



2215 Yukon St .  
Vancouver, BC  
Canada, V5Y 0A1  
T 1. 604.559.9005  
abcellera.com

## NEWS RELEASE

# AbCellera Presents Data on T Cell Engager Platform at AACR 2022

4/8/2022

VANCOUVER, British Columbia--(BUSINESS WIRE)-- **AbCellera** (Nasdaq: ABCL), a technology company focused on next-generation antibody discovery, today announced the release of data on its new T cell engager platform at the American Association for Cancer Research (AACR) 2022 Annual Meeting. AbCellera's poster presentation describes the discovery, characterization, and validation of a diverse panel of CD3-binding antibodies that can be used to develop bispecific CD3 T cell engagers for new cancer treatments.

"T cell engagers are widely recognized for their tremendous potential as precision oncology therapeutics. However, a limited pool of available CD3-binding antibodies and technological challenges in engineering bispecifics have hindered development, leading to many first-generation molecules with poor efficacy or safety," said Bo Barnhart, Ph.D., VP, Translational Research at AbCellera. "Our discovery engine has allowed us to build a panel of hundreds of diverse and fully human CD3-binding antibodies. Combined with our OrthoMab™ bispecific platform, this enables rapid screening of many combinations of CD3- and tumor antigen-binding antibodies to find pairs with optimal biological function and good developability."

CD3 T cell engagers, which bind to T cells and cancer cells simultaneously, are able to redirect T cells to tumor cells, regardless of T cell specificity. Two different parental antibodies, a CD3-targeting antibody that fine-tunes T cell activation and a tumor-targeting antibody with high specificity for cancer cells, are needed to create an optimal bispecific T cell engager. Highly diverse panels of developable and functionally validated parental antibodies increase the probability of finding effective and manufacturable CD3 T cell engagers and reduce the need for downstream engineering to eliminate liabilities.

AbCellera used its technology stack to discover a panel of CD3-binding antibodies from humanized mice.

Bioinformatic analysis revealed high sequence diversity, including somatic hypermutation, a range of CDR3 lengths, and diverse V gene usage. The panel was also found to be functionally diverse, including a broad range of CD3 affinities and T cell activation potencies. Biophysical characterization demonstrated that AbCellera's CD3-binding antibodies have favorable developability properties, which may reduce the time and technical risks of downstream protein engineering, including low mean hydrophobicity, self-association, and polyspecificity.

AbCellera used its clinically validated bispecifics platform, OrthoMab™, to pair the CD3-binding antibodies with a single EGFR-binding arm to validate the panel in bispecific formats. The resulting bispecific antibodies activated T cells with a range of potencies and led to T cell-mediated tumor cell killing of EGFR-expressing cell lines.

"The data from our T cell engager program, which we initiated in late 2021, show the power and speed of AbCellera's robust platform," said Neil Berkley, AbCellera's Chief Business Officer. "Our panel of CD3-binding antibodies offers partners the ability to unlock this promising modality and accelerate their oncology programs by streamlining the development of new cancer treatments."

Details on AbCellera's presentation at AACR are as follows:

Title: Redirecting T cells to tumor targets with functionally diverse CD3-binding antibodies

Presenter: Bryan (Bo) C. Barnhart, Ph.D., VP Translational Research, AbCellera

Session: Antibodies and Immune Therapies – Abstract #312

Date and time: Sunday, April 10 at 1:30-5:00 PM CDT

The poster is available for viewing [here](#).

About AbCellera Biologics Inc.

AbCellera is a technology company that searches, decodes, and analyzes natural immune systems to find antibodies that its partners can develop into drugs to prevent and treat disease. AbCellera partners with drug developers of all sizes, from large pharmaceutical to small biotechnology companies, empowering them to move quickly, reduce cost, and tackle the toughest problems in drug development. For more information, please visit [\*\*www.abcellera.com\*\*](http://www.abcellera.com).

AbCellera Forward-looking Statements

This press release contains forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements are based on management's current beliefs and assumptions and on information currently available to management. All statements contained in this release other than statements of historical fact are forward-looking statements, including statements regarding our ability to develop, commercialize and achieve market acceptance of our current and planned products and services, our research and development efforts, and other matters regarding our business strategies, use of capital, results of operations and financial position, and plans and objectives for future operations.

In some cases, you can identify forward-looking statements by the words "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance, or achievements to be materially different from the information expressed or implied by these forward-looking statements. These risks, uncertainties and other factors are described under "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in the documents we file with the Securities and Exchange Commission from time to time. We caution you that forward-looking statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. As a result, the forward-looking statements may not prove to be accurate. The forward-looking statements in this press release represent our views as of the date hereof. We undertake no obligation to update any forward-looking statements for any reason, except as required by law.

Source: AbCellera Biologics Inc.

View source version on **businesswire.com**: **<https://www.businesswire.com/news/home/20220408005017/en/>**

Media: Jessica Yingling, Ph.D.; **[media@abcellera.com](mailto:media@abcellera.com)**, +1(236)521-6774

Business Development: Neil Berkley; **[bd@abcellera.com](mailto:bd@abcellera.com)**, +1(604)559-9005

Investor Relations: Melanie Solomon; **[ir@abcellera.com](mailto:ir@abcellera.com)**, +1(778)729-9116

Source: AbCellera Biologics Inc.