Changes in Neovascular Activity by Baseline Lesion Type Following Continuous Anti-VEGF Administration in the VIEW Studies

Darius M. Moshfeghi, MD  
Byers Eye Institute, Stanford University School of Medicine, Palo Alto, CA

BACKGROUND and METHODS

OBJECTIVE
- To assess and analyze the effects of continuous anti-VEGF administration on neovascular activity using clinical endpoints.

METHODS
- Patients were assigned to different treatment groups: anti-VEGF or placebo.
- Clinical endpoints included leakage and fluid status assessed through OCT imaging.

RESULTS: Leakage and Fluid Status

Overall
- Baseline
  - Leakage present
  - Leakage absent
  - Fluid present
  - Fluid absent
- Proportion of Patients (%)
- Weeks 24 and 52
  - Leakage present
  - Leakage absent
  - Fluid present
  - Fluid absent

By Fluid Type
- Baseline
  - Leakage present
  - Leakage absent
  - Fluid present
  - Fluid absent
  - Proportion of Patients (%)
  - Weeks 24
  - Weeks 52

RESULTS: Leakage and Fluid Status

By Baseline Lesion Type
- Baseline
  - Leakage present
  - Leakage absent
  - Fluid present
  - Fluid absent
- Proportion of Patients (%)
- Week 24
- Week 52

CONCLUSIONS
- There was a strong relationship between leakage on FA and fluid on OCT.
- Continuous injections reduced neovascular activity from week 24 to week 52.
- After a year of continuous treatment, 56% of patients with predominantly classic lesions, which are more acute in presentation, had no neovascular activity on FA and OCT.
- For ≥25% of patients with occult lesions, which tend to be more chronic in presentation, leakage was present on FA, but fluid was absent on OCT.
- Detailed management with both FA and OCT for these patients is suggested.
BACKGROUND and METHODS

OBJECTIVE

- Post-hoc analysis to evaluate the presence of leakage on fluorescein angiography (FA) and the status of retinal fluid on time-domain optical coherence tomography (TD-OCT) by fluid type and baseline lesion type in the VIEW studies of patients with neovascular age-related macular degeneration (nAMD).

POST HOC ANALYSIS

- All treatment groups combined. Full analysis set was used.
- Observed data at baseline, Week 24, and Week 52 included in the analysis.
- Based on the status of leakage and fluid, four subgroups identified:
  - LEAKAGE present, FLUID present
  - LEAKAGE present, FLUID absent
  - LEAKAGE absent, FLUID present
  - LEAKAGE absent, FLUID absent

VIEW Study Design

- Multi-center, active controlled, double masked trial
  - VIEW 1 N=1217; VIEW 2 N=1240
  - 2457 Patients randomized 1:1:1:1

- Intravitreal Afibbercept
  - 2 mg q4 wks
  - 0.5 mg q4 wks

- Ranibizumab
  - 2 mg q8 wks
  - 0.5 mg q4 wks

Primary endpoint: Maintenance of Vision
- Dosing through Week 52
- Modified quarterly dosing through Week 96

Secondary endpoint: Mean change in BCVA

*After 3 initial monthly doses

- At weeks 52 and 96, all IAI groups demonstrated similar improvements in all visual acuity endpoints compared to Rq4.
- Cataract was the most common serious ocular adverse over 96 weeks (0.8%, 0.7%, 0.5%, and 1.1% with Rq4, 2q4, 0.5q4, and 2q8, respectively).
RESULTS: Leakage and Fluid Status

Overall

Baseline

- Both present: 95%
- Leakage present, fluid absent: 4%
- Leakage absent, fluid present: <0.5%
- Both absent: <0.5%

Proportion of Patients (%)

Weeks 24 and 52

- Both present
  - Week 24: 16%
  - Week 52: 28%

- Leakage present, fluid absent
  - Week 24: 23%
  - Week 52: 19%

- Leakage absent, fluid present
  - Week 24: 14%
  - Week 52: 16%

- Both absent
  - Week 24: 35%
  - Week 52: 49%

Proportion of Patients (%)

Full analysis set; observed case
All treatment groups combined

From week 24 to week 52:
- 43% reduction in % of patients with leakage or fluid
- 40% increase in % of patients with no leakage and no fluid.
RESULTS: Leakage and Fluid Status

By Fluid Type

Baseline

Week 24

Week 52

FAS; observed case; all treatment groups combined

Subretinal fluid

Intraretinal fluid
RESULTS: Leakage and Fluid Status

By Baseline Lesion Type

![Chart showing leakage and fluid status by baseline lesion type for Week 24 and Week 52.](chart.png)

Baseline
- Both present: 97% (96%, 94%)
- Leakage present, fluid absent: 3% (4%, 6%)
- Leakage absent, fluid present: 0% (0%, 0%)
- Both absent: 0% (0%, 0%)

Week 24
- Both present: 22% (27%, 32%)
- Leakage present, fluid absent: 14% (26%, 27%)
- Leakage absent, fluid present: 11% (8%, 27%)
- Both absent: 37% (35%, 33%)

Week 52
- Both present: 12% (15%, 20%)
- Leakage present, fluid absent: 10% (20%, 25%)
- Leakage absent, fluid present: 22% (15%, 11%)
- Both absent: 56% (49%, 44%)

PC: n=621; MC: n=834; occult: n=915
PC: n=525; MC: n=715; occult: n=781
PC: n=528; MC: n=700; occult: n=756
CONCLUSIONS

• There was a strong relationship between leakage on FA and fluid on OCT
• Continued injections reduced neovascular activity from week 24 to week 52
• After a year of continuous treatment, 56% of patients with predominantly classic lesions, which are more acute in presentation, had no neovascular activity on FA and OCT
• For ~25% of patients with occult lesions, which tend to be more chronic in presentation, leakage was present on FA, but fluid was absent on OCT
  – Dual management with both FA and OCT for these patients is suggested