R&D Progress Report – Molecular Medicine

Antisense Oligonucleotides R&D Project (for the treatment Liver Diseases)

Highlights:

- **ASO treatment in a preclinical cell model of Hepatitis B Virus ("HBV") infection demonstrates statistically significant viral suppression.**
- **292 million patients with Chronic Hepatitis B ("CHB") globally.**
- **Annual Medicare (USA) costs per CHB patient estimated at US$100K.**
- **Liver-humanised mouse dosing study to begin this quarter.**

Resonance Health Ltd (ASX: RHT) ("Resonance Health" or the "Company") is pleased to provide the following update on its Antisense Oligonucleotide ("ASO") R&D project for treating liver related diseases ("ASO R&D Project"). The ASO R&D Project is part of the Company's Molecular Medicine R&D workstream, which is led by Resonance Health's Dr. Sherif Boulos. The ASO R&D Project was initially announced on 25 May 2020 (see ASX announcement entitled "Filing of Provisional Patent Application: Method for Treating Liver Related Diseases").

Over the past twelve months the Company has completed lead optimization and early preclinical testing of ASO compounds targeting a human (host) protein essential to the lifecycle of numerous human viruses, including the Hepatitis B Virus ("HBV"). Following the design and testing of over 40 different ASO compounds, the Company has selected a lead compound for the ASO project and has named the compound AS3 ("AS3"). In a preclinical cell model of HBV infection, AS3 demonstrated statistically significant viral suppression compared to a control ASO.

Resonance Health ASO R&D Project leader, Dr. Sherif Boulos, commented:

"Our positive data validates our ASO treatment strategy for chronic HBV, consolidates our intellectual property position, and supports continued investigation of AS3 in a preclinical animal model of disease. Shortly, we will commence a dosage study to test its effectiveness in a humanised-liver mouse strain. If successful, we aim to investigate if AS3 is effective in an HBV infection model using the same strain. Successful elimination of HBV will require a multi-drug approach, and because AS3 targets a human protein essential for viral growth, it is ideally suited to this purpose. In combination with other treatments, AS3 would also help to mitigate the emergence of drug resistant mutants, which is an important clinical consideration."

Chronic Hepatitis B is estimated to affect 292 million people globally, including an estimated 230,000 Australians. Current life-long treatments do not eliminate HBV, and up to 40% of sufferers will develop serious clinical complications such as cirrhosis, liver failure and/or liver cancer. Aside from

the human suffering, the annual healthcare cost of chronic HBV in the USA is estimated to be USD$100K per patient (U.S. Medicare figures, 2015; cited by Robert Gish MD, Medical Director of the Hepatitis B Foundation).

ASO therapeutics fall under the broader molecular medicine study of ribonucleic acid ("RNA") and deoxyribonucleic acid ("DNA") molecules. ASO therapeutics have the benefits of high target specificity and potency. Recent advances in RNA therapeutics have made it possible to directly target the liver with ASO drugs, enabling the administration of lower therapeutic doses, at greater efficacy and, with an improved safety profile.

In view of the positive data achieved, and given the commercial potential of the technology, the Board has decided to extend the Company's anti-viral testing program to include other important viral diseases. Additionally, the Company will investigate the application of AS3 in the treatment of important non-viral related human diseases linked to our drug target. Accordingly, the Company is expanding its Patent Cooperation Treaty ("PCT") patent filing to include these additional disease indications. The updated PCT patent filing is expected to be finalised this month.

The next step in the commercialisation timeline for this project is a liver dosing study in humanised-liver mice which will commence this quarter. The Company looks forward to providing further updates as the ASO R&D Project progresses.

This announcement has been authorised by the Board of Directors of the Company.

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