

T-cell responses by vaccines and boosters effective against Omicron: Australian study

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The most concerning aspect of Omicron is the abundance of mutations in its spike protein, which is the primary target of COVID-19 vaccines



Research from the University of Melbourne in Australia and Hong Kong University of Science and Technology (HKUST) has revealed that T-cells, one of the body's key defences against COVID-19, are expected to be effective in mounting an immune response against Omicron despite its significantly higher mutations compared to previous variants of concern.

T-cells, generated both by vaccinations and COVID-19 infections, have been shown to be critical in limiting progression to severe disease by eliminating virus-infected cells and helping with other immune system functions.

Preliminary studies have reported that Omicron can escape antibodies produced by vaccination or natural COVID-19 infection, raising concerns about the increased possibility of reinfection and breakthrough cases.

"Based on our data, we anticipate that T-cell responses elicited by vaccines and boosters, for example, will continue to help protect against Omicron, as observed for other variants. We believe this presents some positive news in the global fight against Omicron", said the researchers.