

Portage Biotech (Nasdaq: PRTG):

Four clinical compounds with potential to meaningfully improve immunotherapy, successful team of drug developers, multiple clinical catalysts in 2023

Addressing a High Unmet Need

Portage's mission is to expand the number of patients who derive long-term benefit from immunotherapy by advancing its pipeline of first-in-class/best-in-class product candidates. Despite the huge commercial success of PD-1 inhibitors such as Keytruda® and Opdivo®, and widespread use of checkpoint inhibitors in general (>\$35B/yr market), 70-80% of patients have limited or no response to existing therapies.

Target Populations Include:

- Patients who have become resistant to checkpoint inhibitors
- Patients who historically have not benefited from checkpoint inhibitor treatment (i.e., PD-L1 negative tumors)
- Patients who are treatment naïve (i.e., have not received checkpoint inhibitor treatment)

Our Unique Business Model



- **Team of industry veterans.** The Portage team has collectively contributed to 10 oncology drug approvals including the first two approved checkpoint inhibitors and have deep biological understanding and experience to identify the most promising therapies and development strategies.



- **High profile collaborations.** Examples to date include a clinical collaboration with Merck and a Cooperative Research and Development Agreement (CRADA) with the U.S. National Cancer Institute.



- **Strong connections to academics and industry partners.** Portage's drug candidates and development programs are vetted by prospective pharma partners leveraging the Company's industry network for future engagement as anticipated development milestones are achieved.



- **Focused on benefitting patients and generating superior shareholder returns.** The Company's lean business model features a network of consultants and partners who support Portage's day-to-day R&D activities. This allows Portage to advance multiple products through clinical trials rapidly at a relatively low cost.

Current Clinical Programs

Invariant Natural Killer T Cell (iNKT) Engager Platform

- iNKT cells are an underappreciated immune cell type that bridge the innate and adaptive immune systems. Many people mistake iNKT cells as NK or T cells, but they are neither, and represent a novel immunotherapy target.
- iNKTs perform immune surveillance in tissues, and when depleted in animal experiments, those animals develop cancer.
- When stimulated, iNKT cells can promote a multi-pronged attack on the tumor and correct the suppressive tumor microenvironment (TME), which helps to overcome tumor defense mechanisms from immune attack.

Current Clinical Programs (cont.)

Invariant Natural Killer T Cell (iNKT) Engager Platform (cont.)

- Portage's proprietary liposomal formulation of its lead iNKT small molecule engager (PORT-2) has been shown to increase PD-L1 expression on tumor cells in early clinical studies. If the Company's Phase 1/2 study validates this ability to increase PD-L1 expression, the value of PORT-2 could be significant.
- PORT-2 has shown the ability to shrink tumors as a single agent, and may be used alone or in combination with checkpoint inhibitors to improve treatment outcomes. By increasing the number of patients that respond favorably to checkpoint inhibitor therapy, PORT-2 has potential to substantially increase the checkpoint inhibitor market.
- Our ongoing study of PORT-2 is a multi-arm Phase 1/2 trial evaluating PORT-2 for patients with NSCLC and refractory melanoma in collaboration with Merck's anti-PD-1 therapy, Keytruda®.
- Additional strategies of our iNKT platform include combining our small molecule engager with an antigen (PORT-3) to establish immune priming and boosting and bolster immune recognition, and utilizing iNKT agonists to augment cell therapy.

Adenosine Antagonist Platform

- Portage is advancing four best-in-class oral small molecule adenosine inhibitors to explore how adenosine-targeting approaches could improve immune response for patients with multiple cancer and non-cancer indications:

PORT-6

An adenosine receptor type 2A (A2A) inhibitor to treat solid tumors. PORT-6 is expected to enter clinical trials in Q2 2023.

PORT-7

An adenosine receptor type 2B (A2B) inhibitor to treat solid tumors, PORT-7 has an approved IND is expected to enter clinical trials in Q3 2023.

PORT-8

A novel dual inhibitor of adenosine receptors 2A and 2B (A2A/A2B) to address solid tumors, ready for IND enabling work.

PORT-9

A gut selective A2B inhibitor to address gastrointestinal cancers. PORT-9 is ready for IND enabling work.

- A Phase 1a/1b study will explore PORT-6 and PORT-7 as monotherapies in a biomarker defined patient population (i.e., those dependent on adenosine signaling). The study will also evaluate PORT-6 and PORT-7 in combination with one another and possibly in combination with other Portage assets. The second part of the study will explore the efficacy of PORT-6 and PORT-7 when given as monotherapies and in combination vs. standard of care.

Future Impact

With four potentially first/best-in class small molecule therapies in the clinic, the Company expects to report multiple efficacy data catalysts in eight tumor types over the next 1-2 years. Leveraging our unique business model and drug development network with major pharmaceutical companies, each asset and platform has potential for successful licensing, acquisition and/or partnering. Ultimately, this could reproduce the success the company has proven with Pfizer's acquisition of Biohaven for >\$11B (originally funded by Portage).

Learn More About Us

Visit our website: <https://www.portagebiotech.com/>

- To learn more about Portage's invariant natural killer T cell agonists download our [iNKT fact sheet](#).
- To learn more about Portage's adenosine receptor antagonists download our [adenosine fact sheet](#).

