

Age-related macular degeneration is the leading cause of severe central visual acuity loss in people over 50 years of age. Macular degeneration is a complex spectrum of normal age-related changes including reduced photoreceptor density, ultrastructural changes in the pigment epithelium, formation of lipofuscin granules, accumulation of basal laminar lipid-rich deposits, and progressive changes in the choriocapillaris. These changes may cause disturbances in Bruch's membrane allowing vessels originating from the choriocapillaries to form a new and abnormal fibrovascular complex which is the hallmark of exudative AMD.<sup>1,2</sup> It is well-established that vascular endothelial growth factor (VEGF), plays a major role in the neovascular or exudative form of AMD, by aiding in the induction of angiogenesis and enhancing vascular permeability.<sup>3,4</sup> Consequently, Intravitreal injections with medications targeting VEGF have become the standard of care for exudative AMD. Currently there are several anti-VEGF drugs that are used in the treatment of exudative AMD: bevacizumab (Avastin), ranibizumab (Lucentis), and VEGF Trap (Eylea). While Intravitreal anti-VEGF treatments successfully work to stabilize and even improve vision in patients with exudative macular degeneration, controversy still remains regarding the optimal treatment plan for patients. The question of how frequently to treat patients is important as many practitioners and patients alike recognize the burden of monthly injections. This paper seeks to review the data for current anti-VEGF treatment regimens in order to help elucidate the optimal treatment plan to maximize visual outcome and minimize burden to the patient and healthcare system.

Key words: exudative AMD, anti-VEGF, intravitreal injections.