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# Covid-19 is Prevented in High-risk Individuals by an Antibody Medication Developed by AstraZeneca

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AstraZeneca Plc, headquartered in Cambridge, England, is a British-Swedish multinational pharmaceutical and biotechnology company. Its product range includes treatments for cancer, cardiovascular illness, gastrointestinal disease, infection, neurology, respiratory disease, and inflammation. It was involved in the Oxford-AstraZeneca COVID-19 vaccine development. In 1999, the Swedish Astra AB and the British Zeneca Group merged to form the firm (itself formed by the demerger of the pharmaceutical operations of Imperial Chemical Industries in 1993) [1].

Since the merger, it has grown to become one of the world's largest pharmaceutical businesses, acquiring Cambridge Antibody Technology in 2006, MedImmune in 2007, Spirogen in 2013, and Definiens in 2014. (by MedImmune in 2014). Its research and development is focused in three strategic locations: Cambridge, England; Gothenburg, Sweden; and Gaithersburg, Maryland, United States. The corporation stated in March 2020 that it would donate personal protective equipment (PPE), including 9 million face masks, to aid various worldwide health organisations combat the COVID-19 pandemic. CEO Pascal Soriot said in April 2020 that the company was collaborating with GlaxoSmithKline and the University of Cambridge to construct a new laboratory capable of doing 30,000 COVID-19 tests each day. Calquence will also be tested in a clinical trial for the treatment of COVID-19, according to the business [2].

In a pivotal trial, AstraZeneca Plc's Covid-19 antibody cocktail was found to be 77 percent effective in avoiding symptomatic Covid-19 in high-risk persons, potentially expanding the therapeutic options for vulnerable people. According to Astra's findings, no one in the experiment who received the combination contracted severe Covid-19 or died as a result of the condition, according to the company's statement on Friday. The 5,197-person study began in November in the United States, the United Kingdom, Belgium, France, and Spain to investigate if the drug may prevent infection in at-risk populations [3].

The results will come as a huge relief to Astra after a study in June that failed to show that the cocktail could prevent symptomatic Covid-19 in persons who had been specifically exposed to the virus. The findings could possibly save a medication procurement agreement with the United States. The United States had placed an order for up to 700,000 doses to be delivered in 2021, with the value of the deal depending on the trial's failure. In June, Astra said it was in "ongoing" talks with the US government and would wait for the findings of the latest research, dubbed Provent, before deciding how to proceed. For the primary analysis, the trial collected 25 symptomatic Covid-19 infections. The AZD7442 cocktail was administered to volunteers in a 2:1 randomised drug-to-placebo ratio. In a statement, Mene Pangalos, executive vice president of biopharmaceuticals research and development, said, "We need new ways for those who are not effectively protected by Covid-19 vaccinations." “These efficacy and safety statistics in high-risk populations give us a lot of hope.” The corporation stated that it was preparing the data for possible emergency-use authorization with regulators. Antibody medicines are seen as a tool to potentially protect those who may not respond well to vaccination, such as cancer patients, however the products are difficult to deliver and scale-up is limited. Covid-19 preventive and treatment trials have shown varying degrees of success. Although a previous trial for hospitalised patients failed, GlaxoSmithKline Plc and Vir Biotechnology Inc. got US emergency-use authorisation for their medicine in May after it demonstrated it could keep at-risk patients from worsening [4,5].

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