

Parameter	Value
Number of spots	3,000
Number of genes	500
Spatial dimensions	2D (unit square)
Ectopic anomalies	100 (3.3%)
Intrinsic anomalies	300 (10%)
Ectopic donor distance	> 0.5 (normalized)
Intrinsic perturbation	3-10x gene upregulation
Expression distribution	ZINB (r=2, dropout=0.3)
Spatial graph	k=15 neighbors
Number of seeds	30