Compound	Structure	Cancer type	Clinical trial status
DNA methylation inhibitors			
5-Azacytidine 5-Aza-CR (Vidaza)	H H	Myelodysplastic syndrome; AML	FDA-approved for MDS in 2004
5-Aza-2'- deoxycytidine 5-Aza-CdR Decitabine (Dacogen)	HAN DO TO	Myelodysplastic syndrome; AML	FDA-approved for MDS in 2006
SGI-110	NH-b NH-b NH-b NH-b NH-b NH-b	Acute myeloid leukemia; AML	Phase 2
Histone deacetylase inhibitors			
Suberoylanilide hydroxamic acid (SAHA) Vorinostat (Zolinza)		T-cell lymphoma	FDA-approved in 2006
Depsipeptide FK-229 FR901228 Romidepsin (Istodax)		T-cell lymphoma	FDA-approved in 2009

Figure 8. Structures of selected epigenetic drugs. Three nucleoside analogs are known that can inhibit DNA methylation after incorporation into DNA. 5-aza-CR (Vidaza) and 5-aza-CdR (decitabine) have been FDA approved for the treatment of the preleukemic disorder, myelodysplasia. Two HDAC inhibitors are also FDA approved for cutaneous T-cell lymphoma and several others are in clinical trials. Drugs targeting other epigenetic processes are in earlier stages of clinical development (see also Figs. 5 and 6 of Ch. 35 [Audia and Campbell 2014]).