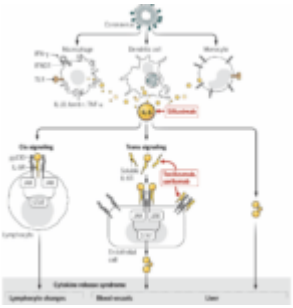
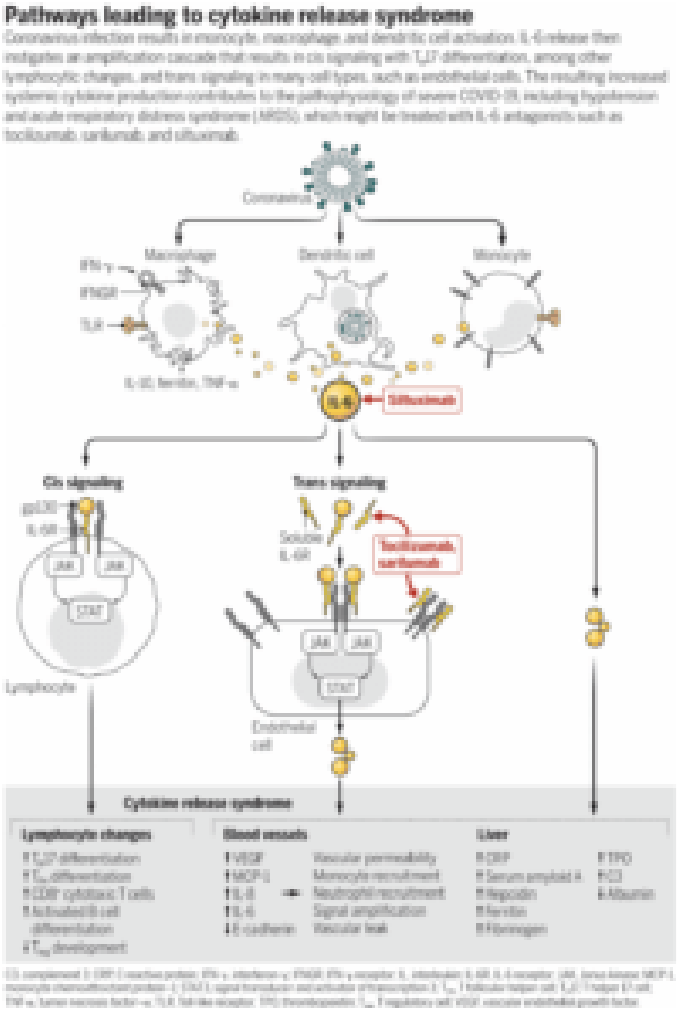
# Cytokine Release Syndrome & COVID-19






Moore & June 2020

A recent perspective in Science asked whether there are lessons that can be learned from arthritis and cell therapy in cancer for COVID-19. Severe disease in 20% of COVID-19 cases appear to be from acute respiratory distress syndrome (ARDS),

which is often fatal. This poignant piece outlines the pathways leading to cytokine release syndrome (CRS), often seen in hemophagocytic lymphohistiocytosis and leukaemia patients receiving T cell therapy, and potential therapeutics that can suppress CRS.  IL-6 release from macrophages, dendritic cells and monocytes (all activated during SARS-CoV-2 infection) is known to be central in amplifying the signalling leading to Th17 differentiation and pathology. Treatment with IL-6 antagonists may be one effective therapeutic intervention. The authors state: “The immediate goal of IL-6 antagonism is to ameliorate severe COVID-19 cases so that requirements for advanced care are minimized. The long-term goal should include a focus on the development of antivirals and vaccines that prevent or ameliorate the infection.”

References: Moore & June, 2020. Cytokine release syndrome in severe COVID-19. Science

Article by Clive Gray