RACURA ONCOLOGY

ASX Announcement

Racura Oncology and Emory University Collaborate to Study (E,E)-bisantrene in Osimertinib Resistant EGFR Mutated Non-Small Cell Lung Cancer

- Collaborative program led by Prof. Shi-Yong Sun, a recognised world-leader in osimertinib resistant lung cancer biology
- Provides Racura access to Emory's unique osimertinib resistant cell and mouse non-small cell lung cancer (NSCLC) models and expertise
- Program supports the HARNESS-1 clinical trial of (E,E)-bisantrene (RC220) aimed at delaying or preventing resistance to osimertinib arising in EGFRm NSCLC patients.

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14 January 2026 – Racura Oncology Limited ("Racura") is pleased to announce that it has commenced a collaboration with Emory University (Atlanta, GA, USA) to study (E,E)-bisantrene (RCDS1) in osimertinib resistant epidermal growth factor receptor mutated (EGFRm) non-small cell lung cancer (NSCLC).

Preliminary data from the collaboration has demonstrated significant synergy between osimertinib and RC220 in the established HC827/AR osimertinib resistance lung cancer mouse model (Figure 1).[1]

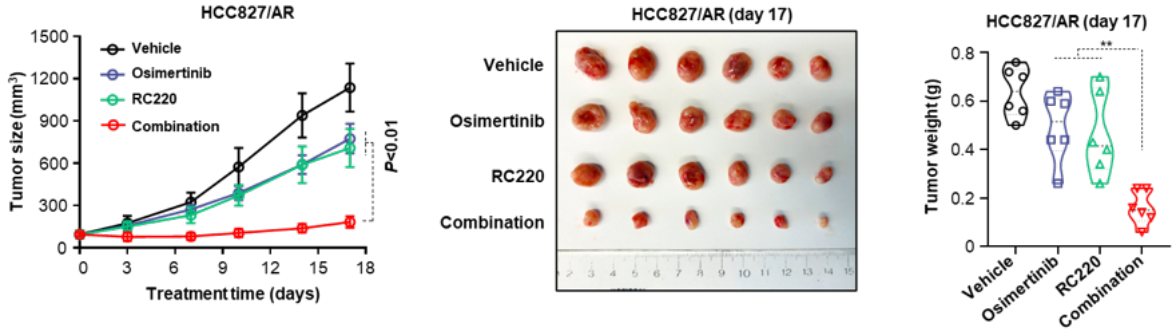

Figure 1. Osimertinib-resistant EGFRm NSCLC (HCC827/AR) tumours in mice treated with either vehicle control, osimertinib, RC220 (E,E-bisantrene), or the combination of RC220 and osimertinib (p-value < 0.01).

Osimertinib (Tagrisso®; AstraZeneca) is the current standard of care treatment for NSCLC with defined EGFR mutations.[2] Tagrisso® is a 3rd generation EGFRm tyrosine kinase inhibitor (TKI) with global sales of greater than US$7 billion in 2025 and projected to grow to US$13.9 billion by 2029.[3]

While osimertinib is effective at improving overall survival (OS) of EGFRm NSCLC patients, acquired resistance to treatment emerges in nearly all patients after a period. Racura Oncology recently announced a Phase 1a/b clinical trial (HARNESS-1) to assess the safety, tolerability, pharmacokinetics, and efficacy of RC220 (E,E-bisantrene, RCDS1) in combination with Tagrisso® in EGFRm NSCLC patients with emerging osimertinib therapy resistance (ASX Announcement: 26 November 2025). The combination aims to extend progression-free and overall survival in patients by targeting osimertinib resistant sub-clones soon after emergence.

Leading the collaboration is Professor Shi-Yong Sun, the David A. Cole Family Professor and GRA Distinguished Cancer Scientist at the Winship Cancer Institute, Emory University (Atlanta, USA). Prof. Sun has published extensively on the molecular mechanisms that drive resistance to osimertinib in

EGFRm NSCLC. Importantly, he and his team have deep knowledge on acquired EGFRm TKI resistance in NSCLC and have published several key papers on the critical importance of MYC[4], h-TERT/telomerase[5] and topoisomerase IIα[1] in the development of acquired osimertinib resistance. Crucially, these osimertinib resistance pathways are known targets of (E,E)-bisantrene (ASX announcement: 2 October 2025). Additional insights into the mechanism of action of (E,E)-bisantrene gained from the collaboration will further strengthen Racura's scientific foundation and support ongoing and future discussions with key opinion leaders, regulators, and pharmaceutical partners.

Racura Oncology Vice President of Research, Professor Michael Kelso commented: *"Racura is very fortunate to be collaborating with Prof. Sun and his group at Emory. Their expertise is invaluable for deeply understanding the biology that explains the impressive efficacy we see when (E,E)-bisantrene is combined with osimertinib in EGFRm NSCLC."*

Emory University, Professor Shi-Yong Sun commented: *"I am very happy to be undertaking this collaboration with the team from Racura Oncology. Bisantrene appears to offer a unique opportunity to target osimertinib resistance sub-clones before they lead to treatment failure."*

-ENDS-

References

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3. Sulivan & Frost. Innovative Small Molecule Drug Market Report. (2024).

4. Zhu, L., Chen, Z., Zang, H., Fan, S., Gu, J., Zhang, G., D-Y Sun, K., Wang, Q., He, Y., Owonikoko, T. K., Ramalingam, S. S. & Sun, S-Y. Targeting c-Myc to overcome acquired resistance of EGFR mutant NSCLC cells to the third generation EGFR tyrosine kinase inhibitor, osimertinib. *Cancer Res.* **81** (2021) 4822–4834.

5. Chen, Z., Vallega, K. A., Wang, D., Quan, Z., Fan, S., Wang, Q., Leal, T., Ramalingam, S.S., & Sun, S-Y. Inhibition of hTERT/telomerase/telomere mediates therapeutic efficacy of osimertinib in EGFR mutant lung cancer. *J. Exp. Med.* **221** (2024) e20240435.

Q&A

Why is Racura undertaking additional preclinical research in EGFRm NSCLC if the HARNESS-1 clinical trial is already underway?

This collaborative project is of major strategic importance to Racura Oncology, as Professor Sun's publications are foundational to the HARNESS-1 EGFRm NSCLC clinical program. This research complements our HARNESS-1 trial by further characterising the underlying biology and mechanism(s) of action of RC220, as well as helping optimisation of the clinical program (e.g. dosage regimens, etc). This research will also strengthen our preclinical data package for regulatory filings and commercial discussions with large pharmaceutical partners.

Why collaborate with Emory University?

The Winship Cancer Institute at Emory University is one of the leading global cancer research institutes. Professor Sun is a world-leading authority on deciphering the resistance mechanisms lung cancer uses to escape EGFRm tyrosine kinase inhibitors (TKIs) such as osimertinib. His team has a strong track record in conducting high-quality translational and preclinical research in this area. Collaborating with a leading global research centre and a renowned professor provides access to specialised capabilities, models, and scientific insight that complement Racura's internal scientific and clinical expertise.

How will this collaboration support future partnering or licensing discussions?

High-quality, mechanism-informed preclinical data generated by a globally recognised expert and institution strengthens the data package supporting RC220. This independent validation is viewed highly favourably by pharmaceutical partners when assessing the scientific rationale, differentiation, and development risk of a new drug.

When can we expect to see more data from the collaboration?

The collaboration project is well underway and is expected to last more than 12 months. The intention is to publish the results of the collaboration in high-impact, peer-reviewed journal(s), so the amount of data we can share publicly may be limited until the data is published, however, we will be able to share the full data package confidentially with any potential pharmaceutical partner(s).

About Racura Oncology (ASX: RAC)

Racura Oncology (ASX: RAC) is a Phase 3 clinical biopharmaceutical company with a dedicated mission to be at the heart of cancer care.

Racura's lead asset, RCDS1 (E,E-bisantrene), is a small molecule anticancer agent that primarily functions via G4-DNA & RNA binding, leading to potent inhibition of the important cancer growth regulator MYC. RCDS1 has demonstrated therapeutic activity in cancer patients with a well characterised safety profile. Recent discoveries made by Racura have enabled composition of matter IP filings that provide for 20 years of patent protection over RCDS1.

Racura is advancing a proprietary formulation of RCDS1 (RC220) to address the high unmet needs of patients across multiple oncology indications, with Phase 3 clinical program in acute myeloid leukaemia (AML), Phase 1a/b program in mutant epidermal growth factor receptor non-small cell lung cancer (EGFRm NSCLC), and a Phase 1a/b program in combination with the anthracycline doxorubicin, where we aim to deliver both cardioprotection and enhanced anticancer activity for solid tumour patients.

Racura Oncology has collaborated with Astex, Emory University, MD Anderson, Sheba City of Health, UNC School of Medicine, University of Wollongong, and University of Newcastle. Racura is actively exploring partnerships, licence agreements, or a commercial merger and acquisition to accelerate access to RC220 for patients with cancer across the world. Learn more at www.racuraoncology.com.

If you have any questions on this announcement, or any past Racura Oncology announcements please visit our Interactive Announcements page.

Racura encourages all investors to go paperless by registering their details with the Company's share registry, Automic Registry Services, at www.automicgroup.com.au.

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