Cardiomyopathy Association of Australia Ltd

JAN 2024 - THE LATEST IN BIG-HEARTED NEWS

AT A GLANCE

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Letter from the President

Hello everyone,

As the new President of the CMAA, I am pleased to bring you our first newsletter for the year. You will notice a new look - we are trialling a new format to see what might best suit us ongoing. Big thanks to Carly Bannan, Dannalee Marshall and Elise Ash for producing our newsletter in the past! We appreciate you maintaining this important link with our members over many years.

First, an update from our AGM in late October. Three long-term board members retired from their roles (Alistair Kerr from President, Tim Blowfield from Treasurer, and Janet George from Secretary). We thank them for their many years of service to the organisation, in particular for keeping it going during Covid when it was especially difficult. A new enthusiastic 9-member volunteer board was appointed: Leigh Bell (myself, President), Mary Smith (Vice President), Rosanna Kirn (Secretary), Shelley Kerr (Treasurer), Christine Wilson (Indigenous Liaison Officer) and four additional Directors - Dona Harrison, Julian Genn, Bronwyn Stewart, and Kerry Shaddick. You can read about the new team on our website by clicking here.

We met for the first time face-to-face in Dec 23 (pic below). We'll be sharing our plans over time, but as an example of some of the things we spoke about, we will be working to revise the website, set up zoom support group meetings, hold in-person meetings (down the track), run webinars with experts, and produce a register of specialists with a specific interest / experience in cardiomyopathy. All of this will be funding-dependent; we're seeking grants currently and will be running fundraisers.

One of our activities is advocacy, and in this newsletter we highlight an opportunity for you to have your say regarding whether genetics discrimination should exist in life insurance. The Federal Government is holding an enquiry currently and you can have your voice heard by completing a simple on-line form. The CMAA will be making a submission, and as someone born with genetic HCM, I will make a personal submission. I encourage you to do the same.

Another important activity will be bringing you information on research, trials, new medications etc. There are exciting developments in the field of cardiomyopathy research including, in this newsletter, new drugs and trials for HCM, a drug trial for DCM, and a mouse model genetic study for ARVC. We explain clinical trials and let our HCM community know about one currently recruiting here in Australia for those without obstruction. It is truly wonderful to see these developments in treatment. Our cardiomyopathy community owes a debt of gratitude to those who participate in these trials to advance research.

Administratively, there are many activities under way. We are reviewing our database to ensure it is up to date, and you may receive a call or e-mail from one of the team to check your details.

I'm looking forward to a wonderful year of working for our big-hearted community. If you'd like to get in touch, please do. Our e-mail is info@cmaa.org.au .

Left to right: Leigh Bell, Julian Genn, Christine Wilson (seated), Donna Harrison, Mary Smith, Rosanna Kirn, Bronwyn Stewart, Kerry Shaddick, Shelley Kerr

End Genetic Discrimination in Life Insurance

The Federal Government is considering whether to ban life insurance companies from discriminating against people on the basis of their genetic test results.

Research has shown that many Australians don't know genetic discrimination is still legal, until they must choose between a genetic test that could save their life, and preserving their access to life insurance.

Following a federally funded Monash University-led report on genetic discrimination in life insurance, the Federal Government announced a consultation period until **31 January 2024**. The Government is seeking submissions from all stakeholders, including the general public.

Possible Federal Government actions could include doing nothing, legislating a total or partial ban on life insurers using genetic results, or legislating a financial cap on the amount of cover consumers can obtain before having to provide insurers with their results.

Monash University School of Public Health and Preventive Medicine Public Health Genomics Ethical, Legal & Social Adviser Dr Jane Tiller led the Final Stakeholder Report of the Australian Genetics and Life Insurance Moratorium: Monitoring the Effectiveness and Response (A-GLIMMER) Project.

As the report recommended to the Federal Government, Dr Tiller wants a total ban on discrimination, with no limits, caps or exclusions, like Canada's legislativeban. Her team has developed a simple form that people can use to make a submission to the government about their experiences and/or advocate for change. We know that time is tight, but this is a simple step that you can take to have your voice heard. The CMAA supports the following position, and if you do too, you may like to make your views known in your own words via the form:

- Legislation must be introduced, to protect consumers, remove the fear of genetic discrimination and ensure government oversight of insurers' compliance.
- The legislation **should not contain any limits**, caps or exclusions, to ensure that consumers can be confident that their genetic results are fully protected. This is consistent with the approach taken in Canada. **Partial consumer protection is not consumer protection.**
- There needs to be a strong pathway for **enforcement and consumer complaints**, so that consumers know where they can go to get help if an insurer is not complying with the legislation.

Clinical Trials - what are they?

What are clinical trials and how do they work1?

Clinical trials are research studies that include human participants and explore how an investigational drug might act in the body and affect a disease. An "investigational drug" is a drug that is being

researched. It is not yet approved by health authorities for doctors to prescribe in the disease area of the clinical trial.

What are the phases of a clinical trial?

Clinical trials are carried out in a series of steps, known as phases, to study whether the investigational drug is safe and effective for people to use.

Phase 1

During Phase 1, researchers test an investigational drug for the first time in humans by giving it to a small number (20-80) of healthy volunteers to evaluate how the drug works in humans and identify side effects. The information from Phase 1 studies is important to the design of Phase 2 studies. In general, approximately 70% of drugs move to the next phase.

Phase 2

During Phase 2, the investigational drug is given to a larger number of people (100-300) who have a particular disease or condition to further evaluate the side effects and whether the drug works as treatment for a specific disease.

Phase 3

During Phase 3, the investigational drug undergoes additional testing in people with the disease or condition to further evaluate the side effects, how well the drug works, how much of the drug people should take and how the drug compares to current standard treatments. Sometimes known as pivotal studies, these studies involve hundreds to thousands of participants. Phase 3 studies provide most of the safety data and usually take the most time to complete.

After Phase 3, health authorities, for example, the TGA in Australia, thoroughly examine all submitted data on the investigational drug and decide to approve it or not to approve it.

As you can see, there are many required steps for a new drug to be developed and approved. This process takes 10-15 years on average.

Phase 4

After an investigational drug is approved and available by prescription, phase 4 clinical trials are sometimes conducted. In this phase, researchers are looking to understand the best way to use this drug as a treatment and whether there are any other risks or benefits associated with using this drug.

Reference

1. https://www.fda.gov/patients/learn-about-drug-and-device-approvals/drug-development-process

HCM News

Mavacamten Update

Mavacamten (branded Camzyos) is a new medication which is the first to be developed specifically for HCM. Called a Myosin Inhibitor, it impacts the way the heart muscle contracts. Mavacamten has been shown to reduce obstruction and relieve symptoms in **HCM patients with obstruction**. It is currently available in some other countries (eg the US and the UK). The drug received Therapeutic Goods Administration (TGA) approval here in Australia in Sept 22, and in Dec 23 it was announced that it has been recommended to be placed on the Pharmaceutical Benefits Scheme (PBS) to receive government subsidies. There are a number of steps before the medication is on the PBS (e.g. Ministerial approvals) and in the meantime, the pharmaceutical company has established an access program. If your cardiologist believes Mavacamten is suitable for you, they can get information about access by writing to Bristol Myers Squibb at bmsmedicineaccess@bms.com. If you'd like to know more, please get in touch via info@cmaa.org.au.

Mavacamten - Non-Obstructed Clinical Trial

There is currently a Clinical Trial for patients with HCM without obstruction that is open and enrolling. The trial is called Odyssey and is sponsored by Bristol Myers Squibb. The trial hopes to enrol 420 patients globally by April 2024.

This is a **phase 3 clinical trial** that is being conducted at multiple locations in the US, Canada, Europe, parts of Asia, and Australia, to understand the effect of the study medication on HCM patients without obstruction.

In Australia, the study is now enrolling at 9 locations in NSW, SA, WA, and QLD. Assistance with travel may be provided on a case-by-case basis at the discretion of the sponsoring company. **Please click here**, to visit BMS Study Connect to learn more about this study. If you're interested, you can take an 8-question pre-screener to see if you may pre-qualify for this study. Australian sites are listed below and here - Site locations.

New South Wales

Liverpool Hospital, Sydney

St Vincent's Hospital Sydney, Darlinghurst

Concord Repatriation General Hospital , Concord

South Australia

Flinders Medical Centre, Bedford Park

Western Australia
Fiona Stanley Hospital, Murdoch

Queensland

The Wesley Hospital, Milton

Greenslopes Private Hospital, Greenslopes

Sunnybank Private Hospital, Sunnybank

Prince Charles Hospital, Chermside

The trial can also be found on clinicaltrials.gov/CV027-031

For more information **contact** clinical.trials@bms.com

Other HCM Developments

Aficamten

Aficamten is a second-in-class myosin inhibitor. It is currently undergoing clinical trials in the US. In December 2023, the pharmaceutical company making the drug announced positive results from their Phase 3 trial (known as SEQUOIA_HCM), which assessed efficacy and safety in adults with symptomatic hypertrophic cardiomyopathy and left ventricular outflow tract obstruction. There are no trials in Australia at this stage. We will keep you updated.

Genetic Therapy

Tenaya Therapeutics, Inc., a clinical-stage biotechnology company, announced in October 2023 that the first patient has been dosed with TN-201 gene therapy for the treatment of Myosin Binding Protein C3 *(MYBPC3)*-associated HCM. The trial is known as MyPeak-1 ; it is Phase 1 and is being conducted at the Cleveland Clinic in Ohio. Tenaya anticipates sharing initial data from the MyPeak-1 trial in 2024. From the announcement:

"*MYBPC3* gene mutations are the most common genetic cause of HCM and people with *MYBPC3*-associated HCM are at increased risk for accelerated decline and serious complications associated with their condition," said Milind Desai, M.D., MBA, Director at the Cleveland Clinic Hypertrophic Cardiomyopathy Center and Vice Chair, Heart Vascular Thoracic Institute, Cleveland Clinic, and an investigator for the MyPeak-1 Phase 1b clinical trial. "TN-201, a gene therapy for *MYBPC3*-associated HCM, offers the potential of a one-time treatment to correct the underlying genetic cause of disease and improve patient outcomes. We are pleased to participate in the first-in-human clinical trial of TN-201 to explore this new use of gene therapy treatment."

We will keep you informed as we hear more.

DCM News

DCM II Trial is a Phase 2 Trial recruiting now in the United States. It is looking at the safety and efficacy of using stem cells to treat Non-Ischemic Dilated Cardiomyopathy. From the study website:

"Stem cells are cells that do not yet have a specific function in the body. Human mesenchymal stem cells (hMSCs) are a type of stem cell that can be grown from human bone marrow. Stem cells can develop into other types of more mature cells, such as blood and muscle cells. When cells are taken from a healthy donor (who is not the patient) it is called allogeneic (or allo for short). It is hoped that by placing these cells in the heart, they will allow the heart to work better.

This research study is being conducted to determine whether giving allo hMSCs to patients with heart muscle damage is safe. We will also examine whether this study drug improves heart function and if an individual's genotype (genetics) plays a role in determining his/her response to allo hMSC therapy.

136 subjects are expected to participate in this study at 4 research sites across the United States. They will be randomized (like flipping a coin) to receive allo hMSCs or placebo. Study products are administered at the clinical center. Follow-up visits occur at the following timepoints after study product administration: 1 week, 1 month, 3 months, 6 months, and 12 months."

You can read more here *https://sph.uth.edu/research/centers/ccct/dcm-ii/*

AC / ARVC News

Arrhythmogenic right ventricular cardiomyopathy (ARVC), also known as Arrhythmogenic Cardiomyopathy (AC), is a genetic heart disease characterised by cardiac arrhythmias. Plakophilin 2 (*PKP2*) is the most frequently mutated gene in ARVC. A paper was published in Dec 2023 demonstrating genetic therapy in mice models with the same genetic variance. The gene therapy was spliced into neonatal mice, resulting in the mice not developing ARVC. Genetic therapy in adult mice improved cardiac function. Further research is in the pipeline for this gene therapy, and while human therapies are still many years away, it is wonderful to see progress in this area.

Bradford, W.H., Zhang, J., Gutierrez-Lara, E.J. *et al.* Plakophilin 2 gene therapy prevents and rescues arrhythmogenic right ventricular cardiomyopathy in a mouse model harboring patient genetics. *Nat Cardiovasc Res* **2**, 1246–1261 (2023). https://doi.org/10.1038/s44161-023-00370-3

Reach Out

For questions, feedback, article ideas, or story contributions, email info@cmaa.org.au, **and we'll be in touch.**