Biotech Daily

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Daily news on ASX-listed biotechnology companies

Dr Boreham's Crucible: Race Oncology

By TIM BOREHAM

ASX code: RAC

Share price: $1.63

Shares on issue: 165,172,030

Market cap: $269.2 million

Financials (December half 2023): revenue nil, loss of $5.66 million ($4.41 million deficit previously), cash of $13.7 million (down 48%). During the period the company received a $4 million research and development tax incentives and $461,428 in interest

CEO: Dr Daniel Tillett

Board: Mary Harney (chairman), Dr Pete Smith, Phillip Lynch (Dr John Cullity resigned in August 2023)

Major identifiable shareholders: Dr Daniel Tillett 9.9%, Dr John Cullity 4.1%, Phillip Richard Perry 3.7%, Mark Juan 3.5%, Merchant Opportunities Fund 2.7%

The home of the repurposed cancer drug bisantrene, Race Oncology has been settling down after doing some 'repurposing' of its own - management-wise.

In August last year new CEO Damian Clarke-Bruce described the company's quest for a new "North Star": pursuing an oncology program based on its lead indication metastasized breast cancer (MBC). For the navigationally challenged, a North Star symbolizes direction, guidance, stability and purpose - due to its fixed position relative to other stars.

Two weeks later Mr Clarke-Bruce – appointed only in February of that year - was gone and the company was consulting its compass again.

The befuddling strategy revamp saw the return of Dr Daniel Tillett, the company's biggest shareholder and former chief scientific officer, as CEO. Dr Tillet in effect runs the company with Dr Peter Smith, who has changed from non-executive to executive director.

Amid the upheaval, the new – or perhaps that old – guard maintains that the Race story essentially remains the same: developing bisantrene as a cardio-protective tool to enhance the efficacy of existing cancer drugs.

A key change is that the intended metastasized breast cancer trial has changed from an envisaged US program to a local study of broader solid cancers. Race is also pursuing a treatment for acute myeloid leukaemia (AML).

"[The strategy] is evolution, not revolution," Dr Tillett says.

Pimping up an old drug

Race was founded in 2013 when US physician and entrepreneur Dr William Garner reviewed medical literature about bisantrene, which was approved by French authorities for acute myeloid leukaemia (AML) in 1988. AML is an aggressive cancer, with only one-third of patients surviving beyond a year.

The drug was developed in the 1980s by French group Lederle Laboratories as an anthracycline - a chemo-therapeutic – but without the common cardio-toxicity that results in many cancer patients dying of heart failure.

Extensive clinical trials covering 1,800 patients in 46 trials confirmed both the drug's cardio-protective and anti-tumor activities. Lederle was taken over by American Cyanamid, which had no interest in the drug.

Bisantrene ended up in the hands of the Nevada-incorporated Update Pharma, owned by Dr Garner, pharmaceutical scientist Dr John Rothman and Dr Peter Molloy (see below).

Race listed in July 2016 via a resources company shell, raising $4.3 million at 20 cents apiece.

So who's in charge here?

Best known as head of the erstwhile ASX-listed influenza drug developer Biota, Dr Molloy resigned from Race to devote his attention to anti-infectives house Firebrick Pharma (which listed on the ASX in January 2022).

Race was then run by executive chair Dr John Cullity and Dr Tillett, before the latter resigned in March 2023 after a disagreement on strategy.

A former executive at Johnson & Johnson's consumer division, Phillip Lynch took over as CEO in May 2020, to be replaced by Mr Clarke-Bruce in February 2023.

Dr Smith was appointed to the board in June, replacing Daniel Sharp. In April, Mary Harney was appointed chair, replacing Dr Cullity who resigned from the board in August.

With three decades' experience in drug development, Dr Smith was the former CEO of the ASX-listed Alchemia and Amrad.

Earlier, Dr Garner was a director and Race's biggest shareholder. He quit the board in October 2020 and sold down his shareholding in the latter part of 2021.

Great for cancer, not for the heart.

Derived from bacteria, anthracyclines are widely used to treat many types of solid and blood cancers.

They work okay, but the trouble is that after six years, about half of the metastatic breast cancer patients on these drugs will develop cardiac problems such as arrythmias, left ventricular disfunction and full heart failure.

"Literally millions of patients around the world are damaged by these drugs every year," Dr Smith says. "There aren't alternatives and probably won't be for a long time."

A classic case of the cure being worse than the disease?

The company is in the throes of reformulating bisantrene as RC220, enabling a more convenient delivery via infusion through veins in the arm, rather than a main artery.

Last month, Race said that its contract manufacturer, Ardena NV had produced 2,600 vials of RC220 to the "exacting standards" of local, European and US regulators. The key significance here is that the drug is now ready for use in trials.

Where's the proof?

Race's acute myeloid leukaemia (AML) program is focused on an estimated 16,000 patients classed as unfit for current treatments (relapsed or refractory) and awaiting a bone marrow transplant.

The company also targets extra-medullary AML, when tumors escape from the bone marrow, enter the surrounding bodily tissue and behave like solid tumors.

Currently, the AML program is focused on an ongoing investigator-led, phase II, open label trial at Israel's Chaim Sheba Medical Centre.

In December last year, Race reported results from the first 15 evaluable relapsed or refractory AML patients treated with bisantrene and in combination with the standard-of-care fludarabine and clofarabine.

Six patients - 40 percent of them - responded, with five complete responses and one partial response. The complete responders were able to be bridged to a stem cell transplant within three months of treatment.

Emulating earlier findings, the data was presented to last December's jamboree of the American Society of Hematology.

"To see such meaningful clinical responses in a group that would typically be receiving palliative care is striking," Dr Smith said. "It is also encouraging that the safety profile was manageable, even for this advanced patient population."

On the back of the "stunning" results, Dr Smith says Race has been approached by an "experienced haematologist" who wants to do an investigator-sponsored phase I/II trial in Australia.

Costed at up to $4 million, the trial would target up to 60 patients and would kick off in late 2024 or early 2025.

Meanwhile, Race last month announced that bisantrene showed "potent anti-cancer activity" in diverse cell and animal models for acute myeloid leukaemia, in combination with the chemotherapy drug decitabine.

The results were presented in a poster to the New Directions in Leukemia research conference in Adelaide. While pre-clinical in nature, the announcement appeared to spark a strong share surge (or at least coincided with one).

We'll take all comers

The company had intended to do a metastatic breast cancer trial in the US, comparing bisantrene with the standard-of-care doxorubicin.

But the phase Ia/Ib trial would have been costly and would not have met the company's honed strategy of achieving things with existing resources.

The trial will now be carried out in Australia, enrolling 25 to 50 patients at 10 sites. The cost is expected to be $11 million, about one quarter to one third less than a US trial (and that's before the Federal Research and Development Tax Incentives).

The trouble is, not enough breast cancer patients can be recruited here because doxorubicin is not so much used because of the cardio-toxicity issues.

The solution? Open the trial to patients with other relevant solid cancers where doxorubicin is used, such as sarcomas and ovarian cancers.

Dr Smith says Race's original approach is "completely intact", because bisantrene historically has been effective against a range of solid cancers.

"It's just a question of where we do it and how it is funded."

The trial is expected to start later this year. Pending the results, the company plans a $32 million follow-on trial of up-to 120 patients, focusing on cardio protection.

Finances and performance

Race held cash of $13.7 million at the end of December 2023, the remnants of a $30 million raising in a share purchase program in November 2021 (just before the sector's nuclear winter set in).

While the company recorded no revenue it pocketed a research and development tax incentive of $4 million and $461,428 in bank interest.

Bizarrely for a biotech, post-raising Race launched a share buyback of up to four million shares. In the early days of his short reign, Mr Clarke-Bruce called it off in favor of investing in the advertised clinical programs - which sounds reasonable.

In an unusual 'buy now, pay later' fund raising, in November 2023, Race announced two tranches of bonus options, aimed at raising up to $36.7 million. The one-for-20 options are exercisable at 75 cents each, up to June 2024. For each option exercised, punters get three 'piggyback' options exercisable at $1.25 by May 2026.

Dr Smith says management structured the raising partly as cost-of-living relief, in that investors didn't have to shell out in the cash-sapping pre-Christmas period. In any case, the company doesn't need the money until the trials start.

With Race shares climbing from their 12-month low of 67 cents on February 6 this year to $1.69 on March 18, all these options are in-the-money and a trickle of them have been exercised already. Race shares peaked at $3.70 (March 2021) and traded as low as 5.0 cents, in mid-2019.

Meanwhile, Dr Tillett says he is "already overweight" - financially, not metabolically speaking - but nonetheless will take half of his salary as well out-of-the-money options (at a strike price of $4.25).

No offence, Fatso

Speaking of weight, Race also has an interest in the fat mass and obesity associated protein (FTO), which is overexpressed in a diverse range of cancers, including melanomas and clear-cell carcinomas.

Naturally, it's known as Fatso.

Because it regulates cancer stem cells, Fatso plays a critical role in cancer development and progression.

Research at Los Angeles' City of Hope hospital identified two small molecules that appeared to suppress tumor growth in multiple cancers, when other treatments failed.

No prizes for guessing that one of them was bisantrene.

In July 2023, Race and the City of Hope struck an exclusive licencing deal pertaining to the hospital's Fatso intellectual property.

Dr Boreham's diagnosis:

The Race story is a familiar one in Australian biotech: a solid scientific story lacking a commercial vision, resulting in management resets, confusing strategic U-turns and a sagging share price.

But these companies plug away and eventually investors will take another look - as last month's 150 percent share spurt attests.

As with other drug repurposers such as Paradigm Biopharmaceuticals and Pharmaust, Race has the benefit of the big dollars the former owners sunk into the drug candidate.

"Our strategic plan now provides a clear regulatory pathway," Dr Smith says.

As Dr Tillett notes, the drug was approved in the 1980s for acute myeloid leukaemia and there's little doubt it works.

"It's finding the right way to bring it forward commercially and get the best returns for shareholders."

Ah! That's always the tricky but, but at least the compass bezel at Race HQ looks to be aligned with true North.

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. Forever navigationally challenged, his new North Star is Google Maps and Siri.