Post Hoc Analysis of Clinical Suprachoroidal Injection Experience Across Retinal Disease Indications

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Financial Disclosures

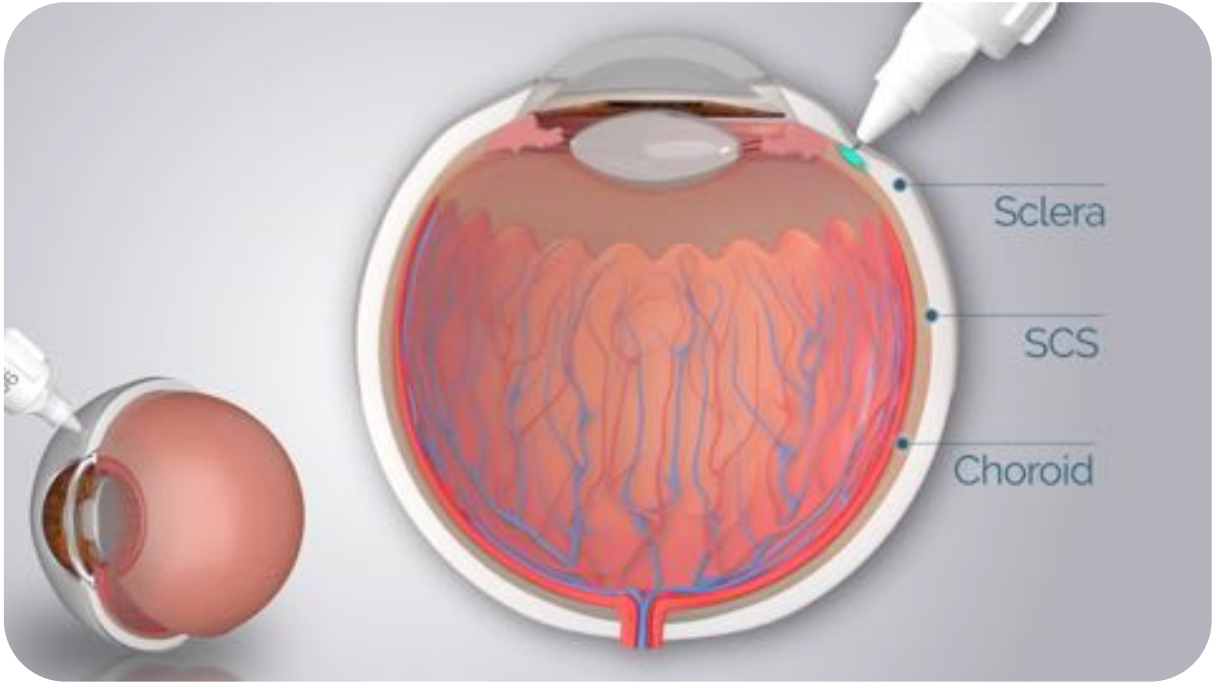
- CH: Clearside Biomedical (C), Bausch and Lomb (C)
- AS: Allergan (C), Aura Biosciences (C), Castle Biosciences (C), Genentech (C), Regeneron (C)
- CW: Clearside Biomedical (E, I)
- BK: Clearside Biomedical (E, I)
- CH: Clearside Biomedical (E, I)
- TC: Clearside Biomedical (E, I)

C = Consultant; E = Employment; I = Personal Financial Interest

Take Home Points

- Over 1000 suprachoroidal injections have been performed as part of clinical trials
- High rate of successful delivery of suprachoroidal injections
- The two needle length options successfully accommodate for anatomical variations across patients and retinal disease states
- Correlations were found between needle length and gender and injection quadrant

Suprachoroidal Injection (SCI) with the SCS Microinjector®



Suprachoroidal Injection (SCI) with the SCS Microinjector®

- SCI performed 1,000+ times in clinical trials to date
- Two needle lengths included to accommodate variation in patient anatomy when starting with 900 µm needle

900 µm and 1100 µm Needles
shown capped

SCS Microinjector® Syringe

Methods

- Data acquired from 6 prospective trials across 3 disease states:
  - Noninfectious Uveitis (AZALEA, PEACHTREE)
  - Diabetic Macular Edema (TYBEE)
  - Retinal Vein Occlusion (TANZANITE, SAPPHIRE, TOPAZ)

- Post-hoc evaluation of correlation between needle usage, 900 µm vs 1100 µm, in SCIs and demographics and ocular characteristic data
  - Included baseline injections to minimize experience bias
  - Included SCIs where the investigator determined CLS-TA was administered

Results

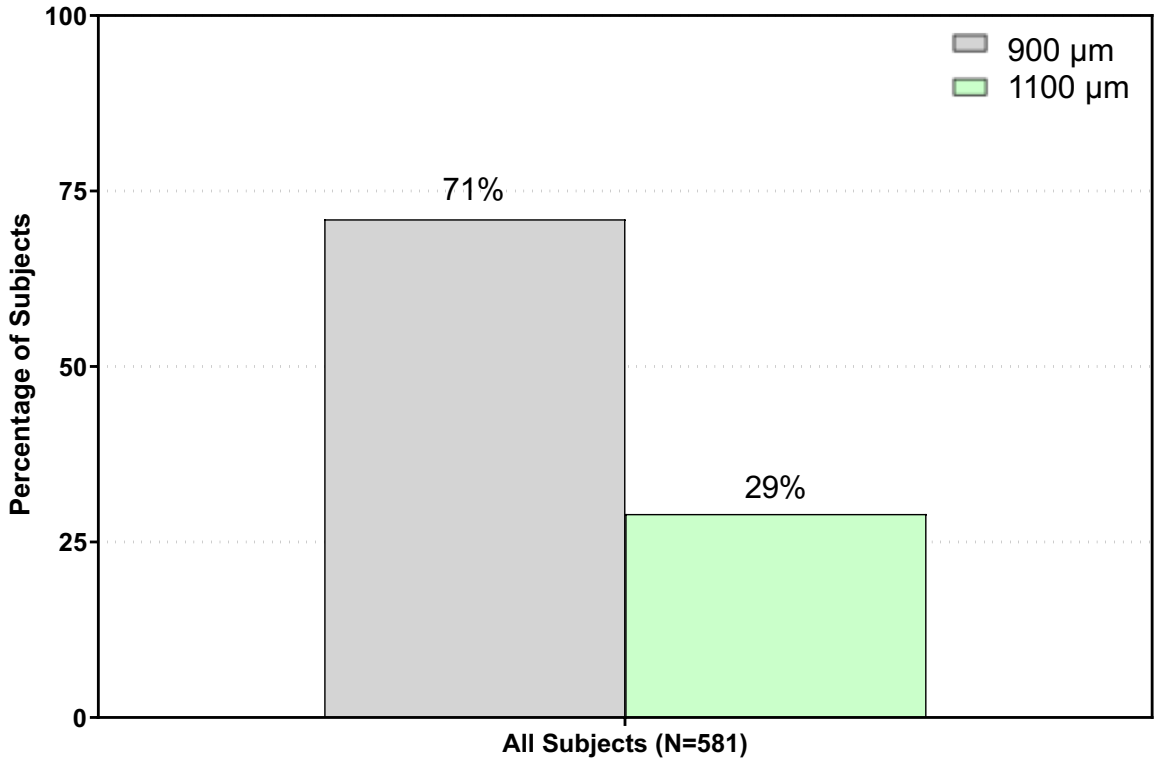
- Suprachoroidal injections were performed in 133, 36, and 412 patients with NIU, DME, and RVO, respectively
- Across these trials, in response to the prompt: “Was the suprachoroidal injection administered?”- 98.1% of injecting physicians reported “Yes”

Demographic & ocular characteristics grouped by correlation to needle length used

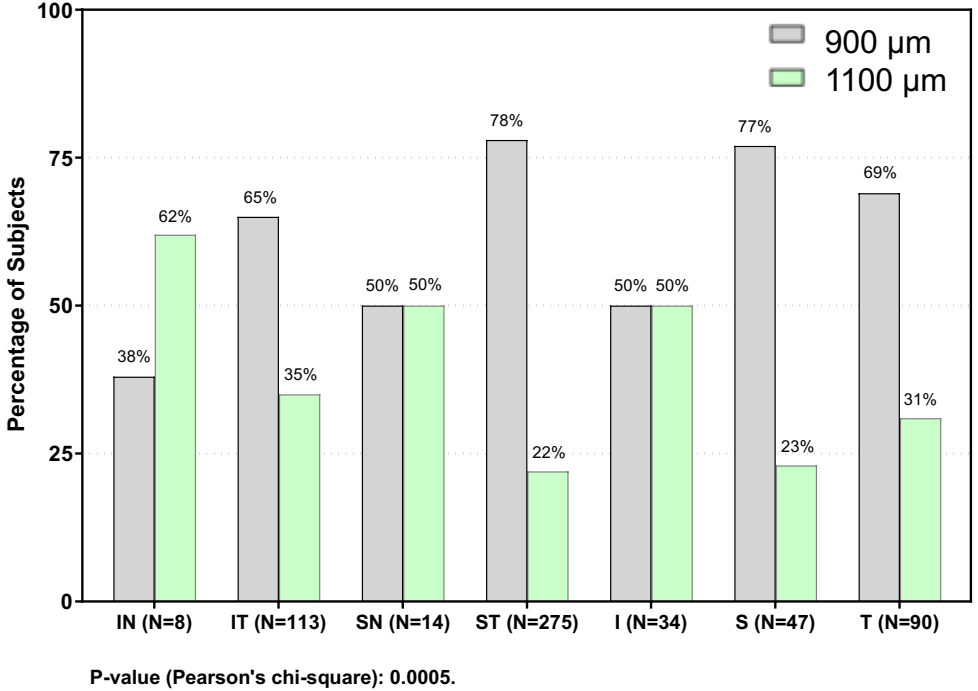
CORRELATION		
Significant *p<0.001* [1]	Moderate *p<0.01* [1]	None *p≥0.01* [1]
Administration quadrant	Gender[2]	Disease indication Visual acuity Intraocular pressure Retinal central subfield thickness Lens status Age Race

1. Without Bonferroni correction
2. The variations by gender could be confounded by other factors, such as height or weight differences between male and female study subjects, which were not assessed.

Overall, 71% of Baseline SCIs Completed with the 900 µm Needle



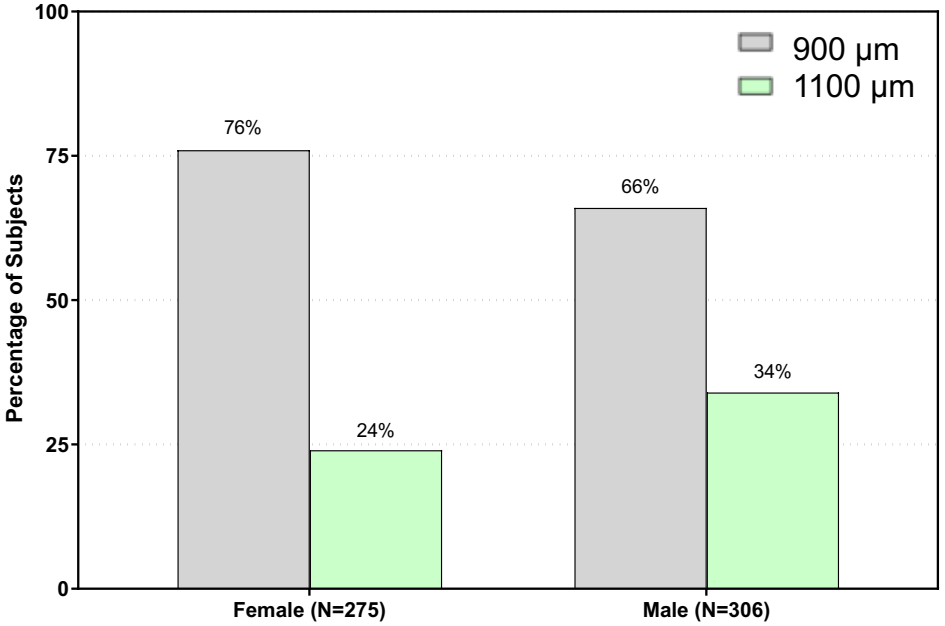
Administration quadrant correlated with needle length used



P-value (Pearson's chi-square): 0.0005.

The variations in administration quadrant corroborates literature reports of thinner sclera in the superior hemisphere, compared to the inferior hemisphere, at the level of the pars plana

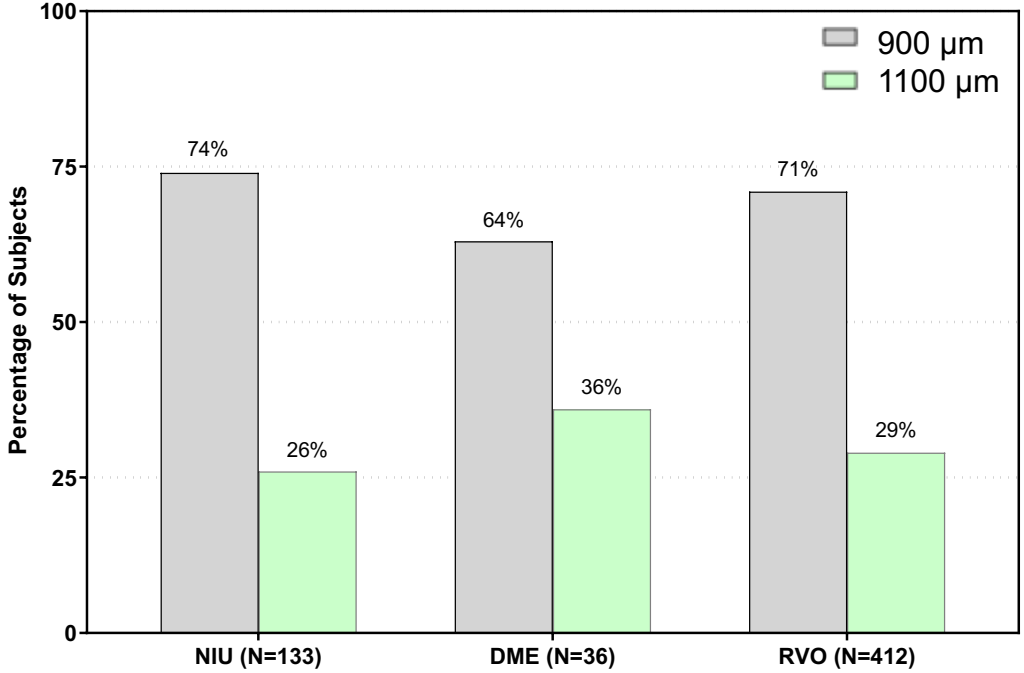
Gender moderately correlated with needle length used



P-value (Pearson chi-square): 0.0061.

The variations by gender could be confounded by other factors, such as height or weight differences between male and female study subjects, which were not assessed.

Disease indication did not correlate with needle length used



P-value (Pearson's chi-square): 0.5035.

64 – 74% of injections were completed with the 900 µm needle for NIU, DME, and RVO indications

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