

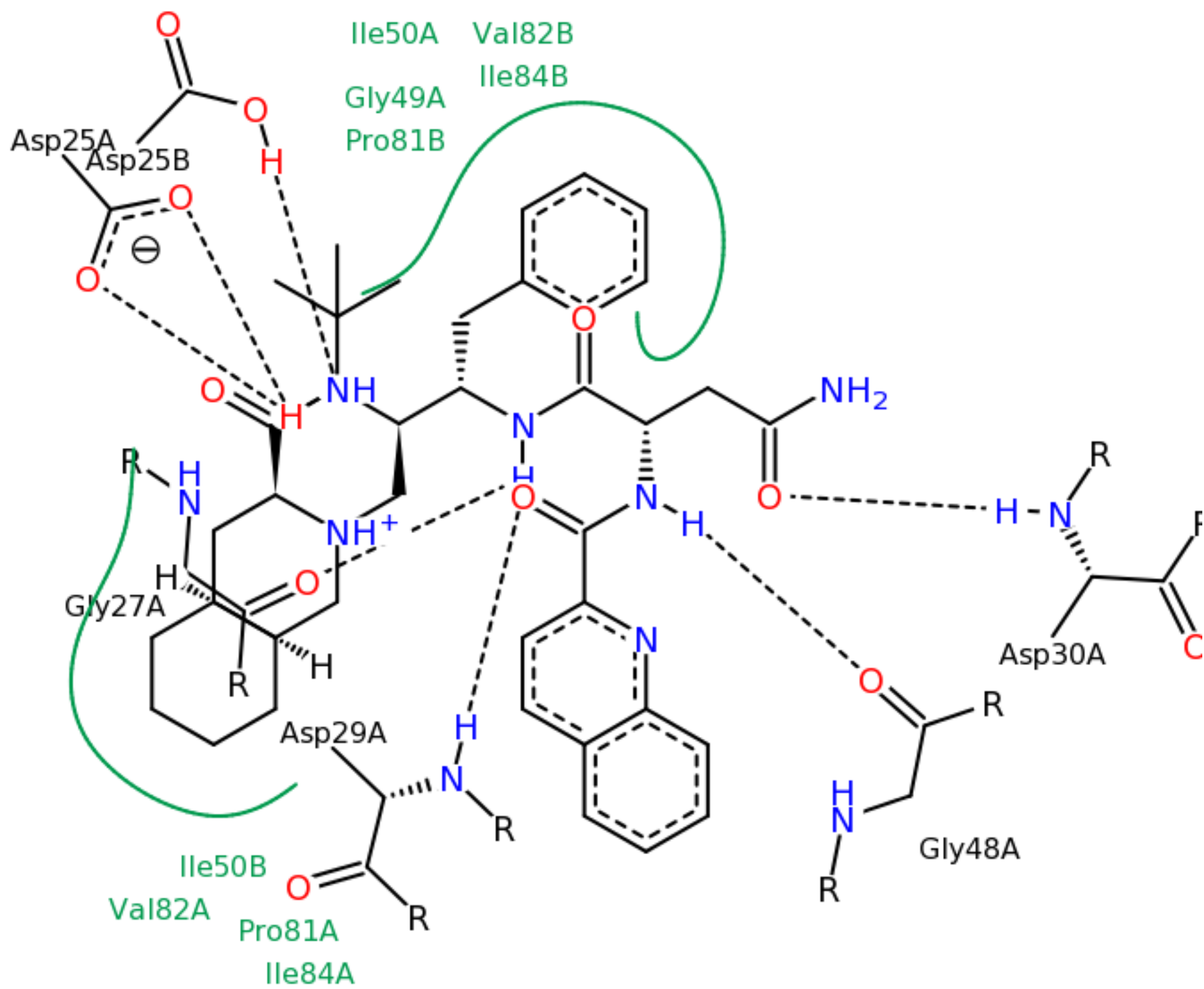
Most drug-target interactions are nonvalent

- The interactions driving drug binding are primarily
 - steric - van der Waals. atoms like to be close but not *too* close.
 - electrostatic - like charges repel and opposite charges attract. H bonding often treated as electrostatic.

- Water can play an important role.

- Some drugs (like penicillin) bind to their targets covalently.

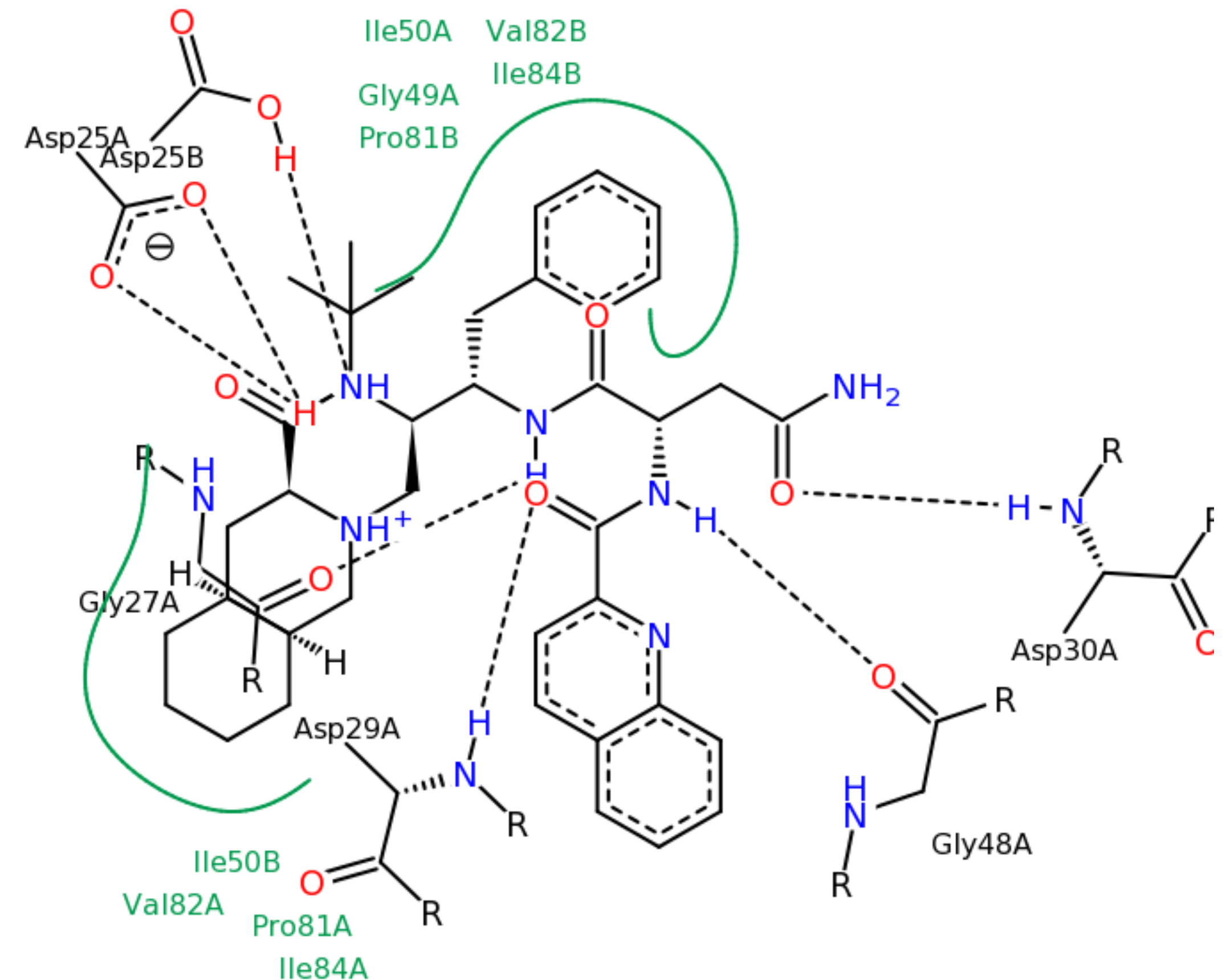




http://www.rcsb.org/pdb/101/motm_disused_entry.do?id=1hxb

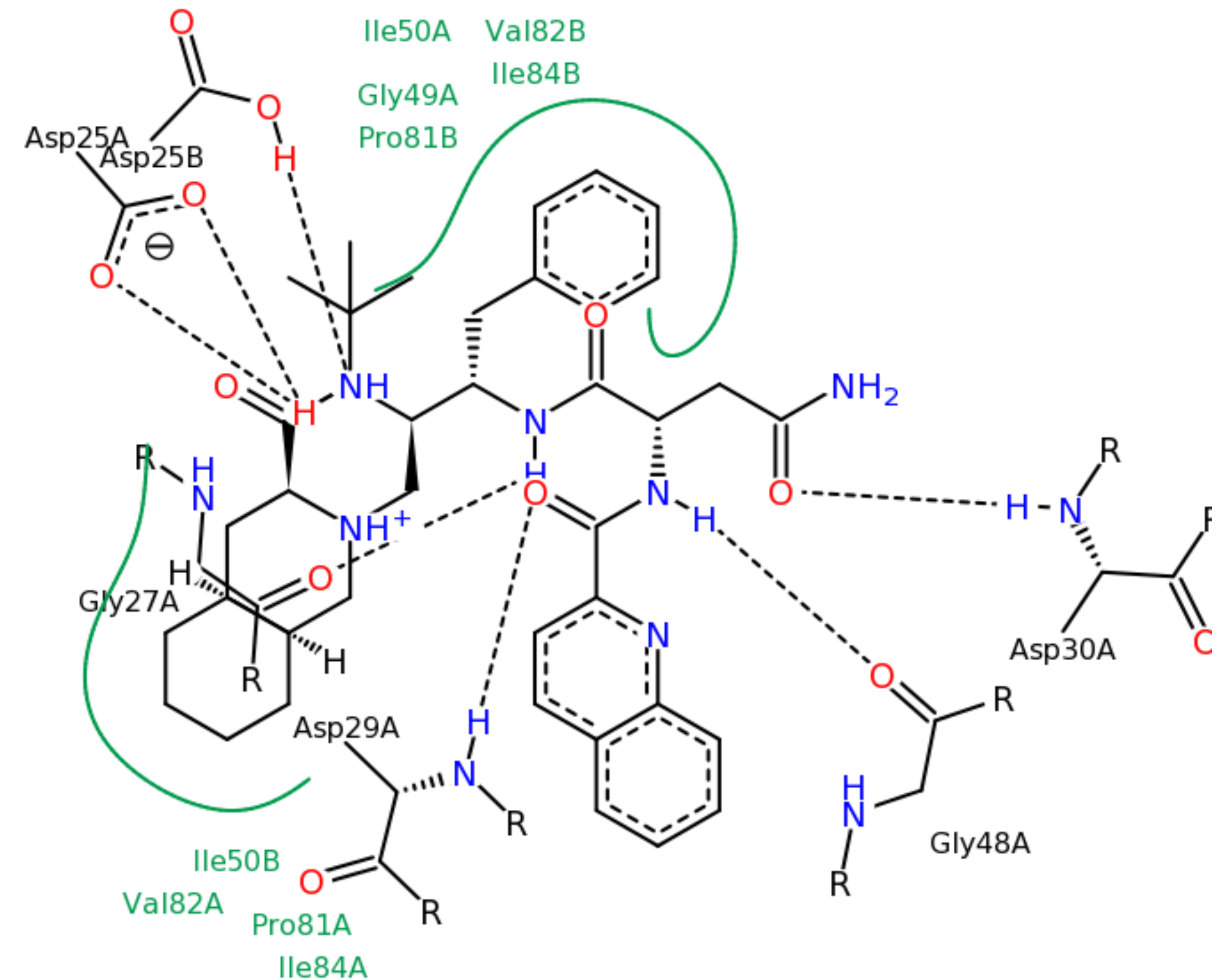
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Drugs can be designed to optimize interactions



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