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BROLUCIZUMAB FOR WET AGE-RELATED MACULAR DEGENERATION: ONE-YEAR REAL-WORLD EXPERIENCE FROM A TERTIARY CENTER

Oral

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Purpose:

To explore the early efficacy and safety of treatment with intravitreal injections of brolucizumab in patients presenting neovascular age-related macular degeneration (nAMD) in a real-world setting.

Methods:

This retrospective study included 194 eyes of 180 patients with nAMD treated with standard 6 mg intravitreal injections (IVT) of brolucizumab by 4 retinal specialists of the same center between 11 March 2021 and 15 June 2022. Both treatment-naive (33 eyes) and switch-therapy patients (161 eyes) were included in the study. Best corrected visual acuity (BCVA), central subfield thickness (CST), retinal fluid distribution (classified as intraretinal fluid, IRF; subretinal fluid, SRF; under the pigmented epithelium fluid, sRPEF), treatment intervals and adverse event rate were collected for analysis.

Results:

Average follow-up time was 37.2±16.6 weeks. Mean baseline BCVA were 38.1±4.5 and 41.9±6.7 letters in the treatment-naive and switch-therapy groups, with a final gain of 16.0±4.9 ($p<0.0001$) and 10.7±5.9 ($p<0.0001$) letters in the two groups, respectively. Throughout the study period, CST significantly decreased in both treatment-naïve (from 352.0±129.4 to 284.2±93.8 µm; $p=0.0015$) and switch-therapy (from 369.9±140.5 to 307.4±123.5 µm; $p<0.0001$) groups. Significant fluid control rates were achieved at the end of the study period (45% and 27% eyes were completely free-of-fluid in naïve and switch groups, respectively). Five eyes in the switch-therapy group developed adverse events without affecting clinical results.

Conclusions:

Brolucizumab IVTs showed a very good anatomical and functional outcomes in both naive and switch patients in this real-world experience. The incidence of intraocular inflammation (IOI) reported rates were in line with post hoc safety analysis of HAWK and HARRIER data.

Localization	Treatment-Naïve	Therapy Switch
IRF	**n=28**	**n=96**
Resolved (%)	17 (61%)	42 (44%)
Reduction (%)	10 (36%)	26 (27%)
Stability (%)	0 (0%)	17 (18%)
Increase (%)	1 (3%)	11 (11%)
SRF	**n=19**	**n=82**
Resolved (%)	14 (74%)	39 (48%)
Reduction (%)	4 (21%)	28 (34%)
Stability (%)	0 (0%)	8 (10%)
Increase (%)	1 (5%)	7 (8%)
sRPEF	**n=22**	**n=134**
Resolved (%)	14 (64%)	58 (44%)
Reduction (%)	4 (18%)	35 (26%)
Stability (%)	4 (18%)	34 (25%)
Increase (%)	0 (0%)	7 (5%)

Table 3. Analysis of the OCT parameters of exudation.

OCT = optical coherence tomography; IRF = intra-retinal fluid; SRF = sub-retinal fluid; sRPEF = sub retinal pigmented epithelium fluid