

Heartburn Med Zantac Does Not Increase Cancer Risk

New data from a large study may ease fears over Zantac use three years after the FDA found a carcinogen in medications.

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For decades, people relied on ranitidine, sold under the brand name Zantac, to treat gastroesophageal reflux disease, or [acid reflux](#), the main symptom of which is heartburn, and peptic ulcer disease. Then, in 2020, the Food and Drug Administration (FDA) found a [human carcinogen linked to increased cancer risk](#) in some ranitidine medications and [requested withdrawal](#) of all prescription and over-the-counter medications containing ranitidine in 2020.

A retrospective observational study published in [JAMA Network Open](#) found that while ranitidine did contain small amounts of the [carcinogen](#) N-nitrosodimethylamine (NDMA), people who used it did not see an increase in their risk of developing cancer compared with those who used other histamine-2 receptor antagonists (H2RAs).

Prior to the FDA's 2020 finding, ranitidine was the third most prescribed gastrointestinal medication, according to [MedPage Today](#). In fact, from 2013 to 2018, more than 14 million ranitidine prescriptions were written.

The latest study involved more than 1.18 million people across seven countries ages 20 years or older who used H2RAs for at least 30 days between 1986 and 2020, with at least one year without exposure before taking H2RAs. Researchers reported no increased risks for [esophageal](#), [stomach](#), [colorectal](#) or 13 other types of cancer among those who used ranitidine compared with those who used other H2RAs, such as famotidine (Pepcid AC), cimetidine (Tagamet) and nizatidine (Axid) .

"The observed lack of significant association between ranitidine use and [cancer risk](#) may be due to low levels of NDMA in ranitidine products," the study's authors wrote. "Although a large amount of NDMA would be harmful, NDMA levels in ranitidine found in preliminary tests conducted by the FDA barely exceeded the amount found in common foods."

Reid Ness, MD, MPH, a gastroenterologist and associate professor of medicine at Vanderbilt University Medical Center in Nashville, told MedPage Today he was not surprised by the findings.

"The study illustrates that the FDA is very watchful and effective in their efforts to eliminate any

cancer risk from our available pharmacologic milieu,” he said. “There was great anxiety amongst our patients initially, both about the cancer risk posed by ranitidine and their medical therapy going forward.”

Ness noted that patients had expressed concern in recent years about cancer risk from ranitidine. Now, he said he can use this study to reassure them.

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