Durability with suprachoroidal injection of triamcinolone acetonide injectable suspension for uveitic macular edema and use of rescue therapy in clinical practice

Michael Singer, Durga Borkar, Abhishek A. Nair, Andrew LaPrise, Kristian Garcia, Joel Fain, Teresa Brevetti, David J. Harrison

Introduction

Background and Objective

Background:

- Triamcinolone acetonide injectable suspension (Xipere®) for suprachoroidal use is a corticosteroid indicated for the treatment of macular edema (ME) associated with uveitis
- Suprachoroidal administration via Clearside's proprietary SCS Microinjector™ is a technique in which drug is delivered to the space between the sclera and the choroid
  - The medication distributes in the suprachoroidal space and is delivered directly to the retina and choroid, sparing the anterior chamber
  - This minimizes the potential for cataract formation and/or increased intraocular pressure
- In clinical trials, the time to rescue therapy relative to subjects' first injection was assessed, however all patients were required by protocol to have a second injection or sham at week 12[1]
  - A subset of patients were followed past 6 months in the Magnolia study and 50% went as long as 6 months without rescue[2]

Objective:

- To understand durability of suprachoroidal triamcinolone acetonide injectable suspension and subsequent practice patterns for treatment of uveitic macular edema (UME) in clinical practice

1. 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. doi:10.1016/j.ophtha.2020.01.006
2. Khurana RN, Merrill P, Yeh S, et al. Extension study of the safety and efficacy of CLS-TA for treatment of macular oedema associated with non-infectious uveitis (MAGNOLIA). *Br J Ophthalmol*. 2022;106(8):1139-1144. doi:10.1136/bjophthalmol-2020-317560

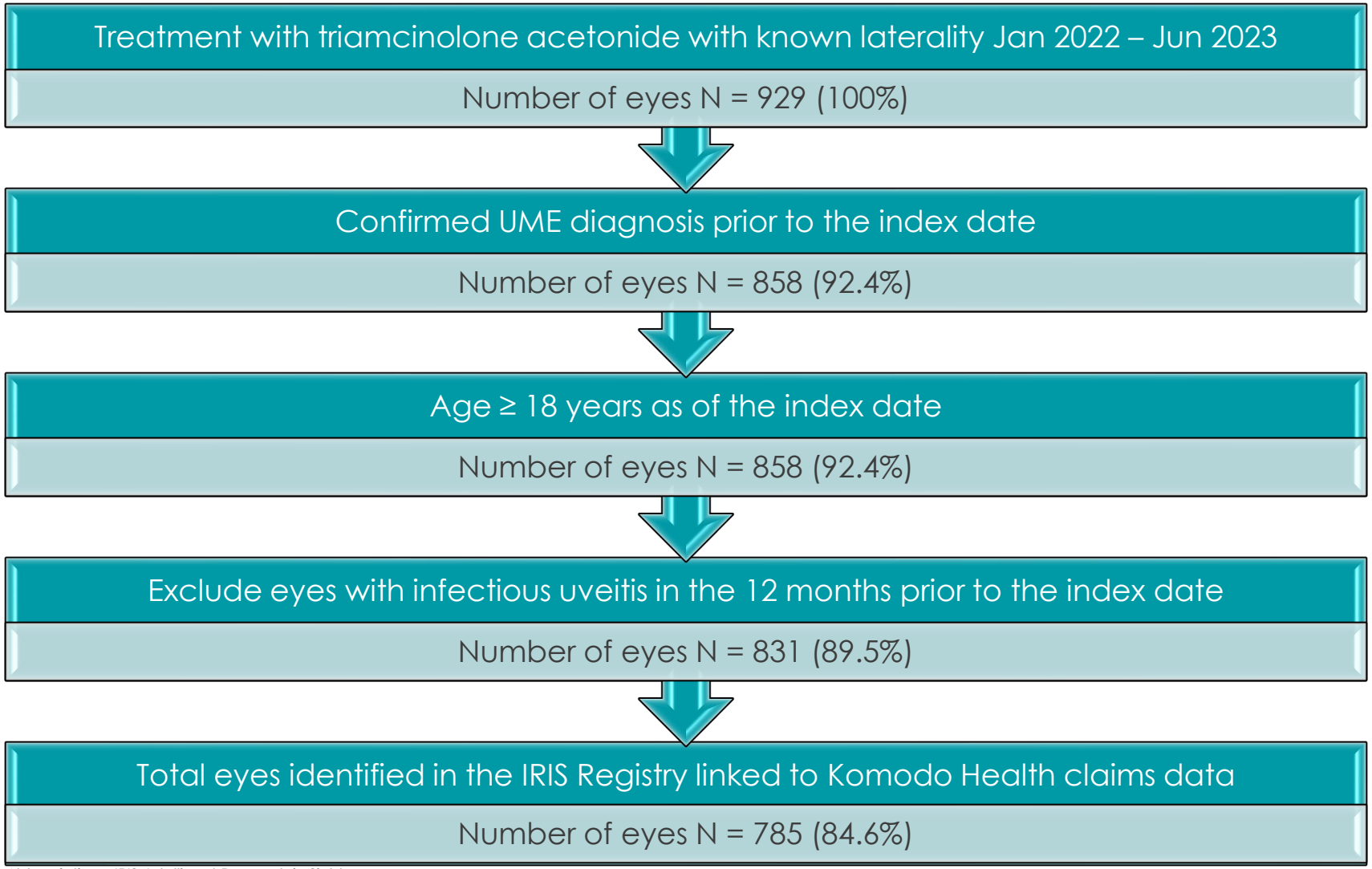
Methods

Methods

- Patients ≥18 with a diagnosis of non-infectious UME and a suprachoroidal injection of triamcinolone acetonide after January 2022 were identified in the American Academy of Ophthalmology IRIS® Registry (Intelligent Research in Sight)
  - The date of the first suprachoroidal injection defined the index date
- IRIS data was linked to Komodo open-source claims data (Jan 2022 to Jun 2023) using the Datavant token to identify corticosteroid use
  - Rescue was defined as use of injectable, implanted, or topical corticosteroids after the initial triamcinolone acetonide suprachoroidal injection
- Patients were followed for 24 weeks after their injection

Results

Study Population Attrition Diagram



Abbreviations: IRIS. Intelligent Research in Sight

Baseline Demographic and Clinical Characteristics

Total eyes	831 (100.0%)
Age	
Mean (SD)	68.2 (13.6)
Sex	
Female	55.7%
Male	44.3%
Race	
Asian	1.7%
Black or African American	9.4%
White	65.8%
Other races	8.3%
Unknown	14.8%
Ethnicity	
Hispanic	4.8%
Non-Hispanic	64.7%
Unknown	30.4%
Insurance / payer type	
Medicare	53.4%
Medicare Advantage	9.7%
Medicaid	4.6%
Commercial	26.0%
Other/Unknown	6.3%

Abbreviations: SD, standard deviation

Ocular comorbidities	
Glaucoma/Ocular Hypertension	41.8%
Cataract	24.7%
nAMD	2.3%
DR with DME	3.5%
DR without DME	4.3%
ME from CRVO	1.6%
ME from BRVO	2.6%
Retinal Detachment	14.4%
Posterior uveitis	81.1%
Panuveitis	14.6%

Abbreviations: DR, diabetic retinopathy; DME, diabetic macular edema; ME, macular edema; CRVO, central retinal vein occlusion; BRVO, branch retinal vein occlusion

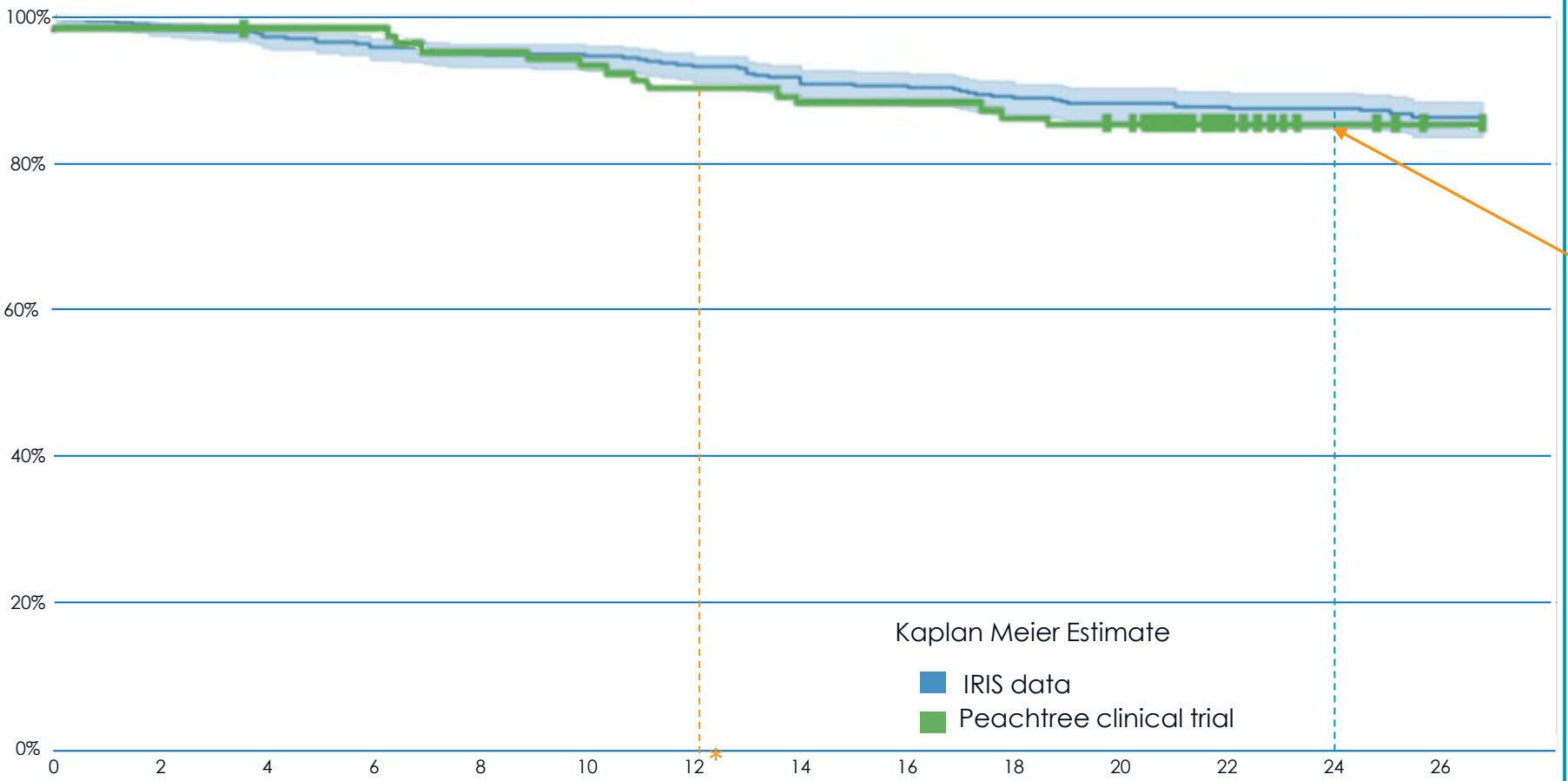
Treating provider subspecialty	
Retina/Vitreous Specialist	86.3%
Cataract/Anterior Segment Specialist	5.9%
Other/Unknown	7.9%

Prior corticosteroid use*	
Injectable/implantable with or without topical	35.2%
Topical only	17.3%

* This was only evaluated in the 786 patients whose data could be linked to claims

87.7% of Eyes Did Not Require an Injected or Implanted Corticosteroid by Week 24

Time to Rescue with Injectable/Implantable Corticosteroids



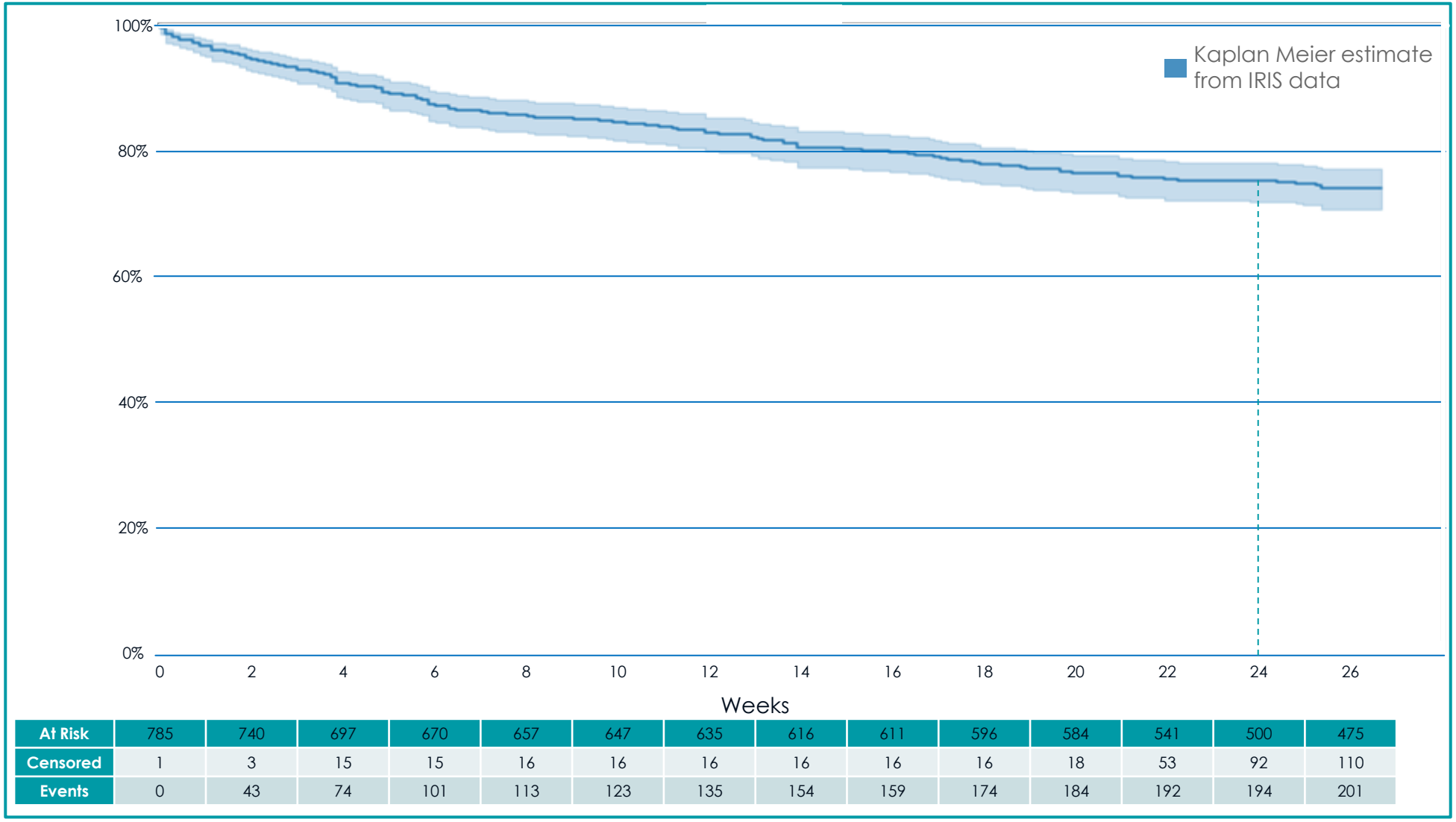
At Risk	785	771	746	733	726	723	711	693	690	677	670	629	590	564
Censored	1	3	18	20	21	21	21	21	21	22	24	60	99	117
Events	0	12	22	33	39	42	54	72	75	87	92	97	97	105

In Peachtree 86.5% did not require rescue therapy by week 24

*In Peachtree, all subjects had a second injection at week 12

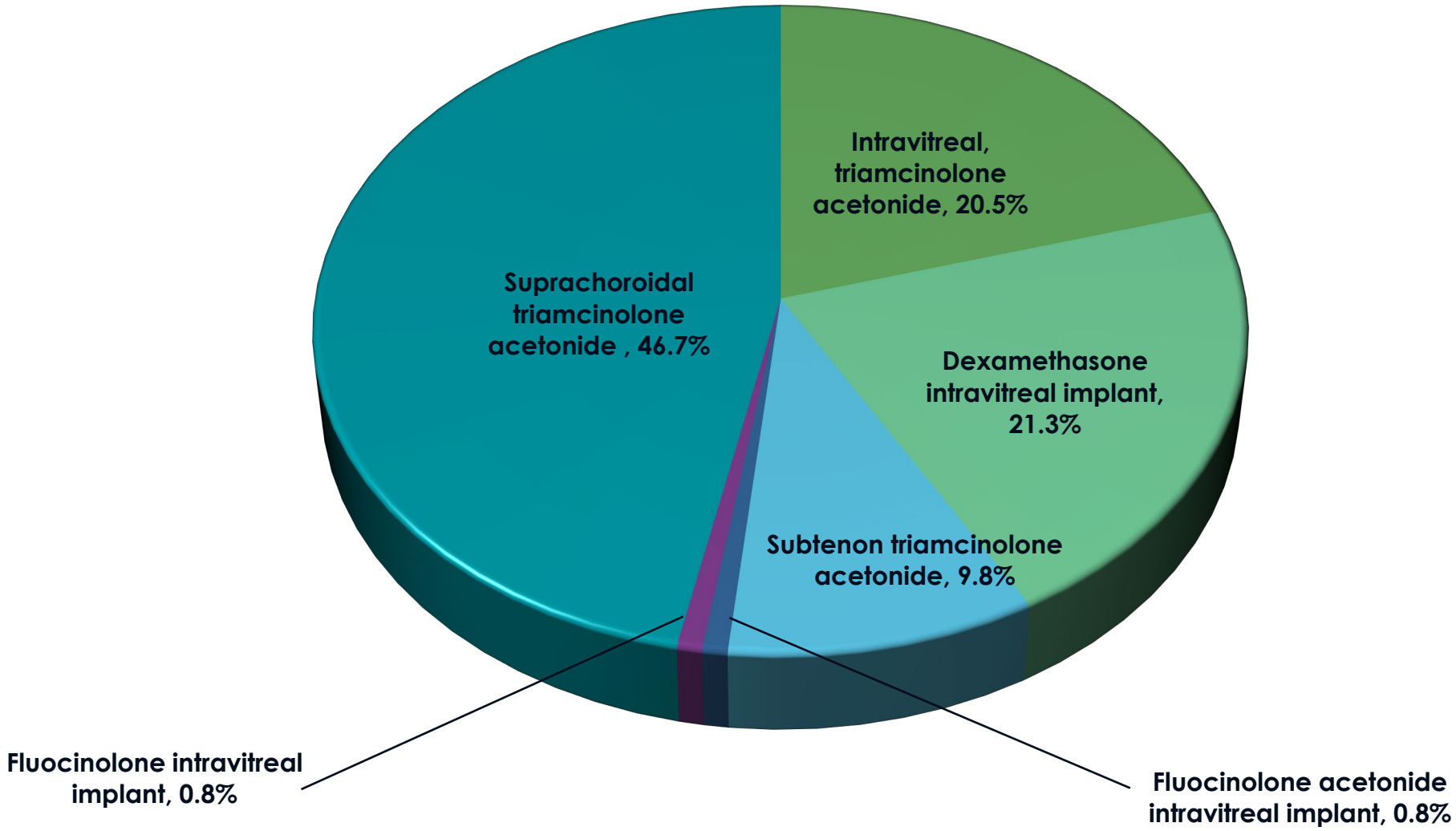
75.4% of Eyes Did Not Require Any Corticosteroid by Week 24

Time to Rescue with Any Corticosteroid



At Risk	785	740	697	670	657	647	635	616	611	596	584	541	500	475
Censored	1	3	15	15	16	16	16	16	16	16	18	53	92	110
Events	0	43	74	101	113	123	135	154	159	174	184	192	194	201

Types of Injected/Implanted Rescue Therapy



Discussion

Conclusion

- 87.6% of patients with UME did not require a subsequent injected or implanted corticosteroid in the 24 weeks after a single suprachoroidal injection of triamcinolone acetonide
  - Suprachoroidal triamcinolone was used in 44.7% of patients who had a second injectable/implantable corticosteroid
  - A second suprachoroidal injection 12 weeks after the first was only seen in 2.4% of patients and does not appear to be part of routine practice, despite being required per protocol in the Peachtree clinical trial