Neuren (NEU) – ASX Announcement **24 February 2021**

Neuren's Orphan Drug pipeline approaching transforming milestones in 2021

Highlights:

- **Key high-value milestones expected in 2021 as Neuren advances treatments for multiple serious conditions that emerge in childhood and have no approved medicines**
- **Results from LAVENDER Phase 3 trial of trofinetide in Rett syndrome expected in H2 2021**
- **On track for commencement of NNZ-2591 Phase 2 trials:**
  - **Dosing for 7 days was safe and well tolerated at all doses tested in Phase 1 trial**
  - **Manufacturing campaign to supply Phase 2 trials on schedule**
  - **Preparing for FDA meeting and IND applications in H1 2021**
- **Three orphan designations granted for NNZ-2591 in the European Union**
- **Prader-Willi syndrome added to NNZ-2591 pipeline with compelling results in pre-clinical model**
- **Discussions ongoing with potential partners for markets in Asia**
- **$24.1 million cash at 31 December 2020:**
  - **US partner ACADIA is fully funding the trofinetide Phase 3 program**
  - **Neuren is funded to achieve Phase 2 data for NNZ-2591 in three indications**

Melbourne, Australia: Neuren Pharmaceuticals (ASX: NEU) today reported financial results and business progress for 2020.

Neuren CEO Jon Pilcher commented: "During 2020 we achieved all targeted milestones, which means that Neuren is in an extremely strong position with the potential for 2021 to be a transforming year. The further announcements last week of a successful Phase 1 trial and addition of Prader-Willi syndrome to the pipeline have each added significantly to the underlying value of NNZ-2591, both from risk reduction and increasing the upside. This has not as yet been reflected in the share price. We are focused on the results of the trofinetide Phase 3 trial in Rett syndrome in H2 2021, executing the optimum commercial strategy for Europe and Asia, and obtaining FDA clearance before commencing the NNZ-2591 Phase 2 trials. These approaching events have the potential to transform Neuren's corporate profile."

Commentary on 2020 progress and outlook

During the year, Neuren's US partner ACADIA continued to enroll new subjects into the Phase 3 trial of trofinetide in Rett syndrome. Despite an enforced enrolment pause from March to June due to Covid-19 precautions in the United States, ACADIA confirmed that top-line results from the LAVENDER trial are expected in the second half of 2021. The development and commercialisation of trofinetide in North America is fully funded by ACADIA and Neuren may receive milestone payments of up to US$455 million, double digit percentage royalties on all sales, plus one third of the sale value of a Priority Review Voucher. In addition, Neuren has free and full access to all data for use in countries outside North America. ACADIA is a NASDAQ listed company (ACAD) that specialises in commercialising and developing breakthroughs in neuroscience.

Neuren achieved further important milestones towards the commencement of Phase 2 clinical trials for NNZ-2591 in patients with each of Phelan-McDermid syndrome, Angelman syndrome and Pitt Hopkins syndrome. Neuren is preparing to meet with the US Food and Drug Administration (FDA) and then submit Investigational New Drug (IND) applications in the first half of 2021. The INDs will incorporate data from manufacturing, non-clinical studies and the Phase 1 clinical trial, as well as the Phase 2 trial protocols.

The Phase 1 trial was successfully completed, with dosing for seven days safe and well tolerated at all dose levels tested in healthy volunteers. There were no Serious Adverse Events or clinically significant findings from safety laboratory tests, vital signs, or cardiac tests. In parallel with completing the Phase 1 trial, the program of non-clinical safety studies was completed, the drug substance manufacturing campaign to supply the Phase 2 trials has progressed on schedule and Neuren has continued to engage with the patient communities and key physicians across all three disorders in preparation for the Phase 2 trials.

In addition, orphan designation was received for NNZ-2591 in each of Phelan-McDermid, Angelman and Pitt Hopkins syndromes in the European Union, which means that Neuren now has orphan designation for all three in both the US and the EU. Orphan designation in the EU enables sponsors to benefit from incentives including free protocol assistance, fee reductions and 10 years of market exclusivity plus two additional years if approved for paediatric use.

Following highly encouraging results in a pre-clinical model, Prader-Willi syndrome was added to the development pipeline for NNZ-2591. Neuren plans to submit applications for Orphan drug designation in the US and Europe. The foundational data for NNZ-2591 from manufacturing, non-clinical studies and the Phase 1 trial should also enable an Investigational

New Drug application (IND) and Phase 2 development for Prader-Willi syndrome. Neuren intends to leverage that foundational data further by investigating additional indications.

Neuren is continuing to explore options with potential partners for markets in Asia, including China. To date the potential for Neuren's products in Asia has not been factored into any analyst valuations.

Financials

The loss after tax for 2020 was $9.2 million compared with $10.8 million in 2019. Research and development costs were $2.1 million lower, due to lower expenditure relating to the Rett syndrome Phase 3 trial, partially offset by an increase in expenditure for the NNZ-2591 non-clinical studies, Phase 1 trial and manufacture of the required drug for these and for the planned Phase 2 clinical trials.

Cash reserves at 31 December 2020 were $24.2 million (2019: $13.8 million), funding Neuren through to achieving Phase 2 data for NNZ-2591 in three indications, while ACADIA fully funds the trofinetide Phase 3 program. Financing provided cash of $19.1 million, received from a placement at $1.40 per share to institutional and sophisticated investors in Australia, New Zealand, Hong Kong and the United Kingdom.

About Neuren

Neuren is developing two new drug therapies to treat multiple serious neurological disorders that emerge in early childhood, none of which have any approved medicines.

The lead drug compound, trofinetide, is currently in a Phase 3 clinical trial for Rett syndrome and has completed a Phase 2 clinical trial in Fragile X syndrome. Both programs have been granted Fast Track designation by the US Food and Drug Administration (FDA). Neuren has granted an exclusive licence to ACADIA Pharmaceuticals Inc. for the development and commercialisation of trofinetide in North America, while retaining all rights outside North America.

Neuren plans to initiate Phase 2 trials of its second drug candidate, NNZ-2591, for each of Phelan-McDermid syndrome, Angelman syndrome and Pitt Hopkins syndrome in 2021.

Because of the urgent unmet need, all five programs have been granted "orphan drug" designation in both the United States and the European Union, a designation that provides incentives to encourage therapies for rare and serious diseases.

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ASX Listing Rules information

This announcement was authorized to be given to the ASX by the board of directors of Neuren Pharmaceuticals Limited, Suite 201, 697 Burke Road, Camberwell, VIC 3124

Forward-looking Statements

This announcement contains forward-looking statements that are subject to risks and uncertainties. Such statements involve known and unknown risks and important factors that may cause the actual results, performance or achievements of Neuren to be materially different from the statements in this announcement.