

**Strictly Embargoed until Monday 23 November**

## **\$9 MILLION CASH INJECTION FOR TWO VICTORIAN BIOTECH COMPANIES**

*..Start-up companies Cardiora and Aravax to receive \$9m in venture capital funding to progress development of novel heart failure therapy and peanut allergy vaccine*

*..Companies spun out of Baker IDI Heart & Diabetes Institute; and Alfred Health and Monash University*

**Melbourne, Australia, 23 November 2015:** Two new Victorian medical technology companies have been awarded \$9 million in venture capital funding to develop novel treatments for heart failure and peanut allergies.

The companies, Cardiora Pty Ltd and Aravax Pty Ltd -- spun out of the Baker IDI Heart and Diabetes Institute and Alfred Health and Monash University respectively – have secured vital venture capital support from the Brandon Capital managed Medical Research Commercialisation Fund (MRCF), which has State Government backing and was established in 2007 to promote the creation of early stage medical technology companies.

Under the latest funding program Cardiora will today officially receive up to \$4.15 million to immediately pursue development of CRD-102, a new oral medicine for the treatment of end stage heart failure. Early studies indicate the drug is a potential new therapy to ease debilitating symptoms including shortness of breath, fluid build up and exercise intolerance.

The drug has been entirely developed in Australia but will now be the focus of international clinical trials.

In addition, Aravax has secured a \$4.85 million investment to fast track clinical development of a safe and effective vaccine for peanut allergies. Spearheading this program will be globally regarded allergy researcher Professor Robyn O’Hehir whose novel allergen immunotherapy approach has been used to create an international company now worth around \$1.6 billion.

MRCF Investment Manager and now Aravax Director, Dr Chris Smith, said peanut allergies could be life threatening, particularly in children.

“Establishing Aravax means that we are able to harness Professor O’Hehir’s research output with Australian investment funds and keep Aravax in Australia,” he said. “These funds allow us to capitalise on this country’s excellent expertise and infrastructure for conducting early stage clinical trials.”

MRCF Investment Manager and new Cardiora Director Dr Ingmar Wahlqvist said there was a clear unmet medical need for new therapies to help patients suffering heart failure.

“Early trials of Cardiora’s CRD-102 have produced highly encouraging results with the drug showing great potential as a new agent to improve the quality of life for millions of heart failure patients around the world,” he said.

“A new treatment for heart failure will potentially lower the economic burden of hospital admissions associated with this group of patients. It will be a win for patients, a win for the healthcare system and a win for government funders.”

MRCF Principal Executive Dr Chris Nave said Australia is ranked in the top four countries globally for biotechnology infrastructure and capability, citing Cardiora and Aravax as “excellent examples” of home grown medical research.

”This investment is a terrific example of how partnering great technologies with capital and the right expertise can facilitate the translation of Australian medical research,” he said.

“At a time when we are seeking to create sustainable jobs and income for the future, I believe the biotech sector warrants considered attention from government.

“Successful biotechnology ultimately requires smart manufacturing to make the new drug, vaccine or medical device. But it is manufacturing protected by patents and strict international regulations which protect it from lower cost economies duplicating products and undercutting on price. It is therefore, a manufacturing industry that can remain competitive for the long term. We need to look at ways to stop our home grown medical innovations from leaving our shores and this is where government can play a vital role.”

To date, the MRCF has invested in 25 start-up companies that are developing and commercialising Australian medical innovations. Notable investments include Spinifex Pharmaceuticals, which was recently sold to Novartis for over US\$700 million; and Fibrotech, which was recently sold to Shire for US\$557 million.

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### About the MRCF

The Medical Research Commercialisation Fund (MRCF) Collaboration was established in 2007 as an innovative investment collaboration to invest in early stage development and commercialisation opportunities emanating from Australian medical research institutes and allied research hospitals. In addition to capital, the MRCF provides hands-on expertise, to help guide the development and commercialisation of promising medical discoveries.

The MRCF’s first two funds, the MRCF Trust (\$11.2M) and MRCF IIF (\$50M), have invested in more than 20 innovative biotech companies. During 2015, the MRCF raised its most recent fund, the \$200M MRCF3.

MRCF investors include AustralianSuper, Statewide Super, HESTA, HOSTPLUS and the Australian Government through its Innovation Investment Fund program. The MRCF acknowledges support from the State Governments of Victoria, New South Wales, Western Australia, Queensland and South Australia. The MRCF is managed by [Brandon Capital Partners](#), an experienced life science fund manager.

### About Cardiora

Cardiora Pty Ltd is an early stage pharmaceutical company focused on the development of a new medicine for the treatment of end stage heart failure. Delivered orally in tablet/capsule form, the medicine is intended to ease the symptoms of patients in late stages of the condition, when patients can be heavily compromised by poor exercise tolerance, severe shortness of breath and fluid build-up. Encouraging preliminary evidence has already been gathered, showing that patients taking CRD-102 are able to walk further and undertake general activity without symptoms including shortness of breath and fatigue. It is possible that CRD-102 could also lower the number of costly hospital admissions for this group of patients, thereby lowering the impact on health systems around the world. Founded by Professor David Kaye and spun out from Baker IDI Heart and Diabetes Institute, the Company is headquartered in Melbourne, Australia.

## **About Aravax**

Aravax will use new technology to develop a safe and effective vaccine for peanut allergy. The technology is underpinned by twenty years of research led by Professor Robyn O’Hehir and her team at Alfred Health and Monash University, which is supported by the Ilhan Food Allergy Foundation, the Alfred Hospital Trust, and the National Health and Medical Research Council. The novel technology uses carefully selected fragments of peanut proteins to switch off allergic reactions. These fragments don’t contain the parts of the nut proteins that cause the life-threatening anaphylaxis reactions that make many other proposed peanut vaccines unsafe. Unlike other approaches, this vaccine would not need life-long daily dosing. A successful vaccine would have a global impact, and could transform the lives of thousands of children and adults. The Company is headquartered in Melbourne, Australia.

## **About Heart Failure (HF)**

Heart failure is a condition where the heart cannot pump a sufficient amount of blood to the body’s tissues. As a result, organs and tissues do not receive sufficient oxygen and/or nutrients to function properly. A key outcome is build-up of fluid around the body, and a variety of symptoms based on whether the right or left side of the heart is affected. In left-sided failure patients may experience shortness of breath and fatigue, while in right-sided failure there can be build-up of fluid in the feet, ankles, liver, abdomen and in the veins of the neck. There are many potential underlying causes, but the most common are diseases that damage the heart, such as coronary heart disease (CHD), high blood pressure and diabetes. HF is a significant burden on healthcare systems around the world. It is estimated that about 100,000 Australian adults have heart failure, though there are no national registers or datasets.<sup>1</sup> The US Centres for Disease Control (CDC) reports that there are approximately 5.1 million people in the United States with HF<sup>2</sup>, and that in 2001 and 2010 there were 1 million hospitalisations for HF.<sup>3</sup>

## **About Peanut Allergy**

Peanut allergy is a rapidly growing problem in Australia and around the world. When exposed to peanuts, sufferers can experience a range of symptoms, from mild itchiness and rash to life-threatening anaphylaxis, with swelling and blockage of the airways and critically low blood pressure. About one person in every fifty is allergic to peanuts, and every year about half of these suffer a serious, potentially life-threatening reaction to peanuts that cannot be predicted or prevented. Fatalities are fortunately rare, but allergy sufferers live in fear of an accidental peanut encounter.

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<sup>1</sup> Cardiovascular disease, diabetes and chronic kidney disease: Australian facts

<http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129549614>, accessed 16 Nov 2015

<sup>2</sup> Heart Failure Fact Sheet, [http://www.cdc.gov/dhdsp/data\\_statistics/fact\\_sheets/fs\\_heart\\_failure.htm](http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_failure.htm), accessed 16 Nov 2015

<sup>3</sup> Hospitalization for Congestive Heart Failure: United States, 2000–2010

<http://www.cdc.gov/nchs/data/databriefs/db108.htm#x2013;2010</a>, accessed 16 Nov 2015