



# Can Stem Cells Help Treat COVID-19?

---

A clinical trial which utilises stem cells to combat COVID-19 is underway in the UAE for the first time. The treatment, which involves extracting stem cells from a patient's bloodstream, activating them and then reintroducing them back into the patient's lungs, is currently being tested at Sheikh Khalifa Medical City.

However, those involved in the trials have stressed that the treatment is only used to alleviate the symptoms of the disease, rather than cure it entirely. Nonetheless, it is still being hailed as a national achievement and, should all trials go well, will likely comprise part of the global strategy in treating the spread of coronavirus.

## Containment not cure

According to the latest statistics, there have been 13,599 documented cases of COVID-19 in the UAE (accurate as of Saturday 2<sup>nd</sup> May 2020). To date, there have been 119 deaths and 2,664 recoveries, although given that [the median incubation period for the virus is around five days](#), the actual figure of those suffering from it could be far higher.

With chronic lung complications the most commonly observed factor in whether the disease is terminal or not, the scientific community has understandably focused its efforts on fighting the pulmonary impacts caused by COVID-19. A team of 28 researchers at the Abu Dhabi Stem Cell Centre have come up with this latest treatment, which focuses on treating the symptoms of the disease rather than its cause.

First tested on a human patient at the beginning of last month, the stem cell treatment has since been used on 72 more patients. 18 of those were in intensive care when the treatment was introduced; the majority of them have shown impressive results in fighting off the illness.

## What is stem cell treatment?

The treatment is unique in that it involves uses the stem cells of the patient themselves, which means that no surgery is required. Instead, a blood sample is extracted from the patient, before platelets are added to it to activate and modulate the stem cells. These are then reinjected back into the patient's lungs, where they can aid in the fight against the disease.



“Once the virus enters the respiratory system, it enters its genome characteristics and overtakes functions of cells, like producing proteins and multiplying DNA and the cell then become a factory of viruses,” [explained Dr Alawi Al Sheikh](#), who is the spokesman for the UAE Advanced Science Department. “The abundance of viruses means the immune system will exert more effort to fight the intruders and by doing that, the gravity and severity of the case continues.”

The new stem cell treatment relieves this pressure on the immune system by giving it a helping hand in the form of the activated blood cells. In this way, those behind the treatment hope to support the most vulnerable members of society and safeguard them as best as possible from the ravages of the virus.