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## Comments on 'Treatment patterns of ranibizumab intravitreal injection and dexamethasone intravitreal implant for retinal vein occlusion in the USA'.

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Sir,

Comments on 'Treatment patterns of ranibizumab intravitreal injection and dexamethasone implant for retinal vein occlusion in the USA'

We commend a study comparing ophthalmology clinic visit frequency for patients receiving ranibizumab and dexamethasone for RVO (1). They make the case that visit burden for both treatments may not be significantly different, but highlight the importance of real world studies from countries other than the USA. We performed an audit of all patients who received intravitreal treatment with one drug type only for newly diagnosed RVO attending one clinic in the UK during one year. This was in 2014, and findings reflect a surge of referrals then given recent licensing of ranibizumab for RVOs in the UK. Fifty-six patients were identified, mean age 74y (range 30-89) with 50% having a BRVO and 50% with a CRVO. Ranibizumab was given to 55% (n=31) and dexamethasone to 29% (n=16). There was no significant difference ( $p=0.7$ ) in the follow-up periods for patients who received ranibizumab (mean 171.2 days, s.d. 46.3) compared to dexamethasone (mean 177.9 days, s.d. 64.8). The number of injections was significantly different for the two drugs ( $p<0.001$ ), with a mean of 3.1 (s.d. 0.9) for ranibizumab and 1.1 (s.d. 0.3) for dexamethasone. For ranibizumab 55% received 3 injections and 29% received 4 injections, while for dexamethasone 88% (n=14) received one injection. There was no significant difference ( $p=0.9$ ) in BCVA from the first injection to follow-up: mean +7.3 letters (s.d. 12.3) for ranibizumab and +7.8 letters (s.d. 8.6) for dexamethasone. Similarly central retinal thickness changes were not significantly different ( $p=0.95$ ): -

165.5 $\mu$ m (s.d. 218.7) for ranibizumab, and -169.1 $\mu$ m (s.d. 152.3) for dexamethasone. IOP lowering topical treatment was needed in 5% following ranibizumab and 23% following dexamethasone.

The visual results obtained fall short of those achieved in clinical trials and treatment patterns in our clinic are now closer to the label recommendations. Our practice was and remains to monitor patients on ranibizumab monthly, injecting if appropriate, and for dexamethasone to review patients 6 weeks following the implant, and then at least 3 months later depending on any prior clinical responses. Thus similar outcomes are obtainable with ranibizumab and dexamethasone but with far fewer treatment and non-treatment visits for the latter.

#### Conflicts of interest

The authors declare no conflicts of interest.

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Treatment patterns of ranibizumab intravitreal injection and dexamethasone intravitreal implant for retinal vein occlusion in the USA. *Eye (Lond)*. 2017 Apr;31(4):551-9. PubMed PMID: 27911446.

