# Switching to aflibercept from ranibizumab in choroidal neovascularization related to angioid streaks: a multicenter real life study

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**Purpose:**
To evaluate the efficacy and the safety of intravitreal aflibercept (Eylea; VEGF trap-Eye, Regeneron) in patients with refractory or recurrent choroidal neovascularization (CNV) secondary to angioid streaks (AS), previously treated by ranibizumab (Lucentis, Novartis).

**Methods:**
Retrospective, multicenter study (n=3). Complete ophthalmic examination, best corrected visual acuity (BCVA), fluorescein angiography (FA), indocyanine green angiography (ICGA), central macular thickness (CMT) on spectral domain optical coherence tomography (SD-OCT), were collected before and after the switch. Patients were recorded into "refractory" (persistent exudation despite six monthly injections of ranibizumab) and "recurrent" groups (exudation suppressed, but requiring frequent injections with at least two recurrences during the last year before the switch). Three monthly loading doses were performed and followed by Pro Re Nata (PRN) regimen with monthly follow-up.

**Results:**
Twenty eyes of 16 patients (10 female, 67.3 ± 11.7 years old) were included. Mean follow-up was 28.4 ± 8,7 months (range 13-41 months). Mean BVCA at baseline was 0.25 ± 0.33 logMAR and 0.35 ± 0.45 log MAR at the last visit (p 0.17). CMT was 321.8 ± 1169.21 µm at baseline and 251.5 ± 63.34 µm at last follow up (p 0.067). Mean number of intravitreal injection of aflibercept was 12.27 ± 6.03. Four eyes were classified as "refractory" and 16 as "recurrent". No adverse effect was observed.

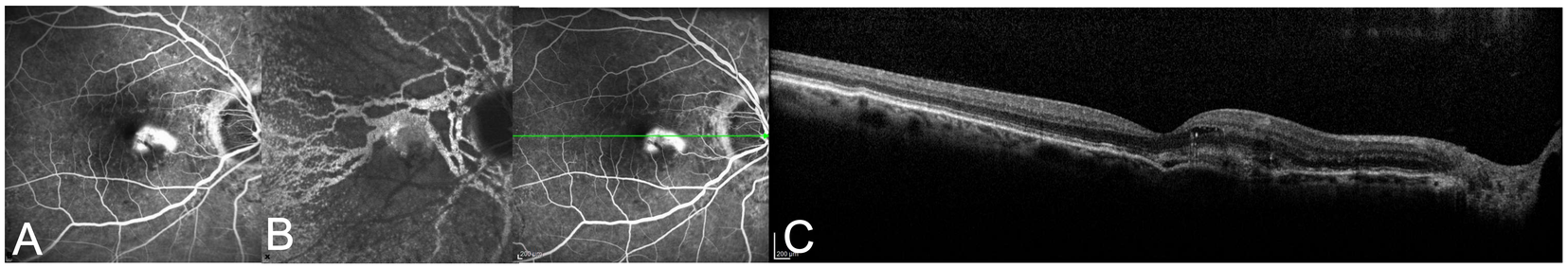


***Figure 1 :*** *Multimodal imaging of CNV secondary to AS before conversion to aflibercept*

**A**: Hyperfluorescence of type 2 CNV with diffusion at the late frame of fluoresceine angiography (FA)
**B**:Hyperfluorescence of the CNV on indocyanine angiography late frame
**C**:Hyper-reflective subretinal exudative lesion (SHE) on Sd-OCT

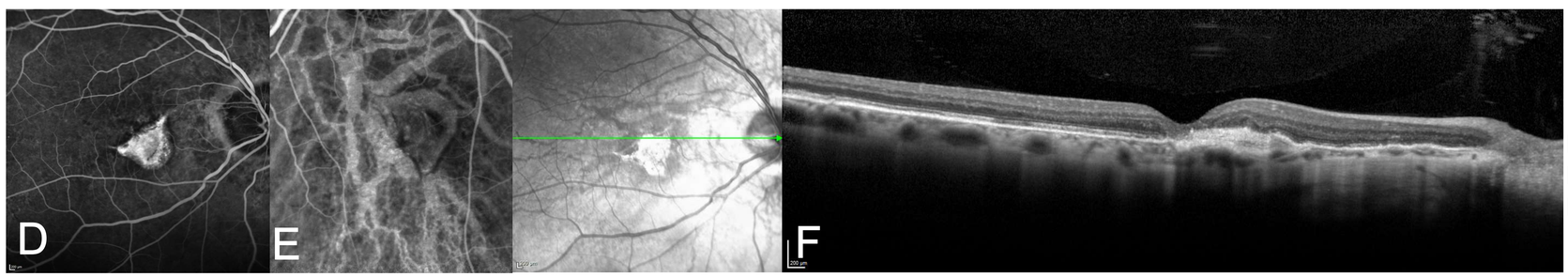


***Figure 2 :*** *Multimodal Imaging of CNV secondary to AS one year after conversion to aflibercept*

**D**: Coloration without diffusion of the CNV on FA
**E**: No perfusion of the CNV on ICG
**F**: Regression of SHE on SD-OCT

**Conclusion:** Switching patients with CNV secondary to AS to aflibercept in a PRN schedule was safe and provided a stabilized vision and improved anatomic outcomes with no significant difference between baseline and after the switch.

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*1:* Tilleul J, Mimoun G, Querques G, et al. Intravitreal ranibizumab for choroidal neovascularization in angioid streaks. Four-Year Follow-up. Retina 36:483–491, 2016.
*2.* Vaz-Pereira S, Collaço L, De Salvo G, Van Zeller P. Intravitreal aflibercept for choroidal neovascularisation in angioid streaks. Eye (Lond)2015 ;29 : 1236–1238.