Proven to be the leading cause of cervical cancer, the human papillomavirus (HPV) has recently been linked to anal and oral cancer as well. That’s why it’s important for young men and women to protect themselves against those strains of the virus with the HPV vaccine. Currently, the vaccine schedule consists of three shots that are spaced months apart, but unfortunately, a three-dose regimen may not be economically feasible for many. That’s why the results of a new study published in the Journal of the National Cancer Institute provide hope that receiving only two HPV vaccine doses or even a single dose may be enough to confer immunity.

For the purposes of their study, researchers from the National Cancer Institute’s epidemiology division recruited 7,500 women between the ages of 18 and 25 who were HPV-negative; these women then received either three doses of the Cervarix vaccine against HPV, or a control (hepatitis A vaccine). Over a four year follow-up period, 929 women received only two doses of the vaccine, while 551 received only one. Surprisingly, the resistance to HPV infection among women who received two shots was just as high as it was among women who received all three shots.

The study authors point out that a two-dose regimen has the potential to reduce cervical cancer incidence more effectively than the standard three-dose regimen since more women, especially in low-income regions, would opt to receive the shorter treatment regimen. The results, however, are still preliminary since the sizes of the dual and single dose groups were very small and not randomized.

A two-dose regimen would be beneficial in terms of both logistics and expense, observes ACSH’s Dr. Gilbert Ross. But further studies are needed to determine if such a regimen is indeed sufficient. The length of time that immunity to HPV lasts is a key but still unknown factor.