



Developing Breakthrough Treatments For Dry Eye Disease



Achim Krauss, Ph.D.
CEO & Founder



Corporate Highlights

COMPANY

- Privately held clinical stage biotech founded in 2016 as a spinout of GSK
- Pharma partner in Laboratoire Théa
- Nimble, highly experienced team with 200+ years of combined experience in ophthalmic drug development (Allergan, Pfizer, GSK)

MISSION

- Develop drugs for treatment of dry eye disease and other ophthalmic inflammatory diseases

SCIENCE

- First-in-class small molecules (DED)
 - Excellent preclinical data and safety packages, initially developed at GSK
 - AXR-159 completed a positive Phase 2a clinical trial
 - IND filing for AXR-270 in Q4 2019

MARKET

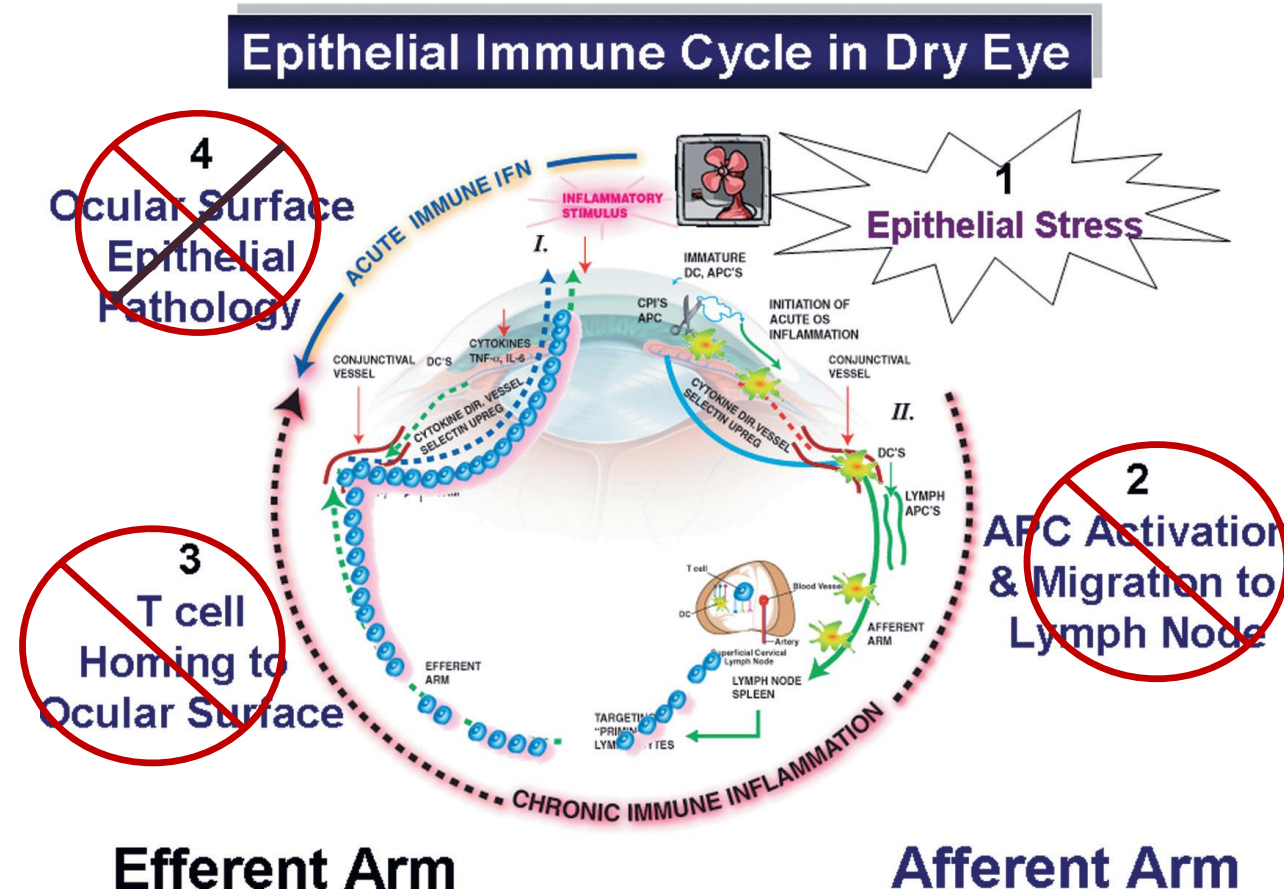
- Dry eye disease market is >\$3B despite suboptimal therapies
- Xiidra acquired by Novartis for \$3.4B upfront, \$1.9B in milestones in 2019

Pipeline



	Indication	Target	Pre-clinical	IND-enabling	Phase 1/2a	Phase 2b	Phase 3
AXR-159 (eyedrop)	DED	$\alpha 4\beta 1$, $\alpha 4\beta 7$					
AXR-270 (cream)	Acute DED, Blepharitis	GR					
AXR-270 (eyedrop)	Acute DED, Blepharitis	GR					

AXR-159 Mechanism of Action

Multi-point interruption of the immune cycle in DED

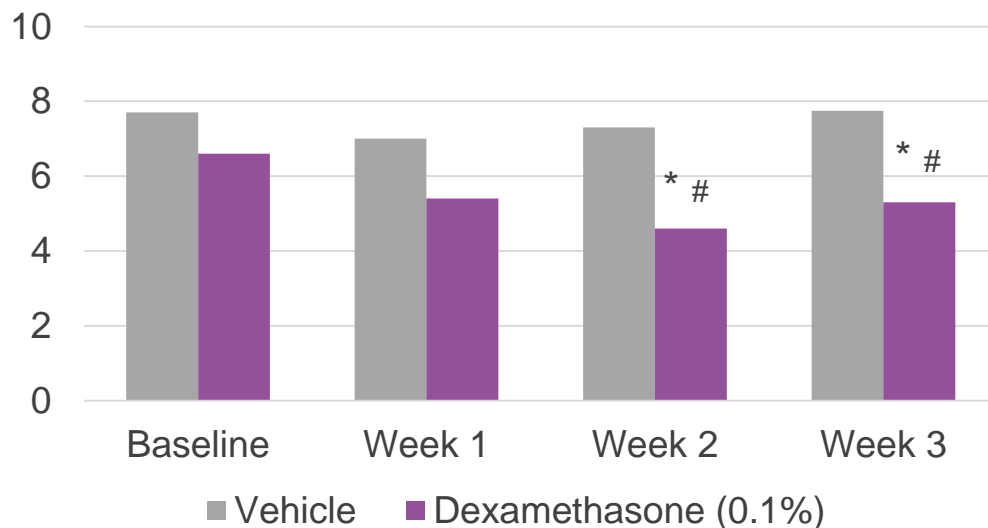


Activity Based on Available Evidence:

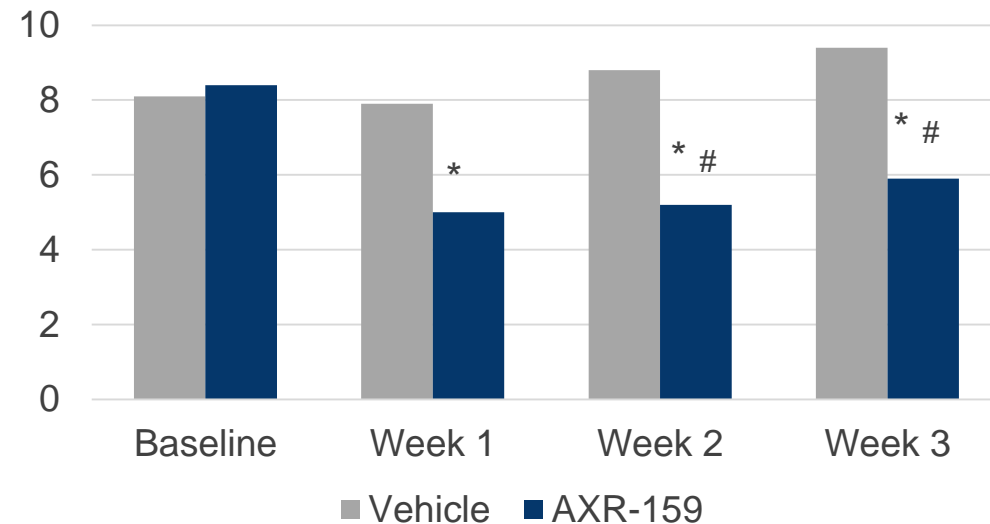
-  AXR-159 Only
-  AXR-159 & Lifitegrast

Steroid-like Reduction of Corneal Staining and Inflammation in Sjögren's Mouse Model

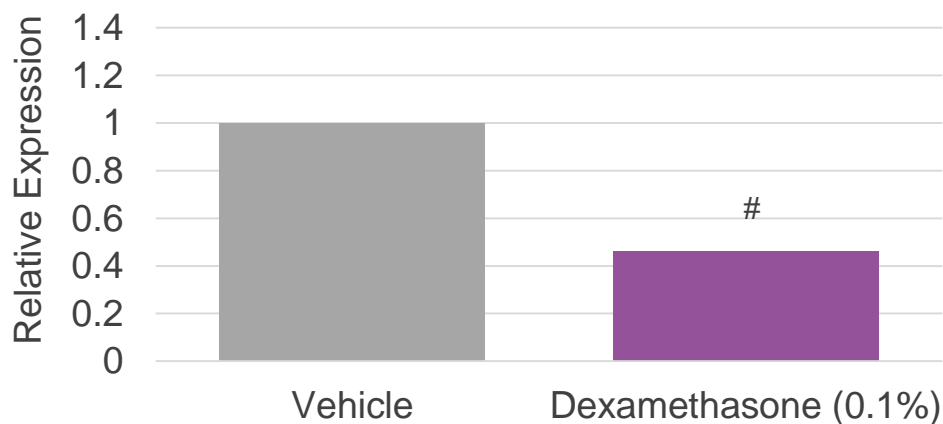
Corneal Fluorescein Score



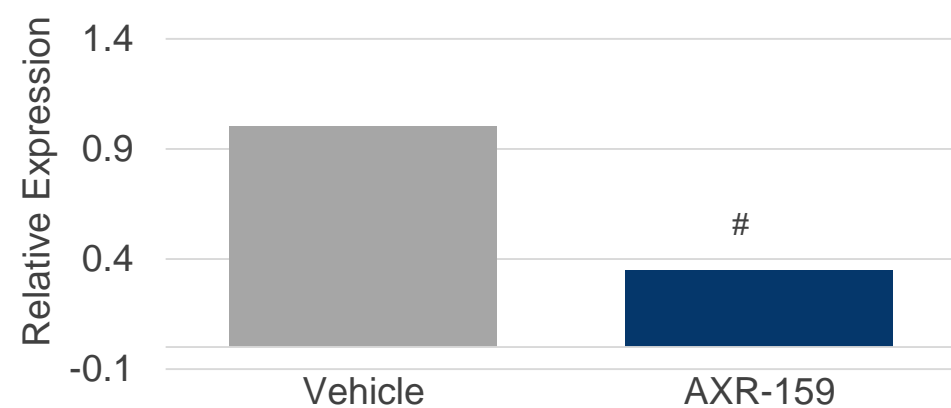
Corneal Fluorescein Score



IL-1b



IL-1b



* compared to baseline; # compared to vehicle

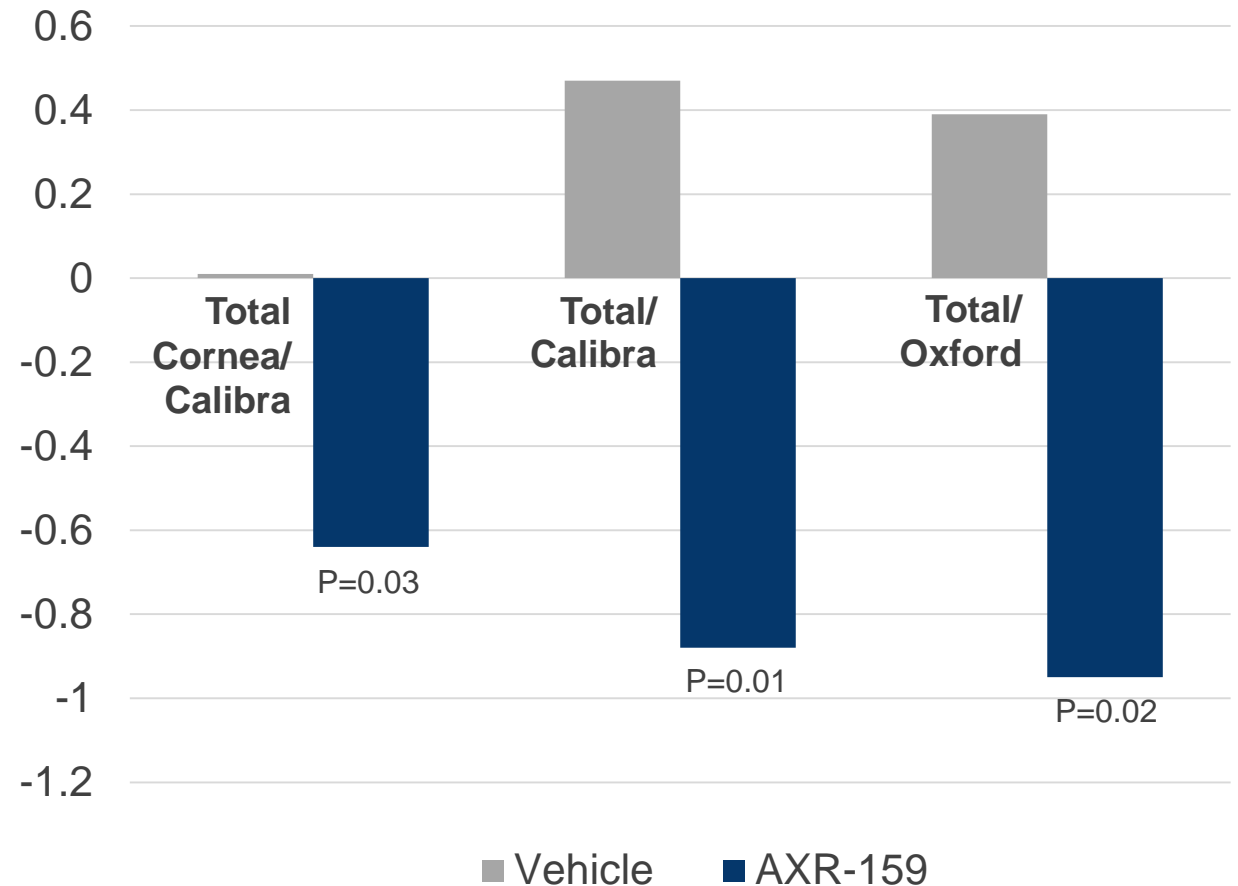
Phase 2a POC Study Design

- Randomized, double-masked, vehicle-controlled
- 3 US sites
- Moderate-severe DED
- N=102; 1:1 randomization, 2 groups
- 50 mg/mL TID for 12 weeks; 2-week vehicle run-in
- Outcome measures: Safety, Tolerability, Systemic Pharmacokinetics, and Pharmacodynamics
 - CFS, LGS, Schirmer's, TBUT; OSDI, SANDE, VAS; tear biomarkers

Demonstration of Safety and Efficacy in Phase 2a Study

- Improvement in signs and symptoms, including total ocular surface staining
- Target / responder population identified → increases probability of success in Phase 3
- Safe and well tolerated
- Opportunity for best-in-class dry eye therapeutic

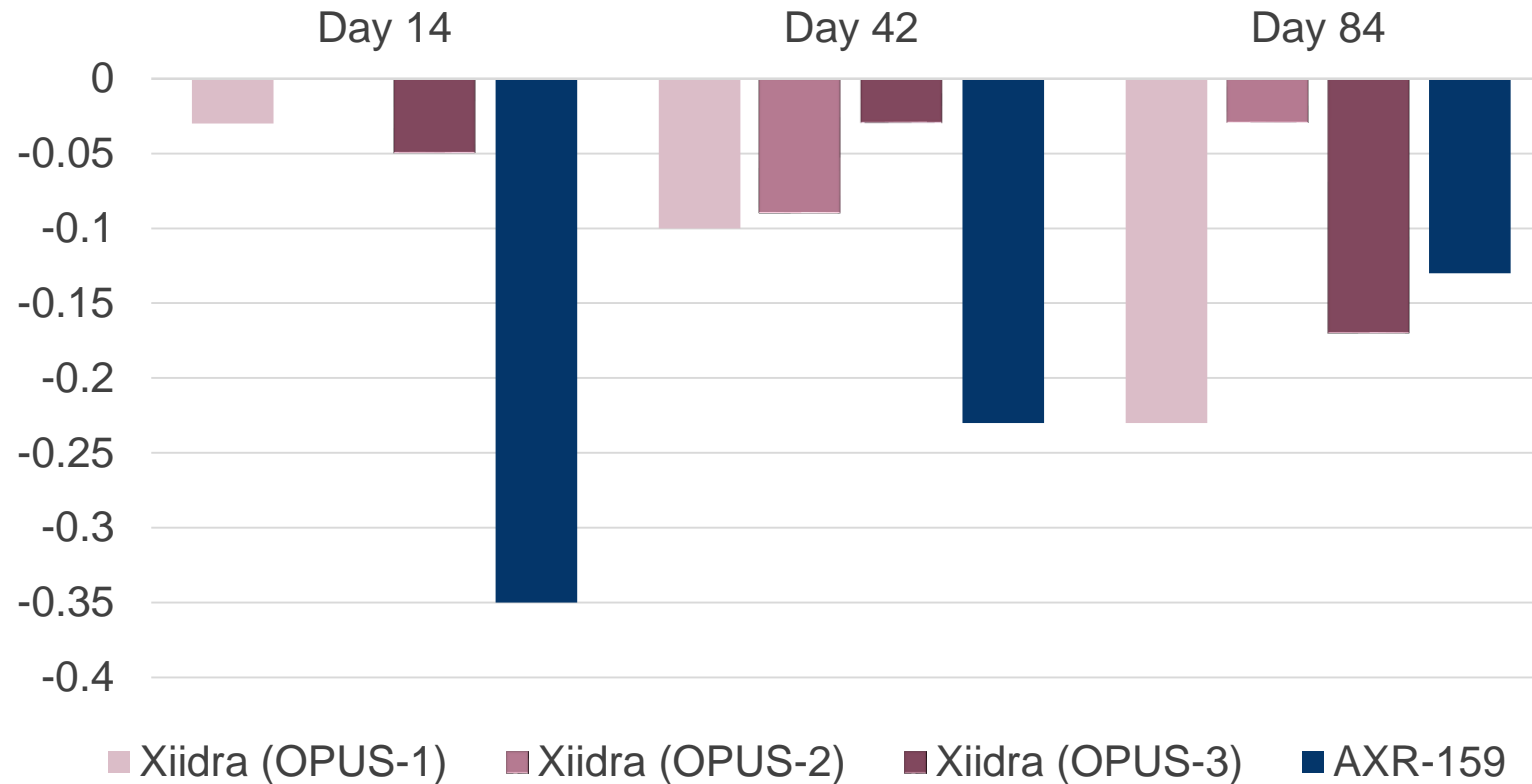
Responder Subpopulation, Day 14
CFB Total Staining Score



Faster Onset and Superior Acute Efficacy Than Xiidra

AXR-159 (pre-specified responder group) comparison with Xiidra

Inferior Corneal Staining Score (CFB Drug – Vehicle)



Scientific Advisory Board

World leading experts in ocular surface disease and drug development



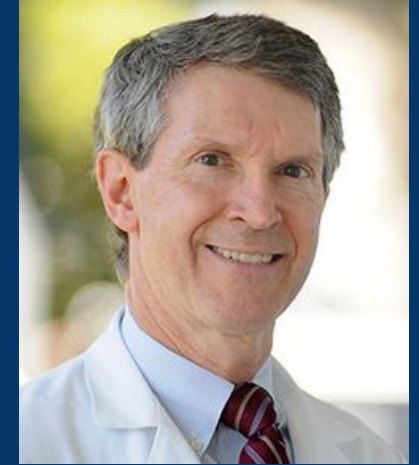
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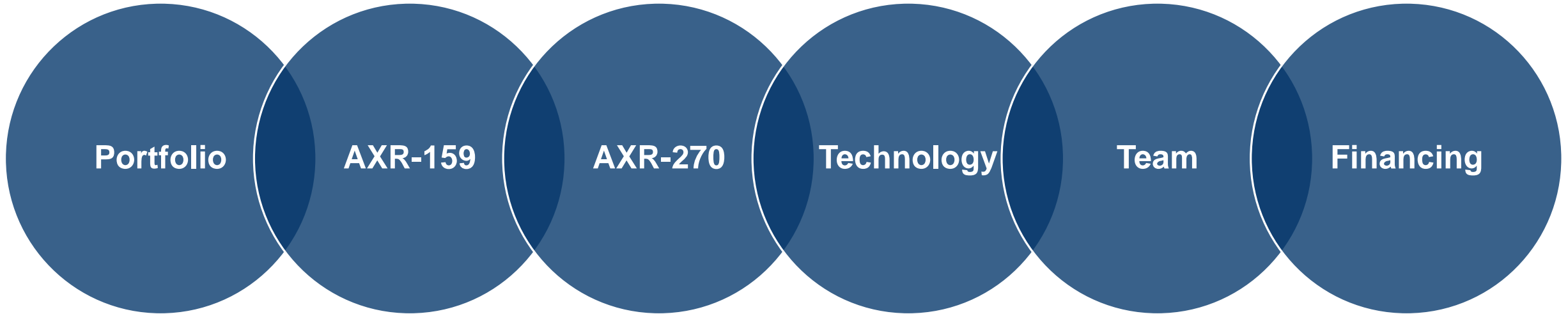


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Future Plans



Advance portfolio in dry eye disease, blepharitis

Prepare for BID dose-ranging study

IND filing in 2019; initiate POC study in early 2020

Build new once-daily delivery platform: goal to replace eye drops

Seasoned team positioned to take AXR-159 and AXR-270 to approval

Looking for additional funding to advance our ambitious plans