Q&A on NTI164 Breakthrough Clinical Trial Results in ASD

Neurotech International Limited (ASX: NTI) recently announced the ground-breaking results with respect to the safety, tolerability, and efficacy of NTI164 and on key behavioural parameters that impact Autism Spectrum Disorder (ASD) patients. NTI164 is one of NTI's proprietary cannabis strains, exclusively licenced from Dolce Cann Global (Ltd), in respect of neurological applications and is the world's first full-spectrum medicinal cannabis product (less than 0.3% THC) to be successfully studied in children with ASD.

Conducted by Professor Michael Fahey, Head of Paediatric Neurology at Monash Children's Hospital in Melbourne, the Phase I/II study was designed to rigorously assess the safety of NTI164 in a dose-escalation regime and to detect signals for efficacy on the behaviour, focus and related cognitive parameters on ASD sufferers using a range of validated neuro-psychological tools. The study was also designed to form the foundation for follow-up studies in therapies relating to the treatment of a wide range of neurological disorders such as Attention Deficit Hyperactivity Disorder (ADHD), Multiple Sclerosis, Motor Neuron Disease and Cerebral Palsy.

Following numerous shareholder questions and enquiries on the significance of the results, the Company has put together a summary of key questions and answers with CEO - Dr Alexandra Andrews, Chairman - Brian Leedman and Non-executive Director - Gerald Quigley:

The study showed that 93% of patients showed improvement relating to the severity of illness after 28 days of daily treatment with NTI164 – how do you define 'improvement'?

Each child was assessed at the start of the trial (before they started treatment with NTI164) to define their own personal 'baseline' of symptoms. The average rating for the severity of illness at baseline was 4.4. Across the trial patients this was reduced to 3.6 (on average) after 28 days of NTI164 treatment. The severity of illness is measured using a scale of 1 to 7. Where 1 is defined as "neurotypical, not ill" and 7 defined as "among the most extremely ill", 4 is defined as "moderately ill" and 3 is defined as "mildly ill".

64% of children had a global improvement of "much improved", 29% of children showed "minimally improved" and one child showed "no change". No child showed regression. These results are very encouraging to all families affected by autism.

To put more perspective around these improvements it is important to understand that common symptoms relating to paediatric ASD include anxiety, socialisation problems, aggression, difficulty communicating, lack of attentiveness and focus. Specific examples of significant improvements amongst trial participants included:

- Marked improvement with school socialisation in terms of attendance and performance regarding speech and learning therapies and classroom behaviour;

- Previously a number of trial participants were restricted to one-on-one supervision in single purpose rooms whereas NTI164 led patients to be able to participate in mainstream classroom settings for the very first time;

- Trial participants were able to significantly improve their ability to positively engage and integrate in family and social settings leading to better qualities of life (with no adverse side effects); and

- Specific instances of participants being far better at following instructions and reading by themselves.

Were there any other key outcomes from the trial?

Yes, some very compelling indicators were received. Two (2/14) patients recorded a Marked Therapeutic Index Score of 2, which is described as "vast improvement" meaning the patients experienced complete or near remission of all symptoms. A further 10 (10/14) patients recorded a Marked Therapeutic Index Score of 5 & 6, representing "decided improvement" meaning the patients experienced partial remission of symptoms.

In terms of measuring the Index Score, the trial involved numerous baseline assessments undertaken by parents, neuropsychologists and clinicians. Both baseline and improvement assessments involved direct and indirect observations and multiple questionnaires. Approximately 2200 assessment points contributed towards the recording of a Trial Index Score.

Was NTI shown to be safe during the trial?

NTI164 was well-tolerated – no serious adverse events were recorded across all doses (5, 10, 15 and 20 mg/kg). No changes were observed in the blood analyses of cells and various biochemistries, such as liver function tests.

Why did you amend the protocol and eliminate the washout period?

Due to overwhelming demand from parents together with the evidence that NTI164 is having life changing positive therapeutic effects, the washout period has been eliminated and children who participated in this trial will continue the treatment for a further year. We aim to report on further safety and efficacy trial outcomes next quarter.

How many patients are continuing with the treatment? Are we going to get further updates in due course about their improvements at different points in time?

All 14 patients that completed the recent trial continue to be treated with NTI164. Yes, further updates will be supplied by the clinical trial team. The extended program will now form the basis of an on-going safety and efficacy program.

The study planned to assess 20 patients in this trial. Why did six dropout?

It is important to note that Phase I/II studies usually comprise of sample size between 10 to 20 patients and is common in clinical trials that participants will enrol and then for one reason or another will decide not to proceed or will need to be excluded. In this case, there were a couple of factors at play. Firstly, at the start of this trial, Victoria was in Stage 3 COVID restrictions, and it was at the peak of COVID lockdowns. Four of the children and families were negatively affected by COVID and the whole lockdown situation certainly played a role in parents' bringing their children into the Monash Children's Hospital for appointments. However, we tried to make it as easy as possible for families at this time and employed online data management capture systems so that we could record patient outcomes online. Furthermore, two of the participants needed to undergo surgeries, unrelated to their ASD, which made them ineligible for the trial.

What regulatory pathway are you following with respect to getting NTI164 registered and if successful what markets become available to you?

We have a clear plan to present to the FDA for registration and approval in the United States, the world's biggest market for ASD. Our team has been involved with successful FDA applications and registrations in the past and we are very confident we have the right approach in place for drug registration. The Company is using leading consultants based in the US with the initial pre-IND meeting scheduled for this quarter.

Based on the clinical trial results, NTI164 may qualify for accelerated registration (ie; fast track registration or even potential orphan drug status) given its significant efficacy profile and the urgent need for treatment options for paediatric ASD. Our team are evaluating all these options to expedite the overall approval process.

What is the next step that NTI is planning with respect to the development of NTI164 as a new treatment for ASD?

NTI plans to commence its landmark phase II/III drug registration trial in the next quarter to further assess the long-term safety and efficacy of NTI164. This trial will include approximately 60 patients based on biostatistical review and analysis.

If the phase II/III trial is as successful, when do you expect to have this product available for consumers?

We have a very clear roadmap through to drug registration. All going to plan, we would be able to complete the Phase II/III trial by Q3 next calendar year, commence US based clinical

trials and be able to have a registered product for sale within the next two years. Throughout this period, we also expect to commence licensing discussions and negotiations with potential big pharma partners.

Do the results to date encourage Neurotech to undertake studies for other neurological conditions?

Absolutely. The fact that we have demonstrated the ability to significantly reduce specific pathways involved in neuroinflammation (the identified cause for the development and onset of many conditions) paves the way to test for treatment options in respect of a whole host of neurological illnesses including ADHD, Multiple Sclerosis, Motor Neuron Disease and Alzheimer's Disease/ Dementia - both using NTI164 on its own and in combination with other off patent drugs such as prednisolone, Celebrex and diclofenac (see NTI announcements 9 June 2022, 1 Dec 2021) . We are planning for the commencement of a Phase I/II trials in Cerebral Palsy and Long Covid later this year. These are diseases that currently have very little effective treatment options available.

Help us understand why this strain is so different to other CBD / THC strains being used around the world?

NTI164 is derived from a unique genetic strain of medicinal cannabis which naturally contains high levels of CBDA and other minor cannabinoids (including the rarer, newly discovered varieties - CBDP and CBDB - as well as CBG, CBN and CBC). Importantly, this variety also expresses very low THC content which allows its use in children. Due to containing <0.3% THC, adverse effects associated with this psychoactive ingredient (notably drowsiness) are not an issue. NTI164 is unique as it provides all the beneficial properties and components of 'full-spectrum' cannabis without the THC.

Latest international data is focussing more on the efficacy of the "rarer" cannabinoids that go far beyond CBD alone. NTI164 contains these rarer cannabinoids which have powerful effects on inflammatory pathways, supress cytokine activity and work differently to CBD in regulating these complex processes. The Company has previously reported that NTI164 supports cell health, cell survival and overall cell maintenance (see NTI announcement 20 Dec 2020).

What intellectual property protection does NTI have with respect to NTI164?

The Company has lodged key, provisional patents applications relating to the composition and use of NTI164 to treat various neurological disorders, including ASD and ADHD. NTI, through its patent attorneys, recently completed international type searches conducted by IP Australia (Canberra) on both NTI 164 patents which demonstrated that there is "no prior art" concerning the inventions which should now pave the way for patent registration early next year (see NTI announcement dated 8 July 2022). The Company continues to add value to its patent position with both preclinical and patient trial results.

Brian, you have been involved in many successful biotech companies over the years, in particular the recent bid by Pfizer to acquire for all the shares in one of your start-ups. How do you rate the opportunity that NTI164 presents when compared to some of the success stories you have been involved with in the past?

I've always been interested in disruptive technologies. NTI164 is a disruptive product that may be the breakthrough needed in treating neurological disorders. The potential to develop efficacious treatment with little to no side-effects should be the goal of all biotechnology companies, and the results from this breakthrough study make me confident in our success moving forward to later stage clinical studies in ASD and in other neurological indications.

Authority
This announcement has been authorised for release by the Chairman of Neurotech International Limited.

Further Information
Dr Alexandra Andrews
CEO
aa@neurotechinternational.com
+61 (0)405 339 788

Brian Leedman
Chairman
b.leedman@neurotechinternational.com
+61 (0)41 228 1780

Media:
Amalie Schreurs
White Noise Communications
amalie@whitenoisecomms.com
+61 (0)431 636 033

About Neurotech

Neurotech International Limited (ASX:NTI) is a biopharmaceutical company focused on the development and commercialisation of neurological solutions that improve quality of life. Neurotech is currently conducting world-first clinical trials to assess the potential application of NTI164 for the treatment of Autism Spectrum Disorder (ASD). Results of Phase I/II indicated that 93% of participants had notable improvements relating to the severity of illness with no serious side effects. The next step will be initiation of Phase II/III of the trial to further assess the long-term safety and efficacy of NTI164, with the potential to lead to drug registration.

The Company has also submitted key, provisional patents relating to the composition and use of NTI164 to treat various neurological disorders, including ASD.

For more information about Neurotech and Mente Autism, please visit **www.neurotechinternational.com**.