

A Zika vaccine shows signs of success in an early human trial

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The Inovio-GeneOne shot is a synthetic vaccine made by reproducing sections of the Zika virus genome in a lab.



A DNA-based Zika vaccine from Inovio Pharmaceuticals Inc and South Korea's GeneOne Life Science induced anti-Zika immune responses in an early stage human trial.

Unlike conventional vaccines, which often use inactivated or killed versions of a virus, the Inovio-GeneOne shot is a synthetic vaccine made by reproducing sections of the Zika virus genome in a lab, and then loading them onto a ring of genetic material called a plasmid.

This vaccine is then injected beneath the skin and followed up with a device that generates electrical impulses, creating small pores in cells that allow the DNA to pass into cells.

After three doses of the Zika vaccine known as GLS-5700, all 40 healthy volunteers in the study developed Zika-specific antibodies.

More testing will be needed to show the vaccine is effective at protecting people from Zika, and that could prove challenging given that the once explosive epidemic has slowed and there are few large populations now at risk for Zika infection.