

# Hospital Flu Mortality Lower in Statin Users

BY MITCHEL L. ZOLER

PHILADELPHIA — Patients taking a statin at the time they were hospitalized for an influenza infection were less likely to die while in the hospital or immediately after, compared with their counterparts who were not on a statin, in an observational study of 2,800 patients.

The study used data on patients hospitalized with influenza during the 2007-2008 flu season collected by the Emerging Infections Program Hospitalized Influenza Surveillance System. This program collected data on laboratory-confirmed influenza hospitalizations in 59 counties in 10 states, representing 7% of the U.S. population.

Mortality during hospitalization and 30 days thereafter was 3.2% among the 1,999 patients who did not take a statin



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MS. VANDERMEER

and 2.1% among the 801 statin users. In a multivariable model, patients taking a statin had a significant 54% reduced risk of death, Meredith Vandermeer reported at the annual meeting of the Infectious Diseases Society of America.

"This is the first study to look for a relationship between statin use and death in patients hospitalized with laboratory-confirmed influenza," said Ms. Vandermeer, an epidemiologist with the Oregon Public Health Division in Portland.

She speculated that the finding might be linked to the anti-inflammatory effect of statins, and suggested that statins are a "possible useful adjunct to antiviral medications and vaccines" for treating influenza infection. She also cautioned that the study couldn't control for all variables and that further study is needed. "We are not saying that patients hospitalized for influenza should be treated with a statin."

The finding "probably means that if you are on a statin for your cholesterol, there may be some extra benefits," commented Dr. Andrew Pavia, chief of the division of pediatric infectious diseases at the University of Utah in Salt Lake City.

Meanwhile, U.S. data as of mid-November showed that the total number of deaths from the pandemic influenza A(H1N1) virus for all age groups had reached about 3,900, according to estimates from the Centers for Disease Control and Prevention.

The estimates "provide a bigger picture of what has been going on," said Dr. Anne Schuchat, director of the CDC's National Center for Immunization and Respiratory Diseases. Unlike previous estimates, the new numbers are based on a method of extrapolation that accounts for underreporting, she said

during a Nov. 12 agency teleconference.

Based on this method, about 22 million cases (ranging from 14 million to 34 million) and 98,000 hospitalizations (ranging from 63,000 to 153,000) were attributed to the H1N1 virus in the United States in the 6-month period between the emergence of the virus in April 2009 and Oct. 17, 2009, the most recent date for which data are available, Dr. Schuchat explained. The range for the approximate death rate

of 3,900 is from 2,500 to 6,100, she said.

Approximately 540 children aged 0-17 years, 2,920 adults aged 18-64 years, and 440 adults aged 65 years and older died as a result of the H1N1 virus during the first 6 months of the H1N1 pandemic in the United States.

The CDC's Web site provides the updated numbers of cases, hospitalizations, and deaths related to the H1N1 virus, along with a description of the method

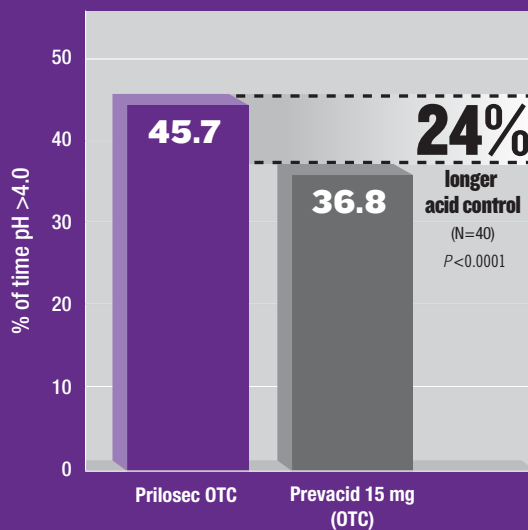
used to estimate the numbers. Updated numbers will be provided every 3-4 weeks, Dr. Schuchat said.

It's too early to compare deaths in the current H1N1 pandemic to previous pandemics. "We have a long flu season ahead of us," she said, adding that "what we are seeing so far is nowhere near the severity of the 1918 pandemic." ■

Heidi Splete contributed to this report.

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