

**A COMBINATION  
OF CELL  
REGENERATION  
SUPPORT AND  
LUBRICATING  
BENEFITS**

# Corneal Repair

**Oculenis™ 0.75%** with



A unique, patented cross-linked hyaluronic acid to lubricate eyes and support healing of superficial corneal conditions in cats, dogs, horses and exotic pets.

# CORNEAL ULCERATIVE DISEASE

Corneal ulcers are defined as a defect in the epithelium with exposure of stroma or basal membrane.<sup>1</sup>

Corneal damage can be defined by its anatomical severity:

- Corneal/epithelial erosion
- Superficial epithelial ulcer
- Superficial stromal ulcer
- Deep stromal ulcer
- Descemetocoele +/- ocular perforation



**CORNEAL EROSION**



**EPITHELIAL ULCER**



**SPONTANEOUS CHRONIC CORNEAL EPITHELIAL DEFECT**



**SUPERFICIAL STROMAL ULCER**



**DEEP STROMAL**

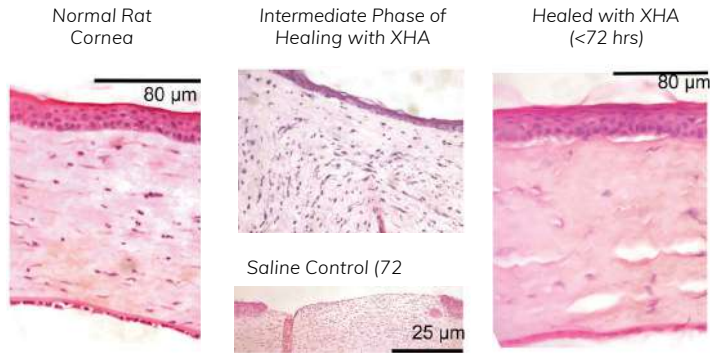


**DESCEMETOCELE**

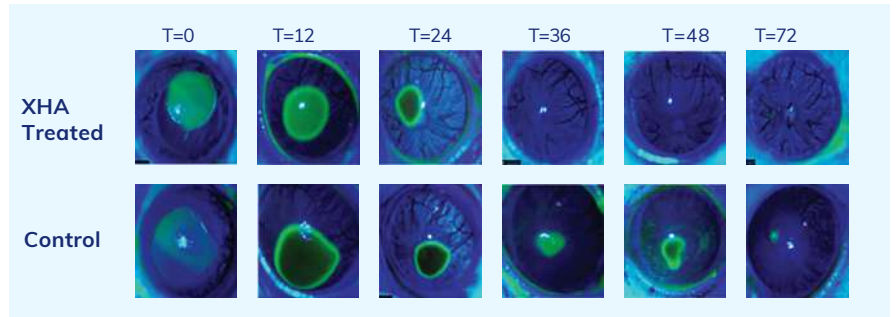
NOTE: Oculenis™ is not a one-for-one substitute of serum. Serum contains factors that can neutralise collagenase activity. Collagenases are enzymes that break the peptide bonds in collagen. They assist in destroying extracellular structures in the pathogenesis of bacteria. Thus in complex cases of infected ulcers serum still may be required. In addition antibiotics are required if an infection is present.

# HEALING SUPPORT WITH OCULENIS

Clinically shown not to bind to antibiotics, increase healing rate, and decrease scarring in corneal wounds and ulcers

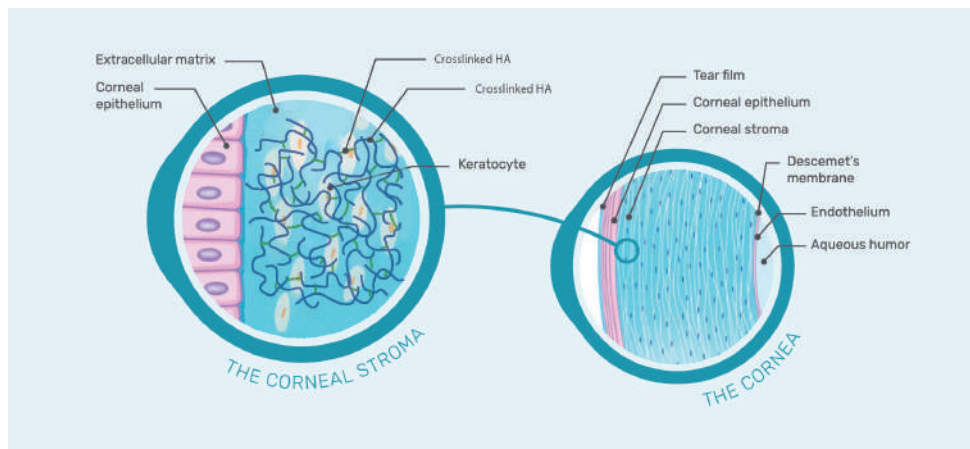


Proof-of-concept study showing a greater than 50% increase in healing rates of corneal injuries treated with crosslinked HA compared to saline controls. It is also worth noting that measurements for the study were formally stopped at 72 hours; in some control groups it took over 100 hours for complete reepithelisation. Thus, if the study was not stopped at 72 hours an even greater difference in healing rates would have been seen.



BioHance™ crosslinked HA creates a matrix that acts as a scaffolding for epithelial cells when applied to the corneal surface. This matrix increases epithelialisation and can help reduce scarring in corneal wounds.

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## UNIQUE FORMULATION

- **BioHance™ cross-linked HA:**  
0.75% highly concentrated cross-linked HA for an improved support of corneal healing<sup>(3, 5)</sup>
- **No preservatives for a better tolerance**

## STRONG POINTS

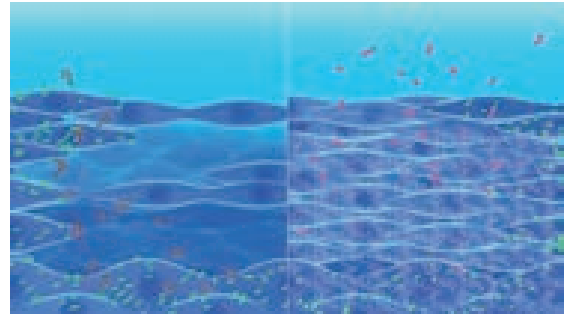
- **Accelerated healing with a highly-concentrated cross-linked HA**
  - 0.75%: a higher concentration for a stronger benefit
  - 0.75% cross-linked HA acts like a scaffold that creates a healing cocoon enabling a better, more stable protection of the corneal defect
  - Cross-linked HA matrix increases reepithelialisation rate<sup>(5, 5)</sup>
- **Improved residence time<sup>(2, 4)</sup>**
  - Better mucoadhesive properties of the concentrated cross-linked HA compared to linear HA
  - More stable than linear HA, it lasts 2-5 times longer than traditional artificial tears
  - Broader coverage of the ocular surface
- **Comfort for pets and pet owners**
  - The cross-linked HA creates a sheer thin film without blurring the vision, unlike linear HA<sup>(6)</sup>
  - Preservative-free to avoid irritation or stinging sensation<sup>(7)</sup>
  - The improved residence time allows for less frequent applications<sup>(6)</sup>

## SUPPORTED BY A CONTROLLED STUDY IN DOGS AND CATS<sup>(5)</sup>

Closure of corneal defects were accelerated when administered three times daily as compared to the standard linear HA of the market, in addition to a topical antibiotic treatment.

- (2) Montiani-Ferreira, F et al (2022) Fluorometric evaluation of cross-linked vs linear hyaluronic acid eye lubricants. ACVO 2022 Conference poster session.
- (3) Yang, G et al (2010) A cross-linked hyaluronan gel accelerates healing of corneal epithelial abrasion and alkali burn injuries in rabbits. Veterinary Ophthalmology 13(3);144-150.
- (4) Plummer, CE et al (2022) Evaluation of topically applied cross-linked hyaluronic acid (Remend®) on the ocular surface of clinically healthy dogs. ACVO 2022 Conference poster session.
- (5) Williams, DL (2017) Topical Cross-Linked HA-Based Hydrogel Accelerates Closure of Corneal Epithelial Defects and Repair of Stromal Ulceration in Companion Animals. Investigative ophthalmology & visual science 58(11);4616-4622.
- (6) Williams, DL et al (2013) A crosslinked HA-based hydrogel ameliorates dry eye symptoms in dogs. International Journal of Biomaterials 2013;460437.
- (7) Goldstein, MH et al (2022) Ocular benzalkonium chloride exposure: problems and solutions. Eye (London, England) 36(2);361-368.

Visit [domespharma.us/learnmore](https://domespharma.us/learnmore) to view our clinical studies, product guides, and videos.



Improved support of corneal healing

## HOW TO USE

- 1 Simply apply 1 to 2 drops directly onto the affected eyes.
- 2 The natural movement of the eyelid will distribute Oculenis™ over the ocular surface.
- 3 Apply a minimum of 2 times daily until corneal reepithelialization is achieved.

Oculenis™ can be used for superficial corneal conditions where protection and healing support may be beneficial.

- Volume 3 ml
- Store at ambient temperature



## CORNEAL HEALING SUPPORT

- A highly concentrated (0.75%), patented, cross-linked hyaluronic acid
- Supports corneal healing
- Soothes the ocular surface
- Preservative-free for a better tolerance

# BIOHANCE™ Corneal Repair Products

An advanced and patented bioengineering technology with highly concentrated cross-linked HA for a long-lasting ocular persistence<sup>(2, 4)</sup>.



## CORNEAL HEALING SUPPORT

to support cellular regeneration in the management of superficial corneal conditions



## Oculenis XL

For cases that require a higher number of doses



NOTE: Oculenis™ does not contain antibiotics and antibiotics are required if an infection is present. For more information please visit [domespharma.us](http://domespharma.us)



As an international reference in ophthalmology, Dômes Pharma and Sentrx are committed to providing veterinarians, nurses, and pet owners with:

- An extensive range of innovative ophthalmic products, from daily care and prevention to diagnostics and therapeutics
- Our teams' scientific and technical expertise
- A broad range of services, including disease management guidelines and innovative educational experiences.

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