

## **New Frontier for Wet AMD**

On June 2017, Novartis, the international pharmaceutical company, announced that its new anti-VEGF drug, Brolucizumab (RTH258), successfully met the primary and secondary endpoints in two large phase III clinical trials. RTH258 had shown superiority in providing longer lasting treatment for wet macular degeneration when compared to the current standard treatment, Eylea (aflibercept)

The data obtained from two clinical trials, HARRIER and HAWK, that began three years ago, and enrolled more than 1,800 patients, grabbed the attention of many when reported at the annual meeting of the American Academy of Ophthalmology in November 2017. RTH258 treatment consisted of 12-week intravitreal injection instead of every 8 weeks.

What makes RTH258 requires less dosing? Novartis stated that RTH258 represents the next generation in anti-VEGF therapy; it is the smallest single chained anti-body fragment in development. Due to the small molecule size, RTH258 is more effective at penetrating the eye tissue and reaching its target in

the retina. Also, the smaller molecules allow RTH258 to be delivered in a higher dosage than currently used anti-VEGF therapy. The dosage used in the two clinical trials was 6 mg and 3 mg. (Standard dosage for Eylea is 2 mg per treatment).



This advancement decreases the treatment burden for patients from every 8 weeks to a 12-week schedule and represents another breakthrough for those affected with wet AMD. Along with the cost of therapy, a recurring complaint by patients is the frequency of returning to the doctor's office for treatment. Eliminating two doctor visits a year will relieve some of the physical and mental strain for those having a hard time getting around.

In February 2018, Novartis reported its plan to submit an FDA application seeking approval of Brolucizumab (RTH258). If all goes according to plan, the drug may be available commercially in 2019, and patients with wet AMD will have another treatment option.