Methods in Drug Development

Covalent Drugs

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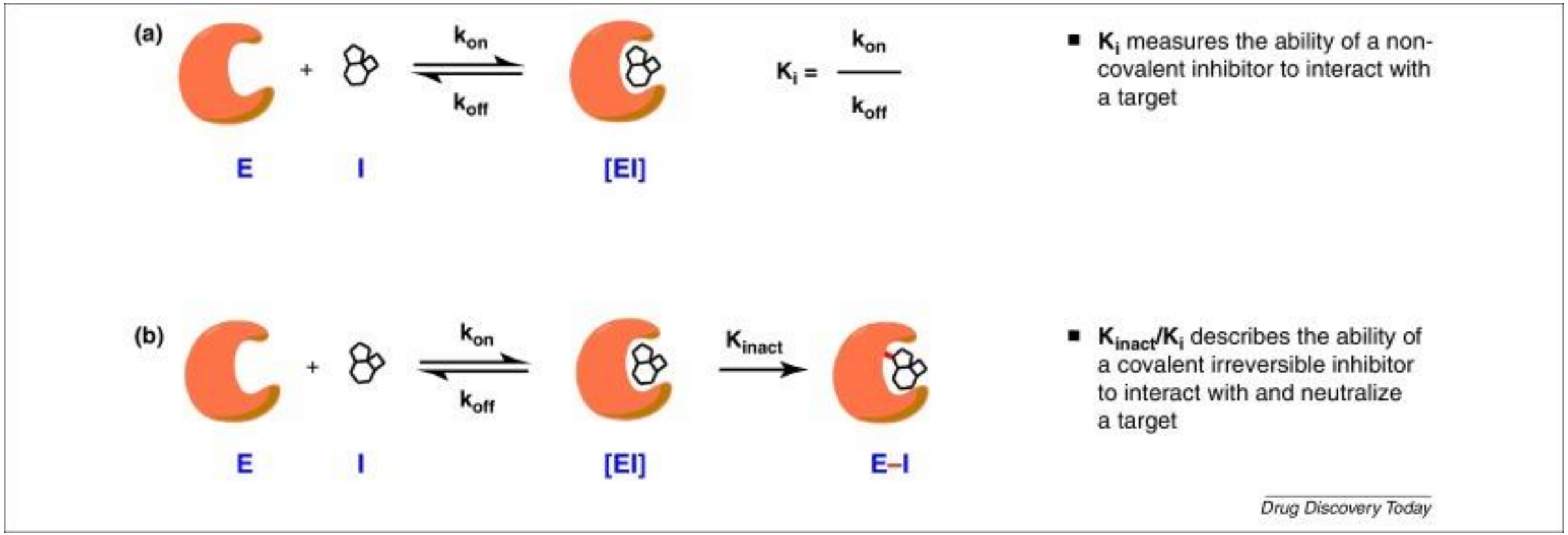
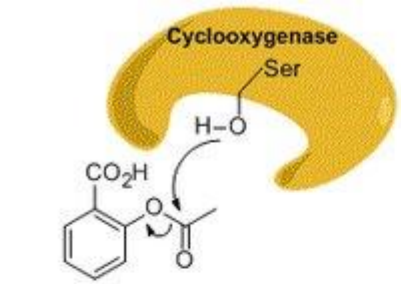
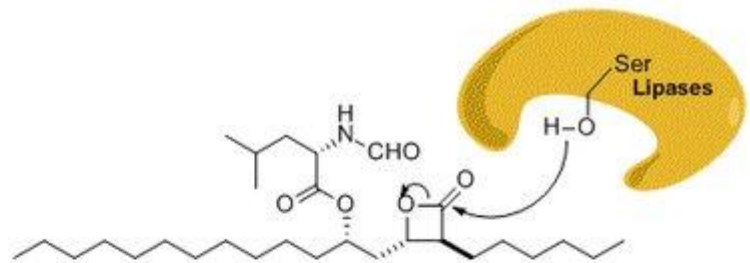
Principle of covalent drugs



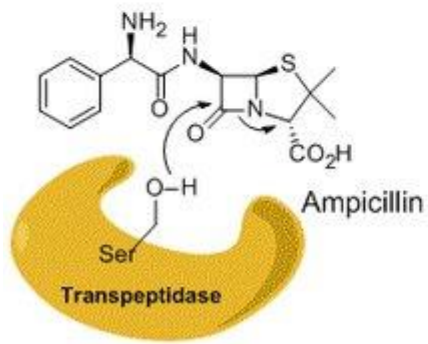
Many «old» drugs are covalent drugs



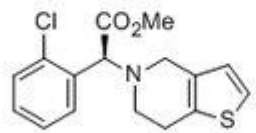
Acetyl salicylic acid



Orlistat

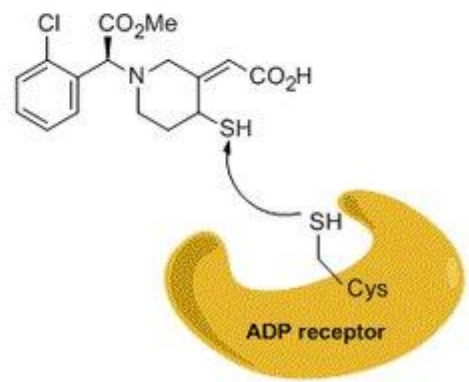


Ampicillin

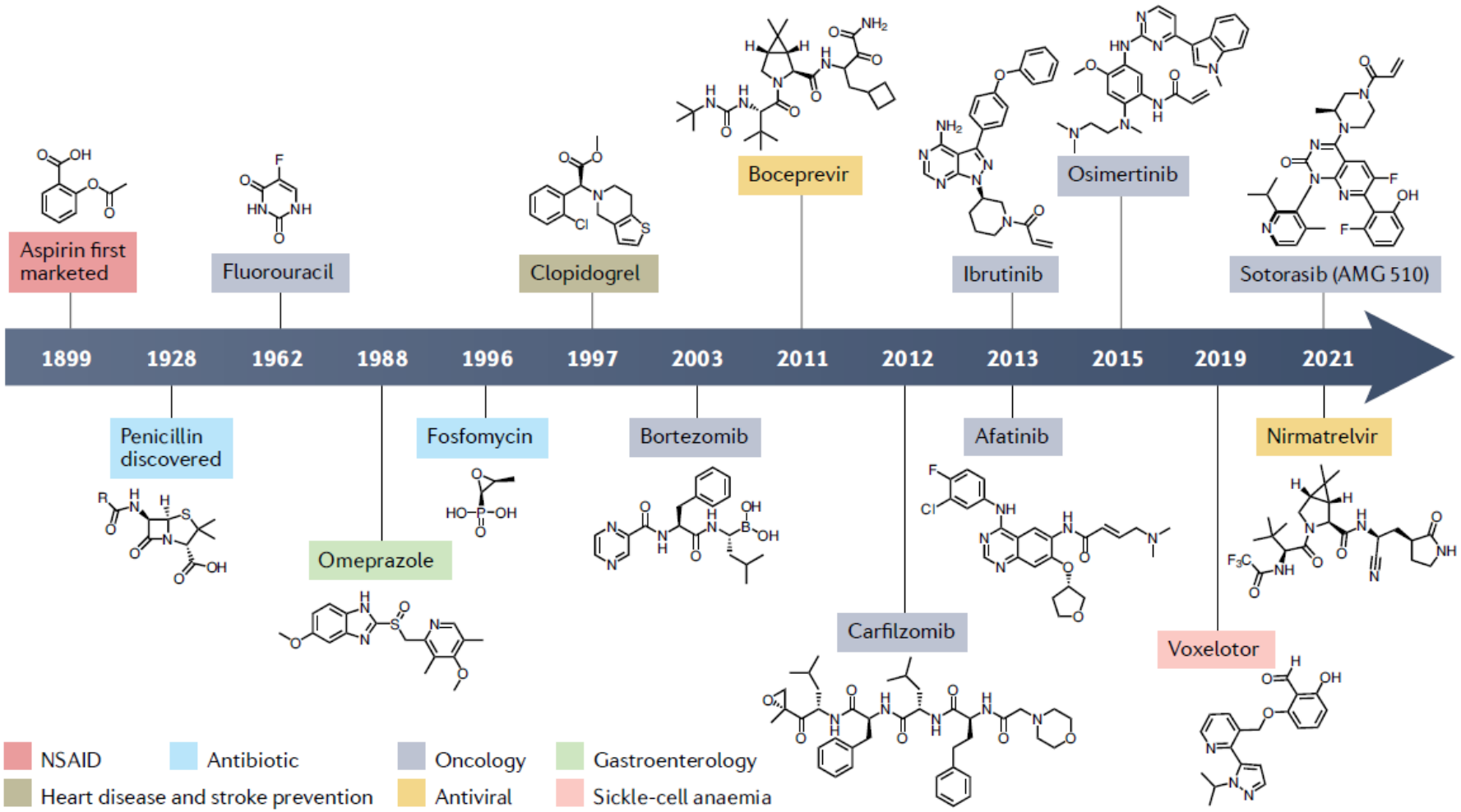


Clopidogrel

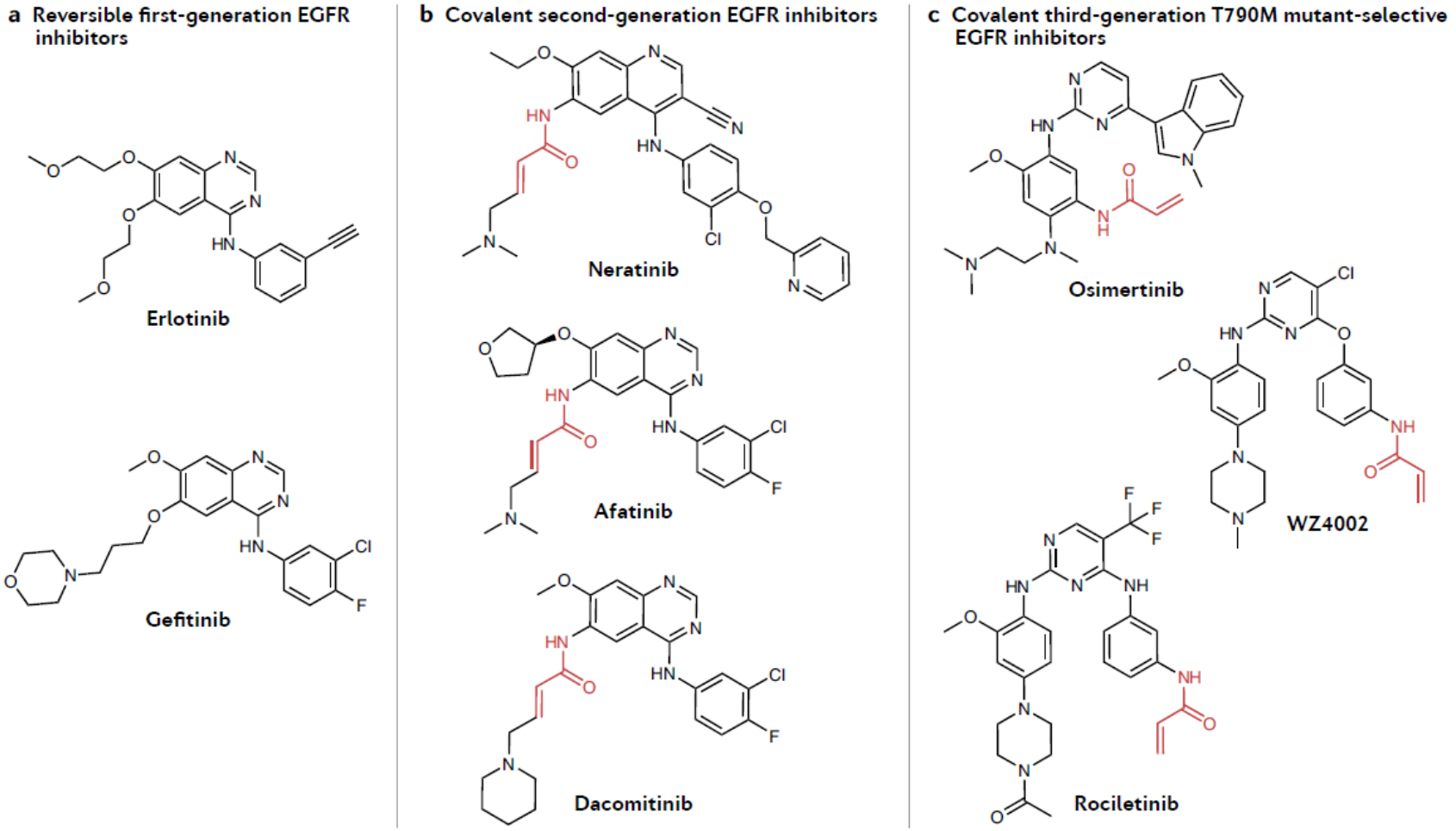
CYP450



History of covalent drugs



EGFR inhibitors



KRAS inhibitor

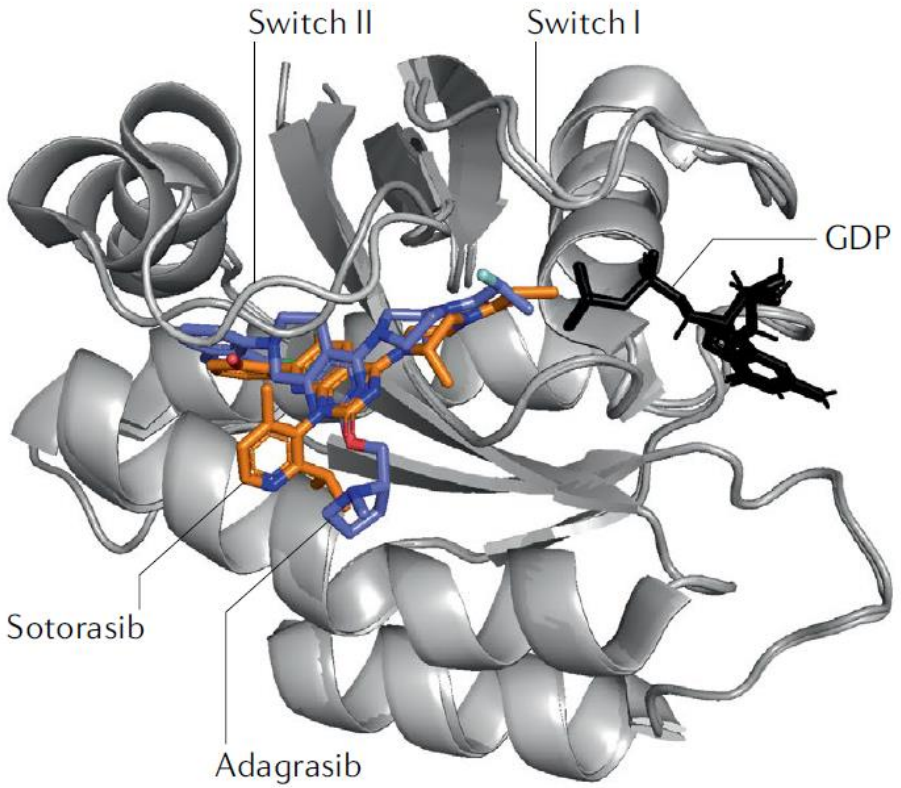
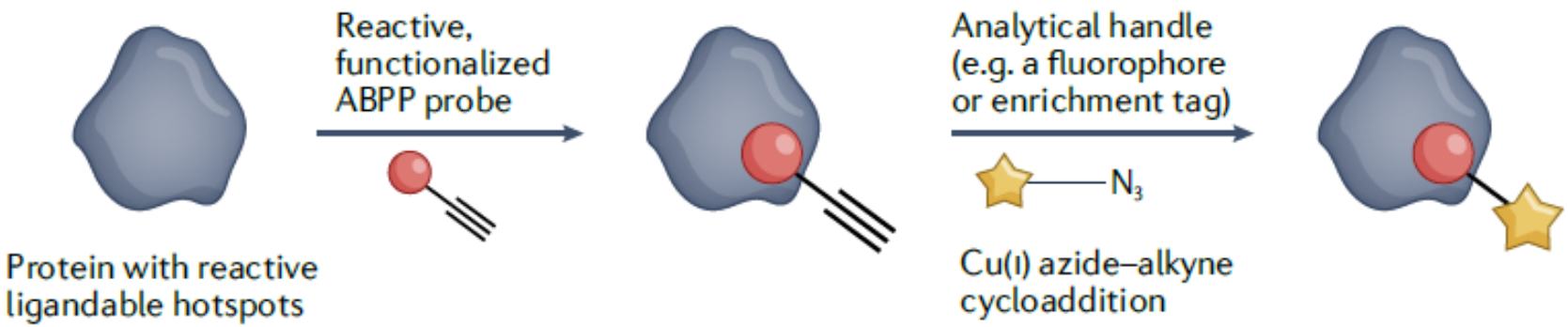


Fig. 3 | **Aligned structures of KRAS(G12C) co-crystallized with adagrasib (MRTX849) and sotorasib (AMG-510).** The covalent inhibitors adagrasib (PDB ID: 6UT0) and sotorasib (PDB ID: 6OIM) are bound to the switch II pocket, which is adjacent to the GDP-binding pocket[93,96].

Development of new covalent drugs



Development of new covalent drugs