

S3. Genomic comparison across the different metastatic sites compared to the matched primary. A. Genomic alterations across metastatic sites compared to matched primary B. Copy number variations across metastatic sites compared to matched primary

A.

Breast primary	Brain met	Lung met
TMB 5	TMB 28.7	TMB 35.7
ARID1A (Q1095fs) GATA3 (V314fs, G378fs)	ARID1A (p.Q1095fs) GATA3 (p.V314fs, p.G378fs)	ARID1A (p.Q1095fs) GATA3 (p.V314fs, p.G378fs)
SETD1B (Q371*)	SETD1B (p.Q371*) Hyper-mutation (APOBEC) PIK3CA (E545K) ESR1 (E380Q, D273N, D351H)	Hyper-mutation (APOBEC) PIK3CA (E545K) ESR1 (E380Q, D273N, D351H)

B.

