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 : PHARMACOVIGILANCE (BP805ET)

VIII SEM / IV YEAR

TOPIC 4 : INTERNATIONAL NON PROPRIETARY NAMES FOR DRUG (INN)

EFFECTIVE COMMUNICATIION IN PHARMACOVIGILANCE

SNS DESIGN THINKING

EMPATHIZE

Goal:
Understand the needs of healthcare professionals, patients, and regulators.

Actions:
- Conduct interviews with stakeholders.
- Analyze feedback from SNS platforms (e.g. Twitter, patient forums).

DEFINE

Goal:
Frame thecore communication problems.

Actions:
- Identify barriers to clear pharmacovigi-lance messaging.
- Create user personas (e.g. busy clinicians. concerned patients).

IDEATE

Goal:
Generate creeative solutions for better communication.

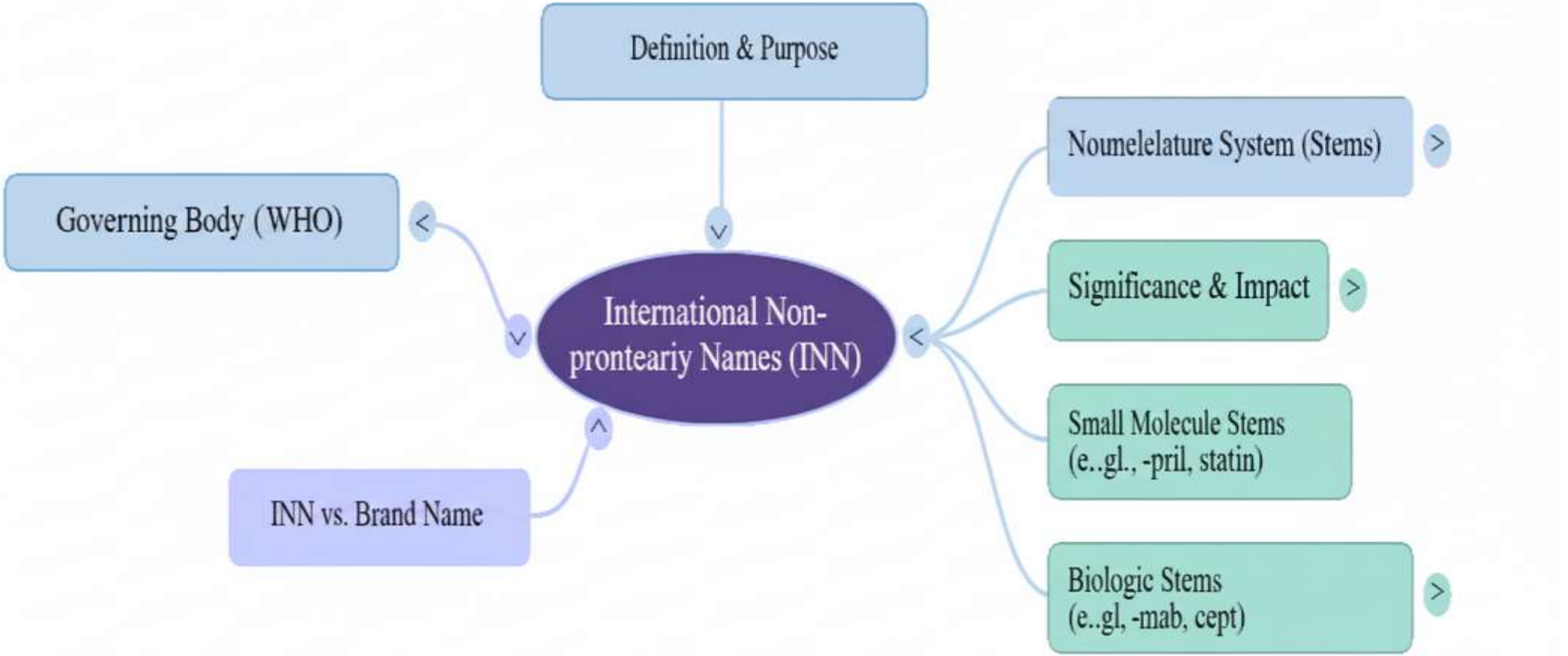
Actions:
- Brainstormm SNS-based tools (e.g. visual ADR alerts, chatbot explainers).
- Explore gamified reporting system or multilingual content.

PROTOTYPE

Goal:
Build and test communication tools

Actions:
- Develop mockups of SNS posts, infographics, or interactive dashboards.
- Test with target users for clarity and engagement.

MINDMAP


Definition & Purpose
Governing Body (WHO)
International Non-prontearіy Names (INN)
INN vs. Brand Name
Noumelelature System (Stems)
Significance & Impact
Small Molecule Stems (e..gl., -pril, statin)
Biologic Stems (e..gl, -mab, cept)

Empathize

INTRODUCTION

INTERNATIONAL NON-PROPRIETARY NAMES FOR DRUGS

1. A **Global Standard:** Established by the WHO to provide unique names for pharmautiical substances.
2. **Non-propritieriy:** Public property, unlike brand names, ensuring universal access.
3. **Clarity & Safety:** Essential for healthcare professionals, regulators, regultors and patients to identify medications consistenty worldwide worldwide
4. **The Stem System:** Names incorsprate common syllables (stems) ndrug class or action
5. **Key for Healthcare:** Facilitates pesperising, research, and pharamacviglicance across borders.

Empathize

www.snsgroups.com

Global Standard:

Established by a WHO for universal drug identifiation.

Patient Safety:

Prevents confusion, ensurs clear communication.

3. **Public domaty:**

accessible of all, unkike brand names.

Non-propyarity:

Public domain, asceble brand names.

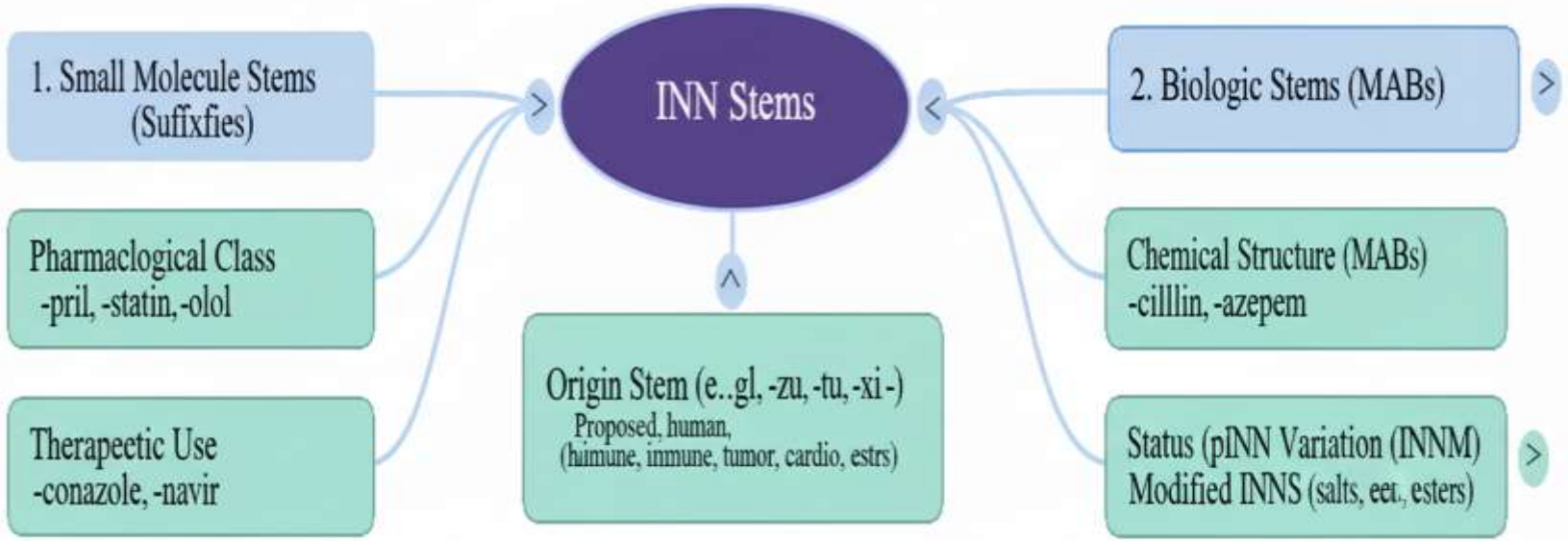
The Stem System

Uses common sylables to denote drug clas

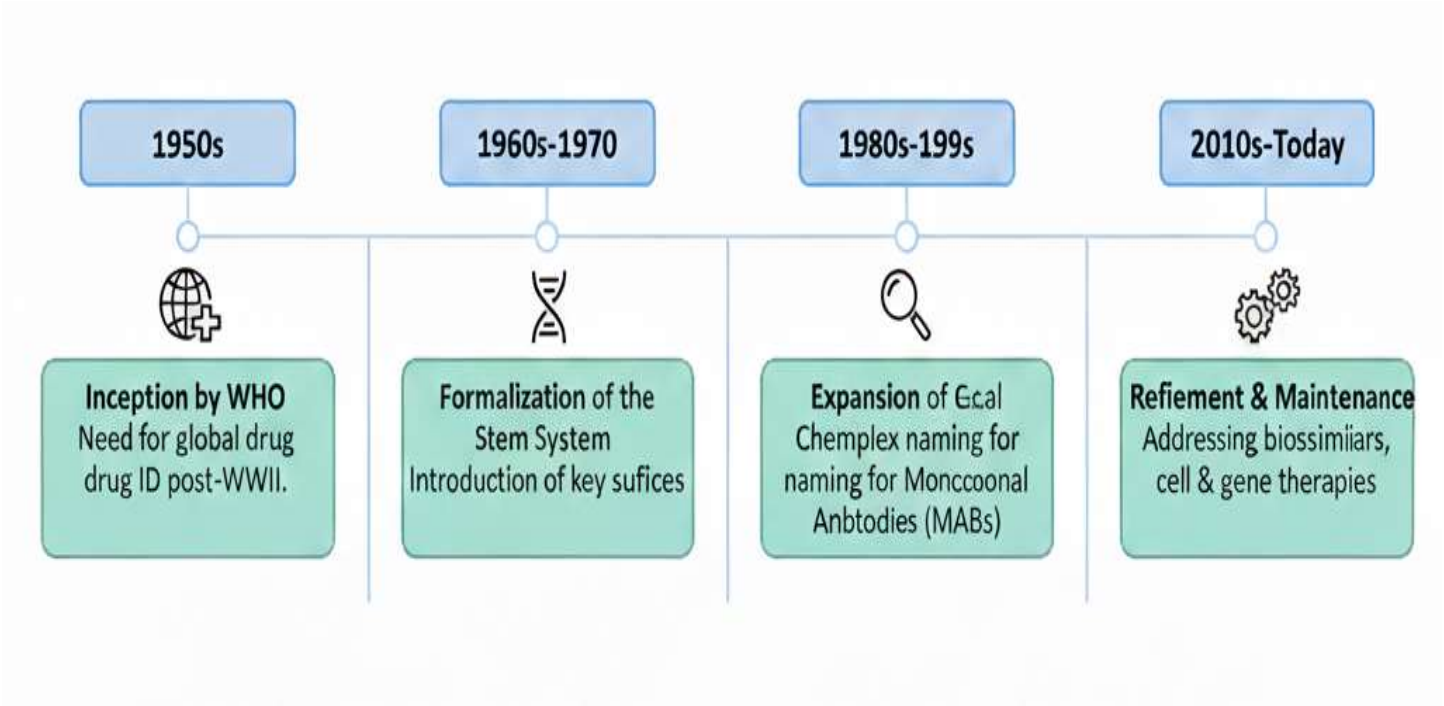
Empathize

INN Classification: The Stem System

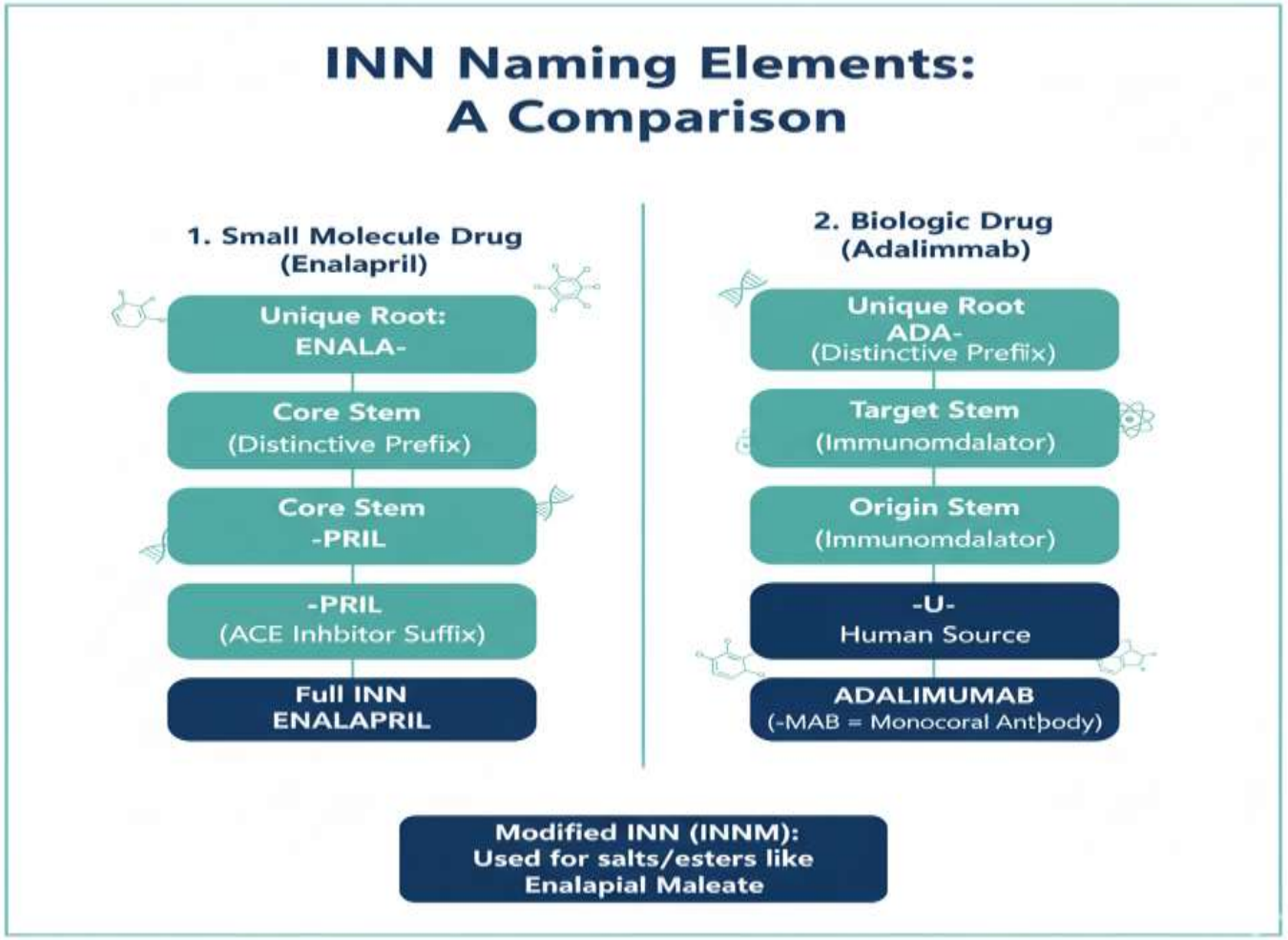
Grouping Drugs by Common Name Syllables



Empathize


1950s
1960s-1970
1980s-199s
2010s-Today
Inception by WHO
Need for global drug drug ID post-WWII.
Formalization of the Stem System
Introduction of key sufices
Expansion of Gcal Chemplex naming for naming for Monccoonal Anbtodies (MABs)
Refiement & Maintenance
Addressing biossimiiars, cell & gene therapies

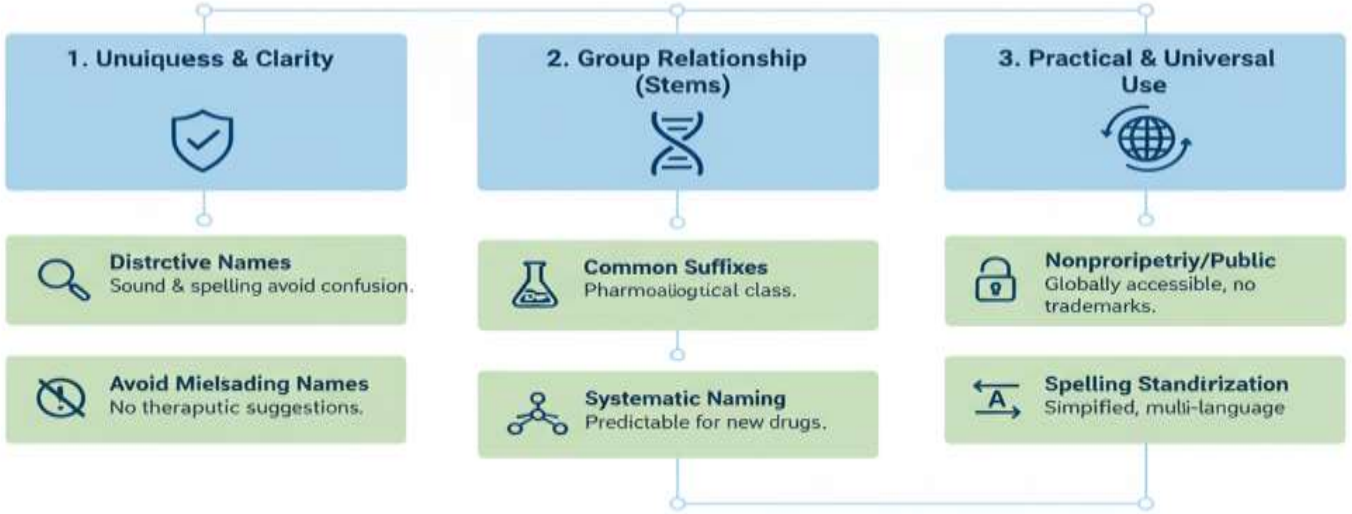
Define


INN Naming Elements:
A Comparison
1. Small Molecule Drug
(Enalapril)
Unique Root:
ENALA-
Core Stem
(Distinctive Prefix)
Core Stem
-PRIL
-PRIL
(ACE Inhbitor Suffix)
Full INN
ENALAPRIL
2. Biologic Drug
(Adalimmab)
Unique Root
ADA-
(Distinctive Prefix)
Target Stem
(Immunomdalator)
Origin Stem
(Immunomdalator)
-U-
Human Source
ADALIMUMAB
(-MAB = Monocoral Antbody)
Modified INN (INNM):
Used for salts/esters like
Enalapial Maleate

Define

PRINCIPLES FOR INTERNATIONAL NONPROPRIONATITY NAMES (INN)

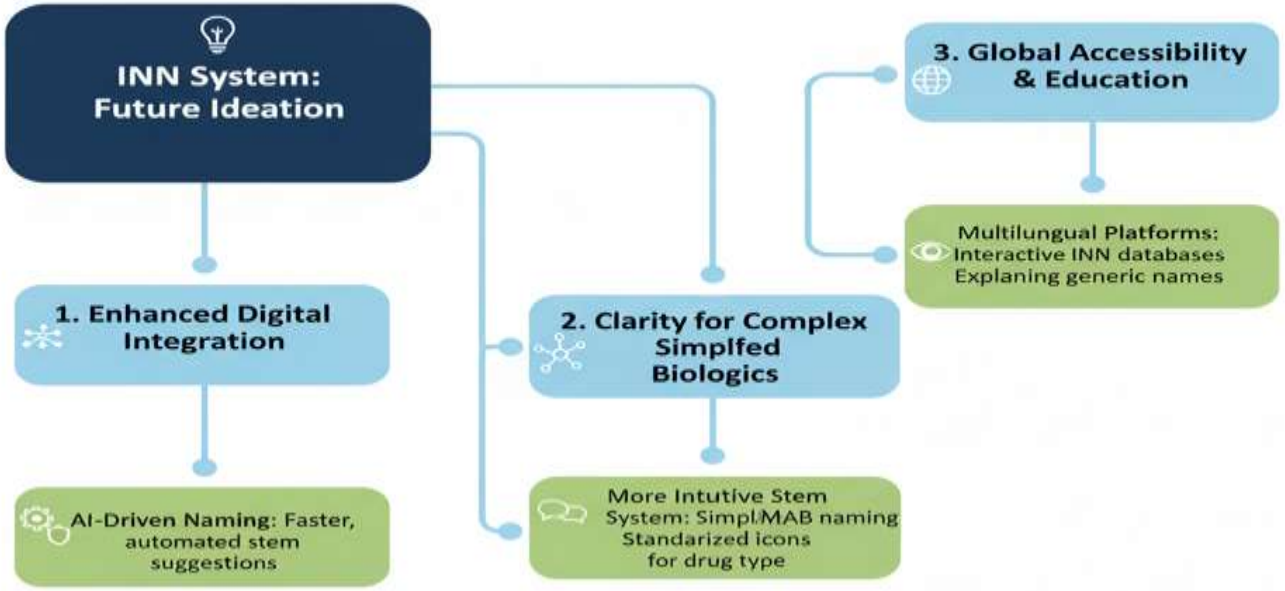
Guiding the Global Drug Naming System for Safety & Clarity



Ideate

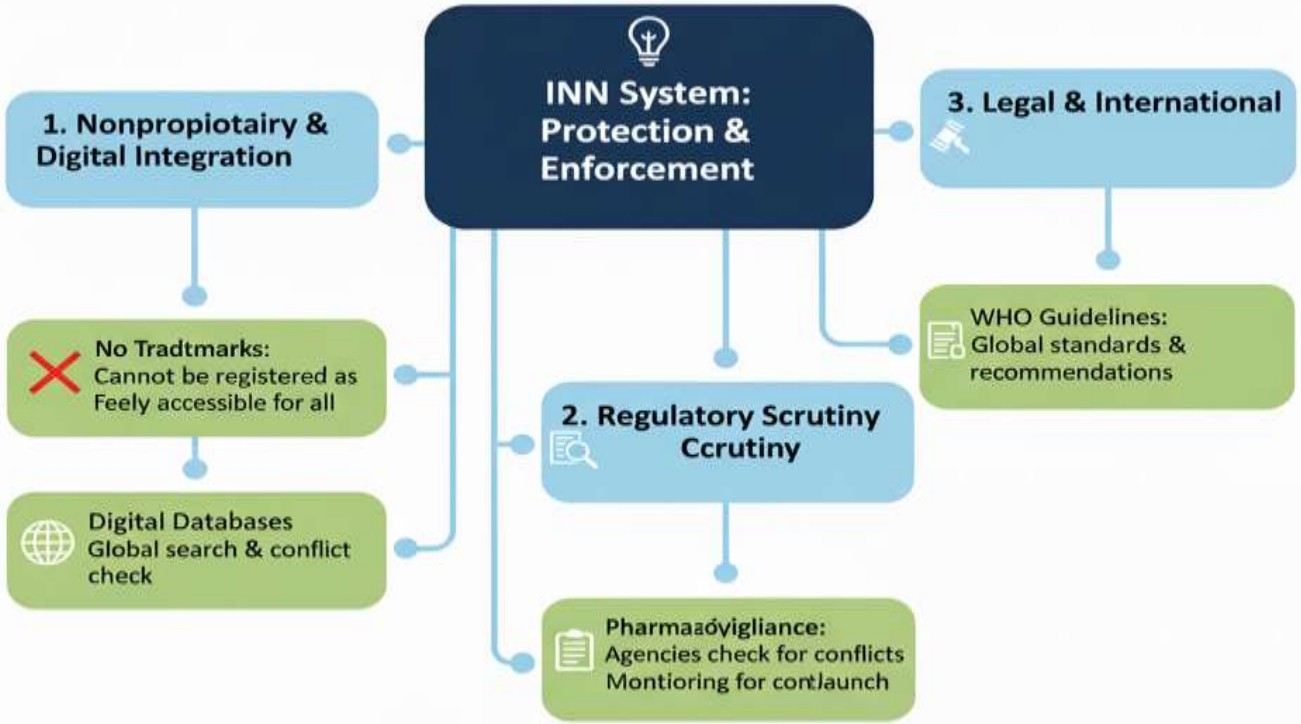
INNOVATING THE INN SYSTEM: FUTURE IDEAS

Concepts for Enhancing Global Drug Noumelature & Safety

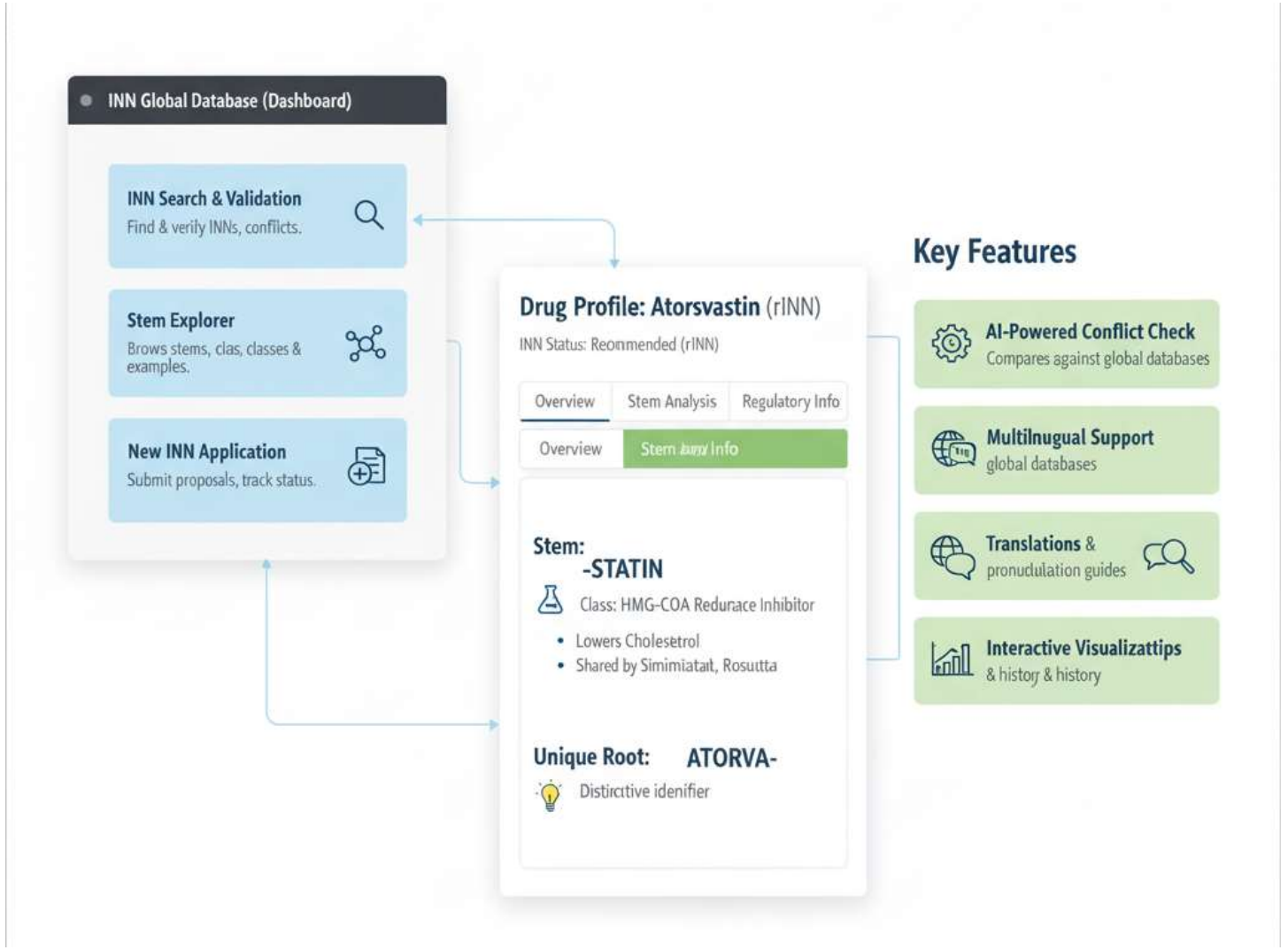


PROTECTING INN: SAFESGFARING DRUG NAMES

Mechanisms Against Misuse & Confusion

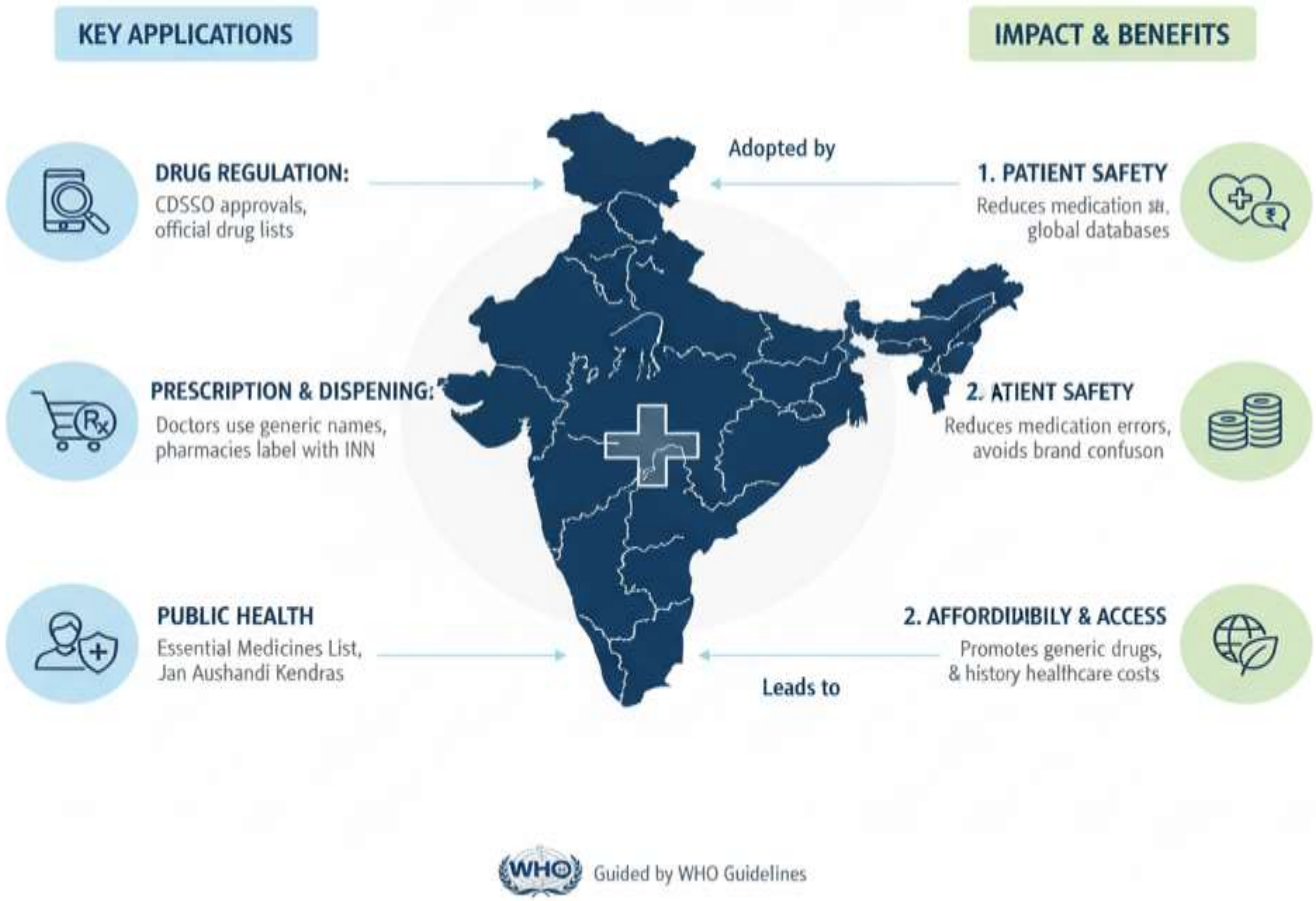


Prototype


INN Global Database (Dashboard)
INN Search & Validation
Find & verily INNs, conflicts.
Stem Explorer
Brows stems, clas, classes & examples.
New INN Application
Submit proposals, track status.
Drug Profile: Atorsvastin (rINN)
INN Status: Reonmended (rINN)
Overview
Stem Analysis
Regulatory Info
Overview
Stem Info
Stem:
-STATIN
Class: HMG-COA Redurace Inhibitor
Lowers Cholesetrol
Shared by Simimiatait, Rosuttta
Unique Root:
ATORVA-
Distirctive idenifier
Key Features
AI-Powered Conflict Check
Compares against global databases
Multilnugual Support
global databases
Translations &
pronuclulation guides
Interactive Visualizattips
& history & history

INN IN INDIA: USES & IMPORTANCE

Ensuring Safe & Consistent Drug Names



INN: GLOBAL BENEFITS

Ensuring Safer, Smarter Healthcare Worldwide

SUMMARY


INN: GLOBAL SUMMARY
A Unified System for Safer, Smarter Healthcare
1. Definition & Purpose
• Unique Generic Name; Avoids confusion
1. Definition & Purpose
• Unique Generic Name; WHO managed
2. Key Principles
• Public Domain; Common stems
2. Key Principles
• Unuiqueuss & Clarity; Avoids confusion
INTERNATIONAL NON-PROPINTARY NAMES (INN)
4. Global Benefits
• Patient Safety; Reduces errors
4. Global Benefits
• Small Molecules; -pril, statin
5. Protection & Future
• Digital Integration; AI & Databases
Classfication (The Stem System)
• Public Health; Access & Affordabily

CLASS ASSESMENTS

1. **A patient with the HLA-B*57:01 allele is prescribed abacavir. What is the most appropriate action to prevent a severe adverse drug reaction?**

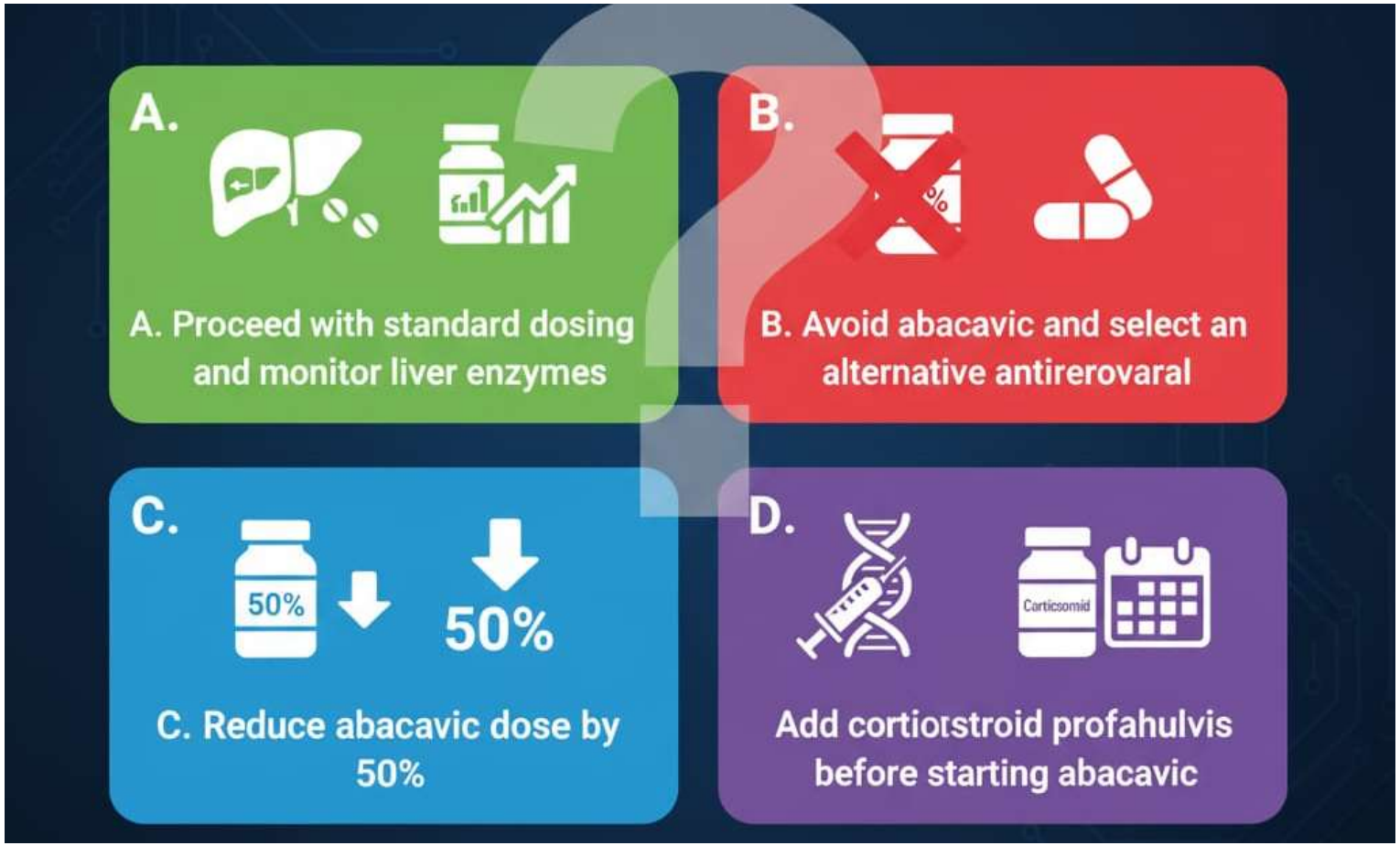
a. Proceed with standard dosing and monitor liver enzymes

b. Avoid abacavir and select an alternative antiretroviral

c. Reduce abacavir dose by 50%

d. Add corticosteroid prophylaxis before starting abacavir

CLASS ASSESSMENTS



CLASS ASSESSMENTS

Which genotype is most associated with life-threatening skin reactions (e.g., Stevens–Johnson syndrome) when exposed to carbamazepine in certain Asian populations?

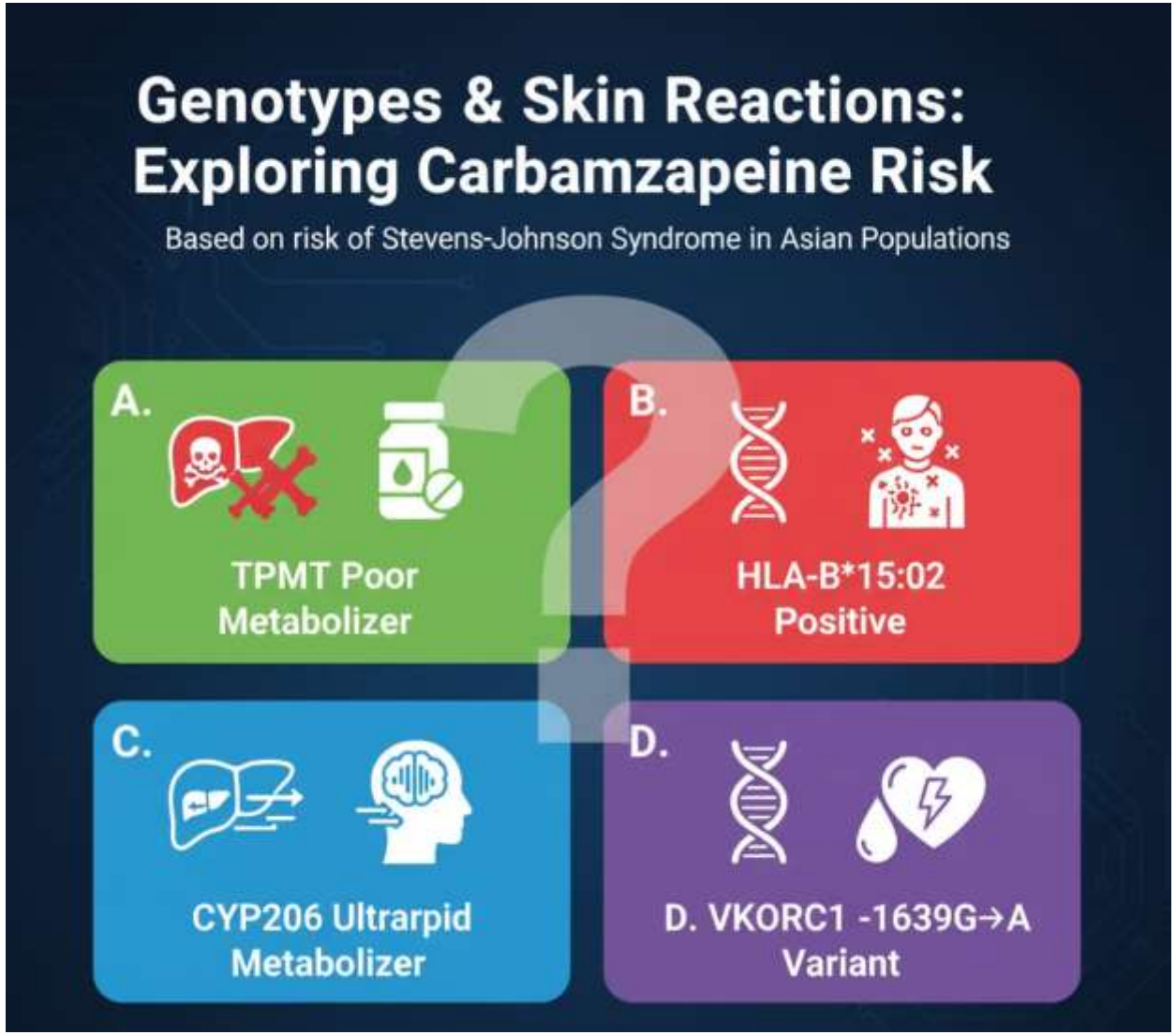
a. TPMT poor metabolizer

b. HLA-B*15:02 positive

c. CYP2D6 ultrarapid metabolizer

d. VKORC1 -1639G→A variant

CLASS ASSESSMENTS



CLASS ASSESSMENTS

A patient with reduced TPMT and NUDT15 activity is starting thiopurine therapy (e.g., mercaptopurine). What adverse reaction risk is increased and how should therapy be adjusted?

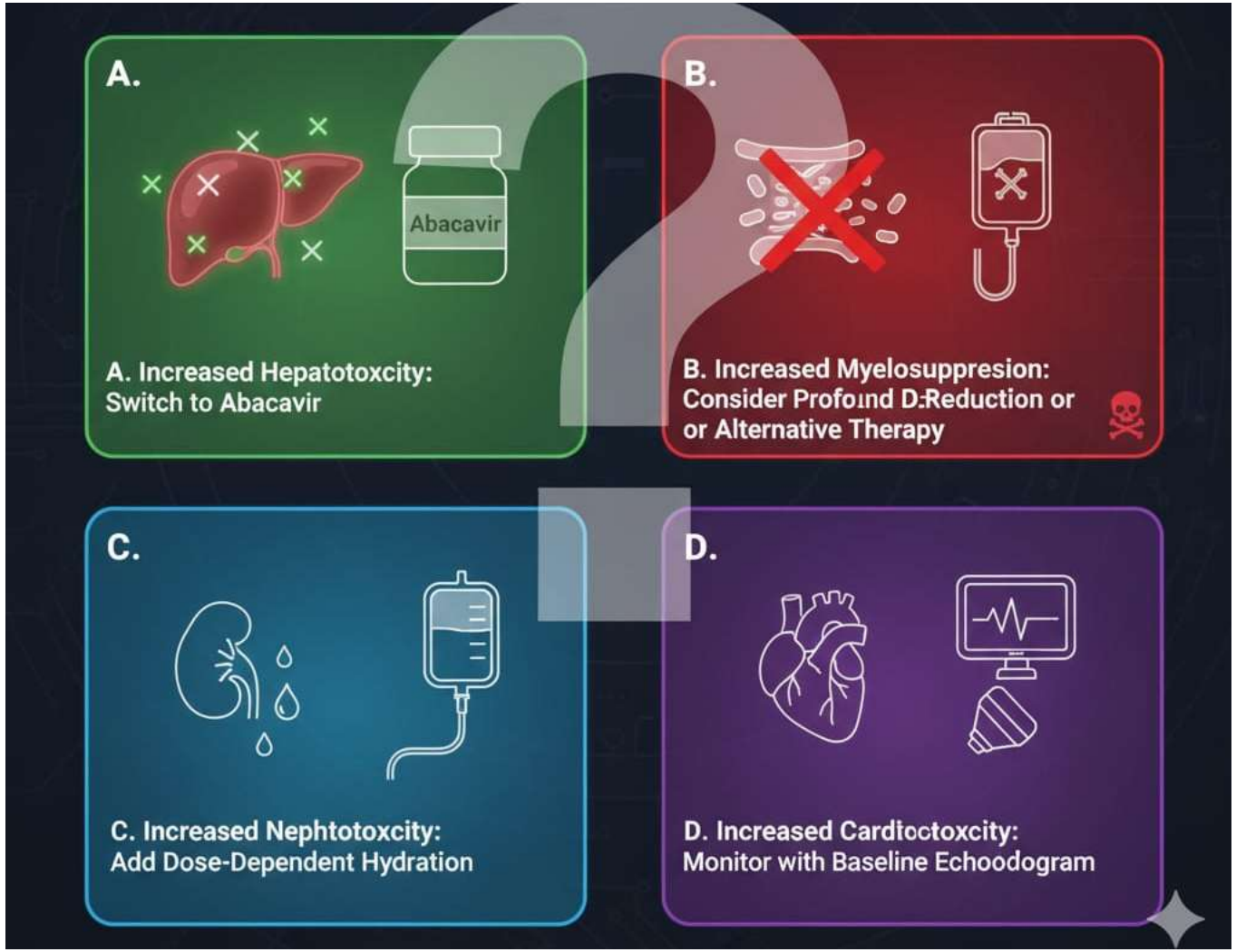
a. Increased hepatotoxicity; switch to abacavir

b. Increased myelosuppression; consider profound dose reduction or alternative therapy

c. Increased nephrotoxicity; add dose-dependent hydration

d. Increased cardiotoxicity; monitor with baseline echocardiogram

CLASS ASSESSMENTS



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Thank
you!