

Supplementary Table 1: HMEC cell lines used in MEMA validation

Original	Patient Age	Variants	Status	Oncogenic insults
237	66	none	primary	n/a
153L	60	153L	primary	n/a
		153L-D1	post-stasis	cyclin D1/CDK2
		153LD1MY	immortalized	cyclin D1/CDK2, c-Myc
122L	55	122L	primary	n/a
		122LP16SMY	immortalized	p16sh, c-Myc
184	21	184	primary	n/a
		184-P16SH	post-stasis	p16sh
		184D-D1L	post-stasis	cyclin D1/CDK2
		184DD1MYL	immortalized	cyclin D1/CDK2, c-Myc
		184DP16S1	immortalized	p16sh, spontaneous immortalized
		184DP16SMY	immortalized	p16sh, c-Myc
240L	18	240L-D1	post-stasis	cyclin D1/CDK2
		240L-P16SH	post-stasis	p16sh
		240LBP16SMY	immortalized	p16sh, c-Myc
		240LBD1MY-N	cancer-like	cyclin D1/CDK2, neu (HER2)
		240LBP16SMY-N	cancer-like	p16sh, c-Myc, neu (HER2)

HMEC cell lines used in MEMA validation. Assigned number and patient age are provided for each line, along with additional oncogenic insults or transformations induced and the resulting status going from primary to post-stasis to immortalized to cancer-like.