Longitudinal Vision-Related Quality of Life for Patients with Noninfectious Uveitis Treated with Fluocinolone Acetonide Implant or Systemic Corticosteroid Therapy

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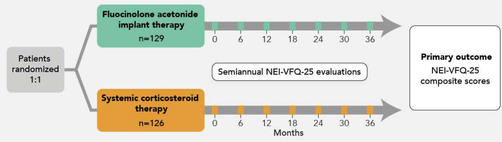
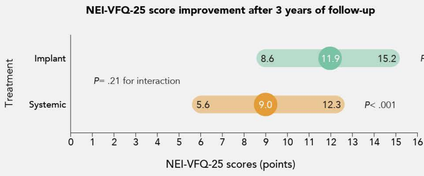
Uveitis impacts multiple aspects of visual function, and is associated with complications that may result in loss of visual acuity. With increasing emphasis on patient-reported outcomes in clinical trials and the multifaceted impact of uveitis on visual function, the 25-item National Eye Institute Visual Function Questionnaire (NEI-VFQ-25) may play a key role in evaluating the progression of disease as well as in comparing therapies. This analysis examined the longitudinal vision-related quality of life (VRQoOL) in patients with noninfectious uveitis treated with either steroid implant or systemic steroid ± immunosuppressive therapy using NEI-VFQ-25 composite scores.

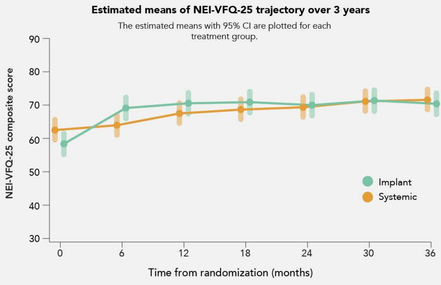
Participants were patients with uveitis (active or recently active intermediate uveitis, posterior uveitis or panuveitis) enrolled in the Multicenter Steroid Treatment (MUST) Trial and Follow-up Study.



Both treatment groups showed similar improvement in NEI-VFQ-25 after 3 years of follow-up.



Individuals in the implant group showed substantial improvement in the first 6 months followed by stable scores, while those in the systemic group showed steady improvement over the course of follow-up.

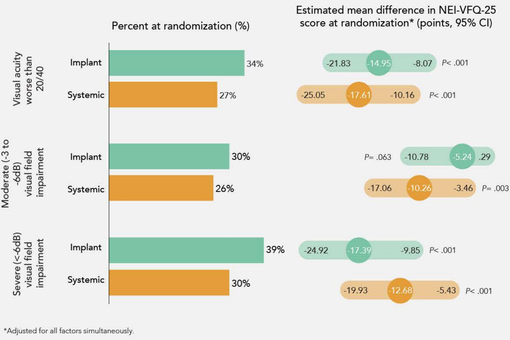


CI = Confidence interval.

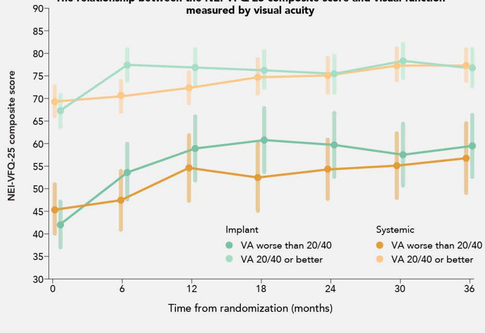
Although both therapies achieved a similar increase in VRQoL, the patterns of improvement differed substantially. Factors likely related to different trajectories include:

- The overall pattern of initial improvement in NEI-VFQ-25 composite scores was similar to that seen in visual acuity in the better eye, an important factor in the NEI-VFQ-25.
- There was immediate control of inflammation and macular edema in the implant arm as compared with more steady improvement in the systemic arm.
- Patients likely had higher expectations and enthusiasm for the more novel implant therapy, as it had the potential to replace systemic corticosteroids and immunotherapy.
- Patients in the systemic arm were able to achieve stable therapeutic doses with low side-effect profiles and maintain good visual acuity, which likely contributed to the steady improvement in NEI-VFQ-25 score.

Visual acuity and visual field impairment had a significant impact on the NEI-VFQ-25 composite score for both implant and systemic treatment arms.



*Adjusted for all factors simultaneously.



N_{Imp}(VA<20/40)	44	41	40	39	39	37	39
N_{Imp}(VA≥20/40)	84	78	79	76	78	74	71
N_{Sys}(VA<20/40)	35	34	34	31	33	30	30
N_{Sys}(VA≥20/40)	91	79	81	82	81	74	77

Conclusions

Over the course of the 3-year follow-up, both implant and systemic treatment groups showed significant improvements in NEI-VFQ-25 scores. The score improvement was immediate for the implant group as opposed to gradual for the systemic group. While individuals who started with poorer visual function in general were unable to achieve levels of NEI-VFQ-25 scores similar to those who started with good values, those who started with poor visual acuity in the implant group were able to overcome their initial deficits by the end of 3 years.