

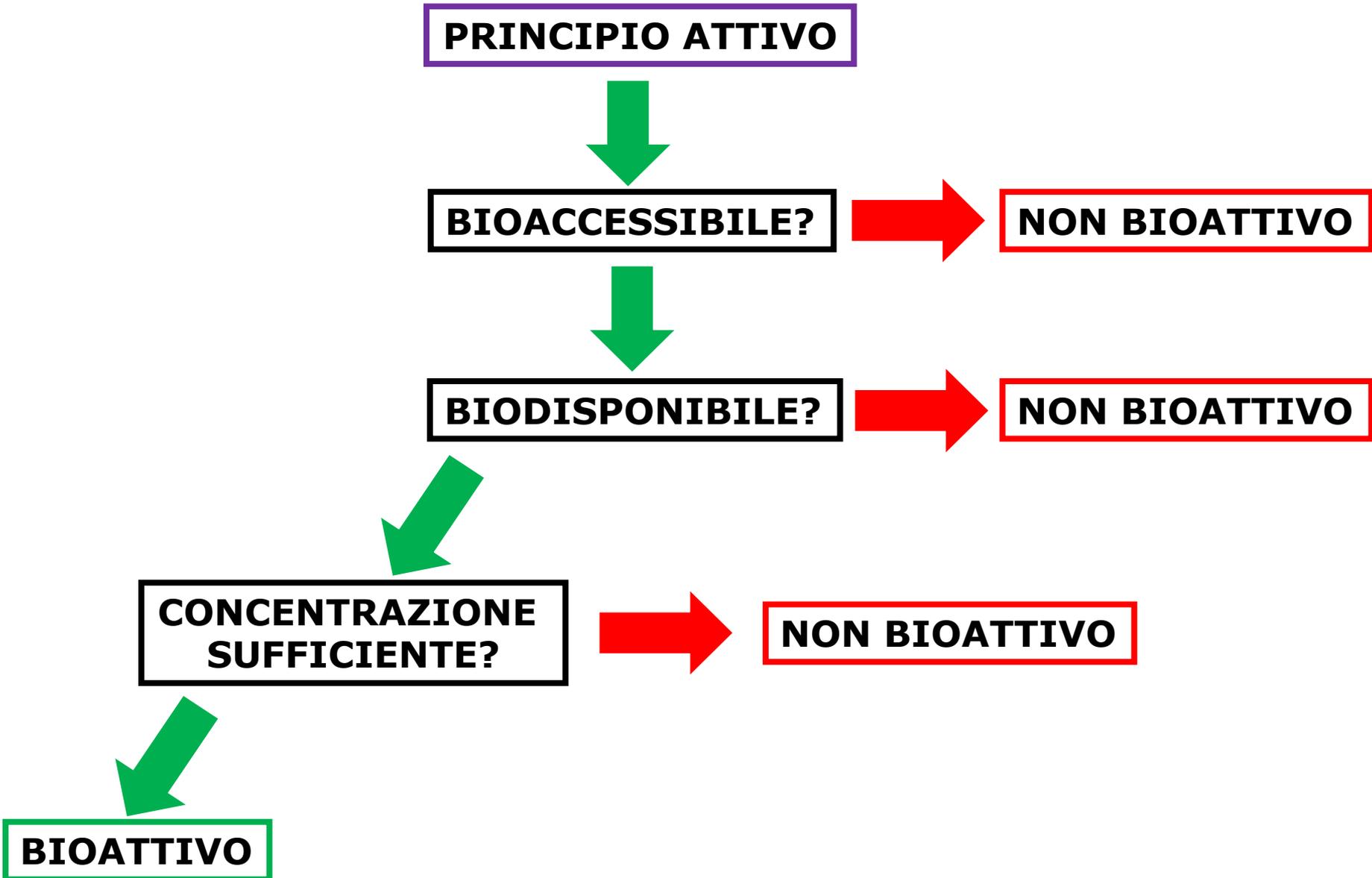
**Primo Simposio Nazionale
sulla **Nutraceutica**
in Urologia**

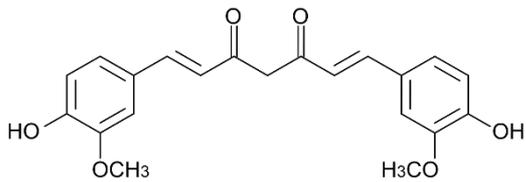
ROVIGO - 16/17 FEBBRAIO 2018

Una formulazione innovativa della curcumina come candidato al trattamento dell'infiammazione prostatica. Biodisponibilità, attività anti infiammatoria

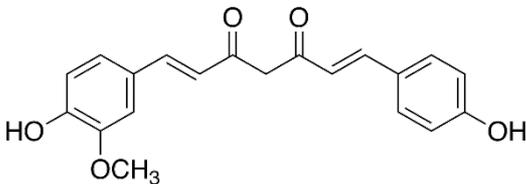
*Angelo Naselli
Ospedale San Giuseppe, Milano*



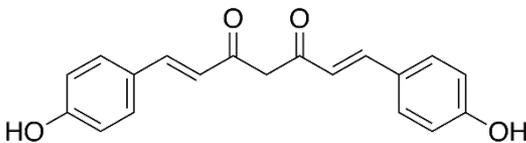




Curcumina I
(Curcumina)

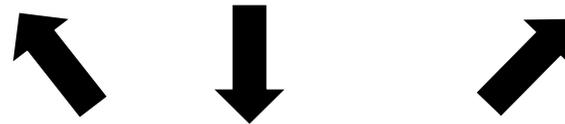
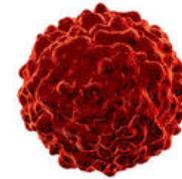


Curcumina II
(demetossicurcumina)



Curcumina III
(bisdemetossicurcumina)

CURCUMINOIDI



Target:

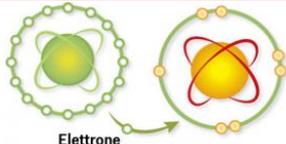
CURCUMINOIDI

Riduzione dell'attività infiammatoria sistemica e prostatica in pazienti affetti da prostatite.

Antibatterico

Antidepressivo

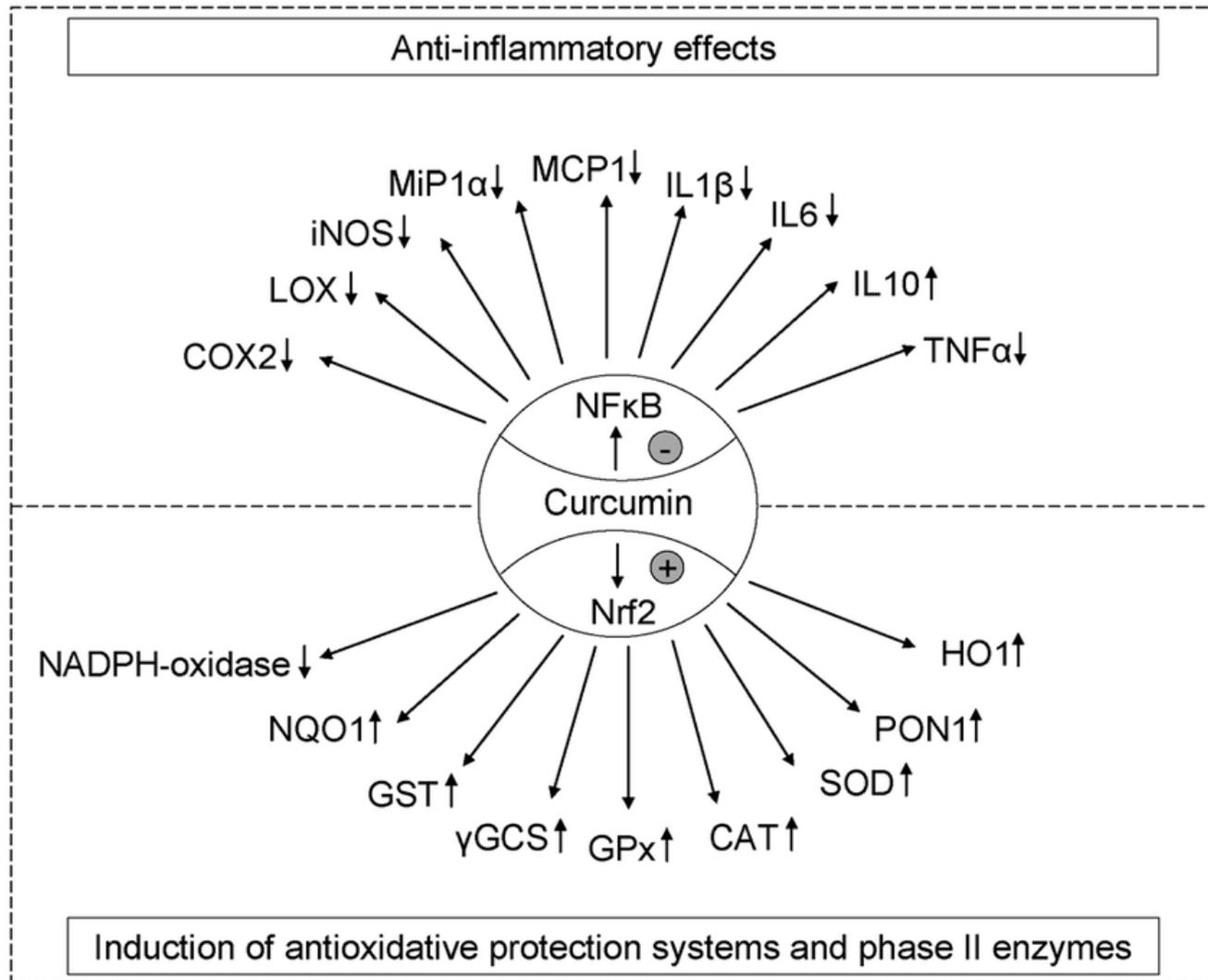
Antiossidante Radicale libero



Antiossidante



Antidolorifico



Liposolubili



Pessima solubilità nei fluidi organici

Sensibile a variazioni del pH

Rapida Eliminazione

Scarso assorbimento Intestinale

Scarsa Biodisponibilità

Curmalprost



ULTRASOL[®] curcumin

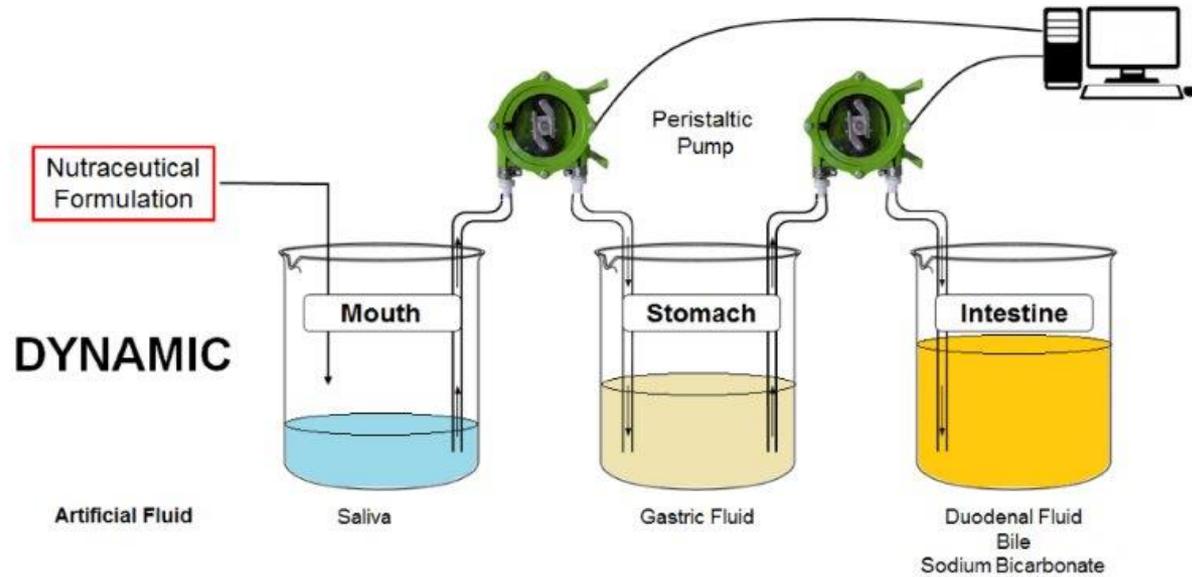


**Dispersibile nei
fluidi biologici**

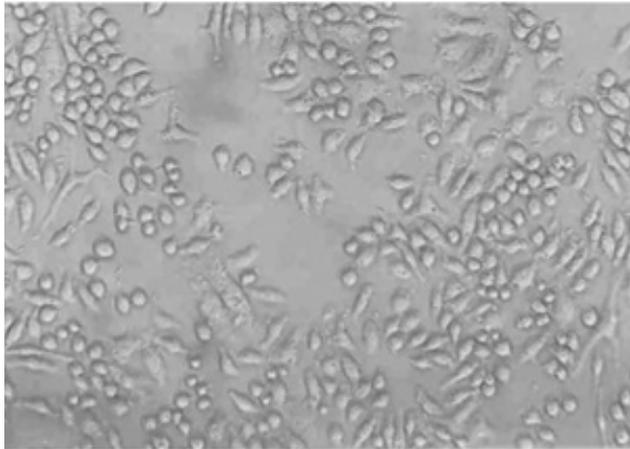
**Alto contenuto in
curcuminoidi (45-50%)**

AUMENTATA BIODISPONIBILITA'

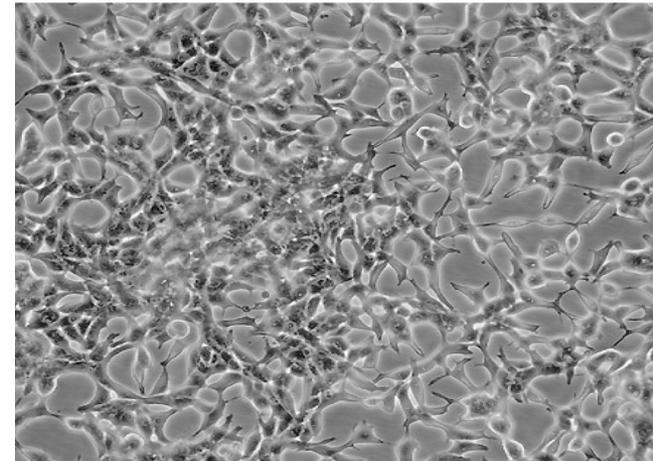
**Attività antinfiammatoria
sistemica e prostatica della
frazione bioaccessibile**



Condizioni digestive simulanti adulto



THP-1



LNCaP

Fenotipo macrofagico (PMA)

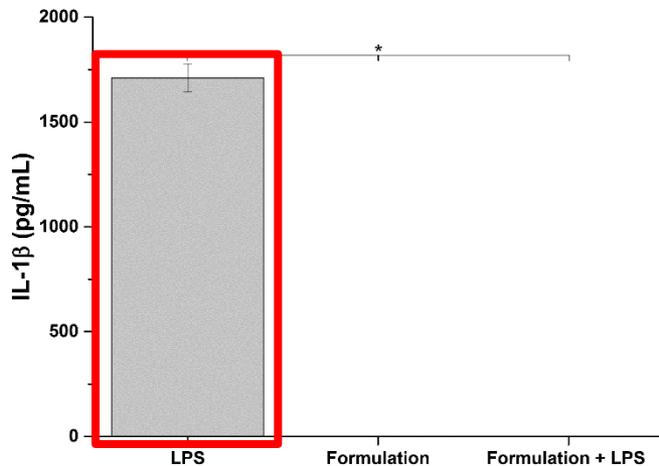
Endotossine (LPS)

**Terreno condizionato
THP-1 (CM)**

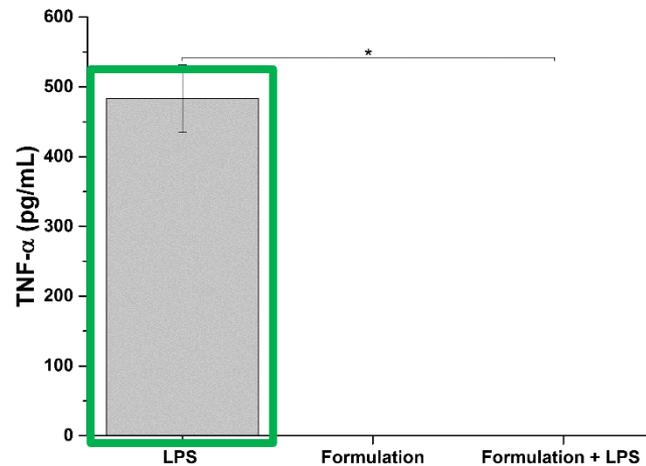
Rilascio citochine (IL-1 β e TNF- α)

Attività ciclossigenasi (COX)

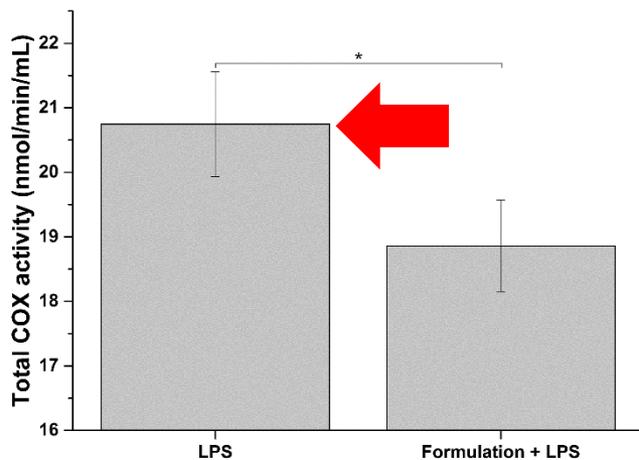
Rilascio IL-1 β



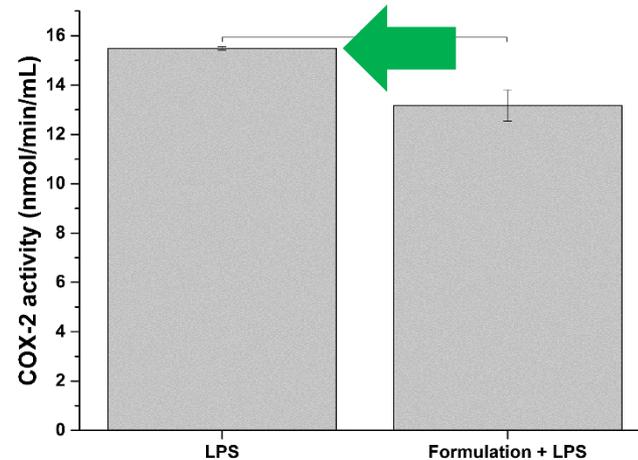
Rilascio TNF- α



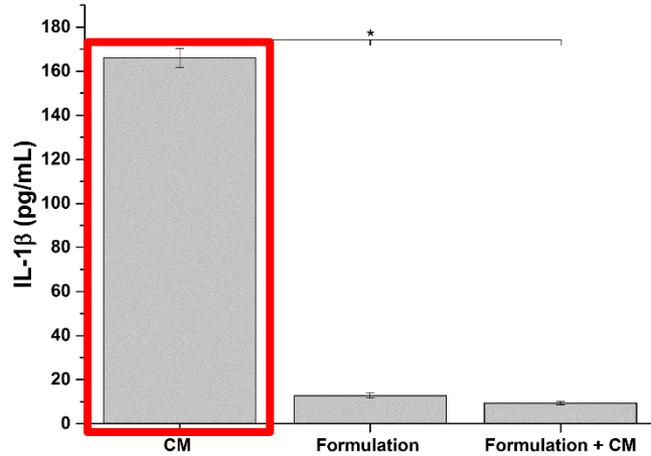
Attività COX totale



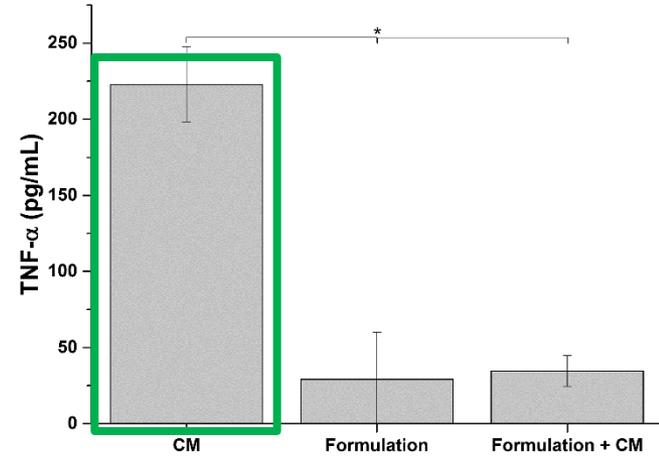
Attività COX-2 totale



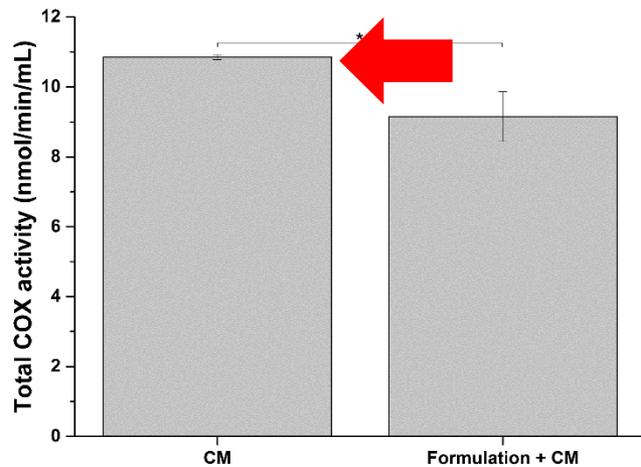
Rilascio IL-1 β



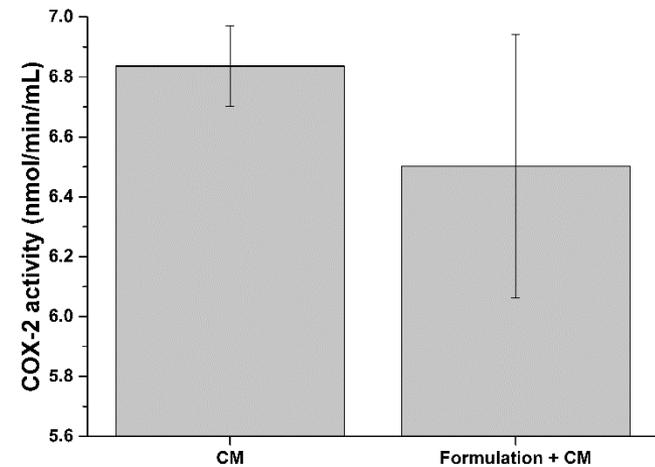
Rilascio TNF- α

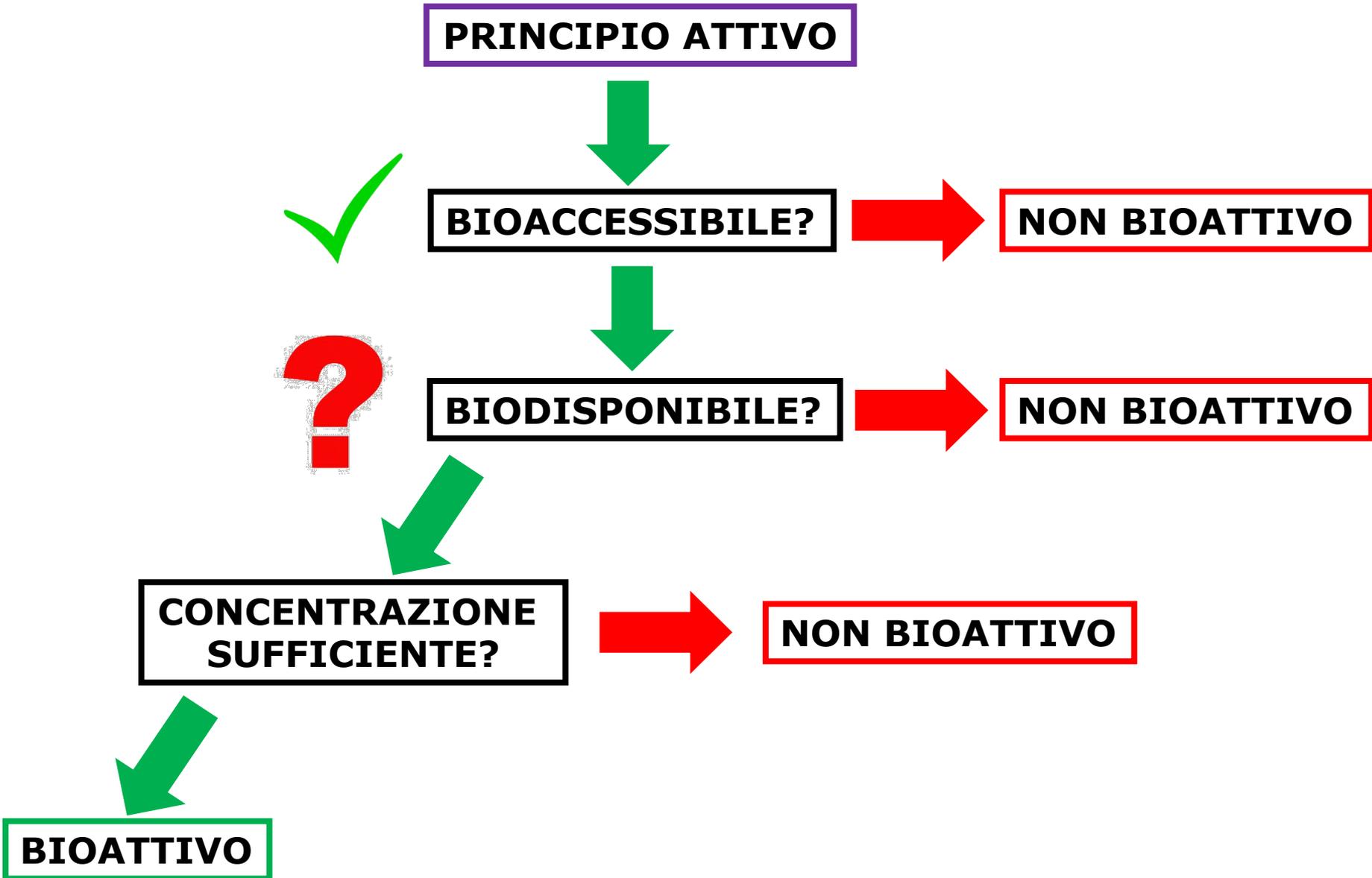


Attività COX totale



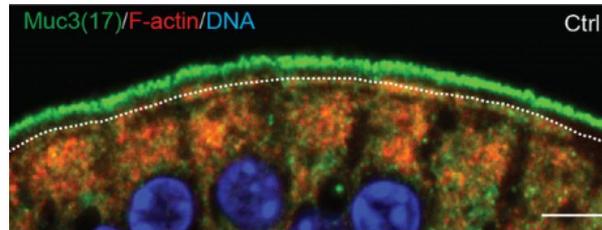
Attività COX-2 totale



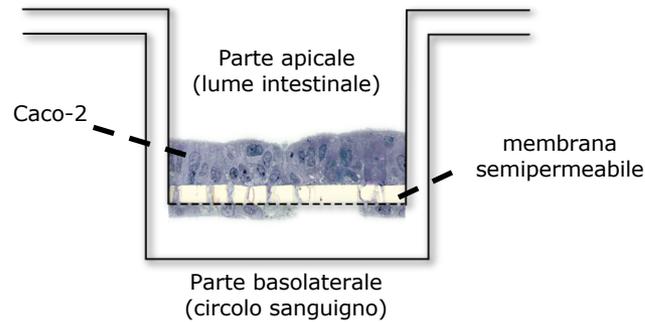
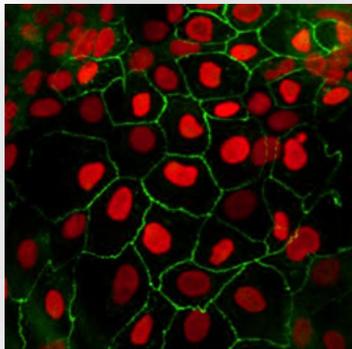


Assorbimento Intestinale

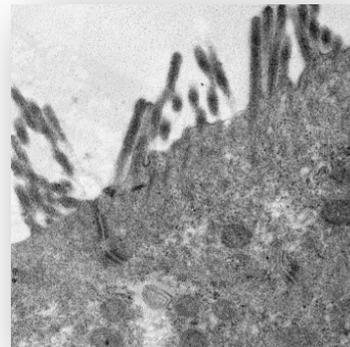
Polarità



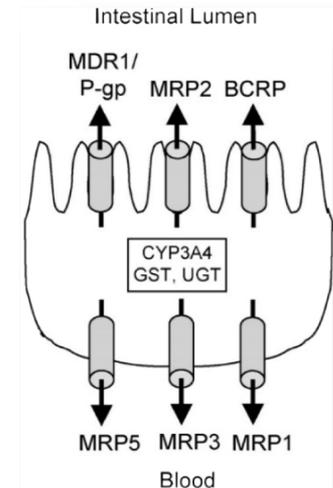
Tight junction



Microvilli

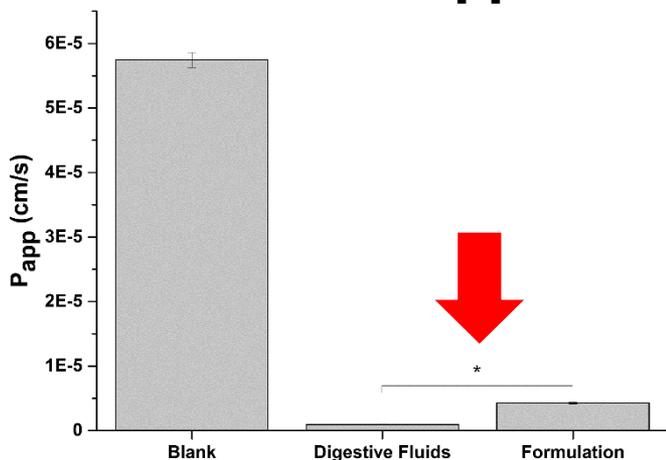


Trasportatori ed enzimi

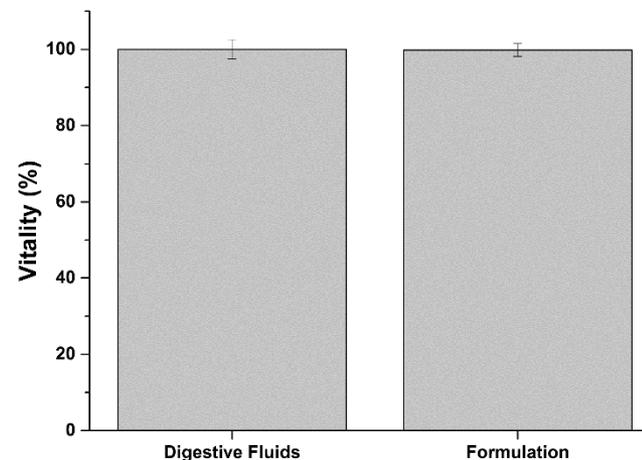


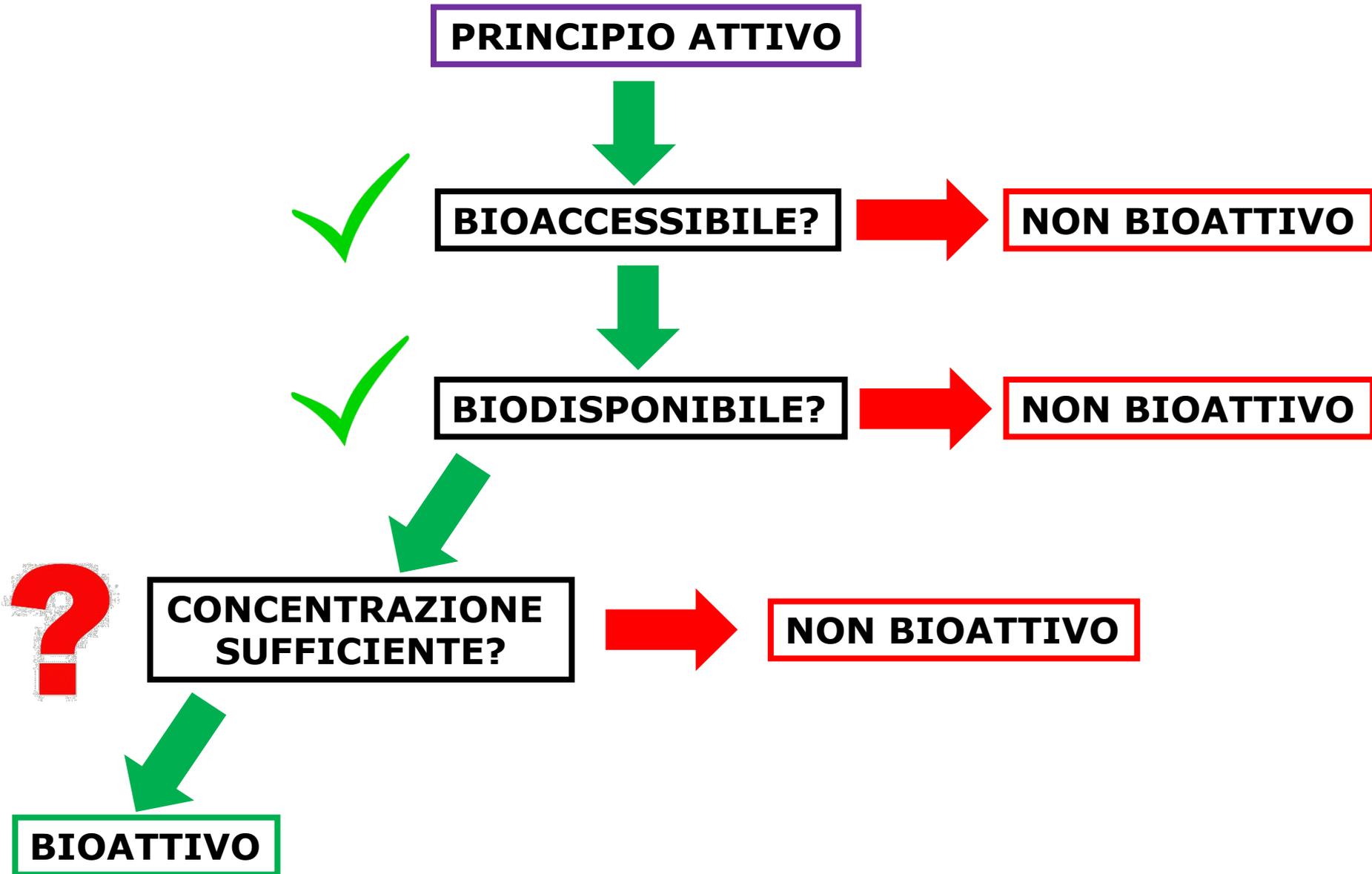
Curcuminoids	
absorption %	0.18 ± 0.05
µg bioavailable/mg active principle	1.8
Apparent permeability – P _{app} (cm/s)	3.9 x 10 ⁻⁷

Permeabilità apparente



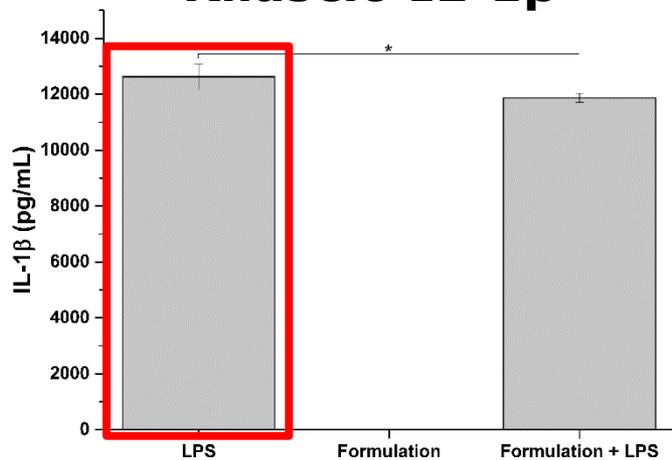
Vitalità



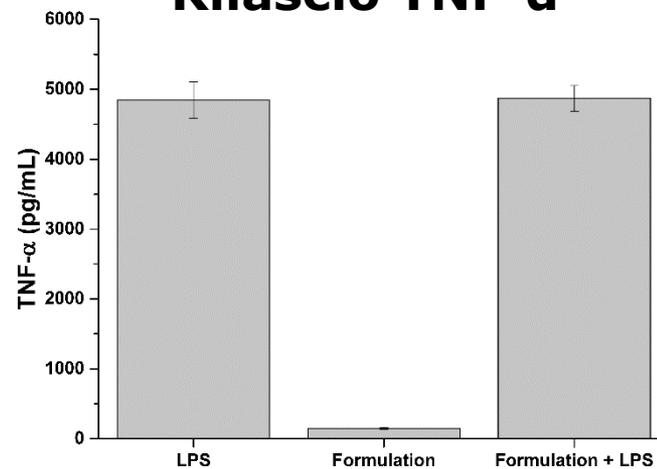


**Attività antinfiammatoria
sistemica e prostatica della
frazione biodisponibile**

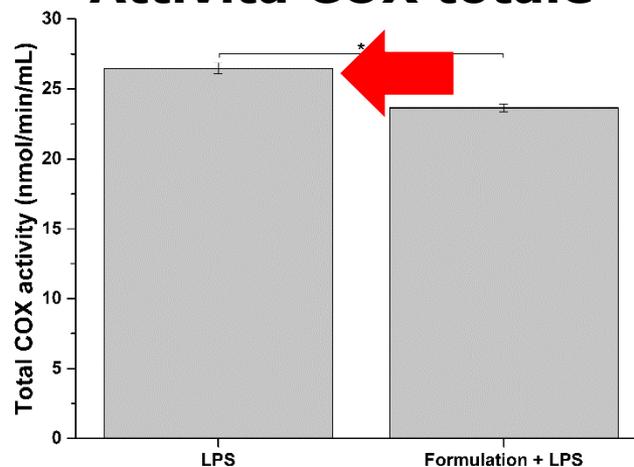
Rilascio IL-1 β



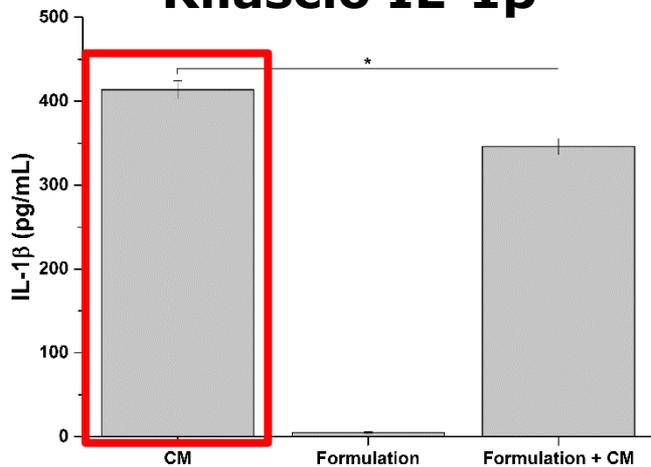
Rilascio TNF- α



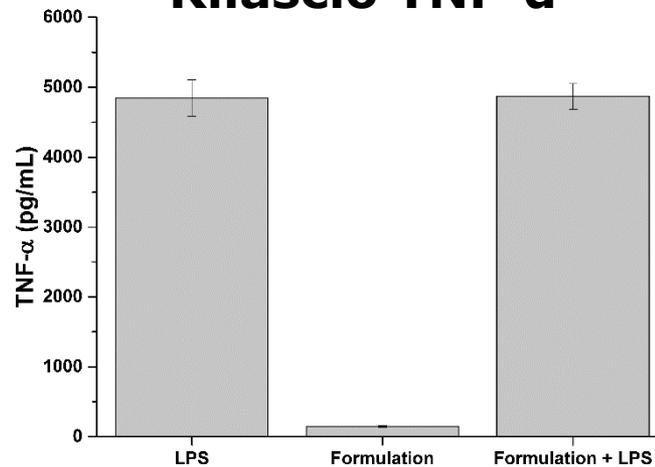
Attività COX totale



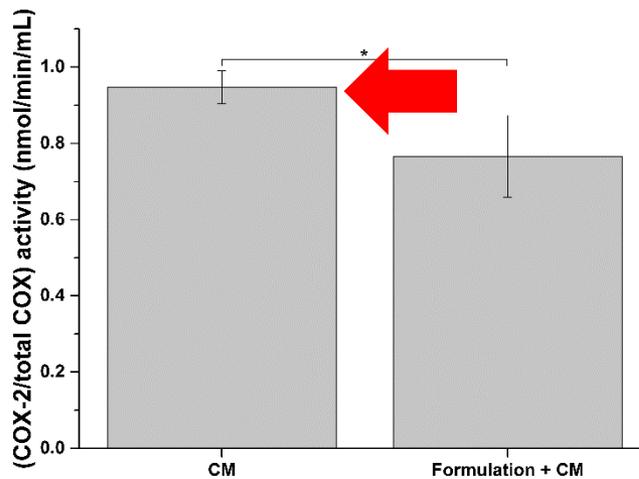
Rilascio IL-1 β

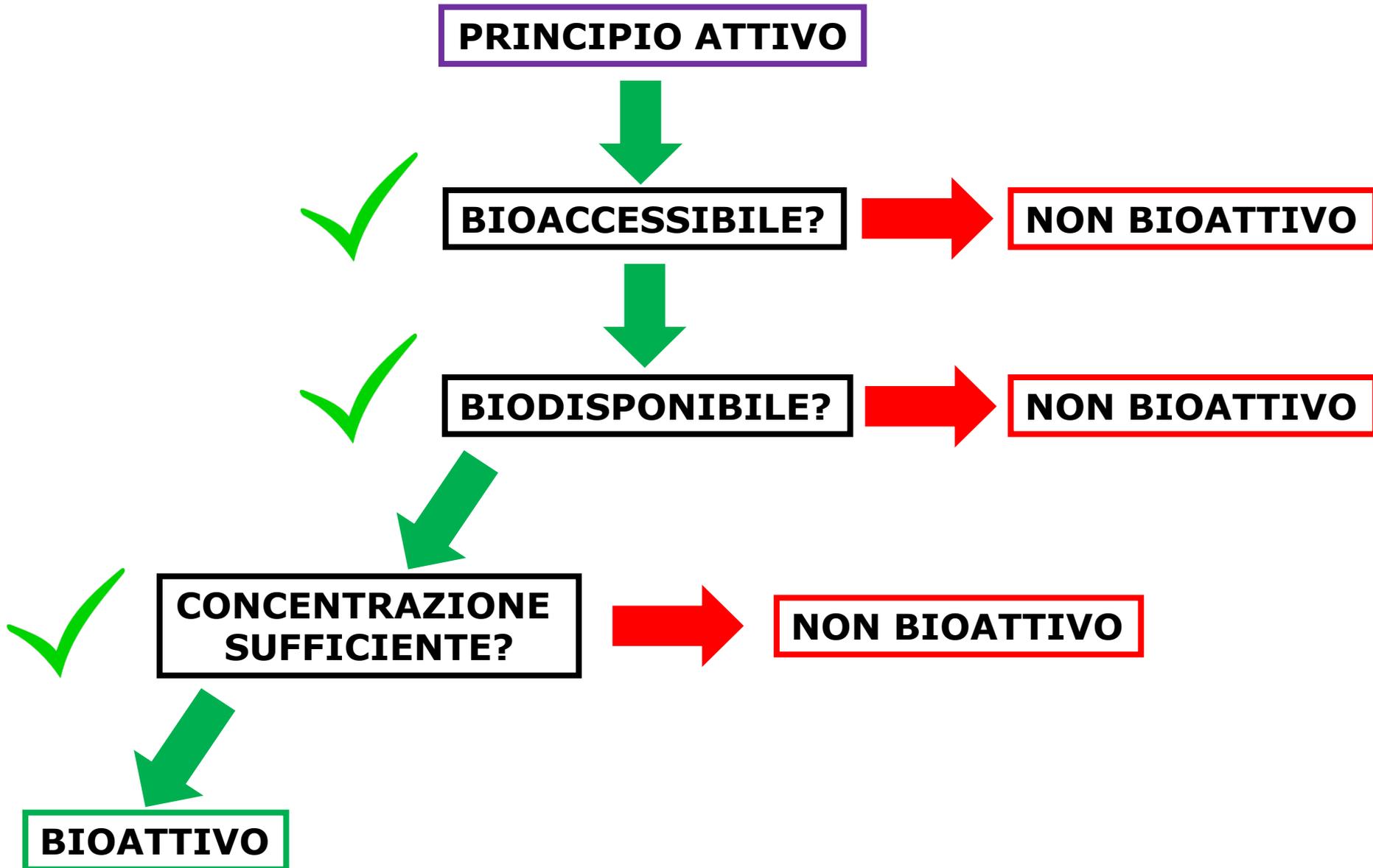


Rilascio TNF- α



Attività COX totale/COX-2





L'innovativa formulazione basata su **ULTRASOL® curcumin** presenta:

□ **ASSENZA** di **EFFETTI AVVERSI** sull'epitelio intestinale (**SICURA**)

□ Frazione bioaccessibile e biodisponibile dotate di un'**EFFICACE ATTIVITA' ANTINFIAMMATORIA** a livello sistemico e prostatico.



SINGOLA SOMMINISTRAZIONE