

Real-World Characteristics of 50,000 Patients Treated With Intracanalicular Dexamethasone Insert: Analysis using IRIS[®] Registry

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Disclosures

- **Presenter:** Renee Bovelle reports speaker fees from Ocular Therapeutix (outside of the current study), Bausch & Lomb, Sun Ophthalmics, and Allergan/AbbVie; consultancy to Allergan/Abbvie, Avellino, Dompe, Johnson & Johnson, Novabay, Novartis, Tarsus, and Zeiss
- **Co-authors:** Srilatha Vantipalli, Dina Akasheh, Matthew Cheung, Aditi Bauskar and Rabia Gurses-Ozden are employees of Ocular Therapeutix. Michael Mbagwu, Meghan Hatfield, and Rachel Myers are employees of Verana Health.
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Background

- Topical steroids and NSAIDs are often used to prevent and treat post-op inflammation and pain following ophthalmic surgery¹
- **Intracanalicular Dexamethasone Insert (DEXTENZA [DEX])²:**
 - Hydrogel-based insert that releases dexamethasone to the ocular surface in a tapered fashion
 - Free of antimicrobial preservatives
 - FDA-approved for the treatment of:
 - Post-op ocular inflammation and pain
 - Ocular itching associated with allergic conjunctivitis



Activates:^{2,3}

- With moisture
- Swells to fit in the canaliculus



Releases:^{2,3}

- Dexamethasone for up to 30 days



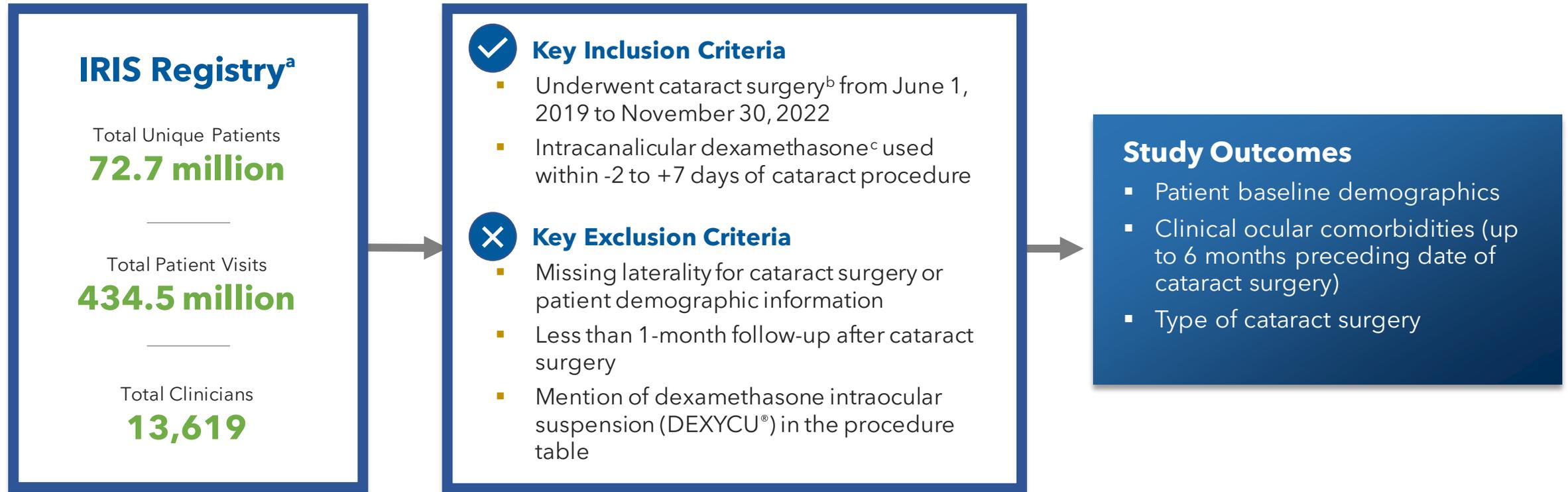
Resorbs:^{2,3}

- Slowly through the course of treatment
- Clears via the nasolacrimal duct

Research Question: How is DEX used among cataract surgery patients in real-world clinical practice?

Methodology: A Retrospective Analysis of EHR Data using the Academy's IRIS Registry (Intelligent Research in Sight)

Objective: To characterize demographics and clinical comorbidities of cataract surgery patients who received intracanalicular dexamethasone insert (DEX)



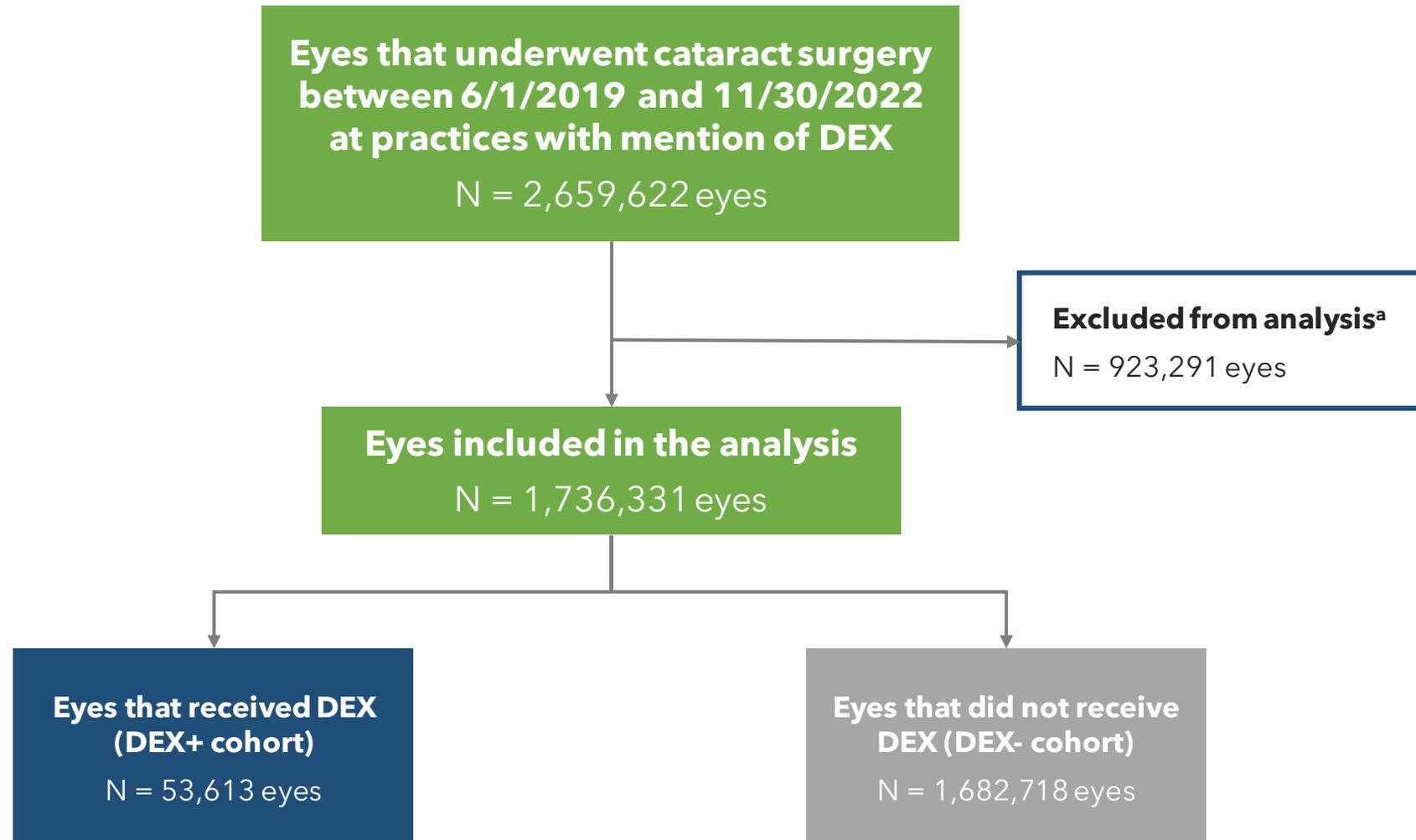
^a as of October 1, 2023.. <https://www.aao.org/iris-registry/data-analysis/requirements>

^b defined as presence of CPT code 66984 or 66982

^c defined as presence of J-code (J1096), C-code (C9048), CPT code (0356T), NDC number (70382-0204-01, 70382-204-10), or keywords indicated intracanalicular dexamethasone use (eg, "DEXTENZA", "dexamethasone, lacrimal ophthalmic insert", "intracanalicular dexamethasone", "lacrimal dexamethasone insert") in the procedural table

^d identified by the presence of new ICD-10 codes

Study Population



^abased on exclusion criteria: 1) Missing laterality for cataract surgery 2) Missing patient demographic information 3) Less than 1-month follow-up after cataract surgery 4) Mention of dexamethasone intraocular suspension (DEXYCU®) in the procedure table

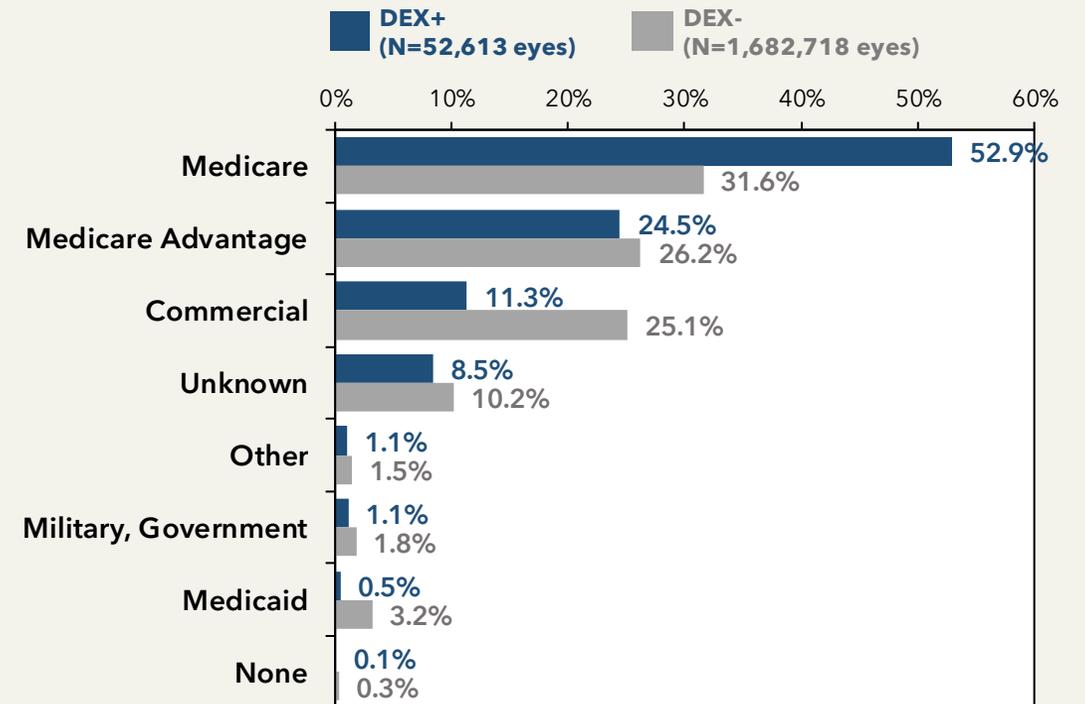
Patient Characteristics and Demographics

DEX+ patients were on average 73.8 years old, 60.3% female and 52.9% Medicare beneficiaries

Baseline Demographic Characteristics

Demographic Characteristics	DEX+ (N=52,613 eyes)	DEX- (N=1,682,718 eyes)
Mean age, years (SD)	73.8 (6.53)	70.6 (8.92)
Sex, n (%)		
Female	32,355 (60.3%)	995,334 (59.2%)
Male	21,258 (39.7%)	687,384 (40.8%)
Race, n (%)		
White/Caucasian	41,012 (76.5%)	1,117,565 (66.4%)
Black/African American	2,768 (5.2%)	123,247 (7.3%)
Asian	648 (1.2%)	33,680 (2.0%)
Other	406 (0.8%)	27,566 (1.6%)
Unknown	8,779 (16.4%)	380,660 (22.6%)
Ethnicity, n (%)		
Not Hispanic or Latino	32,167 (60.0%)	924,014 (54.9%)
Hispanic or Latino	1,295 (2.4%)	91,626 (5.4%)
Unknown	20,151 (37.6%)	667,078 (39.6%)

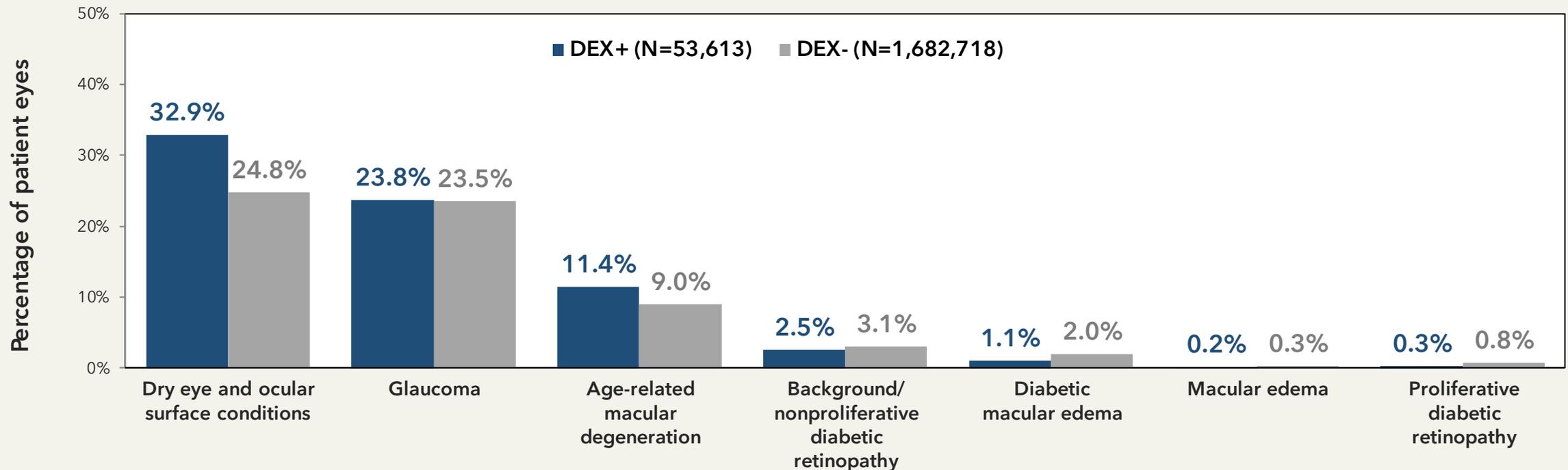
Payer Type



Preoperative Characteristics: Ocular Comorbidities

- DEX was used more frequently in patients with dry eye and ocular surface conditions
 - Use of DEX was observed in patients with a history of glaucoma

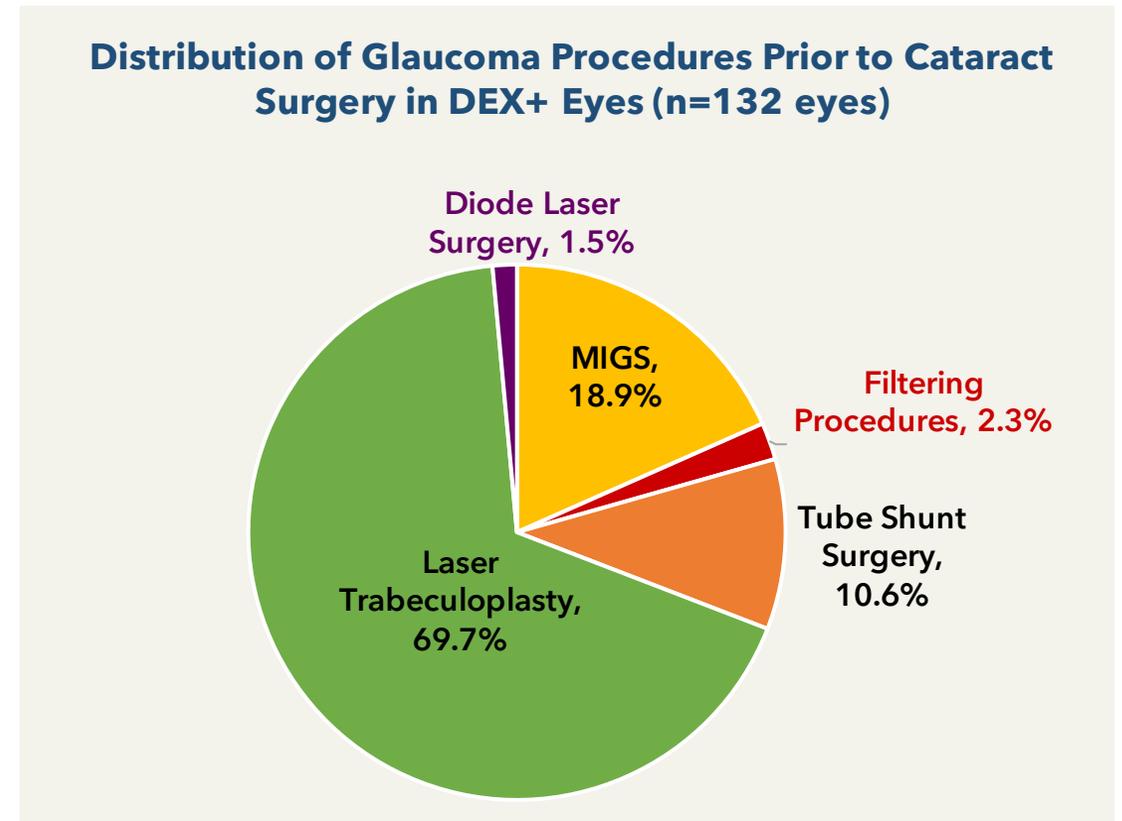
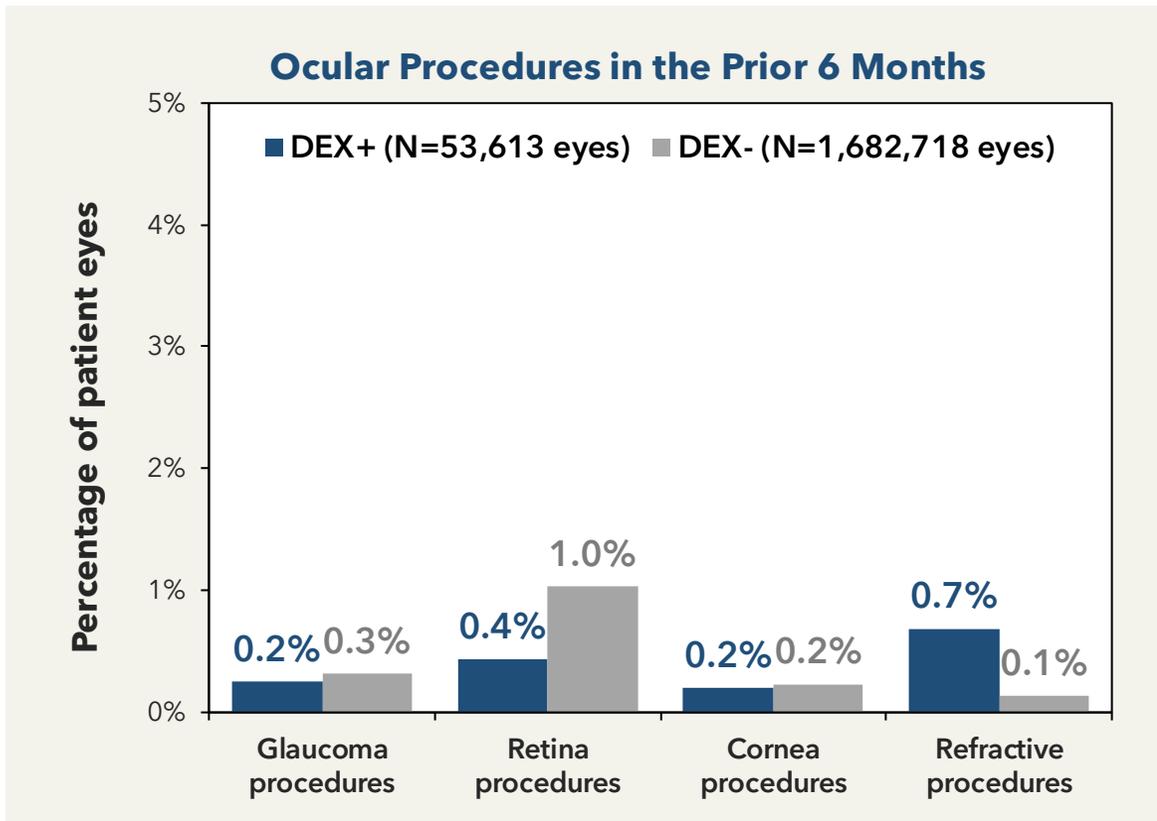
Ocular Comorbidities Within 6 Months Prior to Cataract Surgery



Preoperative Characteristics: History of Ocular Procedures in Prior 6 Months

Clinicians administered DEX in eyes with a history of glaucoma surgery

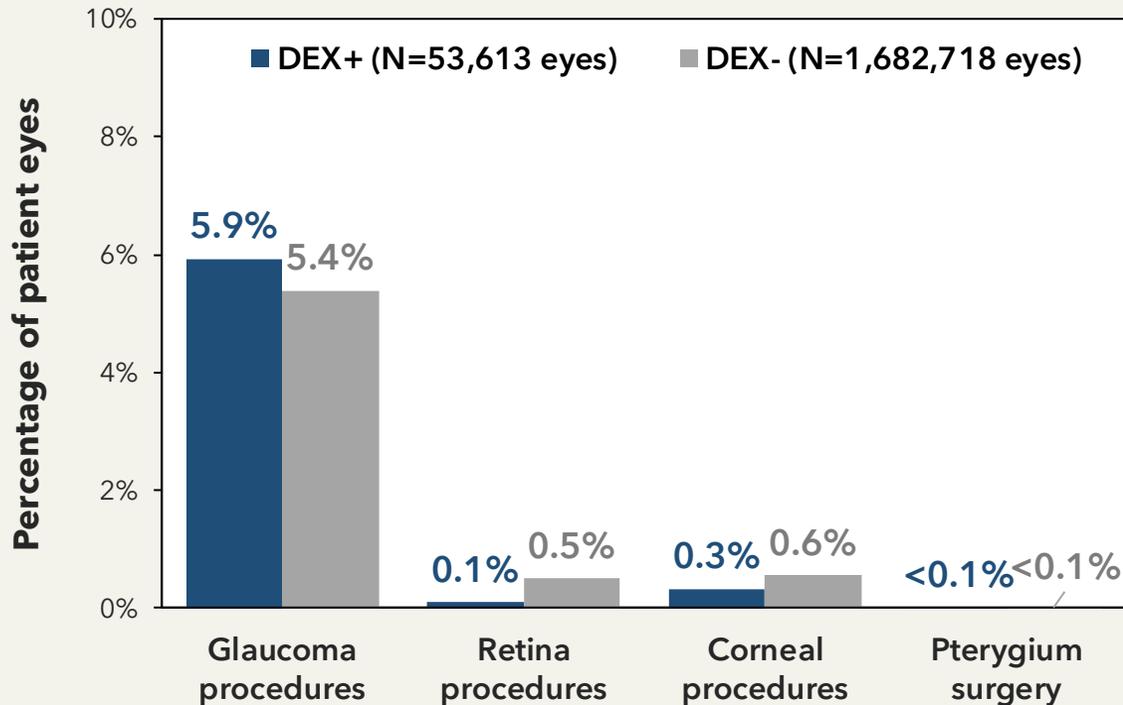
The most common glaucoma procedure prior to cataract surgery was laser trabeculoplasty (69.7%)



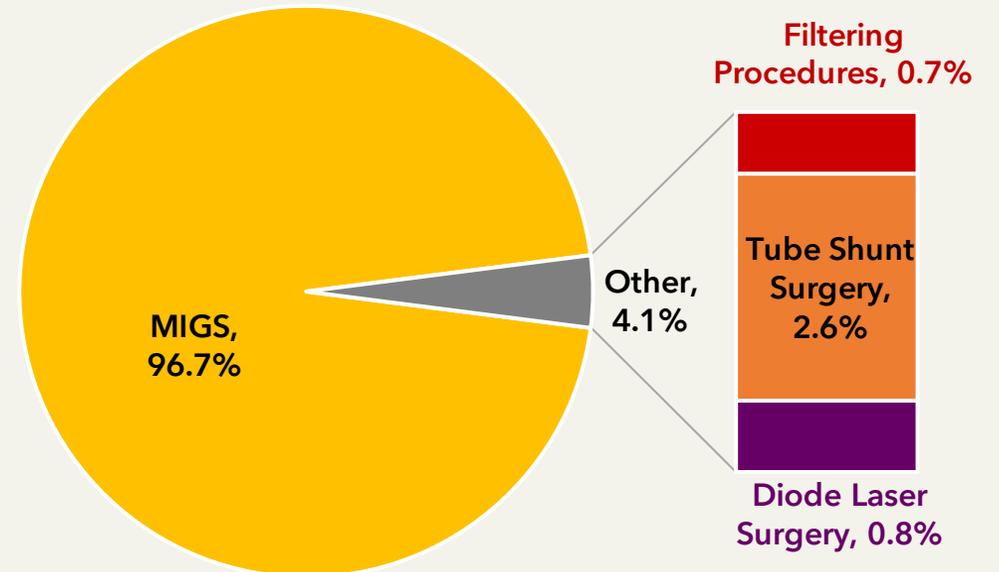
Intraoperative Characteristics: Concurrent Procedures

5.9% of DEX patients underwent concurrent glaucoma surgery on the same day as cataract surgery with nearly all glaucoma procedures being MIGS (96.7%)

Concurrent Procedures on the Same Day as Cataract Surgery



Distribution of Concurrent Glaucoma Procedures in DEX+ Eyes (n=3,181 eyes)



Conclusions

- This study represents the largest analysis of patients who received intracanalicular dexamethasone insert, encompassing over 50,000 eyes
- The findings highlight demographic details and clinical characteristics of cataract surgery patients treated with intracanalicular dexamethasone between 2019 through 2022.
- Observations from the real world demonstrated a higher utilization of DEX in individuals with dry eye and ocular surface disorders, suggesting a potential prescriber preference
- DEX, a sustained-release steroid insert, was utilized in patients with pre-existing glaucoma and those who had combined cataract and glaucoma surgeries