

**Table 2a:** Simulated single-cell data/algorithms

Title	Algorithm	# Cells	Simulation methods	Reference
<b>Splatter</b>	DCA, DeepImpute, PERMUDA, scDeepCluster, scVI, scScope, solo	~2000	<u>Splatter/R</u>	[78]
<b>CIDR</b>	scIGAN	50	<u>CIDR simulation</u>	[54]
<b>NB+dropout</b>	Dhaka	500	<u>Hierachical model of NB/Gamma + random dropout</u>	
<b>Bulk RNA- seq</b>	SAUCIE	1076	<u>1076 CCLE bulk RNAseq + dropout conditional on expression level</u>	
<b>SIMLR</b>	scScope	1 million	<u>SIMLR, high-dimensional data generated from latent vector</u>	[43]