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iBio Discovers New Panel of CD3 T-Cell Binding Antibodies Using its Patented AI Epitope Steering Platform

BRYAN, Texas, April 04, 2023 (GLOBE NEWSWIRE) -- iBio, Inc. (NYSEA:IBIO) (“iBio” or the “Company”), an AI-driven innovator of precision antibody immunotherapies, announced that a presentation given today by its VP & Head of Machine Learning & Platform Technologies, Matt Greving, Ph.D., during Carterra's "Unlocking High-Throughput Biology and Drug Discovery" symposium in San Diego, CA, revealed the discovery of a panel of CD3 T-cell binding antibodies, representing an important first step for the Company into bispecific immuno-oncology therapies.

T-cell-redirecting bispecific antibodies are a new class of therapeutic antibodies designed to simultaneously bind to T cells via CD3 and to tumor cells via tumor-specific antigens (“TSA”) or tumor-associated antigens (“TAA”), inducing T-cell-mediated killing of tumor cells.[1]

Early studies of CD3-based T-cell engagers showed promising clinical efficacy, but were hampered by severe dose-limiting toxicities, due in large part to anti-CD3 binders with high potency.[2] Another hurdle in the development of CD3-based T-cell engagers has been the often-observed lack of cross-reactivity with non-human primates. This has made it difficult to assess the potential of CD3 antibody therapies in humans, potentially delaying their clinical development.[3]

With the aim of overcoming these challenges, iBio employed its patented epitope steering technology to guide antibodies towards specific CD3 epitopes. The Company’s AI-based antibody optimizer, combined with its mammalian display technology broadened the range of CD3 affinities, identified antibodies with cross-reactivity to non-human primates and increased the humanness of the antibody sequences.

Dr. Greving explained, “Our leading epitope-steering and mammalian-display integration enabled efficient discovery of a diverse panel of CD3 antibodies. With our technology stack, we were able to overcome key challenges associated with CD3 antibody discovery, including identifying T-cell binding antibodies with non-human primate cross-reactivity.”

In response to the Company's latest AI platform success, iBio's Interim Chief Executive Officer and Chief Scientific Officer, Martin Brenner, DVM, Ph.D., affirmed that, “By combining two of our platform technologies, we were successful in generating anti-CD3 antibodies with highly desirable characteristics. By adding CD3-based T-cell engaging antibodies as a tumor cell killing modality, we now have a valuable option to tune efficacy and safety of our future and existing pipeline programs.”

References

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About iBio, Inc.

iBio develops next-generation biopharmaceuticals using computational biology and 3D-modeling of subdominant and conformational epitopes, prospectively enabling the discovery of new antibody treatments for hard-to-target cancers and other diseases. iBio's mission is to decrease drug failures, shorten drug development timelines, and open up new frontiers against the most promising targets. For more information, visit www.ibioinc.com.

FORWARD-LOOKING STATEMENTS

Certain statements in this press release constitute "forward-looking statements" within the meaning of the federal securities laws. Words such as "may," "might," "will," "should," "believe," "expect," "anticipate," "estimate," "continue," "predict," "forecast," "project," "plan," "intend" or similar expressions, or statements regarding intent, belief, or current expectations, are forward-looking statements. These forward-looking statements are based upon current estimates and assumptions and include statements regarding the guarantee of broad coverage of the Company's proprietary, epitope-steering antibody discovery engine and the engine providing iBio a competitive advantage. While the Company believes these forward-looking statements are reasonable, undue reliance should not be placed on any such forward-looking statements, which are based on information available to us on the date of this release. These forward-looking statements are subject to various risks and uncertainties, many of which are difficult to predict that could cause actual results to differ materially from current expectations and assumptions from those set forth or implied by any forward-looking statements. Important factors that could cause actual results to differ materially from current expectations include, among others, the Company's ability to continue to execute its growth strategy; its ability to obtain regulatory approvals for commercialization of its product candidates, or to comply with ongoing regulatory requirements; regulatory limitations relating to its ability to promote or commercialize its product candidates for specific indications; acceptance of its product candidates in the marketplace and the successful development, marketing or sale of products; its ability to

maintain its license agreements; the continued maintenance and growth of its patent estate; its ability to obtain or maintain the capital or grants necessary to fund its research and development activities and whether the Company will incur unforeseen expenses or liabilities or other market factors; successful compliance with governmental regulations applicable to its manufacturing facility; competition; its ability to retain its key employees or maintain its NYSE American listing; and the other factors discussed in the Company's filings with the SEC including the Company's Annual Report on Form 10-K for the year ended June 30, 2022 and the Company's subsequent filings with the SEC on Forms 10-Q and 8-K. The information in this release is provided only as of the date of this release, and the Company undertakes no obligation to update any forward-looking statements contained in this release on account of new information, future events, or otherwise, except as required by law.

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