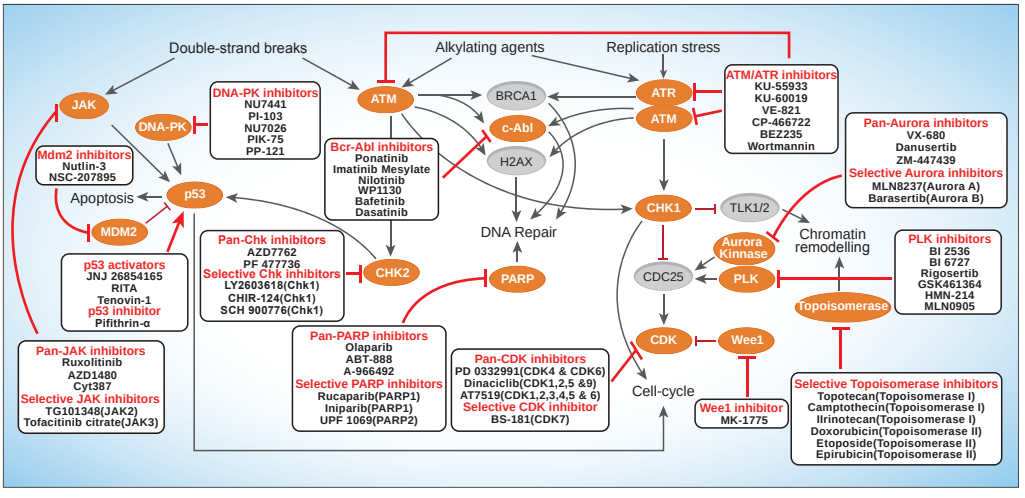
DNA/RNA Synthesis



DNA/RNA Synthesis inhibitors

Discovery	Cat.No.	Product Name	Information	Clinical Trial
2003	S1166	Cisplatin	Cisplatin is an inorganic and water-soluble platinum complex, which is able to inhibit DNA synthesis by forming DNA adducts.	Phase 3
2002	S1149	Gemcitabine HCl	Gemcitabine HCl is a DNA synthesis inhibitor with IC_{50} of 50 nM, 40 nM, 18 nM and 12 nM in PANC1, MIAPaCa2, BxPC3 and Capan2 cells, respectively.	Phase 3
1997	S1214	Bleomycin Sulfate	Bleomycin Sulfate is a glycopeptide antibiotic and an anticancer agent for squamous cell carcinomas (SCC) with IC_{50} of 4 nM in UT-SCC-19A cells.	Phase 4
2008	S1215	Carboplatin	Carboplatin is a DNA synthesis inhibitor that binds directly to DNA and interferes with cellular repair mechanisms.	Phase 2/3
1998	S1224	Oxaliplatin	Oxaliplatin inhibits DNA synthesis by forming DNA adducts.	Phase 3
1999	S1491	Fludarabine	Fludarabine is a STAT1 activation inhibitor and a DNA synthesis inhibitor.	Phase 3
1997	S1135	Pemetrexed	Pemetrexed is a novel antifolate and antimetabolite for TS, DHFR and GARFT with K_i of 1.3 nM, 7.2 nM and 65 nM, respectively.	Phase 3
2003	S1209	Fluorouracil (5-Fluoracil, 5-FU)	Fluorouracil is an DNA/RNA synthesis inhibitor, which interrupts nucleotide synthesis by inhibiting thymidylate synthase (TS).	Phase 3
2011	S2684	CX-5461	CX-5461 is an inhibitor of rRNA synthesis, selectively inhibits Pol I-driven transcription of rRNA with IC_{50} of 142 nM, has no effect on Pol II, and possesses 250- to 300-fold selectivity for inhibition of rRNA transcription versus DNA replication and protein translation.	
1990	S1714	Gemcitabine	Gemcitabine belongs to the group of medicines called antimetabolites.	Phase 3
2004	S1648	Cytarabine	Cytarabine is an antimetabolic agent and DNA synthesis inhibitor with IC_{50} of 16 nM in wild-type CCRF-CEM cells.	Phase 3