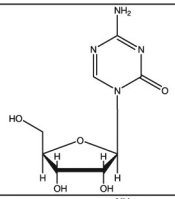
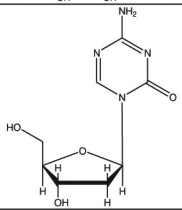
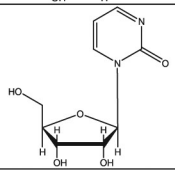
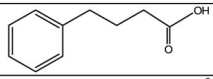
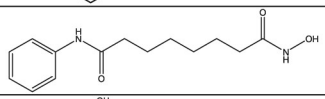
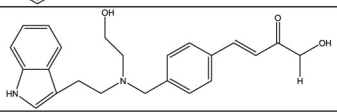
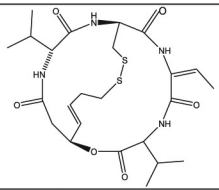
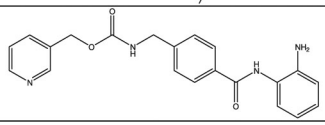
	Compound	Structure	Cancer Type	Clinical Trials
a	**DNA METHYLATION INHIBITORS**			
	5-Azacytidine 5-Aza-CR Vidaza		**MDS; Hematologic malignancies**	**I, II, and III; FDA-approved for MDS**
	5-Aza-2'-deoxycytidine 5-Aza-CdR Dacogen		**MDS; Hematologic malignancies**	**I, II, and III**
	Zebularine 1-β-D-ribofuranosyl-2(1H)-pyrimidinone		**N/A**	**Preclinical**
b	**HISTONE DEACETYLASE INHIBITORS**			
	4-Phenylbutyrate (PBA)		**Refractory solid tumors**	**I**
	Suberoylanilide hydroxamic acid (SAHA)		**Solid tumors and hematologic malignancies**	**I, II**
	NVP-LAQ824		**N/A**	**I**
	Depsipeptide FK-228 FR901228		**Advanced neoplasms, CLL, AML, and T-cell lymphoma**	**I, II**
	MS-275		**Solid tumors and lymphoma**	**I, II**

Figure 7. Structures of Nucleoside Analog Inhibitors of DNA Methylation (a), and Inhibitors of Histone Deacetylation (b)

(*a*) Three nucleoside analogs are known that can inhibit DNA methylation after incorporation into DNA. 5-aza-CR (Vidaza) and 5-aza-2′-deoxycytidine (Decitabine) have been approved for the treatment of leukemia. Zebularine is at an earlier stage of development. (*b*) Some examples of the many histone deacetylase inhibitors, some of which are currently in clinical trials.