AXON Neuroscience announces discovery of a new potential immunotherapeutic ACmab1 against COVID-19.

- Axon generated potential therapeutic antibodies that are able to neutralize the SARS-CoV-2 virus

- In cooperation with the Virological Institute of Biomedical Research Center at the Slovak Academy of Sciences in Bratislava, Axon successfully tested the efficacy of these therapeutic antibodies on the live SARS-CoV-2 virus

- Axon has begun preparing these potential therapeutic antibodies for the humanisation process, which is required to start human clinical trials

24th November 2020, Bratislava – AXON Neuroscience (“Axon”), a clinical-stage biotech company and a world leader in the development of tau vaccines for therapy and prevention against Alzheimer’s Disease, announced today that it successfully tested therapeutic antibodies on the live SARS-CoV-2 virus.

Axon generated these antibodies, which can prevent the SARS-CoV-2 virus from reproducing, in the course of developing its prophylactic COVID-19 vaccine ACvac1 (“COVIDAX”). Using antibodies that demonstrated strong efficacy in several independent tests, Axon was able to map the most vulnerable parts of the virus, which are then detectible by the human immune system.

Norbert Žilka, the Chief Scientific Officer of Axon, said: “Some of these antibodies were able to completely eliminate the virus, showing their therapeutic potential. We have subsequently demonstrated their efficacy in a number of other conceptually different tests that we have developed in our laboratories. We will now focus on the process of humanisation, in order to start the production process, which is necessary to begin the clinical trials.”

Michal Fresser, CEO of Axon, added: “Axon’s research program is based on 20+ years of innovative, and at times seemingly unconventional, research and development that has led to major breakthroughs. We are delighted to announce that we have successfully identified antibodies with a potential therapeutic effect in patients diagnosed with COVID-19. We have a two-pronged goal: to continue developing our preventive COVIDAX vaccine to immunize vulnerable populations; and, in parallel, to develop a drug that can halt and mitigate the COVID-19 virus in those infected. This would have the potential to flatten the curve and take pressure off overburdened health care systems. We have decided to open the project to interested investors through crowdfunding (www.covidax.eu) because we would like to stay independent and continue our research program unaffected by political or industry pressure.”
ACmab1 (COVIMAX) – neutralising antibodies against COVID-19
ACmab1 is a therapeutic candidate intended to treat those infected with COVID-19. The antibodies show the ability to target vulnerable parts of the S-protein of the virus, in order to stop the virus from interacting with host cells and replicating.

Testing the antibodies was done at the laboratories of the Virological Institute of Biomedical Research Center at the Slovak Academy of Sciences in Bratislava. The efficacy of the selected antibody candidates was tested directly on the live SARS-CoV-2 virus on cell cultures. Results from these tests show that the antibodies are able to efficiently stop the interaction of virus with the host cell and stop its further reproduction.

RNDr. Boris Klempa, DrSc, Virological Institute, BMC of SAS added: “In our cooperation with Axon, we are utilising the plaque-reduction neutralization test. This test is performed in our specialized laboratory compliant with a 3rd degree of Biosafety Level requirements (“BSL3”), as we are working directly with the infectious virus SARS-CoV-2 (in the form of our isolate BMC5). Tests are being performed in a strictly blinded mode; our team receives only numbered samples, which we then evaluate based on their ability to neutralize the virus. We have identified a strongly neutralizing ability in several of these blinded samples.”

About Axon Neuroscience
Axon Neuroscience is an industry leading, clinical stage biotech company and an innovator in the development of peptide vaccines against so-far incurable brain diseases. The company was founded in 1999 and now has the single biggest team in the world dedicated exclusively to peptide vaccine development for treating Alzheimer's Disease. The work of the Axon team is regularly published in top-tier scientific journals and publications, including Lancet Neurology and Neurology.

Axon’s lead vaccine AADvac1 is the most clinically-advanced tau therapy in development for treating and preventing Alzheimer's Disease. In late 2019, Axon successfully completed a Phase 2 clinical trial in almost 200 Alzheimer's patients, which revealed excellent safety, immunogenicity and efficacy. The evidence from its clinical trials on Alzheimer's disease proved its peptide-based vaccine platform to be very safe and well-tolerated. Over 80% of the treated Alzheimer's patients demonstrated an exceptional immune response and generated a robust quantity of antibodies. The therapy was able to significantly slow down the process of neurodegeneration in treated patients by almost 60%.

Axon’s extensive knowledge in producing safe and immunogenic vaccines and well-established scalable technology allowed it to move very quickly in creating its novel peptide vaccine against COVID-19.

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