

Figure S1 Downregulated genes. Presentation of different downregulated genes (marked in red) in TNF-(A), Relaxin-(B), MAPK-(C) and IL17-(D) signaling pathways in tumor samples of patients with MPM after platinum-based therapy presented within interaction networks from the Kyoto Encyclopedia of Gene and Genomes.

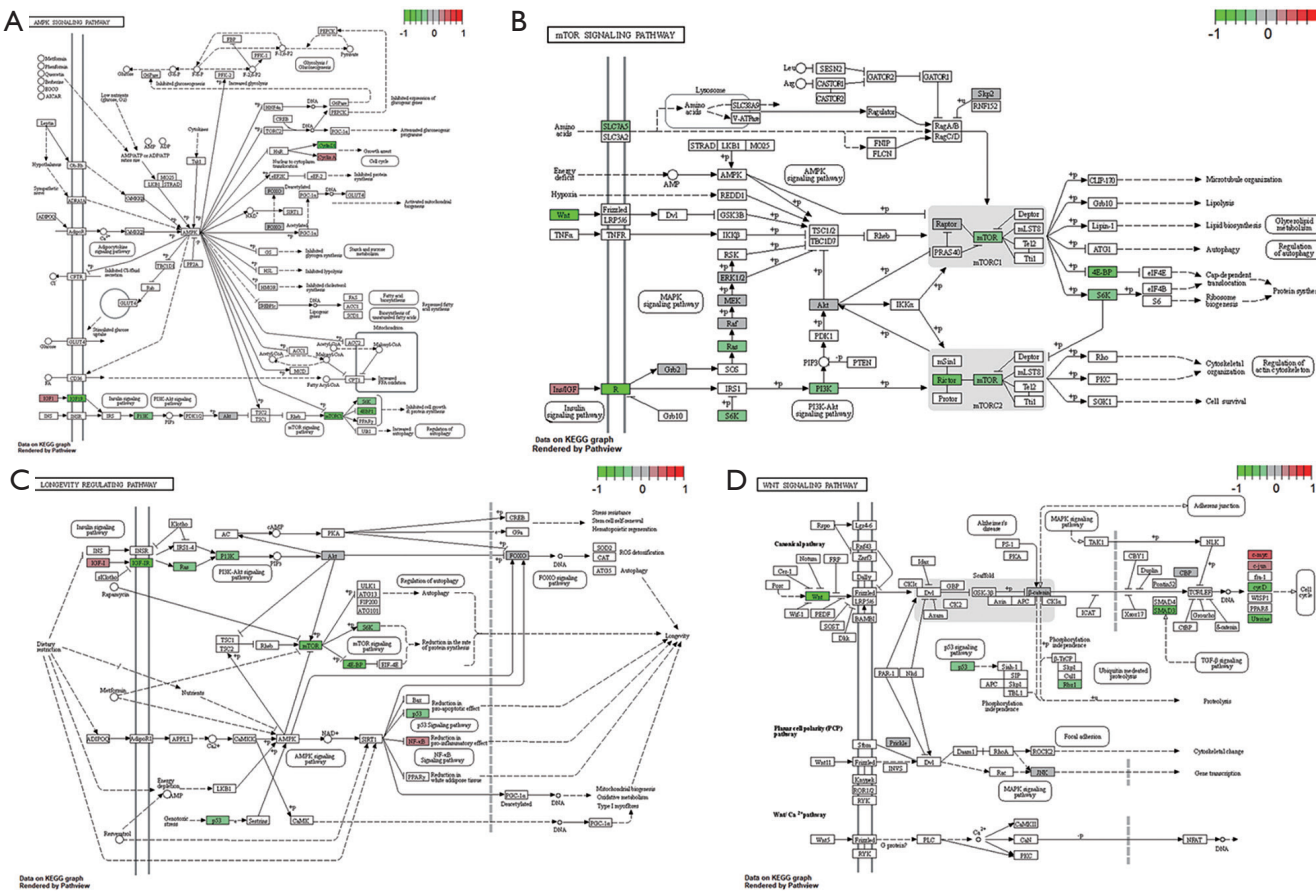


Figure S2 Upregulated genes. Presentation of different upregulated genes (marked in green) in AMPK-(A), mTOR-(B), Longevity regulating(C) and Wnt-(D) signaling pathways in tumor samples of patients with MPM after platinum-based therapy presented within interaction networks from the Kyoto Encyclopedia of Gene and Genomes.

Table S1

Gene Set	Enrichment Score	Normalized Enrichment Score	P value	FDR	Size	Leading Edge Num	Leading EdgId	UserId
TNF signaling pathway	0.62453388	2.03472978	0	0.00641818	24	14	5743; 4318; 3726; 6300; 7424; 3383; 4314; 1435; 5602; 2353; 5600; 5604; 3725; 4790	CSF1; FOS; ICAM1; JUN; JUNB; MAP2K1; MAPK10; MAPK11; MAPK12; MMP3; MMP9; NFKB1; PTGS2; VEGFC
Rheumatoid arthritis	0.7953622	1.99147244	0	0.01497575	10	9	4312; 7040; 7422; 3383; 4314; 1435; 284; 2353; 3725	ANGPT1; CSF1; FOS; ICAM1; JUN; MMP1; MMP3; TGFB1; VEGFA
IL-17 signaling pathway	0.62020339	1.93251228	0	0.02495958	22	13	5743; 4318; 2354; 6300; 4312; 3727; 4314; 3320; 5602; 2353; 5600; 3725; 4790	FOS; FOSB; HSP90AA1; JUN; JUND; MAPK10; MAPK11; MAPK12; MMP1; MMP3; MMP9; NFKB1; PTGS2
Leishmaniasis	0.69135566	1.82323012	0	0.04150421	12	7	5743; 6300; 7040; 2353; 5600; 3725; 4790	FOS; JUN; MAPK11; MAPK12; NFKB1; PTGS2; TGFB1
Osteoclast differentiation	0.58229047	1.83940837	0.00691244	0.0433227	22	12	2354; 3726; 6300; 7040; 3727; 1435; 5602; 2353; 5600; 5604; 3725; 4790	CSF1; FOS; FOSB; JUN; JUNB; JUND; MAP2K1; MAPK10; MAPK11; MAPK12; NFKB1; TGFB1
Parathyroid hormone synthesis, secretion and action	0.57591782	1.6766067	0.01492537	0.1278287	16	12	1958; 3727; 10893; 2353; 1026; 5604; 860; 64386; 673; 4323; 1956; 596	BCL2; BRAF; CDKN1A; EGFR; EGR1; FOS; JUND; MAP2K1; MMP14; MMP24; MMP25; RUNX2
MAPK signaling pathway	0.38338932	1.51300576	0.0212766	0.35177725	57	21	1847; 3082; 6300; 4609; 1848; 7424; 7040; 7422; 3727; 2065; 285; 1435; 284; 5602; 1942; 2353; 2246; 2247; 5600; 5604; 3725	ANGPT1; ANGPT2; CSF1; DUSP5; DUSP6; EFNA1; ERBB3; FGF1; FGF2; FOS; HGF; JUN; JUND; MAP2K1; MAPK10; MAPK11; MAPK12; MYC; TGFB1; VEGFA; VEGFC
Th1 and Th2 cell differentiation	0.53522774	1.41582219	0.09054326	0.4028865	12	6	6300; 5602; 2353; 5600; 3725; 4790	FOS; JUN; MAPK10; MAPK11; MAPK12; NFKB1
NOD-like receptor signaling pathway	0.52812711	1.44749671	0.08350731	0.41088221	14	7	6300; 1508; 3320; 5602; 5600; 3725; 4790	CTSB; HSP90AA1; JUN; MAPK10; MAPK11; MAPK12; NFKB1
Relaxin signaling pathway	0.40747761	1.42211469	0.05275229	0.42691577	35	13	4318; 6300; 4312; 7424; 7040; 7422; 5602; 2353; 5600; 5604; 3725; 4790; 4313	FOS; JUN; MAP2K1; MAPK10; MAPK11; MAPK12; MMP1; MMP2; MMP9; NFKB1; TGFB1; VEGFA; VEGFC
ErbB signaling pathway	-0.1408939	-0.4631295	0.99656947	0.99249764	34	5	1398; 2475; 6198; 1978; 5599	CRK; EIF4EBP1; MAPK8; MTOR; RPS6KB1
Endometrial cancer	-0.1995341	-0.5947989	0.93989071	0.99559667	24	1	595	CCND1
mTOR signaling pathway	-0.4997085	-1.4996909	0.04042179	1	23	9	4893; 3265; 8140; 2475; 6198; 253260; 1978; 3480; 7471	EIF4EBP1; HRAS; IGF1R; MTOR; NRAS; RICTOR; RPS6KB1; SLC7A5; WNT1
Hepatocellular carcinoma	-0.4588698	-1.4812795	0.04230118	1	34	10	2475; 7157; 6198; 1021; 4088; 1019; 1728; 3480; 7471; 595	CCND1; CDK4; CDK6; IGF1R; MTOR; NQO1; RPS6KB1; SMAD3; TP53; WNT1
AMPK signaling pathway	-0.6094516	-1.5758227	0.05325444	1	13	5	2475; 6198; 1978; 3480; 595	CCND1; EIF4EBP1; IGF1R; MTOR; RPS6KB1
Endocytosis	-0.6051434	-1.4625272	0.06147541	1	11	6	50855; 56288; 3265; 4087; 4088; 3480	HRAS; IGF1R; PARD3; PARD6A; SMAD2; SMAD3
Breast cancer	-0.4187946	-1.3702826	0.10499139	1	34	8	2475; 7157; 6198; 1021; 1019; 3480; 7471; 595	CCND1; CDK4; CDK6; IGF1R; MTOR; RPS6KB1; TP53; WNT1
Wnt signaling pathway	-0.5220283	-1.3775742	0.11666667	1	16	6	7157; 5599; 4088; 4316; 7471; 595	CCND1; MAPK8; MMP7; SMAD3; TP53; WNT1
Longevity regulating pathway	-0.4848352	-1.3139883	0.14757282	1	15	7	4893; 3265; 2475; 7157; 6198; 1978; 3480	EIF4EBP1; HRAS; IGF1R; MTOR; NRAS; RPS6KB1; TP53
Glioma	-0.3978881	-1.2454026	0.19499106	1	28	6	2475; 7157; 1021; 1019; 3480; 595	CCND1; CDK4; CDK6; IGF1R; MTOR; TP53