

News Release

Oct. 23, 2012

**EMBARGOED: Hold for release until
Monday, Oct. 29, 2012, 11 a.m. ET**
American Society for Radiation Oncology

MULTIMEDIA ALERT: A video interview with
Dr. Miller is available for journalists to download on
the [Mayo Clinic News Network](#).

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Mayo Clinic: Antidepressant Eases Radiation-Related Mouth Pain in Head, Neck Cancer

BOSTON — An oral rinse of the antidepressant [doxepin](#) significantly eased pain associated with [oral mucositis](#) in patients receiving [radiation therapy](#) for cancers of the head and neck, a study led by [Mayo Clinic](#) found. The findings were presented at the [American Society for Radiation Oncology](#) annual meeting in Boston.

“Oral mucositis or mouth sores is a painful and debilitating side effect of radiation therapy,” says principal investigator [Robert Miller, M.D.](#), a [radiation oncologist](#) at Mayo Clinic. “Our findings represent a new standard of care for treating this condition.”

Doxepin rinse does not cause the side effects associated with narcotic pain medicines, Dr. Miller says.

The Phase III study assessed the effectiveness of doxepin oral rinse versus placebo in 155 patients receiving radiation therapy for head and neck cancer. Patients received a single blinded dose of doxepin on day one and crossed over to the opposite study arm on a subsequent day. Patients reported pain associated with oral mucositis on a pain questionnaire with a scale of 0 to 10 administered at baseline and then at five, 15, 30, 60, 120 and 240 minutes after rinsing with doxepin. Patients could continue doxepin after the study, and 64 percent did so. Doxepin was well tolerated, though stinging, burning, unpleasant taste and drowsiness were reported as side effects.

Mayo Clinic researchers involved in the study also included [Rui Qin, Ph.D.](#), [James Martenson, M.D.](#), [Robert Foote, M.D.](#) and [Charles Loprinzi, M.D.](#)

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About Mayo Clinic Cancer Center

As a leading institution funded by the National Cancer Institute, [Mayo Clinic Cancer Center](#) conducts basic, clinical and population science research, translating discoveries into improved methods for prevention, diagnosis, prognosis and therapy. For information on cancer clinical trials, call 507-538-7623.

About Mayo Clinic

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