

# mRNA vaccine more effective booster to ChAdOx1 nCoV-19

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(HealthDay)—Use of heterologous ChAdOx1 nCoV-19 and mRNA

prime-boost vaccination is more effective than homologous ChAdOx1 nCoV-19/ChAdOx1 nCoV-19 prime-boost vaccination, according to a study published online Oct. 17 in *The Lancet Regional Health: Europe*.

Peter Nordström, M.D., Ph.D., from Umeå University in Sweden, and colleagues examined the effectiveness of heterologous prime-boost COVID-19 vaccination among individuals in Sweden who had received two doses of COVID-19 [vaccine](#) by July 5, 2021. The study cohort included 94,569 individuals who received heterologous ChAdOx1 nCoV-19/BNT162b2 prime-boost vaccination, 16,402 individuals who received ChAdOx1 nCoV-19/mRNA-1273 prime-boost vaccination, and 430,100 individuals who received homologous ChAdOx1 nCoV-19/ChAdOx1 nCoV-19 prime-boost vaccination. Furthermore, 180,716 individuals were selected who were unvaccinated at the vaccination date of the corresponding case.

The researchers confirmed symptomatic COVID-19 infection in 187 individuals with heterologous vaccine schedules (incidence rate, 2.0/100,000 person-days) and in 306 individuals from the unvaccinated control group (incidence rate, 7.1 per 100,000 person-days) during a mean follow-up of 76 days. The adjusted vaccine effectiveness was 67 and 79 percent for heterologous ChAdOx1 nCoV-19/BNT162b2 prime-boost vaccination and heterologous ChAdOx1 nCoV-19/mRNA-1273 prime-boost vaccination, respectively. When combined and analyzed together, the vaccine effectiveness was 68 percent for the heterologous schedules, which was significantly higher than the 50 percent [effectiveness](#) seen for homologous ChAdOx1 nCoV-19 vaccination.

"Our [study](#) shows a greater risk reduction for people who received an mRNA vaccine after having received a first dose of a vector-based, as compared to people having received the vector-based vaccine for both doses," Nordström said in a statement.

**More information:** [Abstract/Full Text](#)

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