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EDITORIAL

The impact of LEAVO study in Greece

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Macular edema is the leading cause of visual impairment in patients with central retinal vein occlusion (CRVO) [1]. Currently, intravitreal anti-vascular growth factor (anti-VEGF) agents have been considered as the gold standard in the treatment of macular edema due to CRVO, with aflibercept and ranibizumab being licensed agents and bevacizumab off-label [2]. LEAVO study has shown that bevacizumab was not non-inferior compared with ranibizumab, but aflibercept was non–inferior to ranibizumab at the 100-week follow-up. It is worthy to mention that all three anti-VEGF agents markedly improved and maintained visual acuity, while fewer injections were needed in patients treated with aflibercept [3].

Currently in Greece, intravitreal bevacizumab cannot be officially used and only the two licensed anti-VEGF agents can be provided to patients with retinal diseases in both the private and public sector, including the National Health System and University Hospitals. In addition, logistic and administrative reasons, mainly due to the current health insurance system and the relevant policies related to the use of high cost medications, can cause some delay in the treatment of patients with CRVO and other retinal diseases, leading to divergence from the well-established treatment protocols.

Real-life studies for the treatment of macular edema due to CRVO in Greece have shown that intravitreal 0.5 mg ranibizumab and 2.0 mg aflibercept demonstrated similar anatomical and functional outcomes over an 18-month follow-up, using a loading phase of three intravitreal injections and *pro re nata* regimen thereafter [4]. These findings are in accordance with those of the LEAVO study regarding the two licensed anti-VEGF agents, although the treatment regimens are different [3].

Since intravitreal bevacizumab cannot be used as a treatment option in patients with CRVO in Greece for the time being, the physician can choose between ranibizumab and aflibercept, probably slightly in favor of aflibercept given the lower number of injections needed, as was found in the LEAVO study [3]. However, even though bevacizumab was not proven non–inferior to ranibizumab, the change in visual acuity outcome using bevacizumab and ranibizumab were inconclusive [3]. Therefore, based on the lower cost of bevacizumab and on the recently published results of the SCORE2 study, which showed that bevacizumab and aflibercept presented similar outcomes in visual acuity and retinal thickness improvement [5], it would be beneficial if intravitreal bevacizumab could be used in patients with CRVO as another treatment option to ranibizumab and aflibercept in patients, who make the choice of bevacizumab after being informed of these clinical trial results.

Compliance with ethical standards

Conflict of interest The author declares that she has no conflict of interest.

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