

Monoclonal Antibodies:

On either Wednesday or Thursday of last week, I was listening to CBS's half hour of evening news. As a result, I learned that there could be a potential treatment of COVID19. The implications for such a medication are by definition enormous and lifesaving. One can easily say that 150,000+ dead Americans as well as the thousands more dead across the world are far too many. Although there is reason to worry that the antibodies may not work, I believe they have been developed with sound science.

To begin, I must do my best to explain in layman's terms how COVID19 infects us. The article "Synthetic Antibody Could Prevent and Treat COVID19," authored by Eleanor Bird and factchecked by Hannah Flynn states that COVID19 enters the lungs through specific receptors. "SARS-CoV-2 the new coronavirus gains entry into our cells in the body using a receptor called angiotensin converting enzyme 2 (ACE 2)." "ACE2 is present on the surface of airways and the lungs..." In other words, one can say that COVID-19 travels through the air, and when it binds to the ACE-2 receptors lining the airways and lungs, you are infected. Consequently, using the knowledge of these receptors will be extremely helpful in fighting the new coronavirus.

Bird and Flynn discuss the research undertaken by a team at Tulane University in New Orleans, Louisiana, who have synthesized antibodies for fighting SARS-CoV-2. The researchers created a decoy ACE-2 protein and attached it to four separate antibodies. After that, the researchers found that a similar virus bound more tightly to the MDR504 antibodies than to the other antibodies. Consequently, the positive findings have led the investigators at Tulane University to test their experiment on mice. Furthermore, they are partnering up with a biotech company for human trials.

As a college student, I am in awe of the people creating these antibodies. This treatment sounds as novel as the pandemic we are trying to fight. I cannot help but feel that we are using the scientific method to fight COVID19. More importantly, the scientific method was adhered to. After all, for science to work, one should observe, hypothesize, experiment, analyze and interpret the data, and finally draw conclusions. Due to all of this painstaking research, I feel confident that we will prevail over this pandemic.

PS: After concluding this article, I find it important to stay up-to-date on the antibody treatment. As a matter of fact, human trials are already underway. Of course, I will soon write about them.