

# **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**

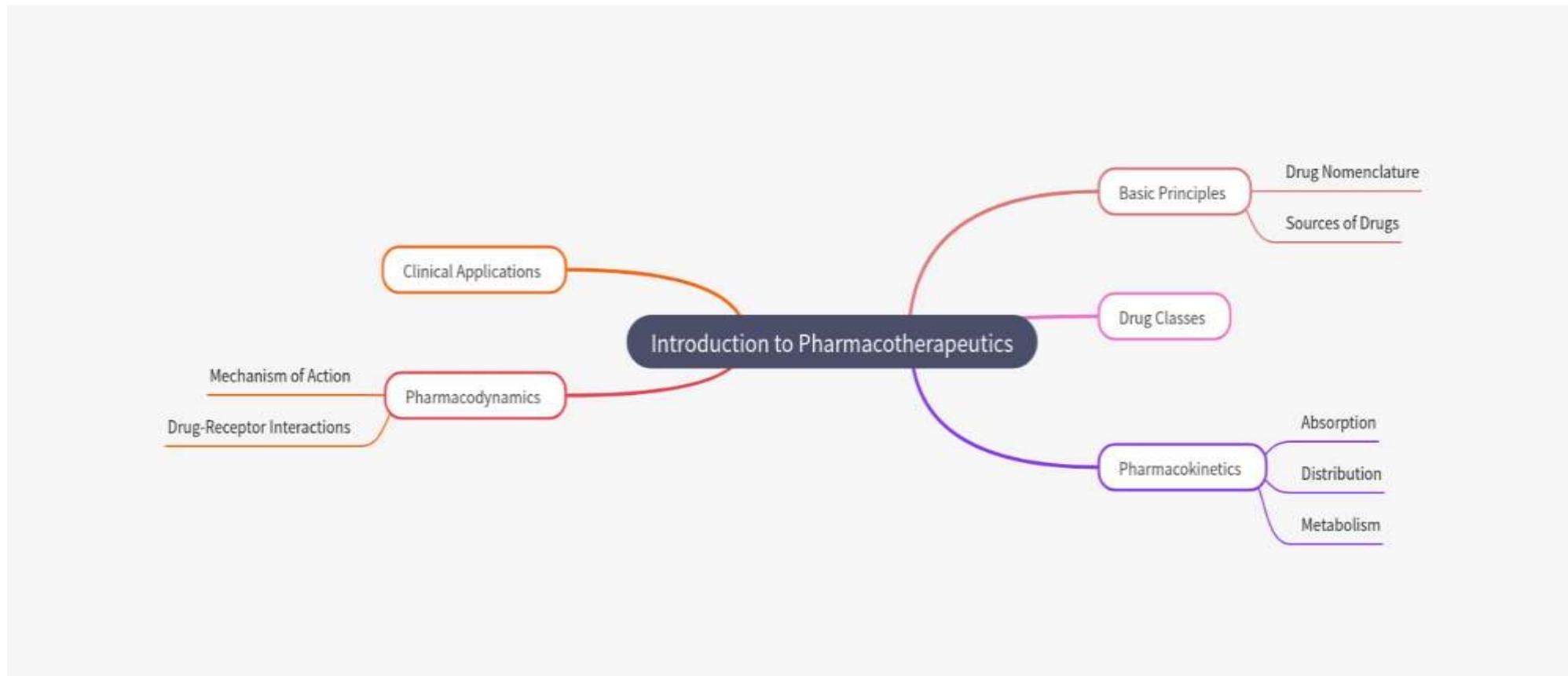


**COURSE NAME : PHARMACOTHERAPEUTICS (ER20-24T)**

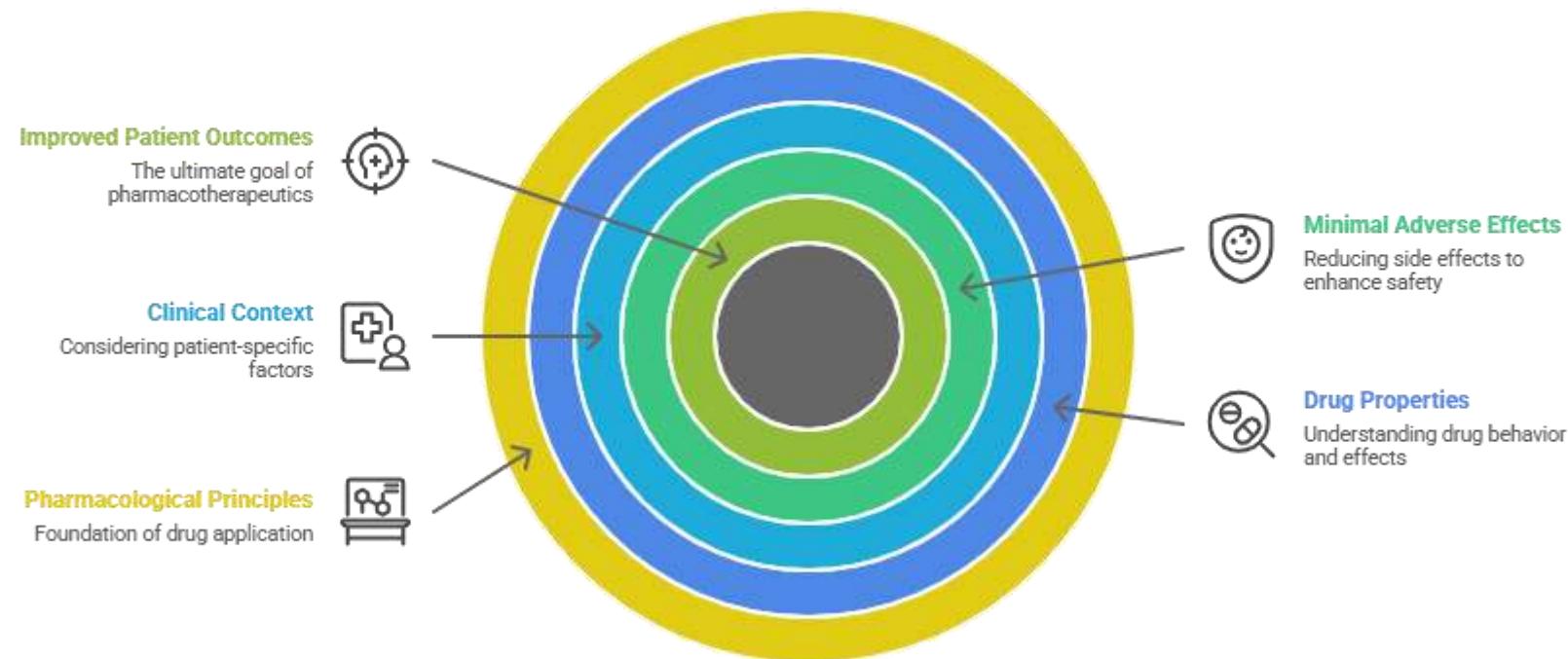
**D. PHARM II YEAR**

**TOPIC : INTRODUCTION TO PHARMACOTHERAPEUTICS**

# MINDMAP

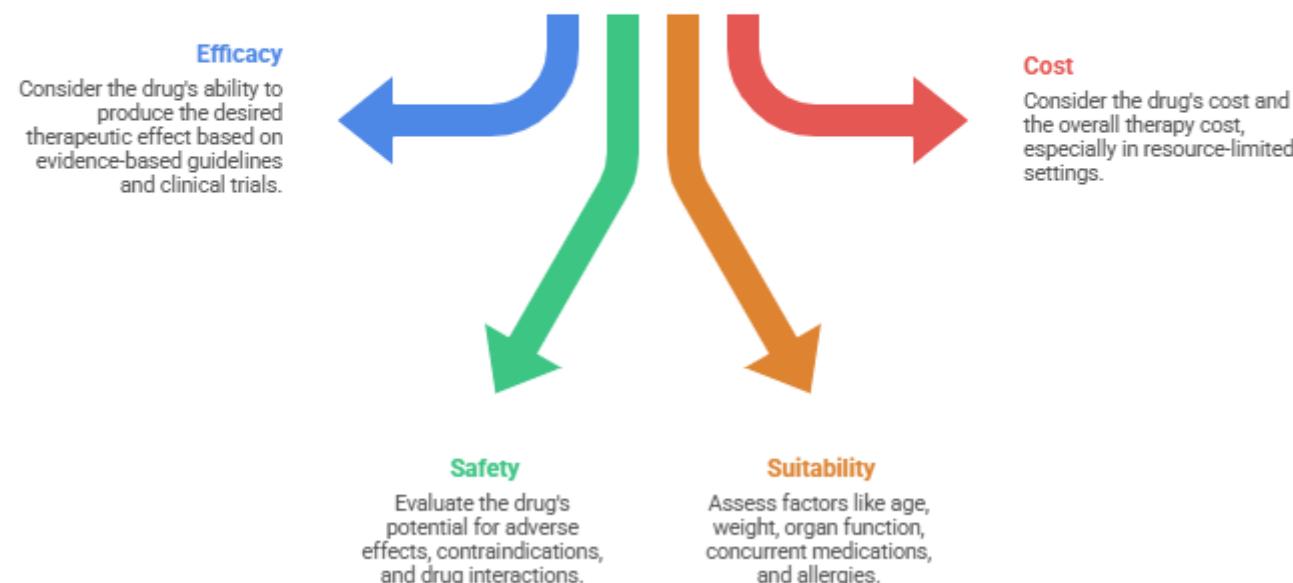


## Pharmacotherapeutics Process



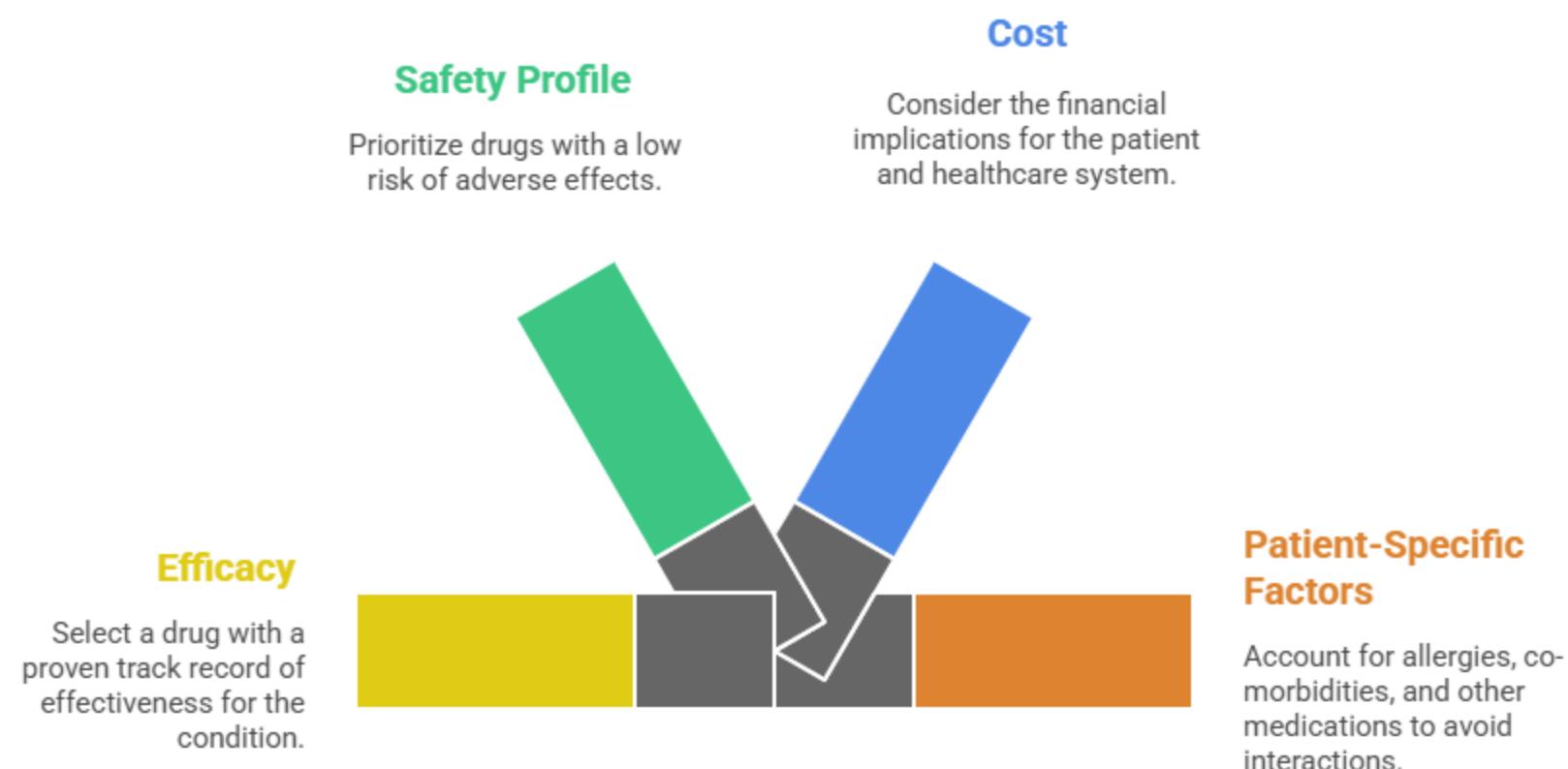
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## Which drug should be selected for a patient?



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## Which drug should be selected for treatment?



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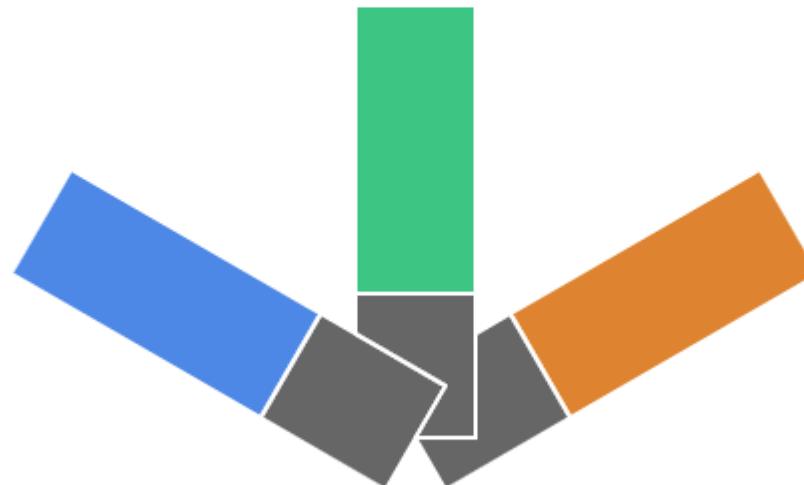
## How to determine the optimal dosage and administration route?

### Renal and Hepatic Function

Modify dosage based on kidney and liver function to prevent drug accumulation.

### Age and Weight

Adjust dosage based on patient's age and weight to ensure appropriate metabolism and elimination.



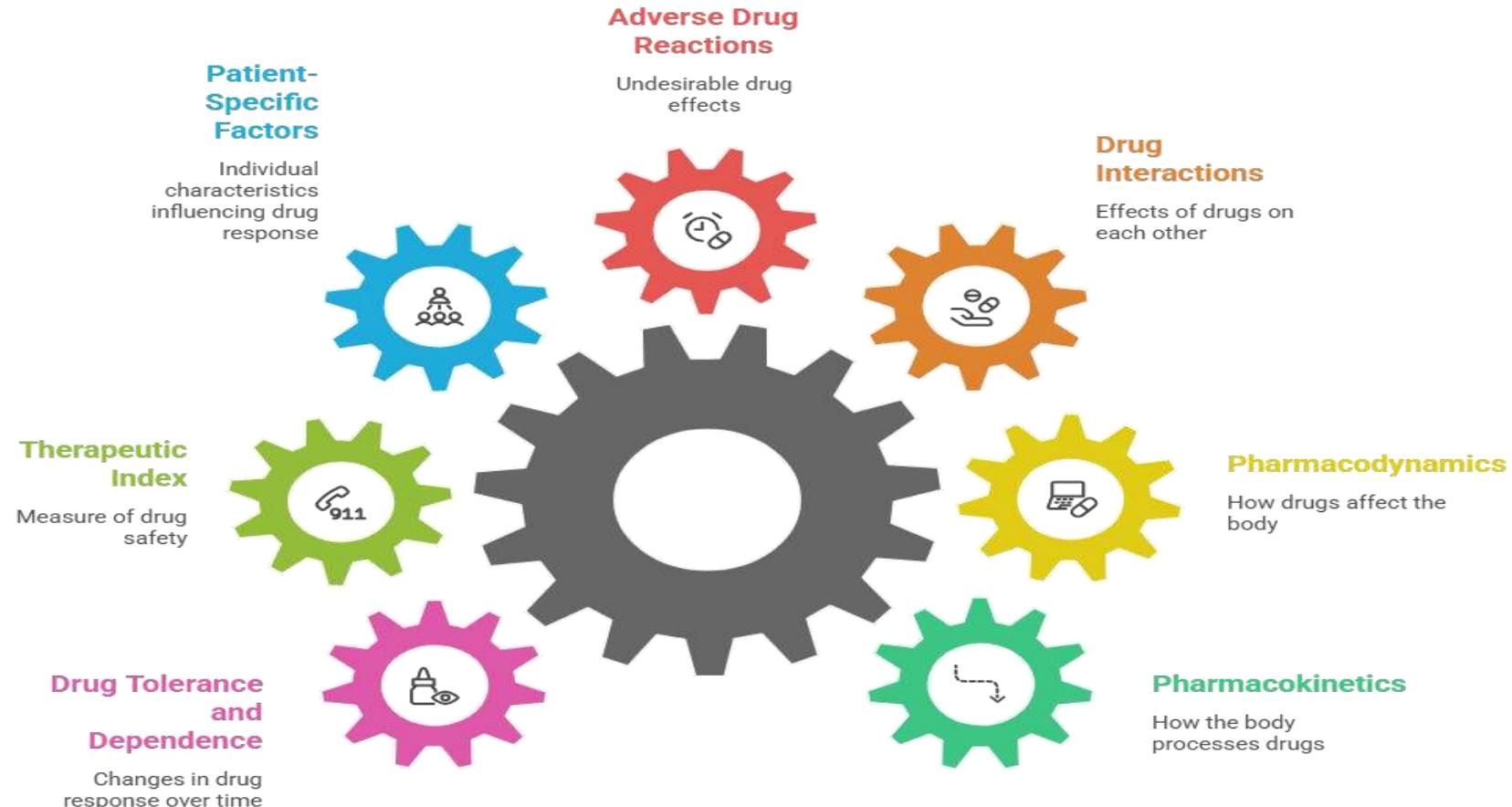
### Route of Administration

Select the most effective route (e.g., oral, intravenous) based on the drug's properties and patient's condition.

## Pharmacotherapy Monitoring Cycle

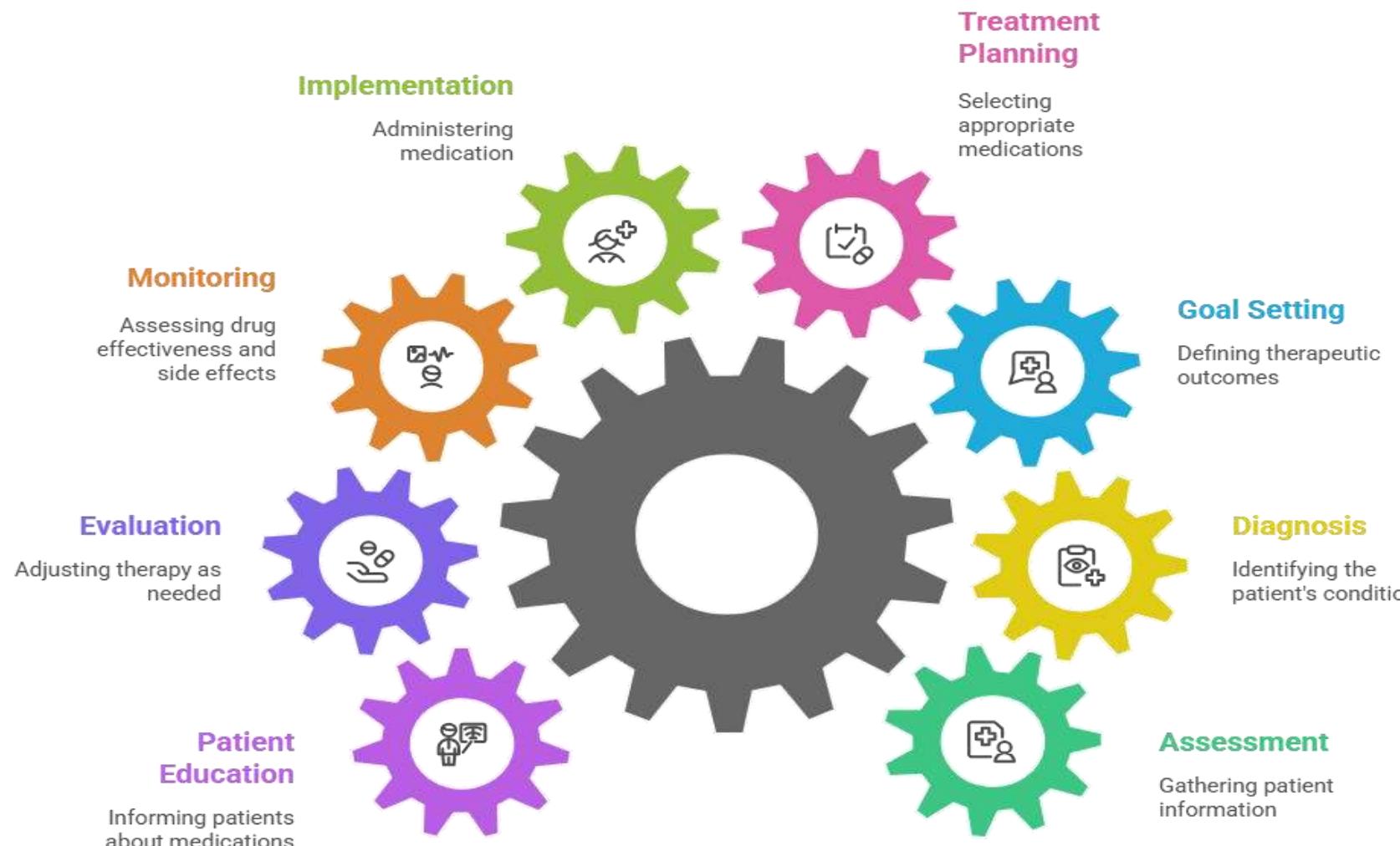


## Pharmacotherapeutic Considerations



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## Pharmacotherapeutic Process Steps



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## Navigating Pharmacotherapeutic Challenges

### Medication Cost

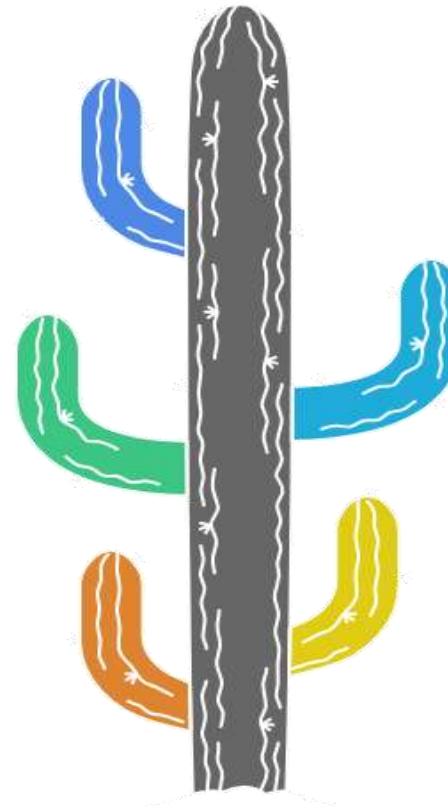
Limits access to treatment

### Drug Resistance

Makes infections difficult to treat

### Polypharmacy

Increases interaction and adverse effects



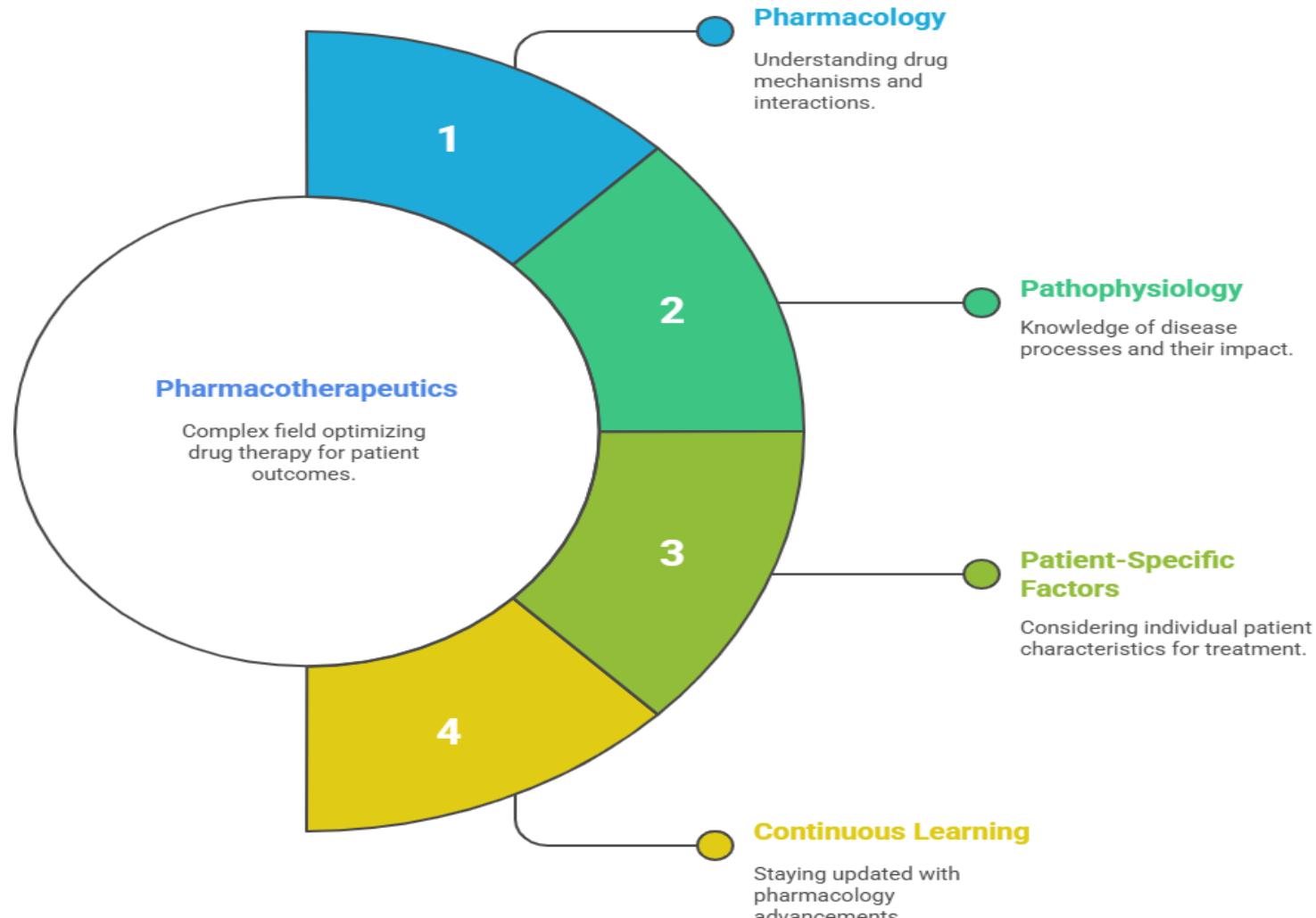
### Limited Evidence

Guides drug selection and dosage

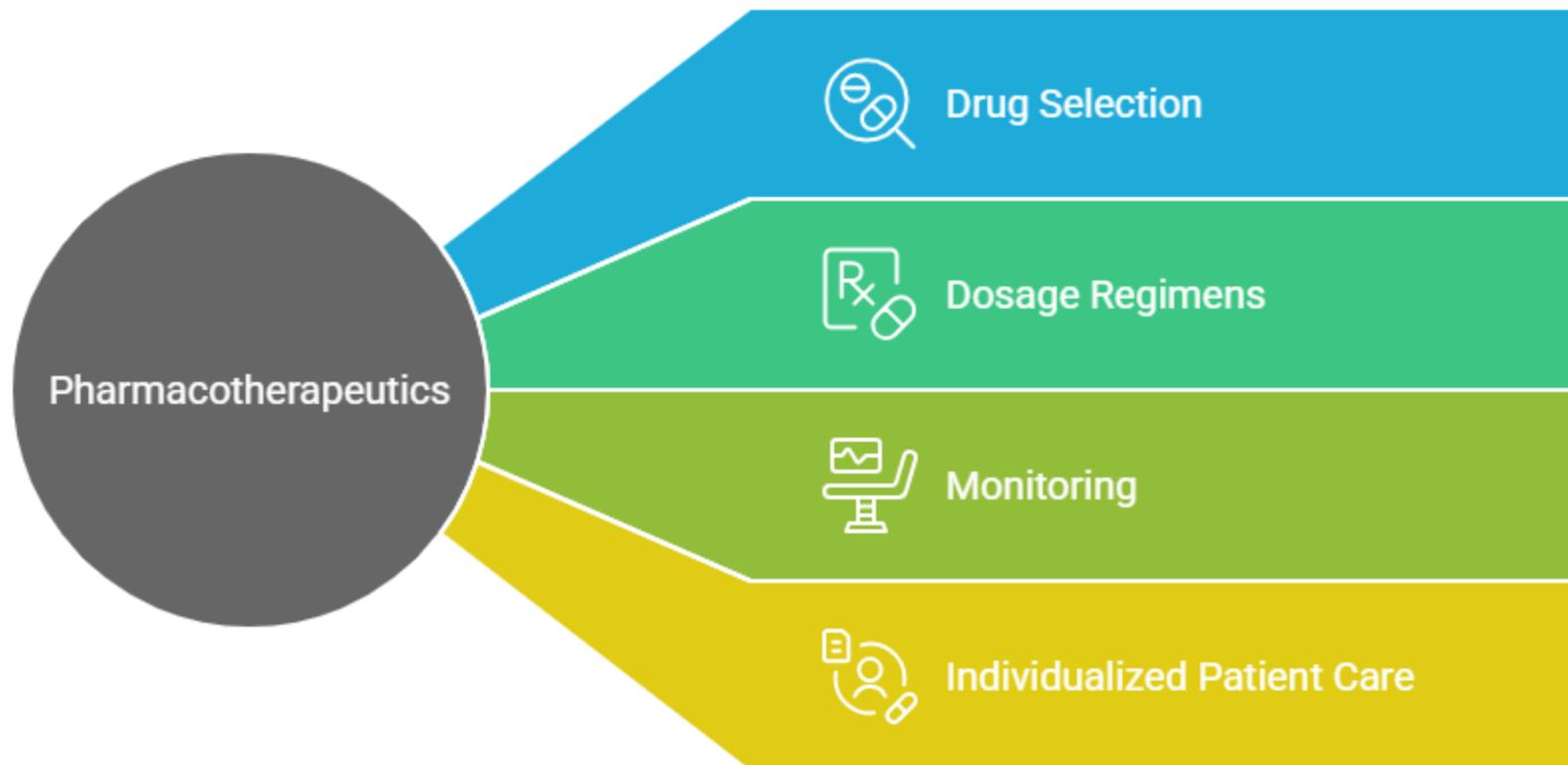
### Non-Adherence

Leads to treatment failure

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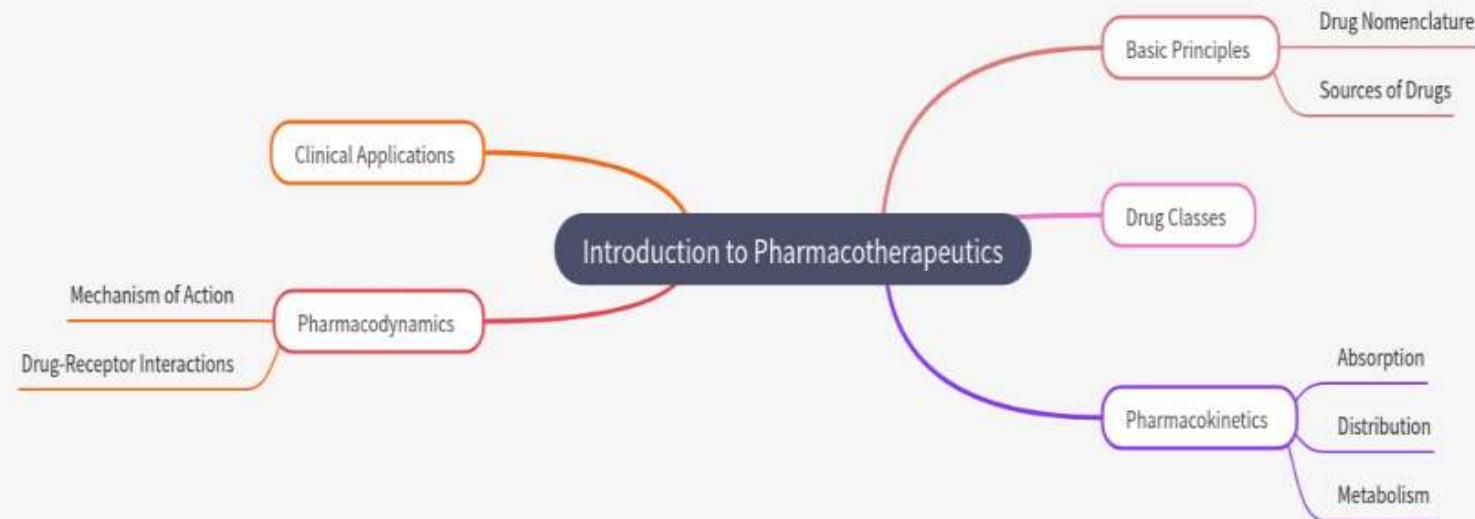


## Unveiling the Dimensions of Pharmacotherapeutics



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# SUMMARY



# ASSESSMENTS



1. Which of the following Anti-Epileptic Drugs (AEDs) should be avoided in an ICU patient who is on meropenem for pneumonia?

- A) Sodium Valproate
- B) Levetiracetam
- C) Lacosamide
- D) Midazolam



2. All of the following AEDs except one are consider to be enzyme-inducing AEDs



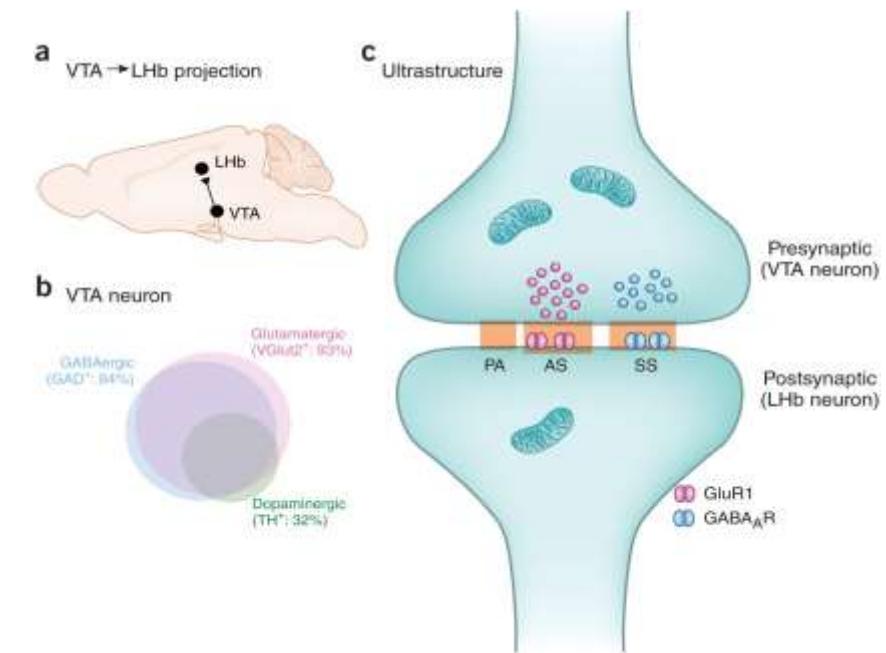
- A) Phenytoin
- B) Carbamazepine
- C) Primidone
- D) Sodium Valproate





3. The proposed mechanism of action for Levetiracetam is:

- A) Modifies synaptic release of glutamate and GABA through action on vesicular function
- B) Enhances slow inactivation of voltage-gated Sodium Channels
- C) Inhibits Carbonic Anhydrase
- D) Irreversibly inhibits GABA aminotransferase



## REFERENCES

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A large, stylized 'Thank you' text in blue, with decorative elements like a pink flower, a yellow crescent, a red heart, a green leaf, an orange swirl, and a pink flower on the right side.