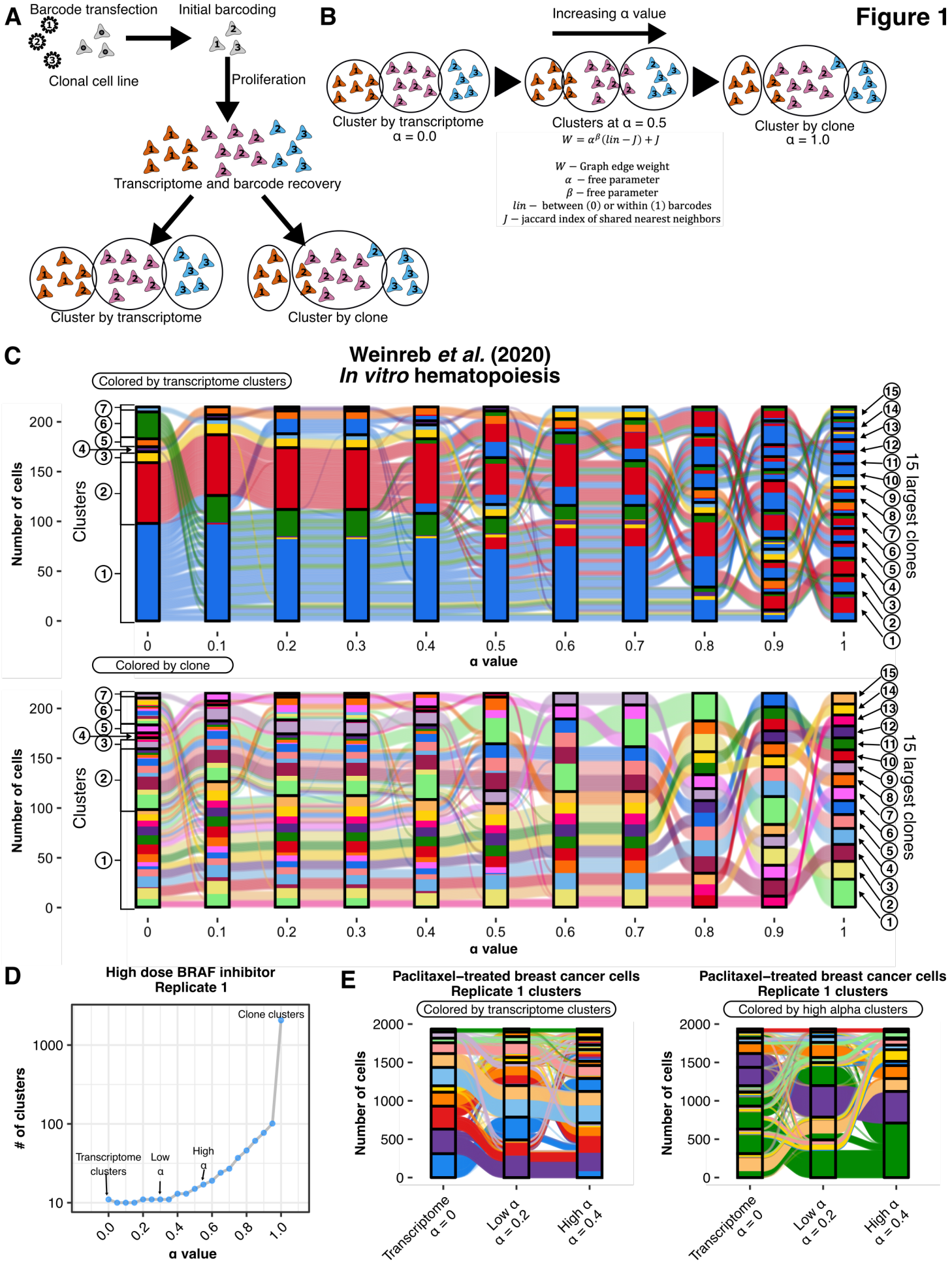
Figure 1
A
Barcode transfection
Initial barcoding
Clonal cell line
Proliferation
Transcriptome and barcode recovery
Cluster by transcriptome
Cluster by clone
B
Increasing α value
Cluster by transcriptome
α = 0.0
Clusters at α = 0.5
Cluster by clone
α = 1.0
$W = \alpha^{\beta}(lin - J) + J$
W – Graph edge weight
α – free parameter
β – free parameter
lin – between (0) or within (1) barcodes
J – jaccard index of shared nearest neighbors
C
Weinreb et al. (2020)
In vitro hematopoiesis
Colored by transcriptome clusters
Colored by clone
Number of cells
Clusters
15 largest clones
α value
D
High dose BRAF inhibitor
Replicate 1
# of clusters
Clone clusters
Transcriptome clusters
Low α
High α
α value
E
Paclitaxel–treated breast cancer cells
Replicate 1 clusters
Colored by transcriptome clusters
Number of cells
Transcriptome α = 0
Low α α = 0.2
High α α = 0.4
Paclitaxel–treated breast cancer cells
Replicate 1 clusters
Colored by high alpha clusters
Number of cells
Transcriptome α = 0
Low α α = 0.2
High α α = 0.4