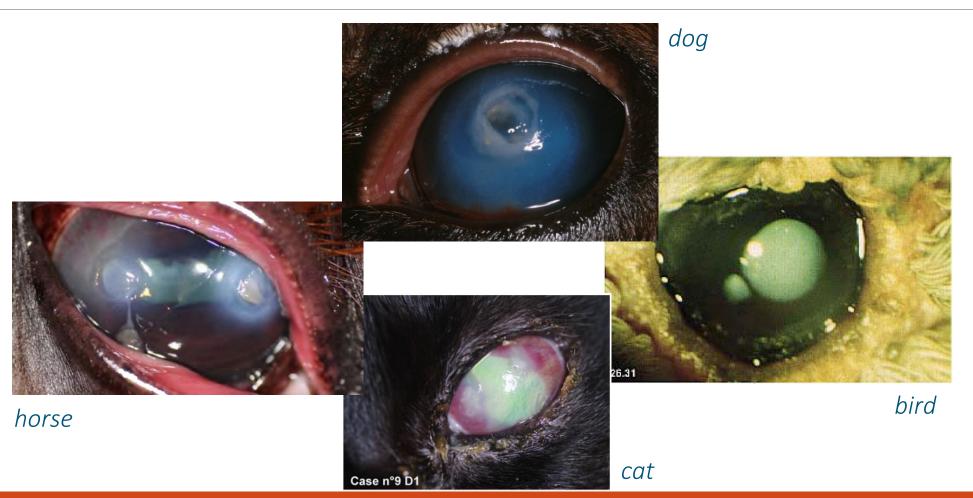


#### IMPROVING EYE CARE IN VETERINARY MEDICINE



**Infectious keratitis** and **corneal ulcer** are common diseases in dogs, cats, horses and birds.

They can be rapidly complicated by corneal melting leading to visual loss.





## Corneal photochemotherapy with VETUVIR

is the **new antimicrobial therapy** for efficiently treating **infectious ulcerative keratitis** with **riboflavin** and **UV-A light**.







Indication for use: Infectious keratitis and septic corneal ulcer in dogs, cats, horses and birds.



### How does it work?

Corneal photochemoterapy is performed by irradiating the cornea, which has been soaked with VISIOFLAVIN riboflavin solution for 20 minutes, using VETUVIR, the advanced UV-A device.

with VISIOFLAVIN

1) Soak the cornea 2) Irradiate the cornea with VETUVIR









**VETUVIR** and **VISIOFLAVIN** are for veterinary use only. Trademarks registered by Vision Engineering Italy srl.



### How does it work?

RF=riboflavin

collagen molecule sidechains 370 nm NH<sub>2</sub> NHa  $RF \rightarrow {}^{1}RF^* \rightarrow {}^{3}RF^* \rightarrow {}^{3}O_2 \rightarrow {}^{1}O_2$ CHO NHa NH<sub>2</sub> NH<sub>2</sub> NH<sub>2</sub> **UV-absorption** oxidative activation of formation of formation of Riboflavin (RF) desamination singuletcross-links oxygen

CORNEA enriched with riboflavin

strengthening corneal stroma

peroxidation of cell lipid membranes

**Direct killing action** on microbes caused by peroxidation of cell membrane

Strenghtens the biomechanics and structure of corneal

tissue by photo-polymerization of stromal proteins (counteracting bacterial collageolytic activity)



# Unique features

Two UV-A irradiance settings: 10 mW/cm<sup>2</sup> and 30 mW/cm<sup>2</sup>

Fully portable

Easy-to-use

Bluetooth remote control

Efficiently used either in the operating room or in the stable



Manufactured according to Dir. CEE 2001/95, 2006/42/CEE and 2014/30/UE



### Riboflavin with enhancers

#### 0.1% riboflavin solution

- hypotonic
- dextran-free
- with enhancers





### Clinical cases

Courtesy Prof. R. Gialletti

Horse with chronic corneal abscess (pseudomonas+ and streptococcus+)

Resistant to antibiotic therapy.





1 week after treatment: Almost complete resolution of the abscess.



5 weeks after treatment: (pseudomonas- and streptococcus-)
Vision is restored.



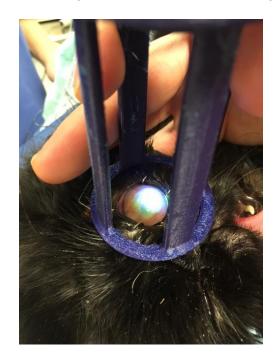
### Clinical cases

Courtesy Dr. C. Giordano

**Persian cat**with ulcerative keratitis

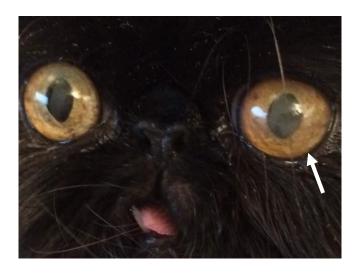


#### Corneal photochemotherapy





1 month after treatment



2 months after treatment The left cornea is almost CLEAR



### Clinical cases

Courtesy Prof. C. Peruccio

French bulldog with corneal melting and descemetocele.

Resistant to antibiotic therapy.



2 weeks after treatment: The cornea becomes more transparent.

#### Photochemoterapy







1 day after treatment: (no more descemetocele)



**4 weeks** after treatment: Visual function is preserved.



#### ORDERING AND INFORMATION

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