

# Recombinant type-5 vector-based ebola vaccine safe

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(HealthDay)—For healthy adults from Sierra Leon, the recombinant

type-5 vector-based Ebola vaccine is safe and immunogenic, according to a study published online Dec. 21 in *The Lancet*.

Feng-Cai Zhu, from the Jiangsu Provincial Center for Disease Control and Prevention in Nanjing, China, and colleagues recruited healthy HIV-negative [adults](#) aged 18 to 50 years, with no history of Ebola virus infection and no previous immunization with other Ebola candidate vaccines. Five hundred participants were randomized to receive high-dose [vaccine](#) ( $1.6 \times 10^{11}$  viral particles; 250 participants), low-dose vaccine ( $8.0 \times 10^{10}$  viral particles; 125 participants), or [placebo](#) (125 participants).

The researchers found that at least one solicited adverse reaction was reported by 53, 48, and 43 percent of [participants](#) in the high-dose, low-dose, and placebo groups, respectively, within seven days of vaccination; most were mild and self-limiting. Vaccine recipients more often had solicited injection-site adverse reactions (26 and 25 percent in the high- and low-dose groups, respectively, versus 17 percent in the placebo group;  $P = 0.0169$ ). In the low- and high-dose groups, glycoprotein-specific antibody responses were detected from day 14 onward (geometric mean titer, 1,251.0 and 1,728.4, respectively); these peaked at day 28 and decreased rapidly in the following months.

"The recombinant adenovirus type-5 vector-based Ebola vaccine was safe and highly immunogenic in healthy Sierra Leonean adults, and  $8.0 \times 10^{10}$  [viral particles](#) was the optimal dose," the authors write.

Two authors are employees of Tianjin CanSino Biotechnology, a co-developer of the vaccine.

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