

# **SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**



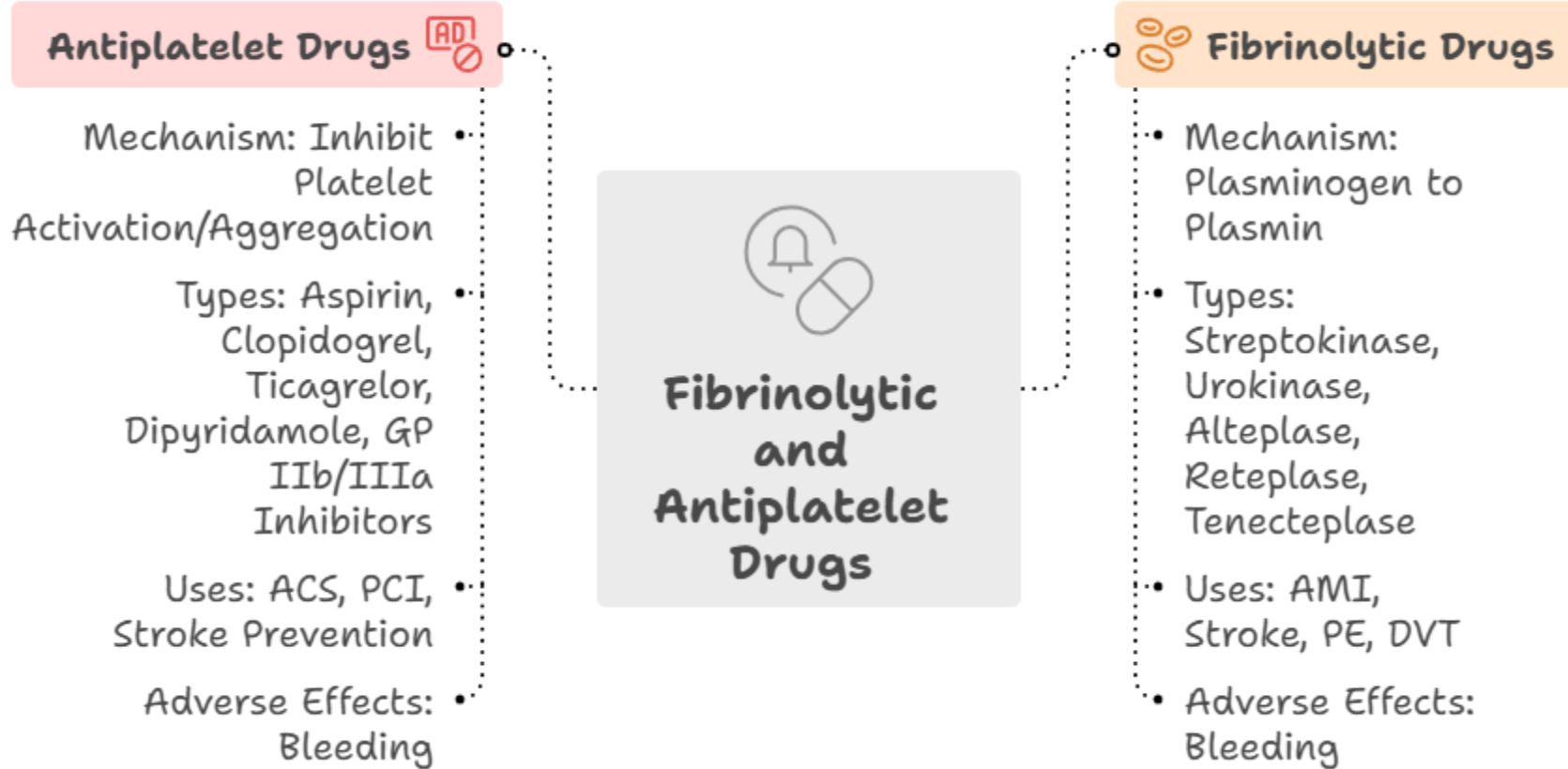
*Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai  
Approved by Pharmacy Council of India, New Delhi*

**Coimbatore-641035**

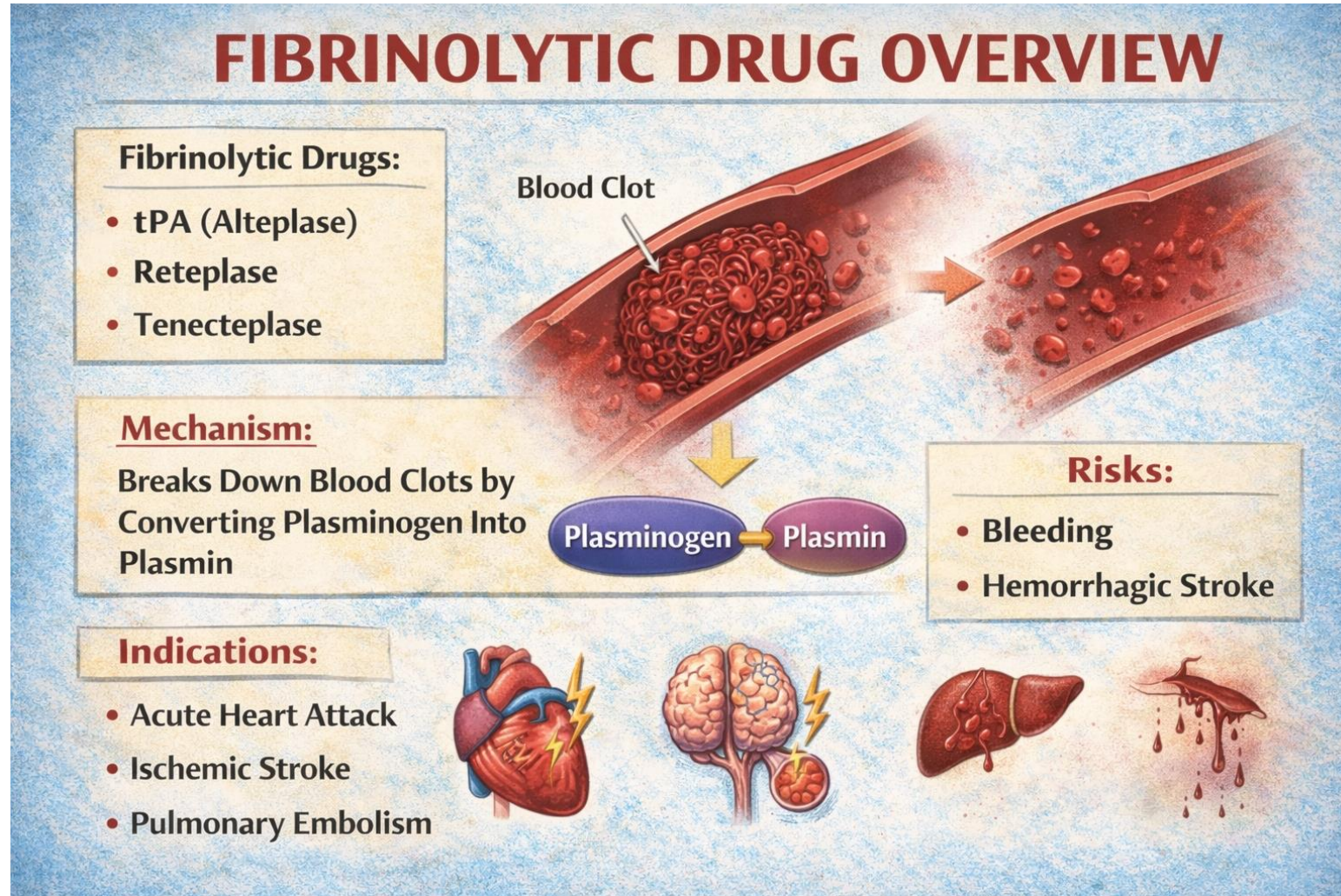
**TOPIC : FIBRINOLYTIC AND ANTI PLATELET DRUGS**

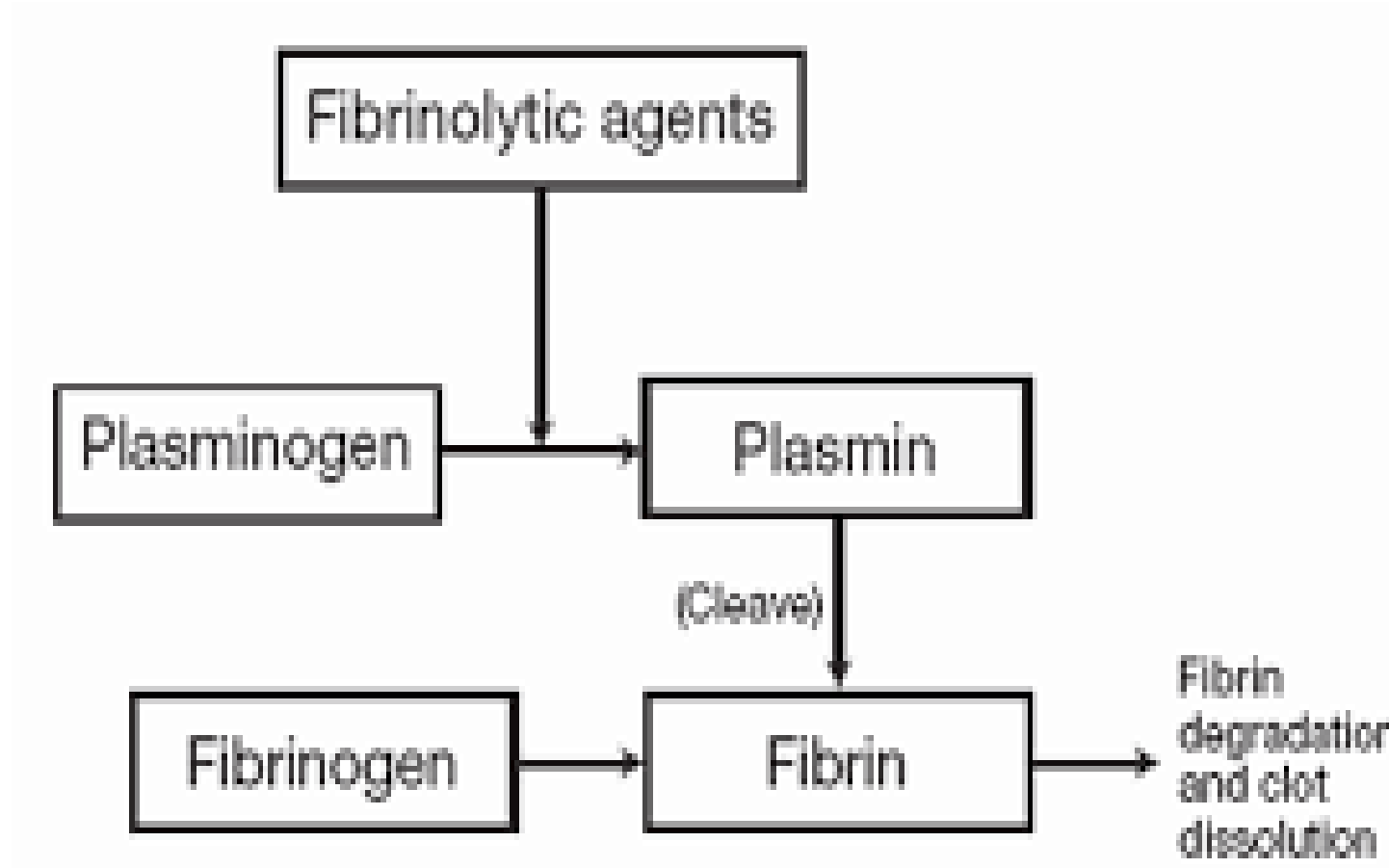
**COURSE:PHARMACOLOGY II**

# MIND MAP:

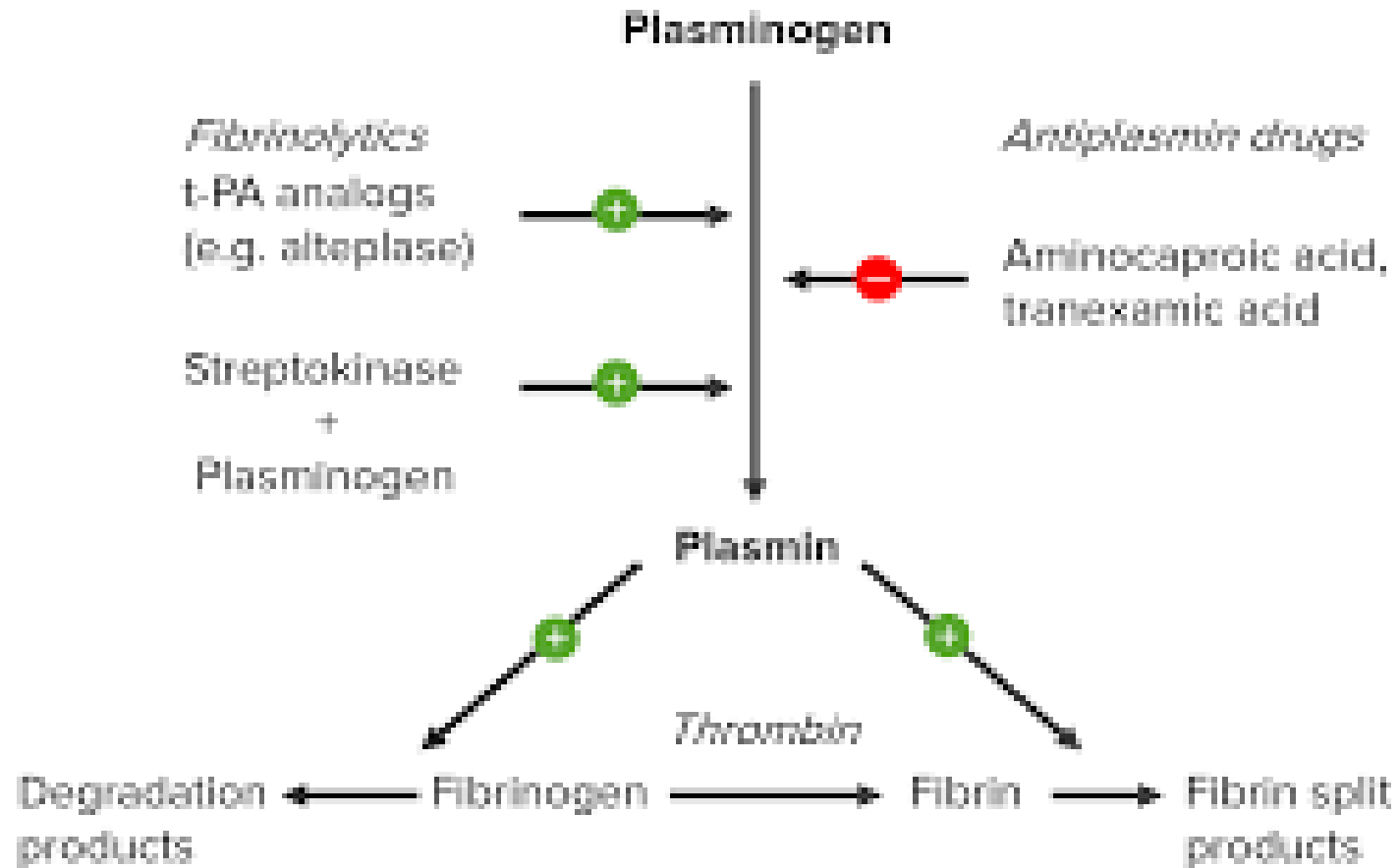


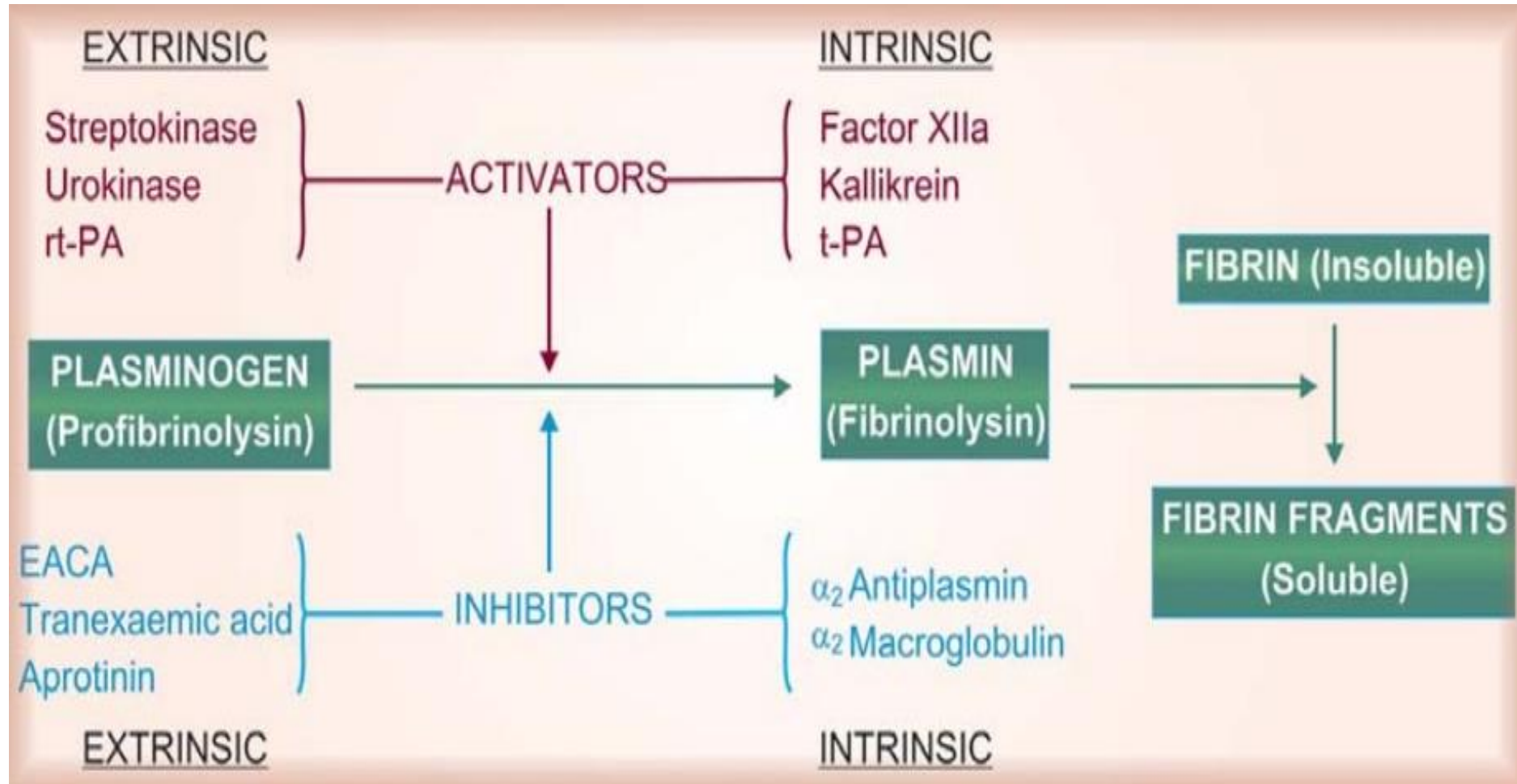
# Fibrinolytic Drugs:





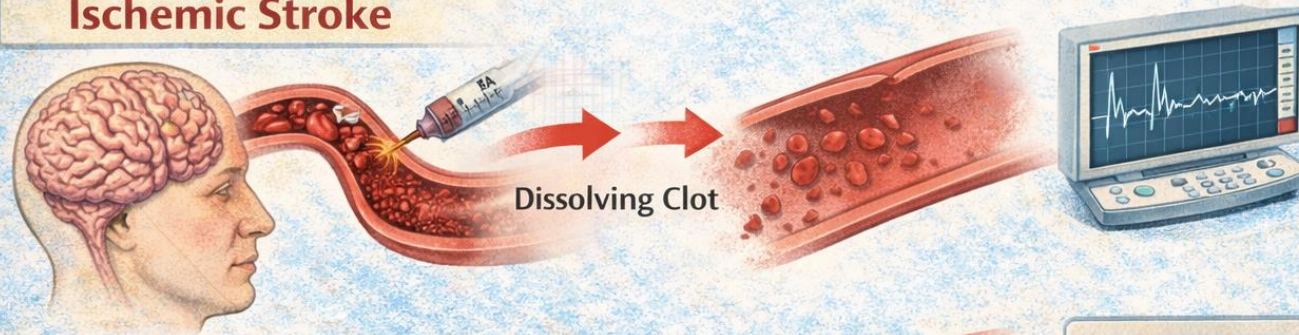
# Mechanism of Action



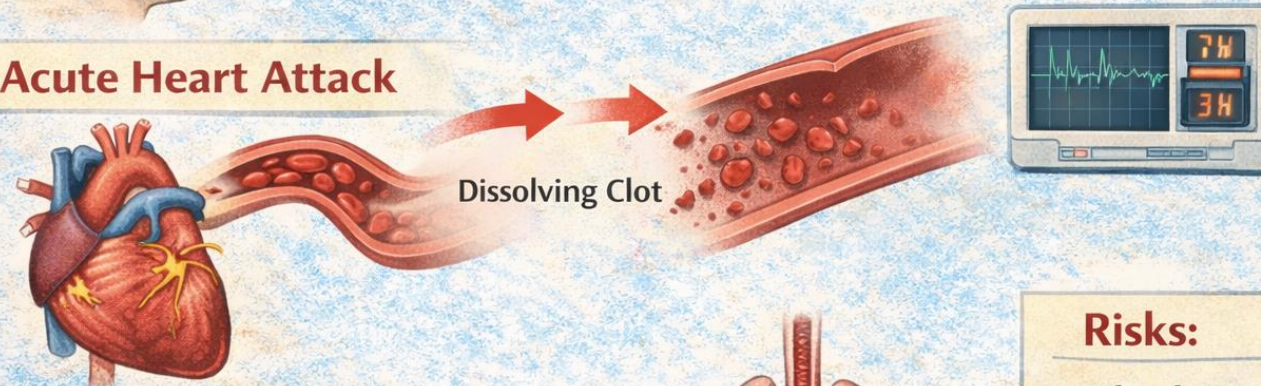


# CLINICAL APPLICATION OF FIBRINOLYTIC DRUGS

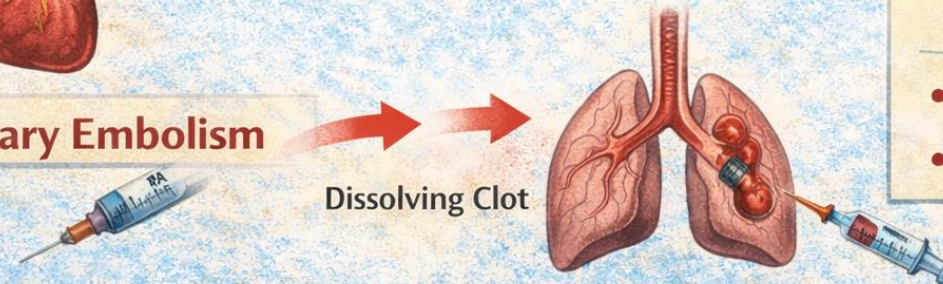
## Ischemic Stroke



## Acute Heart Attack



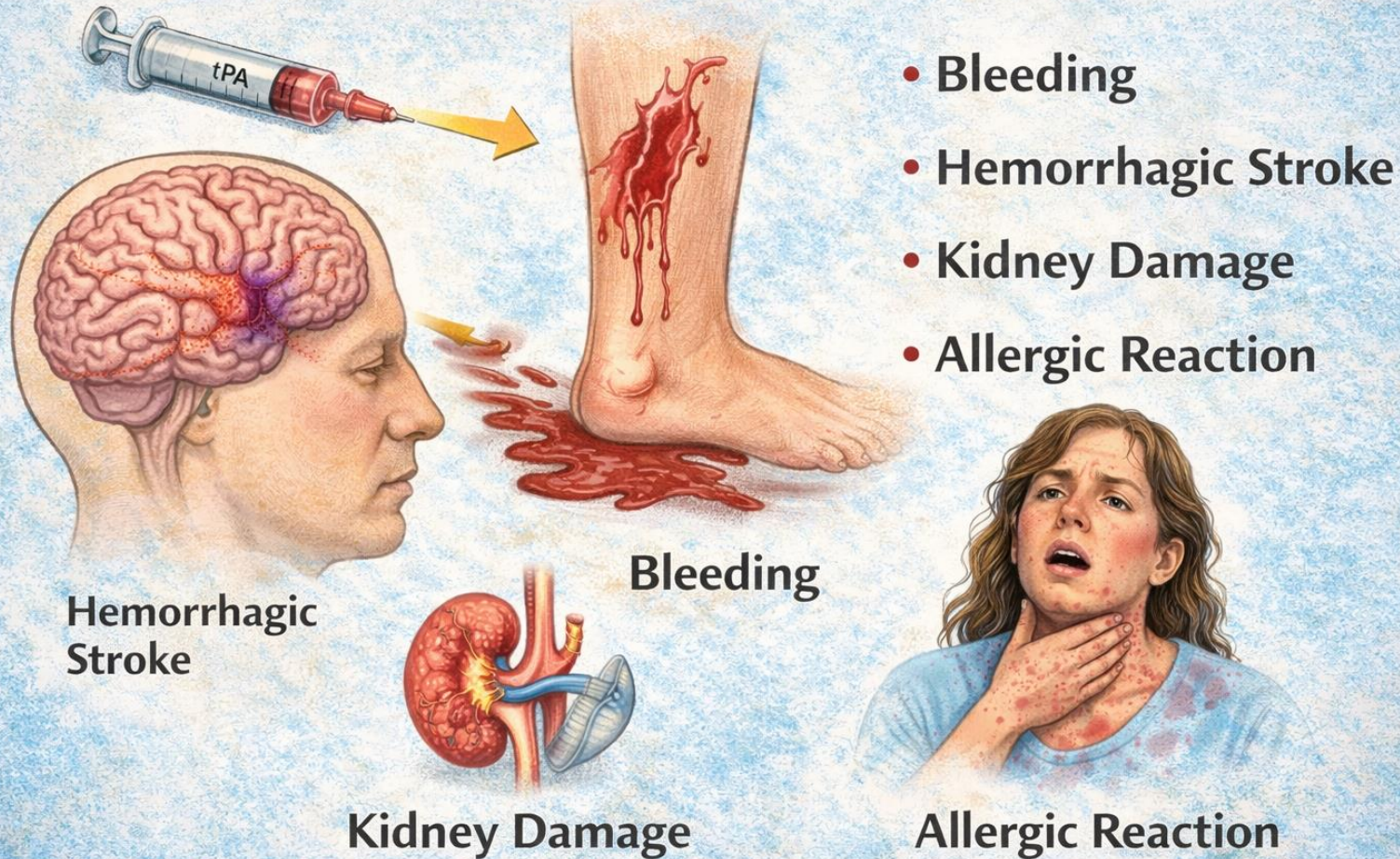
## Pulmonary Embolism



### Risks:

- Bleeding
- Hemorrhagic Stroke

## ADVERSE EFFECTS OF FIBRINOLYTIC DRUGS





# CONTRAINDICATIONS OF FIBRINOLYTIC DRUGS

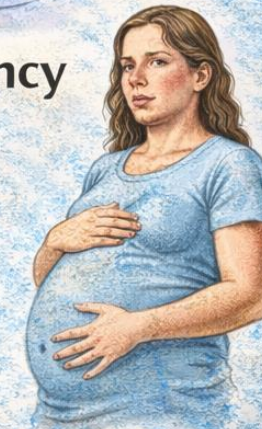
Recent Bleeding or Hemorrhagic Stroke

• Recent Major Surgery / Trauma



• Active Internal Bleeding

Pregnancy



Severe  
Uncontrolled Hypertension

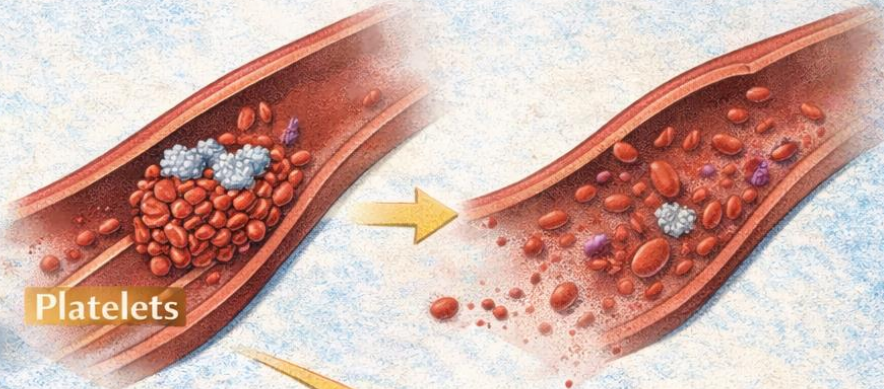
Hypertension

# Antiplatelet Drugs:

## ANTIPLATELET DRUG OVERVIEW

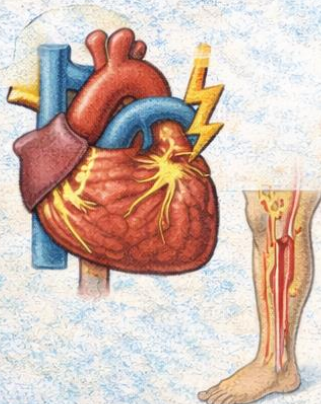
**Antiplatelet Drugs:**

- Aspirin
- Clopidogrel
- Ticagrelor



Platelets

Inhibit Platelet Aggregation




**Indications:**

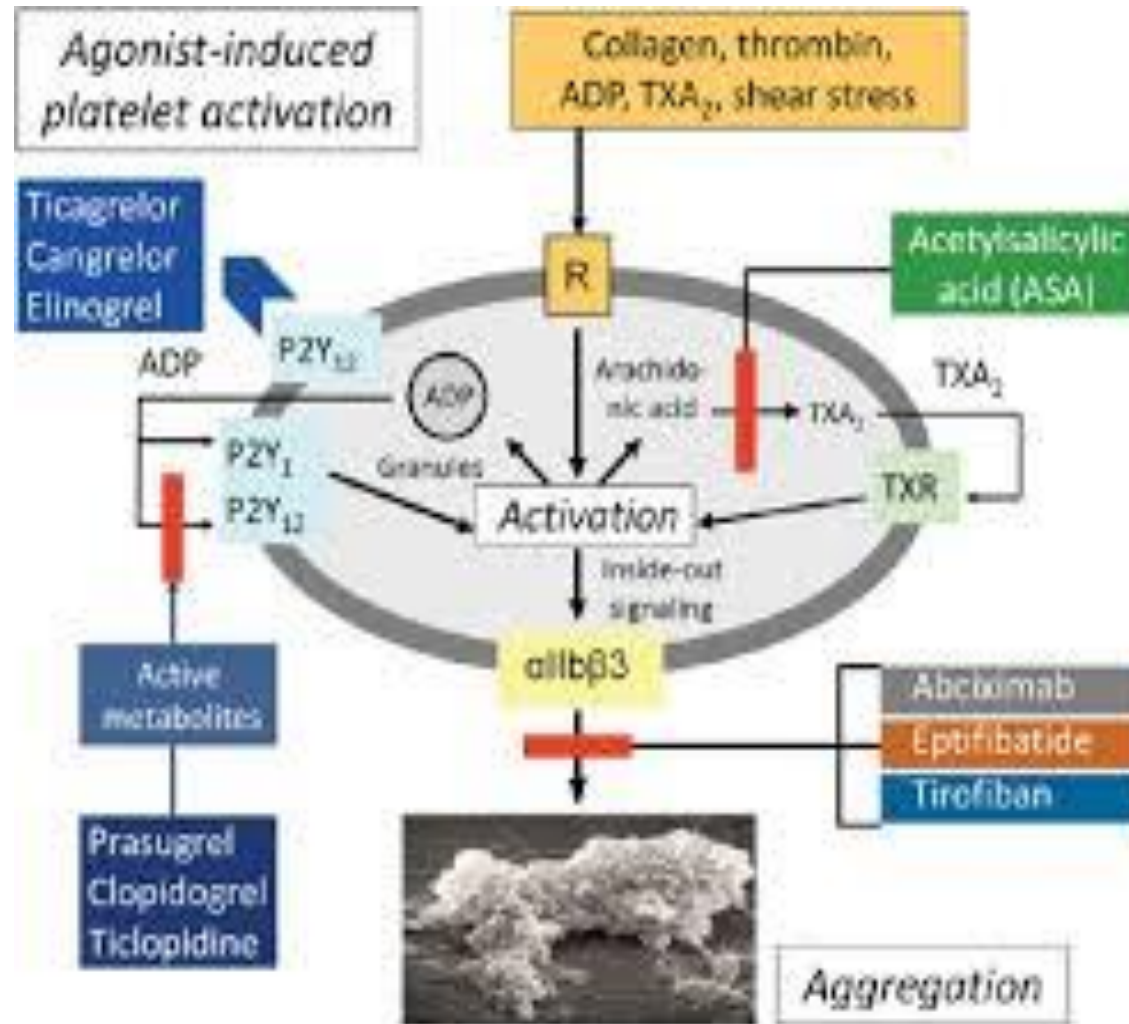
- Prevent Heart Attack
- Prevent Stroke
- Peripheral Artery Disease

**Risks:**

- Bleeding
- Gastrointestinal Issues



# Mechanism of Action:



## TYPES OF ANTIPLATELET DRUGS

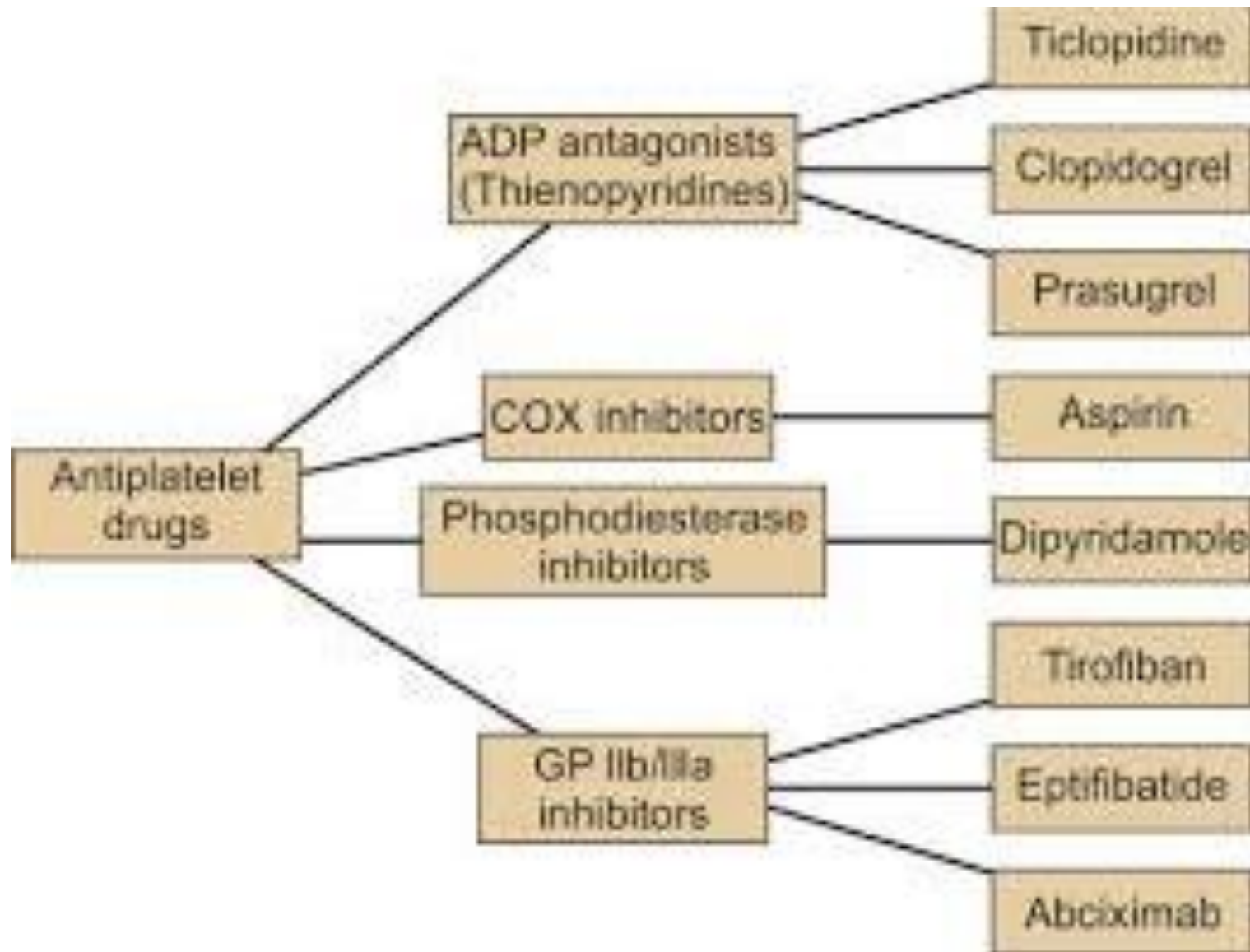
COX Inhibitors



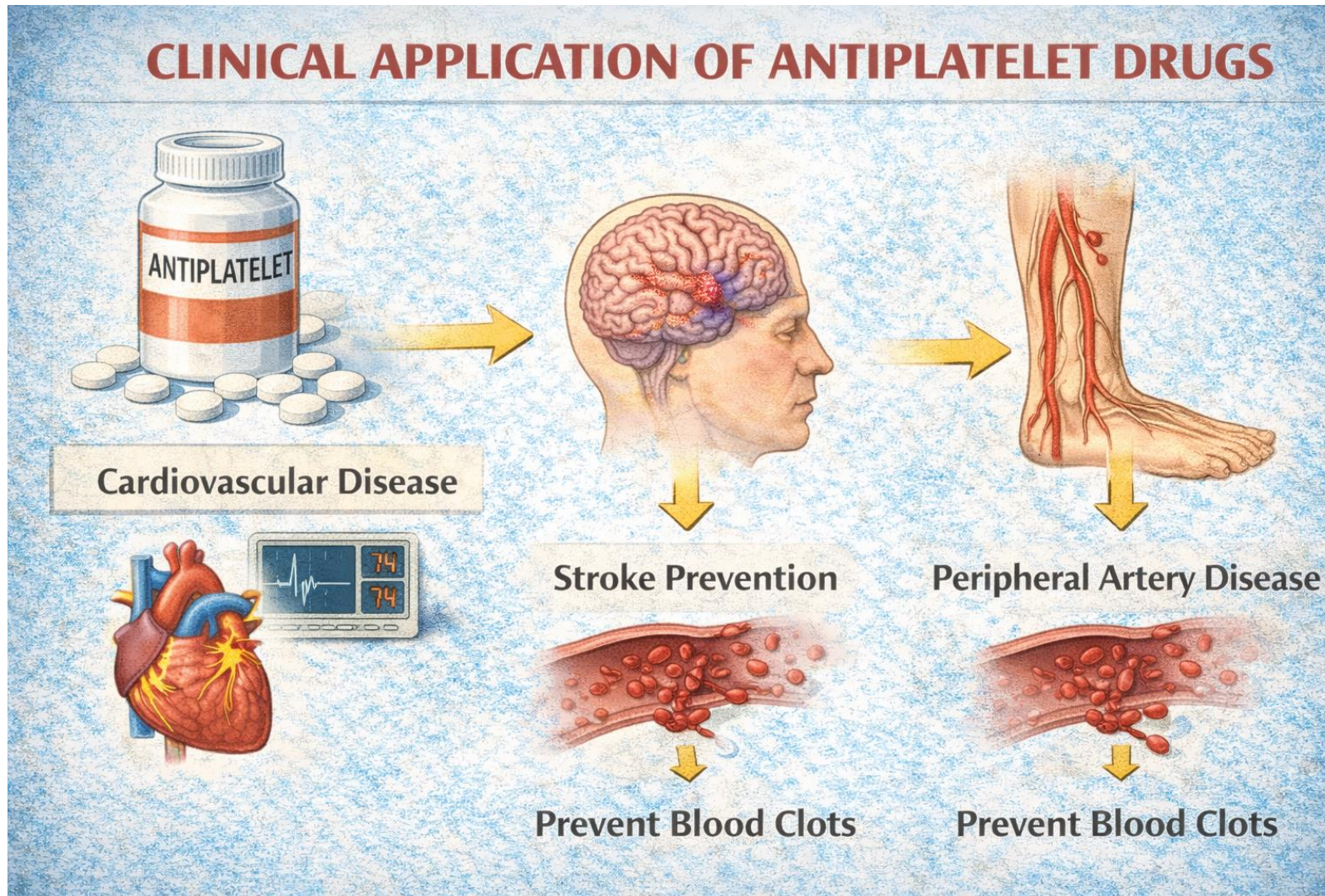
P2Y<sub>12</sub> Inhibitors

PLAVIX  
BRILINTA  
EFFIENT





# CLINICAL APPLICATION OF ANTIPLATELET DRUGS



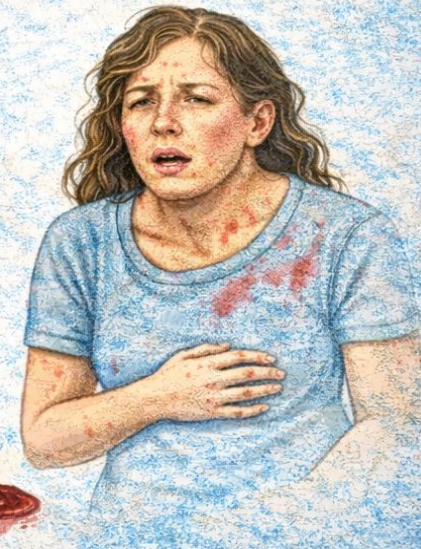
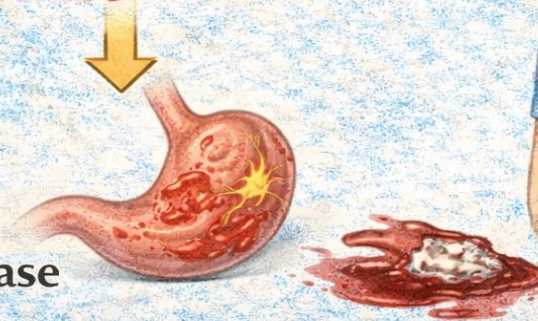
## ADVERSE EFFECTS OF ANTIPLATELET DRUGS



- Bleeding
- Gastrointestinal Irritation

### Indications;

- Prevent Heart Attack
- Prevent Stroke
- Peripheral Artery Disease



## Multiple Choice Questions (MCQs):

1. Which of the following fibrinolytic drugs is a recombinant tissue plasminogen activator (t-PA)?

- a) Streptokinase
- b) Urokinase
- c) Alteplase
- d) Anistreplase

2. Which antiplatelet drug inhibits cyclooxygenase (COX)-1?

- a) Clopidogrel
- b) Aspirin
- c) Dipyridamole
- d) Abciximab



3. Which of the following is a common adverse effect of fibrinolytic drugs?

- a) Hypertension
- b) Bradycardia
- c) Bleeding
- d) Constipation

4. Which antiplatelet drug is a P2Y<sub>12</sub> receptor antagonist?

- a) Aspirin
- b) Dipyridamole
- c) Clopidogrel
- d) Abciximab

5. Glycoprotein IIb/IIIa inhibitors prevent platelet aggregation by blocking the binding of which of the following?

- a) Thromboxane A<sub>2</sub>
- b) ADP
- c) Fibrinogen
- d) Plasminogen

## References:

1. Rang & Dale's Pharmacology. 9th ed. Churchill Livingstone; 2021.
2. Katzung BG, Vanderah TW. Basic & Clinical Pharmacology. 15th ed. McGraw-Hill Education; 2021.
3. Goodman & Gilman's The Pharmacological Basis of Therapeutics. 14th ed. McGraw-Hill Education; 2018.
4. Anderson JL, Morrow DA. Antiplatelet and Anticoagulant Therapy. *Cardiology Clinics*. 2008;26(2):173-194.
5. Collet JP, Thrombolysis in Myocardial Infarction (TIMI) Study Group. Reperfusion therapy for acute myocardial infarction. *European Heart Journal*. 2004;25(23):2145-2154

**THANK YOU !**