

a)	Method												b)	Summary																					
Graph methods	Priors required	Wrapper type	Platform	Topology inference	Inferable trajectory types							Aggregated scores per experiment																							
					Most complex traj. type	Cycle	Linear	Bifurcation	Multifurcation	Tree	Connected	Disconnected	Overall	Accuracy	Scalability	Stability	Usability																		
PAGA	×	Direct	Python	Free																															
RaceID / StemID		Proj	R	Free																															
SLICER	×	Cell	R	Free																															
Tree methods																																			
Slingshot		Direct	R	Free																															
PAGA Tree	×	Direct	Python	Free																															
Projected Slingshot		Direct	R	Free																															
MST		Proj	R	Free													Off-the-shelf																		
Monocle ICA	×	Cell	R	Param																															
Multifurcation methods																																			
STEMNET	✖	Prob	R	Param																															
FateID	✖	Prob	R	Param																															
MFA	×	Prob	R	Param																															
GPfates	×	Prob	Python	Param																															
Bifurcation methods																																			
Projected DPT		Proj	R	Fixed																															
Wishbone	×	Direct	Python	Param																															
DPT		Direct	R	Fixed																															
Linear methods																																			
SCORPIUS		Linear	R	Fixed																															
Component 1		Linear	R	Fixed													Off-the-shelf																		
MATCHER		Linear	Python	Fixed																															
Embeddr		Linear	R	Fixed																															
TSCAN		Linear	R	Fixed																															
Cyclic methods																																			
Angle		Cyclic	R	Fixed													Off-the-shelf																		
EIPiGraph - Cycle		Direct	R	Fixed																															
reCAT		Cyclic	R	Fixed																															
Prior information required																																			
None																																			
×																		Weak: Start or end cells																	
✖																		Strong: Cell grouping or time course																	