UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): February 12, 2024

KIORA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

001-36672 (Commission File Number)

98-0443284 (IRS Employer Identification No.)

332 Encinitas Blvd. Suite 102 Encinitas, CA 92024

(858) 224-9600

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions: Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Name of each exchange on which registered NASDAQ Title of each class: Common Stock, \$0.01 par value

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 7.01. Regulation FD Disclosure.

Kiora Pharmaceuticals, Inc. (the "Company") hereby furnishes the updated investor presentation attached as Exhibit 99.1 to this Current Report on Form 8-K, which the Company may use in presentations to investors from time to time.

The information furnished pursuant to Item 7.01, including Exhibit 99.1, shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

The information furnished in this report, including Exhibit 99.1, shall not be deemed to constitute an admission that such information or exhibit is required to be furnished pursuant to Regulation FD or that such information or exhibit contains material information that is not otherwise publicly available. In addition, the Company does not assume any obligation to update such information or exhibit in the future.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

 Exhibit Number
 Title

 99.1
 Company Presentation

104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

^{*}Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The registrant hereby undertakes to furnish copies of any of the omitted schedules and exhibits upon request by the U.S. Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

KIORA PHARMACEUTICALS, INC.

By: /s/ Melissa Tosca
Melissa Tosca

Executive Vice President of Finance (Principal financial and accounting officer)

Date: February 12, 2024

Kiora Pharmaceuticals, Inc. NASDAQ: KPRX

H1 2024 | Corporate Overview



Forward Looking Statements

Some of the statements in this presentation are "forward-looking" and are made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995. These "forward-looking" statements include statements relating to, among other things, the development and commercialization efforts and other regulatory or marketing approval efforts pertaining to Kiora's developmentstage products, including KIO-301 and KIO-104, as well as the success thereof, with such approvals or success may not be obtained or achieved on a timely basis or at all, the potential ability of KIO-301 to restore vision in patients with RP, the expecting timing of enrollment, dosing and topline results for the ABACUS study, the ability to develop KIO-301 for Choroideremia and Stargardt Disease and KIO-104 for posterior non-infectious uveitis, the ability to utilize strategic relationships to develop certain product candidates, Kiora's ability to maintain the listing of our common stock on a national securities exchange, and Kiora's ability to achieve the specific milestones described herein. These statements involve risks and uncertainties that may cause results to differ materially from the statements set forth in this presentation, including, among other things, the ability to conduct clinical trials on a timely basis, the ability to obtain any required regulatory approvals, market and other conditions and certain risk factors described under the heading "Risk Factors" contained in Kiora's Annual Report on Form 10-K filed with the SEC on March 23, 2023, or described in Kiora's other public filings. Kiora's results may also be affected by factors of which Kiora is not currently aware. The forward-looking statements in this presentation speak only as of the date of this presentation. Kiora expressly disclaims any obligation or undertaking to release publicly any updates or revisions to such statements to reflect any change in its expectations with regard thereto or any changes in the events, conditions, or circumstances on which any such statement is based, except as required by law.

Sharpened Focus on Orphan Retinal Diseases

Kiora is developing retinal therapeutics to improve sight in patients with severe vision loss due to inherited or age-related diseases

Patient Perspective Individual's burden of disease



Physicians Perspective Efficient, cost-effective treatments

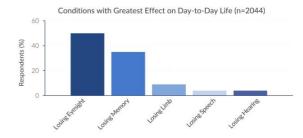
Societal Perspective Pharma industry obligation to help 70% of blind patients are unemployed

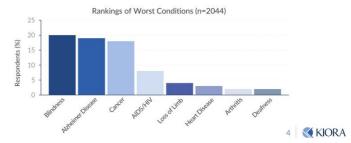


Why Retinal Diseases?

"...the last light sensations faded and the dark discs had finally overwhelmed me. I had fought them bravely, as it seemed to me, for thirty-six years, but to no avail. It was then I began to sink into the deep ocean, and finally learn how to touch the rock on the far side of despair."

- John M. Hull, Touching the Rock





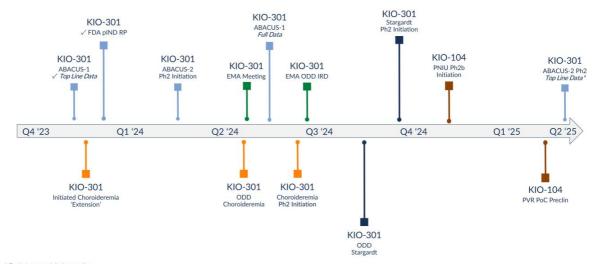
JAMA Ophthalmology. Oct 2016. 134-10.

Pipeline



^{*} Approximate 2023 populations. Orpha.net, NORD, Ophthalmol Ther. 2021 Sep; 10(3).

Upcoming Clinical/Regulatory Milestones



* Excludes open label extension RP – Retinitis Pigmentosa, PVR – Proliferative Vitreoretinopathy, PoC – Proof of Concept, ODD – Orphan Drug Designation, EMA – European Medicines Agency, IRD – Inherited Retinal Disease, PNIU – Posterior Noninfectious Uveitis



KIO-301 Partnership



	Final Major Terms
Territory	Global less Asia
Field of Use	Ophthalmology (all indications) with development milestones for each indication (RP, CHM, SD) or others
Development Responsibilities	Kiora responsible until Ph3 (JSC)
Development Costs for Ph2	Thea to reimburse Kiora for KIO-301 Research & Development
Development Costs for Ph3	Thea to cover 100%
Upfront Payment	\$16M
Development & Commercial Milestones	
In aggregate	Up to \$285M
Commercial Royalties	
Royalties on Net Sales	Tiered up to low 20%
Total Upfront and Milestones	\$301M (for RP and 2 add'l indications approved in USA and EU with net sales exceeding \$1B)

Non-Binding Term Sheet Signed 5Oct2023, 25Jan2024 for Definitive Agreement Execution Public announcement planned for after market 31Jan2024



Who is Théa?

- >100 commercial ophthalmic products globally including: Azasite® Cosopt® Ivizia® Virgan® Zioptan®













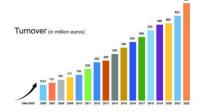








Théa products available in over 75 countries direct or through distributors





KIO-301

Small Molecule Targeting Vision Restoration

Retinitis Pigmentosa, Choroideremia, Stargardt Disease



Inherited Retinal Diseases Lead to Loss of Vision



Healthy Vision

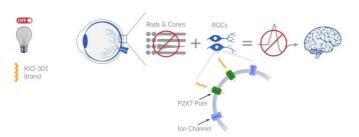
- Rods and cones, the photoreceptors of the retina, process light and relay an electrical signal to downstream cells.
- One of these cell types, retinal ganglion cells (RGCs), transmit the signal to the visual cortex.
- The visual cortex is the part of the brain where vision is perceived.



Damage from Retinitis Pigmentosa

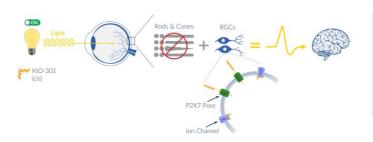
- Retinitis Pigmentosa (RP) results in progressive degeneration and loss of function of rods and cones.
- This causes continuous impairment of vision that often leads to blindness.
- Importantly, in RP and other inherited retinal diseases, the RGCs remain viable.

KIO-301 is a Molecular Photoswitch Designed to Restore Vision



KIO-301 without Light

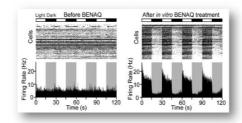
- When photoreceptors die, RGCs undergo some remodeling, including expressing specific proteins that allow KIO-301 to selectively enter the cell with ion channels.
- Without light, KIO-301 remains in its linear "off" (trans) position.

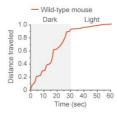


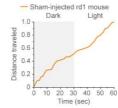
KIO-301 with Light

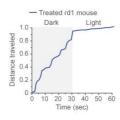
- With light, KIO-301 is activated and bends into its "on" (cis) formation.
- This physically blocks ion channels and activates the cell to transmit signals to the visual cortex.

KIO-301 Reanimates the Retina & Changes Behaviour Extensive Validation in Preclinical Models









Neuron. 81, 800-813 (2014). Behavioural study used a homologue molecule to KIO-301 API

Normal Vision



Vision Declines over Time



Retinitis Pigmentosa A Disease with No Available Treatments

Clinical Presentation

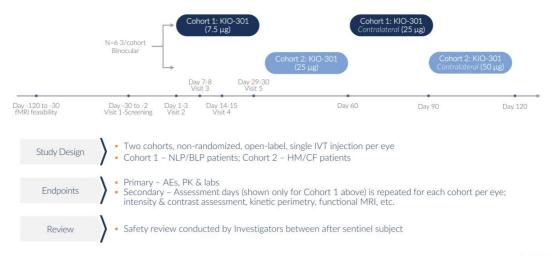
- Night blindness, reduced visual field range and eventual loss of central vision
- Visual acuity declines
- 50% of patients are not qualified to drive by age 37 and legally blind by 55

- 50+ genetically distinct subtypes from 150+ mutations
- Inherited disease

Market Opportunity

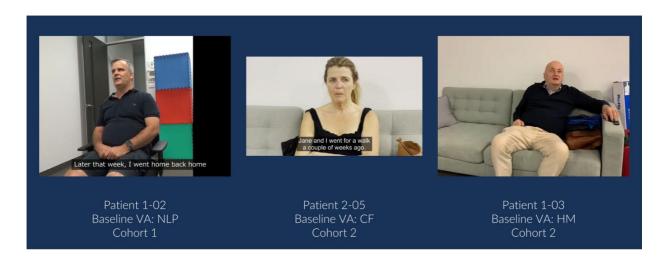
- ~100k patients in US (Provider: Retina Specialists [~3k])
- Estimated total cost to US healthcare system in 2019: \$3.7B

KIO-301-1101: Phase 1b Study Design (ABACUS) Open Label, Single Ascending Dose Trial – 2 Sites (Australia)



NLP - No Light Perception, BLP - Bare Light Perception, HM -Hand Motion, CF - Counting Fingers

Patient Testimonials

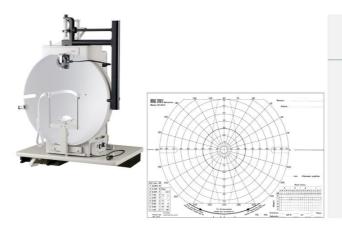


VA - Visual Acuity, NLP - No Light Perception, CF - Counting Fingers, HM - Hand Motion

ABACUS-1 – Primary Endpoint Achieved Single Dose IVT KIO-301 is Safe & Well Tolerated @ 7.5µg, 25µg, 50µg

MedDRA Term	KIO-301 7.5μg (N=3); n (%)	KIO-301 25μg (N=6); n (%)	KIO-301 50μg (N=3); n (%)	Severity	Drug Related	Total N=12; n (%)
Ocular Hypertension	1 (33%)	0 (0%)	0 (0%)	Mild	Possible	1 (8.3%)
Eye Swelling	0 (0%)	1 (17%)	0 (0%)	Mild	Unlikely	1 (8.3%)
Eye Pain	0 (0%)	2 (33%)	0 (0%)	Mild	Unlikely	2 (17%)
Anterior Chamber Cell	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Anterior Chamber Flare	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Vitreal Cells	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Retinitis	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Vasculitis	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Iritis	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Keratitic Precipitates	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Photophobia	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Photopsia	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Vitreous Floaters	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Punctate Keratitis	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)
Conjunctival Hyperemia	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)

Kinetic Visual Field (Goldmann Perimetry)

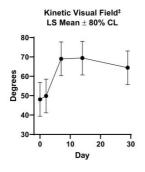


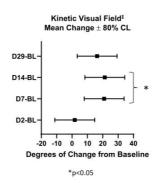
Aim: Evaluate Peripheral Vision at a Basic Level

Assessment & Insights:

- Applicability in this population
- Performed by experienced orthoptists
- Limited to 2-axis
- The patient is asked to acknowledge (using a buzzer) when light stimulus is visualized within the dome
- Method facilitates limitation of fixation
- Proof-of-feasibility achieved
 Will expand scope of evaluation to capture increased degrees

Kinetic Visual Field KIO-301 May Improve Visual Field





Kinetic Visual Field

- Goldmann perimetry
- Performed at baseline (BL), and each study visit
- Performed by same group of orthoptists to reduce variability
- Greater improvement observed in Cohort 2

‡ Cohort 2 includes 3 patients (6 eyes)



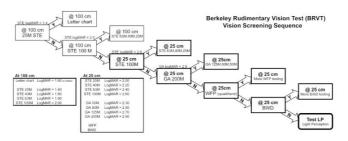
Visual Acuity — Berkeley Rudimentary Vision Test (BRVT)

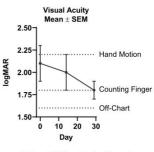
1040-5488/12/8909-1257/0 VOL. 89, NO. 9, PP. 1257-12 OPTOMETRY AND VISION SCIENCE

ORIGINAL ARTICLE

The Berkeley Rudimentary Vision Test

Ian L. Bailey*, A. Jonathan Jackson†, Hasan Minto‡, Robert B. Greer‡, and Marlena A. Chu§





Cohort 2 (3 patients, 3 eyes)

Optometry and Vision Science 2012:89(9), 1257-1264

Light Perception (Intensity & Contrast Assessment)

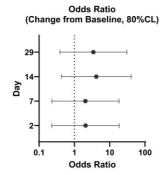


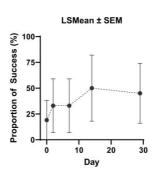
Aim: Evaluate Light Perception at a Basic Level

Assessment:

- Series of visual stimuli (a series of letters are presented on a screen to the patient via a rear projector)
- Binary outcome (yes/no)
- The subject is asked to acknowledge (verbally and/or physically) when a change in light is perceived
- Asked to also identify object, if possible

Light Perception – Cohort 1KIO-301 may improve light perception in the NLP/BLP Population





Light Perception

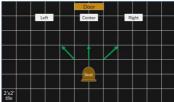
- Cohort 1 subjects demonstrate improved odds ratio on drug
- Odds Ratio strength of association, $OR=2 \rightarrow 100\%$ increase in the odds of an outcome
 - > e.g., duration of diabetes mellitus (> 15 years) with diabetic retinopathy is >9.0*
- Cohort 2 subjects are existing light perception patients; therefore, expect little change

Cohort 1 includes 3 patients (6 eyes), NLP – No Light Perception, BLP – Bare Light Perception * Int J Retin Vitr 2016:2, 21

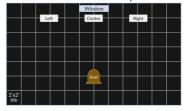


Functional Vision - Multiluminance Orientation & Mobility (MLOM)





Window Location Test Setup



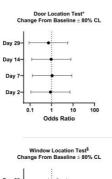
Walking Direction Test Setup

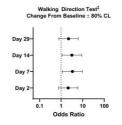


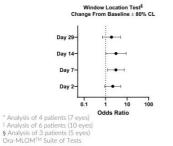
HCRE Course Setup

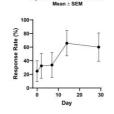


Functional Vision - Multiluminance Orientation & Mobility (MLOM) KIO-301 May Improve Functional Vision









MLOM

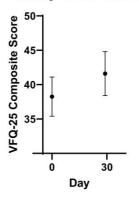
- First time used in ultra-low vision
- Question: "Is this test valuable?"

- Important aspect of documenting vision driven movement
- Not all "functional" tests relevant to the population tested
- One or two clinically meaningful functional tests will remain in Phase II
- Will incorporate light-level changes into



Visual Function Questionnaire (NEI VFQ-25) KIO-301 May Improve Patients' Overall Quality of Life

Quality of Life Survey



Quality of Life

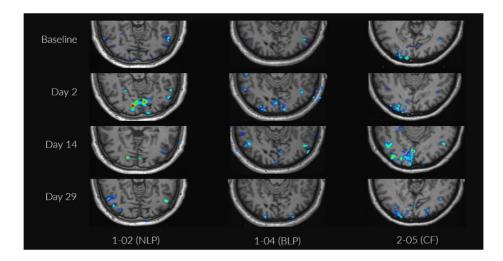
National Eye Institute generated survey assess daily functions related to general health & vision, ocular pain, near & distance activities, social functioning, mental health, dependency, driving, color vision, and peripheral vision.

2-4 point increase is considered clinically meaningful*

n=12 *HMSA Medical Policy – Luxturna - 2016



— Functional MRI Supportive of Cortical Activation



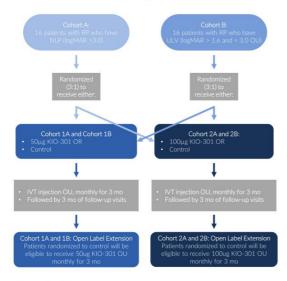
NLP – No Light Perception, BLP – Bare Light Perception, CF – Counting Fingers



ABACUS-1 Takeaways



KIO-301-2101: Phase 2 Study Design (ABACUS-2) Randomized (3:1), Controlled*, Double Masked, Multiple Dose Study – 4 Sites (Australia)

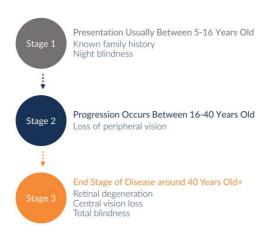


- Primary: Safety & Tolerability
 - o AEs, vitals ECG, chemistry and hematology, SD-OCT, FAF, slit lamp, IOP
- Secondary: Efficacy (change from baseline @ 11 weeks)
 - o Visual acuity as measured by BRVT
 - o Visual field as measured by automated Goldmann perimetry
 - o Functional vision as measured by an orientation, mobility, & object identification test
- pIND feedback (12/23) supportive of p2 trial design
- FPFV planned for Q2 2024 & topline data Q2 2025



Choroideremia: Inherited Disease that Leads to Blindness

No Approved Therapeutics and Only ONE Active Therapeutic Clinical Trial*



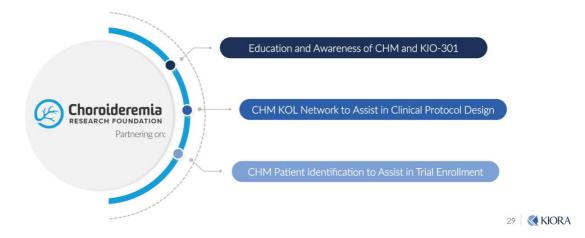
- Orphan Disease: prevalence of 1:50,000, ~12,000 patients in US/EU
- X-linked recessive disease primarily affecting males
- Cause: Inherited mutation in the Choroideremia (CHM) gene encoding Rab escort protein-1 (REP1)
- REP1 is involved in the regulation of intracellular trafficking of Rab proteins
- Vision Loss: Degeneration in the photoreceptors, retinal pigment epithelium (RPE), and choroid. Retinal ganglion cells remain viable.

* Clinicaltrials.gov as of 1 July 2023

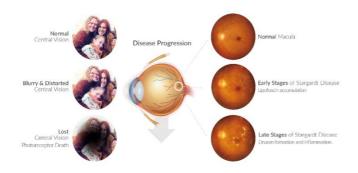


— Partnership with the Choroideremia Research Foundation

The Choroideremia Research Foundation (CRF) is the largest global not-for-profit organization focused on the search for a cure for Choroideremia (CHM).



Stargardt Disease: No Approved Therapeutics

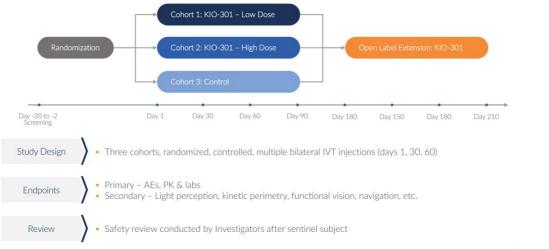


- Orphan Disease: prevalence of 1:10,000 ~30,000 patients in US
- Autosomal recessive disease inherited from parent carriers, typical onset in 2nd decade of life, vision loss in 4th-5th decade.
- Cause: Mutation in the ABCA4 or ELOVL4 gene
- Accumulation of lipofusion plaques in the retinal pigment epithelium (RPE), leading to inflammation and cell death.
- Vision Loss: Degeneration of the photoreceptors and RPE. Retinal ganglion cells remain viable. Often, some peripheral vision is

Foundation Fighting Blindness, Makari Wellness



KIO-301-3101: Phase 2 Study Designs (CHM & Stargardt) Controlled, Randomized Clinical Trial - Australia





KIO-104

Intravitreal Small Molecule DHODH Inhibitor

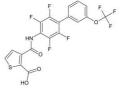
Steroid Sparing Approach to Retinal Inflammation



KIO-104 Overview (DHODH Inhibitor)

KIO-104 is an intravitreal, non-steroidal, novel small molecule which mitigates:

- Metabolic activity and proliferation of T-cells
- Secretion of IL-17, VEGF and IFN-γ



Existing immunosuppressive agents have a fundamentally different mode of action on T-cells compared to KIO-104

- KIO-104 is best-in-class inhibitor of DHODH (lowest IC₅₀)*
- KIO-104 is first-in-class in ophthalmology

*1,000x more potent than Teriflunomide (Aubagio© - Sanofi)

33 KIORA

DHODH - dihydroorotate dehydrogenase

Non-Infectious Uveitis

Uveitis is a group of eye disorders affecting the uvea and characterized by intraocular inflammation that is often chronic, can flare up at any time, and can lead to visual impairment and vision loss.

1.2 million patients in US + EU5

Clinical Symptoms

- Redness and pain in the eye
- Sensitivity to light
- Blurred vision
- Dark floating spots in the vision
- Vision loss

Additional Statistics

- ~15% of all cases of legal blindness and visual handicap in the US and EU
- ~25% of all cases of blindness globally
- ~\$55k annual tx cost of adalimumab (2nd line behind steroids)
- 6.9% CAGR 2020-2027
- 20-50 years old most common age affected in the United States

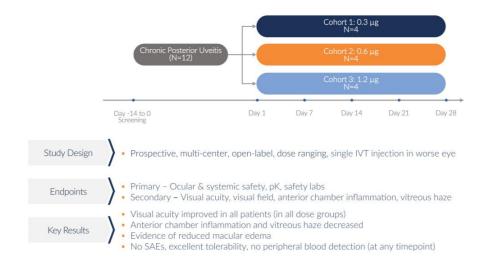
Significant unmet need for a steroid sparing approach

Br J of Ophthalmol. 2004;88(9):1159-1162. Med Hypothesis Discov Innov Ophthalmol. 2013 Winter:2(4):113-120. Retina Today. 2016;47-51. Clin Ophthalmol. 2016;10:1983-2020. JAMA Ophthalmol. 2016 Nov 1;134(11):1237-1245. Uveitis Market Insights, Epidemiology & Market Forecast-2032 Delvelnsights

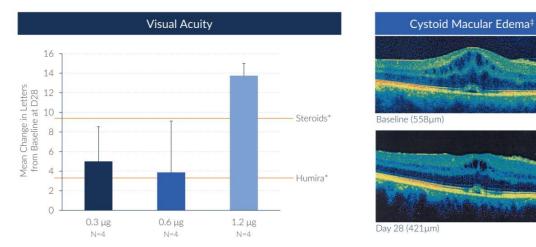




KIO-104-1101: Phase 1 Study Design



KIO-104 Improves VA and CME After Single IVT Dose



‡ 40% of eyes with vision threatening cystoid macular edema at baseline had clinically meaningful improvement

* Historical Controls (Yeh et al. Retina 00, 1-9,2018; Suhler et al. Visual III, Ophthalmology 125, 7, 2018.) IVT - Intravitreal

KIO-104 Path Forward



- Ph2b Clinical Trial (EU): Q4 2024 Q1 2026
- Non-Clinical, IND Enabling Studies: Q1 2025 Q1 2026
- Ph3 Registration Study(s) in USA & EU: Q3 2026 Q1 2028
- NDA: Late 2028

Proliferative Vitreoretinopathy and/or other retinal inflammatory conditions

- PoC Non-Clinical Testing: Q2 2024 Q1 2025
- Non-Clinical Dose Range Finding: Q4 2024 Q2 2025
- Ph2 Clinical Trial (EU): Q3 2025 Q3 2026



CORPORATE OVERVIEW



Capitalization

Clean cap table – no ratchets/resets/ACEs; No debt

Capitalization as of Feb 5, 2024	Common Stock Equivalents	
Common Stock	25,879,020	
Series D Convertible Preferred (convertible @ \$141.28/ share)	52	
Series F Convertible Preferred (convertible @ \$1.10/share)	381,780	
Warrants (WAEP \$0.84)	71,419,749	
Options (WAEP \$4.26)	812,945	
ESPP	191	
Available Option Pool	482,655	
Total Fully Diluted	98,976,392	

Pro forma cash (30sep2023) ~\$34M*

Feb2024 completed PIPE up to \$45M (\$15M upfront) with ADAR1, Nantahala, Rosalind, Stonepine, Velan and others



Leadership Team









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