

## Zydus announces IND filing of ZYIL1, a novel oral small molecule NLRP3 inflammasome inhibitor

- NLRP3 inflammasome inhibitor can selectively modulate the inflammatory responses caused by the 'Cytokine Storm' in Acute Respiratory Distress Syndrome (ARDS), COVID19 and other inflammatory conditions.
- In this cutting-edge, innovative research field of 'innate immunity', Zydus' development candidate 'ZYIL1' is efficacious in non-clinical animal models of inflammation, with acceptable ADME profile and high-safety margins
- Zydus has secured a Strong IP portfolio with multiple patents filed in all major countries

Ahmedabad, India, November 3, 2020

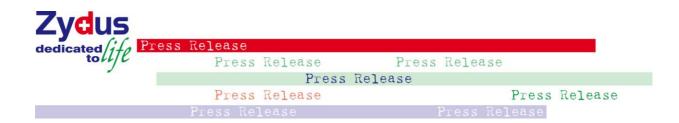
Zydus, a leading discovery based, global pharmaceutical company today announced that it has filed the IND application of ZYIL1, a novel oral small molecule NLRP3 inhibitor candidate. Following up on its initiatives to fight COVID 19 with diagnostics, vaccines and therapeutics, the company is now focussing on cutting edge research to bring targeted therapies that can selectively modulate the inflammatory responses caused by the Cytokine Storm.

NLRP3 inflammasomes are involved in the inflammation process by production and release of proinflammatory cytokines IL-1 $\beta$  and IL-18. This harmful inflammation within the body leads to the onset and development of various kinds of diseases, including auto-immune diseases, inflammatory diseases, cardiovascular diseases, metabolic disorders, Gastro-intestinal diseases (inflammatory bowel disease), renal diseases, CNS diseases as well as Acute Respiratory Distress Syndrome (ARDS).

SARS-CoV-2 has been reported to activate the innate immune signalling sensor NLRP3 inflammasome thereby leading to 'Cytokine Storm' in COVID-19 patients and causing Acute Respiratory Distress Syndrome (ARDS) complications like organ failures, and death in severe cases. As an NLRP3 inflammasome inhibitor, ZYIL1 will bridge a critical unmet healthcare need in several inflammatory diseases including the current pandemic of COVID 19 and address complications caused by chronic, uncontrolled inflammation.

Speaking on the development, Pankaj R. Patel, Chairman, Cadila Healthcare Ltd., said, "We are at the forefront of targeting the innate immune system through novel NLRP3 inflammasome inhibitors candidates with deep understanding of the inflammasome biology. We are committed to developing these pioneering novel treatments to the clinic for the patients in need."

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ZYIL1, has demonstrated promising efficacy in a number of validated pre-clinical models of Inflammatory Bowel Disease (IBD), Multiple Sclerosis (MS), Sepsis and acute lung injury models of Acute Respiratory Distress Syndrome (ARDS). The studies have demonstrated that ZYIL1 can selectively supress inflammation caused by the NLRP3 inflammasome. The candidate, ZYIL1, has an acceptable ADME profile, with high safety margin. The Company has completed all IND enabling pre-clinical studies and has filed the IND application to advance this drug candidate towards the clinic.

## **About Zydus**

Zydus Cadila is an innovative, global pharmaceutical company that discovers, develops, manufactures and markets a broad range of healthcare therapies, including small molecule drugs, biologic therapeutics and vaccines. The group employs nearly 25,000 people worldwide, including 1,400 scientists engaged in R & D, and is dedicated to creating healthier communities globally. <a href="https://www.zyduscadila.com">www.zyduscadila.com</a>

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