



## EYE DROP SYSTEM **COL**<sup>®</sup>

IL DISPOSITIVO PROGETTATO, PRODOTTO  
E BREVETTATO PER L'APPLICAZIONE DI  
SIERO-COLLIRIO E CONCENTRATO PIASTRINICO.

I prodotti della linea COL presentano differenti configurazioni **per soddisfare le necessità di ogni professionista.**

COL è la configurazione in rampa con **10 o 20 applicatori.**

COL.C è la configurazione in collana da **30, 40 o 50 applicatori.**

Gli applicatori possono essere da **45 gocce** (1,45 ml) o da **80 gocce** (2,50 ml).

Il gocciolatore di ciascun applicatore è studiato per dosare sempre la stessa quantità di siero-collirio, **ogni goccia è da 0,031 ml.**

Gli applicatori sono **certificati per resistere fino a - 80° C.**

**In questo modo il siero-collirio può essere congelato** e consegnato al paziente.

**Filtri anti-batterici** sono posizionati sulla chiusura di ciascun applicatore per mantenerlo sterile fino all'apertura.

## EYE DROPS WITH SERUM

Human tears are rich in "natural unique elements" and growth factors, such as vitamins, fibronectin, cytokines, albumin, important for maintaining a healthy corneal and conjunctival epithelium. These components cannot be found in **artificial tear preparations** which often contain preservatives, stabilizers and other additives, which potentially induce allergic reactions.

COMPARATIVE CONCENTRATIONS OF TEARS AND AUTOLOGOUS SERUM OF THE MAIN EPITHELIOTROPHIC FACTORS

	EGF (ng/ml) epithelial growth factor	TGF- $\beta$ (ng/ml) transforming growth factor	VITAMIN A (mg/ml)	LYSOZYME (mg/ml)	FIBRONECTIN ( $\mu$ g/ml)
TEARS	0.2 - 3.0	2 - 10	0.02	1 - 4	21
SERUM	0.5	6 - 33	46	6	205

1 - López-García J. S., García-Lozano I., Rivas L., Martínez-Garchitorena J. - Use of autologous serum in ophthalmic practice - Arch Soc Esp Oftalmol 2007; 82: 9-20.

## THE EFFECT OF AUTOLOGOUS PLATELET LYSATE EYE DROPS

Vitamin A, Endothelial Growth Factor (EGF), fibronectin, Tissue Growth Factor  $\beta$  (TGF- $\beta$ ), and nerve growth factor (NGF) are necessary for maintaining the integrity of conjunctival and corneal integrity and it has been demonstrated that LPA is rich in these GFs. In our study, subjects without a satisfactory control of the disease with conventional topical therapy achieved improvement in symptoms after APL treatment. This

improvement was significantly higher compared to patients treated with tear substitutes. Break up time (FBUT) average and, in consequence, the mean value of Ocular protection Index (OPI) increased in patients treated with APL, indicating greater stability and an improvement in quality of the tear film. The corneal staining score improved significantly and after 90 days of treatment 80% of patients showed an Oxford score  $\leq 1$ .<sup>2</sup>

2 - A. M. Fea, V. Aragno, V. Testa, F. Machetta, S. Parisi, S. D'Antico, R. Spinetta, E. Fusaro, and F.M. Grignolo - The effect of autologous Platelet Lysate Eye drops: An in Vivo confocal microscopy Study - Hindawi Publishing Corporation BioMed Research International, 2016, Article ID 8406832.

### TIME - BODY RESPONSE TO TISSUE INJURY



COL®			
REF	FLACONI PER KIT	VOL RIEMPIMENTO PER FLACONE	GOCCE PER FLACONE
COL10	10	0 - 1,45 ml	45
COL20	20	0 - 1,45 ml	45
COLB10	10	0 - 2,50 ml	80
COLB20	20	0 - 2,50 ml	80

  

COL®.C			
REF	FLACONI PER KIT	VOL RIEMPIMENTO PER FLACONE	GOCCE PER FLACONE
COLC30	30	0 - 1,45 ml	45
COLC40	40	0 - 1,45 ml	45
COLC50	50	0 - 1,45 ml	45
COLCB30	30	0 - 2,50 ml	80
COLCB40	40	0 - 2,50 ml	80
COLCB50	50	0 - 2,50 ml	80



BIOMED DEVICE S.R.L.

via Vittorio Bottego, 239 / 41126 Modena / Italy

tel. +39.059.343929 / fax +39.059.4550010

e.mail info@biomeddevice.it / www.biomeddevice.it

All products are 1936 certified in accordance with European Directives. Biomed Device is a certified company:



Management System  
ISO 9001:2015  
EN ISO 13485:2016  
www.tuv.com  
ID 9105080839



ISO 9001:2015

EN ISO 13485:2016

Biomed Device products are medical devices and not available to the general public, and must be used only by authorized personnel. Biomed Device reserves the right to change the products at any time, in line with technical innovation and product improvement. This informative material is for the exclusive use of authorized personnel.