

ASX ANNOUNCEMENT

14 October 2025

Co-PSMA trial achieves primary endpoint

Clarity Pharmaceuticals (ASX: CU6) ("Clarity" or "Company"), a clinical-stage radiopharmaceutical company with a mission to develop next-generation products that improve treatment outcomes for patients with cancer, is pleased to announce that the Co-PSMA (NCT06907641)¹ Investigator-Initiated Trial (IIT), led by Prof Louise Emmett at St Vincent's Hospital Sydney, has achieved its primary endpoint with a statistically significant higher number of prostate-specific membrane antigen (PSMA)-positive prostate cancer lesions detected using ⁶⁴Cu-SAR-bisPSMA compared to standard-of-care (SOC) ⁶⁸Ga-PSMA-11 positron emission tomography/computed tomography (PET/CT) in patients with low prostate-specific antigen (PSA) levels.

Co-PSMA's official study title is "Comparative performance of ⁶⁴Copper [⁶⁴Cu]-SAR-bisPSMA vs. ⁶⁸Ga-PSMA-11 PET CT for the detection of prostate cancer recurrence in the setting of biochemical failure following radical prostatectomy". This Phase II IIT is evaluating the performance of Clarity's diagnostic product, ⁶⁴Cu-SAR-bisPSMA, in comparison to SOC ⁶⁸Ga-PSMA-11 in 50 patients with low PSA who are candidates for curative salvage therapy. Eligible patients were required to have had radical prostatectomy with no salvage therapy and a PSA level between 0.2 and 0.75 ng/mL.

The Co-PSMA trial has successfully met its primary endpoint, demonstrating that ⁶⁴Cu-SAR-bisPSMA PET/CT detects significantly more lesions per patient than the SOC, ⁶⁸Ga-PSMA-11 PET/CT. This result supports the hypothesis that ⁶⁴Cu-SAR-bisPSMA can improve early detection of recurrence and staging of prostate cancer in patients with low PSA who are candidates for curative salvage therapy. Full analysis of all data generated in the Co-PSMA trial is underway, and results of this study will be presented at an upcoming international conference.

The Co-PSMA topline results corroborate findings from the COBRA trial², which investigated the diagnostic performance of ⁶⁴Cu-SAR-bisPSMA in patients with biochemical recurrence (BCR) of prostate cancer who had a negative or equivocal SOC scan at study entry. In the COBRA study, a subset of participants underwent follow-up SOC PSMA PET imaging. Only 60% of these participants had a positive SOC PSMA PET, while 70% of participants had a positive ⁶⁴Cu-SAR-bisPSMA PET on same-day imaging and 90% on next-day imaging. The number of lesions across all participants (average sum of lesions across all readers) identified by ⁶⁴Cu-SAR-bisPSMA was also higher (26.3 lesions on same-day imaging, 52.6 on next-day imaging) than that detected by SOC PET agents (20 lesions). The COBRA trial results showed that ⁶⁴Cu-SAR-bisPSMA was able to identify lesions more than 6 months earlier than SOC PSMA PET agents, with 6 months being the last follow-up visit for that trial.

The Co-PSMA trial further builds on the growing body of evidence of the enhanced diagnostic performance of ⁶⁴Cu-SAR-bisPSMA compared to SOC PSMA PET agents, which are known to have low sensitivity, especially in patients with low PSA levels^{3,4}. Improvements in sensitivity, as with all diagnostic agents, play a pivotal role in guiding more informed treatment decisions, enabling earlier and more accurate detection of prostate cancer recurrence and ultimately improving patient outcomes.

Dr Alan Taylor, Executive Chairperson of Clarity Pharmaceuticals, commented: "Achieving the primary endpoint in the Co-PSMA trial, which was a head-to-head trial against a SOC competing product, is yet another important step in the development of ⁶⁴Cu-SAR-bisPSMA as we look to further validate this agent as best-in-class through two registrational trials with two Fast Track Designations (FTDs) under our belt for diagnostic applications and a strong focus on commercialisation.

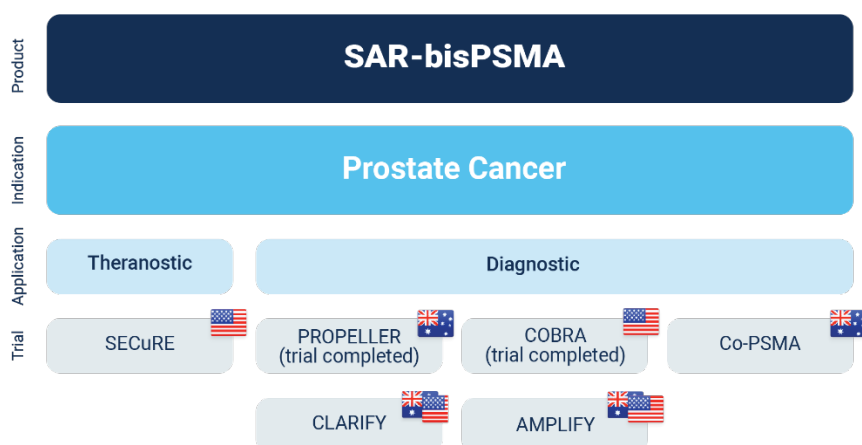
"We look forward to Prof Emmett releasing the full Co-PSMA trial data at world-leading congresses as we continue to adhere to the highest standards of clinical research in our aspirations to bring a best-in-class diagnostic option to men with prostate cancer with clear evidence of superiority. We have already seen in the first-in-human PROPELLER trial an improved diagnostic performance of ⁶⁴Cu-SAR-bisPSMA compared to ⁶⁸Ga-PSMA-11 on same-day imaging, including a higher number of lesions identified and 2-3 times higher tumour uptake and tumour-to-background ratio⁵. We then showed in the COBRA trial that approximately twice the amount of lesions was

identified on ^{64}Cu -SAR-bisPSMA PET on next-day vs. same-day imaging, and vs. SOC PSMA PET². ^{64}Cu -SAR-bisPSMA also allowed for the identification of lesions in the 2-mm range, something that SOC PSMA PET agents often fail to achieve^{2, 6-9}. This improvement was driven by a substantially increased tumour-to-background ratio and lesion uptake over time with next-day imaging².

"The current market for PSMA PET imaging in the US alone is around US\$2 billion per year, and this is expected to further grow to over US\$3 billion by 2029. However, this entire market is currently served by products that have low sensitivity, while the development pipeline of new products, excluding ^{64}Cu -SAR-bisPSMA, offers no differentiation from the existing agents, with some new entrants commercialising the unpatented ^{68}Ga -PSMA-11 agent, which has been capitalised on by three separate groups already. We believe that with the clinical and logistical benefits offered by ^{64}Cu -SAR-bisPSMA we could not only become the new SOC in PSMA PET but grow the market opportunity further by diagnosing prostate cancer earlier, while lesions are still very small.

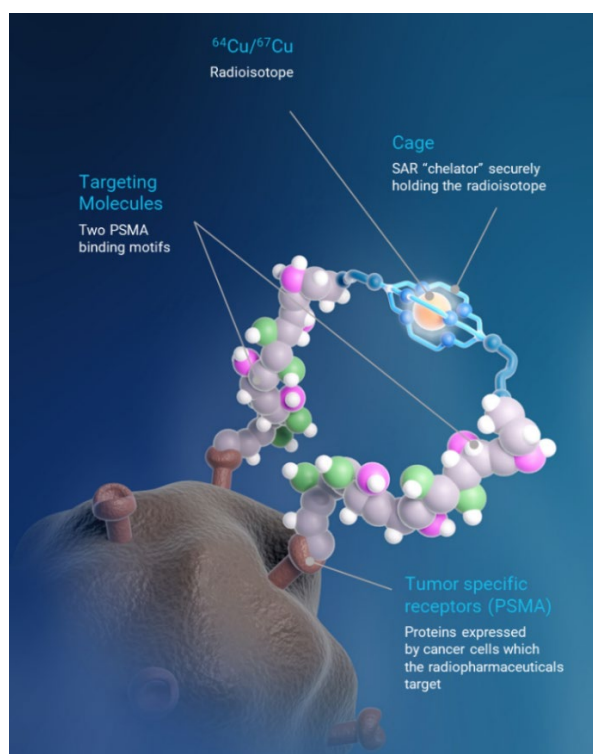
"We look forward to continuing to work with Prof Emmett, a world-renowned thought leader in the radiopharmaceutical space, in our home city of Sydney on progressing clinical development of the ^{64}Cu -SAR-bisPSMA product, including our CLARIFY and AMPLIFY Phase III trials. This partnership will ensure we continue to generate the highest quality of data supporting our New Drug Applications (NDAs) to the US Food and Drug Administration (FDA) as the next step towards our mutual goal of improving treatment outcomes for men with prostate cancer."

Overview of Clarity's SAR-bisPSMA clinical trial program



About SAR-bisPSMA

SAR-bisPSMA derives its name from the word "bis", which reflects a novel approach of connecting two PSMA-targeting agents to Clarity's proprietary sarcophagine (SAR) technology that securely holds copper isotopes inside a cage-like structure, called a chelator. Unlike other commercially available chelators, the SAR technology prevents copper leakage into the body. SAR-bisPSMA is a Targeted Copper Theranostic (TCT) that can be used with isotopes of copper-64 (Cu-64 or ^{64}Cu) for imaging and copper-67 (Cu-67 or ^{67}Cu) for therapy.



Disclaimer

^{64}Cu -SAR-bisPSMA is an unregistered product. The safety and efficacy of ^{64}Cu -SAR-bisPSMA have not been assessed by health authorities such as the US FDA or the Therapeutic Goods Administration (TGA). There is no guarantee that this product will become commercially available.

About Prostate Cancer

Prostate cancer is the second most common cancer diagnosed in men globally and the fifth leading cause of cancer death in men worldwide¹⁰. Prostate cancer is the second-leading causes of cancer death in American men. The American Cancer Institute estimates in 2025 there will be about 313,780 new cases of prostate cancer in the US and around 35,770 deaths from the disease¹¹.

About Clarity Pharmaceuticals

Clarity is a clinical stage radiopharmaceutical company focused on the treatment of serious diseases. The Company is a leader in innovative radiopharmaceuticals, developing Targeted Copper Theranostics based on its SAR Technology Platform for the treatment of cancers.

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This announcement has been authorised for release by the Executive Chairperson.