

Meeting Summary

6th Real Life Meeting, Lugano 04. 09. 2009



The pharmacotherapy of retinal diseases changed profoundly since the advent of VEGF blockers. The trials MARINA and ANCHOR showed for carefully selected patients in a near optimal clinical setting a marked benefit of ranibizumab monthly injections for the treatment of age related macular disease (AMD). But “real life” offers obstacles in regard to costs, patient management, and institutional resources. Several trials have been designed to address the question how to best combine treatments in order to balance treatment outcome and real life conditions. The 6th Real Life Meeting allowed participants of the 102th Congress of the Swiss Society of Ophthalmologists to update on latest study results and to discuss the possibilities as they present in their daily practice. Andreas Wenzel, Medical Affairs Manager at Novartis Pharma Switzerland, chaired the meeting and the very vivid discussion on ranibizumab in AMD and in the developing indications of macular involvement in vascular, i.e. diabetic retinopathy.

■ SUSTAIN: 12-month data on individual as-needed dosing of ranibizumab in AMD

ANCHOR and MARINA studies both support the efficacy and safety of monthly ranibizumab injections.^{1,2} The SUSTAIN study³ was designed to further assess the use of ranibizumab in CNV secondary to AMD using a guided individualized as-needed (PRN) dosing schedule to provide safety and efficacy data. Prof. Francesco Bandello, University of Milan, presented the results.

Patients were treated with 3 injections of ranibizumab 0.3 mg within 3 months (loading phase). They were followed monthly. New treatments were based on these criteria:

- 5 letters loss equaling 1 line of the EDTRS chart
- 100 μ m increase in central retinal thickness (CRT)

SUSTAIN: Study of Ranibizumab (0.3 mg) in Patients With Subfoveal Choroidal Neovascularization Secondary to Age-Related Macular Degeneration. Phase IIIb
N=513

Primary Outcome

- Incidence of ocular adverse events (AEs) in subfoveal CNV secondary to AMD on treatment with 0.3 mg intravitreal ranibizumab [12 months]

Secondary Outcome

- Mean change in best corrected visual acuity (BCVA) from Baseline to Months 3 and 12
- Mean change in retinal thickness from Baseline to Months 3 and 12
- Time to first retreatment and total number of treatments.

Key inclusion criteria

- ≥ 50 years of age
- Diagnosis of active primary or recurrent CNV secondary to AMD
- Total area of CNV (classic and occult components) encompassed within the lesion $\geq 50\%$ of total lesion area
- Total lesion area ≤ 12 disc areas
- BCVA score between 73 and 24 letters, inclusive, in the study eye using ETDRS-like charts

There was an option not to treat if VA was ≥ 79 letters or CRT ≤ 225 μ m or change by < 50 μ m in CRT and < 5 letters in BCVA after 3 consecutive treatments. One third of patients (32.8%) switched from the 0.3 mg to the 0.5 mg dose in the maintenance phase only.

Monitoring of adverse events produced no important new signal. Ocular adverse events were reported in 48.5%. Most frequent were a reduced visual acuity (18.5%), a retinal haemorrhage (7.2%), and an increased IOP (7.0%). A tear of the retinal pigment epithelium occurred in 2.1%, a subretinal fibrosis in 2.1%. Most non-ocular AE were mild; among serious non-ocular AEs a cerebrovascular accident happened in 0.2%, a myocardial infarction in 1.0%, similar to the rates already known from other studies.

The functional results were favorable. After 3 injections the VA improved by 5.8 letters, followed by a slight decrease with a mean of 3.5 letters improvement compared to baseline after 12 months (fig 1a). The CRT decreased significantly by 100 μ m; this effect was almost maintained for one year. After the

first three loading injections the mean number of injections was 2.7, meaning 5–6 injections over one year, markedly less than in the MARINA and ANCHOR trials. One out of five patients did not require any retreatment during the maintenance phase. The improvement of this patient group remained well above 7 letters during 12 months. Another 33% needed one or 2 retreatments, 26% needed 3 or 4 retreatments but somewhat lost the initial response. A reduction of VA towards baseline was observed in 21% of patients despite of 5 or more retreatments.

The study identified three responder groups⁴ (fig. 1b):

- Gain/maintained (n=253; 53%): mean 2.4 retreatments (PRN)
- Gain/not maintained (n=100; 21%): mean 3.5 retreatments (PRN)
- No initial gain (n=124; 26%): mean 3.2 retreatments (PRN)

Altogether 71.7% of initial gainers maintained the gained VA throughout the treatment period. A difference between the ‘gain and maintain’ and ‘gain not maintained’ groups became