

RESEARCHERS AT STANFORD UNIVERSITY PUBLISH NEW PRECLINICAL DATA SHOWING ACTIVITY OF HMBD-002 IN COMBINATION WITH RADIOTHERAPY

Melbourne, Australia – 23 July 2025: Percheron Therapeutics Limited (ASX: PER) ('the Company'), an international biotechnology company focused on the development of novel therapies for oncology and rare diseases, is pleased to share new preclinical data for its investigational cancer drug, HMBD-002.

The data was recently published in the peer-reviewed scientific journal, *Cell Reports*, and describes a series of experiments which included combining HMBD-002 with radiotherapy in an animal model of squamous cell carcinoma of the head and neck (SCCHN)¹. The work was performed through a collaboration with Stanford University, in Palo Alto, CA, under the oversight of Professor Quynh-Thu Le, a leading researcher in this field.

Key Points

- SCCHN comprises a group of cancers affecting the mouth, throat, larynx, and neck. They represent approximately 4% of all cancers diagnosed in the United States, or approximately 70,000 patients per annum. Radiotherapy remains a key component of most treatment algorithms for SCCHN.
- The Stanford team has shown that treatment with radiotherapy increases the level of VISTA expression on both tumour cells and immune cells in mouse models of SCCHN and in patients with the disease². It is thought that upregulation of VISTA represents an important resistance mechanism to radiotherapy, suppressing the activity of the immune system in the irradiated tumour.
- Inhibition of VISTA, including specifically via administration of HMBD-002, substantially improves the activity of radiotherapy in mouse models of SCCHN. It appears to do this by shifting the immune system to a 'pro-inflammatory (M1)' state, where it is better able to attack irradiated cancer cells. In the well-established *MOC2* model of SCCHN, addition of HMBD-002 extended median survival to 35.5 days, versus 27 days with radiotherapy alone (*p* < 0.05).
- Prior research combining radiotherapy with inhibition of PD-1, another immunooncology target, has generally been disappointing. These data suggest that VISTA may be a more impactful target for therapeutic development.

¹ DK Nambiar et al. (2025) Cell Reports 44(7):115893

² VISTA (v-linked immunoglobulin suppressor of T-cell activation) is the molecular target of HMBD-002

"This is very encouraging data," commented Percheron CEO, Dr James Garner. "Radiotherapy is a critical therapeutic tool in the treatment of many cancers and is very widely used, but its efficacy is often suboptimal, and recurrence is common. These data suggest that addition of a VISTA inhibitor such as HMBD-002 could significantly potentiate the effect of radiotherapy, leading to better outcomes for patients."

He added, "as the Percheron team considers different approaches to the further clinical development of HMBD-002, this data provides a very informative and very timely input into our deliberations. The Stanford team, under Professor Le's oversight, are comprised of leading experts in this field, and we look forward to discussing the work further with them in due course."

Background to This Research

Investigation of new cancer drugs is typically performed initially in animal models of the disease. Doing so is faster and more economical than moving directly into human trials and reduces the ethical challenges associated with exposing patients to drugs with uncertain effects.

Typically, standardised samples of human tumours are surgically grafted onto mice, resulting in a 'PDX model' (patient-derived xenograft). The treatment in question is then administered to the mice, sometimes in comparison to other treatments, and usually in comparison to a 'control group' which receives only inert treatment. Researchers will typically measure parameters such as the size of the tumour and the survival of the mice, as well as safety parameters and potential biomarkers of activity.

Mouse models are never entirely predictive of efficacy in human patients, but they do provide very useful insights in the development of new medicines and are particularly useful in eliminating ineffective therapeutic strategies.

In this experiment, a *MOC2* model of SCCHN was primarily used to explore the activity of HMBD-002 in combination with radiotherapy. Similar effects were also seen in a *B16BL6* melanoma model and in a *4T1* breast cancer model, although the difference was less pronounced due to the greater efficacy of radiotherapy alone in these tumours.

Implications for Future Development

The Stanford data supports the potential for combination of HMBD-002 with radiotherapy in the treatment of cancers such as SCCHN, breast cancer, lung cancer, or melanoma. However, further examination of other data, and discussion with clinicians, will be required before the Company is able to definitively evaluate this opportunity in comparison to other potential clinical trial approaches.

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About Percheron Therapeutics Limited

Percheron Therapeutics Limited [ASX: PER | US OTC: PERCF] is a publicly listed biotechnology company focused on the development and commercialisation of novel therapies for oncology and rare diseases. The company's lead program is HMBD-002, a monoclonal antibody targeting the immune checkpoint regulator, VISTA. HMBD-002 has completed a phase I clinical trial in patients with advanced cancer, which has shown the drug to be generally safe and well tolerated, and Percheron aims to commence further clinical trials in CY2026. For further information, please see our website at www.PercheronTx.com, or email info@PercheronTx.com.

This announcement has been authorized for release to the Australian Securities Exchange by the Board of Directors.