

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: SRA accession numbers used for WGS data, OM molecule length statistics and OM assembly statistics for cell lines in this study.

File Name: Supplementary Data 2

Description: AR performance on simulated data. Includes comparison of SegAligner and other OM alignment methods, amplicon mixture performance, false graph edge performance, profile of simulated amplicons, and performance on *de novo* simulated amplicons.

File Name: Supplementary Data 3

Description: Focal amplification breakpoints identified in both AR and AA for cell lines in this study and estimated integration point locations for focal amplifications.

File Name: Supplementary Data 4

Description: AR amplicon reconstruction paths and summary statistics about AR reconstructions for cell lines in this study.

File Name: Supplementary Data 5

Description: Default parameters for AR and SegAligner.