

Early Adoption of Triamcinolone Acetonide Suprachoroidal Injection for Uveitic Macular Edema: A Physician Survey

Contact information:
 Peter Y Chang, MD, FACS
 Massachusetts Eye Research & Surgery Institution
 Tel: (781)891-6377
 Email: pchang@mersi.com

Chang P,¹ Henry C,² Warrow D,³ Walker S,⁴ Emami-Naeini P,⁵ Singer M,⁶ Blinder K,⁷ Dacey M,⁸ Chu D,⁹ Raiji V,¹⁰ Rifkin L,¹¹ Shah M,¹² Yassine M¹³

¹Massachusetts Eye Research & Surgery Institution, Waltham, MA, USA; ²Retina Consultants of Texas, Houston, TX, USA; ³Cumberland Valley Retina Consultants, Hagerstown, MD, USA; ⁴Retina Consultants, Hartford, CT, USA; ⁵University of California, Davis, Davis, CA, USA; ⁶Medical Center Ophthalmology Associates, San Antonio, TX, USA; ⁷The Retina Institute, St Louis, MO, USA; ⁸Colorado Retina, Denver, CO, USA; ⁹Metropolitan Eye Research & Surgery Institute, Palisades Park, NJ, USA; ¹⁰Illinois Retina Associates, Chicago, IL, USA; ¹¹Ophthalmic Consultants of Boston, Boston, MA, USA; ¹²Midwest Eye Institute, Indianapolis, IN, USA; ¹³Bausch + Lomb, Bridgewater, NJ, USA

Introduction

- Suprachoroidal administration of triamcinolone acetonide injectable suspension (SCS-TA, XIPERE[®]) provides targeted steroid delivery to the choroid/retina while minimizing drug exposure in non-target tissues.¹
- SCS-TA was approved by the FDA for the treatment of macular edema (ME) associated with uveitis in Oct 2021.²
- The safety and efficacy of SCS-TA for treatment of ME associated with uveitis was previously demonstrated in the PEACHTREE study.³
- We evaluated perceptions of and early experience with the injection procedure among early adopters of SCS-TA along with patient outcomes.



Methods

Retina/uveitis specialists who had completed ≥10 suprachoroidal injections of SCS-TA were eligible to participate in virtual meetings in which they discussed a series of pre-defined survey questions probing their experience. The survey was sent to participants ahead of the meeting and included 37 questions spanning patient selection, the suprachoroidal injection procedure, patient outcomes and overall satisfaction. Survey responses, including additional response detail garnered during virtual meetings, were pooled and summarized descriptively.

Results

12 retina/uveitis specialists participated

243 SCS-TA-treated patients (avg 20)

43 patients requiring re-injection (avg 4)

≥291 suprachoroidal injections (avg 24)

REFERENCES

1. Habet-Wilner Z, Noronha G, Wykoff CC. Suprachoroidally injected pharmacological agents for the treatment of chorio-retinal diseases: a targeted approach. *Acta Ophthalmol.* 2019;97(5):460-472. 2. XIPERE[®] (triamcinolone acetonide injectable suspension), for suprachoroidal use [package insert]. Bridgewater, NJ: Bausch & Lomb Americas Inc.; 2022. 3. Yeh S, Khurana RN, Shah M, et al. Efficacy and safety of suprachoroidal CLS-TA for macular edema secondary to noninfectious uveitis: Phase 3 randomized trial. *Ophthalmology.* 2020;127(7):948-955.

ABBREVIATIONS

CME, cystoid macular edema; CST, central subfield thickness; FDA, US Food and Drug Administration; IOP, intraocular pressure; IVT, intravitreal; ME, macular edema; SCS-TA, suprachoroidal triamcinolone acetonide; UME, uveitic macular edema; VKH, Vogt-Koyanagi-Harada

- Uveitis patients had various disease durations, anatomical involvement and etiologies, and some were treated for post-surgical CME (Table 1)

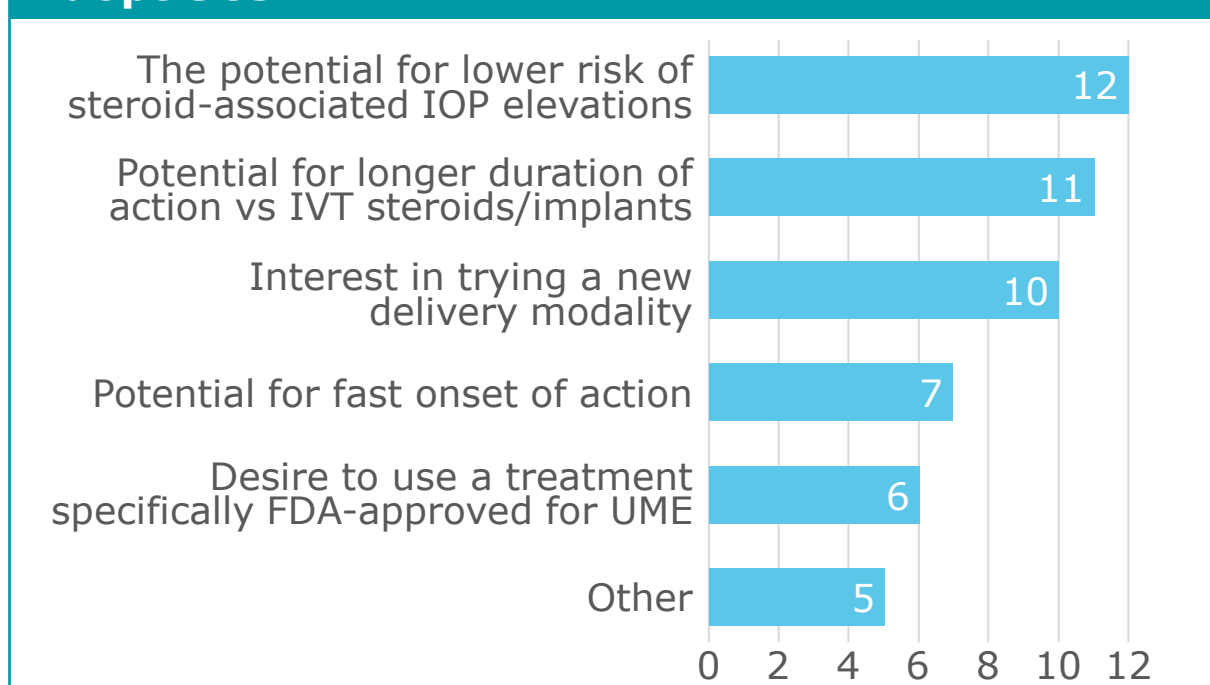
Table 1. Patient Characteristics

Category	Characteristic	Count
Disease Duration	Acute uveitis	2
	Chronic uveitis	9
	Recurrent uveitis	8
	A mix of duration/chronicity	9
Anatomical Location	Panuveitis	10
	Posterior uveitis	11
	Intermediate uveitis	10
	Anterior uveitis	5
Diagnosis	Idiopathic uveitis (12)	12
	VKH syndrome (3)	3
	Pars planitis (8)	8
	Post-surgical, serpinginous, post-vitreotomy (3)	3
	Birdshot retino-choroidopathy (7)	7
	Reactive arthritis (1)	1
	Sarcoidosis (6)	6
	HLA-B27-related (4)	4

Data are number of participants giving that response

- Patients had varying demographic characteristics and most had significant comorbidities
- Few were new to UME treatment, and most were on concurrent uveitis medications
- The most common reason to adopt SCS-TA was the potential for lower steroid-associated IOP elevations (Figure 1)

Figure 1. Reasons Participants Cited to Adopt SCS-TA



- Most participants were somewhat/very confident about the SCS-TA injection procedure before training and even more so after (Figure 2)
- 92% of respondents felt the injection procedure was somewhat/very easy after training (Figure 3)
- Most (75%) felt comfortable with the procedure after 2-5 injections
- Respondents most commonly used subconjunctival anesthesia, and 75% used the 900-µm needle first, targeting temporal quadrants (Figure 4)

Figure 2. Physician Comfort with the SCS-TA Injection Procedure Before and After Training

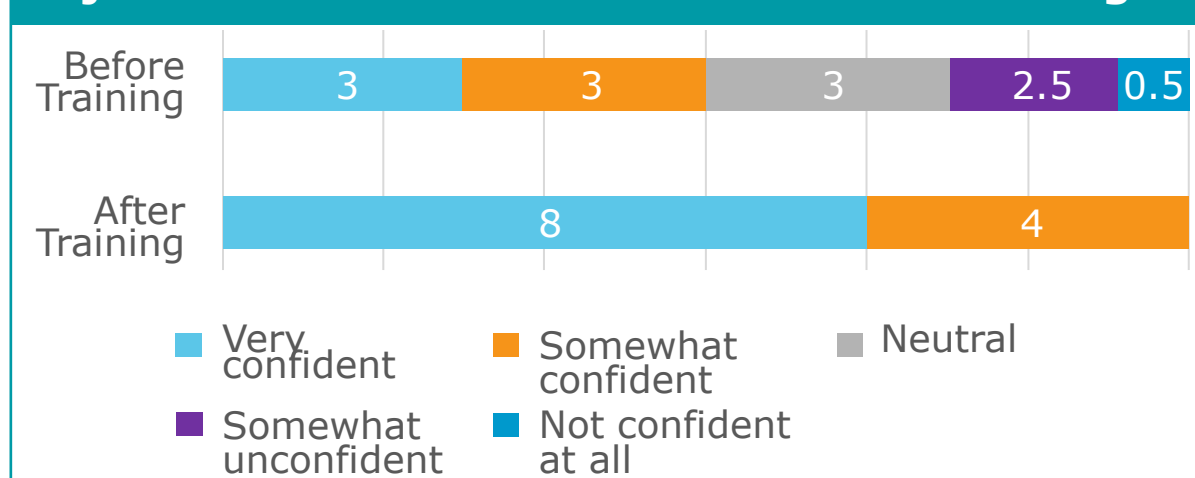


Figure 3. Perception of the SCS-TA Injection Procedure Post-Training

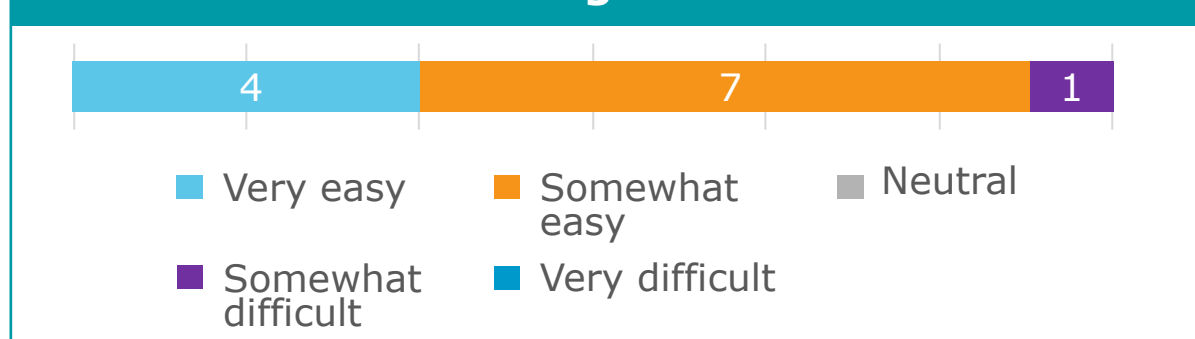
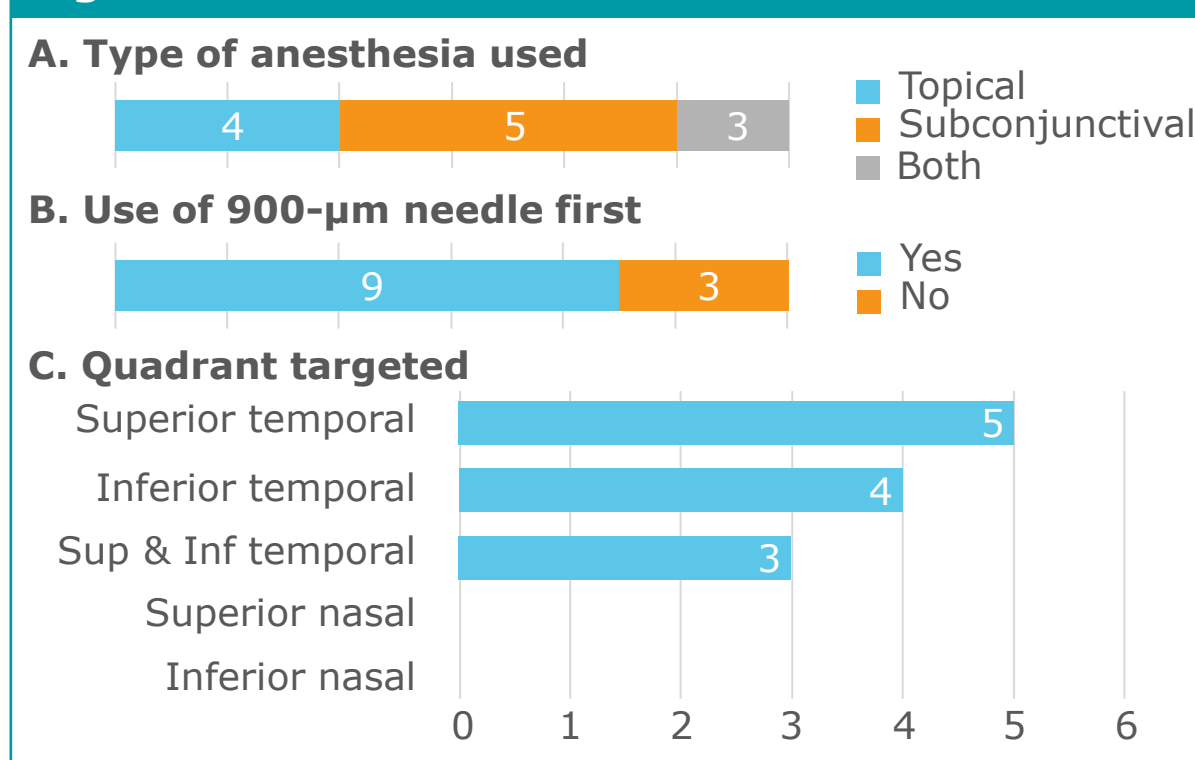
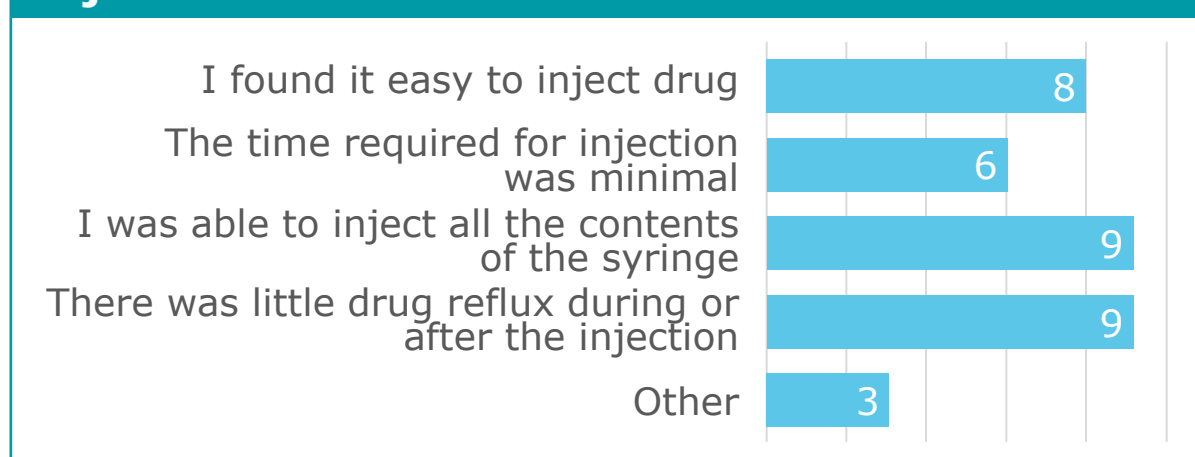


Figure 4. Anesthesia and Needle Selection



- Most respondents rated the SCS-TA injection procedure as slightly or moderately more difficult than intravitreal injections (11/12) or implants (10/12) but reported positive overall experiences (Figure 5)

Figure 5. Overall Experience with the SCS-TA Injection Procedure

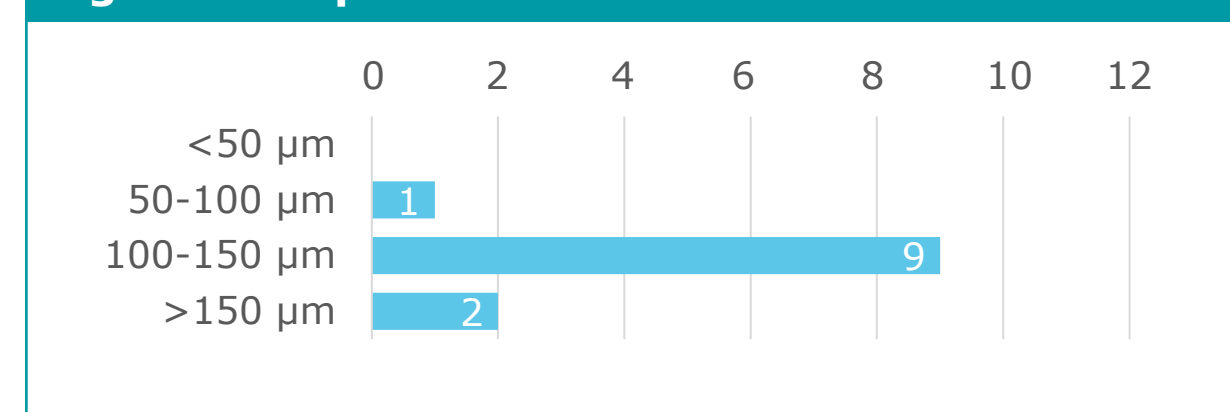


2-3 lines of vision gained (most respondents)

CST reduced by ≥100-150 µm (92% of respondents)

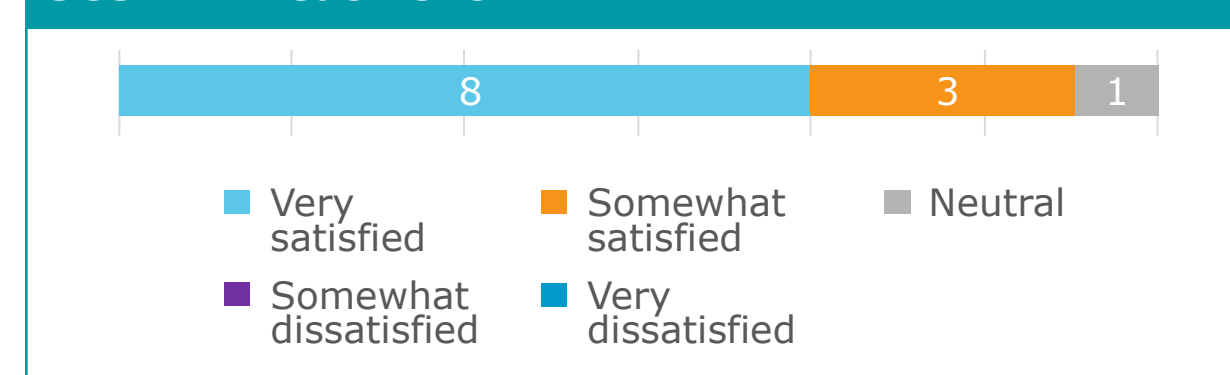
- Most respondents recalled patients gaining 2-3 lines of vision at approximately 4-6 weeks post-injection
- 92% of respondents reported CST reduced by 100-150 µm or more (Figure 6)

Figure 6. Reported CST Decreases Post-SCS-TA



- 92% of respondents were satisfied with SCS-TA treatment (Figure 7)

Figure 7. Overall Satisfaction with SCS-TA Treatment



- Respondents expressed interest in using SCS-TA in
 - Patients post-UME surgery
 - Steroid responders
 - Younger patients

Conclusions

- Perceptions and experiences of early adopters with treatments involving new delivery techniques can reveal educational gaps and provide real world evidence.
- Findings from this survey of early adopters of SCS-TA suggest suprachoroidal injection was easy to learn and resulted in patient improvements in vision and in macular edema aligned with findings in clinical registrations trials.