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Australia's EnGeneIC brings 2nd-Gen COVID-19 vaccine against all variants

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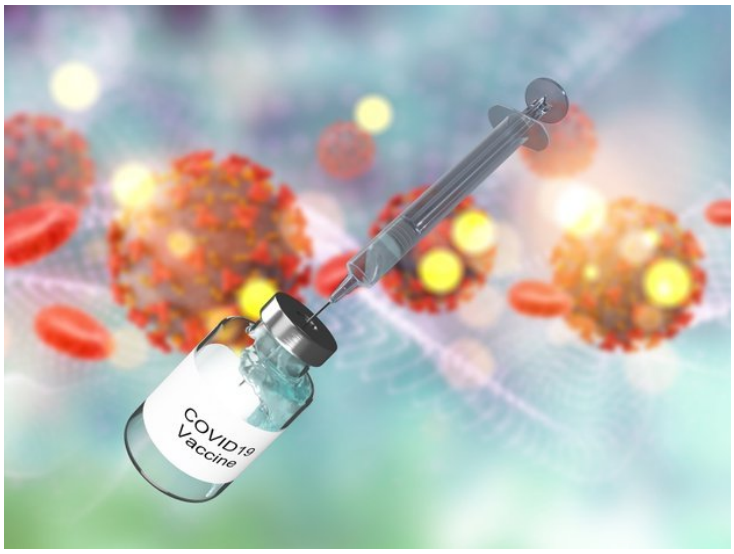
Clinical trials have shown that the novel vaccine produces Ã¢â?¬Å?high affinityÃ¢â?¬Â• antibodies that can neutralise all COVID-19 variants and is safe for immune-compromised patients



Australian biopharma company EnGeneIC is developing the world's first COVID-19 vaccine which can offer immunity against all variants. Clinical trials have shown the novel vaccine stimulates a completely different immune pathway from other vaccines, producing "high affinity" antibodies that neutralise all COVID-19 variants.

EnGeneIC is currently conducting anti-COVID-19 vaccine trials with its patented platform technology based around a biological nanocell (EDV; EnGeneIC Dream Vector) in Sydney and Melbourne.

Initially developed as a breakthrough in cancer treatment, these EDVs are loaded with anti-viral molecules to deliver a world-first nano-cellular COVID-19 vaccine.

Based on the company's trials treating late-stage cancer patients, EnGeneIC believes its COVID-19 EDV vaccine will also be effective in those who are immune-compromised (cancer, organ transplant, rheumatoid arthritis, and diabetes patients).

EnGeneIC founders and joint CEOs, Dr Himanshu Brahmbhatt and Dr Jennifer MacDiarmid, said they were seeing high levels of high-affinity neutralising antibodies against all variants, including the now-common Omicron BA2, and a robust T cell and memory response in trial participants.

So, even if the spike protein mutates or changes, EnGeneIC's antibodies still stick to it tightly and neutralise it, says Dr. Brahmbhatt. Additionally, the novel vaccine has a shelf life of one year and can be stored and transported at room temperature, making them be supply chain efficient while serving developing and remote locations.