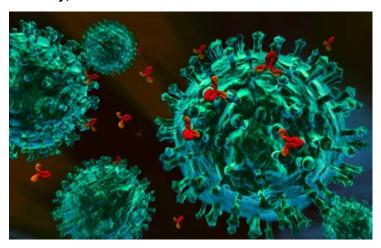


Tiziana to Develop Monoclonal Antibody as Potential Treatment to COVID-19

11 March 2020 | News

Tiziana Life Sciences plc To Expedite Development of its Fully Human Anti-Interleukin-6-Receptor Monoclonal Antibody, a Potential Treatment of Certain Patients Infected with Coronavirus COVID-19



Tiziana Life Sciences plc, a biotechnology company focused on innovative therapeutics for inflammatory and autoimmune diseases, announced today that it is expediting development of TZLS-501, a novel, fully human anti-interleukin-6 receptor (anti-IL6R) monoclonal antibody (mAb) for treatment of patients infected with coronavirus COVID-19 (SARS-CoV-2). Tiziana plans to administer TZLS-501 using a proprietary formulation technology. The Company entered into a world-wide license for composition-of-matter of TZLS-501, a fully human mAb targeting IL-6R, with Novimmune, SA, a Swiss biotechnology company in 2017.

Certain patients infected with coronavirus COVID-19 may develop an uncontrolled immune response ("cytokine storm") resulting in severe damage to lung tissue which could lead to respiratory failure. Early clinical studies conducted by doctors in China suggest that anti-IL6R mAbs may be used in clinical practice for the treatment of COVID-19. Consequently, China's National Health Commission has recommended the use of Roche's blockbuster drug, Actemra® for treatment of patients infected with COVID-19, with serious lung damage and elevated IL-6 levels. Actemra was first approved by the FDA in 2010 for rheumatoid arthritis. Besides Actemra®, Sanofi and Regeneron are currently exploring Kevzara®, an FDA-approved anti-IL-6 receptor therapy for rheumatoid arthritis, for treatment of severe COVID-19.

Tiziana's anti-IL-6R mAb binds to both the membrane-bound and soluble forms of IL-6R and rapidly depletes circulating levels of IL-6 in the blood. Excessive production of IL-6 is regarded as a key driver of chronic inflammation and is believed to be associated with severe lung damage observed with COVID-19 infections and acute respiratory illness. A recent Chinese study also reported that COVID-19 infection caused clusters of severe respiratory illness such as severe acute respiratory distress syndrome (*ARDS*).

"We believe that the features of TZLS-501 consisting of its dual mechanism of action to inhibit signaling by the membrane-bound and soluble IL-6 receptors along with rapid depletion of circulating IL-6 cytokine, a major cause of lung damage, provides TZLS-501 with distinct advantages for treatment of COVD-19 over other anti-IL-6R mAbs such as Actemra® and Kevzara® for treatment of COVID-19. The recent decision by researchers in China to add Actemra® to treatment guidelines for coronavirus patients with serious lung damage confirms the utility of anti-IL6R mAb. We are excited to move forward with

our clinical development plan to expedit	te evaluation in patient	s as soon as possible'	', said Dr. Kunwa	ır Shailubhai, CEO &
CSO of Tiziana Life Sciences.				