To prevent pre-invasive cervical disease, a single dose of the human papillomavirus (HPV) vaccine could be enough. Investigation of more than 130,000 young women suggests that 1 dose of quadrivalent (4vHPV) vaccine has the same effectiveness of 2 doses, recommended for all adolescents before the age of 15, or more. «Overall, our findings showed a similar degree of association between varying doses of 4vHPV vaccines and preinvasive cervical lesions among adolescents who received the vaccine between the ages of 15 and 19 years» the first author **Ana M. Rodriguez**, of The University of Texas Medical Branch In United States, wrote in a paper just published in Cancer.

The retrospective cohort study involved 133,082 females between the ages of 9 and 26. Exactly half of then were unvaccinated, while the other half received at least 1 dose of HIV vaccine (2006-2015). Among females aged 15-19 years old, vaccination was associated with a lower risk of pre-invasive cervical disease. Compared to unvaccinated females, the hazard ratio (adjusted for US census region, history of sexually transmitted diseases and pregnancy) among participants in the 1, 2 and ≥3 doses groups was 0.64, 0.72 and 0.66, respectively.

At the same time, there were no significant differences among study groups for girls less than 15 years old and for girls of 20 years and older. However, the group that received 3 doses –a schedule recommended by Centers for Disease Control and Prevention for immunocompromised persons or for youth aged 15-26 – was associated with a lower risk for high-grade cytology results, compared with unvaccinated females. «Efforts should focus on not only the need to initiate the HPV vaccine but also the need for beginning and continuing cervical cancer screening among young women who are vaccinated at older ages (≥18 years)» **Rodriguez** said, explaining that disease related to HPV infection, the most common sexually transmitted infection in the United States, «remains a significant source of morbidity and mortality in both developed and developing countries».

According to an accompanying editorial, the new analysis' results are consistent with those emerging from other population-based studies, carrying important implications. «If one dose of HPV vaccine was sufficient for effective protection, HPV vaccine implementation and scale-up would require less logistics […], available doses could extend further, and the overall cost would be lower» **Julia M. L. Brotherton**, of the University of Melbourne in Australia, and **Karin Sundström**, of the Karolinska Institute in Sweden, wrote.