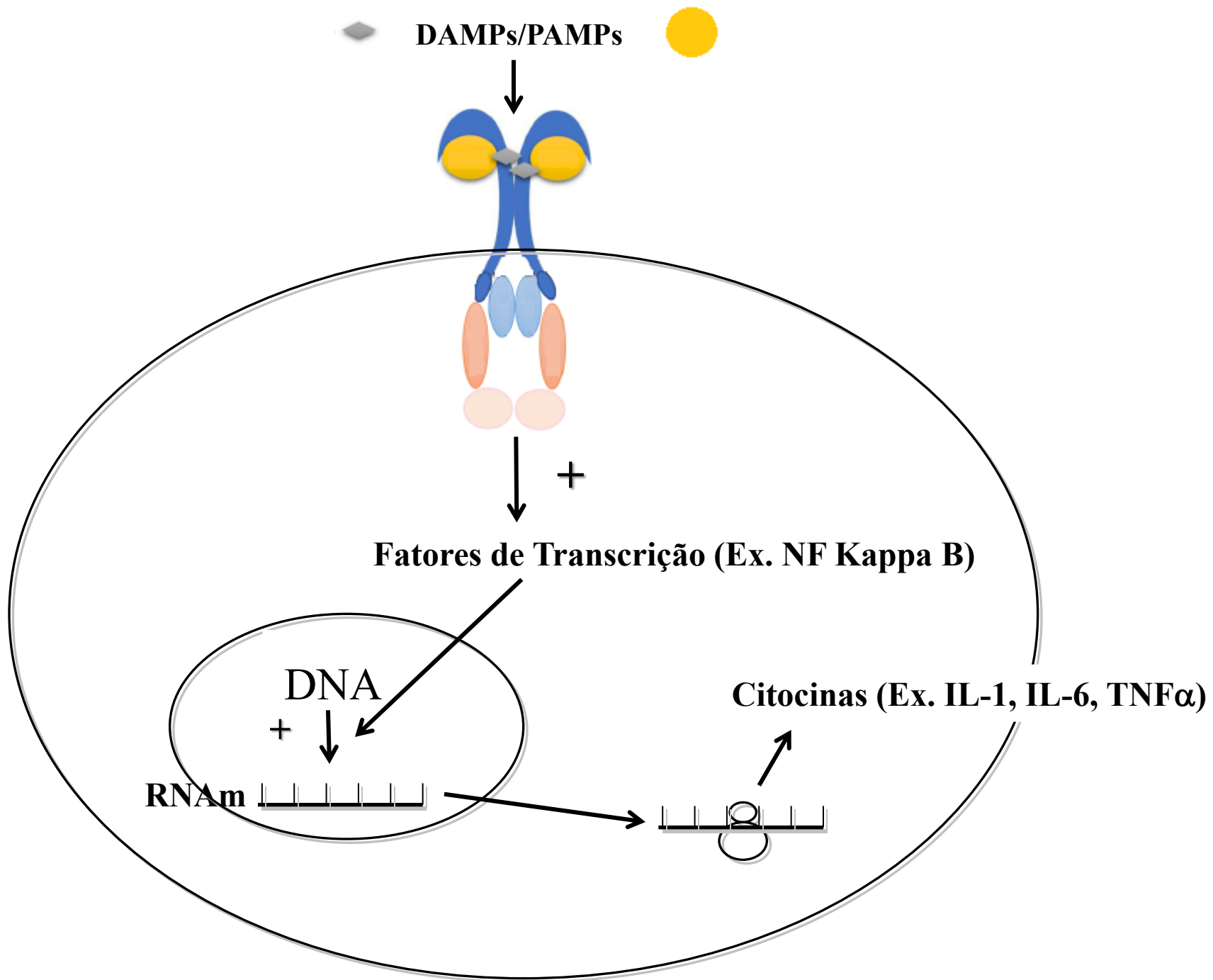


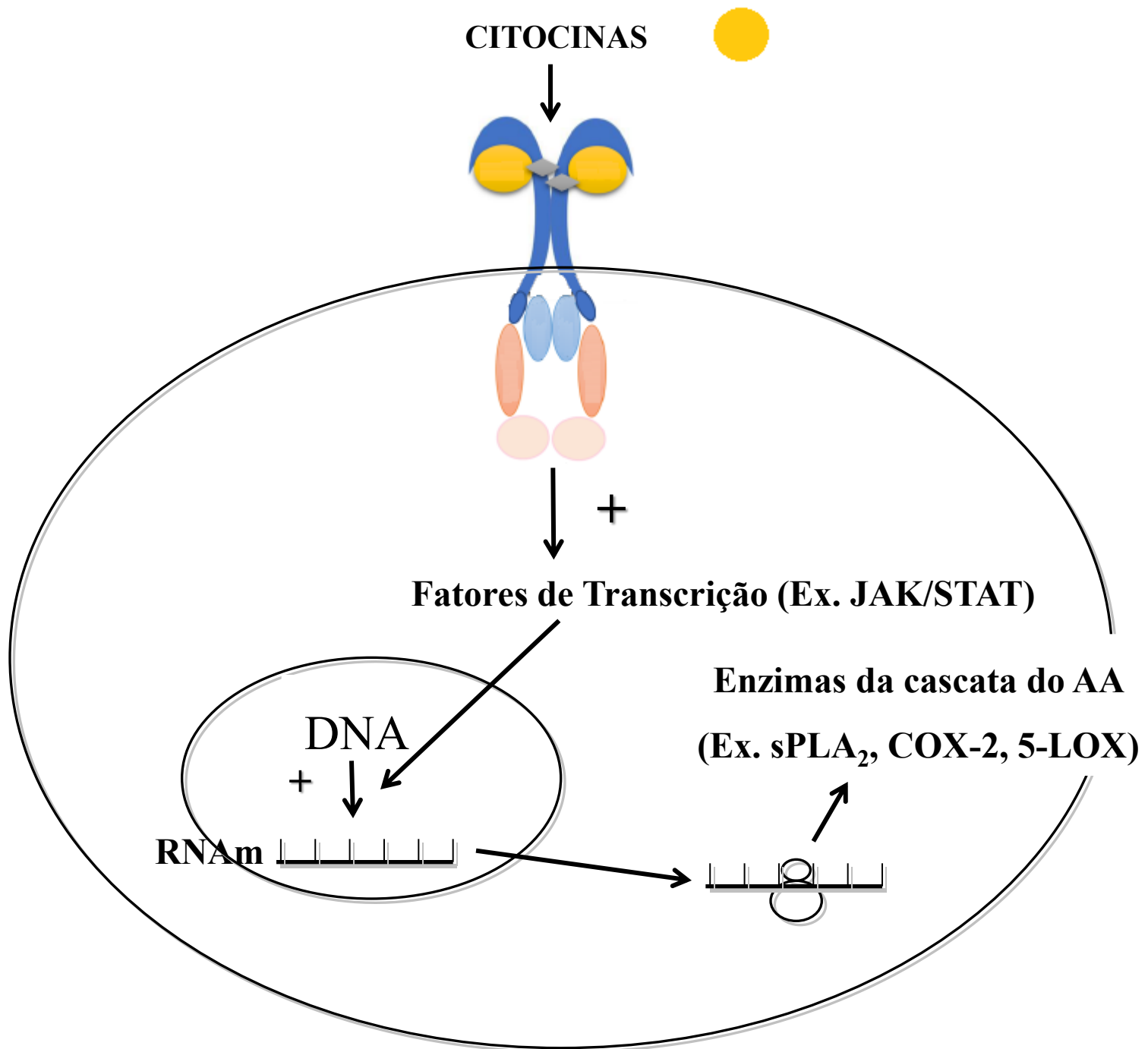
- Fisiopatologia Inflamação e AINEs -



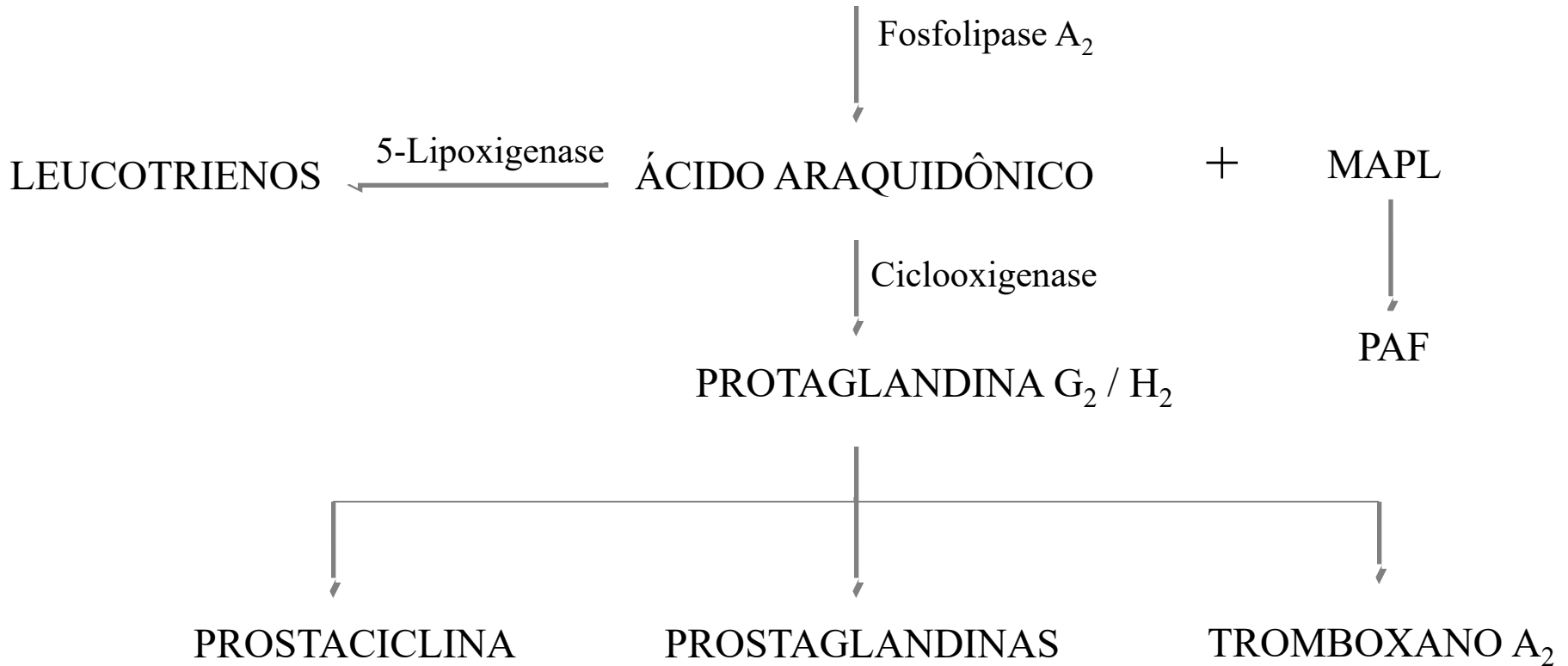
- Prof. Dr. Rogério Cardoso de Castro -



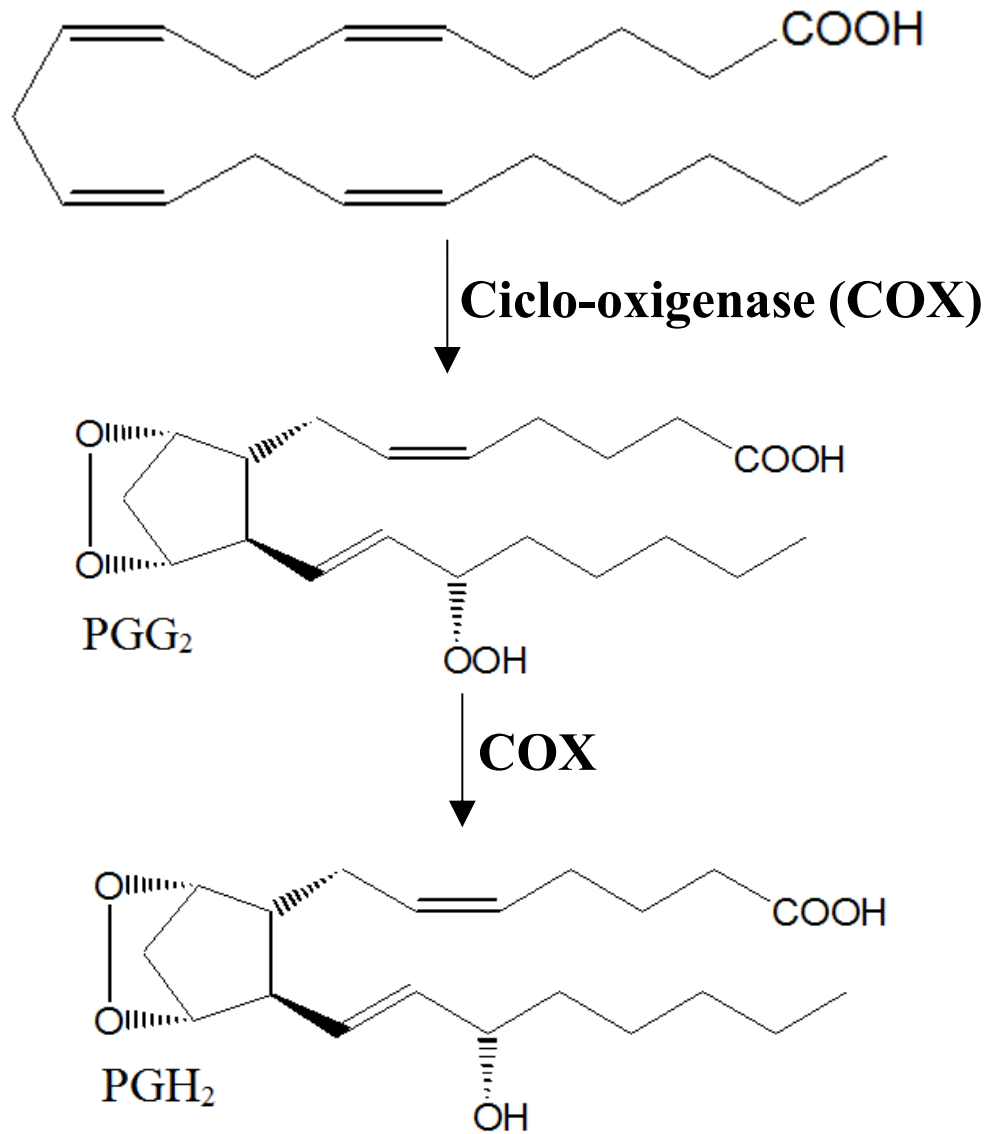


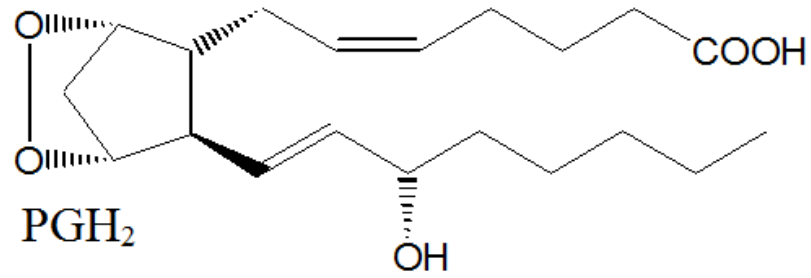


FOSFOLIPÍDEOS DE MEMBRANA

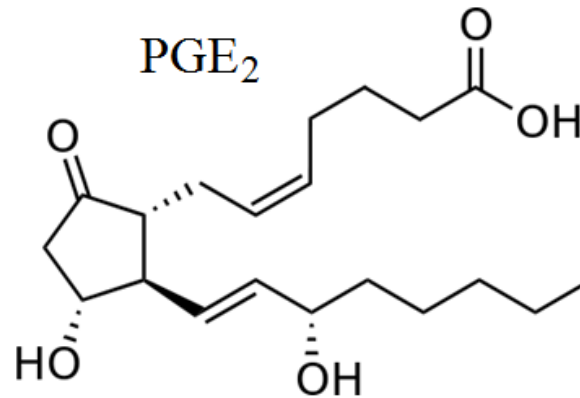








PGE₂ Sintase



Prostaglandinas

Histamina

Cininas

Serotonina

INFLAMAÇÃO

Citocinas

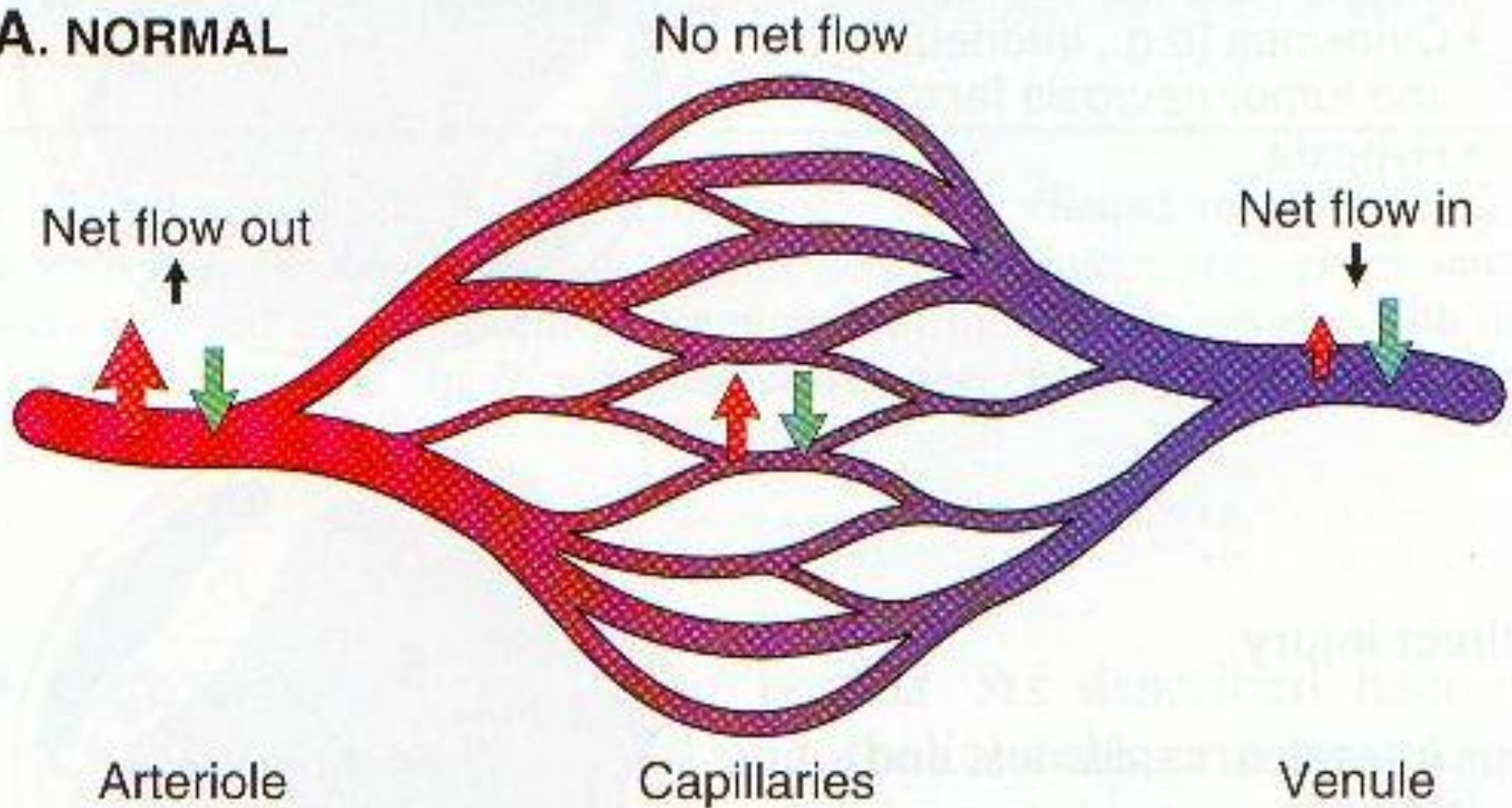
Neuropeptídeos

PAF

Espécies Reativas de Oxigênio

PERFUSÃO TECIDUAL NORMAL

A. NORMAL



Prostaglandinas
Leucotrienos
PAF
Histamina
Serotonina
Cininas
Neuropeptídeos
Óxido Nítrico

**Vasodilatação
arteriolar**

**Aumento do fluxo
sanguíneo local**

RUBOR
CALOR

**Aumento da
pressão hidrostática**

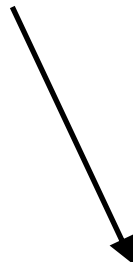
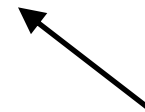
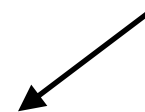
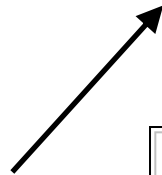
EDEMA

**Redução da
pressão oncótica**

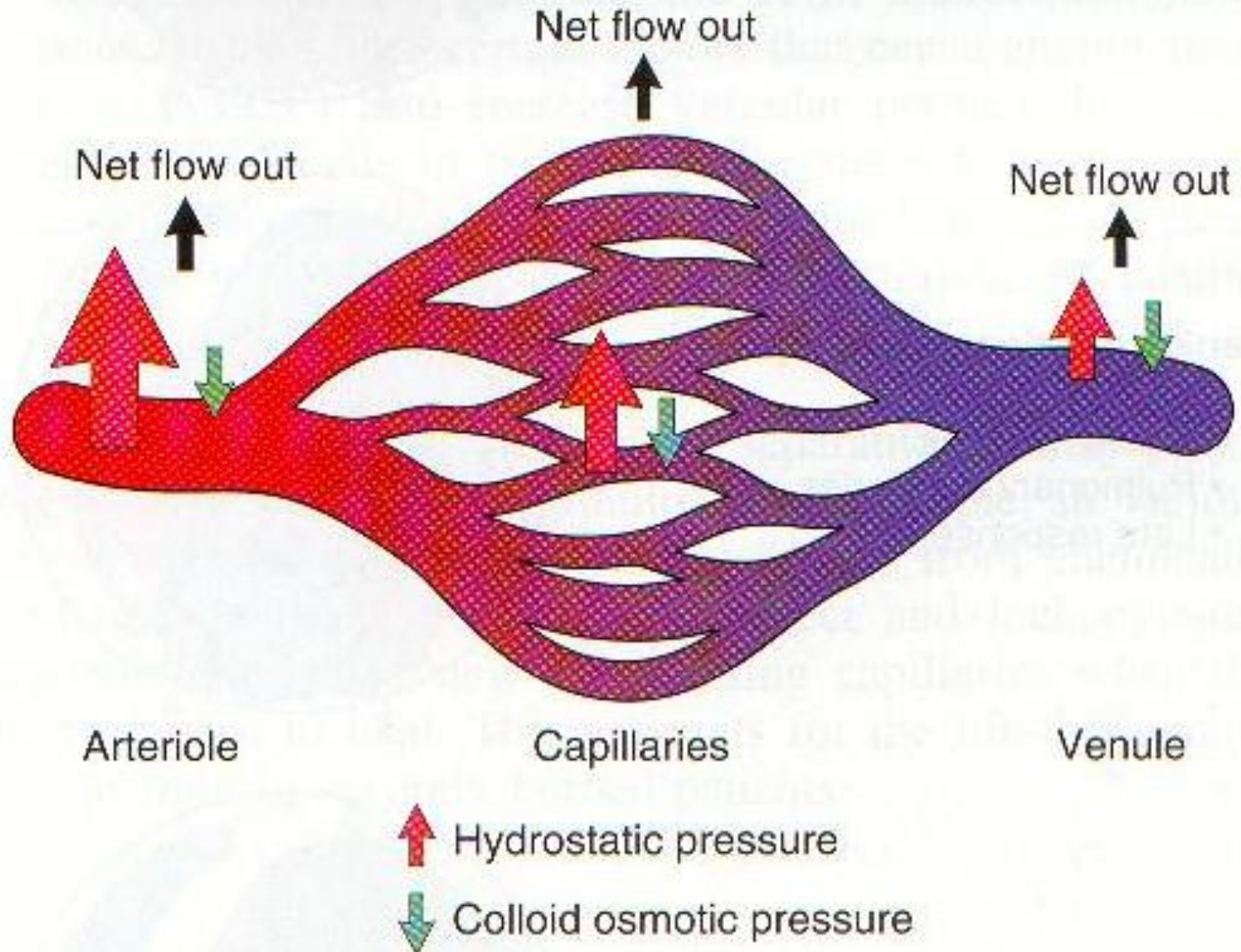
**Aumento da
permeabilidade
vascular**

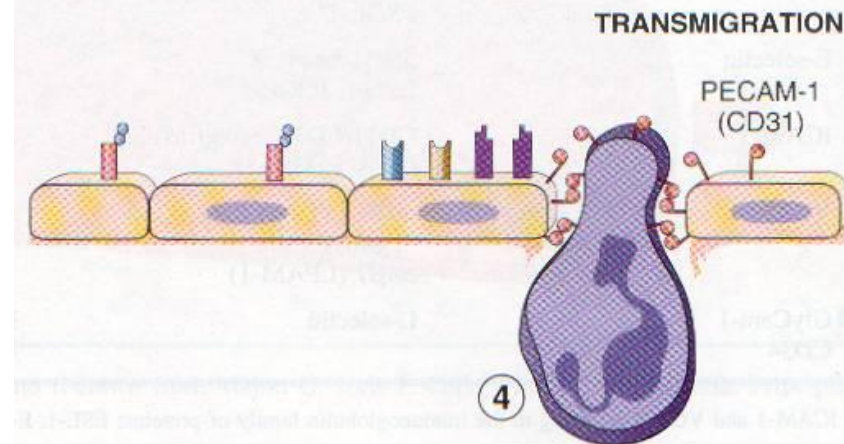
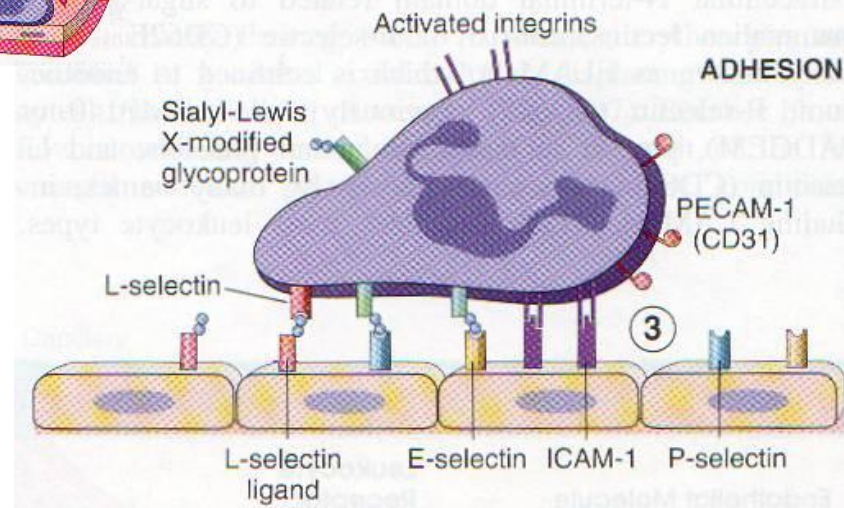
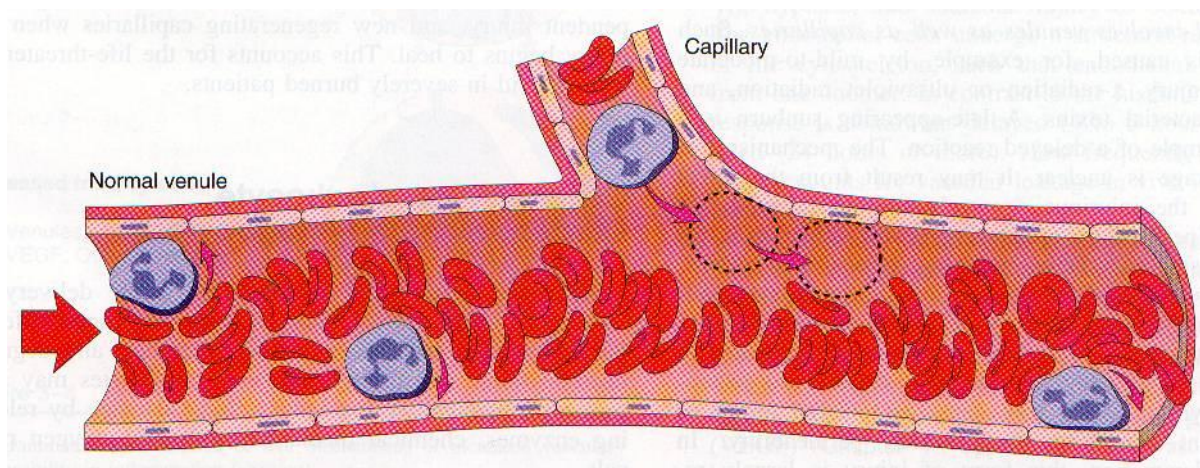
**Extravasamento de
proteico**

Slide elaborado pelo autor

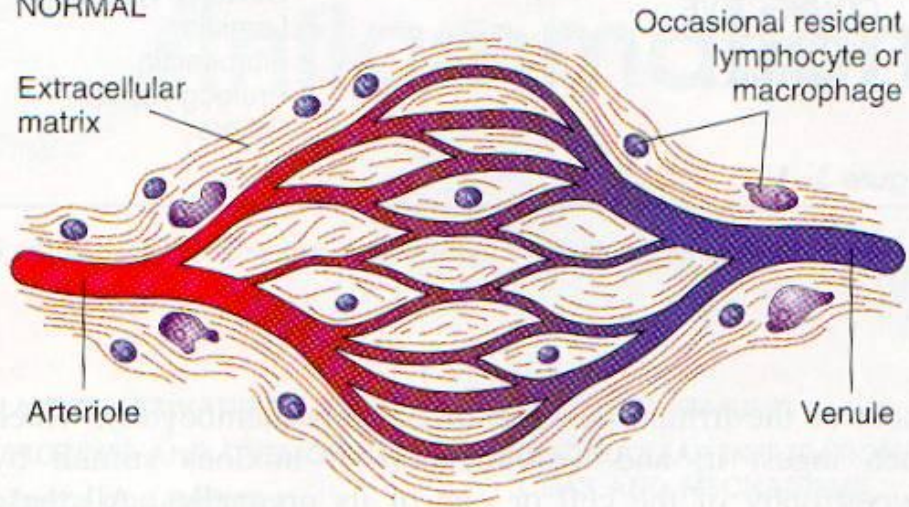


B. ACUTE INFLAMMATION

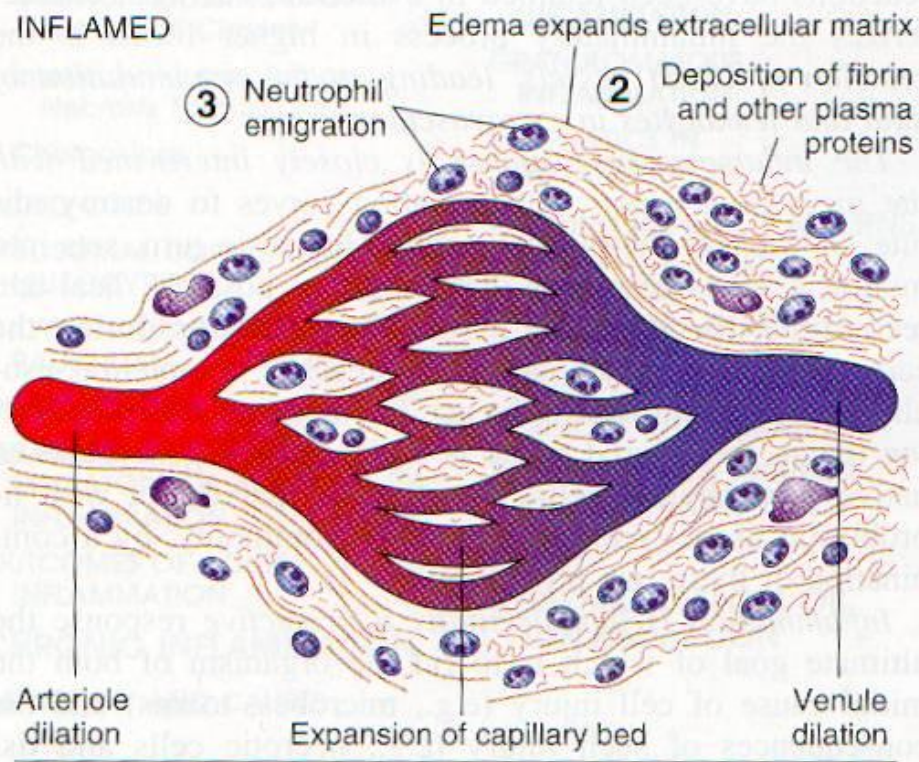




NORMAL



INFLAMED



Increased blood flow

①

FARMACOLOGIA DOS ANTI-INFLAMATÓRIOS NÃO ESTEROIDAIIS

“AINEs”

Salix alba





Relação Nacional de Medicamentos Essenciais 2020

salgueiro (<i>Salix alba</i> L.)	60 mg a 240 mg de salicina (dose diária)	comprimido
	60 mg a 240 mg de salicina (dose diária)	elixir
	60 mg a 240 mg de salicina (dose diária)	solução oral

ácido salicílico	50 mg/g (5%) (FN)*	pomada
------------------	--------------------	--------

ácido acetilsalicílico	100 mg	comprimido
	500 mg	comprimido

➤ Salicilatos

Ácido Salicílico

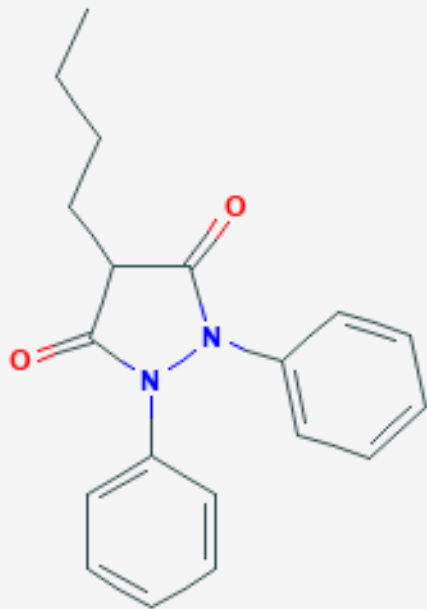
Ácido Acetilsalicílico

Salicilato de Metila

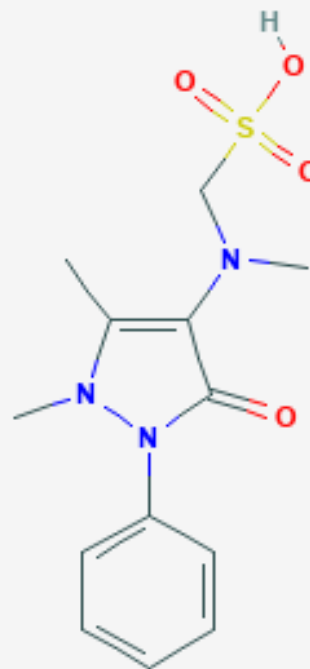
➤ Derivados pirazolônicos

Fenilbutazona

Dipirona



Pubchem



Pubchem

➤ Fenamatos

Ácido Mefenâmico

➤ Derivados heterocíclicos do ácido acético

Indometacina

Etodolaco

Cetorolaco

➤ Derivados do ácido propiônico

Ibuprofeno

Cetoprofeno

Naproxeno

Flurbiprofeno

Loxoprofeno

➤ Ácidos Enólicos

Piroxicam

Tenoxicam

Meloxicam

Lornoxicam

➤ Composto sulfonanilídico

Nimesulida

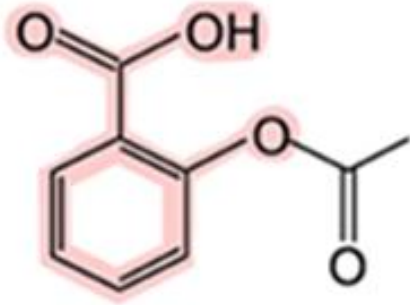
➤ Derivados do ácido fenil-acético

Diclofenaco

Aceclofenaco

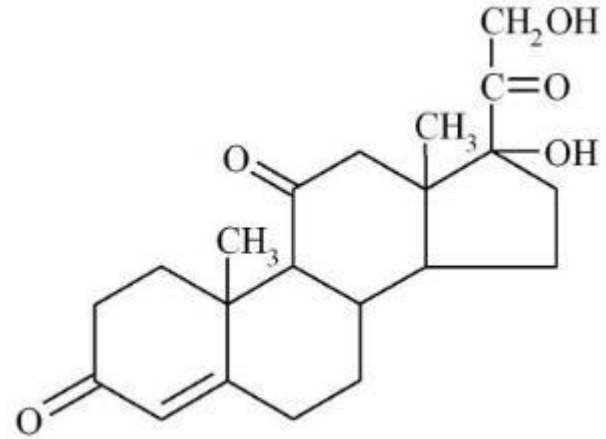
Nepafenaco

Porque não esteroidais ?

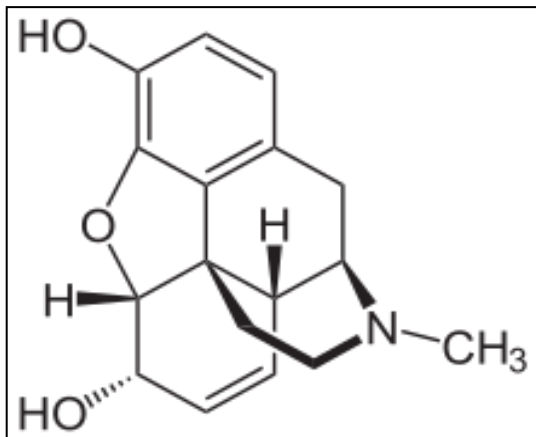


Ácido Acetilsalicílico

X



CORTISONA



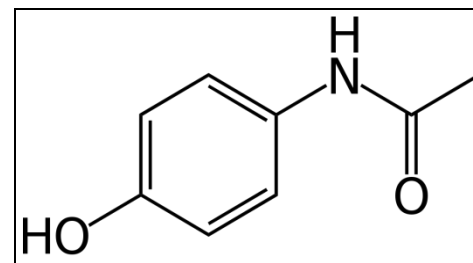
Morfina



X



Ácido Acetilsalicílico



Paracetamol

John R. Vane
(1927-2004)



Sérgio Henrique Ferreira
(1934-2016)



Prêmio Nobel de Medicina e Fisiologia de (1982)

Nat New Biol. 1971 Jun 23;231(25):232-5.

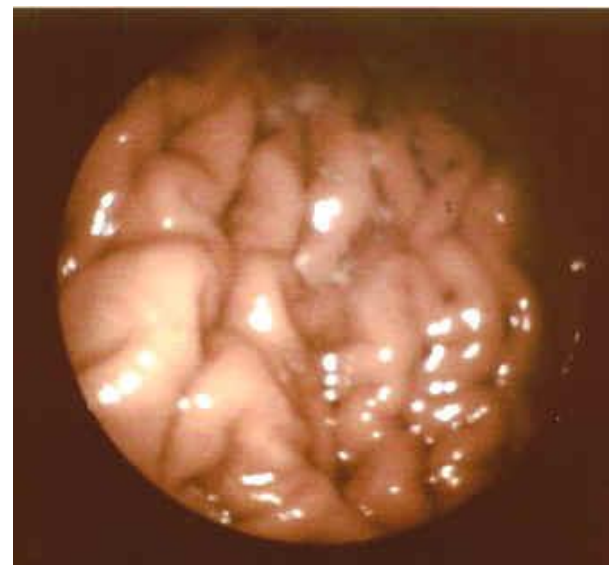
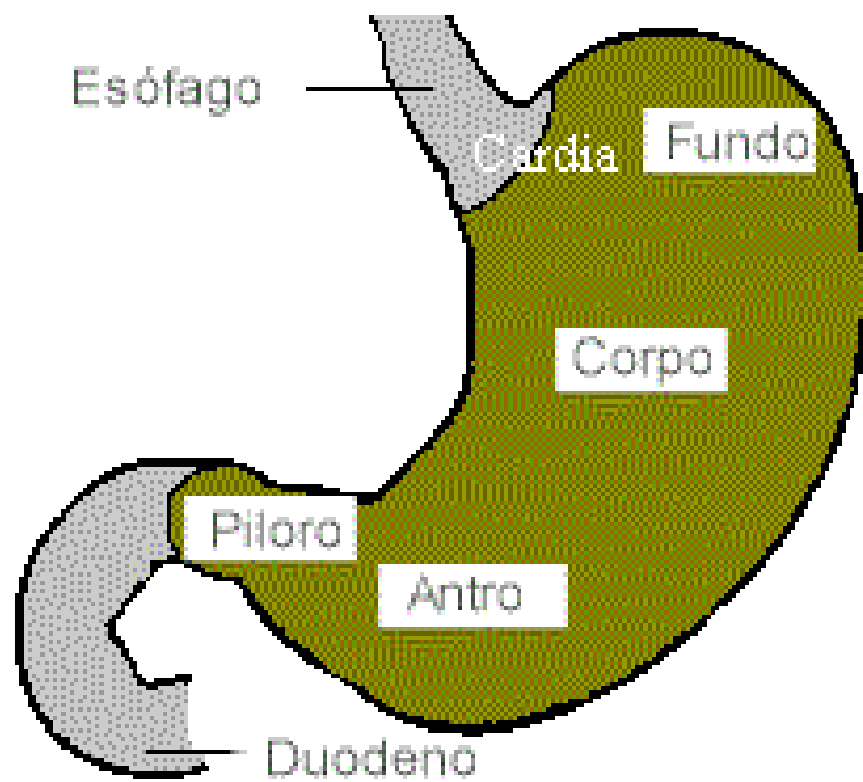
Inhibition of prostaglandin synthesis as a mechanism of action for aspirin-like drugs.

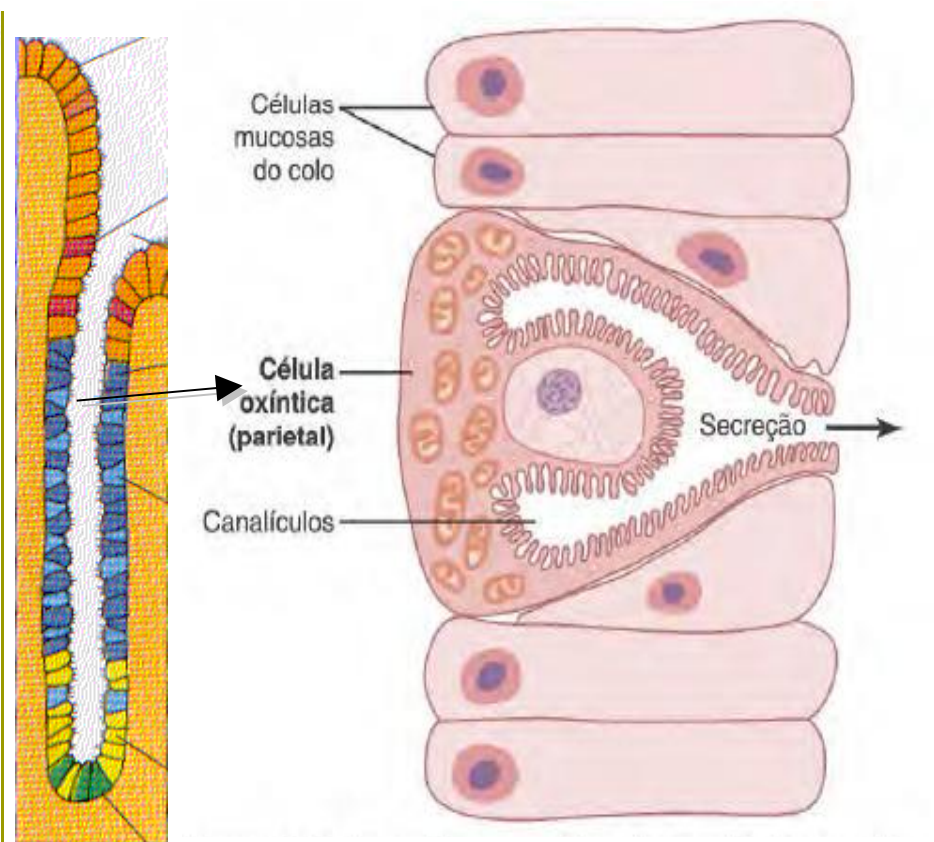
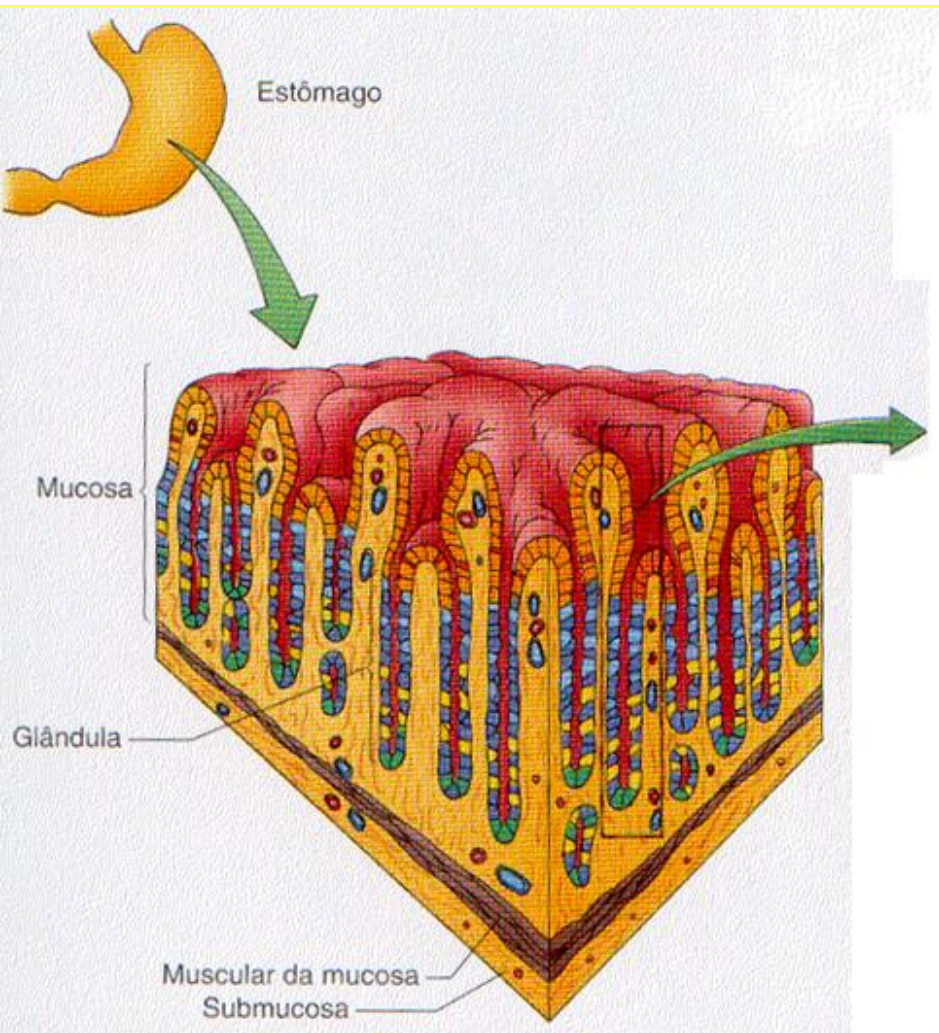
Vane JR.

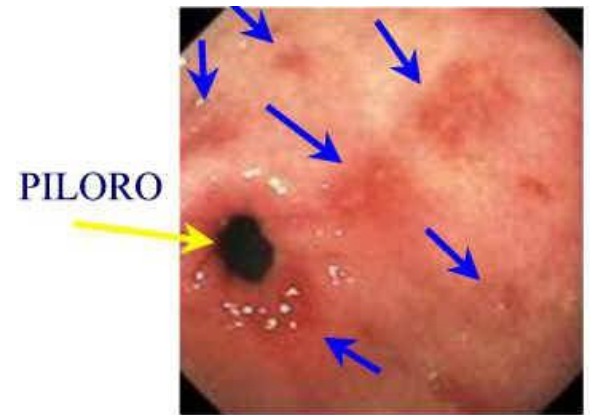
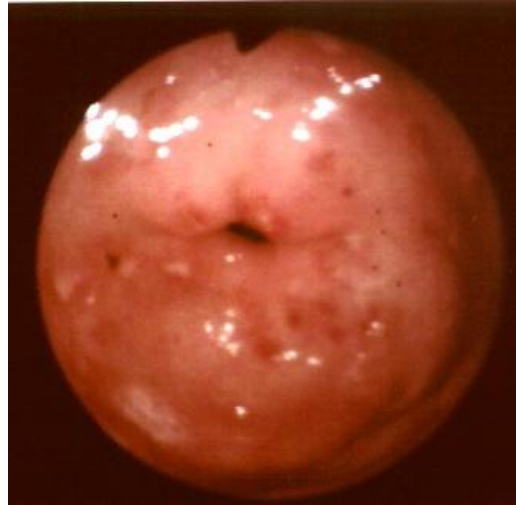
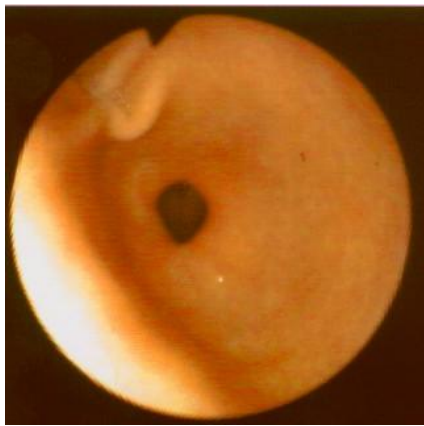
Nat New Biol. 1971 Jun 23;231(25):237-9.

Indomethacin and aspirin abolish prostaglandin release from the spleen.

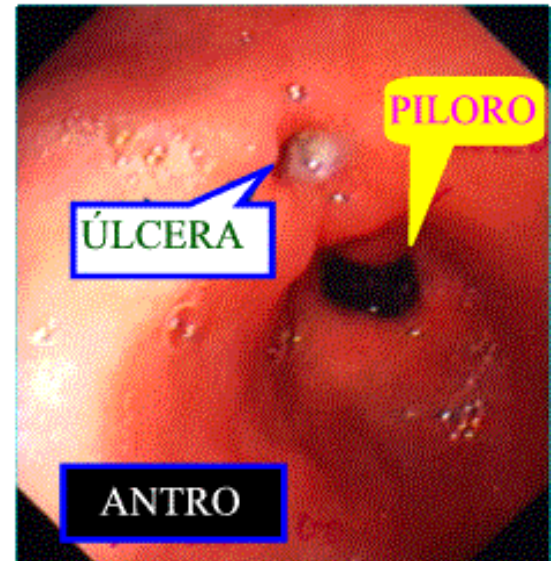
Ferreira SH, Moncada S, Vane JR.







Erosões do antro num indivíduo que tomava diariamente Ibuprofeno



FISIOPATOLOGIA DOS DISTÚRBIOS GÁSTRICOS

INDUZIDOS PELOS AINEs

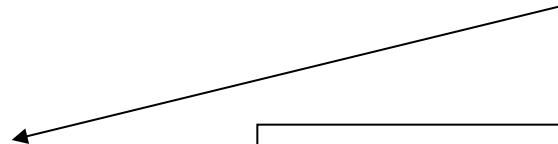
Uso de AINEs



Inibição da COX-1 presente em células da submucosa gástrica

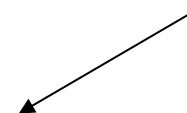
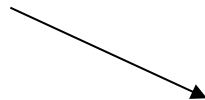


Redução da produção de PGE₂ no estômago



Aumento da secreção de H⁺ do suco gástrico

Redução da produção de muco com bicarbonato



Distúrbios Gástricos

SELETIVOS PARA COX-1

- ✓ **Ácido Acetilsalicílico**

- ✓ **Indometacina**
- ✓ **Cetorolaco**

- ✓ **Fenilbutazona**

- ✓ **Ácido Mefenâmico**

- ✓ **Cetoprofeno**
- ✓ **Ibuprofeno**
- ✓ **Naproxeno**
- ✓ **Flurbiprofeno**

POUCO SELETIVOS PARA COX-2

(menos do que 5 vezes mais seletivos para COX-2)

- ✓ Diclofenaco
- ✓ Piroxicam

SELETIVOS PARA COX-2

(entre 5 e 50 vezes mais seletivos para COX-2)

- ✓ Meloxicam
- ✓ Etodolaco
- ✓ Celecoxibe

ALTAMENTE SELETIVOS PARA COX-2

(acima de 50 vezes mais seletivos para COX-2)

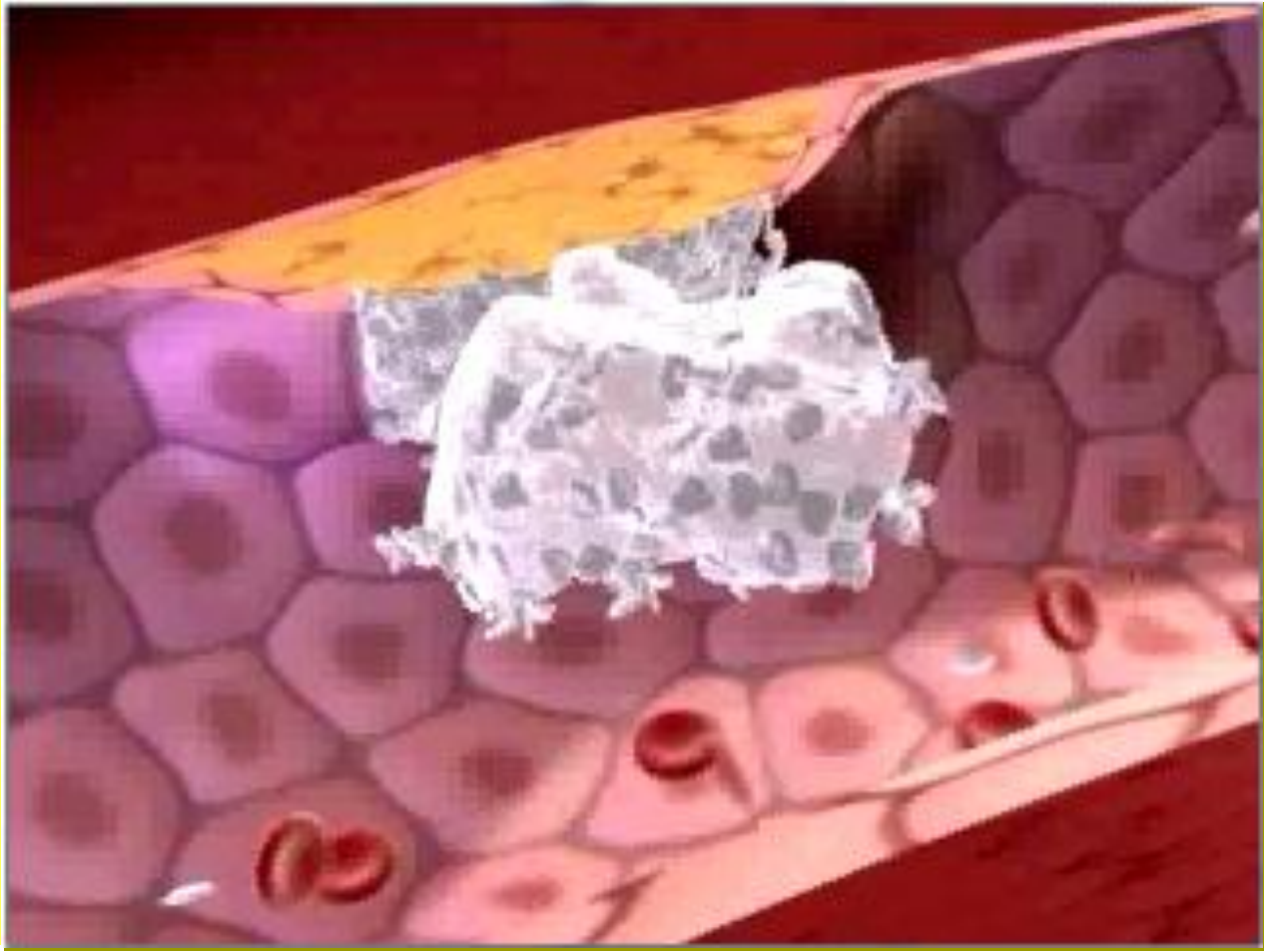
- ✓ Rofecoxibe

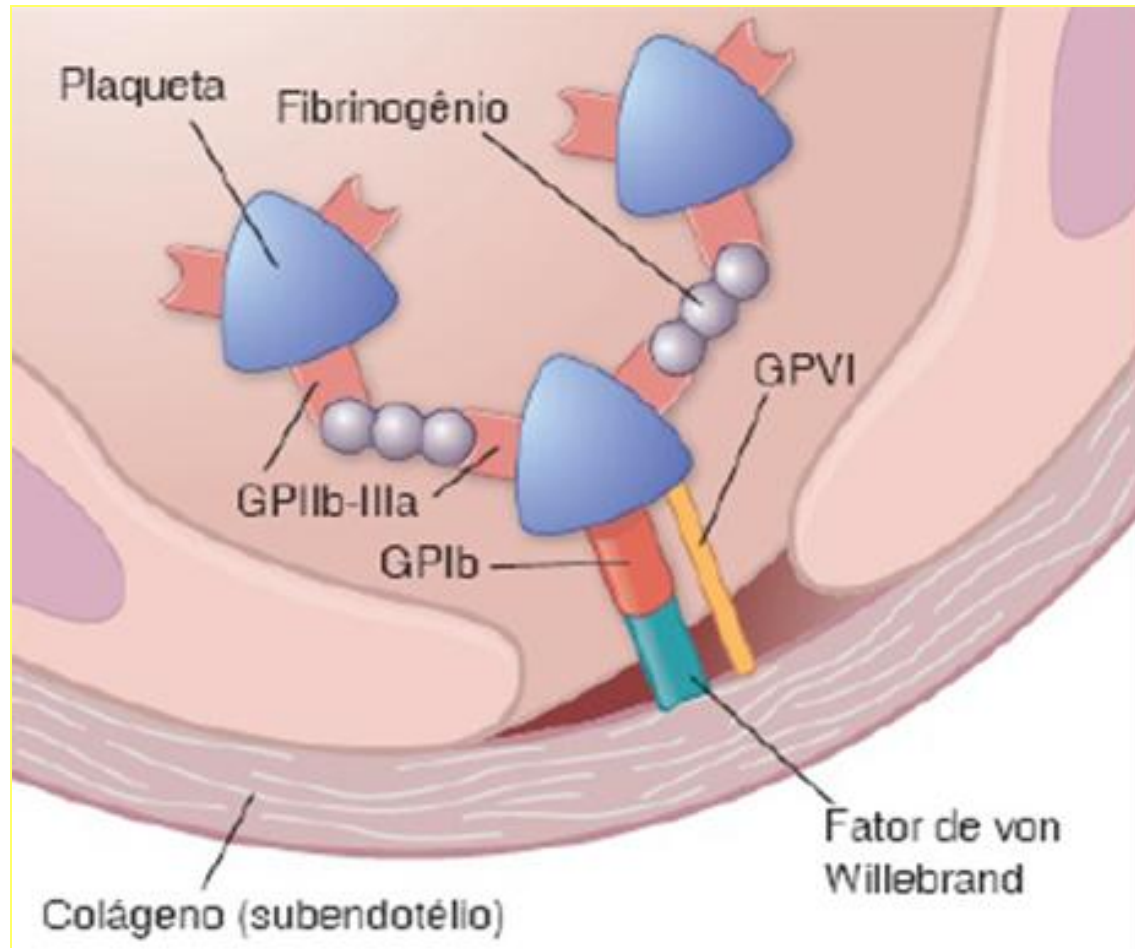
Estudo APPROve

- Polipose Adenomatosa Familiar (FAP)
 - forma assintomática
 - pré-maligna



www.tumoriereditari.info/tumore.htm

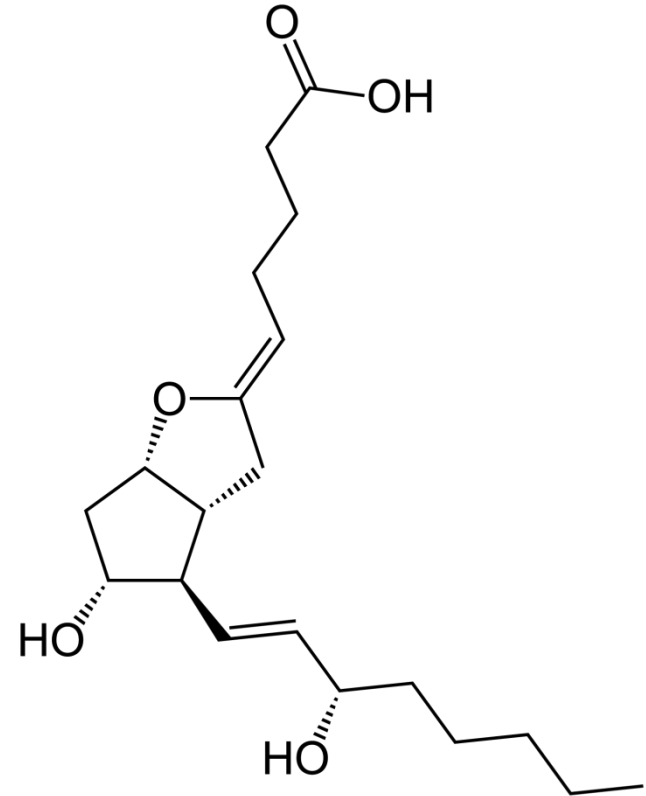
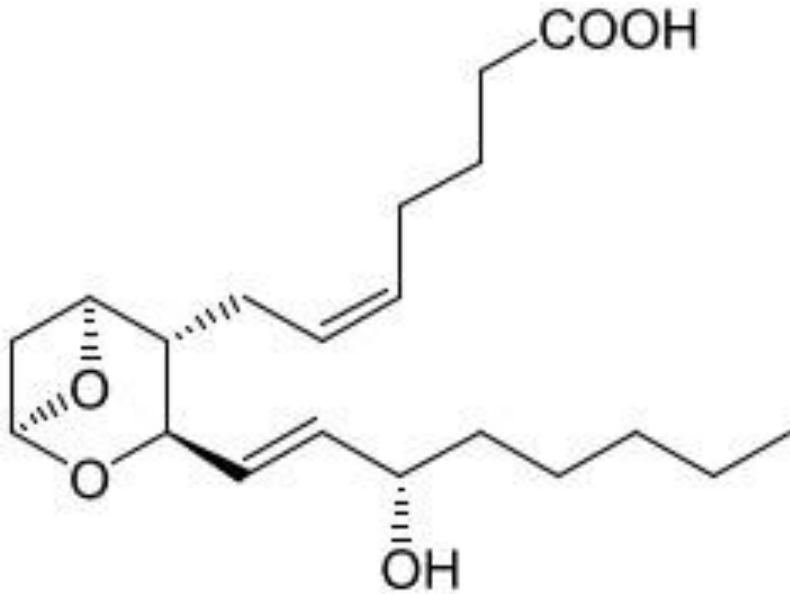




TROMBOXANO A₂ (TX A₂)

X

PROSTACICLINA (PGI₂)



REFERÊNCIAS

BRUNTON, L. L.; CHABNER, B. A; KNOLLMANN, B. C. (Org.) **As bases farmacológicas da terapêutica de Goodman & Gilman**. 12. ed. Porto Alegre: AMGH (Artmed/McGraw-Hill), 2012.

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KATZUNG, B. G.; MASTERS, S. B.; TREVOR, A. J. **Farmacologia básica e clínica**. 12. ed. Porto Alegre: AMGH (Artmed/McGraw-Hill), 2014.

RANG, H. P.; DALE, M. M; RITTER, J. M.; FLOWER, R. J.; HENDERSON, G. **Farmacologia**. 7. ed. Rio de Janeiro: Elsevier, 2012.