



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

## NEWS RELEASE

# AbCellera Presents Data on T-Cell Engagers Against Four Tumor Targets at AACR 2024

4/8/2024

---

Data show how AbCellera is expanding the reach of T-cell engagers with:

- CD3-binding antibodies that consistently generate T-cell engagers with potent tumor-cell killing and low cytokine release across multiple tumor targets, including PSMA, B7-H4, and 5T4
- Costimulatory CD28-binding antibodies that stimulate T cells without superagonist activity
- Highly specific T-cell engagers for the peptide-MHC target MAGE-A4

VANCOUVER, British Columbia--(BUSINESS WIRE)-- **AbCellera** (Nasdaq: ABCL) today announced new data on its T-cell engager (TCE) programs at the American Association for Cancer Research® (AACR) Annual Meeting 2024 at the San Diego Convention Center, with three posters being presented on April 8 and one on April 9. Together, AbCellera's data demonstrate that it is well-positioned to advance TCEs as a drug class by widening the therapeutic window, enhancing potency, and broadening the accessible target space.

"TCEs are among the most promising new modalities in cancer therapy, but limitations in efficacy and safety have been barriers to realizing their potential for solid tumor indications," said Bo Barnhart, Ph.D., VP, Translational Research at AbCellera. "Our data illustrate that we can repeatedly generate TCEs that maximize tumor-cell killing without inducing excessive cytokine release. Reducing the risk associated with CD3 engagement could improve efficacy both by widening the therapeutic window and by creating opportunities to further enhance potency through co-stimulatory modalities."

AbCellera's poster presentations, which are available for viewing [here](#), describe how AbCellera is:

**Widening the therapeutic window** : AbCellera's data describe the generation of TCEs for three solid tumor targets, PSMA, B7-H4, and 5T4, with functional profiles that are differentiated from clinical benchmarks. These molecules were engineered using a specific set of rare CD3-binding antibodies that consistently show potent tumor-cell killing and low cytokine release across multiple targets, demonstrating their potential to expand the therapeutic window across solid tumor indications.

**Enhancing potency** : TCEs that engage the CD28 costimulatory receptor can enhance T-cell activation, proliferation, and anti-tumor activities, particularly in solid tumors. The data show that AbCellera's IgG and heavy chain-only CD28-binding antibodies do not display superagonist activity – a property associated with toxicity. Integrating costimulatory building blocks into AbCellera's TCE repertoire may enable development of molecules with enhanced potency for difficult-to-treat cancers.

**Broadening the accessible target space** : The target repertoire for TCEs has been restricted to proteins expressed on the surface of cancer cells. Intracellular peptides displayed on MHC class I (pMHCs) would greatly expand the target pool for TCEs. However, development of TCEs against pMHCs has been limited due to the high degree of target specificity required. Data illustrate how AbCellera is unlocking this target class by generating molecules with high specificity for MAGE-A4-pMHC, which showed little to no binding to hundreds of off-target pMHCs.

"Our platform for creating precision TCEs to address indications in cancer and autoimmunity provides a strong foundation for both internal programs and strategic partnerships," said Murray McCutcheon, Ph.D., SVP, Partnering at AbCellera. "We look forward to advancing these programs with the aim of delivering powerful new medicines for patients."

## About AbCellera's T-Cell Engager Platform

CD3 T-cell engagers have the potential to be a cornerstone of cancer treatment. They guide the immune system to find and eliminate cancer cells by binding the CD3 protein on cancer-killing T cells and tumor targets at the same time. However, development of T-cell engagers has been limited due to challenges with efficacy and safety. To address these challenges, AbCellera developed a T-cell engager platform that includes novel CD3-binding antibodies to expand the therapeutic window for this modality, costimulatory building blocks to enhance efficacy for difficult-to-treat cancers, and discovery capabilities to broaden the range of T-cell engagers to complex peptide-MHC tumor targets. AbCellera is leveraging its platform to unlock the full potential of this modality and bring powerful new cancer medicines to patients.

## About AbCellera Biologics Inc.

**AbCellera** (Nasdaq: ABCL) discovers and develops antibody medicines for indications across therapeutic areas including cancer, metabolic and endocrine conditions, and autoimmune disorders. AbCellera's engine integrates technology, data science, infrastructure, and interdisciplinary teams to solve the most challenging antibody discovery problems. AbCellera is focused on advancing an internal pipeline of first-in-class and best-in-class programs and collaborating on innovative drug development programs with partners. 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.

### Inquiries

Media: Kathleen Reid; [media@abcellera.com](mailto:media@abcellera.com), +1(236)521-6774

Business Development: Murray McCutcheon, Ph.D.; [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.