

Inspira Pharmaceuticals and University of Oxford Demonstrate Proof-of-Concept of Novel IPA Formulations for COVID-19

Highlights

- Inspira's plant-derived IPA formulations show strong inhibition of ACE2 receptor binding to SARS-CoV-2 spike protein
- All relevant SARS-CoV-2 variants evaluated including the Delta variant
- Further studies planned to test binding inhibition in live virus experiments

London, UK – 14 October 2021 – Inspira Pharmaceuticals Limited ("Inspira" or "the Company"), a UK-based company focused on developing therapies for respiratory and infectious diseases, today announced the results of recent experiments conducted by the University of Oxford.

The research was conducted within the University's Nuffield Department of Medicine, and used Inspira's proprietary extracts from a plant source which contain proteolytic enzymes ("IPA formulations"). The Oxford team designed a program to measure the ability of the IPA formulations to inhibit recombinant ACE2 receptor binding to the SARS-CoV-2 spike protein. The experiments tested a range of SARS-CoV-2 variants of concern (VOCs) (including the now dominant B.1.617.2 "Delta" variant). The Oxford team concluded that the IPA formulations tested show a clear ability to inhibit recombinant ACE2 receptors to bind to SARS-CoV-2 spike from various VOCs. The experiments included serial dilutions of each formulation and there was a clear titratable effect.

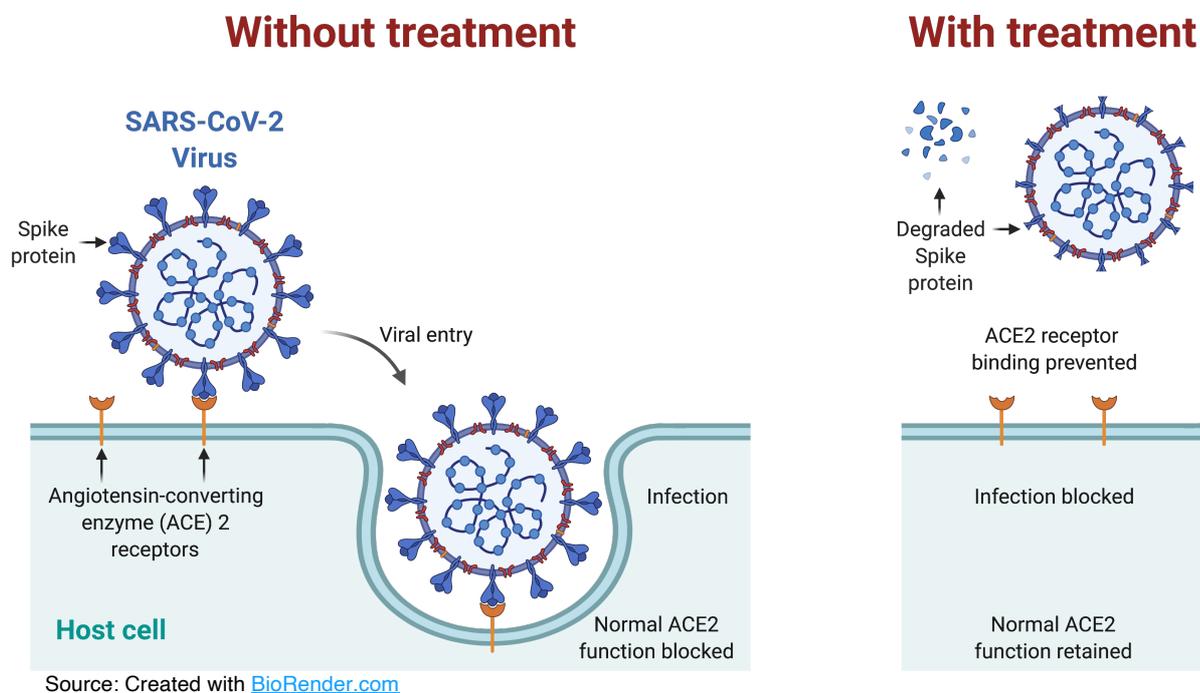


Figure 1: Potential Mechanism of Action of Inspira's IPA formulations (Nb: the method of action remains conceptual in nature and must be verified through further testing)

Rory McGoldrick, CEO of Inspira, commented: "We are delighted to have completed this work with Oxford, a University well established as a global leader in the development of COVID-19 vaccines. Oxford's depth

of expertise is invaluable to Inspira as we continue to rapidly develop our novel formulations as a potential COVID-19 therapy. As we move from pandemic to endemic COVID, it will be ever more important to have new treatments that are cost effective, easy to distribute, and easy to administer. We are targeting a treatment that has the potential to be effective at the early stage of infection, to minimise the risk of hospitalisation and reduce the need for ventilatory support in intensive care.”

All studies were undertaken at the University of Oxford’s Nuffield Department of Medicine (NDM) on the Oxford campus, which is home to world-leading research laboratories. Follow up studies are now being planned to test binding inhibition in experiments using the live SARS-CoV-2 virus.



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ABOUT INSPIRA PHARMACEUTICALS

Inspira Pharmaceuticals Limited is a UK-based company focused on the development and commercialisation of its proprietary IPX technology platform. Inspira has identified novel plant-based formulations that have potential therapeutic applications for the treatment of respiratory diseases, including COVID-19 (designated the “IPA formulations”). The Company has demonstrated that its product candidates contain proteolytic enzymes that have shown to be effective in degrading key proteins associated with lung infections, including the spike protein on the SARS-CoV-2 virus. The spike protein is crucial for the virus to infect cells. Inspira’s products are being formulated for pulmonary delivery with the aim of inhibiting SARS-CoV-2 replication in the lungs as well as treating and preventing other respiratory infections.

For further information, please visit www.inspiraph.com

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