## **RETINA TODAY**

Volume 10, No. 6 · September 2015

## Rates of Endophthalmitis Similar After Ranibizumab, Bevacizumab Injections

Rates of endophthalmitis were similar in patients who received intravitreal injections of ranibizumab (Lucentis, Genentech) or compounded bevacizumab (Avastin, Genentech), according to a study published in *JAMA Ophthalmology*. The purpose of the study was to determine whether use of the compounded drug increased the risk for endophthalmitis compared with the use of single-dose units distributed by the manufacturer.

In a retrospective cohort study, researchers examined medical claims data from ambulatory care centers across the United States submitted to a large national insurer. Researchers calculated rates of endophthalmitis in patients ( $N = 58\,612$ ) injected with ranibizumab or bevacizumab (total injections =  $383\,810$ ) from January 2005 to December 2012.

Researchers identified a total of 71 cases of endophthalmitis. There were 49 cases in the bevacizumab cohort (0.017% [95% CI, 0.012%-0.021%]; 1 case per 6061 injections), and 22 in the ranibizumab cohort (0.025% [95% CI, 0.015%-0.036%]; 1 case per 3968 injections). After controlling for age, race, sex, injection-related diagnosis, and year of injection, researchers found no significant association with development of endophthalmitis after a bevacizumab injection compared with ranibizumab (odds ratio, 0.66 [95% CI, 0.39-1.09]; P = .11).

In a statement to *Retina Today*, Genentech, which manufacturers both drugs, said internal studies showed

"similarly low rates of endophthalmitis for [ranibizumab]."

The Genentech statement also commented on the delicate balance between off-label use of medication and physician discretion. "[Bevacizumab] is not approved for use in the eye by the [US Food and Drug Administration], and we do not support or promote unapproved use of our medicines," the statement said. "However, decisions about treatment should be made between the physician and patient. We support their right to choose an appropriate medicine."

To watch EyewireTV's coverage of this story, scan the QR code below.

1. VanderBeek BL, Gonaffini SG, Ma L. Association of compounded bevacizumab with postinjection endophthalmitis [published online ahead of print August 13, 2015]. *JAMA Ophthalmol*. doi:10.1001/jamaophthalmol.2015.2556.



## Severe Vision Loss Linked to Poverty, Southern Geography, Says CDC

Rates of severe vision loss (SVL) are linked to poverty rates and southern geographic location, according an analysis in *Morbidity and Mortality Weekly Report.*<sup>1</sup>

Researchers at the US Centers for Disease Control and Prevention (CDC) analyzed data from the American Community Survey to estimate prevalence of SVL at the county level. Patients who were blind or had serious difficulty seeing even while wearing glasses were considered to have SVL. Among counties in the highest quartile of SVL prevalence ( $\geq$  4.2%), 77.3% were located in the

South, 11.7% were in the West, 10.7% in the Midwest, and 0.3% in the Northeast.

Researchers also found a link between poverty and prevalence of SVL. Among counties in the top quartile for percentage of population living below the poverty line, 74.5% were in the South, 13.1%, were in the Midwest, 11.5% were in the West, and 0.9% were in the Northeast.

Researchers identified 437 counties in the top quartiles for both SVL and percentage of those living below the poverty line, 83.1% of which were in the South, followed by 9.1% in the West, and 7.8% in the Midwest. No county in the top quartile for both SVL and percentage of those living below the poverty line was in the Northeast.

Kirtland KA, Saaddine JB, Geiss LS, et al; Centers for Disease Control and Prevention (CDC). Geographic disparity
of severe vision loss—United States, 2009-2013. MMWR Morb Mortal Wkly Rep. 2015;64(19):513-517.