Targeted drug may prolong survival of patients with cervical cancer

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A new clinical study has found that erlotinib, a targeted antitumor agent, has promising potential to improve treatment for cervical cancer. Published early online in *CANCER*, a peer-reviewed journal of the American Cancer Society, the results indicate that larger trials are warranted to determine whether the drug should become part of standard therapy for women with the disease.

Nearly half a million new cases of cervical cancer are reported worldwide each year, making it the third most common cancer among females. Despite the widespread use of screening programs and the recent advent of vaccines against human papilloma virus, cervical cancer continues to be a significant public health problem.

Cisplatin-based chemoradiation is the standard therapy for locally advanced cervical cancer. Unfortunately, treatment responses are unpredictable and often disappointingly brief. A potentially promising new treatment strategy involves targeting the epithelial growth factor receptor (EGFR), which is frequently overexpressed in cervical cancer. Inhibiting this receptor is known to have antitumor effects against a variety of cancers.

Angélica Nogueira-Rodrigues, MD, PhD, of the Brazilian National Cancer Insitute, and her colleagues designed a phase 2 clinical trial to test the potential of the EFGR inhibitor erlotinib combined with chemoradiation therapy in 36 women with cervical cancer. Median duration of therapy was 77 days and median follow-up time was 59.3

months.

The therapy was well tolerated overall, and 34 patients (94.4 percent) achieved a complete response (meaning the disappearance of all cancerous lesions). After two years, 91.7 percent of women were alive, and 80.6 percent experienced no progression of their disease. After three years, 80 percent of women were alive, and 73.8 percent experienced no disease progression.

"While cervical cancer is a neglected disease and very few clinical trials have been reported in the last 10 years, some groups, including ours, have reported that its biology might be prone to targeted therapy," said Dr. Nogueira-Rodrigues. "To the best of our knowledge, this is the first study to present that a targeted agent has promising activity in the management of locally advanced cervical disease." She added that targeted therapies may be added to the standard treatment for locally advanced cervical cancer if randomized trials confirm the current study's results.

More information: "Phase II trial of erlotinib combined with cisplatin and radiotherapy in locally advanced cervical cancer." Angélica Nogueira-Rodrigues, Giulliana Moralez, Rachele Grazziotin, Claudio C. Carmo, Isabele A. Small, Flavia V.G. Alves, Marcelo Mamede, Felipe Erlich, Celia Viegas, Sergio A. Triginelli, and Carlos G. Ferreira. *Cancer*; Published Online: March 10, 2014 DOI: 10.1002/cncr.28471

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