MicroRNA- Why old age make it more difficult to fight COVID-19

- A group of tiny RNA — that is supposed to attack the SARS-CoV-2 when it infects human bodies — diminishes with age and in people with chronic health problems, which may explain why older individuals and those with pre-existing health conditions are more vulnerable to Covid-19.
- MicroRNAs play a big role in controlling gene expression, and are a frontline defence when viruses invade.
- According to a study published in Aging and Disease, the microRNA numbers dwindle with age and under chronic medical conditions, which reduces a person’s ability to respond to viruses.
- The team from Augusta University had looked at the RNA sequence of two coronaviruses — SARS, which surfaced in 2002, and SARS-CoV-2.
- They also looked at the sequence of microRNAs that appeared to be attacking these viruses, then used computer simulation to figure out the results.
- They found 873 microRNAs that target the SARS-CoV-2 genome. These microRNAs were associated with more than 72 biological processes — from the production of molecules to immune response.