

A

NAME	SIZE	ES	NES	NOM p-val	FDR q-val
HALLMARK_INTERFERON_ALPHA_RESPONSE	74	0.7147997	2.701154	0.0	0.0
HALLMARK_INTERFERON_GAMMA_RESPONSE	142	0.64879125	2.6742682	0.0	0.0
HALLMARK_ALLOGRAFT_REJECTION	91	0.53649336	2.1006086	0.0	0.0
HALLMARK_INFLAMMATORY_RESPONSE	83	0.5240015	2.0065818	0.0	0.0
HALLMARK_COMPLEMENT	92	0.50774217	1.96035	0.0	1.945946E-4
HALLMARK_IL6_JAK_STAT3_SIGNALING	44	0.5621248	1.9068547	0.0	9.843857E-4
HALLMARK_OXIDATIVE_PHOSPHORYLATION	170	0.44374618	1.89804	0.0	8.4375916E-4
HALLMARK_KRAS_SIGNALING_UP	100	0.45809048	1.8031284	0.0	0.0024285933
HALLMARK_HYPOXIA	135	0.42461038	1.7468218	0.0	0.0044223834
HALLMARK_PI3K_AKT_MTOR_SIGNALING	85	0.45153704	1.7463474	0.0	0.003980145
HALLMARK_COAGULATION	59	0.46995404	1.6972476	0.002728513	0.0048601115
HALLMARK_IL2_STAT5_SIGNALING	122	0.36895782	1.5050087	0.007444169	0.042797077
HALLMARK_APOPTOSIS	106	0.3735777	1.4838812	0.012820513	0.049013812
HALLMARK_APICAL_JUNCTION	105	0.366879	1.4703022	0.016795866	0.052129544
HALLMARK_TNFA_SIGNALING_VIA_NFKB	124	0.36338362	1.4645097	0.011235955	0.051928267

B

NAME	SIZE	ES	NES	NOM p-val	FDR q-val
HALLMARK_G2M_CHECKPOINT	178	-0.45532104	-2.293512	0.0	0.0
HALLMARK_E2F_TARGETS	177	-0.45066673	-2.258981	0.0	0.0
HALLMARK_MYC_TARGETS_V1	176	-0.34090087	-1.7291223	0.0	0.01172436
HALLMARK_MYC_TARGETS_V2	54	-0.4226604	-1.7207888	0.003717472	0.008793269
HALLMARK_WNT_BETA_CATENIN_SIGNALING	20	-0.50100756	-1.6036451	0.016216217	0.016866626

Supplemental table S3. GSEA results comparing non-treated CM melanomas versus non-treated LN melanomas.
(A) Gene sets with positive enrichments scores (= up in CM). **(B)** Gene sets with negative enrichments scores (= down in CM). NOM p-val=0.0 corresponds to p<0.001. (N)ES: (normalized) enrichments score. FDR; false discovery rate.