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Rating	Buy
Price (07/30/2025)	$2.51
Price Target	$13.00

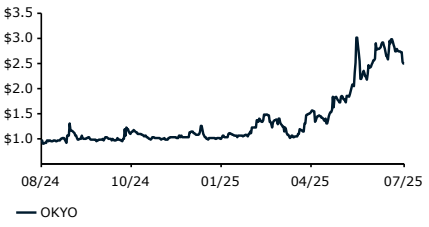
Market Data

% to Target	417.9%
52-Week High	$3.11
52-Week Low	$0.81
Market Cap (mil)	$92.9
Cash & Equivalents	$6.0
Total Debt	$0.0
Enterprise Value	$86.9
Cash per Share	$0.16
Shares Outstanding (mil)	37.0
3-Month ADTV	183,822
Short interest (mil)	NA
Float	25.1
Fiscal Year-End	Dec

Estimates

FY	2024A	2025A	2026E
EPS Diluted	(0.57)	(0.13)	(0.18)
Revenue ($M)	0.0	0.0	0.0

Performance Chart



OKYO Pharma Ltd (OKYO)

Developing a Novel Drug for Severe Eye Pain; Initiating with a Buy Rating and a $13 Price Target

KEY POINTS

Initiating coverage of OKYO Pharma Limited (OKYO) with a Buy rating and a $13/share 12-month price target. OKYO is developing a drug for neuropathic corneal pain, an indication with current approved treatment.

Our Buy thesis on the shares of OKYO is based on the following:

NCP: Neuropathic Corneal Pain (NCP), or corneal neuralgia, is a chronic condition caused by damage or dysfunction of the corneal nerves. Unlike typical ocular surface diseases, such as dry eye, NCP is marked by severe, persistent pain - burning, stinging, aching, or electric-like - despite a normal-looking eye under examination. This mismatch between intense symptoms and minimal clinical signs often leads to misdiagnosis, delaying proper treatment.

Lack of Effective Treatments: Management requires a multimodal approach targeting both ocular and neuropathic components. Treatment begins with ocular surface therapies - preservative-free tears, antibiotics, omega-3s, and lenses to reduce nerve irritation. Anti-inflammatories (steroids, NSAIDs, cyclosporine, lifitegrast, tacrolimus) and amniotic membranes aid healing. Regenerative options like autologous serum tears support nerve repair, while systemic drugs (antidepressants, anticonvulsants, naltrexone, opioids, B12) address widespread pain. Refractory cases may need acupuncture, neurostimulation, or neuromodulation. However, misdiagnosis, limited provider expertise, and lack of FDA-approved therapies highlight major gaps in care.

Enter Urcosimod: Urcosimod, developed by OKYO, is a novel, non-opioid, topical therapy that uniquely combines immunomodulation and neural targeting, offering fast, effective pain relief while overcoming typical limitations of eye drop treatments - positioning it as a promising advance in neuro-ophthalmology. In a Phase 2 trial, after 12 weeks, 75% of patients with moderate to severe NCP saw over 80% pain reduction on urcosimod, with relief beginning as early as Week 4. The mean VAS pain score dropped by 5.5 in the urcosimod group versus 2.75 with placebo (p=0.025), showing significant efficacy. In the broader intent-to-treat population, 67% on urcosimod had ≥50% pain reduction vs. 33% with placebo, with a large treatment effect (Cohen's d > 1.2), underscoring urcosimod's strong clinical benefit.

Orphan, but…: While without an approved drug it is difficult to ascertain the precise prevalence of NCP, based on cross-sectional studies, we estimate the total addressable population in the US to be less than 200,000 patients, which could qualify NCP as an orphan indication. An efficacious treatment for an orphan eye indication, such as Oxervate for neurotrophic keratitis, can achieve blockbuster status (>$1B in sales in 2024).

Valuation & Risks: We arrive at our 12-month price target of $13 per share by assessing the after-tax, risk-adjusted NPV of potential future cash flows from the company's urcosimod program in NCP. The probability-adjusted, fully taxed (21%) NPV at a 15% discount rate of potential cash flows until 2039 is approximately $690M, equivalent to $13 per share, corresponding to our 12-month price target. Potential factors that could prevent shares from reaching our price target include the failure of urcosimod to demonstrate significant efficacy benefits or being deemed unsafe, leading to the discontinuation of clinical programs and

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commercial launch. In addition, the company may not be able to raise additional funds to complete development.

DISEASE BACKGROUND: NEUROPATHIC CORNEAL PAIN

Disease Overview

Dry Eye Disease (DED) is a multifactorial ocular surface disorder characterized by a loss of homeostasis of the tear film, resulting in symptoms of discomfort, visual disturbance, and inflammation[1]. It is typically divided into two major subtypes: aqueous-deficient dry eye (caused by reduced tear production) and evaporative dry eye (caused by excessive tear evaporation, often related to meibomian gland dysfunction). Common symptoms include burning, stinging, grittiness, photophobia, and a sensation of dryness or foreign body in the eye. Despite its prevalence, affecting millions globally, DED varies widely in severity and symptom expression. Standard treatments often involve artificial tears, anti-inflammatory drops, lid hygiene, and lifestyle modifications[2].

However, a significant subset of patients with clinically diagnosed DED continue to report severe and disproportionate ocular pain despite minimal observable signs. This phenomenon has led to increased recognition of Neuropathic Corneal Pain (NCP). NCP arises when there is dysfunction or damage to the corneal nerves, either peripherally at the ocular surface or centrally within the nervous system, leading to abnormal pain signaling.

Neuropathic Corneal Pain (NCP), also known as corneal neuralgia, is a chronic, debilitating pain syndrome caused dysfunction or injury to the corneal nerves[3]. Unlike typical ocular surface diseases such as dry eye, the hallmark of NCP is a severe, persistent pain that is often disproportionate to clinical findings during an eye exam. Patients may report intense burning, stinging, aching, or electric shock-like sensations, yet their eyes may appear relatively normal under slit-lamp examination. This disconnection between symptoms and observable signs makes NCP frequently misdiagnosed as dry eye disease or blepharitis, leading to ineffective treatments and prolonged suffering.

NCP can be comorbid with or mistaken for dry eye disease, since both conditions share overlapping symptoms including burning, irritation, and sensitivity to wind or light. However, in NCP, the pain is often described as electric, shooting, or aching, and may persist even in the absence of tear film abnormalities. In fact, many NCP patients are misdiagnosed as having refractory dry eyes, which can delay appropriate treatment. What links the two conditions is that chronic dry eye may actually induce or exacerbate neuropathic pain over time, due to persistent inflammation and injury to corneal sensory nerves. Conversely, in some patients with NCP, the tear film may appear normal, and symptoms may arise independently of any classical dry eye mechanisms.

Although the exact prevalence of NCP is unknown, it is increasingly recognized among individuals who experience chronic ocular pain, particularly after refractive surgery (e.g., LASIK), cataract surgery, or corneal trauma. It is also associated with conditions including herpes zoster ophthalmicus, chronic contact lens wear, or systemic diseases such as fibromyalgia or migraine. Some estimates suggest that up to 1–5% of patients with persistent dry eye symptoms may actually have NCP[4].

In a broader long-term analysis, over a 26-year period (1996–2021), researchers identified 18 cases of NCP out of approximately 16,000 LASIK procedures, yielding an estimated prevalence of about 1 in 900 patients. Patients typically experienced symptoms onset approximately 10 months post-surgery. Symptomatic presentation was dominated by severe ocular pain, often described in terms such as burning, sensitivity to light or air, and foreign body sensation. Yet, slit-lamp exams frequently revealed minimal to no signs of surface disease, making diagnosis based on symptoms rather than visible pathology[5].

[1] Messmer EM. The pathophysiology, diagnosis, and treatment of dry eye disease. *Dtsch Arztebl Int.* 2015 Jan 30;112(5):71-81; quiz 82. doi: 10.3238/arztebl.2015.0071. PMID: 25686388; PMCID: PMC4335585.
[2] Shen Lee B, Kabat AG, Bacharach J, Karpecki P, Luchs J. Managing Dry Eye Disease and Facilitating Realistic Patient Expectations: A Review and Appraisal of Current Therapies. *Clin Ophthalmol.* 2020 Jan 14;14:119-126. doi: 10.2147/OPTH.S228838. PMID: 32021076; PMCID: PMC6969676.
[3] Watson SL, Le DT. Corneal neuropathic pain: a review to inform clinical practice. *Eye (Lond).* 2024 Aug;38(12):2350-2358. doi: 10.1038/s41433-024-03060-x. Epub 2024 Apr 16. PMID: 38627548; PMCID: PMC11306374.
[4] Moshirfar M, Bhavsar UM, Durnford KM, McCabe SE, Ronquillo YC, Lewis AL, Hoopes PC. Neuropathic Corneal Pain Following LASIK Surgery: A Retrospective Case Series. *Ophthalmol Ther.* 2021 Sep;10(3):677-689. doi: 10.1007/s40123-021-00358-x. Epub 2021 Jun 15. PMID: 34129211; PMCID: PMC8319231.
[5] Moshirfar M, Bhavsar UM, Durnford KM, McCabe SE, Ronquillo YC, Lewis AL, Hoopes PC. Neuropathic Corneal Pain Following LASIK Surgery: A Retrospective Case Series. *Ophthalmol Ther.* 2021 Sep;10(3):677-689. doi: 10.1007/s40123-021-00358-x. Epub 2021 Jun 15. PMID: 34129211; PMCID: PMC8319231.

Unmet Medical Need: Diagnostic and Treatment Gaps in Neuropathic Corneal Pain

One of the most prominent diagnostic challenges in NCP is the disconnect between patient-reported symptoms and clinical findings[6]. Individuals with NCP often describe severe, persistent ocular pain, such as burning, stinging, or electric-like sensations, despite a normal-looking eye on slit-lamp examination. This mismatch between symptom severity and observable signs frequently leads clinicians to question the validity of the pain, resulting in misdiagnoses or inappropriate referrals, often to psychiatry or psychosomatic services. As a result, many patients undergo significant delays in receiving an accurate diagnosis, sometimes for months or years, which can lead to the worsening of symptoms due to central sensitization.

Another major diagnostic barrier is the lack of awareness and training among eye care providers regarding NCP as a distinct clinical entity. Since neuropathic pain mechanisms are not traditionally emphasized in ophthalmologic education, clinicians often default to more familiar diagnoses such as dry eye disease or allergic conjunctivitis. While some tools, such as *in vivo* confocal microscopy (IVCM) and corneal esthesiometry, can aid in detecting nerve abnormalities, they are not widely available in most practices, further compounding the underdiagnosis. Consequently, many patients are managed based on assumptions rather than a mechanistic understanding of their condition.

On the treatment front, a key gap lies in the absence of standardized, evidence-based protocols for managing NCP. Due to the limited number of clinical trials and heterogeneous presentations, treatment tends to be empirical and highly variable between providers. While some patients may receive topical treatments, neuromodulatory medications (gabapentin or duloxetine), or autologous serum tears, these are often prescribed in trial-and-error fashion, with no consensus on first- or second-line therapies. This inconsistent approach contributes to patient frustration and often fails to provide timely relief.

Finally, the psychological impact and lack of holistic care represent a critical unmet need. Many patients feel disbelieved or dismissed due to the invisibility of their symptoms, which can lead to emotional distress, social isolation, and loss of trust in the medical system. Unfortunately, mental health care and supportive counseling are rarely integrated into the management of NCP, despite their relevance in chronic pain syndromes. Communication gaps between patients and physicians, fueled by time constraints or disbelief, further hinder effective care. As a result, individuals with NCP often fall into a cycle of underdiagnosis, inadequate treatment, and emotional exhaustion, underscoring the need for a multidisciplinary, empathetic, and informed approach to both diagnosis and management.

Pathophysiology and Clinical Manifestations

The human cornea is widely recognized as one of the most sensitive pain-producing structures in the body[7]. This is due to its extremely dense innervation, with around 7,000 nerve endings per square millimeter, making it approximately 300 to 600 times more sensitive than skin. These corneal nerves are responsible for detecting sensations such as touch, pain, and temperature, and are primarily composed of unmyelinated C fibers, along with some myelinated Aδ fibers[8].

These nerves respond to mechanical, thermal, and chemical stimuli. However, after injury or disruption, the corneal nerves may regenerate abnormally[9], leading to an overexpression of pain receptors (nociceptors) and heightened sensitivity to stimuli that would not normally cause pain. This hypersensitivity, or allodynia, is a hallmark of neuropathic corneal pain[10]. Additionally, systemic disorders affecting the somatosensory system can contribute to the development of ocular neuropathic pain.

Clinically, NCP is thought to evolve in stages. Initially, peripheral sensitization occurs when corneal nerve endings are damaged or inflamed, creating heightened sensitivity to stimuli[11]. This pain may respond to topical anesthetics. If the damage persists, central sensitization can develop, where pain processing becomes dysregulated in the central nervous system, making the pain independent of peripheral stimuli. In this stage, patients may feel pain even when their eyes are closed, and topical anesthetics offer little to no relief. This progression underscores the importance of early diagnosis and intervention.

[6] McNally TW, Figueiredo FC. Corneal Neuropathic Pain: A Patient and Physician Perspective. *Ophthalmol Ther.* 2024 Apr;13(4):1041-1050. doi: 10.1007/s40123-024-00897-z. Epub 2024 Feb 16. PMID: 38363459; PMCID: PMC10912060.
[7] Goyal S, Hamrah P. Understanding Neuropathic Corneal Pain--Gaps and Current Therapeutic Approaches. *Semin Ophthalmol.* 2016;31(1-2):59-70. doi: 10.3109/08820538.2015.1114853. PMID: 26959131; PMCID: PMC5607443.
[8] Shaheen BS, Bakir M, Jain S. Corneal nerves in health and disease. *Surv Ophthalmol.* 2014 May-Jun;59(3):263-85. doi: 10.1016/j.survophthal.2013.09.002. Epub 2014 Jan 23. PMID: 24461367; PMCID: PMC4004679.
[9] Dieckmann G, Goyal S, Hamrah P. Neuropathic Corneal Pain: Approaches for Management. *Ophthalmology.* 2017 Nov;124(11S):S34-S47. doi: 10.1016/j.ophtha.2017.08.004. PMID: 29055360; PMCID: PMC5743225.
[10] Galor A, Levitt RC, Felix ER, Martin ER, Sarantopoulos CD. Neuropathic ocular pain: an important yet underevaluated feature of dry eye. *Eye (Lond).* 2015 Mar;29(3):301-12. doi: 10.1038/eye.2014.263. Epub 2014 Nov 7. PMID: 25376119; PMCID: PMC4366454.
[11] Jacobs DS. Diagnosis and Treatment of Ocular Pain: the Ophthalmologist's Perspective. *Curr Ophthalmol Rep.* 2017;5(4):271-275. doi: 10.1007/s40135-017-0152-1. Epub 2017 Nov 2. PMID: 29226029; PMCID: PMC5711963.

Managing chronic pain is particularly challenging, not only due to its physical complexity but also because of its psychological impact. Patients often develop anxiety surrounding their pain, which in turn can heighten their sensitivity to it, creating a self-reinforcing cycle[12]. Chronic pain is frequently linked to other debilitating conditions, including depression, joint pain, and chronic fatigue, compounding its overall burden[13].

Standard of Care for NCP

NCP is often profoundly disabling, with severe photophobia and pain that can prevent basic daily functioning. It is frequently accompanied by anxiety, depression, and in some cases, even suicidal ideation[14]. As a result, treatment approaches must be comprehensive, targeting both ocular surface abnormalities and the underlying neuropathic mechanisms.

Ocular Surface Therapy. Management often begins with ocular surface therapy, including aggressive lubrication with preservative-free artificial tears to reduce tear film hyperosmolarity and dampen corneal nerve overstimulation[15]. For patients with evaporative dry eye or blepharitis, adjunctive use of topical or systemic antibiotics and omega-3 fatty acids is common. Some patients benefit from bandage or scleral lenses, which create a fluid reservoir over the cornea to reduce direct stimulation of hypersensitive nerves. However, in cases of severe hyperalgesia, these lenses may worsen discomfort. Specialized devices such as PROSE (prosthetic replacement of the ocular surface ecosystem) lenses are custom designed to optimize comfort and healing. Compounded medications such as lacosamide can be added to the reservoir to further aid pain control.

Anti-inflammatory Medicines. Anti-inflammatory strategies also play a critical role[16]. These include mild topical steroids such as fluorometholone or loteprednol, as well as NSAIDs (topical or oral). Immunomodulators including cyclosporine 0.05% or lifitegrast 5% are also used, though their onset of action may be delayed. Tacrolimus 0.03% drops have shown promise in improving tear stability while reducing inflammation. In cases of meibomian gland dysfunction, oral antibiotics such as doxycycline or azithromycin serve as effective adjuncts. Amniotic membranes offer anti-inflammatory, anti-scarring, and nerve-regenerative benefits, though some patients may not tolerate the polycarbonate ring used in self-retained formats.

Regenerative Medicine. For neuroregeneration, autologous serum tears (typically 20%) are commonly prescribed. These contain numerous growth and healing factors, such as nerve growth factors, EGF, IGF-1, and fibronectin, help promote corneal nerve recovery and epithelial repair[17].

Alternative Systemic Therapies. Beyond local therapies, systemic treatments are often required, especially when NCP is associated with widespread neuropathic or somatic pain[18]. These may include tricyclic antidepressants (e.g., amitriptyline), anticonvulsants (e.g., gabapentin, pregabalin, or carbamazepine), and in some cases, low-dose naltrexone or opioids such as tramadol for acute relief. Vitamin B12 is also used to support nerve function and reduce pain, particularly in diabetic or post-herpetic neuralgia cases.

Finally, alternative and interventional treatments are considered for refractory cases[19]. These include acupuncture, electrical neurostimulation, and in severe, intractable situations, invasive neuromodulation techniques such as deep brain stimulation or intrathecal analgesic infusions. The overall treatment plan is often tailored to individual needs, combining multiple modalities to relieve symptoms and restore function.

However, the current standard of care has several limitations. Many patients are misdiagnosed and receive treatments aimed solely at ocular surface inflammation, which are ineffective for neuropathic mechanisms. Moreover, most ophthalmologists are not

[12] Jacobs DS. Diagnosis and Treatment of Ocular Pain: the Ophthalmologist's Perspective. *Curr Ophthalmol Rep.* 2017;5(4):271-275. doi: 10.1007/s40135-017-0152-1. Epub 2017 Nov 2. PMID: 29226029; PMCID: PMC5711963.
[13] Woolf CJ. Central sensitization: implications for the diagnosis and treatment of pain. *Pain.* 2011 Mar;152(3 Suppl):S2-S15. doi: 10.1016/j.pain.2010.09.030. Epub 2010 Oct 18. PMID: 20961685; PMCID: PMC3268359.
[14] Dieckmann G, Goyal S, Hamrah P. Neuropathic Corneal Pain: Approaches for Management. Ophthalmology. 2017 Nov;124(11S):S34-S47. doi: 10.1016/j.ophtha.2017.08.004. PMID: 29055360; PMCID: PMC5743225.
[15] Dieckmann G, Goyal S, Hamrah P. Neuropathic Corneal Pain: Approaches for Management. Ophthalmology. 2017 Nov;124(11S):S34-S47. doi: 10.1016/j.ophtha.2017.08.004. PMID: 29055360; PMCID: PMC5743225.
[16] Goyal S, Hamrah P. Understanding Neuropathic Corneal Pain--Gaps and Current Therapeutic Approaches. Semin Ophthalmol. 2016;31(1-2):59-70. doi: 10.3109/08820538.2015.1114853. PMID: 26959131; PMCID: PMC5607443.
[17] Moshirfar M, Benstead EE, Sorrentino PM, et al. Ocular Neuropathic Pain. [Updated 2023 Aug 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK542282/
[18] Pakravan M, Roshani M, Yazdani S, Faramazi A, Yaseri M. Pregabalin and gabapentin for post-photorefractive keratectomy pain: a randomized controlled trial. Eur J Ophthalmol. 2012;22 Suppl 7:S106-13. doi: 10.5301/ejo.5000143. PMID: 22577038.
[19] Dieckmann G, Goyal S, Hamrah P. Neuropathic Corneal Pain: Approaches for Management. Ophthalmology. 2017 Nov;124(11S):S34-S47. doi: 10.1016/j.ophtha.2017.08.004. PMID: 29055360; PMCID: PMC5743225.

trained to recognize or manage chronic pain syndromes. There are also no FDA-approved therapies specifically for NCP, and systemic medications for neuropathic pain often come with undesirable side effects such as sedation, dizziness, or gastrointestinal issues. These challenges highlight a significant unmet medical need.

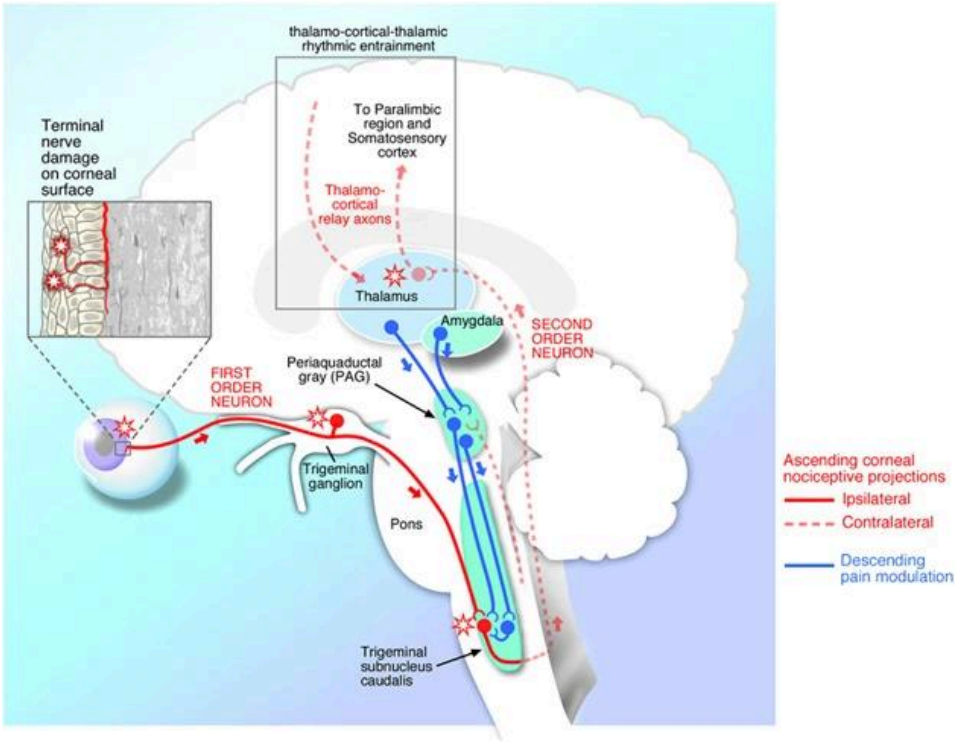
Pathology Mechanisms Underlying NCP

The underlying mechanism of NCP begins with peripheral sensitization[20]. When corneal nerves are damaged due to surgeries such as LASIK, infections, inflammation, or chronic dry eye, nerve endings may regenerate abnormally or form microneuromas (Figure 1). Initially, injury to the corneal nerves leads to abnormal nerve regeneration and hypersensitive nerve endings. These damaged nerves express more ion channels such as TRPV1 or Nav1.8, lowering their threshold for activation. As a result, they can generate spontaneous pain signals or become hypersensitive to minor stimuli such as wind or light, producing sensations of burning, stinging, or aching even in the absence of a direct insult.

Over time, sustained pain signals lead to central sensitization, where the brain and spinal cord amplify pain responses and diminish natural pain inhibition. In this stage, the neurons in the CNS, particularly those in the trigeminal pathway, undergo changes that amplify pain processing. The threshold for activating these neurons becomes lower, and normal sensory signals may be misinterpreted as pain. Furthermore, the body's natural inhibitory systems that dampen pain become less effective. This central mechanism explains why patients can continue to experience severe pain even after the initial cause has healed, and in extreme cases, even after the eye is surgically removed, a phenomenon similar to phantom limb pain.

Together, peripheral and central sensitization create a self-perpetuating pain cycle. While the condition may begin with ocular surface disease, it eventually becomes independent of surface signs, leading to a mismatch between the severity of symptoms and clinical findings. This discrepancy is a hallmark of NCP and poses a diagnostic challenge. Consequently, treating dry eye symptoms alone is often insufficient. Management may require a combination of topical anti-inflammatory or neurotrophic therapies, systemic neuropathic pain medications (e.g., gabapentin or duloxetine), and even neuromodulatory approaches such as transcranial magnetic stimulation or behavioral therapy.

Figure 1: Ocular Sensory Pathway



Source: Galor et al., 2014

[20] Galor A, Levitt RC, Felix ER, Martin ER, Sarantopoulos CD. Neuropathic ocular pain: an important yet underevaluated feature of dry eye. *Eye (Lond).* 2015 Mar;29(3):301-12. doi: 10.1038/eye.2014.263. Epub 2014 Nov 7. PMID: 25376119; PMCID: PMC4366454.

URCOSIMOD FOR TREATING NEUROPATHIC CORNEAL PAIN

Urcosimod Overview

Urcosimod is an investigational therapeutic developed by OKYO Pharma, designed to treat ocular conditions characterized by inflammation and pain, most notably NCP and dry eye disease. Urcosimod represents a first-in-class, non-opioid, topically delivered therapeutic that leverages immunomodulation and neural pathway targeting in a single agent. Its design circumvents common limitations in eye drop-based treatments, and its rapid, robust effect on pain makes it a standout candidate in the emerging field of neuro-ophthalmology.

Urcosimod is a lipid-conjugated chemerin-derived peptide that acts as an agonist of the ChemR23 G protein-coupled receptor (GPCR)[21].This receptor is expressed on both immune cells, such as macrophages and monocytes, and on neurons and glial cells involved in pain transmission. By activating ChemR23, urcosimod helps shift macrophages toward an anti-inflammatory phenotype while also modulating pain signals, making it a dual-action molecule that addresses both inflammation and sensory dysfunction.

A key innovation lies in urcosimod's lipid anchoring strategy. A palmitic acid tail attached to the peptide allows the molecule to adhere to the ocular surface more effectively, resisting washout by tears and extending its local tissue residency. This increases the drug's potency and durability compared to traditional eye drop therapies, which often struggle with poor bioavailability due to rapid clearance from the eye (Figure 3A).

In preclinical studies, urcosimod demonstrated potent analgesic effects in mouse models of corneal neuropathic pain, with efficacy comparable to systemic gabapentin, without compromising corneal epithelial health. Encouraging early signals continued in clinical trials: a Phase 2, randomized, double-masked, placebo-controlled study at Tufts Medical Center was terminated early after enrolling 17 patients due to strong efficacy. By Week 12, 75% of patients on the 0.05% urcosimod formulation experienced over 80% pain reduction, compared to much lower rates in the placebo group. Pain relief appeared as early as Week 4, and no serious treatment-related adverse events were observed.

Given the significant unmet need in NCP, where no FDA-approved treatments currently exist, urcosimod received Fast Track designation from the FDA, recognizing its potential to address a serious condition with limited options. In late 2024, OKYO launched a Phase 2b trial, further supported by $1.9M non-dilutive funding from an undisclosed source to support the continued development of urcosimod for neuropathic corneal pain.

Role of Chemerin and CMKLR1 in Inflammation and Pain

Chemerin is a multifunctional, secreted endogenous protein that regulates immune cell migration, adipogenesis, metabolism, angiogenesis, and inflammation[22]. Initially produced as an inactive precursor (prochemerin) (Figure 2), it becomes biologically active through C-terminal proteolytic cleavage, generating isoforms with varying activity. It plays dual roles in inflammation, promoting immune cell recruitment during the early phases and supporting resolution in later stages. It is also implicated in obesity, diabetes, cardiovascular disease, autoimmune disorders, and cancer, making it a promising target for therapeutic intervention.

CMKLR1 is a G protein–coupled receptor (GPCR) that couples to Gi/o proteins and β-arrestin, initiating downstream signaling cascades such as inhibition of cAMP, calcium mobilization, and ERK/MAPK activation[23]. It is also capable of biased signaling, responding to different ligands with selective pathway activation. Notably, chemerin-derived peptides including chemerin-9 and chemerin-15, as well as unrelated ligands such as resolvin E1 and amyloid-β, can activate CMKLR1. In contrast, GPR1 binds chemerin with high affinity but exhibits minimal G protein activation, functioning mainly through β-arrestin recruitment and receptor internalization. CCRL2, the third receptor, binds chemerin but does not signal and is believed to serve as a decoy or chemerin-presenting receptor.

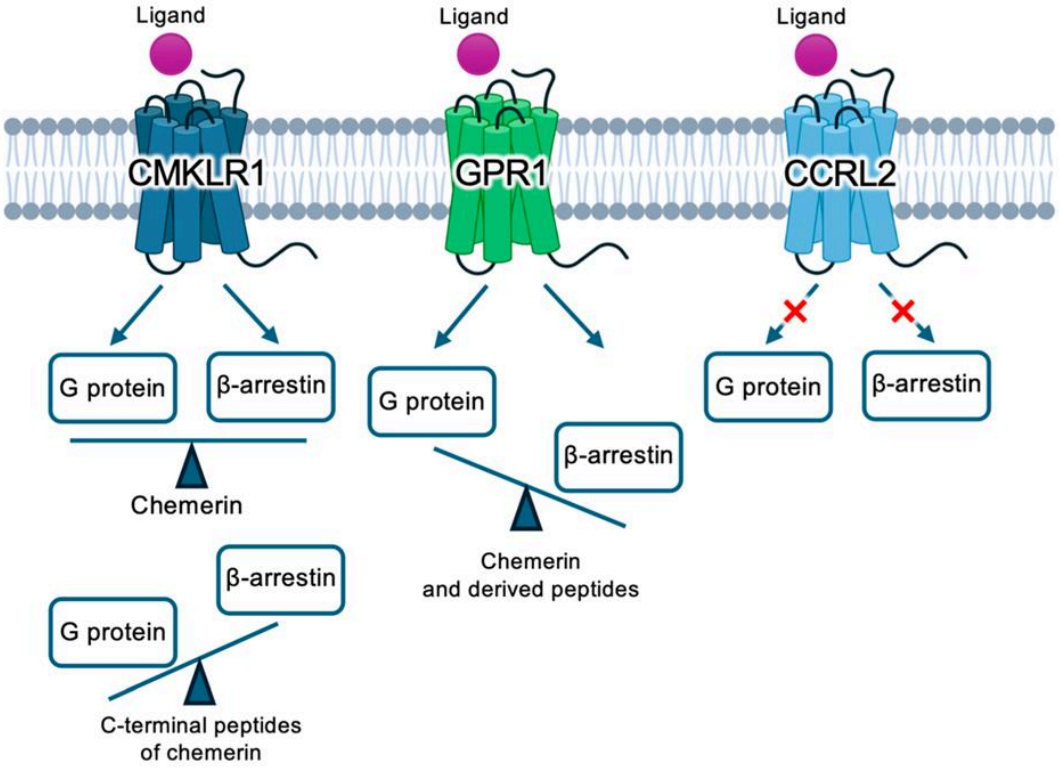
Interestingly, the chemerin/chemR23 axis is involved in both the initiation and resolution phases of inflammation[24]. During the early stages, chemerin facilitates immune cell recruitment, while in later phases or through specific processed fragments, it contributes to the resolution of inflammation, returning tissues to homeostasis. This biphasic nature makes it unique among inflammatory mediators. The axis also plays diverse roles across different organ systems. In the skin, it is implicated in conditions such as psoriasis and lupus; in the lungs, it

[21] Corporate website: https://okyopharma.com/
[22] Li J, Lu Y, Li N, Li P, Wang Z, Ting W, Liu X, Wu W. Chemerin: A Potential Regulator of Inflammation and Metabolism for Chronic Obstructive Pulmonary Disease and Pulmonary Rehabilitation. *Biomed Res Int.* 2020 Apr 6;2020:4574509. doi: 10.1155/2020/4574509. PMID: 32337250; PMCID: PMC7166297.
[23] Liu Y, Liu A, Ye RD. Structural Basis for Chemerin Recognition and Signaling Through Its Receptors. *Biomedicines.* 2024 Oct 28;12(11):2470. doi: 10.3390/biomedicines12112470. PMID: 39595036; PMCID: PMC11592271.
[24] Mariani F, Roncucci L. Chemerin/chemR23 axis in inflammation onset and resolution. *Inflamm Res.* 2015 Feb;64(2):85-95. doi: 10.1007/s00011-014-0792-7. Epub 2014 Dec 30. PMID: 25548799.

participates in allergic inflammation and tumor growth; and in the cardiovascular system, it influences lipid metabolism and vascular inflammation. It has also been linked to reproductive health and gut-related disorders, including colorectal cancer.
Resolvin E1 (RvE1) is a lipid-derived signaling molecule generated from the omega-3 fatty acid eicosapentaenoic acid (EPA)[25]. It belongs to a family of specialized pro-resolving mediators that actively promote the resolution of inflammation rather than merely suppressing it. RvE1 exerts its biological effects primarily through the G protein–coupled receptor CMKLR1 (also known as ChemR23), which is expressed on immune cells, airway epithelial cells, and sensory neurons. By binding to CMKLR1, RvE1 inhibits neutrophil migration, enhances clearance of dead cells by macrophages, and modulates pain signaling, contributing to the resolution of both inflammation and neuropathic pain.

CMKLR1 is normally activated by chemerin peptides and resolvin E1, which play a role in resolving inflammation and alleviating pain. However, both natural ligands degrade quickly in the body, making them unsuitable for long-term therapeutic use and limiting their therapeutic utility unless stabilized or mimicked through synthetic analogs.

Figure 2: Chemerin and CMKLR1 Signaling Pathway



Source: Liu et al., 2024

[25] Ishida T, Yoshida M, Arita M, Nishitani Y, Nishiumi S, Masuda A, Mizuno S, Takagawa T, Morita Y, Kutsumi H, Inokuchi H, Serhan CN, Blumberg RS, Azuma T. Resolvin E1, an endogenous lipid mediator derived from eicosapentaenoic acid, prevents dextran sulfate sodium-induced colitis. *Inflamm Bowel Dis.* 2010 Jan;16(1):87-95. doi: 10.1002/ibd.21029. PMID: 19572372; PMCID: PMC3070396.

Urcosimod – Mechanism of Actions

To overcome the limitation of chemerin peptides and resolvin E1, researchers engineer a modified, long-acting version of the chemerin peptide, urcosimod (replace with lower case, throughout)[26]. It is a membrane-tethered ligand (MTL) fusing the minimal active chemerin peptide segment (chemerin-9, amino acids 149–157) to a membrane anchor. This construct is more potent than full-length chemerin in activating CMKLR1 in both human and mouse cells. Researchers then converted this construct into a synthetic lipidated version, a soluble membrane-anchored ligand (SMAL), which maintained the membrane-like activity while being easier to deliver (Figure 3A). Urcosimod retained high potency, triggered robust receptor activation, and showed resistance to washout *in vitro*, indicating sustained receptor engagement (Figure 3B).

Those results presented strong proof of concept for using lipidated minimal peptides to create potent and long-acting GPCR agonists. The SMAL approach offers a novel strategy to harness the therapeutic effects of short-lived endogenous peptides by stabilizing them through membrane anchoring.

Preclinical Proof-of-Concept: Urcosimod Efficacy in CCI-Induced Neuropathic Pain

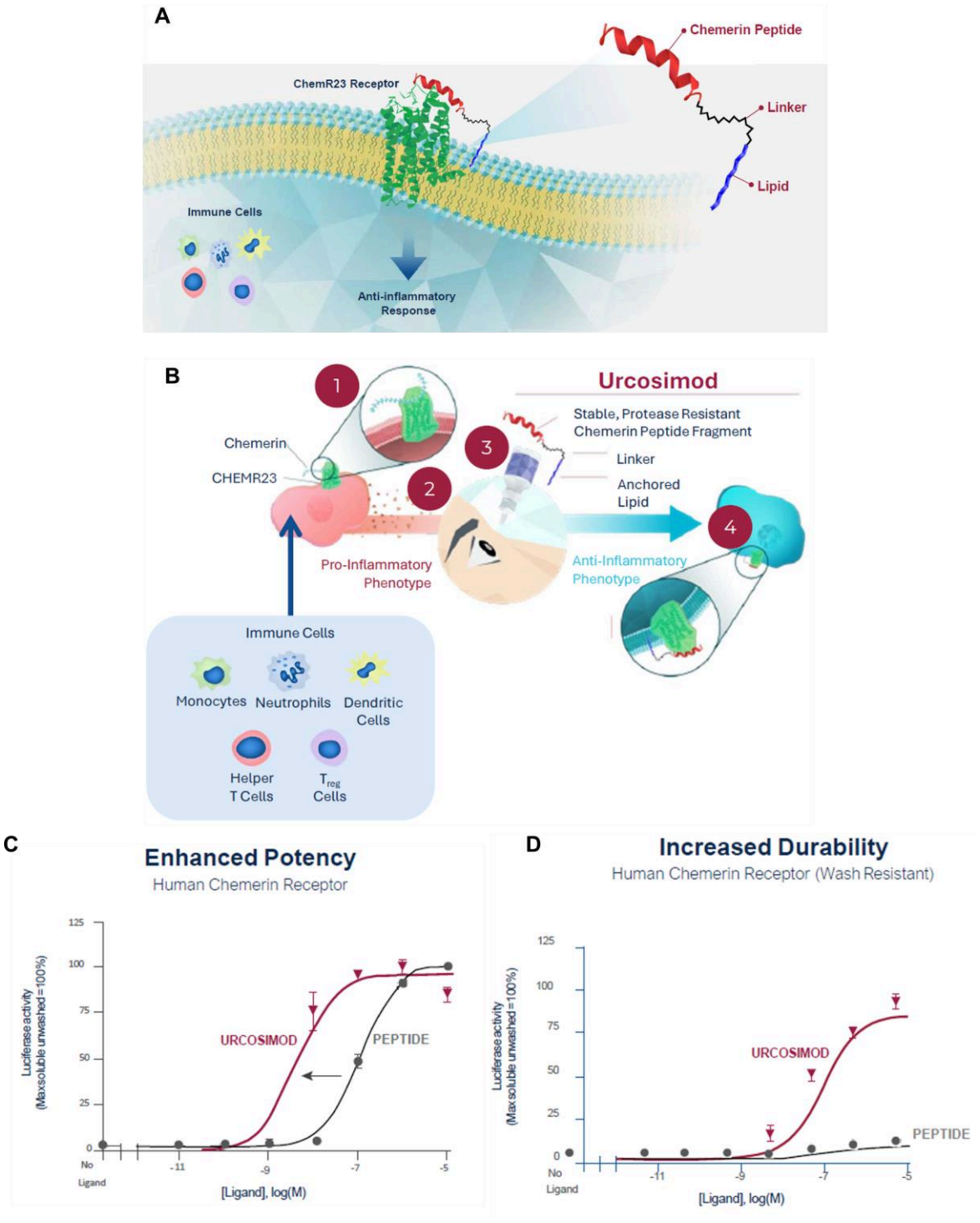
The Chronic Constriction Injury (CCI) model is a well-established and widely used method for studying neuropathic pain in mice. It closely mimics several features of human neuropathic pain conditions. In this model, neuropathic pain is induced by surgically exposing the sciatic nerve and loosely tying two to four ligatures around it using sutures. These ligatures are tightened just enough to constrict the nerve without completely blocking blood flow, creating a state of partial nerve injury (Figure 4A). This controlled constriction results in sustained inflammation and nerve damage, which in turn trigger long-lasting pain responses in the animal.

Following the CCI procedure, mice develop characteristic signs of neuropathic pain within a few days. These include mechanical allodynia, where normally innocuous stimuli such as light touch become painful; thermal hyperalgesia, where sensitivity to heat is exaggerated; and cold allodynia, where mild cooling causes discomfort. Mice may also display spontaneous pain-related behaviors such as paw licking, guarding, or shaking. These symptoms closely parallel those observed in human conditions such as diabetic neuropathy, sciatica, and post-surgical nerve damage.

The SMAL peptide urcosimod has been tested in CCI-induced neuropathic pain model. In the airway inflammation model, urcosimod treatment significantly reduced immune cell infiltration, mucus production, and inflammatory markers in the lungs. In a neuropathic pain model, CCI induced strong mechanical and cold allodynia, as shown by reduced paw withdrawal thresholds and increased sensitivity to von Frey filaments and acetone. A single intrathecal dose of l-Stable Chem (urcosimod) given one week after injury significantly reduced both mechanical and cold allodynia for over 24 hours. In contrast, RvE1's pain-relieving effects were short-lived, lasting only about one hour, demonstrating better and longer-lasting analgesia than resolvin E1 (Figure 4B-G).

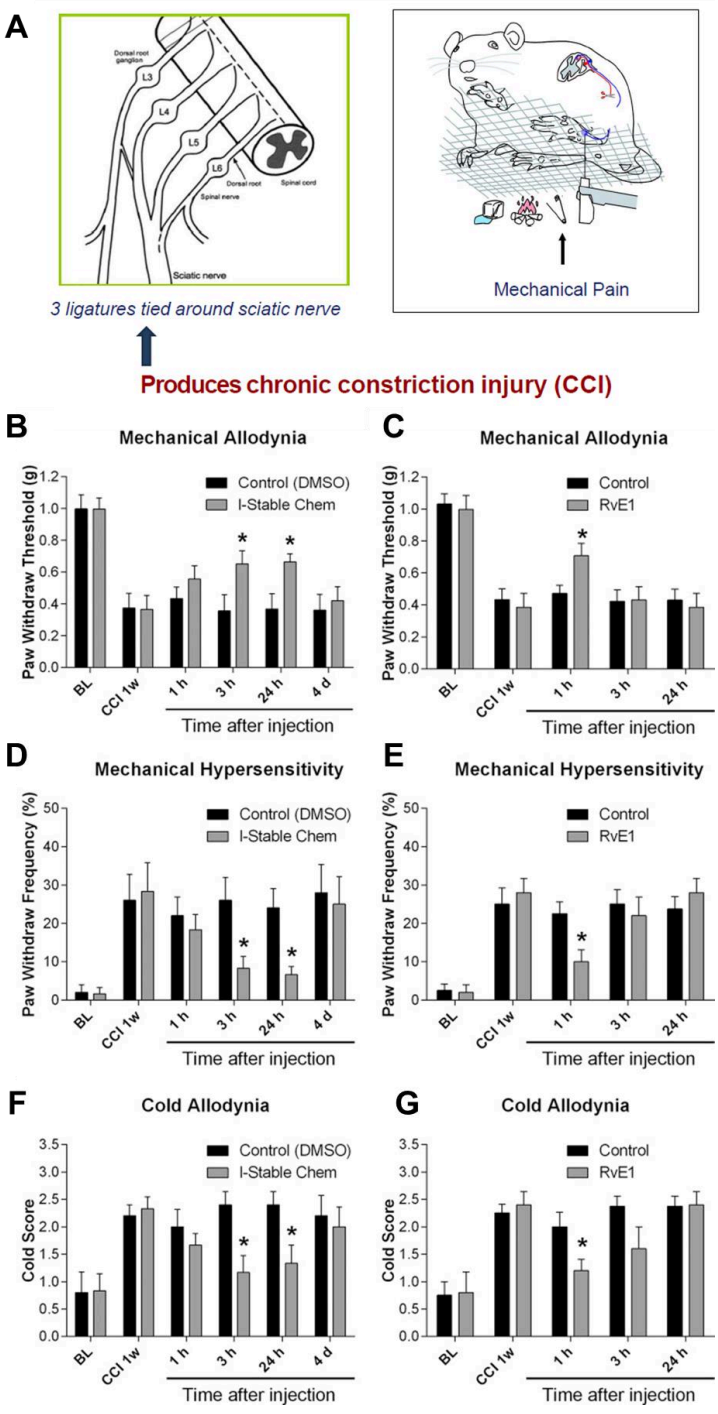
[26] Trilleaud C, Gauttier V, Biteau K, Girault I, Belarif L, Mary C, Pengam S, Teppaz G, Thepenier V, Danger R, Robert-Siegwald G, Néel M, Bruneau S, Glémain A, Néel A, Poupon A, Mosnier JF, Chêne G, Dubourdeau M, Blancho G, Vanhove B, Poirier N. Agonist anti-ChemR23 mAb reduces tissue neutrophil accumulation and triggers chronic inflammation resolution. *Sci Adv.* 2021 Apr 2;7(14):eabd1453. doi: 10.1126/sciadv.abd1453. PMID: 33811066; PMCID: PMC11057782.

Figure 3: Urcosimod – Mechanism of Action



Source: OKYO Pharma Corporate Presentation, June 2025

Figure 4: Urcosimod Reduces CCI-Induced Neuropathic Pain



Source: Trilleaud et al., 2021

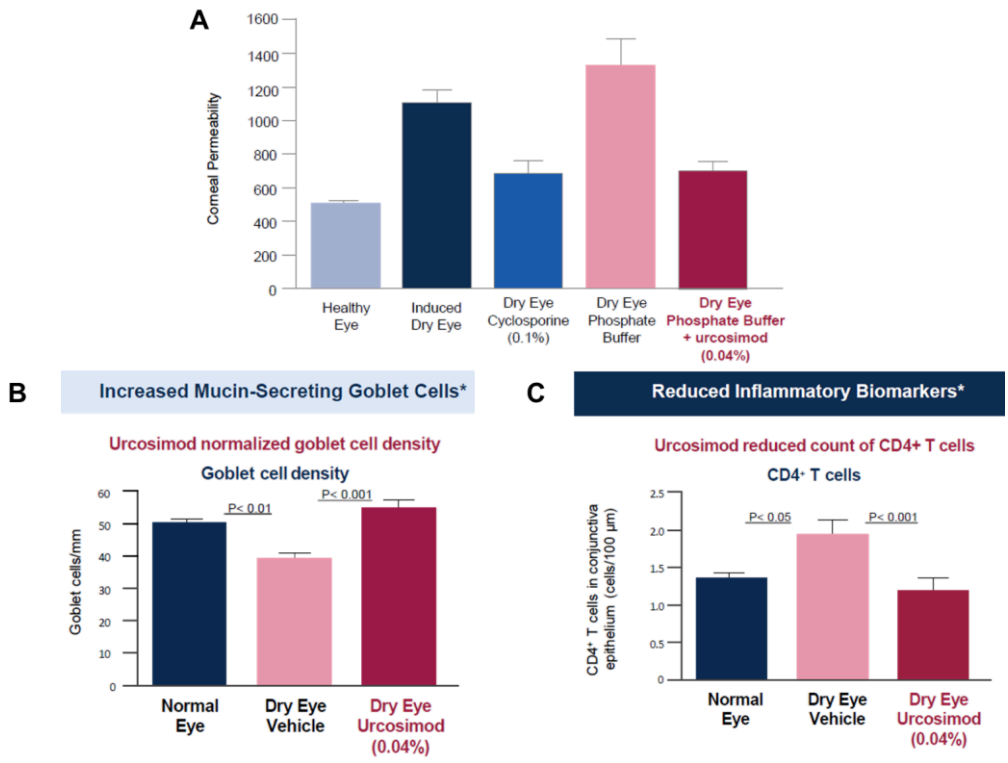
Preclinical Proof-of-Concept: Urcosimod Efficacy in Dry Eye Mouse Model

In a preclinical dry eye mouse model, urcosimod demonstrated strong efficacy in improving corneal barrier function. Mice with induced dry eye exhibited significantly increased corneal permeability, indicating compromised epithelial integrity. Treatment with urcosimod (0.04%) administered topically twice daily substantially reduced this permeability, bringing it close to levels seen with cyclosporine (0.1%), a benchmark treatment found in Restasis (cyclosporine ophthalmic emulsion) and Cequa (cyclosporine ophthalmic solution) (Figure 5A). Notably, urcosimod's effect was markedly superior to the phosphate buffer vehicle alone, indicating its active therapeutic role rather than a placebo effect. These findings suggest that urcosimod can restore corneal integrity and reduce ocular surface damage associated with dry eye.

Further analysis of enucleated mouse eyes from a scopolamine-induced dry eye model revealed that urcosimod also modulates key markers of disease pathology. Specifically, it normalized the density of mucin-secreting goblet cells in the conjunctiva (Figure 5B). Dry eye significantly reduced goblet cell density compared to normal eyes, but treatment with urcosimod restored levels to near normal, suggesting improved mucin production and tear film stability. Additionally, urcosimod significantly reduced the number of inflammatory $CD4^+$ T cells in the conjunctival epithelium (Figure 5C). These cells were elevated in untreated dry eye mice but were brought down to baseline levels following urcosimod administration, indicating a potent anti-inflammatory effect.

Together, these results show that urcosimod improves both structural and immunological aspects of dry eye disease. It enhances corneal integrity, restores mucin-producing cells, and reduces inflammatory cell infiltrations, supporting its potential as a therapeutic agent comparable to or possibly even superior to cyclosporine in treating dry eye.

Figure 5: Urcosimod Efficacy in Dry Eye Mouse Model



Source: OKYO Pharma Corporate Presentation, June 2025

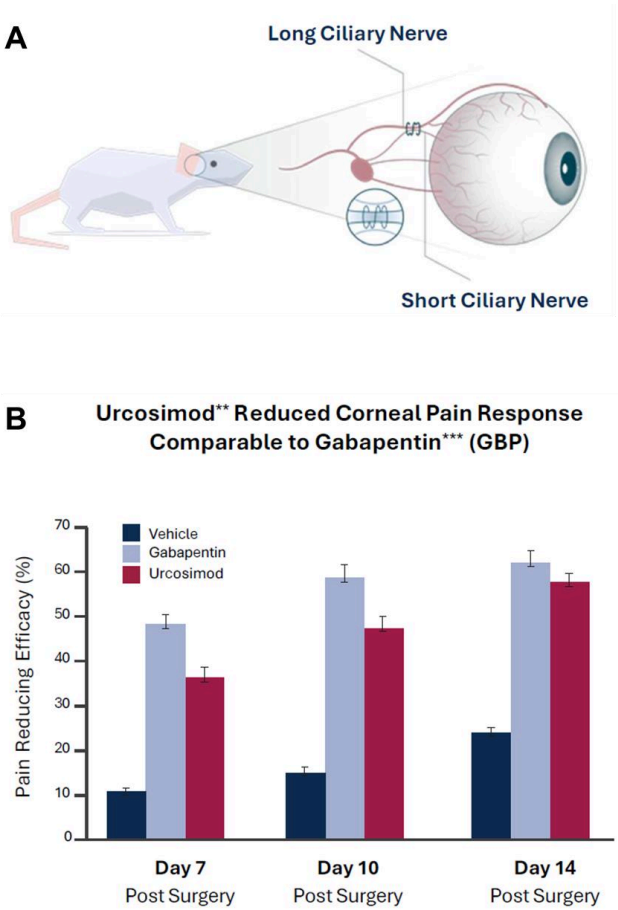
Preclinical Proof-of-Concept: Urcosimod Efficacy in Mouse Model of Neuropathic Ocular Pain

In the mouse model of NCP, the long and short ciliary nerves innervating the eye are surgically ligated, which induces persistent corneal pain resembling human neuropathic ocular conditions. The goal of this experiment was to evaluate whether urcosimod, administered topically, could alleviate the pain response resulting from nerve injury (Figure 6A).

Pain reduction was assessed on post-surgery days seven, ten, and 14. The results demonstrate that urcosimod produced a significant and sustained decrease in corneal pain (Figure 6B). On Day Seven, urcosimod achieved approximately 35% pain reduction, compared to nearly 50% with gabapentin and only about 10% with vehicle control. By Day 10, urcosimod's efficacy increased to about 50%, while gabapentin reached 60%, and the vehicle remained low. By Day 14, urcosimod approached the efficacy of gabapentin, with approximately 58% pain reduction versus 63% for gabapentin. The vehicle-treated group consistently showed minimal effect.

These findings are notable because urcosimod was administered topically, while gabapentin was delivered systemically via intraperitoneal injection. Despite this difference, urcosimod achieved comparable pain-reducing effects by the end of the observation period. This supports the therapeutic potential of urcosimod as a non-invasive topical treatment for neuropathic corneal pain, a condition that currently lacks effective localized therapies.

Figure 6: Urcosimod Efficacy in Mouse Model of Neuropathic Ocular Pain



Source: OKYO Pharma Corporate Presentation, June 2025

CLINICAL DEVELOPMENT OF URCOSIMOD

Key Learnings from Initial Trial to Treat DED

Study Design. The Phase 2 clinical trial of urcosimod in dry eye disease (DED) was the compound's first evaluation in human subjects (Figure 7). The study enrolled a total of 384 participants, of which 240 were successfully randomized after excluding 144 screen failures. Subjects were randomly assigned to one of three arms: urcosimod 0.05% (n=81), urcosimod 0.1% (n=80), or placebo (n=79). All participants underwent a two-week placebo run-in period prior to randomization, followed by active treatment beginning on Day One and continuing through Day 85.

The trial consisted of six clinic visits spaced between screening and Day 85, with key evaluation points on Days 15, 29, 57, and 85. The primary endpoints were focused on both clinical signs and patient-reported symptoms: inferior corneal staining as a measure of ocular surface damage, and the ocular discomfort score to capture symptom relief. Secondary endpoints provided additional insights into the drug's efficacy and tolerability. These included total conjunctival staining, tear film break-up time (TFBUT), blurred vision, burning/stinging sensations, pain, and entries in a daily symptom diary.

The study was conducted in partnership with Ora, Inc., a contract research organization specializing in ophthalmic clinical trials.

Safety Profile. Safety data showed a favorable profile for urcosimod (Figure 8). There were no drug-related serious adverse events (SAEs), and most reported adverse events were mild in nature, typically involving transient stinging or burning. Only one subject discontinued due to iritis in the 0.05% urcosimod group. Baseline characteristics were balanced across the treatment arms, ensuring comparability of outcomes.

Efficacy Data in Symptom Relief. Urcosimod demonstrated statistically significant improvements in both sign and symptom endpoints for DED. The trial showed that urcosimod provided rapid relief, with improvements in ocular pain, burning/stinging, blurred vision, dryness, and itching as early as Day 15.

For symptom relief, OK-101 showed a significant reduction in ocular pain (as measured by the Visual Analog Scale, or VAS), with the treatment group experiencing consistently greater pain relief compared to placebo at all time points. By Day 85, the average reduction in pain score was significantly larger for OK-101 ($p=0.01$) (Figure 9A), and a higher proportion of patients achieved at least a 30-point reduction from baseline (30.9% vs. 19% with placebo) (Figure 9B).

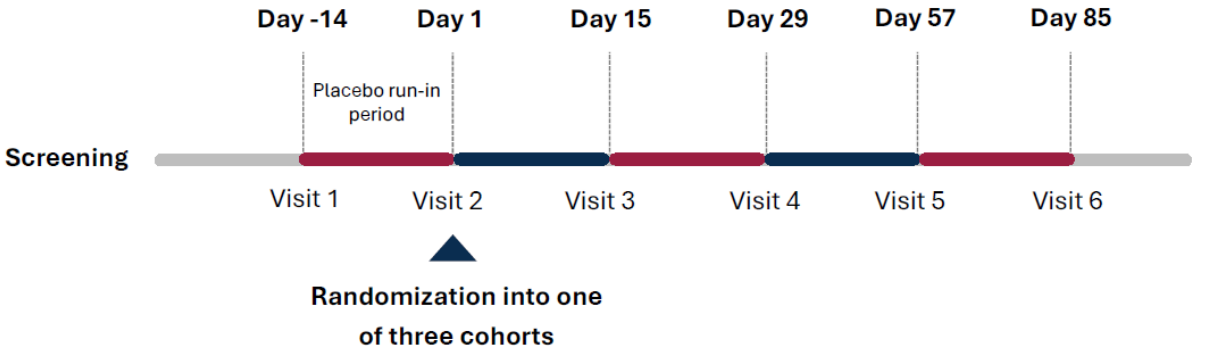
In addition to pain, OK-101 significantly improved secondary symptoms including burning/stinging and blurred vision. For burning/stinging, statistically significant differences vs. placebo were observed as early as Day 15 ($p<0.01$) and sustained through Day 85 ($p=0.01$) (Figure 9C), with about 30% of patients achieving a ≥30-point reduction (Figure 9D). Blurred vision also improved meaningfully, reaching statistical significance at multiple time points (e.g., $p=0.01$ on Day 29, $p=0.03$ on Day 57) (Figure 9E & F).

Efficacy Data in Sign. From a sign perspective, OK-101 improved conjunctival staining (Ora Calibra scale), an objective measure of ocular surface damage. In the overall intent-to-treat (ITT) and above-median severity populations, OK-101 showed greater reductions in staining scores versus placebo, with some comparisons reaching significance (e.g., $p=0.01$ to 0.02 across multiple time points) (Figure 10A & B). Additionally, a higher percentage of OK-101-treated patients achieved ≥12.5% and ≥25% improvement thresholds compared to placebo (Figure 10C & D).

Tear film break-up time, another objective sign, also improved significantly in the OK-101 group (Figure 10E & F). Changes reached statistical significance by Day 15 ($p=0.01$), peaked at Day 57 ($p=0.02$), and remained significantly better than placebo through Day 85 ($p=0.03$). Nearly 37% of patients on OK-101 achieved at least a 0.5-second increase by Day 85, versus 24% on placebo.

Overall, the trial data supported the efficacy of OK-101 in improving both subjective symptoms and objective clinical signs of dry eye disease, showing consistent and statistically significant improvements across multiple validated endpoints.

Figure 7: Urcosimod DED Phase 2 Trial Design



Urcosimod (0.05%) n = 81	Urcosimod (0.1%) n = 80	Placebo n = 79

Study Overview	
Total Subjects: Enrolled = 384	Baseline characteristics were balanced amongst treatment groups
Screen Failures = 144	No drug-related SAEs, most AEs were mild stinging & burning
Randomized Subjects = 240	1 discontinuation for iritis in 0.05% OK-101 group

Source: OKYO Pharma Corporate Presentation, June 2025

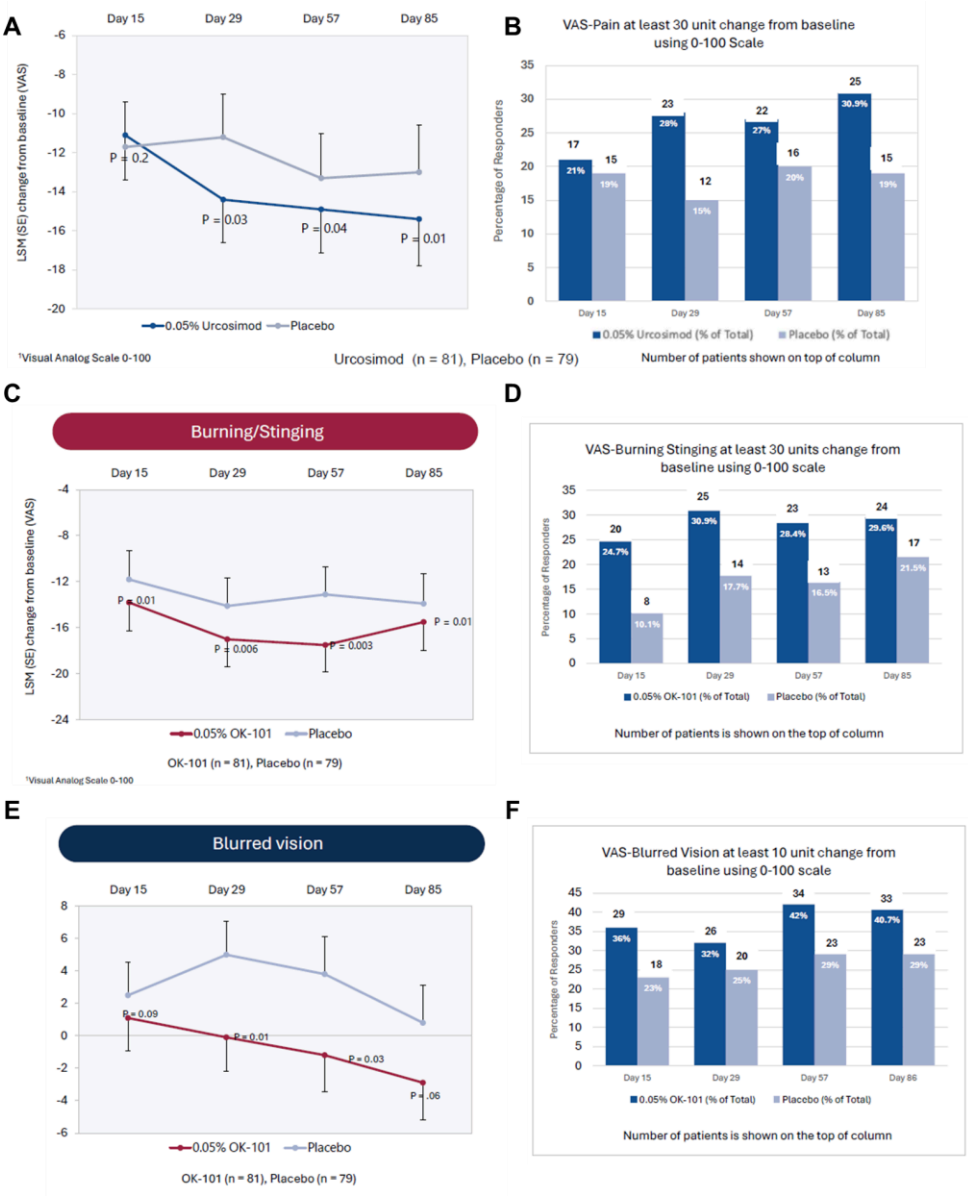
Figure 8: Urcosimod DED Safety Profile

Category	OK-101 (0.1%) (N = 80)	OK-101 (0.05%) (N = 81)	Placebo (N = 79)
Number of Ocular AEs	7	19	7
Number of Ocular TEAEs	6	16	6
Number of Ocular SAEs	0	0	0
Number of Ocular TE-SAEs	0	0	0
Number of Subjects Withdrawn Study Drug due to Ocular TEAE: n (%)	**0**	**1 (1.2)**	**1 (1.3)**
Number of Subjects with Ocular TEAEs (Severity)			
Mild: n (%)	5 (6.3)	14 (17.3)	4 (5.1)
Moderate: n (%)	0	1 (1.2)	0
Severe: n (%)	0	0	0
Number of Subjects with Ocular TEAEs by Relationship to Study Drug			
Definitely Related: n (%)	4 (5.0)	8 (9.9)	0
Probably Related: n (%)	0	0	0
Possibly Related: n (%)	0	1 (1.2)	3 (3.8)
Not Related: n (%)	1 (1.3)	6 (7.4)	1 (1.3)

Drop Comfort	Urcosimod 0.1% (n=79)	Urcosimod 0.05% (n=77)	Placebo (n=76)
Mean Score (SD)	2.5 (2.32)	2.3 (2.32)	1.8 (1.73)
Median	2.0	1.0	1.5

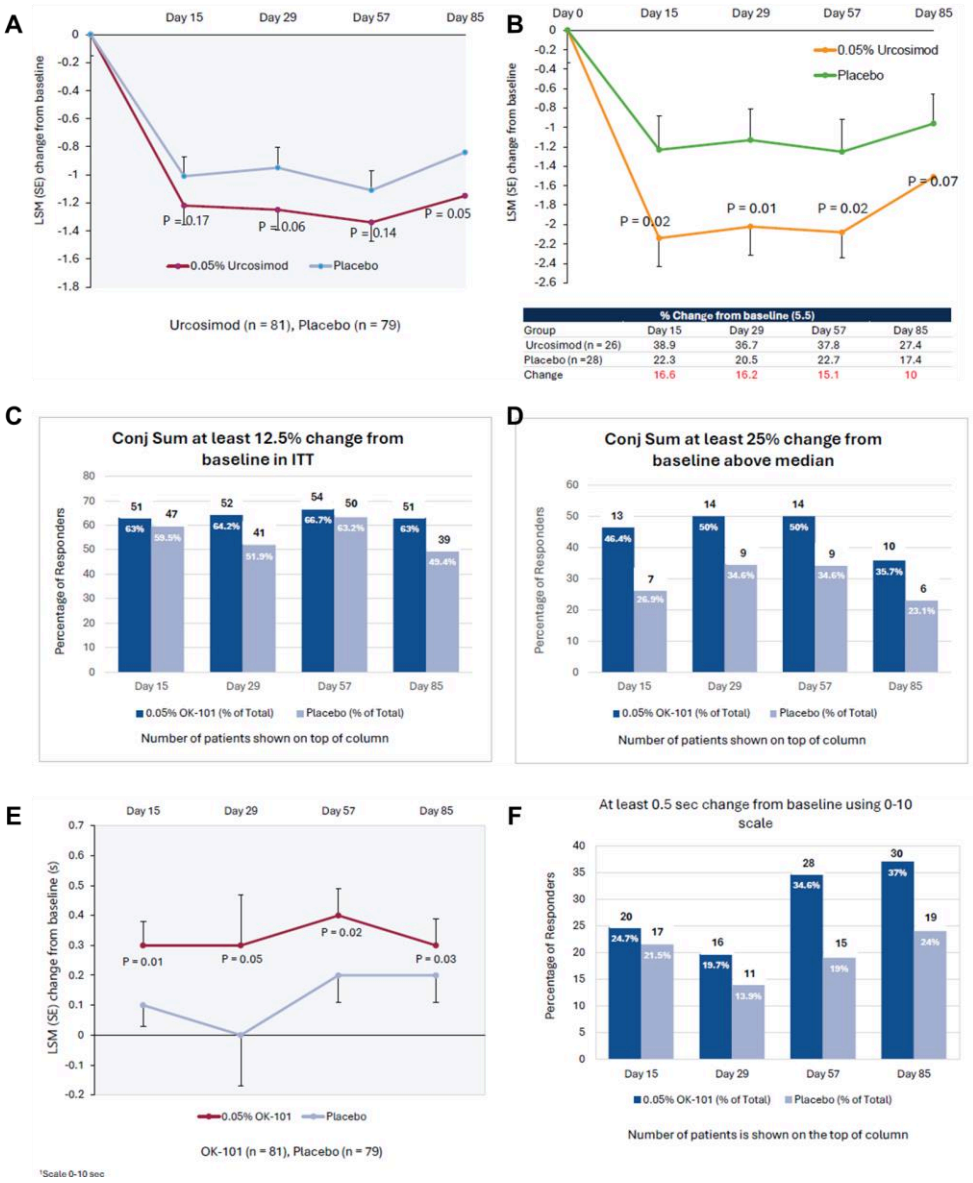
Source: OKYO Pharma Corporate Presentation, June 2025

Figure 9: Efficacy of Urcosimod in DED Symptoms Relief



Source: OKYO Pharma Corporate Presentation, June 2025

Figure 10: Efficacy of Urcosimod in DED Signs



Source: OKYO Pharma Corporate Presentation, June 2025

Urcosimod: Shift Focus from DED to NCP

OKYO Pharma shifted its focus from DED to NCP for several strategic reasons, aligning both with clinical opportunity and regulatory positioning.

While DED is a prevalent condition with an established market, it is also highly saturated and competitive, with multiple approved therapies already available. This makes it challenging for new entrants to differentiate meaningfully in terms of efficacy or market positioning, especially in the absence of clearly superior clinical outcomes. OKYO's Phase 2 trial for urcosimod in DED was the first human study of the compound and provided valuable safety and tolerability data. However, achieving significant commercial success in DED would have required larger, longer trials to demonstrate a substantial advantage over existing treatments, potentially slowing development timelines and increasing costs.

In contrast, NCP represents a high unmet need with no FDA-approved therapies specifically targeting the condition. NCP is often debilitating, underdiagnosed, and difficult to treat, creating a significant opportunity for a first-in-class drug. OKYO Pharma has received Fast Track designation from the FDA for urcosimod treating NCP. This designation is reserved for therapies targeting serious conditions with unmet medical needs and aims to accelerate the development and review process. Urcosimod is notable for being the first drug to enter clinical trials with patients specifically diagnosed with NCP. By pivoting to NCP, OKYO positioned itself to pursue a more targeted and potentially faster regulatory path, as reflected by the FDA's grant of Fast Track designation for urcosimod in this indication. This designation brings benefits such as more frequent engagement with the FDA, eligibility for Accelerated Approval or Priority Review, and the ability to submit a rolling NDA, all of which can shorten development time and reduce risk.

Phase 2 Study of Urcosimod in NCP

Study Design. The Phase 2a clinical trial (NCT06637527) is designed to evaluate the efficacy and safety of urcosimod in treating patients with NCP. This interventional study involves approximately 48 adult participants randomized in a 1:1:1 ratio to receive one of three treatments: 0.05% OK-101, 0.1% OK-101, or placebo. Each treatment group will self-administer eye drops four times daily over a 12-week period. The study uses a triple-masked design (participants, care providers, and investigators) and is set to last approximately 16 weeks per patient, including baseline, treatment, and follow-up visits.

The primary endpoint is the reduction in ocular pain as measured by a 0–10 visual analog scale (VAS). Secondary endpoints include assessments using the Ocular Pain Assessment Survey (OPAS), the Ocular Surface Disease Index (OSDI), drop comfort scores, and quality of life changes. In addition to subjective symptom scores, the trial incorporates objective biomarkers, such as corneal sensitivity thresholds (using a Cochet-Bonnet esthesiometer), corneal nerve regeneration, presence of microneuromas, and dendritiform cell density, all measured using *in vivo* confocal microscopy (IVCM).

To qualify for the study, participants must have experienced NCP symptoms (e.g., burning, stinging, or light sensitivity) for at least three months and show IVCM evidence of decreased corneal nerve density with microneuromas. Key exclusions include active ocular infections, inflammation, recent eye surgery, contact lens use, and systemic conditions that could interfere with outcomes.

The trial, which began in October 2024, is led by Dr. Pedram Hamrah at Tufts Medical Center and reflects OKYO Pharma's strategic pivot to address NCP. In April 2025, OKYO Pharma announced its decision to close the Phase 2 trial early after 17 patients completed the protocol. This strategic move was driven by the company's desire to expedite data analysis and engage the FDA more quickly for further regulatory discussions. Early closure of the trial allows for unblinding and evaluation of the masked efficacy data to assess urcosimod's therapeutic potential. Additionally, the company reported that several patients who completed the trial requested continued access to the drug under compassionate use, which OKYO is now considering pending the appropriate FDA approvals.

Efficacy Data. The Phase 2 trial of 0.05% urcosimod in patients with NCP demonstrated strong clinical efficacy and safety.

After 12 weeks of treatment, 75% of patients in the per-protocol population experienced greater than 80% reduction in pain severity, as measured by the VAS. These patients began the trial with moderate to severe NCP despite prior use of maximum medical therapy, highlighting urcosimod's potential in a difficult-to-treat population. Notably, pain relief was observed as early as Week Four and sustained through the 12-week treatment period.

Statistically, the mean change in VAS pain score from baseline to end of treatment was 5.5 in the 0.05% urcosimod group versus 2.75 in the placebo group, resulting in a delta of 2.75. This reduction was statistically significant (p=0.025), indicating robust

efficacy. While the placebo group also showed significant improvement (p=0.035), their effect size was notably smaller, and most placebo patients began the trial with only mild NCP, in contrast to the moderate to severe pain levels in the urcosimod group.
In the broader intent-to-treat population, 67% of patients treated with 0.05% urcosimod achieved greater than 50% reduction in pain severity, compared to only 33% in the placebo group. The mean VAS score reduction in this population was 4.2 for urcosimod and 2.5 for placebo. Importantly, the treatment effect size at Week 12, measured using Cohen's d, exceeded 1.2, indicative of a strong and clinically meaningful benefit.

Safety Data. No serious adverse events were reported in the 18-patient study, reinforcing the safety profile of urcosimod.

Next Step. Following this promising outcome, OKYO Pharma plans to meet with the FDA to determine next steps for the program, which already holds Fast Track designation for NCP.

Intellectual Property of Urcosimod

The intellectual property protection for urcosimod is covered by three issued US patents. The composition of matter patent (US 10,233,219) is valid through 2034, with a potential extension to 2039. The method of use patent for dry eye treatment (US 11,197,906) extends to 2037 and may be prolonged until 2042. Lastly, the use patent for neuropathic pain (US 11,254,720) is valid until 2034, with an additional 187 days granted under Patent Term Adjustment (PTA). Collectively, these patents provide urcosimod with robust protection through at least 2039, supporting its long-term commercial potential.

COMPETITION – NCP

Pharmacological Approach

Nerve Growth Factor Eye Drops. Dompé Farmaceutici S.p.A. (Private) has previously evaluated the efficacy and safety of recombinant human nerve growth factor (rhNGF), commercially known as cenegermin (Oxervate®), for the treatment of NCP. While cenegermin is already approved for neurotrophic keratitis, an ocular condition caused by damage to corneal sensory innervation, the rationale for using NGF in NCP stems from its ability to promote regeneration of corneal nerves and modulate nociceptive signaling. NCP is characterized by persistent eye pain due to dysfunction of the corneal somatosensory system, and NGF was hypothesized to help restore normal nerve function and reduce pain by enhancing corneal nerve repair and trophic support.

The study (NCT05700864) was intended to be a randomized, double-masked, placebo-controlled trial targeting adult patients with NCP, but it was officially withdrawn before enrollment began. As of now, no specific reason for the withdrawal has been disclosed.

SAF312. Originally developed by Novartis (NVS; Not Rated), SAF312 was investigated for its potential to treat ocular surface pain, specifically pain following procedures, such as photorefractive keratectomy (PRK). It works by blocking the TRPV1 receptor, a key factor in pain sensation. SAF312 has shown promise in preclinical studies and early clinical trials for its ability to reduce pain and be well-tolerated without delaying wound healing. In June 2023, Novartis reached an agreement to divest several ophthalmology assets, including SAF312, to Bausch + Lomb (BLCO; Not Rated), valued at up to $2.5B.

In a randomized Phase 2 trial, each of the 40 participants received SAF312 in one eye and placebo (vehicle) in the fellow eye[27]. The drops were administered four times daily over a 72-hour postoperative period. Results showed that SAF312 significantly reduced ocular pain compared to the placebo. At six hours post-PRK, pain scores were approximately 25% lower in SAF312-treated eyes, with a reduction of –11.13 mm on a 100-mm on the VAS. Over the zero to 12-hour window, there was a statistically significant average reduction of –8.56 mm in pain scores. SAF312 consistently outperformed the vehicle in pain reduction between one- and 30-hours post-surgery, with significant differences observed at eight of 11 timepoints. In addition to reducing pain, SAF312 also decreased the need for oral rescue medication (acetaminophen with codeine). Participants used fewer tablets and were more likely to avoid oral medication entirely in the first 24 hours when treated with SAF312. This suggests a meaningful opioid-sparing benefit, which is particularly relevant given the ongoing concerns about opioid dependency.

Importantly, the study reported a favorable safety profile. No serious adverse events were recorded, and minor ocular side effects were mild, transient, and unrelated to the drug. SAF312 did not impair corneal healing; all eyes re-epithelialized by 72 hours. In fact, redness and ocular surface inflammation were slightly less severe in SAF312-treated eyes at certain timepoints. Visual acuity, blink rate, tear production, and corneal staining were similar between the treatment and control groups, confirming that SAF312 did not interfere with healing or visual function.

A Phase 2 study (NCT04630158) has been designed to evaluate the safety and efficacy of SAF312 eye drops in treating chronic ocular pain following refractive or cataract surgery. This type of chronic pain, referred to as corneal induced chronic pain (CICP), can persist for months after surgical procedures like LASIK, PRK, SMILE, or cataract removal. The trial focused on patients experiencing eye pain for at least four months after surgery, where the pain responded significantly to topical anesthetics, suggesting a corneal origin. The goal was to determine whether SAF312 could reduce that pain compared to placebo.

The study enrolled 153 adult participants and used a randomized, placebo-controlled, quadruple-masked (participant, care provider, investigator, outcomes assessor) design across multiple centers. Participants were assigned to receive SAF312 at two different concentrations (5mg/mL and 15mg/mL) or placebo, administered as eye drops twice daily for 12 weeks. Before enrollment, all participants went through an approximately 12-week screening and observation phase, which included daily pain tracking through electronic diaries and a topical anesthetic response test to confirm corneal pain as the primary source. The primary objective was to determine whether SAF312 reduced pain more effectively than placebo by the end of the 12-week treatment period. Secondary objectives included assessments of safety and tolerability, reduction in the use of artificial tears or rescue medications, and changes in corneal nerve morphology, which could provide insight into the drug's mechanism of action. The inclusion and exclusion criteria were carefully defined to focus on patients with true post-surgical corneal pain while excluding those with confounding conditions like active infections, recent corticosteroid or neuromodulatory drug use, or unstable psychiatric or systemic illnesses.

[27] Thompson V, Moshirfar M, Clinch T, Scoper S, Linn SH, McIntosh A, Li Y, Eaton M, Ferriere M, Stasi K. Topical Ocular TRPV1 Antagonist SAF312 (Libvatrep) for Postoperative Pain After Photorefractive Keratectomy. *Transl Vis Sci Technol*. 2023 Mar 1;12(3):7. doi: 10.1167/tvst.12.3.7. PMID: 36917119; PMCID: PMC10020951.

There has been no formal public release of results from the Phase 2 trial of SAF312 for chronic ocular pain (NCT04630158), but data posted on ClinicalTrials.gov suggest a lack of meaningful efficacy. While early timepoints (Days Seven and 14) showed modest reductions in ocular pain for SAF312, the placebo group consistently demonstrated equal or greater pain relief throughout the study. By Week 12, the placebo group outperformed both SAF312 doses on the primary endpoint (change in pain severity), and no statistical significance or responder analyses were reported. These findings suggest any early treatment effect with SAF312 was not sustained, which may explain the absence of broader communication or continued development updates.

Non-Pharmacological Approaches

Beyond drug therapies, there are device-based and neuromodulation approaches being explored for neuropathic ocular surface pain, including corneal neuralgia, NCP.

ITNS. Intranasal Trigeminal Nerve Stimulation (ITNS) is an emerging, non-invasive neuromodulation technique showing promise as a potential treatment for neuropathic ocular pain (NOP), including NCP. This approach targets the ophthalmic branch of the trigeminal nerve via stimulation delivered through the nasal cavity, where sensory fibers innervating the cornea also pass.

A recent exploration interventional study. [28]demonstrated that ITNS significantly reduced ocular pain intensity in patients with NOP, particularly those experiencing burning pain—one of the hallmark symptoms of NCP. Notably, the treatment was well-tolerated, with no serious adverse events, and pain relief was observed even in individuals who had not responded to conventional therapies. The mechanism is thought to involve modulation of peripheral and central sensitization pathways responsible for chronic ocular pain.
This study supports the potential of ITNS as a non-drug, device-based alternative for managing NCP and highlights its applicability in outpatient settings without the risks associated with systemic pharmacotherapy.

TENS. Transcutaneous Electrical Nerve Stimulation (TENS) is a non-invasive therapy that uses low-voltage electrical currents delivered through the skin to modulate pain perception[29]. It has been widely used in conditions involving musculoskeletal and neuropathic pain. In recent years, there has been growing interest in applying TENS to treat ocular pain, especially chronic and neuropathic types such as neuropathic corneal pain (NCP). TENS works by stimulating peripheral nerves, particularly large-diameter A-beta fibers, which can inhibit the transmission of pain signals from smaller nociceptive fibers (A-delta and C fibers) through a mechanism known as the Gate Control Theory. Additionally, TENS may activate descending inhibitory pathways involving endogenous opioids and neurotransmitters like serotonin and norepinephrine, providing a broader analgesic effect.

In the context of ocular pain, TENS is typically applied over the skin in areas innervated by branches of the trigeminal nerve, such as the supraorbital and infraorbital regions. These areas correspond to the same sensory pathways that transmit pain signals from the ocular surface and cornea. By stimulating these peripheral branches, TENS may indirectly modulate abnormal pain signaling associated with ocular surface disorders.

In a study that evaluated the feasibility and effectiveness of using home-based TENS therapy for managing chronic ocular pain, ten patients with persistent ocular pain were included, who underwent an initial successful in-clinic TENS trial before being prescribed a home-use device. Patients used the device regularly for a median duration of 6.5 months, ranging from three to 14 months. Participants were instructed to apply the TENS device over the periocular region, initially using it around 14 times per week, with frequency tapering to about three times per week over time. The treatment was well-tolerated and showed promising results: there was a 27.4% reduction in reported pain intensity, which was statistically significant (p=0.02). Importantly, nine out of ten patients reported subjective improvement in their symptoms. There were no adverse events or safety concerns associated with long-term use of the device, supporting its feasibility for sustained home-based neuromodulation.

This study suggests that TENS could offer a safe, non-pharmacologic adjunct for patients suffering from neuropathic ocular pain, a condition often resistant to standard anti-inflammatory or lubricating treatments.

[28] Koseoglu ND, Chen E, Tuwani R, Kompa B, Cox SM, Cuneyt Ozmen M, Massaro-Giordano M, Beam AL, Hamrah P. Development and validation of a deep learning model for diagnosing neuropathic corneal pain via in vivo confocal microscopy. *NPJ Digit Med.* 2025 May 14;8(1):277. doi: 10.1038/s41746-025-01577-3. PMID: 40369269; PMCID: PMC12078480.
[29] Zayan K, Aggarwal S, Felix E, Levitt R, Sarantopoulos K, Galor A. Transcutaneous Electrical Nerve Stimulation for the Long-Term Treatment of Ocular Pain. *Neuromodulation.* 2020 Aug;23(6):871-877. doi: 10.1111/ner.13146. Epub 2020 Mar 20. PMID: 32196838; PMCID: PMC7483841.

PATIENTS, PRICING, MARKET POTENTIAL, NPV

Patient Population. We estimate that the addressable patient population includes: (1) DED patients exhibiting signs of neuropathic pain that may progress to chronic NCP; (2) patients with NCP resulting from refractive surgeries such as LASIK and PRK; (3) those with NCP caused by Herpes Zoster Ophthalmicus; and (4) patients with NCP associated with autoimmune conditions, including Sjögren's syndrome. For detailed calculations, please refer to the model below (Figure 11).

Pricing. Urcosimod, as a potential first-in-class treatment for NCP, may command a premium price within the ophthalmic therapeutics market. First-in-class therapies are those that introduce a novel mechanism of action not previously approved for a given indication, often addressing high unmet medical needs where conventional therapies have limited or no efficacy. In the case of NCP. many of whom remain refractory to lubricants, anti-inflammatories, or systemic neuromodulators. This strategic positioning supports the rationale for pricing at a premium, in line with recent FDA-approved, first-in-class ophthalmic drugs.

Oxervate® is a first-in-class biological therapy approved by the FDA for the treatment of neurotrophic keratitis (NK), a rare degenerative disease of the cornea caused by damage to the trigeminal nerve[30]. This condition leads to a loss of corneal sensation, poor healing of the corneal surface, and can lead to ulcers, scarring, and even vision loss. Oxervate is a recombinant form of human nerve growth factor (rhNGF), designed to restore corneal nerve function and promote epithelial healing. It is formulated as an eye drop and administered six times daily over an eight-week period. It was developed by Dompé Farmaceutici, an Italian private pharmaceutical company with a focus on rare diseases and ophthalmology. The FDA approved Oxervate on August 22, 2018, for patients aged two years and older. The approval was based on clinical trial results demonstrating that Oxervate led to complete corneal healing in a significantly higher percentage of patients compared to placebo. Due to the rarity of NK, Oxervate received Orphan Drug Designation in the US. Oxervate is priced at approximately $100,000 for the full treatment course, which includes daily dosing for eight weeks.

Our pricing assumption for urcosimod, which will likely be a chronically administered drug, is more conservative, at $30,000/year in the US.

Urcosimod has strong patent protection, with intellectual property (IP) exclusivity extending until at least 2039. The company may seek to pursue additional patents to further strengthen protection for urcosimod and potentially extend its patent term. We assume regulatory approval will occur in 2029, implying a ten-year commercial product life.

Market Potential of Urcosimod. According to our estimates peak sales could surpass ~$1B five years after commercial launch (US) (Figure 11) and ~$750M in EU5 countries (Figure 12).

Net Present Value (NPV) of Urcosimod. The risk-adjusted (30% probability of success) NPV for the urcosimod program is ~$690M ($13/share), according to our model (Figure 13).

FINANCIALS

As of July 31, 2025, the company has ~$6M in pro forma cash, cash equivalents. Cash burn for operation is expected to be in the range of ~$7.8M for the next 12 months.

[30] https://www.fda.gov/news-events/press-announcements/fda-approves-first-drug-neurotrophic-keratitis-rare-eye-disease

Figure 11: Market Model of US for NCP

NCP Market - US		2025A	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E
($ in thousands except price)																
US Population (in 000s)		343,523	345,241	346,967	348,702	350,446	352,198	353,959	355,729	357,507	359,295	361,091	362,897	364,711	366,535	368,367
% US Population Growth	*0.5%*															
US Adult Population (in 000s)		267,948	269,288	270,635	271,988	273,348	274,714	276,088	277,468	278,856	280,250	281,651	283,059	284,475	285,897	287,327
% Adult Population	*78%*															
Adult Patients with DED (in 000s)		18,220	18,312	18,403	18,495	18,588	18,681	18,774	18,868	18,962	19,057	19,152	19,248	19,344	19,441	19,538
*% Prevalence of DED in Adult Population **	*6.8%*															
DED patients with Neuropathic Features (in 000s)		1,822	1,831	1,840	1,850	1,859	1,868	1,877	1,887	1,896	1,906	1,915	1,925	1,934	1,944	1,954
*% DED Patients with Signs of Neuropathic Pain ***	*10%*															
DED patients develop chronic NCP		91,102	91,558	92,016	92,476	92,938	93,403	93,870	94,339	94,811	95,285	95,761	96,240	96,721	97,205	97,691
*% Patients with Neuropathic Pain Turned Chronic NCP ****	*5%*															
Refractive Surgeries Cases #		700,000	714,000	728,280	742,846	757,703	772,857	788,314	804,080	820,162	836,565	853,296	870,362	887,769	905,525	923,635
% Case Growth ##	*2%*															
NCP by Refractive Surgeries Cases		70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016	83,656	85,330	87,036	88,777	90,552	92,364
% Patients with Neuropathic Pain Turned Chronic NCP ###	*10%*															
Shingles Cases with Eyes-Affected ‡		80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
NCP by Herpes Zoster Ophthalmicus		12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
% Eye Shingles by HZO ‡‡	*15%*															
Annual Sjögren's Syndrome Cases †		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Sjögren's Syndrome Cases with Eye-Involvement		148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000
% Eye Involvement ††	*74%*															
NCP by Sjögren's Syndrome		14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800
% Severe Ocular Paink indicating NCP †††	*10%*															
Total Addressable Patients		187,902	189,758	191,644	193,560	195,508	197,489	199,501	201,547	203,627	205,741	207,891	210,076	212,298	214,557	216,855
Annual Patient Treated						1,955	5,925	14,963	25,193	30,544	41,148	41,578	42,015	42,460	42,911	43,371
Market Penetration						*1%*	*3%*	*7.5%*	*12.5%*	*15%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*
Annual Treatment Cost §						$30,000	$31,500	$33,075	$34,729	$36,465	$38,288	$40,203	$42,213	$44,324	$46,540	$48,867
Total US Gross sales						**$58,653**	**$186,627**	**$494,888**	**$874,935**	**$1,113,795**	**$1,575,504**	**$1,671,563**	**$1,773,592**	**$1,881,968**	**$1,997,095**	**$2,119,400**
Gross-to-Net Ratio %	*80%*															
Total US Net Sales						**$46,922**	**$149,301**	**$395,910**	**$699,948**	**$891,036**	**$1,260,403**	**$1,337,251**	**$1,418,873**	**$1,505,575**	**$1,597,676**	**$1,695,520**

* In the US, the prevalence of diagnosed DED is estimated to be around 6.8% of the adult population. Source: https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2797832

** ~10% of DED cases show pain disproportionate to signs, underlying neuropathic mechanisms. Source: https://pure-oai.bham.ac.uk/ws/files/240630355/Tuan-ManLeD2024Ocular.pdf

*** ~5% of all DED patients meet strict criteria for chronic NCP. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC6969676/

‡ Shingles Affects ~1 million Americans/year, with ~80,000 eye-involved cases annually. Source: https://www.glamour.com/story/shingles-vision

‡‡ Eye shingles, also called herpes zoster ophthalmicus, affects the eye in about 10% to 20% of cases. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC7039739/

~700,000 LASIK surgeries are performed annually in the US. Source: https://www.webmd.com/eye-health/default.htm

The compounded annual growth rate for laser vision correction is ~2%. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC7982707/

Estimated Incidence of NCP/Corneal Neuralgia ~ 10%. Source: https://pubmed.ncbi.nlm.nih.gov/39880672/

† Primary Sjögren's affect ~200,000 patients in US. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC5478481/

†† Ocular involvement in ~74% of these Sjögren's patients. Source: https://pubmed.ncbi.nlm.nih.gov/39434575/

††† Among those ocular involved cases, severity of ocular pain occurred in ~10% of patients, Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC11589435/

§ Recent first-in-class, FDA-approved orphan ophthalmic treatment Oxervate is priced around $100K for for an eight-week treatment course. We assume that urcosimod will be priced similarly but lower for the annual price due to chronic use.

Source: Lucid Capital Markets estimates

Figure 12: Market Model of EU5 for NCP

NCP Market - US		2025A	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E
($ in thousands except price)																
US Population (in 000s)		343,523	345,241	346,967	348,702	350,446	352,198	353,959	355,729	357,507	359,295	361,091	362,897	364,711	366,535	368,367
% US Population Growth	*0.5%*															
US Adult Population (in 000s)		267,948	269,288	270,635	271,988	273,348	274,714	276,088	277,468	278,856	280,250	281,651	283,059	284,475	285,897	287,327
% Adult Population	*78%*															
Adult Patients with DED (in 000s)		18,220	18,312	18,403	18,495	18,588	18,681	18,774	18,868	18,962	19,057	19,152	19,248	19,344	19,441	19,538
*% Prevalence of DED in Adult Population **	*6.8%*															
DED patients with Neuropathic Features (in 000s)		1,822	1,831	1,840	1,850	1,859	1,868	1,877	1,887	1,896	1,906	1,915	1,925	1,934	1,944	1,954
*% DED Patients with Signs of Neuropathic Pain ***	*10%*															
DED patients develop chronic NCP		91,102	91,558	92,016	92,476	92,938	93,403	93,870	94,339	94,811	95,285	95,761	96,240	96,721	97,205	97,691
*% Patients with Neuropathic Pain Turned Chronic NCP ****	*5%*															
Refractive Surgeries Cases #		700,000	714,000	728,280	742,846	757,703	772,857	788,314	804,080	820,162	836,565	853,296	870,362	887,769	905,525	923,635
% Case Growth ##	*2%*															
NCP by Refractive Surgeries Cases		70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016	83,656	85,330	87,036	88,777	90,552	92,364
% Patients with Neuropathic Pain Turned Chronic NCP ###	*10%*															
Shingles Cases with Eyes-Affected ‡		80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
NCP by Herpes Zoster Ophthalmicus		12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
% Eye Shingles by HZO ‡‡	*15%*															
Annual Sjögren's Syndrome Cases †		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Sjögren's Syndrome Cases with Eye-Involvement		148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000	148,000
% Eye Involvement ††	*74%*															
NCP by Sjögren's Syndrome		14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800	14,800
% Severe Ocular Paink indicating NCP †††	*10%*															
Total Addressable Patients		187,902	189,758	191,644	193,560	195,508	197,489	199,501	201,547	203,627	205,741	207,891	210,076	212,298	214,557	216,855
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Market Penetration						*1%*	*3%*	*7.5%*	*12.5%*	*15%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*
Annual Treatment Cost §						$30,000	$31,500	$33,075	$34,729	$36,465	$38,288	$40,203	$42,213	$44,324	$46,540	$48,867
Total US Gross sales						**$58,653**	**$186,627**	**$494,888**	**$874,935**	**$1,113,795**	**$1,575,504**	**$1,671,563**	**$1,773,592**	**$1,881,968**	**$1,997,095**	**$2,119,400**
Gross-to-Net Ratio %	*80%*															
Total US Net Sales						**$46,922**	**$149,301**	**$395,910**	**$699,948**	**$891,036**	**$1,260,403**	**$1,337,251**	**$1,418,873**	**$1,505,575**	**$1,597,676**	**$1,695,520**

* In the US, the prevalence of diagnosed DED is estimated to be around 6.8% of the adult population. Source: https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2797832

** ~10% of DED cases show pain disproportionate to signs, underlying neuropathic mechanisms. Source: https://pure-oai.bham.ac.uk/ws/files/240630355/Tuan-ManLeD2024Ocular.pdf

*** ~5% of all DED patients meet strict criteria for chronic NCP. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC6969676/

‡ Shingles Affects ~1 million Americans/year, with ~80,000 eye-involved cases annually. Source: https://www.glamour.com/story/shingles-vision

‡‡ Eye shingles, also called herpes zoster ophthalmicus, affects the eye in about 10% to 20% of cases. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC7039739/

~700,000 LASIK surgeries are performed annually in the US. Source: https://www.webmd.com/eye-health/default.htm

The compounded annual growth rate for laser vision correction is ~2%. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC7982707/

Estimated Incidence of NCP/Corneal Neuralgia ~ 10%. Source: https://pubmed.ncbi.nlm.nih.gov/39880672/

† Primary Sjögren's affect ~200,000 patients in US. Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC5478481/

†† Ocular involvement in ~74% of these Sjögren's patients. Source: https://pubmed.ncbi.nlm.nih.gov/39434575/

††† Among those ocular involved cases, severity of ocular pain occurred in ~10% of patients, Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC11589435/

§ Recent first-in-class, FDA-approved orphan ophthalmic treatment Oxervate is priced around $100K for for an eight-week treatment course. We assume that urcosimod will be priced similarly but lower for the annual price due to chronic use.

Source: Lucid Capital Markets estimates

Figure 13: NPV Model

NPV Calculation			2025A	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E
Total Revenue			-	-	-	-	$46,922	$181,142	$497,187	$968,415	$1,365,507	$1,864,202	$1,977,611	$2,098,058	$2,225,989	$2,361,878	$2,506,230
COGS			-	-	-	-	($4,692)	($18,114)	($49,719)	($96,842)	($136,551)	($186,420)	($197,761)	($209,806)	($222,599)	($236,188)	($250,623)
% of COGS		*10%*															
Total Gross Profit			**-**	**-**	**-**	**-**	**$42,230**	**$163,028**	**$447,469**	**$871,574**	**$1,228,956**	**$1,677,782**	**$1,779,850**	**$1,888,252**	**$2,003,390**	**$2,125,690**	**$2,255,607**
R&D			($2,254)	($3,000)	($3,600)	($4,320)	($5,184)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)	($6,221)
SG&A			($4,838)	($5,400)	($5,400)	($5,400)	($21,115)	($48,908)	($89,494)	($87,157)	($122,896)	($167,778)	($177,985)	($188,825)	($200,339)	($212,569)	($225,561)
SG&A as % of Revenue							*50%*	*30%*	*20%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
Operating Income (EBIT)			**($7,092)**	**($8,400)**	**($9,000)**	**($9,720)**	**$15,931**	**$107,899**	**$351,754**	**$778,195**	**$1,099,840**	**$1,503,783**	**$1,595,644**	**$1,693,206**	**$1,796,830**	**$1,906,900**	**$2,023,825**
Probability-adjusted EBIT	*PoS*																
	30%																
Total Probability-adjusted EBIT			**($7,092)**	**($8,400)**	**($9,000)**	**($9,720)**	**$4,779**	**$32,370**	**$105,526**	**$233,459**	**$329,952**	**$451,135**	**$478,693**	**$507,962**	**$539,049**	**$572,070**	**$607,148**
Tax Expense	*21%*		-	-	-	-	-	-	($22,161)	($49,026)	($69,290)	($94,738)	($100,526)	($106,672)	($113,200)	($120,135)	($127,501)
Free Cash Flow			($7,092)	($8,400)	($9,000)	($9,720)	$4,779	$32,370	$83,366	$184,432	$260,662	$356,396	$378,168	$401,290	$425,849	$451,935	$479,647
Discount rate	*15%*																
NPV of FCF		**$690,788**															
Shares Outstanding in Thousands		54,762															
NPV of FCF per Share		**$13**															

In millions except per share values

MANAGEMENT

Gary Jacob, PhD – Chief Executive Officer / Director

Dr. Jacob has over 35 years of extensive experience in the pharmaceutical and biotechnology industries across multiple disciplines, including research and development, operations, business development, capital financing activities and senior management expertise. He has developed broad and influential contacts throughout the biopharmaceutical, financial, banking and investor communities.

Dr. Jacob is the Co-Founder and former CEO and Chairman of Synergy Pharmaceuticals. During his time at Synergy, he served as Chairman, Chief Executive Officer and Executive Chairman, and is the co-inventor of Synergy's FDA-approved drug Trulance® which is currently marketed in the U.S. by Bausch Health, Inc. to treat functional GI disorders. Dr. Jacob is also the former CEO and Managing Director of Immuron Inc., an Australian biotechnology company dual-listed on the Australian ASX exchange and on NASDAQ. Dr. Jacob is the former Chairman of the Board of Hepion Pharmaceuticals, Inc., a public NASDAQ listed company with a drug in clinical development to treat nonalcoholic steatohepatitis (NASH), and is also on the Board of Directors of Cardiff Oncology, Inc., a NASDAQ listed public oncology company. He served as Chief Executive Officer and Director of Callisto Pharmaceuticals, Inc. from May 2003 until January 2013.

Prior to his involvement with Callisto and Synergy, Dr. Jacob was at Monsanto/G.D. Searle, where he was Director of Glycobiology and a Monsanto Science Fellow, specializing in the field of Glycobiology and drug discovery. Dr. Jacob holds over 30 patents and is the co-inventor of two pharmaceutical drugs which are FDA approved. Dr. Jacob earned a B.S. cum laude in Chemistry from the University of Missouri, St. Louis and holds a Ph.D. in Biochemistry from the University of Wisconsin, Madison.

Raj Patil, PhD – Chief Scientific Officer

Dr. Patil brings 30 years of ophthalmic experience and a powerful combination of academic scholarship and pharmaceutical R&D excellence.

Dr. Patil previously worked with Ora Inc, as Vice President of Research & Development, where he was responsible for driving all anterior and posterior segment research of Ora's R&D Institute. Earlier in his career, he worked at iVeena Delivery Systems as Vice President of Advanced Ocular Delivery Systems. His tenure at iVeena included a two-year sabbatical in Singapore, where he served as an Associate Professor of Ophthalmology at DUKE/NUS Medical School and Principal Investigator at Singapore Eye Research Institute.

Dr. Patil also held a number of leadership roles at Alcon/Novartis Institute of Biomedical Research, including Associate Director of Research and Head of Molecular Pharmacology glaucoma and retina research. Prior to joining the business world, Dr. Patil served as an Associate Professor of Ophthalmology, Cell Biology & Genetics at University of Nebraska Medical Centre in Omaha and as an Assistant Professor of Ophthalmology, Molecular Biology & Pharmacology at Washington University in St. Louis.

Dr. Patil received his PhD in Biochemistry from National Chemical Laboratory/University of Pune, India and completed his postdoctoral training in Biochemistry and Molecular Biology at the University of Michigan, Ann Arbor, MI. He is the recipient of Olga Keith Wiess Special Scholar Award from Research to Prevent Blindness Foundation and NIH Director's New Innovator Award. Dr. Patil has authored over 50 peer-reviewed research articles and serves as reviewer and editorial board member for numerous journals and is frequently invited to lecture at academic and industry events.

Keeren Shah – Chief Financial Officer

Keeren Shah serves as the Chief Financial Officer. Ms. Shah currently also serves as the Finance Director of Tiziana Life Sciences LTD, Accustem Sciences Limited and Rasna Therapeutics Inc., having previously served as the Group Financial Controller for all businesses from June 2016 to July 2020. Prior to joining the company, Ms. Shah spent 10 years at Visa, Inc. as a Senior Leader in its finance team where she was responsible for key financial controller activities, financial planning and analysis, and core processes as well as leading and participating in key transformation programs and Visa Inc.'s initial public offering. Before joining Visa, Ms. Shah also held a variety of finance positions at other leading companies including Arthur Andersen and BBC Worldwide. She holds a Bachelor of Arts with honors in Economics and is a member of the Chartered Institute of Management Accountants.

RISKS

OKYO Pharma is a development-stage company, and investment is subject to risk.

Clinical Trial Risk

The company has completed multiple clinical studies for urcosimod. Urcosimod was found to be safe and effective, without any serious adverse events. However, in the upcoming pivotal clinical trial, urcosimod may not be deemed safe and effective.

Regulatory Risk

The FDA and European regulators may require additional clinical trials beyond the ones OKYO currently anticipates.

Competition Risk

Urcosimod is facing albeit limited competition from other drugs devices under clinical development for NCP.

Financing Risk

As of July 31, 2025, the company has ~$6M in pro forma cash, cash equivalents. Cash burn for operation is expected to be in the range of ~$7.8M for the next 12 months. The company may need to raise additional equity capital to support its clinical development beyond mid-2026. Financing may not be available under favorable terms, or at all.

Income Statements

OKYO Pharma									Elemer Piros, Ph.D. 646-350-1528 epiros@lucidcm.com					
		F2024A			F2025A			F2026E			F2027E		
($ In thousands, except per share data; fiscal year ending on March 31)	**F2023A**	**1HA**	**2HA**	**2024A**	**1HA**	**2HA**	**2025A**	**1HE**	**2HE**	**2026E**	**1HE**	**2HE**	**2027E**
Operating Expenses													
Research and development	($6,338)	($4,600)	($3,644)	($8,244)	($2,216)	($38)	($2,254)	($1,000)	($2,000)	($3,000)	($4,000)	($4,000)	($8,000)
Operating expenses	($6,849)	($4,135)	($3,371)	($7,506)	($1,123)	($3,715)	($4,838)	($2,400)	($3,000)	($5,400)	($3,500)	($3,500)	($7,000)
Loss from operations	**($13,187)**	($8,735)	($7,015)	**($15,750)**	($3,339)	($3,753)	**($7,092)**	($3,400)	($5,000)	**($8,400)**	($7,500)	($7,500)	**($15,000)**
Other Income	($97)	-	($1,053)	($1,053)	($758)	($120)	($878)	-	-	-	-	-	-
Income Tax / Credit	$12	($83)	$61	($22)	$1,418	$1,846	$3,264	-	-	-	-	-	-
Net (loss) income	**($13,272)**	($8,817)	($8,008)	**($16,825)**	($2,680)	($2,026)	**($4,706)**	($3,400)	($5,000)	**($8,400)**	($7,500)	($7,500)	**($15,000)**
Foreign currency translation adjustment	($441)	$342	($201)	$141	($480)	$321	($159)	-	-	-	-	-	-
Total Comprehensive (Loss)	**($13,713)**	($8,476)	($8,208)	**($16,684)**	($3,160)	($1,705)	**($4,865)**	($3,400)	($5,000)	**($8,400)**	($7,500)	($7,500)	**($15,000)**
Weighted average number of shares outstanding	22,257	25,714	29,344	29,344	33,573	37,611	37,611	45,491	47,766	46,628	52,154	54,762	53,458
Net loss attributable to common stockholders per share	**($0.60)**	($0.34)	($0.27)	**($0.57)**	($0.08)	($0.05)	**($0.13)**	($0.07)	($0.10)	($0.18)	($0.14)	($0.14)	($0.28)

Source: OKYO Pharma SEC filings, Lucid Capital Markets estimates

Risks for: OKYO Pharma Ltd (OKYO)

OKYO Pharma is a development-stage company, and investment is subject to risk.

Clinical Trial Risk

The company has completed multiple clinical studies for urcosimod. Urcosimod was found to be safe and effective, without any serious adverse events. However, in the upcoming pivotal clinical trial, urcosimod may not be deemed safe and effective.

Regulatory Risk

The FDA and European regulators may require additional clinical trials beyond the ones OKYO currently anticipates.

Competition Risk

Urcosimod is facing albeit limited competition from other drugs devices under clinical development for NCP.

Financing Risk

As of July 31, 2025, the company has ~$6M in pro forma cash, cash equivalents. Cash burn for operation is expected to be in the range of ~ $7.8M for the next 12 months. The company may need to raise additional equity capital to support its clinical development beyond mid-2026. Financing may not be available under favorable terms, or at all.

Valuation for: OKYO Pharma Ltd (OKYO)

We arrive at our 12-month price target of $13 per share by assessing the after-tax, risk-adjusted NPV of potential future cash flows from the company's urcosimod program in NCP. The probability-adjusted, fully taxed (21%) NPV at a 15% discount rate of potential cash flows until 2039 is approximately $700M, equivalent to $13 per share, corresponding to our 12-month price target. Potential factors that could prevent shares from reaching our price target include the failure of urcosimod to demonstrate significant efficacy benefits or being deemed unsafe, leading to the discontinuation of clinical programs and commercial launch. In addition, the company may not be able to raise additional funds to complete development.

Company Description for: OKYO Pharma Ltd (OKYO)

OKYO Pharma Limited is a clinical stage biopharmaceutical company developing innovative therapies for the treatment of neuropathic corneal pain and dry eye disease, with ordinary shares listed for trading on the NASDAQ Capital Market. OKYO is focused on the discovery and development of novel molecules to treat neuropathic corneal pain and dry eye disease. A Phase 2 trial of urcosimod to treat neuropathic corneal pain patients was just completed by OKYO.

Appendix

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Neutral: 18.8%	Neutral: 15.4%
Sell: 0.0%	Sell: 0.0%
Not Rated: 0.0%	Not Rated: 0.0%

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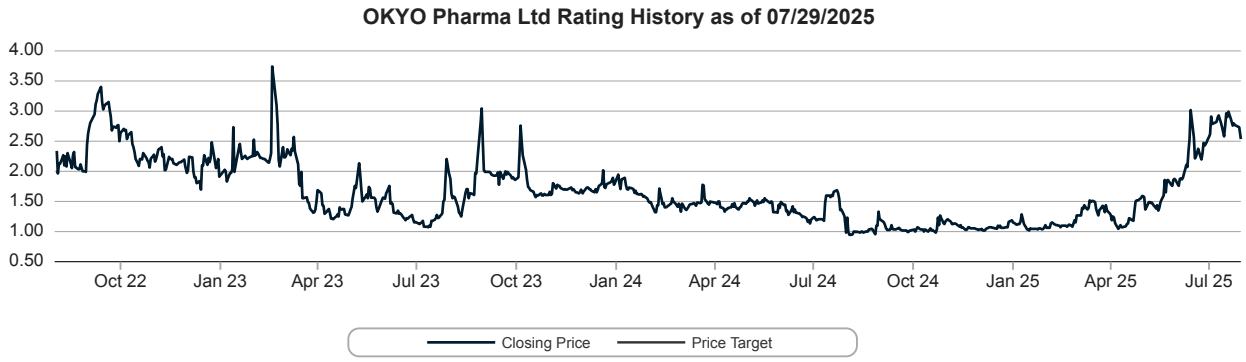
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OKYO Pharma Ltd Rating History as of 07/29/2025
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
Oct 22
Jan 23
Apr 23
Jul 23
Oct 23
Jan 24
Apr 24
Jul 24
Oct 24
Jan 25
Apr 25
Jul 25
Closing Price
Price Target