Head and neck cancer patients with HPV-positive tumors tend to survive longer and are more responsive to treatment compared with patients with HPV-negative tumors, according to a study published online February 12 in the *Journal of the National Cancer Institute*.

Human papillomavirus has been shown to be involved in the development of some head and neck cancers, particularly cancers of the upper throat, or oropharynx. Retrospective studies suggest that patients with HPV-positive tumors generally have a better prognosis than those patients with HPV-negative tumors, but these findings must be confirmed in clinical trials.

To examine the association between HPV infection and cancer prognosis, Maura Gillison, M.D., Ph.D., of Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University in Baltimore and colleagues followed 96 patients with stage III or IV cancer of the oropharynx or larynx (voicebox). All of the patients were enrolled in the same phase II clinical trial and received the same treatment. The researchers collected data on the patients’ response to treatment and their survival times, as well as whether their tumors were HPV-positive or -negative.

Patients with HPV-positive tumors had higher response rates after chemoradiation therapy, compared to patients with HPV-negative tumors (84 percent vs. 57 percent), and their two-year overall survival rates were also higher (95 percent vs. 62 percent).

“Our data suggest that the risks and benefits of…therapies should be considered separately for HPV-positive and -negative patients,” the authors write.

Source: *Journal of the National Cancer Institute*