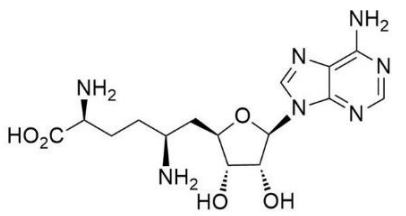
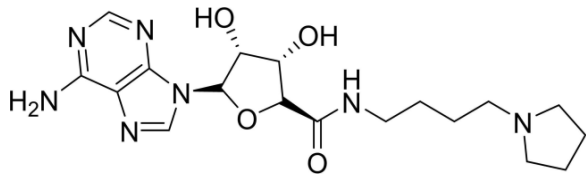
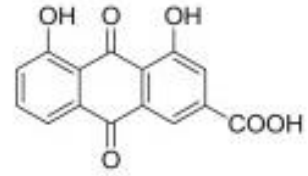
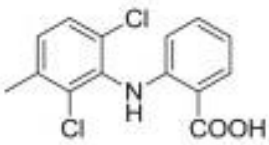
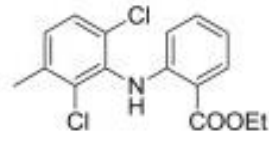
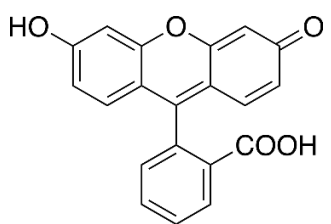
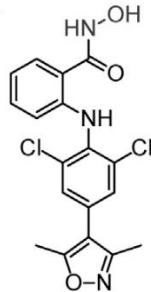
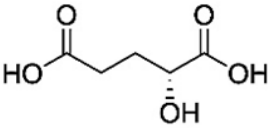


Table 2. Selected current small-molecule inhibitors of RNA-modifying enzymes. AML, acute myeloid leukaemia; NSLCL, non-small cell lung cancer. n.a., not available.

Compound	Targeted RNA-modifier	Biological model	Reference	Structure
Sinefungine	RNA methyltransferases (non-selective)	Several <i>in vitro</i> cancer cell lines	(Kaniskan et al., 2015b)	
STC-15	METTL3-METTL1	AML models (cell lines and mice) Other solid tumours	STORM Therapeutics	n.a.
n.a.	METTL3, ADAR1	AML, NSLCL cell lines	Accent Therapeutics	n.a.
n.a.	METTL3	AML cell lines	Gotham Therapeutics	n.a.
Compound 2 (adenosine derivative)	METT3	n.a.	(Bedi et al., 2020)	

Rhein	FTO, ALKH	BE-2(C) neuroblastoma cell line AML models (cell lines and mice) of TKI resistance	(Chen et al., 2012; Li et al., 2016a) (Yan et al., 2018)	
Meclofenamic acid (MA)	FTO	HeLa cervix cell line AML models (cell lines and mice) of TKI resistance	(Huang et al., 2015) (Yan et al., 2018)	
Ethyl ester form of meclofenamic acid (MA2)	FTO	Glioblastoma mice model	(Cui et al., 2017)	
Fluorescein derivatives (FL6, FL8)	FTO	HeLa cervix cell line	(Wang et al., 2015)	

Derivatives of MA (FB23, FB23-2)	FTO	AML models (cell lines and mice)	(Huang et al., 2019c)	
Fluorescent RNA aptamers	FTO	HEK293C cell line	(Svensen and Jaffrey, 2016)	n.a.
R-enantiomer of 2-hydroxyglutarate (R-2HG)	FTO	AML models (cell lines and mice)	(Su et al., 2018)	
1-(5-methyl-1H-benzimidazol-2-yl)-4-benzyl-3-methylpyrazol-5-ol (HUHS015)	PCA-1; ALKBH3	Prostate cancer cell line and mouse xenograft model	(Nakao et al., 2014)	