ASX Release

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Tickers:
Australia (ASX): ZLD
USA (OTC): ZLDAF

Ordinary Shares:
755,341,934

Options:
46,000,000

1,500,000 ($0.04 – 6/2/2020)
*4,500,000 ($0.04 – 6/2/2020)
40,000,000 ($0.03125 – 17/11/2021)
** subject to vesting conditions*

PAEDIATRIC BRAIN CANCER RESEARCH UPDATE

- **Research project with Telethon Kids Institute progressing**
- **Key staff recruited from overseas to complement existing research team**
- ***In vitro* assays established and validated**
- **Initial *in vitro* results demonstrate pure CBD and pure THC each have anti-cancer activity in paediatric medulloblastoma cell lines**
- **Results to be presented at Australian Society of Medical Research (Australia) and the International Cannabinoid Research Society (Netherlands) conferences**
- **Next phase of research will seek to demonstrate the effect of Zelda formulations on these cell lines and in animal models**

Zelda Therapeutics Ltd (**ASX: ZLD, US OTC: ZLDAF, Zelda** or **the Company**) is pleased to provide an update on its previously announced paediatric brain cancer research project with the prestigious Telethon Kids Institute ("TKI" or "the Institute) in Perth, Western Australia.

Medulloblastoma is a common brain tumor in children, and the most common malignant brain tumor. It accounts for about 15% of brain cancers in children[1]. Mortality from medulloblastoma remains significant. In addition, many survivors suffer from severe treatment-related effects of radiation and cytotoxic chemotherapy[2]. Zelda's research collaboration has the potential to provide an alternative treatment option.

This collaboration is focused on the pre-clinical testing of Zelda's compounds, formulations and protocols on pediatric medulloblastoma cell lines.

The collaboration with the Telethon Kids Institute will be confined to pre-clinical research accessing the Institute's validated cell and animal models for the studies. Through the research, the Institute will examine the potential for Zelda's compounds to act as anti-cancer agents, either alone or in combination with existing treatments.

The research consists of a series of experiments that have been designed within stringent scientific protocols to produce a comprehensive data pack that can be used as the basis for any future clinical trials either in Australia or in other geographies.

These initial results have shown that increasing doses of pure Δ^9-tetrahydrocannabinol (THC) or pure cannabidiol (CBD) reduces cancer cell viability in cell-based assays – that is, the cannabinoids are having an anti-cancer effect by reducing the proliferation of cancer cells.

Furthermore, high doses of THC and CBD in combination with cyclophosphamide (a type of chemotherapy agent) shows an increase in anti-proliferative effect. Additional studies are planned to further understand the nature of this effect.

With the validation of these assays now complete, the next phase of the research project will be testing Zelda's full plant extracts in these same assays and hoping to achieve better results than the individual pure cannabinoids. At the same time, these full plant extracts will be tested in animal models hosting human tumours to determine the extent of any anti-cancer effect in these *in vivo* models. It is generally accepted that cannabinoid-based compounds interact with multiple targets and these *in vivo* studies will generate invaluable data on the potential for cannabinoids to play a role in future cancer therapy regimes.

Executive Chairman of Zelda Harry Karelis stated:

"We are very pleased to show that pure cannabinoids have demonstrated anti-cancer effect in these assays which gives us confidence that our systems are working well. We look forward to the results from the next phase of our research which will test the effectiveness of our formulations on these same assays providing rigorous comparative data as well as in in vivo models."

Dr Raelene Endersby & Dr Clara Andradas, TKI researchers stated:

"We are pleased to have been able to validate our assays and show positive initial results in cell models. We look forward to expanding to the next phase of this research project and test Zelda's formulations in our cell and animal models. Whilst we are a long way from testing in patients, these results are encouraging and suggest that cannabinoids may have potential anti-cancer activity in medulloblastoma as seen in other cancers. The potential remains to develop a new class of treatment options for patients with limited choices."

Tim Slate
Company Secretary

About Zelda Therapeutics (www.zeldatherapeutics.com)

Zelda Therapeutics Ltd ("Zelda") is an Australian-based bio-pharmaceutical company that is focused on developing a range of cannabinoid-based formulations for the treatment of a variety of medical conditions. The Company has a two-pronged strategy comprising:

- A **human clinical trial programme** focused on insomnia, autism and eczema with activities in Australia, Chile and the USA.
- A **pre-clinical research programme** examining the effect of cannabinoids in breast, brain and pancreatic cancer as well as research examining the potential for cannabinoids to treat diabetes-associated cognitive decline.

  It has partnered with the world's leading cancer cannabis researchers at Complutense University Madrid in Spain to conduct certain pre-clinical work testing cannabis-based formulations known to have an effect in humans in order to generate data packs in a form expected by regulators and the pharmaceutical industry. A similar programme is in place with the Australian Telethon Kids Institute targeting paediatric brain cancer and Curtin University targeting pancreatic cancer and cognitive decline.

About Telethon Kids Institute (www.telethonkids.org.au)

Telethon Kids Institute is one of the largest, and most successful medical research institutes in Australia, comprising a dedicated and diverse team of more than 500 staff and students. Established in 1990 by Founding Director and former Australian of the Year Professor Fiona Stanley, the Institute was among the first to adopt a multidisciplinary approach to major health issues.

[1] John Hopkins Medicine. 2018. *Neurology and Neuroscience*: www.hopkinsmedicine.org
[2] V.Ramaswamy & M.D.Taylor, 2017, *Medulloblastoma: From Myth to Molecular*, Journal of Clinical Oncology