate and recruit the immune system, the data presented this year at AACR suggest that gNO may be a potent therapeutic agent for tumor treatment across a range of tumor types. Specifically, we saw gNO induce innate and adaptive immune cell populations and the reduction of immune suppressor cells, which we believe are indicative of an anti-tumor immune response that underlies the rejection of secondary tumors in gNO treated mice. We look forward to continuing to develop this exciting therapy,” stated Hila Confino, Chief Scientific Officer of Beyond Cancer.

Dr. Frederick Dirbas, Surgical Oncologist and Associate Professor of Surgery in Stanford's Department of Surgery and member of the Stanford Cancer Institute, commented, “Immunotherapy has shown so much promise in treating solid tumors that it is exciting to see where Nitric Oxide can potentially fit into this therapeutic space.”

The presentations detailing the *in vivo* and *in vitro* data presented at the AACR Annual Meeting, which are titled, “Single intra-tumoral injection of gaseous nitric oxide induces an adaptive immune response in a mouse CT-26 solid tumor model” (abstract 1283) and “Ultra-high concentrations of gaseous nitric oxide show rapid cytotoxic capabilities against colon, breast, pancreatic and other cancer cells in vitro” (abstract 1848) will be made available on the company's website ([click here](#)).

Details of the AACR presentations are as follows:

Title: 1283 – Single intra-tumoral injection of gaseous nitric oxide induces an adaptive immune response in a mouse CT-26 solid tumor model

Session: Clinical Research Excluding Trials – Immune Mechanisms Invoked by Other Therapies

Location: New Orleans Convention Center, Exhibit Halls D-H, Poster Section 32, Poster Board Number 5 on Monday Apr 11, 2022 9:00 AM - 12:30 PM CST

Participant: Hila Confino, PhD; Chief Scientific Officer, Beyond Cancer

Title: 1848 – Ultra-high concentrations of gaseous nitric oxide show rapid cytotoxic capabilities against colon, breast, pancreatic and other cancer cells in vitro

Session: Experimental and Molecular Therapeutics – Mechanisms of Drug Action 1

Location: New Orleans Convention Center, Exhibit Halls D-H, Poster Section 24, Poster Board Number 20 on Monday Apr 11, 2022 1:30 PM - 5:00 PM CST

Participant: Hila Confino, PhD; Chief Scientific Officer, Beyond Cancer

About Nitric Oxide (NO)

Nitric Oxide (NO) is a powerful molecule, naturally synthesized in the human body, proven to play a critical role in a broad array of biological functions. In the airways, NO targets the vascular smooth muscle cells that surround the small resistance arteries in the lungs. Currently, exogenous inhaled NO is used in adult respiratory distress syndrome, post certain cardiac surgeries, and persistent pulmonary hypertension of the newborn to treat

hypoxemia. Additionally, NO is believed to play a key role in the innate immune system and in vitro studies suggest that NO possesses anti-microbial activity not only against common bacteria, including both gram-positive and gram-negative, but also against other diverse pathogens, including mycobacteria, viruses, fungi, yeast, and parasites, and has the potential to eliminate multi-drug resistant strains.

About Beyond Air, Inc.

Beyond Air, Inc. is a clinical-stage medical device and biopharmaceutical company developing a revolutionary NO Generator and Delivery System, LungFit[®], that uses NO generated from ambient air to deliver precise amounts of NO to the lungs for the potential treatment of a variety of pulmonary diseases. The LungFit[®] can generate up to 400 ppm of NO, for delivery either continuously or for a fixed amount of time and has the ability to either titrate dose on demand or maintain a constant dose. The Company is currently applying its therapeutic expertise to develop treatments for pulmonary hypertension in various settings, in addition to treatments for respiratory tract infections that are not effectively addressed with current standards of care. Beyond Air is currently advancing its revolutionary LungFit[®] for clinical trials for the treatment of severe lung infections such as acute viral pneumonia (including COVID-19) and nontuberculous mycobacteria (NTM). Additionally, Beyond Air, through its affiliate Beyond Cancer, Ltd., is using ultra-high concentrations of NO with a proprietary delivery system to target certain solid tumors. For more information, visit www.beyondair.net.

About Beyond Cancer, Ltd.: UNO Therapy for Solid Tumors

Cancer is the second leading cause of death globally, with tumor metastases responsible for approximately 90% of all cancer-related deaths. Current cancer treatment modalities generally include chemotherapy, immunotherapy, radiation, and/or surgery. Nitric oxide at ultra-high concentrations has been reported to show anticancer properties and to serve as a chemosensitizer and radiotherapy enhancer. Based on its current findings, Beyond Cancer is developing treatment protocols using ultra-high nitric oxide concentrations to ablate primary tumors and treat metastatic disease. For more information, visit www.beyondcancer.com.

Forward Looking Statements

This press release contains “forward-looking statements” concerning inhaled nitric-oxide and the Company’s LungFit[®] product, including statements with regard to potential regulatory developments and the expected timing thereof, expected product launch for the Company’s LungFit[®] product and the timing thereof, and the potential impact on patients and anticipated benefits associated with its use. Forward-looking statements include statements about our expectations, beliefs, or intentions regarding our product offerings, business, financial condition, results of operations, strategies or prospects. You can identify such forward-looking statements by the words “anticipates,” “expects,” “intends,” “impacts,” “plans,” “projects,” “believes,” “estimates,” “likely,” “goal,” “assumes,” “targets” and similar expressions and/or the use of future tense or conditional constructions (such as “will,” “may,” “could,” “should” and the like) and by the fact that these statements do not relate strictly to historical or current matters. Rather, forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made. Because forward-looking statements relate to matters that have not yet occurred, these statements are inherently subject to risks and uncertainties that could cause our actual results to differ materially from any future results expressed or implied by the forward-looking statements.

These forward-looking statements are only predictions and reflect our views as of the date they are made with respect to future events and financial performance. Many factors could cause our actual activities or results to differ materially from the activities and results anticipated in forward-looking statements, including risks related to: the potential that regulatory authorities, including the FDA and EMA, may not grant or may delay approval for our product candidate; the impact of the COVID-19 pandemic on the FDA's review process; our approach to discover and develop novel drugs, which is unproven and may never lead to efficacious or marketable products; our ability to fund and the results of further pre-clinical and clinical trials; obtaining, maintaining and protecting intellectual property utilized by our products; our ability to enforce our patents against infringers and to defend our patent portfolio against challenges from third parties; our ability to obtain additional funding to support our business activities; our dependence on third parties for development, manufacture, marketing, sales, and distribution of products; the successful development of our product candidates, all of which are in early stages of development; obtaining regulatory approval for products; competition from others using technology similar to ours and others developing products for similar uses; our dependence on collaborators; our short operating history and other risks identified and described in more detail in the "Risk Factors" section of the Company's most recent Annual Report on Form 10-K and other filings with the SEC, all of which are available on our website. We undertake no obligation to update, and we do not have a policy of updating or revising, these forward-looking statements, except as required by applicable law.

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