

CEBINA reports positive findings on the potency of azelastine, a widely used anti-histamine, as anti-COVID-19 approach

Vienna, 17th September 2020

CEBINA GmbH, an Austrian biotech company, today announces further positive results in its collaborative COVID-19 drug repurposing project, demonstrating that a common allergy nasal spray medication containing azelastine has potent efficacy against SARS-CoV-2 in a human 3D nasal tissue model.

Azelastine, a generic anti-histamine medication, has previously been identified as potential anti-COVID-19 drug by CEBINA in collaboration with Professor Robert Konrat, a renowned structural biologist (Department of Structural and Computational Biology, University of Vienna, Austria) who applied a novel computational prediction approach and Professor Ferenc Jakab and his group (Head of National Laboratory of Virology at the Szentágothai Research Centre, University of Pécs, Hungary), providing experimental confirmation. The potent anti-SARS-CoV-2 activity of azelastine formulated in a nasal spray was demonstrated in an experimental reconstituted human nasal tissue model and was evident at a lower dose than present in commercially available products.

“The confirmation of the efficacy of azelastine in human nasal tissue can have major implications in the fight against COVID-19 as we witness the second wave of coronavirus infections, with record rises in the number of new cases registered daily. We believe a nasal spray formulation containing azelastine could be an immediate prophylactic or post-exposure solution to prevent nasal colonization with the SARS-CoV-2 virus as well as preventing the progression to symptomatic disease in infected individuals and the spread of the virus in the population” - commented Eszter Nagy, MD PhD, CEO and founder of CEBINA GmbH.

“Using the reconstituted human nasal tissue model, we simulated the clinical situation of nasal colonization by SARS-CoV-2 and have observed the strong inhibition of viral propagation. This translational data indicates that azelastine is a potent antiviral agent.” said Professor Ferenc Jakab.

“The experimental confirmation of our computational prediction demonstrates that our novel approach to drug repurposing is an effective way to quickly identify new medical uses for existing, immediately available medicines with known safety profiles.” commented Professor Robert Konrat.

CEBINA, jointly with its research collaborators, has submitted its findings for publication (under peer-review) and has issued the manuscript on a preprint server for immediate dissemination (<https://doi.org/10.1101/2020.09.15.296228>).

CEBINA is planning a proof-of-concept clinical trial to confirm the efficacy of azelastine against nasal colonization and is in discussion with potential licensing partners for worldwide production and distribution of an anti-COVID-19 azelastine nasal spray.

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ABOUT CEBINA

CEBINA GmbH – Central European Biotech Incubator and Accelerator (www.cebina.eu) is an Austrian-based company offering in house research, development, financing and management capabilities to early and medium stage biotech companies as well as pursuing its own development projects in particular in infectious diseases. CEBINA recently announced it has initiated multiple research projects to fight the COVID-19 pandemic.

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