RACE ONCOLOGY

ASX Announcement

December 2023 Preclinical & Clinical Program Update

29 December 2023 – Race Oncology Limited ("Race") is pleased to share an update on the company's clinical and preclinical programs. I

Last month, Race released a fully funded updated clinical development strategy focused on anthracycline cardioprotection plus anti-cancer activity in solid tumours (ASX Announcement: 22 November 2023). This program is designed to deliver proof-of-concept clinical data on the cardioprotection opportunity for bisantrene within the constraints of the current capital market.

A bonus option issue was also announced, awarding shareholders on the record date one option for every 20 shares held with an exercise price of 75c and exercise date before 4 June 2024. The exercise of these options provides a further three piggyback options for every bonus option exercised with an exercise price of $1.25 and exercise date before 29 May 2026. The bonus options are intended to reward loyal shareholders and provide funding to support future clinical trials of RC220, Race's reformulated bisantrene, in AML and solid tumours. The bonus options prospectus can be accessed here.

Preclinical Activities

RC220 Development

Significant progress has been made in the manufacturing of RC220 by Societal CDMO (San Diego, USA), who issued a Certificate of Testing for the first engineering batch of Race's proprietary bisantrene formulation, RC220, confirming that the drug product meets manufacturing quality specifications (ASX Announcement: 9 November 2023).

The Certificate of Testing clears RC220 for use in Good Laboratory Practice (GLP) toxicology and safety pharmacology studies (ASX Announcement: 5 October 2023) and significantly de-risks the RC220 current Good Manufacturing Practice (cGMP) campaign underway at Ardena (ASX Announcement: 12 July 2023).

Race's innovative RC220 bisantrene formulation is designed to enable safe administration of bisantrene to patients via peripheral vein (arm or leg) intravenous (IV) infusions (ASX Announcement: 28 September 2022). More than 1,500 vials of RC220 were manufactured by Societal.

Progress of the final cGMP batch of RC220 continues at Ardena and delivery remains on track for release in Q1 2024, enabling clinical trials to begin once the non-clinical toxicology data package is finalised.

Non-clinical Toxicology Program

Race announced that it had signed contracts with Attentive Science (USA) and Agilex Biolabs (Australia) to complete a package of Good Laboratory Practice (GLP) toxicology and safety pharmacology studies (ASX Announcement: 5 October 2023). These studies are required to support human clinical trials of Race's flagship bisantrene formulation for peripheral infusion, RC220.

Extensive historical and modern clinical data has been collected around the safety and efficacy of bisantrene in humans. While RC220 contains the same active pharmaceutical ingredient as previous formulations, it is considered a new 'drug product' by regulators. All new drug products must pass a panel

of toxicology and safety pharmacology preclinical studies to: (i) show that they are safe for use in humans and (ii) establish a safe starting dose for Phase I dose-escalation studies.

The data for RC220 will be used in all regulatory submissions requesting approval for its use in clinical trials, including any US FDA Investigational New Drug (IND) applications. The non-clinical data program is progressing well and remains on track to be finalised by late Q2 2024.

AML

Scientists at Race Oncology in collaboration with researchers from the University of Newcastle (Newcastle, Australia) submitted a mouse study exploring low dose bisantrene in combination with decitabine as a treatment for AML for presentation at the 65th American Society of Hematology (ASH) Annual Meeting.

The study abstract entitled *"Preclinical Evaluation of Bisantrene As Single Agent and in Combination with Decitabine for Acute Myeloid Leukemia"* while not able to be accepted as a presentation at the ASH meeting due to space constraints, was published in the prestigious journal *Blood* (doi.org/10.1182/blood-2023-188353). The results of this study are summarised below.

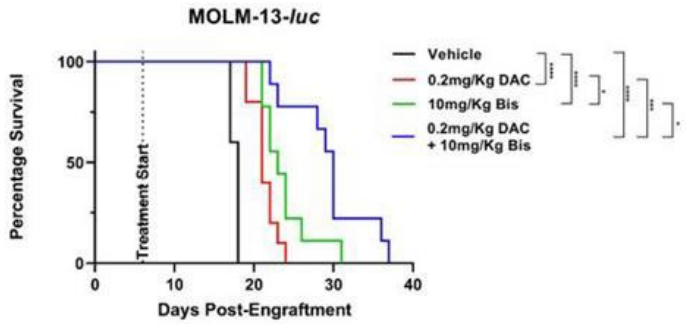

Figure 1. Survival effects of bisantrene and decitabine alone and in combination in NSG mice engrafted with MOLM13-*luc*. Mice were treated with vehicle control, 0.2 mg/kg i.p. decitabine (DAC) (5x/week), 10 mg/kg i.v. bisantrene (Bis) (3x/week), or both drugs for up to 4 weeks. Leukemia burden was detected by bioluminescence imaging (BLI). N = 10 mice/group. Median survival for vehicle = 18; decitabine = 21; bisantrene = 23; decitabine + bisantrene = 30 days. ****p<0.0001; ***p<0.001; **p<0.01; *p<0.05.

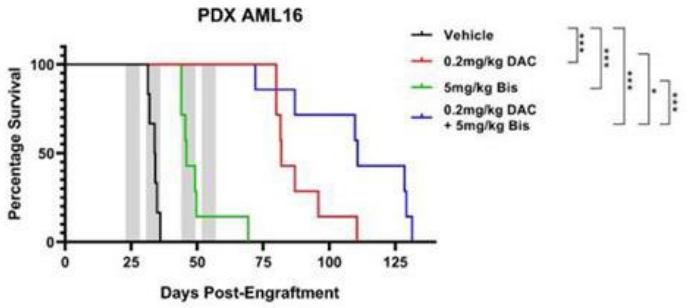

Figure 2. Survival effects of bisantrene and decitabine alone and in combination in NSG mice engrafted with a patient derived AML xenograft, PDX-AML16. Mice were treated with vehicle control, 0.2 mg/kg i.p. decitabine (DAC) (5x/week), 5 mg/kg i.v. bisantrene (Bis) (2x/week), or both drugs for 4 weeks, as indicated (grey shading). Leukemia burden was measured by detecting human CD45+ cells using flow cytometry. N = 10 mice/group. Median survival for vehicle = 34; decitabine = 82; bisantrene = 46; decitabine + bisantrene = 111 days. ***p<0.001; *p<0.05.

The *in vitro* activity of bisantrene was initially assessed in a range of human and mouse AML cell lines covering the major molecular and clinical subtypes. All cells were sensitive to bisantrene, showing IC 50 values in the range 16-563 nM. FLT3-ITD + cells in particular were sensitive, while NRAS, KRAS and KIT

mutant lines were also responsive. When tested against primary patient AML samples, 15/49 (30.6%) responded strongly to bisantrene treatment ex *vivo* over the dose range 0.1-1 µM. Bisantrene was shown to induce G1 accumulation and dose-dependent apoptosis in the FLT3-ITD + cell line, MOLM13. When tested in combination with decitabine, pre-treatment with decitabine for 24 h followed by decitabine plus bisantrene for 3 days produced synergistic cytotoxicity in MOLM13, MV4-11 and OCI-AML3 cells. Bisantrene and decitabine together resulted in S phase accumulation in MOLM13 cells and synergistic induction of apoptosis.

The *in vivo* efficacy of bisantrene alone and in combination with decitabine were examined using the MOLM13- luc cell line and a patient derived xenograft (PDX; AML16) (FLT3-ITD +, NPM1, IDH2 and WT1 mutant) in NSG mice. Bisantrene (10 mg/kg i.v. twice/week) significantly reduced leukemic burden and increased median survival compared to vehicle control in MOLM-13- luc engrafted mice, and significantly reduced leukemic burden and increased median survival in a dose and schedule-dependent manner (2.5mg/kg and 5mg/kg, twice or three times weekly) in the PDX model. The combination of bisantrene (5 or 10 mg/kg twice weekly) and decitabine (0.2 mg/kg i.p. 5 days/week) significantly ($p < 0.01$) improved survival in MOLM13- luc (Figure 1) and PDX AML16 (Figure 2) engrafted mice, respectively, relative to vehicle control and each single agent. The combination also reduced leukemic infiltration to extramedullary sites (spleen, liver, uterus, brain).

This data is highly supportive of the proposed investigator initiated clinical trial of RC220 in combination with oral decitabine as a low intensity treatment for AML (see clinical activities) and is expected to be published in a high impact peer reviewed journal in 2024.

Clinical Activities

Sheba 2

Interim results were released from an ongoing investigator-initiated Phase 2 trial of bisantrene in combination with fludarabine and clofarabine in relapsed or refractory acute myeloid leukaemia (R/R AML) patients. The trial is running at the Sheba Medical Centre, Israel, under the supervision of key opinion leader Professor Arnon Nagler. Results of this trial were chosen by the conference committee for presentation at the prestigious American Society of Hematology (ASH) 65th Annual Conference held on the 9-12 December 2023. The oral poster presentation entitled *"Bisantrene in combination with Fludarabine and Clofarabine as Salvage Therapy for Adult Patients with Relapsed or Refractory Acute Myeloid Leukemia (AML) – An Open label, Phase II Study"* describes clinical results from the first 15 evaluable patients treated on study since August 2021 (NCT04989335) (ASX Announcements: 9 November 2023 & 13 December 2023).

The results of the trial were highly positive, with six of the 15 evaluable patients (40%) responding to the Bis/Clo/Flu treatment (five complete responses, one partial response), with three of the clinical responders having active extramedullary disease (EMD). Five of the six treatment-responsive patients were able to be bridged to a stem cell transplant (SCT) within one to three months of treatment. Of the five stem-cell transplanted patients, three have since died; one from graft-versus-host disease, one who relapsed within four months of transplant, and one of infection after two years. The two other patients remain disease free and in complete remission.

The trial is continuing to recruit the final two patients and shareholders can expect to be updated when the final patient finishes treatment (H1 2024). It is expected the study will be published in a high impact peer reviewed journal in 2024.

Cardio-protection & m^{6}A RNA Solid Tumour Phase 1a/b Trial of RC220

Significant progress has been made towards initiating the Phase 1a/b trial in H2 2024 exploring the use of bisantrene as a cardio-protective anti-cancer agent for use in patients where an anthracycline treatment is indicated. Strong clinical interest has been fielded from a range of Australian oncologists interested in participating in the trial. Shareholders can expect regular updates on contract research organisation selection, investigator and site selection, human ethics and governance approvals, along with first patient treatment in 2024.

Investigator Initiated Trial of RC220 in AML

Race received a proposal from an experienced haematologist to undertake an investigator-initiated Phase 1/2 trial of RC220 in combination with oral decitabine in Australia, building on the preclinical mouse work untaken by Race's collaborators at the University of Newcastle and the recent Sheba Phase 2 AML results presented at the 2023 ASH meeting. This trial offers Race a low-cost clinical proof-of-concept of bisantrene in AML compatible with modern clinical practice. Initiation of this trial is contingent on available funding from the recently announced bonus option.

Corporate Activities

Race wishes to thank those shareholders that have exercised their bonus options early. The funds from these early option exercises will be used to accelerate and further de-risk the clinical development of bisantrene as well as undertake additional preclinical studies. We will update our shareholders on the progress of these program in 2024.

-ENDS-

About Race Oncology (ASX: RAC)

Race Oncology (ASX: RAC) is an ASX-listed clinical stage biopharmaceutical company with a dedicated mission to be at the heart of cancer care.

Race's lead asset, bisantrene, is a small molecule chemotherapeutic. Bisantrene has a rich and unique clinical history with demonstrated therapeutic benefits in both adult and paediatric patients, a well characterised safety profile, and compelling clinical data demonstrating an anti-cancer effect and less cardiotoxicity over certain anthracyclines, such as doxorubicin.

Race is advancing a reformulated bisantrene (RC220) to address the high unmet needs of patients across multiple oncology indications, with a clinical focus on anthracycline combinations, where we hope to deliver cardio-protection and enhanced anti-cancer activity in solid tumours. Race is also exploring RC220 as a low intensity treatment for acute myeloid leukaemia.

Race is investigating the effect of bisantrene on the m^6A RNA pathway, following independent research published by the City of Hope identifying bisantrene as a potent inhibitor of FTO (Fat mass and obesity-associated protein). Dysregulation of the m^6A RNA pathway has been described in numerous peer reviewed studies to be a driver of a diverse range of cancers.

Race Oncology has collaborated with Astex, City of Hope, MD Anderson, Sheba City of Health, UNC School of Medicine, University of Wollongong and University of Newcastle, and is actively exploring partnerships, licence agreements or a commercial merger and acquisition to accelerate access to bisantrene for patients with cancer across the world.

Learn more at www.raceoncology.com.

If you have any questions on this announcement or any past Race Oncology announcements, please go to the Interactive Announcements page in our Investor Hub https://announcements.raceoncology.com

Race 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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