

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

COURSE NAME : MEDICINAL CHEMISTRY II

B.PHARM/ III YEAR

TOPIC: THIAZIDES

DESIGN THINKING STAGES IN CLASSIFICATION

Empathize: Understand the users — in this case, students, pharmacists, or researchers who use the alphabetical classification system.

Define: Clearly define the problem based on the insights from the empathize stage.

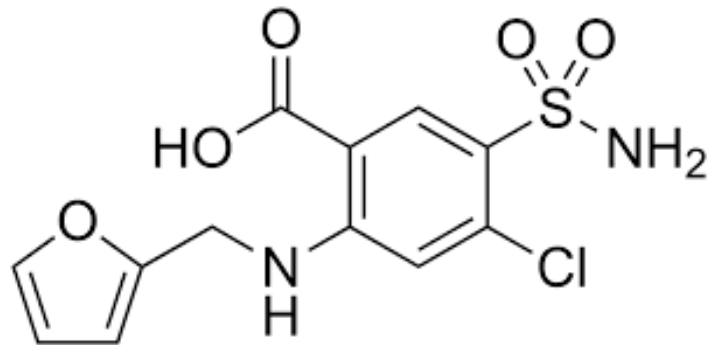
Ideate: Generate possible solutions or improvements.

Prototype: Create a tangible version of your solution

Test: Evaluate the prototype with real users.

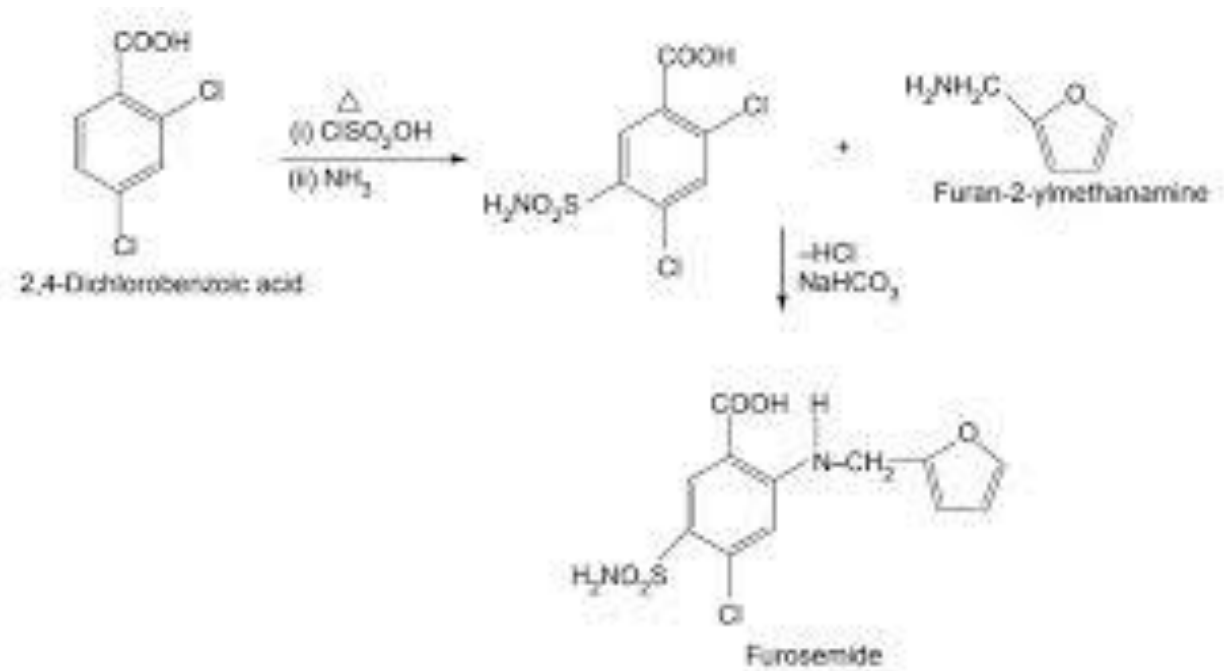
INTRODUCTION

LOOP DIURETICS

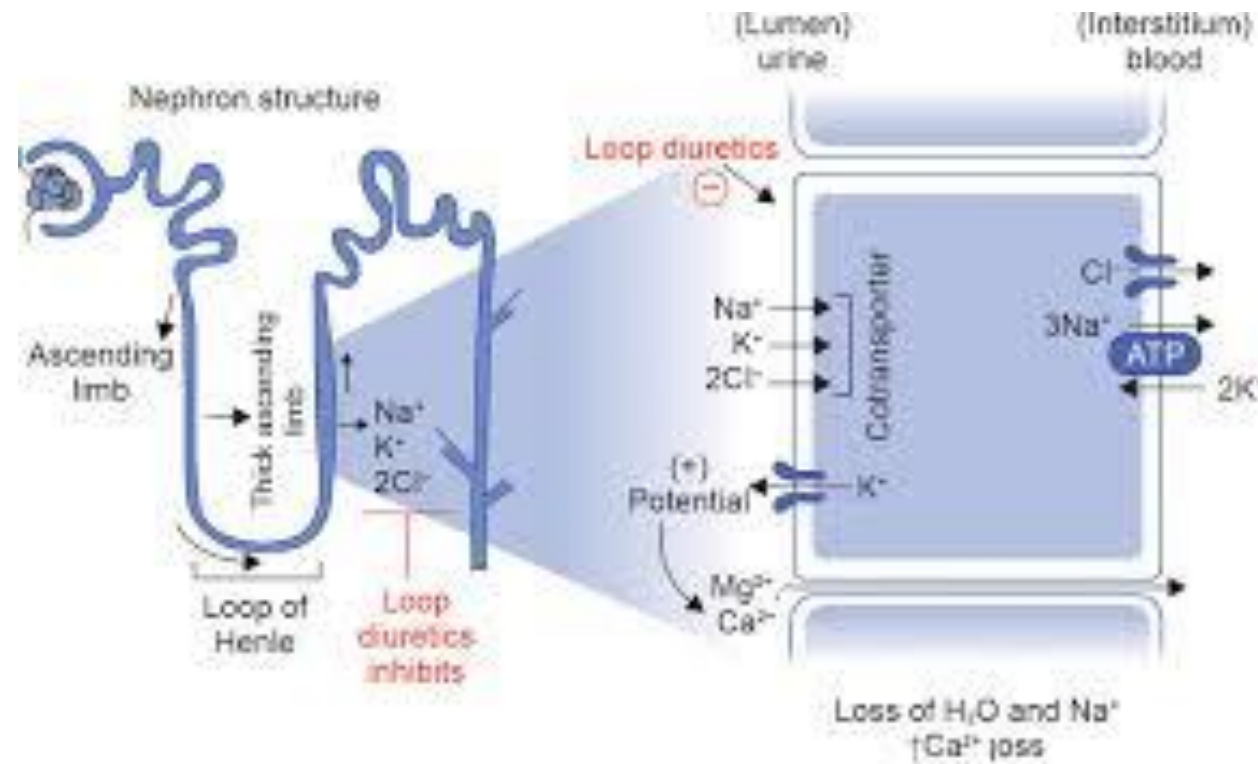


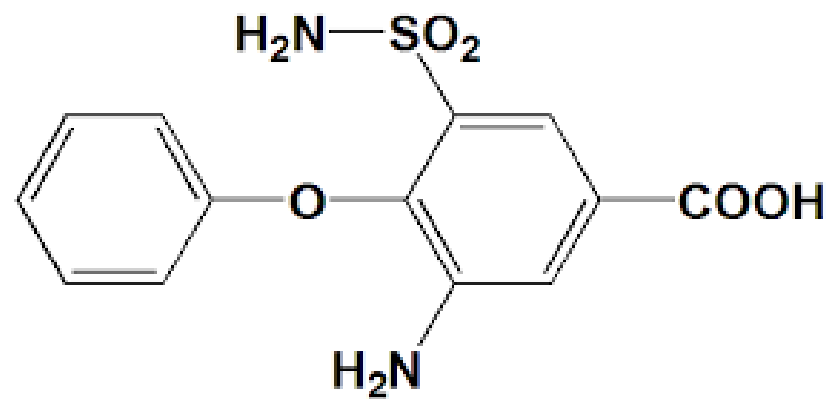
FUROSEMIDE :

SYNTHESIS



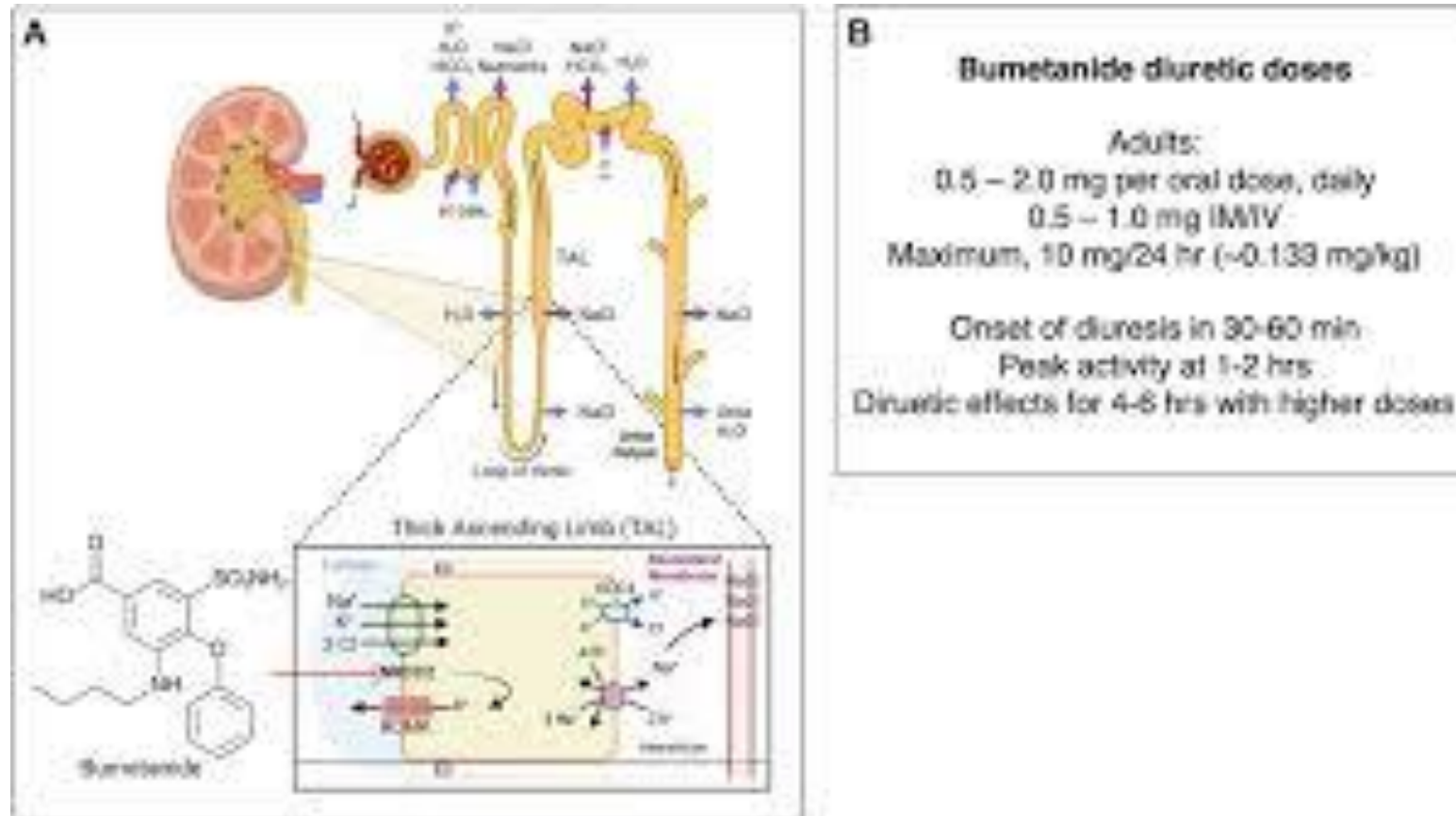
MECHANISM OF ACTION



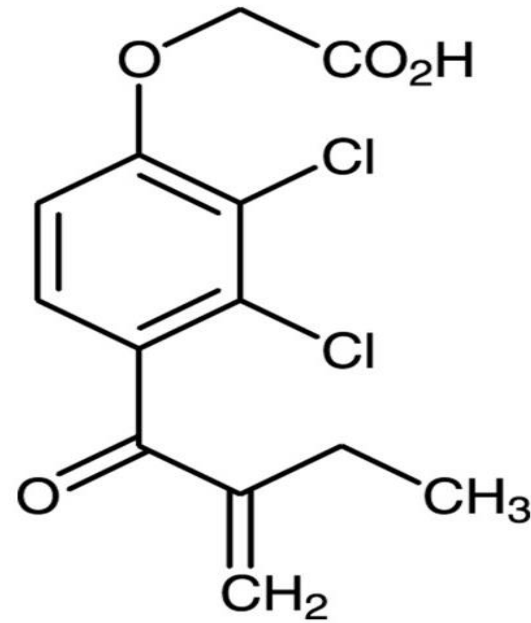


bumetanide

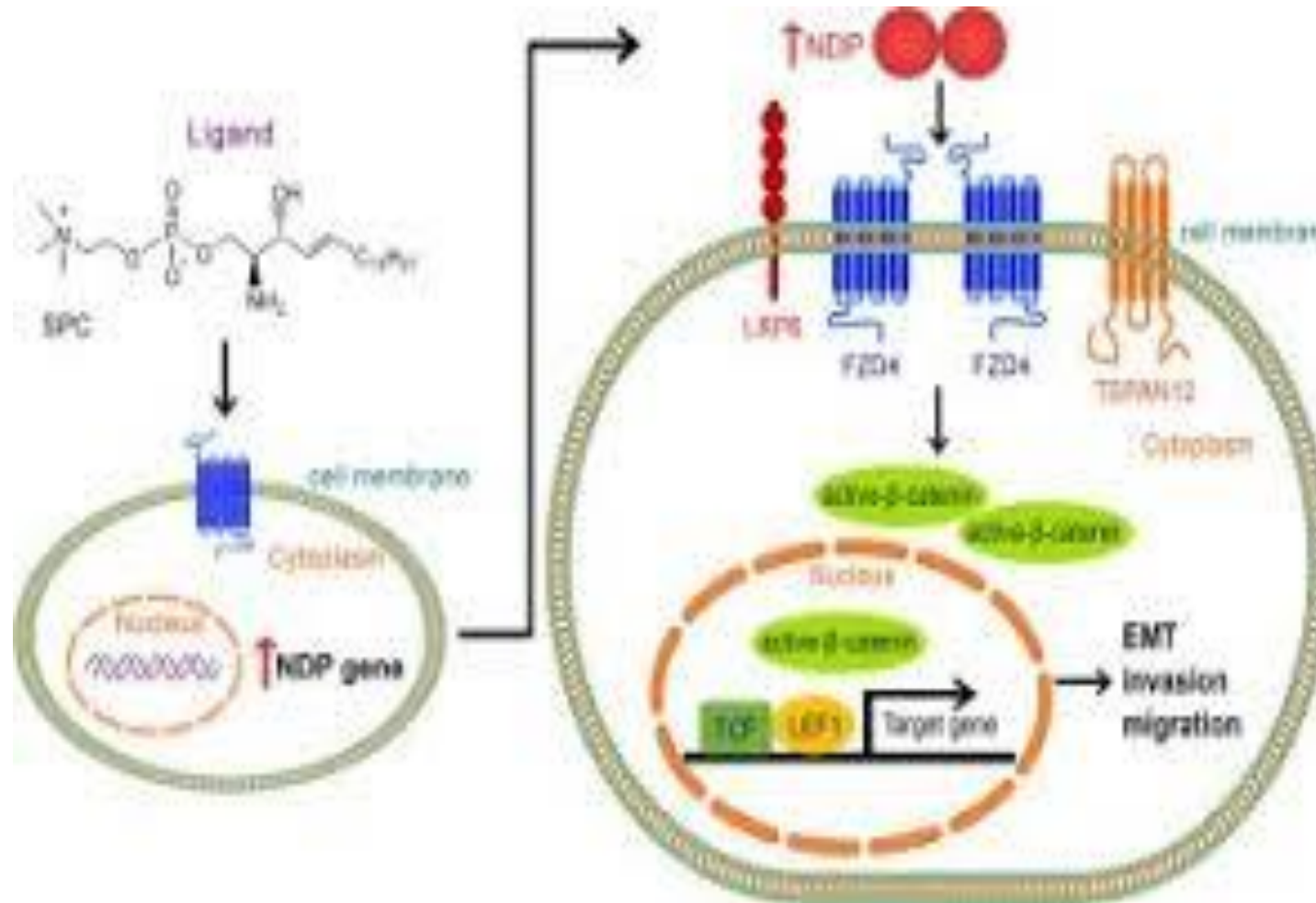
MECHANISM OF ACTION



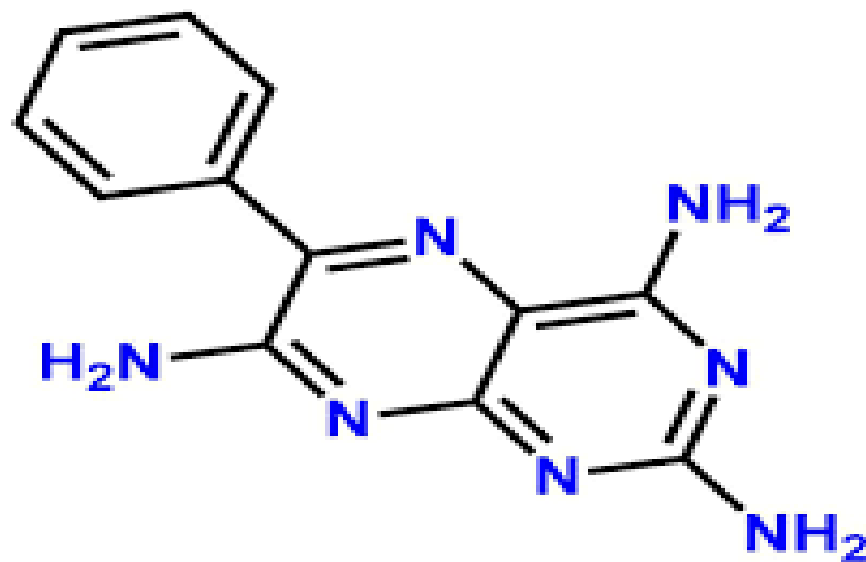
ETHACRYNIC ACID



MECHANISM OF ACTION



TRIAMTERENE



ASSESSMENT

1. Site of action of Amiloride is:

- A. Proximal tubule
- B. Loop of Henle
- C. Distal tubule
- D. Collecting duct

2. Which of the following increases calcium reabsorption?

- A. Loop diuretics
- B. Thiazides
- C. Carbonic anhydrase inhibitors
- D. Osmotic diuretics

3. Carbonic anhydrase inhibitors act at:

- A. Proximal tubule
- B. Loop of Henle
- C. Distal tubule
- D. Collecting duct

4. Which diuretic causes ototoxicity as side effect?

- A. Mannitol
- B. Furosemide
- C. Spironolactone
- D. Acetazolamide

REFERENCES

1. Foye, W.O., Lemke, T.L., and Williams, D.A. *Foye's Principles of Medicinal Chemistry*, 7th Edition, Wolters Kluwer.
2. Wilson, C.O., Gisvold, O., and Block, J.H. *Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry*, 12th Edition, Lippincott Williams & Wilkins.
3. Patrick, G.L. *An Introduction to Medicinal Chemistry*, 7th Edition, Oxford University Press.
4. Thomas, G. *Fundamentals of Medicinal Chemistry*, John Wiley & Sons.
5. Singh, H. and Kapoor, V.K. *Medicinal and Pharmaceutical Chemistry*, Vallabh Prakashan, New Delhi.



Thank You