A First-in-Class Investigational Bispecific Intravitreal Biologic for the Treatment of Macular Edema Secondary to Inflammation (MESI)

International Ocular Inflammation Society 2025

Forward-Looking Statements

These slides contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These forward-looking statements are not based on historical fact and include statements regarding: the progress and anticipated benefits of our ABC platform; the prospects, anticipated milestones and potential benefits of the candidates in our pipeline, including tarcocimab, KSI-501, KSI-101, KSI-102 and KSI-103; the expected enhancements and benefits of a new formulation; our ability to successfully execute on our manufacturing development plan; the timing and success of our planned Biologics License Application ("BLA") package; the timing of anticipated data readouts; and the timing of initiation of Phase 3 PEAK and PINNACLE studies. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "could," "expect," "plan," "believe," "intend," "pursue," and other similar expressions among others. Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. The risks and uncertainties include, but are not limited to: the risk that cessation or delay of any of the on-going clinical studies and our development of tarcocimab, KSI-501 or KSI-101 may occur; the risk that ongoing clinical trial results may not provide the evidence, insights, or benefits as anticipated; the risk that safety, efficacy, and durability data observed in our product candidates in current or prior studies may not continue or persist; the risk that the results of the tarcocimab Phase 3 studies may not be sufficient to support a single BLA submission for DR, RVO and wet AMD; the risk that a BLA may not be accepted by, or receive approval from, the FDA or foreign regulatory agencies when expected, or at all; future potential regulatory milestones of tarcocimab, KSI-501 or KSI-101, including those related to current and planned clinical studies, may be insufficient to support regulatory submissions or approval; the risk that a new formulation of tarcocimab, KSI-501 or other ABC Platform derived molecules may not provide the benefits expected; our research and development efforts and our ability to advance our product candidates into later stages of development may fail; the risk that KSI-501 may not inhibit VEGF and IL-6 or have an impact on the treatment of patients as expected; any one or more of our product candidates may not be successfully developed, approved or commercialized; our manufacturing facilities may not operate as expected; adverse conditions in the general domestic and global economic markets, which may significantly impact our business and operations, including our clinical trial sites, as well as the business or operations of our manufacturers, contract research organizations or other third parties with whom we conduct business; as well as the other risks Identified in our filings with the Securities and Exchange Commission. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our most recent Form 10-Q, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof and Kodiak undertakes no obligation to update forward looking statements, and readers are cautioned not to place undue reliance on such forward-looking statements. Kodiak®, Kodiak Sciences®, ABC®, ABC Platform®, and the Kodiak logo are registered trademarks or trademarks of Kodiak Sciences Inc. in various global jurisdictions.

Victor Perlroth, MD
CEO, Kodiak Sciences

Kodiak Today

Three late-phase clinical assets

Advancing in parallel across a broad spectrum of retinal diseases in growing markets.

On track for phase 1b data in 2025 and Phase 3 topline data in 2026

Dedicated commercial scale manufacturing facility

Custom designed, commercial scale manufacturing facility dedicated to the premium manufacture of Kodiak's ABC® medicines.

Commissioned as a cGMP facility in 2023

BLA filing preparation

On track towards our goal of filing a single BLA for tarcocimab in the 3 large indications of wet AMD, retinal vein occlusion and diabetic retinopathy in 2026.

BLA-facing data for KSI-501 and KSI-101 is expected 2026

Visual engagement platform

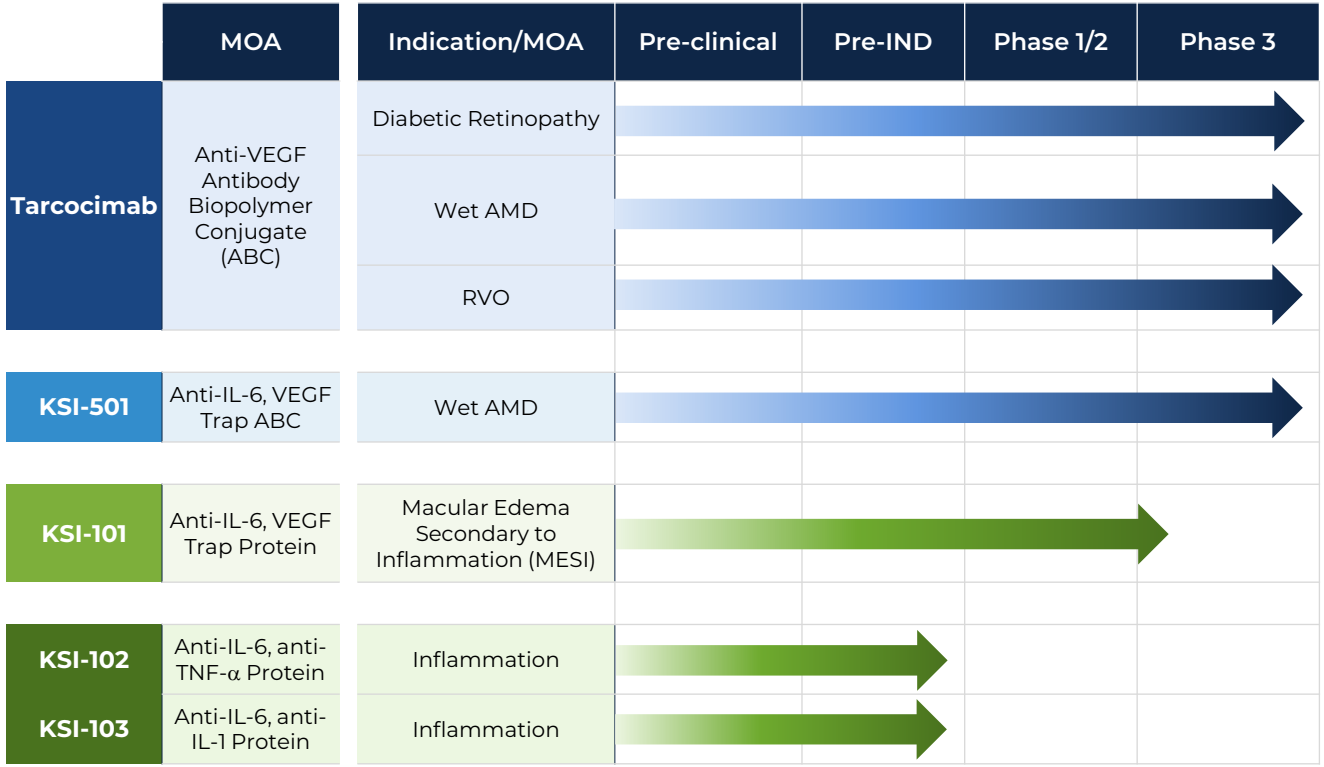
Visual engagement technology and imager (VETi), an autonomous AI- and machine-learning-enabled headset that engages directly into the eye for retina disease management & long-term health engagement

Robust pipeline program

Kodiak's next set of investigational therapies targeting glaucoma and geographic atrophy, built on the ABC® platform, enabling an even larger group of high unmet need diseases and patients

Three clinical assets include tarcocimab (Phase 3), KSI-501 (Phase 3), and KSI-101 (Phase 1b; expected to initiate dual PEAK/PINNACLE Phase 3 studies mid 2025).
ABC: antibody biopolymer conjugate; BLA: biologics license application; AMD: age-related macular degeneration

Kodiak is a precommercial, retina-focused biotech with a maturing portfolio in retinal vascular disease and in ocular inflammation



- GLOW1 primary endpoint met
- **GLOW2 topline data expected Q1 2026**

- DAYLIGHT primary endpoint met
- **DAYBREAK actively enrolling; topline data expected mid-2026**

- BEACON primary endpoint met

- **DAYBREAK actively enrolling**
- **Topline data expected mid-2026**

- **Phase 1b APEX study ongoing**
- **Emerging APEX data 2Q and 3Q 2025**
- **On track to initiate Phase 3 PEAK and PINNACLE studies in 2Q 2025**

- **Entering IND enabling studies**

ABC: antibody biopolymer conjugate; RVO: retinal vein occlusion; AMD: age-related macular degeneration

Three late-stage clinical assets across a broad spectrum of retinal diseases

Phase 3

TARCOCIMAB

Anti-VEGF ABC® for patients with retinal vascular disease

- **Compelling 6-month predominant durability demonstrated** across three completed phase 3 studies (DR, RVO and wet AMD)
- **Enhanced formulation** designed for high immediacy and high durability
- Phase 3 GLOW2 DR topline data in 1Q2026
- Phase 3 DAYBREAK wet AMD topline data in mid-2026

Phase 3 / First-in-class

KSI-501

Anti-IL-6 VEGF trap bispecific ABC® for patients with retinal vascular disease

- **Dual inhibition of IL-6 and VEGF with potential for additional efficacy beyond anti-VEGF monotherapies** while maintaining signature durability of ABC platform
- **Enhanced formulation** designed for high immediacy and high durability
- Phase 3 DAYBREAK wet AMD topline data in mid-2026

Phase 1b / First-in-class

KSI-101

High-strength anti-IL-6 anti-VEGF bispecific protein for macular edema secondary to inflammation

- **High-strength, dual inhibition of IL-6 and VEGF for potent control of macular edema secondary to inflammation (MESI)**
- Unmet need with no approved biologic therapy today
- Phase 1b APEX in patients with MESI, data presentation planned for July 2025
- Phase 3 PEAK and PINNACLE studies in MESI on track to start in 2Q25

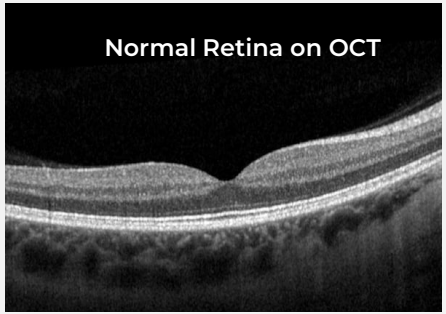
ABC: antibody biopolymer conjugate; DR: diabetic retinopathy; RVO: retinal vein occlusion; AMD: age-related macular degeneration

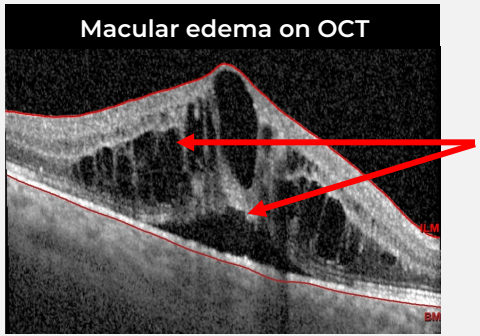
Lyndell Lim
MBBS, DMedSci

KSI-101

A First-in-Class Investigational Bispecific Intravitreal Biologic for the Treatment of Macular Edema Secondary to Inflammation (MESI)

Macular edema is the leading cause of vision loss among patients with ocular inflammation



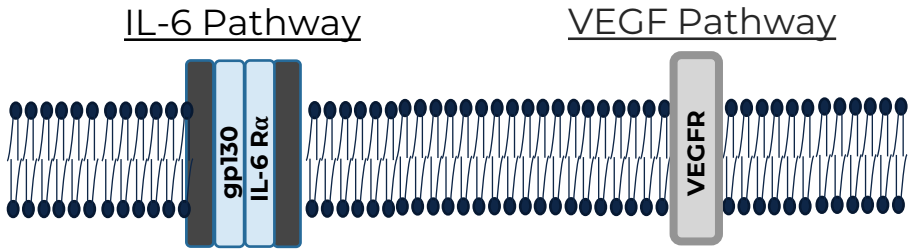


Fluid that leaked into the retina causing macular edema

- **Ocular inflammation is the 4th leading cause of vision loss among working aged adults in the developed world[1]**
- **Approximately 1/3 of patients with ocular inflammation develop macular edema in the U.S.[2]**
- **Macular edema is the leading cause of vision loss among patients with ocular inflammation**

1. *Br J Ophthalmol.* 2004;88(9):1159-1162. 2. Tomkins-Netzer O, et al. Ophthalmology. 2021 May;128(5):719-728.

IL-6, a proinflammatory cytokine, and VEGF play key roles in driving the accumulation of fluid in the retina



Endothelial Activation

Vascular Hypertrophy

Endothelial Survival

Endothelial Proliferation

Endothelial Migration

Vascular Fibrosis

Immune Cell Recruitment

Vascular Permeability

Endothelial Dysfunction

Inflammation

Blood-Retinal Barrier Breakdown

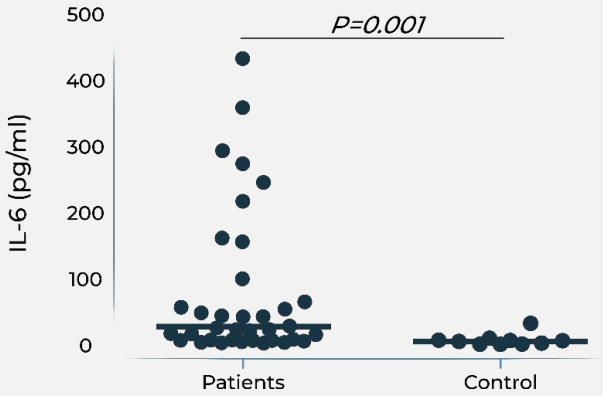
Angiogenesis

Both IL-6 and VEGF levels are elevated in patients who have ocular inflammation and macular edema

IL-6

- IL-6 levels are elevated in patients with ocular inflammation and further elevated in patients with inflammatory macular edema

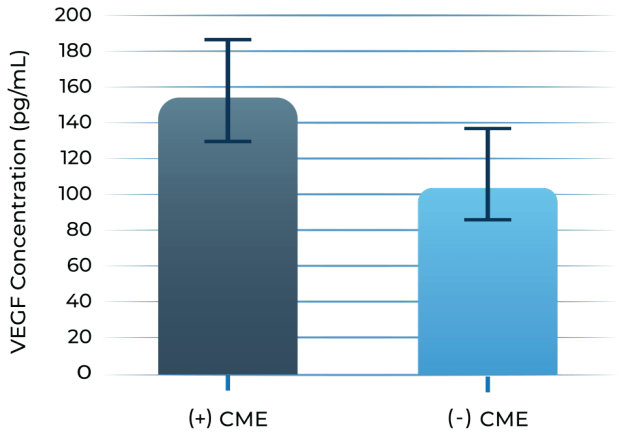
Aqueous humor IL-6 levels in patients with intermediate uveitis[1]



VEGF

- Persistent inflammation triggers VEGF upregulation. VEGF levels are found to be elevated in eyes with inflammatory macular edema

VEGF levels in aqueous humor of uveitis patients with macular edema vs without macular edema[2]

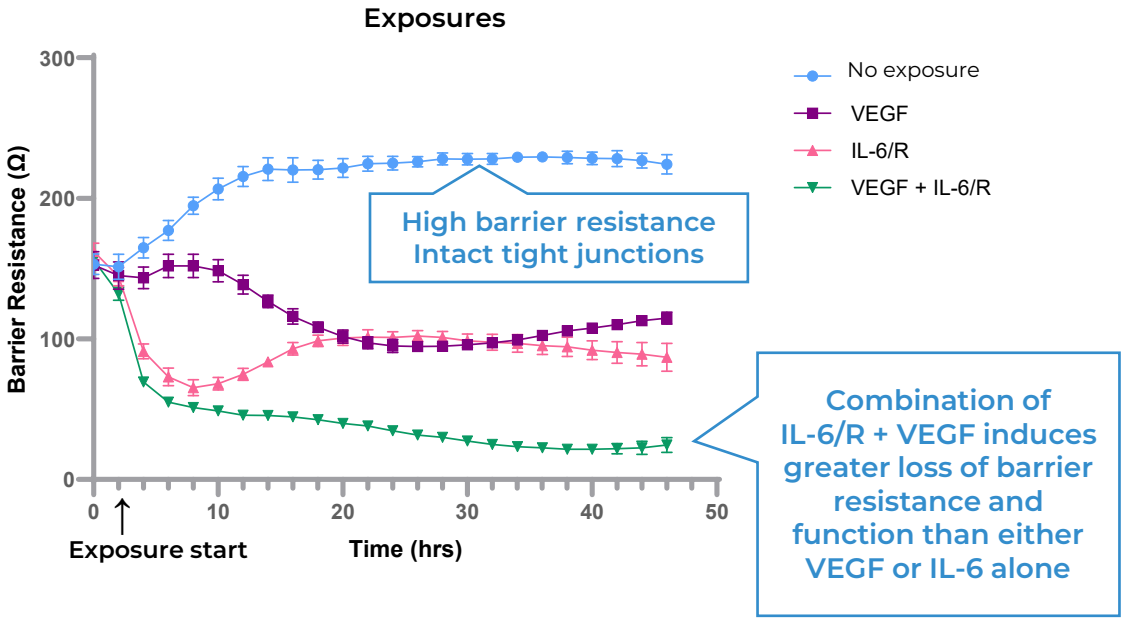


CME: cystoid macular edema

1. Adapted from Valentincic et al. Molecular Vision 2011; 17: 2003-2010. 2. Adapted from Fine et al. Am J Ophthal. 2001; 132: 794-796.

IL-6 and VEGF each disrupt the blood-retinal barrier independently. When combined, they cause an even greater loss of barrier integrity

- Ocular inflammation damages tight junctions between endothelial cells, compromising the integrity of the BRB. This increases vascular permeability[1]
- The integrity of the blood-retinal barrier can be measured by barrier resistance
- Exposure to both IL-6/R and VEGF **additively induces greater loss in barrier function**, as measured by decreased barrier resistance, than either IL-6 of VEGF alone, in human umbilical vein endothelial cells (HUVEC)



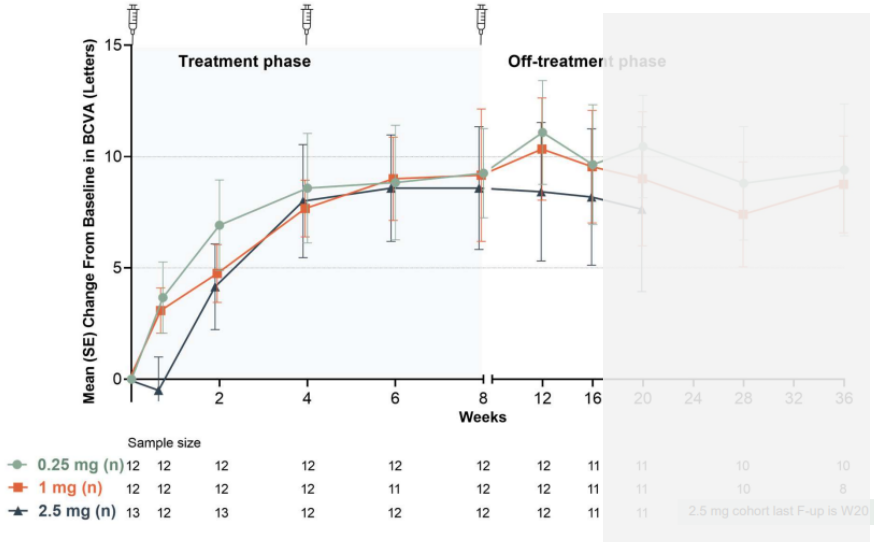
HUVEC cells were treated as indicated after growth to establish barrier

1. Vinores SA. Encyclopedia of the Eye. 2010:216–22.
BRB: blood-retinal barrier.

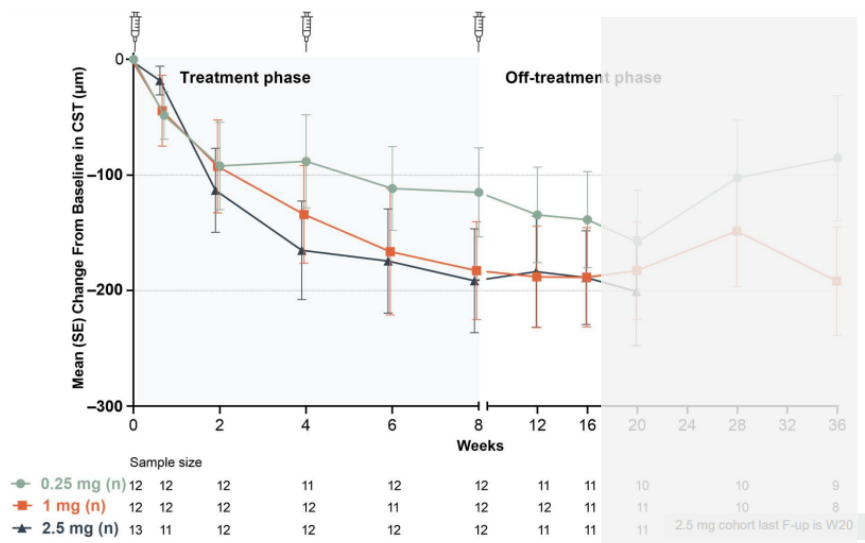
KODIAK

Vamikibart (Roche, anti-IL-6) has shown that anti-IL-6 monotherapy can provide visual and anatomical improvement in patients with inflammatory macular edema

Change from Baseline in BCVA



Change from Baseline in CST

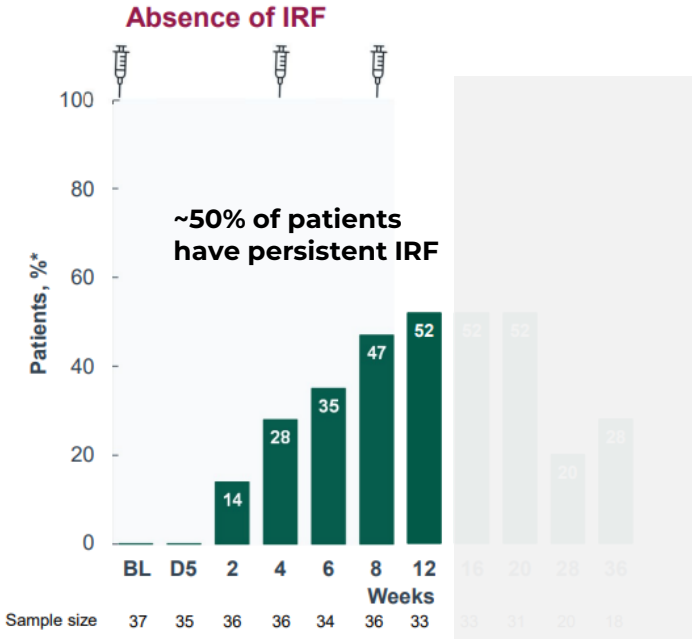


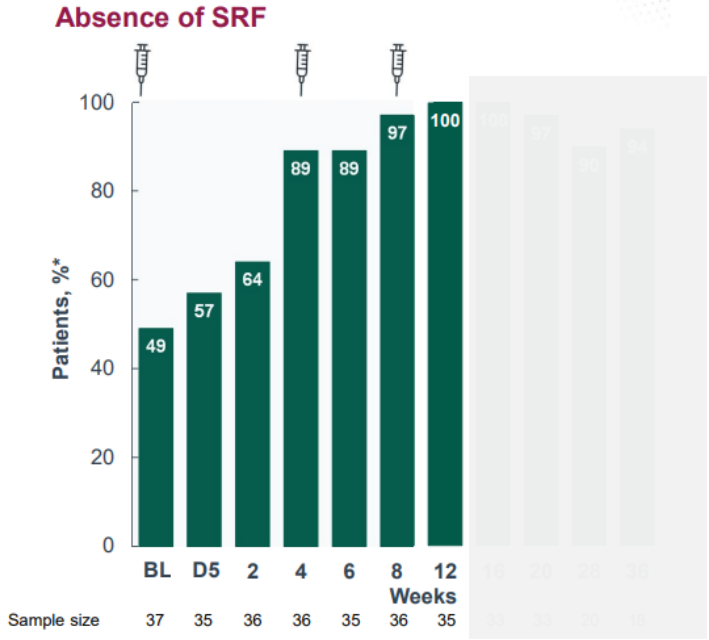
A clear dose response is seen with IL-6 monotherapy in patients with inflammatory macular edema

KODIAK

Sharma, et al. A Novel Intravitreal Anti-IL-6 Monoclonal Antibody for Uveitic Macular Edema (UME): Preliminary Results From the Phase 1 DOVETAIL Study. Presented at the American Society of Retina Specialists, Seattle, WA, July 28 – August 1, 2023

While intravitreal IL-6 monotherapy is helpful, 50% of patients have persistent IRF, similar to the overall failure rate of systemic adalimumab[1], leaving room for a more potent therapy





Persistent intraretinal fluid (IRF) is known to cause deleterious and permanent effects on visual function

1. Jaffe et al. N Engl J Med. 2016. 375:932-43. 2. Figure from Sharma, et al. A Novel Intravitreal Anti-IL-6 Monoclonal Antibody for Uveitic Macular Edema (UME): Preliminary Results From the Phase 1 DOVETAIL Study. Presented at the American Society of Retina Specialists, Seattle, WA, July 28 – August 1, 2023;

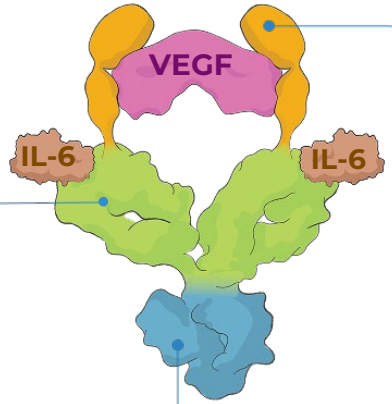
KSI-101 is a first-in-class, high-strength intravitreal biologic designed to target IL-6 mediated inflammation and VEGF-mediated vascular permeability simultaneously

KSI-101: high formulation strength (100 mg/mL)

Anti-IL-6 Antibody

Potent Anti-Inflammatory Effect

The anti-IL-6 antibody can inhibit up to two IL-6 molecules to block inflammation and normalize the blood retinal barriers



VEGF Trap

Broad VEGF Inhibition

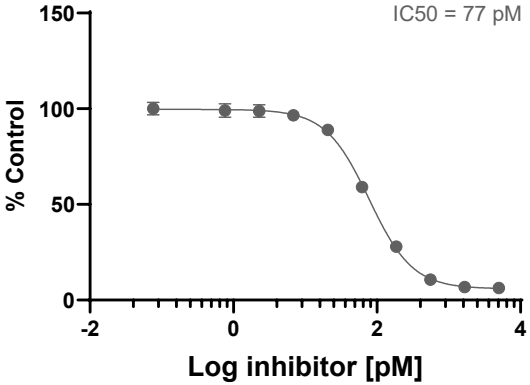
The VEGF trap mimics the native receptor and binds multiple targets including VEGF-A, VEGF-B and PIGF

Modified Fc

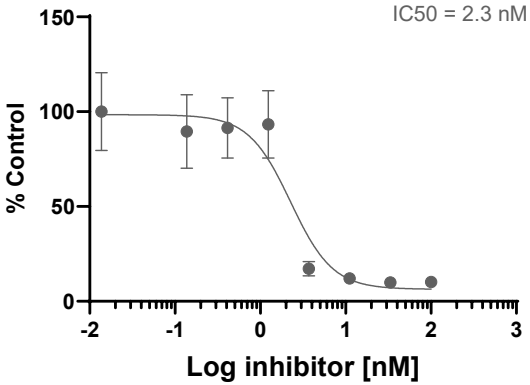
Immunologically inert antibody

KSI-101 is a potent dual inhibitor of VEGF signaling and IL-6 classic (cis) and soluble (trans) receptor-mediated pathways

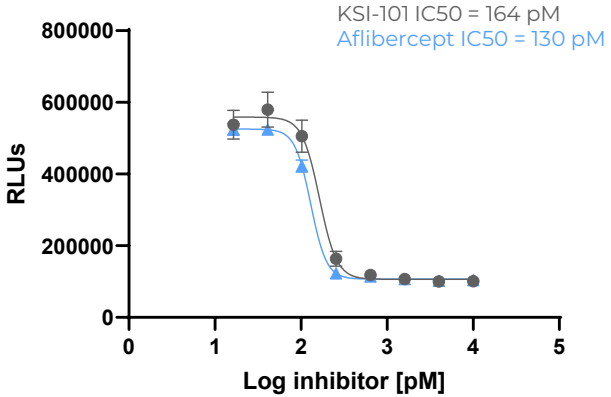
KSI-101 inhibits IL-6 classic signaling



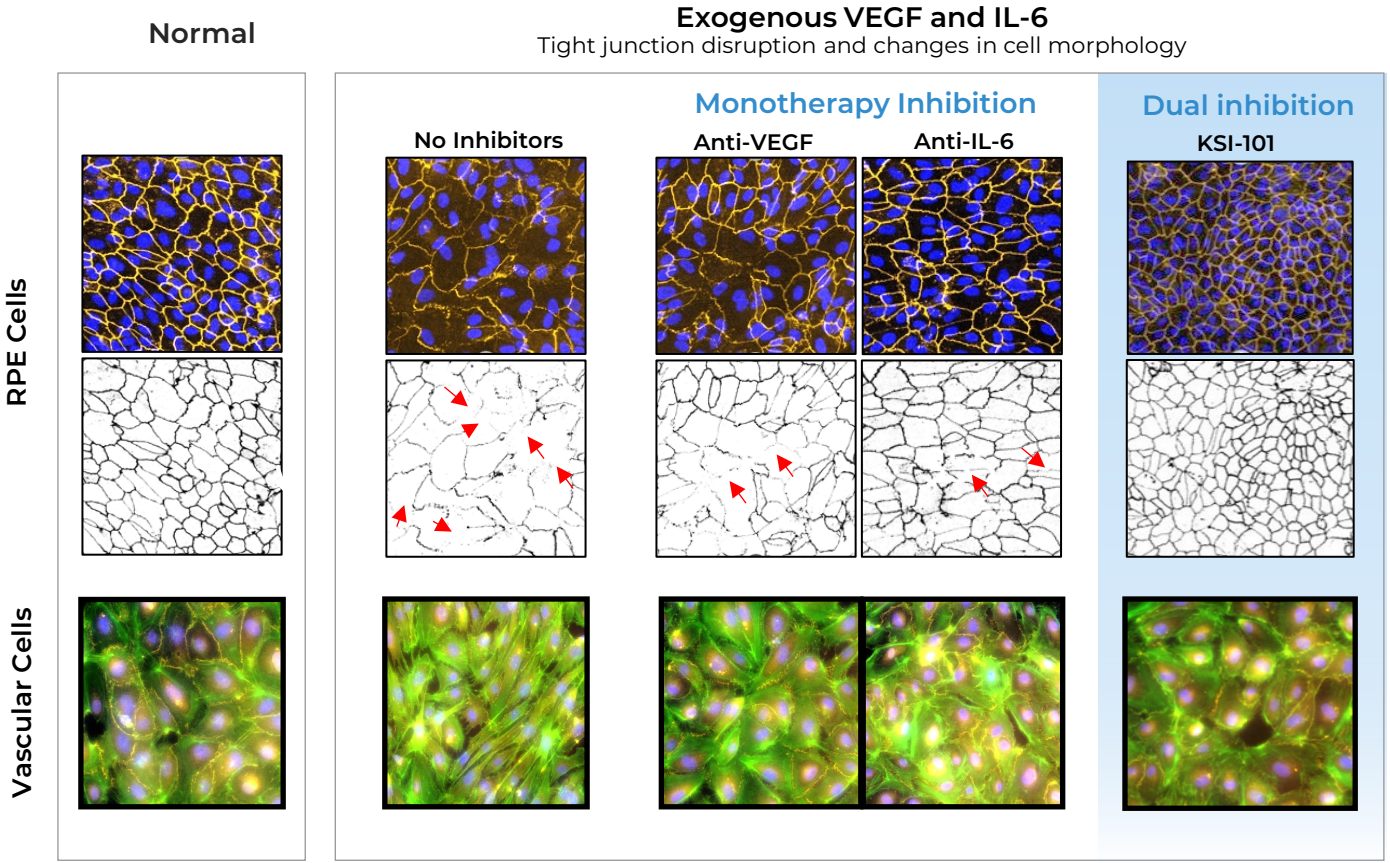
KSI-101 inhibits soluble IL-6 receptor-mediated signaling



KSI-101 inhibits VEGF signaling



Bispecific KSI-101 improves barrier tight junctions greater than anti-IL-6 or anti-VEGF monotherapies alone

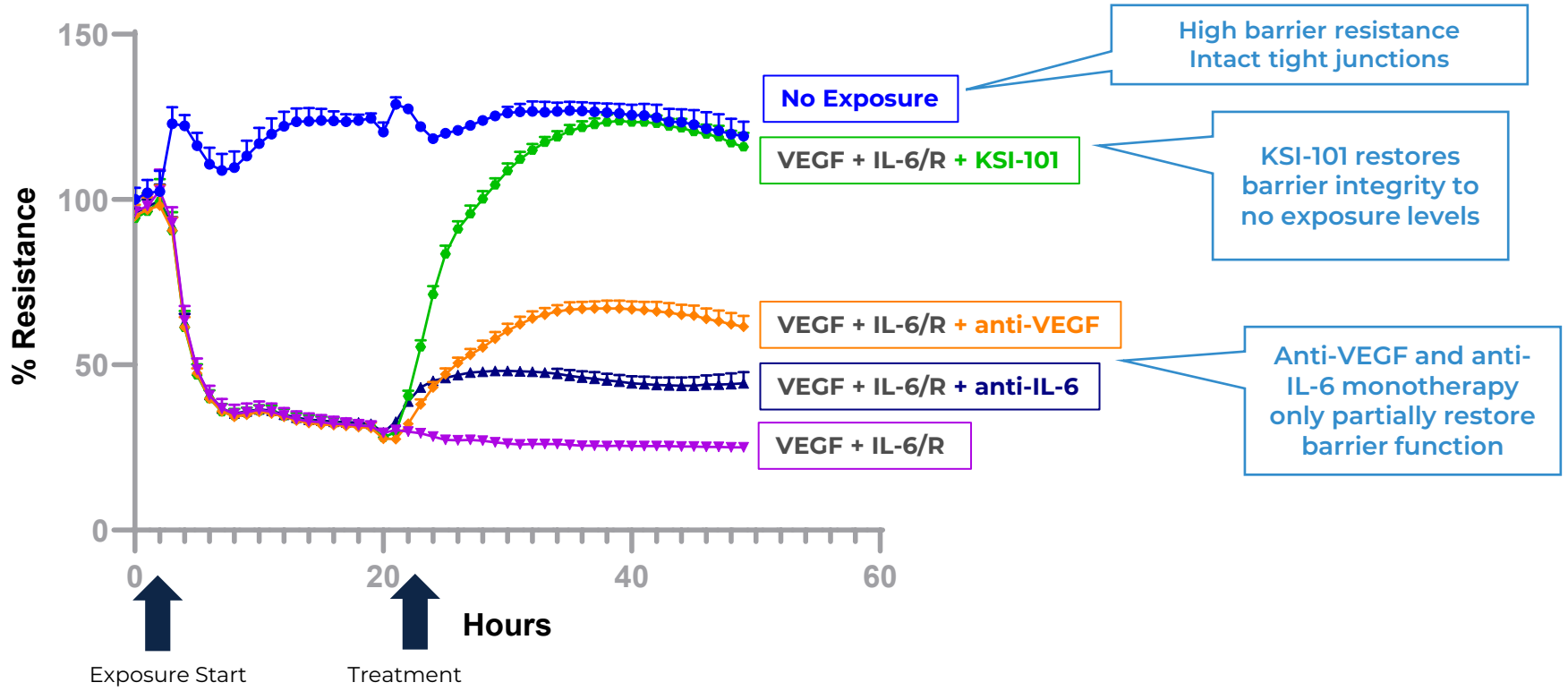


Dual inhibition by KSI-101 confers superior normalization of complex tight junction-mediated barrier biology compared to either anti-VEGF or anti-IL-6 monotherapy alone

Demonstrates the synergistic effect of IL-6 and VEGF dual inhibition

RPE cells: nuclei in blue, ZO1 (tight junction protein) in yellow. Red arrows indicate gaps in ZO-1 tight junction protein. Vascular cells: nuclei in purple, ZO1 (tight junction protein) in yellow, actin in green.

Bispecific KSI-101 restores barrier resistance from pre-existing insult greater than anti-IL-6 or anti-VEGF monotherapies alone



HUVEC cells were treated as indicated after growth to establish barrier

De-Kuang Hwang
MD, PhD

KSI-101 for the Treatment of MESI

Macular Edema Secondary to Inflammation

In the universe of macular edema, KSI-101 is being developed for the treatment of macular edema secondary to inflammation (MESI)

Driver is Inflammation

Idiopathic

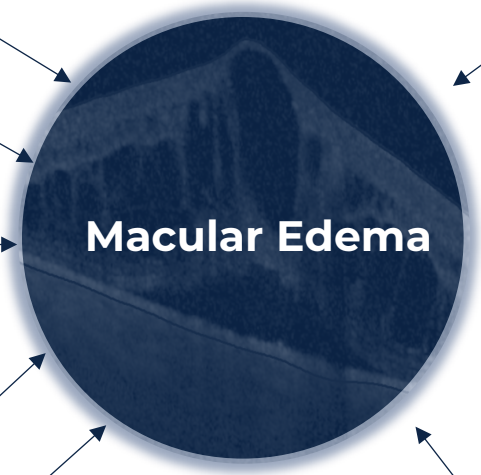
Uveitis
(cells in the eye)

Systemic or Autoimmune Disease

Inflammatory CNV

Post Surgical

"MESI"



Anti-VEGF Approved

Diabetic Macular Edema

Retinal Vein Occlusion

Neovascular AMD

Myopic CNV

AMD: age-related macular degeneration; CNV: choroidal neovascularization

There are several risk factors that increase the likelihood of developing Macular Edema Secondary to Inflammation

Risk factors for the development or progression of MESI:

- Female
- Autoimmune or systemic disease
- Nonanterior ocular inflammation
- History of uveitis
- Procedures (e.g., ocular surgery, tattoo)
- Infection

Patients that develop MESI tend to have an increased susceptibility to an underlying inflammatory “trigger”

1. Sohn, A., et al. Epidemiology of Uveitis in the United States. ARVO 2025. Poster #2862-A01552. Kodiak Data on File.

MESI has a heterogenous patient population. Case examples demonstrate how MESI is clinically unified but etiologically diverse

Potential causes of MESI

Uveitis

- **Macular edema is the leading cause of vision loss in patients with uveitis**, often referred to today as uveitic macular edema

Systemic / Autoimmune Disease

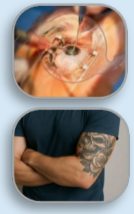
- **Systemic inflammatory disorders,** such as rheumatoid arthritis, sarcoidosis, ankylosing spondylitis and juvenile idiopathic arthritis are known to cause MESI

Idiopathic

?

- **No identifiable cause at time of diagnosis**

Post (Surgical) Procedure



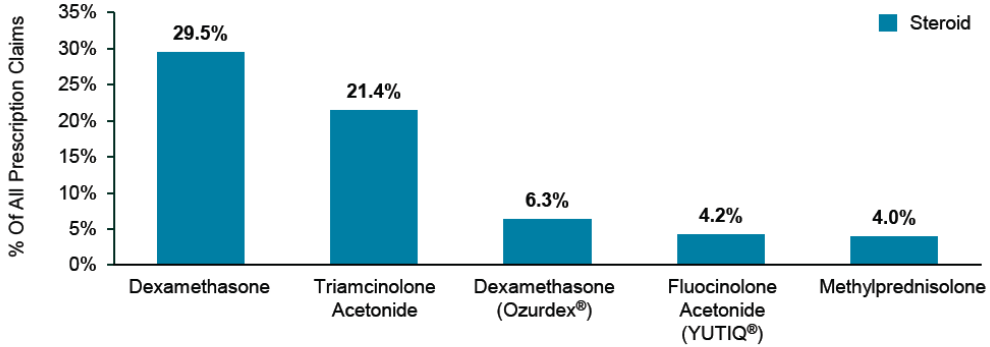
- Clinically significant macular edema that **does not resolve post cataract surgery**, typically called pseudophakic CME or Irvine Gass Syndrome
- Foreign body reactions to dyes used in **tattoos** can initiate a systemic inflammatory response that causes MESI[1]

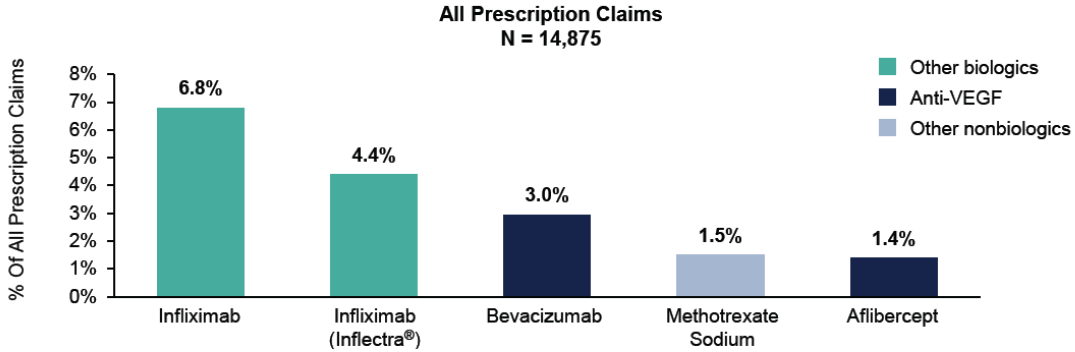
In all cases of MESI, macular edema is present and can persist despite clinical remission of inflammation

1. Saliba, N., et al. Tattoo-associated uveitis. *Eye* 24, 1406 (2010). CME: cystoid macular edema

Corticosteroids are used most often for MESI, but carry significant safety risks and efficacy is limited

Most frequently prescribed steroid and nonsteroid for uveitic macular edema, a form of MESI, medications across any line of therapy[1]



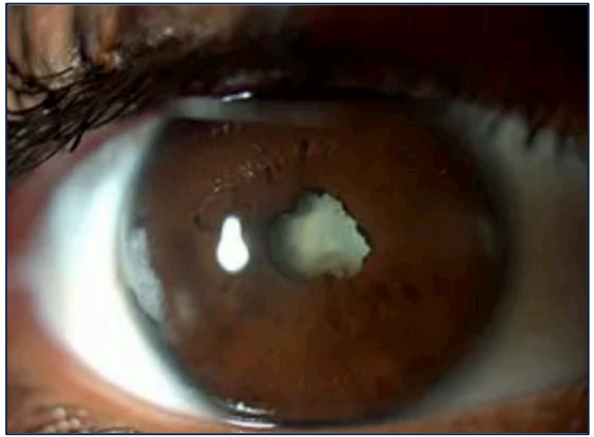


- Steroids were the most common medication class and remain the standard of care[1]
- XIPERE® (triamcinolone acetonide) is the only approved local ocular treatment in the U.S.
- **Approximately 30-40% of patients do not fully respond to intraocular steroids[2,3]**
- Intraocular steroids are avoided in the pediatric population and **used with caution in adults due to high risk of cataract formation and permanent glaucoma damage**

1. Eichenbaum, D. et al. ARVO 2025 Poster Presentation 643. 2. Teper SJ. *Journal of Clinical Medicine*. 2021; 10(18):4133. 3. Tomkins-Netzer O et al. Ophthalmology. 2015. 122:2351-2359.

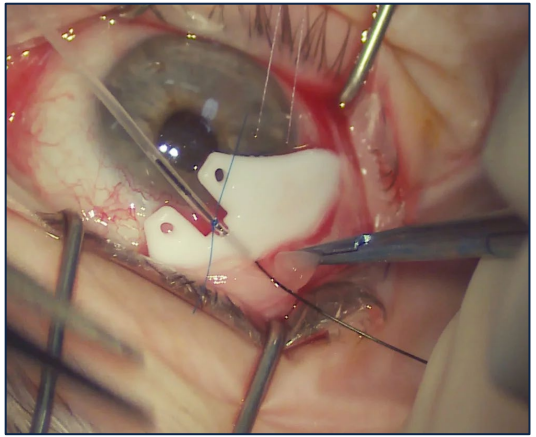
Treatments for MESI today are suboptimal, often leading to complications

Cataract in uveitis patients is complex



- Surgeries are complicated (synechiae/scarring)
- Surgeries can trigger fulminant inflammation, often need to leave the eyes without implant

Glaucoma surgery is invasive



- Once the optic nerve is damaged due to high eye pressure, the effects are irreversible
- Topical drops are often insufficient, needing invasive surgeries

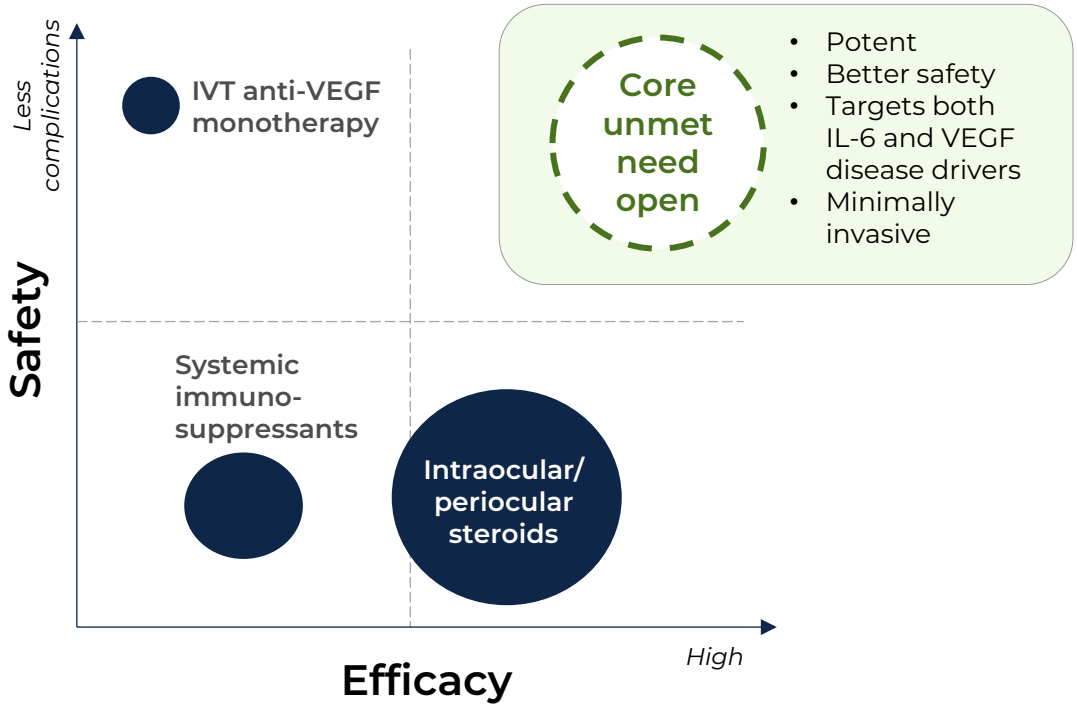
RETISERT® (fluocinolone acetonide intravitreal implant) label:

- **60% of patients will require chronic IOP lowering medications** to control intraocular pressure **and 37% will require filtering procedures** to control intraocular pressure
- Within an average post-implantation period of approximately 2 years, **nearly all phakic eyes are expected to develop cataracts and require cataract surgery**

1. RETISERT® (fluocinolone acetonide intravitreal implant) Prescribing Information.

KSI-101 is poised to fulfill the core unmet need in MESI based on its potential to be a disease modifying, high-strength, locally administered and safe biologic

Illustrative



KSI-101 is designed to address core unmet need

- **Potential for disease modifying** based on its synergistic inhibition of IL-6 and VEGF, as demonstrated in preclinical models and clinical cases
- **High strength formulation** (100 mg/mL) and **high potency** provide the fire-power needed to treat “angry” inflammation and macular edema
- **Local (intravitreal) administration**

De-Kuang Hwang
MD, PhD

Phase 1b APEX Case Examples in MESI

Phase 1b APEX study: multiple dose study of KSI-101 in patients with MESI

Subjects with MESI (n~36)

Weeks	0	4	8	12	16	20	24
2.5 mg	■	■	■	■			
5 mg	■	■	■	■			
10 mg	■	■	■	■			

■ KSI-101 injection

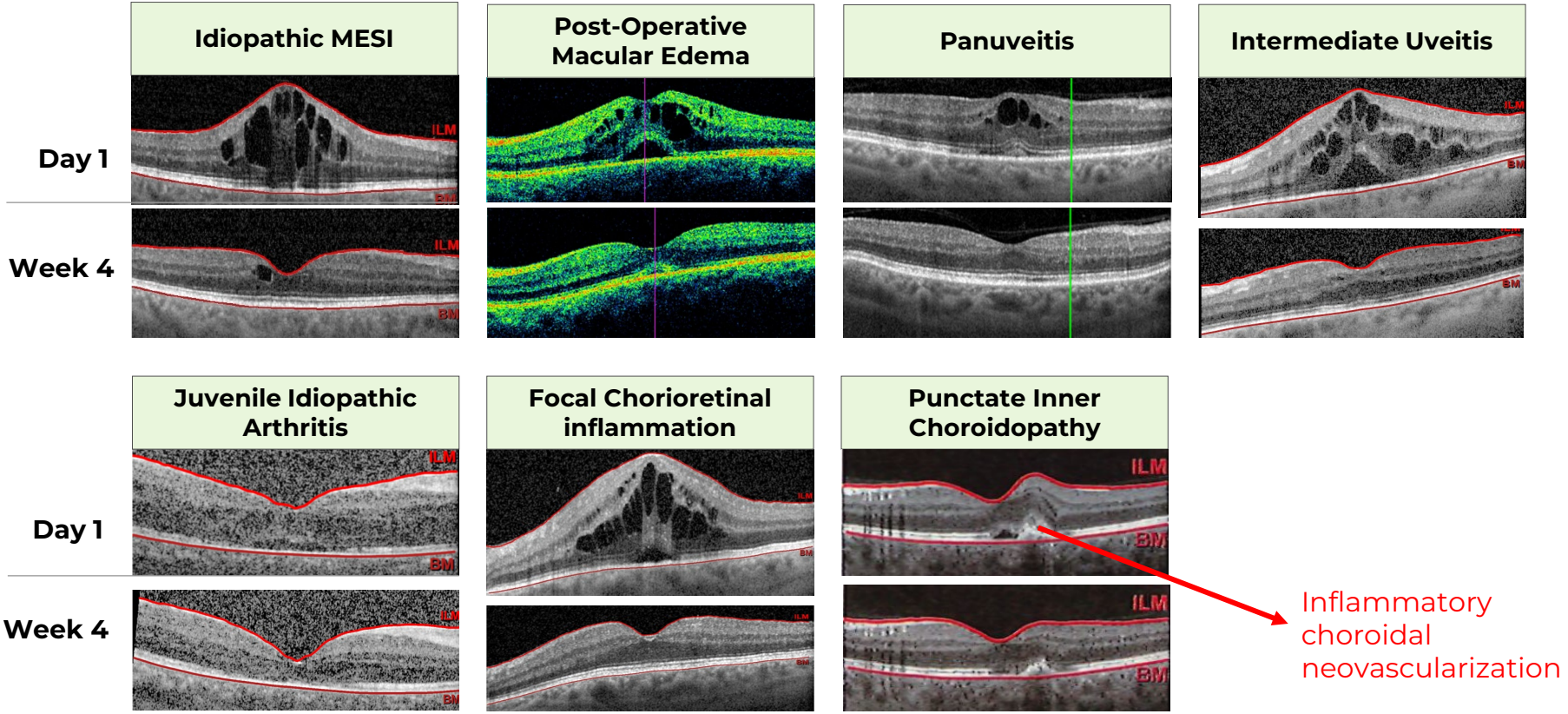
Ongoing

End of Study

A low and high dose of KSI-101 will be selected to progress into dual Phase 3 pivotal studies (PEAK and PINNACLE) in MESI

MESI: macular edema secondary to inflammation

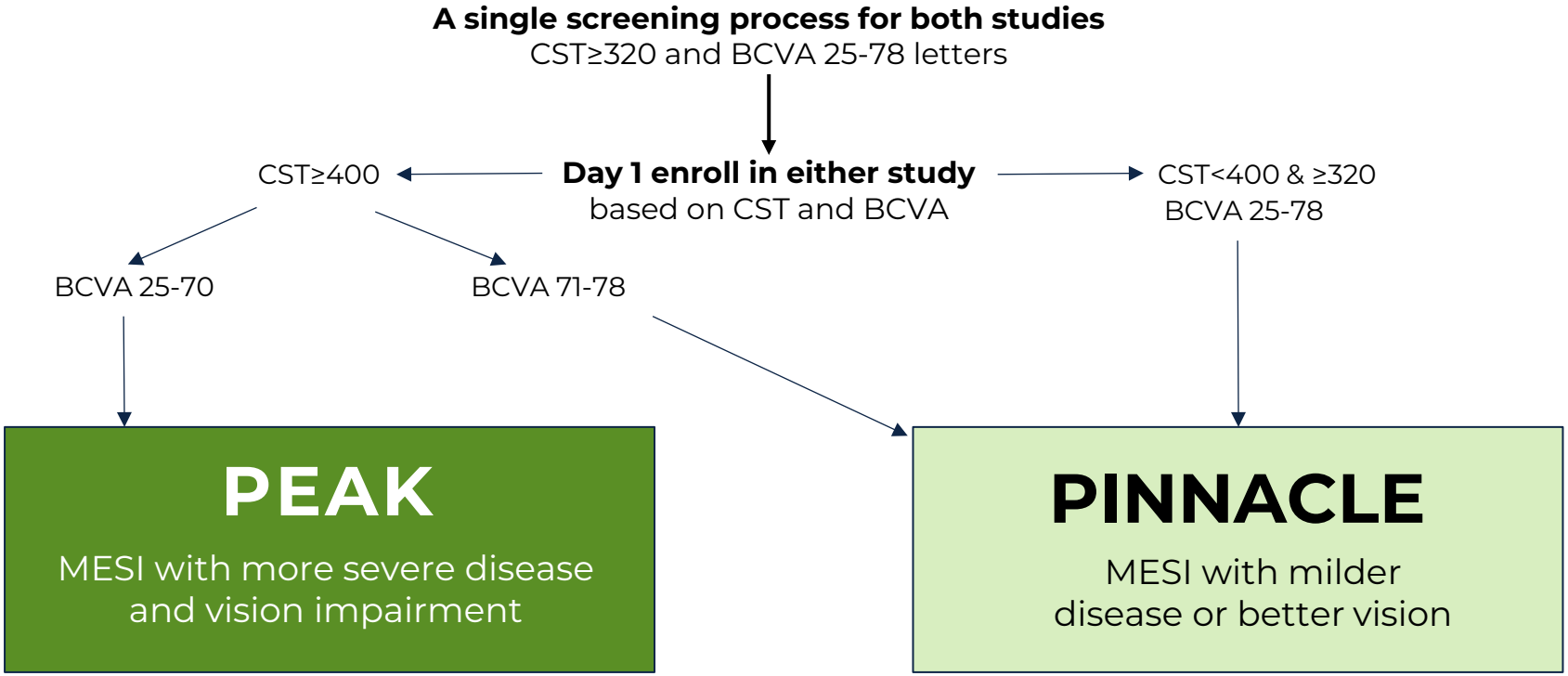
After one dose of KSI-101, heterogenous MESI diseases show rapid and meaningful responses to the simultaneous IL-6 and VEGF inhibition



Ariel Schlaen
MD, PhD

Phase 3 Program in MESI

Phase 3 Peak and Pinnacle studies: efficient master protocol design



Key eligibility criteria for MESI

PEAK

- CST of ≥400 microns on SD-OCT in Study Eye
- BCVA ETDRS score of ≥25 and ≤70 letters in the Study Eye

PINNACLE

- CST of <400 and ≥320 microns on SD-OCT *and* a BCVA score of ≥25 and ≤78 ETDRS letters in the Study Eye

OR

- CST of ≥400 microns on SD-OCT *and* a BCVA score of ≥71 and ≤78 ETDRS letters in the Study Eye

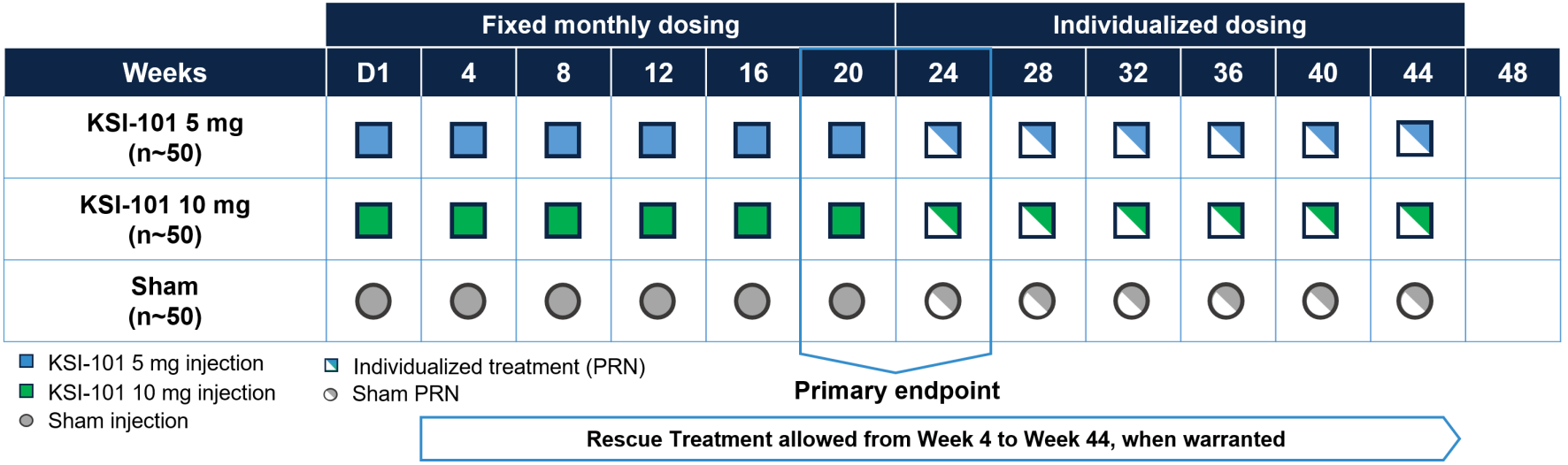
Key inclusion for both

- Adult patients with decrease in vision primarily resulting from MESI
- Active macular leakage with
- Active or inactive non-infectious intraocular inflammation, acute or chronic

Key exclusion for both

- Active or suspected ocular or periocular infection in either eye
- ME in the Study Eye secondary to DME, RVO, or wAMD

Phase 3 pivotal programs in MESI to be initiated mid-2025: PEAK and PINNACLE



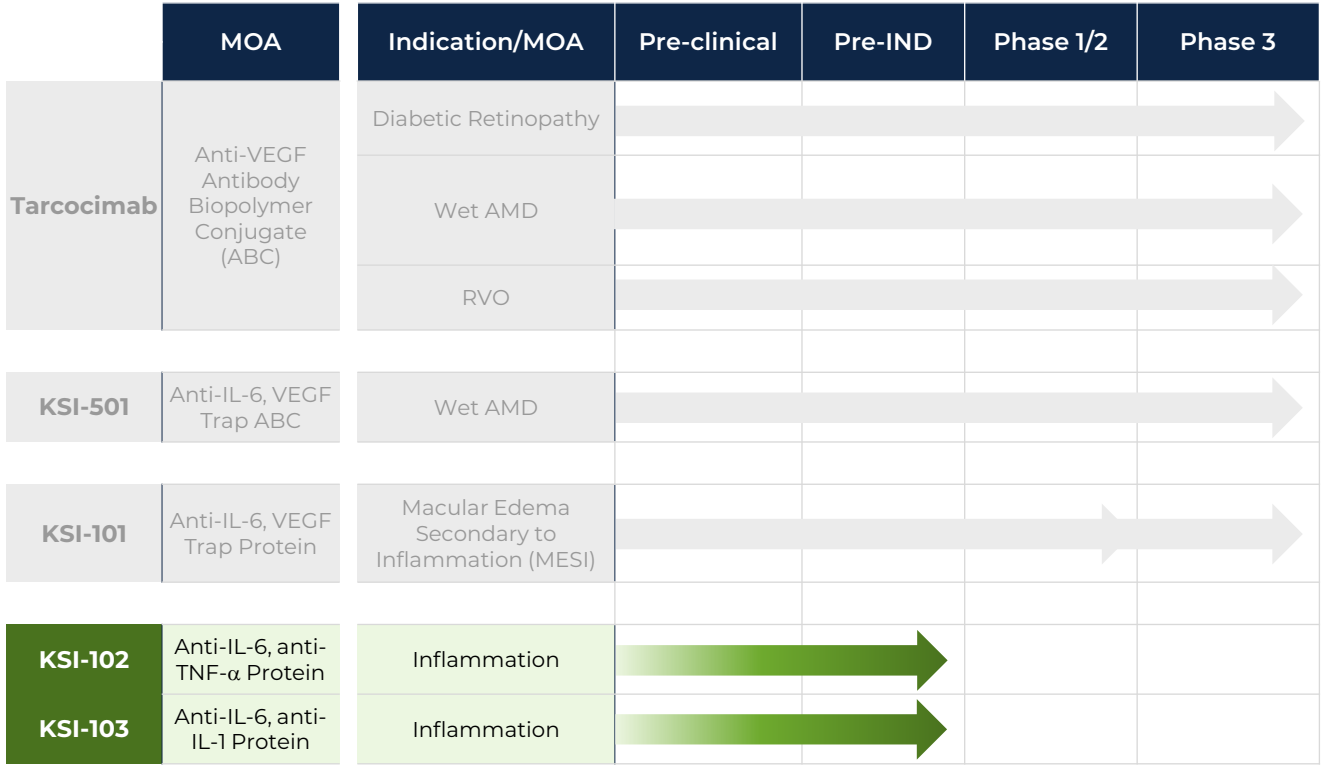
Primary endpoint: change in best corrected visual acuity from baseline

Ariel Schlaen
MD, PhD

Pipeline

Building on Kodiak's
Bispecific Protein Platform for
Ocular Inflammatory Disease

KSI-102 and KSI-103 are advancing and being developed for the treatment of ocular inflammation



- GLOW1 primary endpoint met
- **GLOW2 topline data expected Q1 2026**

- DAYLIGHT primary endpoint met
- **DAYBREAK actively enrolling; topline data expected mid-2026**

- BEACON primary endpoint met

- **DAYBREAK actively enrolling**
- **Topline data expected mid-2026**

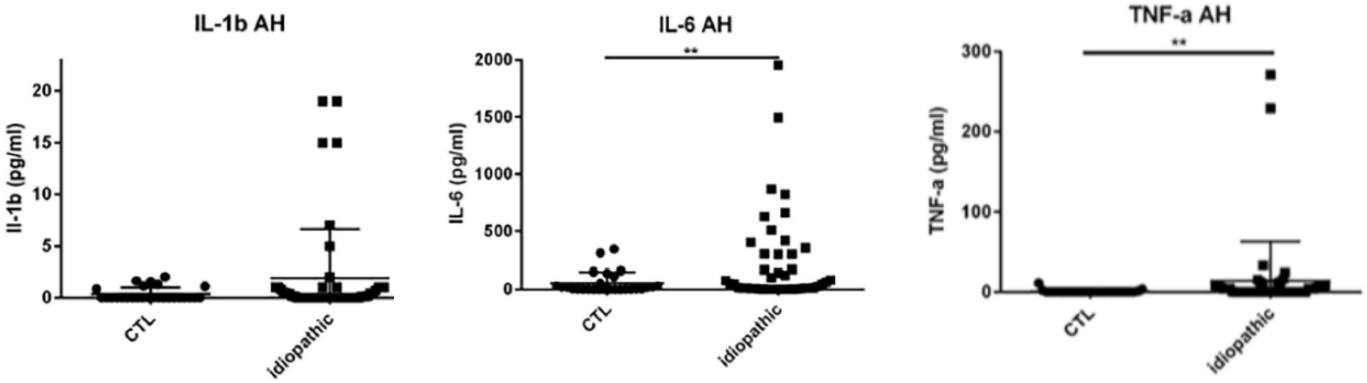
- **Phase 1b APEX study ongoing**
- **Emerging APEX data 2Q and 3Q 2025**
- **On track to initiate Phase 3 PEAK and PINNACLE studies in 2Q 2025**

- **Entering IND enabling studies**

ABC: antibody biopolymer conjugate; RVO: retinal vein occlusion; AMD: age-related macular degeneration

Complex cytokine interactions drive chronic ocular inflammatory disease. TNF-α, IL-6 and IL-1 levels are upregulated in these patients

Aqueous Humor

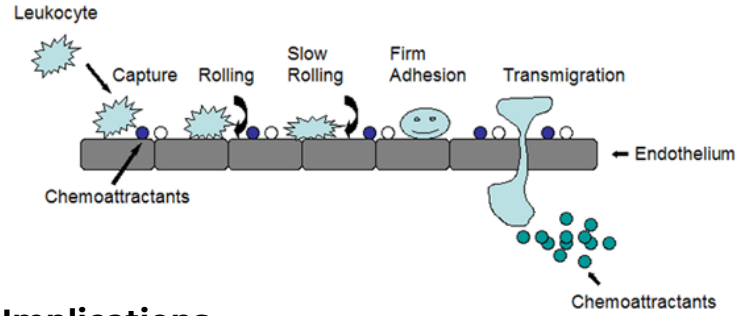


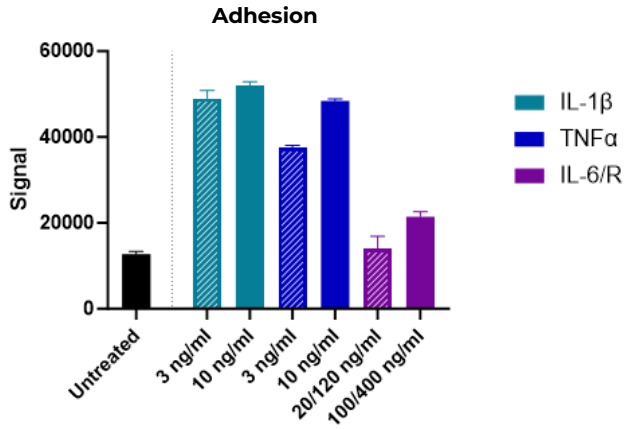
Dot plots comparing immune mediator levels in aqueous humor (AH) of patients with idiopathic uveitis and noninflammatory controls patients (cataract age-related)

1. Errera et al. PlosS One. 2022 Jan 21;17(1):e0254972.

Modeling ocular inflammation through leukocyte-endothelial adhesion: roles of TNF-α, IL1-β and IL-6

Leukocyte endothelial adhesion model





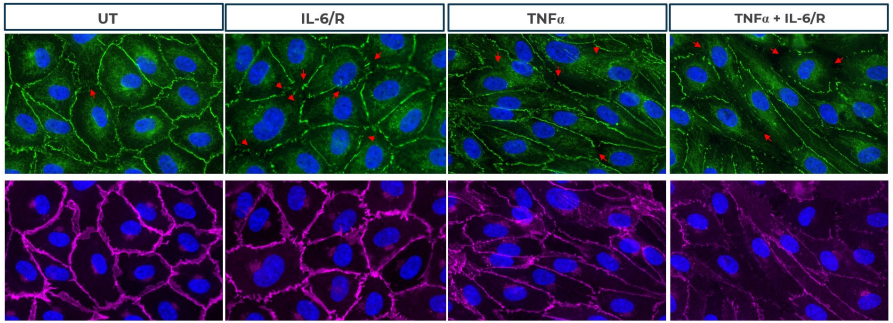
Implications

- **All 3 cytokines are involved in driving ocular inflammation:** TNFα, IL-1β and IL-6/R demonstrated leukocyte adhesion
- **IL-1β and TNFα have the strongest effect on leukocyte adhesion:** demonstrates the especially central role they play in driving an inflammatory response
- **As demonstrated earlier, IL-6/R is the primary driver of vascular permeability:** IL-6 plays a central role in destabilizing tight barrier junctions

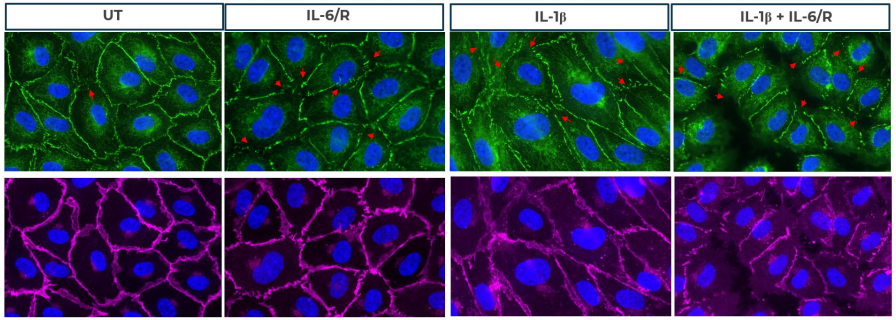
Human vascular endothelial cells were grown into a monolayer and treated with TNFα, IL-1 and / or IL-6 with IL-6 receptor prior to addition of labeled monocytic cells. Adherent cells were detected by fluorimetry after washing (Kodiak unpublished).

Modeling macular edema and vascular permeability: barrier function measurements reveal cytokines additively compromise the blood-retinal barrier

TNFa and IL-6

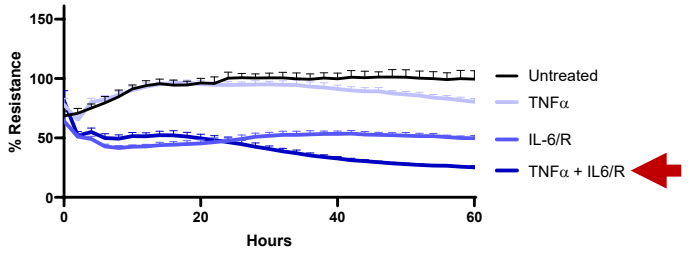


IL-1b and IL-6

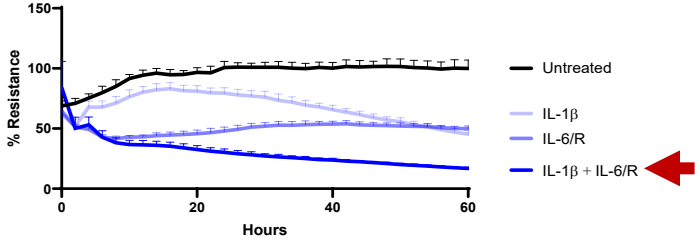


ZO-1 VE-Cadherin Nuclei

TNFa and IL-6



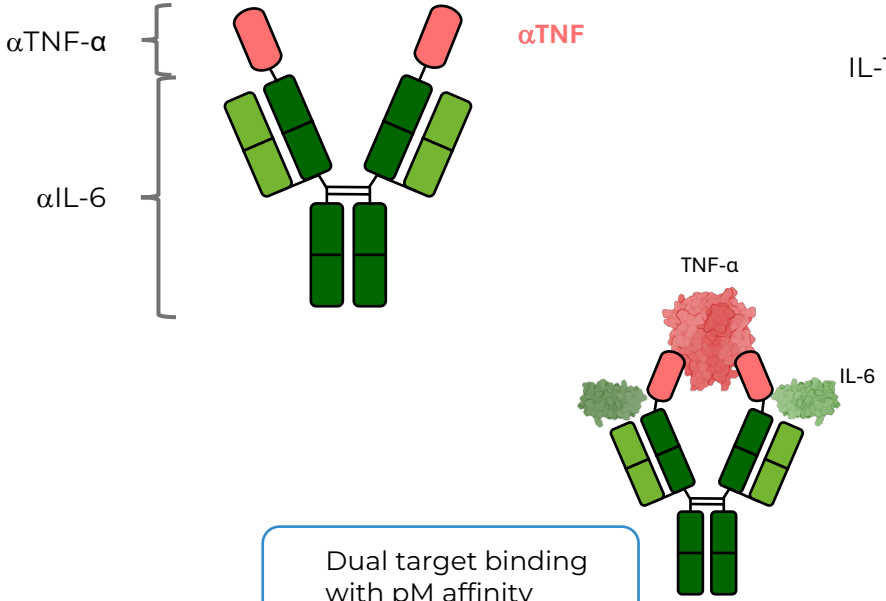
IL-1b and IL-6



Human endothelial cells were grown into a monolayer and treated with TNFa, IL-1b and / or IL-6 with IL-6 receptor prior to staining for junctional proteins ZO-1 and VE-Cadherin (loss marked with red arrows) and ECIS barrier resistance measurement (Kodiak unpublished)

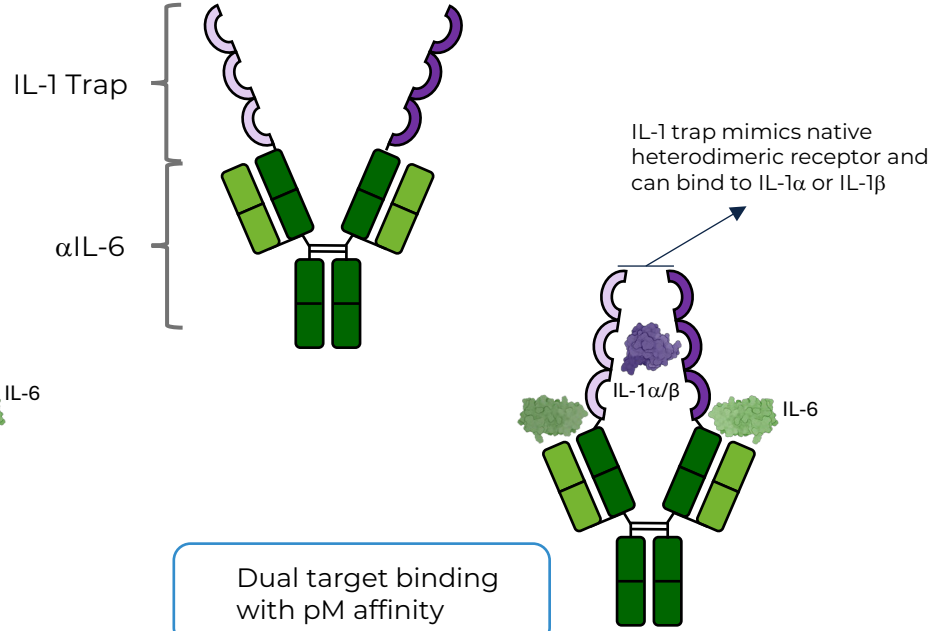
KSI-102 and KSI-103: Engineered to inhibit TNF-α/IL-6 and IL-1/IL-6 through dual cytokine targeting

KSI-102
(αTNF-α / αIL-6 bispecific)



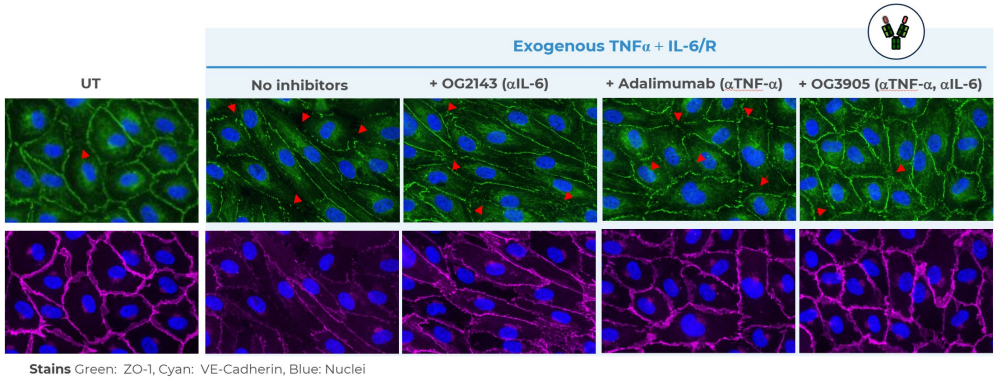
Dual target binding with pM affinity

KSI-103
(IL-1 trap / αIL-6 bispecific)

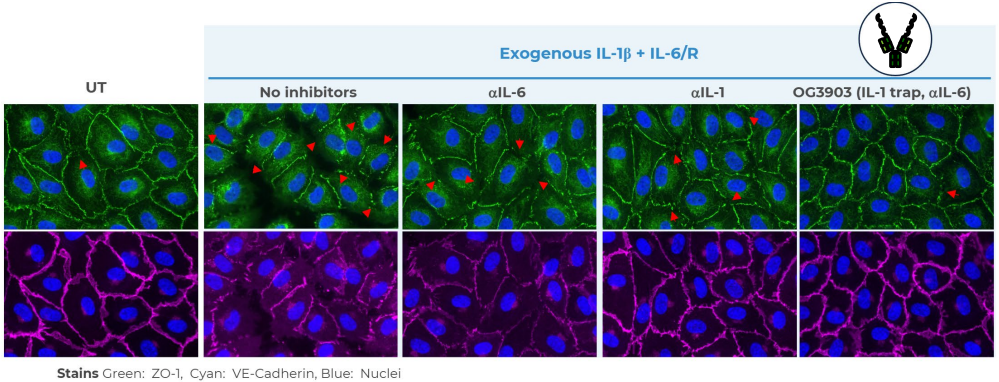


Dual target binding with pM affinity

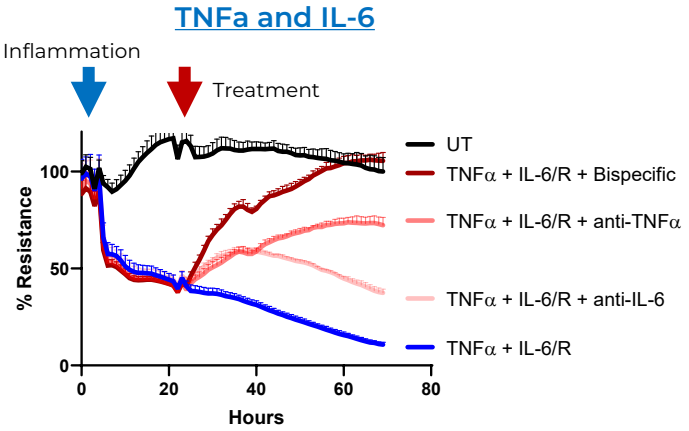
Bispecifics can superiorly (i) rescue junctional proteins, (ii) normalize cell morphology, and (iii) physiological barrier integrity and may (iv) normalize effects of existing inflammation

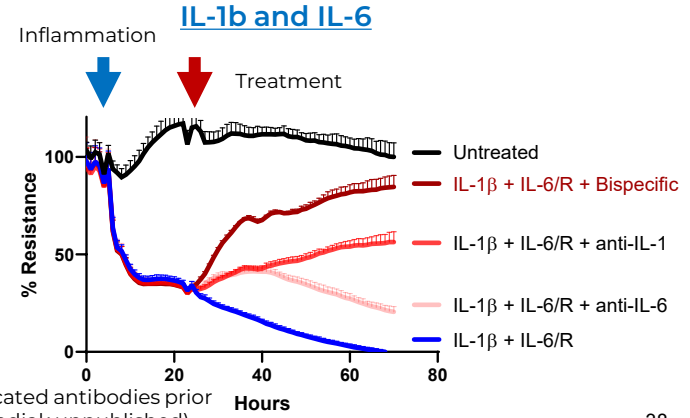


Stains Green: ZO-1, Cyan: VE-Cadherin, Blue: Nuclei



Stains Green: ZO-1, Cyan: VE-Cadherin, Blue: Nuclei





Human endothelial cells were treated with TNFα, IL-1β and/or IL-6 with IL-6 receptor and the indicated antibodies prior to staining for junctional proteins ZO-1 and VE-Cadherin and barrier resistance measurement. (Kodiak unpublished)

Panelist Discussion