



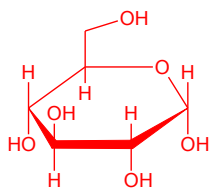
Iminosugar

Discovery and Development

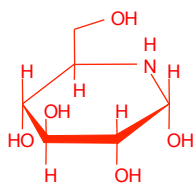


# Iminosugars

Analogues of sugars, with ring oxygen replaced by nitrogen

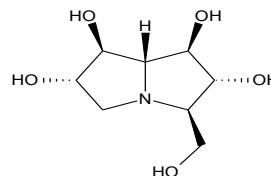


D-glucose

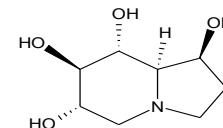


equivalent  
iminosugar

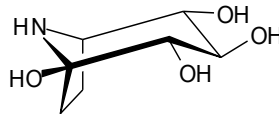
Examples:



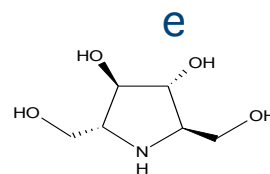
pyrrolizidin



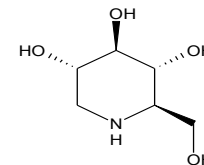
indolizidine



*nortropane*



pyrrolidine



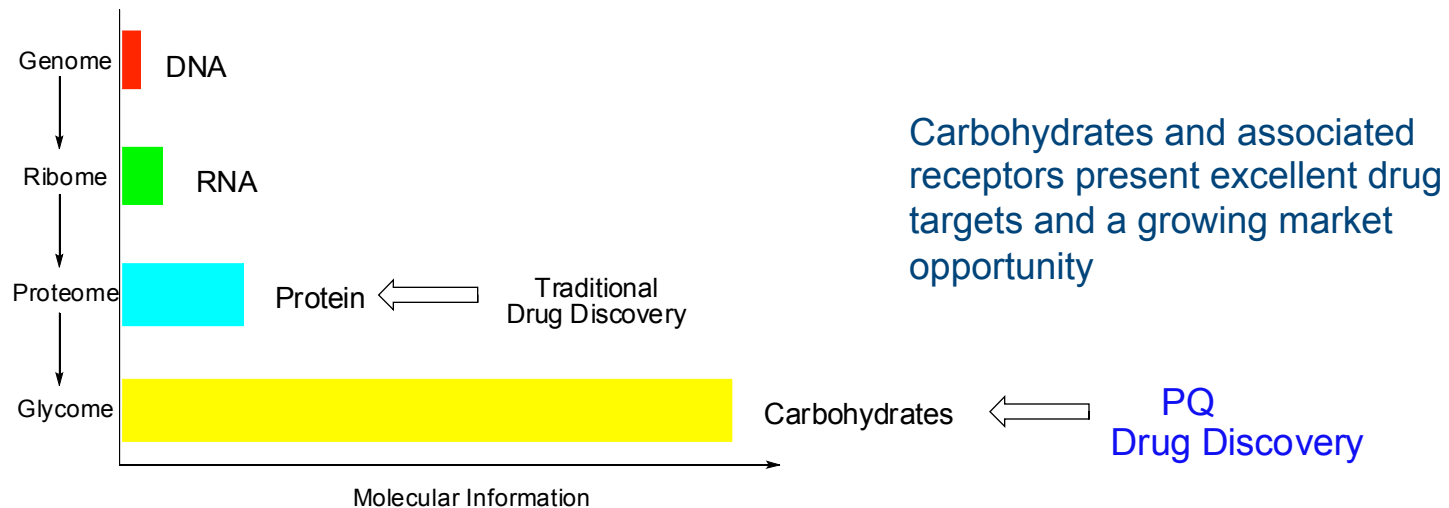
piperidine

## Iminosugars:

- Stable, small molecules
- Selective glycosylation inhibitors, immune modulators, protein stabilisers
- Orally available, distributed rapidly
- Metabolically inert (excreted in urine unchanged)
- Common in plants and micro-organisms
- Specialised expertise required for discovery and synthesis

# Carbohydrates: New Therapeutic Targets and Drug Classes

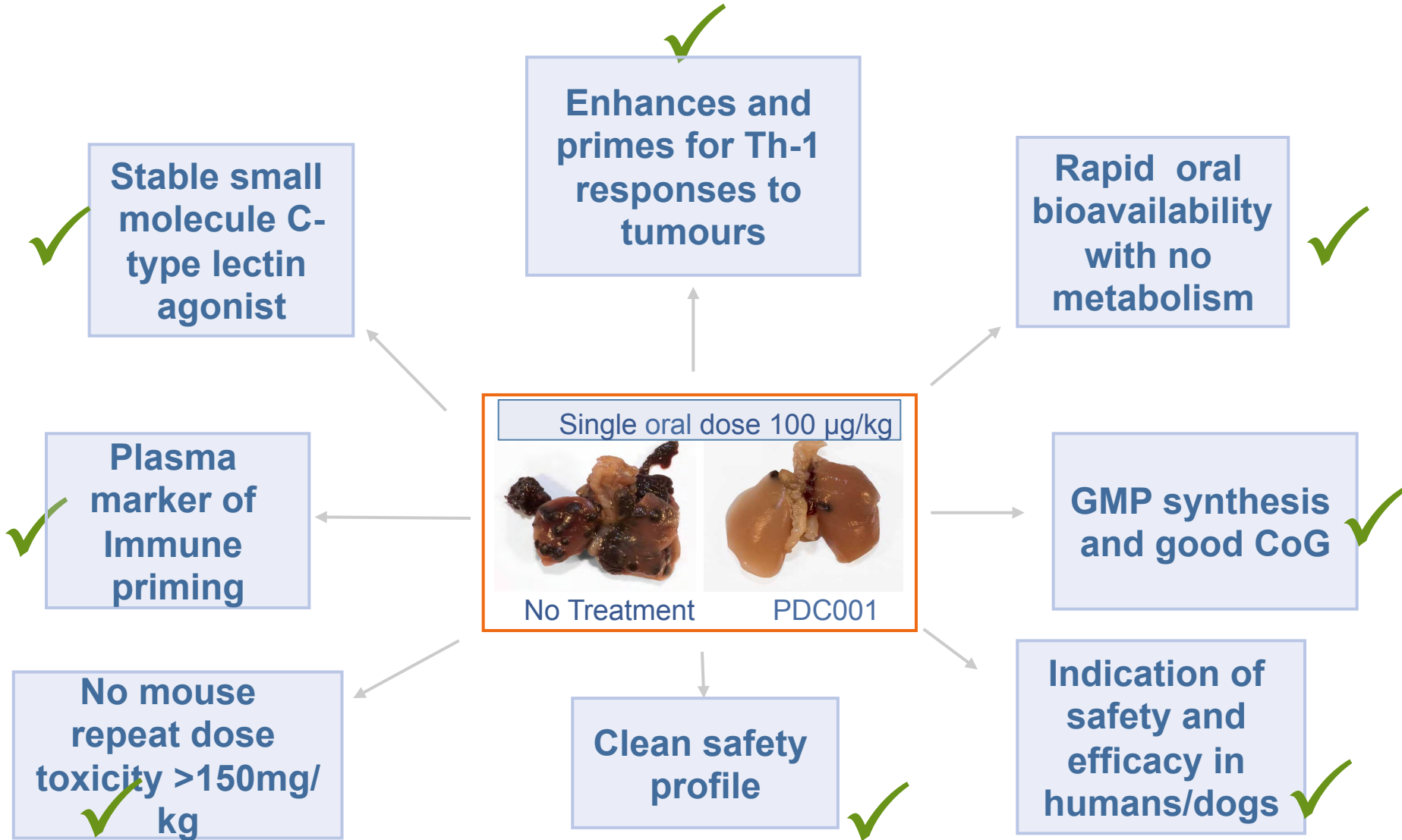
Carbohydrate complexity and diversity greatly exceeds that of proteins and genes



**“One of ten emerging technologies that will change the world”**

*MIT Review 2003*

# PDC001 & PDC002



# Disease Control Points in Diabetes –

## PQ125 is Potentially the Ideal Diabetes Treatment derived from Indian Ayurvedic medicine

