Table S1 Complete list of all 67 differentially expressed genes among the entire cohort

Column 1	baseMean	log2FoldChange	lfcSE	stat	P value
RPE65	7.68733898	–2.571350011	0.70442542	–3.65028	0.00026195
NBPF6	25.90198965	–2.442938581	0.68712315	–3.555314	0.00037753
SPRR1B	157.3235125	–2.52973519	0.70307749	–3.5980887	0.00032056
S100A7	171.5242641	–3.533723408	0.95979549	–3.6817462	0.00023164
FCER1A	64.08876755	–2.0302491	0.53216142	–3.8151001	0.00013613
REN	108.3446647	2.35955338	0.48155691	4.89984322	9.59E–07
IGKV3-7	3.794564464	–4.158328543	0.98978012	–4.201265	2.65E–05
IGKV1-17	373.0407807	–2.969023821	0.73768259	–4.0247986	5.70E–05
IGKV2D-30	3.317110822	–4.486840264	1.07764392	–4.1635648	3.13E–05
IGKV3D-15	9.567786631	–3.427569731	0.82681503	–4.1455097	3.39E–05
DAPL1	51.5754466	–3.733826377	0.80840908	–4.6187338	3.86E–06
HOXD11	31.05264799	–3.60949324	0.8341999	–4.3268924	1.51E–05
HOXD10	225.067114	–2.082518063	0.52159398	–3.9926037	6.54E–05
CXCR1	14.51362623	–2.694638035	0.62956326	–4.2801704	1.87E–05
DES	1105.806282	–2.803220454	0.74075671	–3.784266	0.00015416
IQCA1	157.7611797	–2.095790107	0.57000182	–3.676813	0.00023617
CYP8B1	100.6244139	2.469417197	0.66801656	3.69664067	0.00021847
HNRNPA1P2	118.0411934	2.262877569	0.54673085	4.13892421	3.49E–05
GABRR3	13.83206586	2.790034517	0.78782189	3.5414534	0.00039793
GAP43	7.858817376	–2.4393895	0.61124018	–3.9908854	6.58E–05
GPR78	117.6919983	2.569996155	0.48736887	5.27320542	1.34E–07
JCHAIN	1005.933162	–2.081747521	0.60040368	–3.4672464	0.00052582
ANXA10	1751.90732	–2.588131704	0.57452764	–4.5047993	6.64E–06
FAT2	4586.23489	–2.057745311	0.52966203	–3.8850157	0.00010232
TNXA	3.164020447	–3.667106616	0.99169801	–3.6978057	0.00021747
CLPSL1	7.293100841	–3.464649696	0.90966568	–3.8087066	0.0001397
GLP1R	28.53075021	2.970804223	0.84526271	3.51465195	0.00044033
LHFPL3	6.707658831	2.234167912	0.63836499	3.49982841	0.00046556
ATP6V0A4	145.3407964	3.171395695	0.66013045	4.80419541	1.55E–06
PRSS2	6.5480637	–3.991690365	1.04962055	–3.8029842	0.00014296
CBLL2	5.102838811	2.46572491	0.61989647	3.97763984	6.96E–05
HNRNPA1P2	22.82667343	2.411431636	0.62060168	3.88563502	0.00010206
CT83	10.51343918	3.741888855	0.85245742	4.38953166	1.14E–05
SDR16C5	35.39316594	–2.619917391	0.6338022	–4.1336515	3.57E–05
FABP4	732.2650152	–2.615212461	0.63419368	–4.123681	3.73E–05
LINGO2	5.626760599	–2.754688192	0.7951548	–3.464342	0.00053153
CLIC3	106.6775328	2.528410334	0.52383202	4.82675791	1.39E–06
PKNOX2	67.3993649	–2.200218422	0.49988345	–4.4014628	1.08E–05
HNRNPA1P3	31.82147202	2.364252715	0.5995125	3.94362537	8.03E–05
CLEC2B	892.3273153	–2.116153228	0.4844572	–4.3680912	1.25E–05
SLCO1B3	10.89656062	–5.341511987	1.11677497	–4.7829797	1.73E–06
KRT1	231.4617811	–3.530174731	0.80998071	–4.3583442	1.31E–05
LGR5	215.3834438	–3.007485344	0.69966071	–4.2984911	1.72E–05
PDCD6IPP1	14.88562238	–2.198570803	0.60631082	–3.6261447	0.00028768
PLA2G4E	32.03878282	–2.338369072	0.62479961	–3.7425904	0.00018213
PLA2G4D	51.60568941	–2.118924598	0.59692566	–3.5497294	0.00038563
ALDH3A1	158.8963232	–2.536654695	0.681123	–3.7242241	0.00019592
LAMA1	496.0994292	2.619976536	0.56935057	4.60169301	4.19E–06
CIDEA	9.546056103	–2.830693268	0.77815274	–3.6377091	0.00027507
CHST9	44.2382589	–2.760563673	0.73014027	–3.7808676	0.00015628
SERPINB4	111.4501069	–2.903643906	0.76793457	–3.7811085	0.00015613
SERPINB3	590.7329976	–3.369561537	0.80818	–4.1693206	3.06E–05
SLC5A5	25.27003541	2.792910318	0.57500228	4.85721605	1.19E–06
KRTDAP	41.57913812	–2.384849081	0.64584581	–3.6925982	0.00022197
SBSN	255.5431969	–2.499487433	0.60155142	–4.1550686	3.25E–05
CYP2S1	214.9712457	–2.197729068	0.49353876	–4.453002	8.47E–06
PSG5	58.55825416	2.560115345	0.63566379	4.02746764	5.64E–05
PSG4	137.2964535	2.808715606	0.58875103	4.77063384	1.84E–06
PSG9	44.72608203	2.460799793	0.63693701	3.86349006	0.00011178
IGFL1	148.0335765	–3.287593779	0.68100987	–4.8275273	1.38E–06
SIGLEC11	4.632318214	2.031872984	0.57918796	3.5081409	0.00045125
IGLV1-51	22.07888685	–2.409881302	0.60716704	–3.9690582	7.22E–05
IGLV3-19	127.9767079	–3.04369407	0.75298639	–4.0421635	5.30E–05
IGLV2-18	56.67811333	–4.917737728	0.91828702	–5.3553384	8.54E–08
PIWIL3	53.13670612	3.216643423	0.90951327	3.53666463	0.00040521
MYO18B	116.2046349	2.841135925	0.58540301	4.85329912	1.21E–06
ENTHD1	16.42218903	–2.64700336	0.64662671	–4.0935571	4.25E–05

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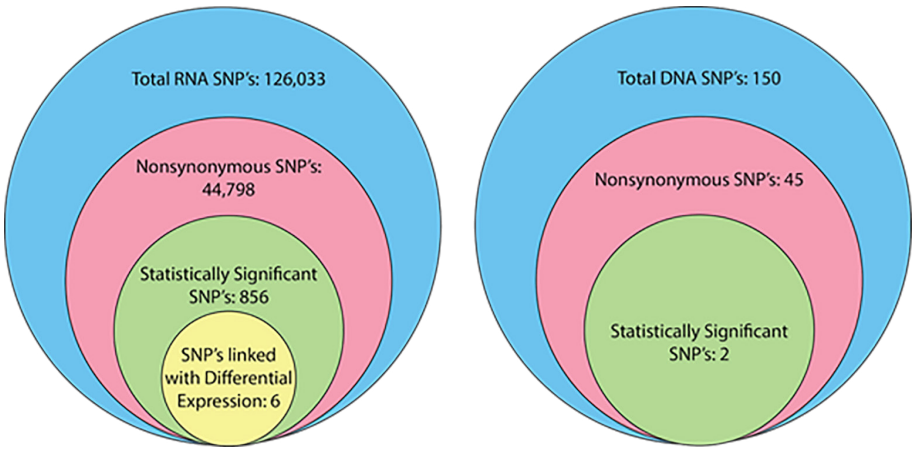

Figure S1 Pathway analysis of genes with statistically significant differential expression between responders and non-durable responder in the MIF regulation of innate immunity pathway. Pathway analysis was performed using IPA software. IPA allows for integration of gene expression results to identify and visualize associated biological pathways. Components highlighted in purple showed differential expression on RNAseq in our dataset. MIF, macrophage migration inhibitory factor; IPA, Ingenuity Pathway Analysis.

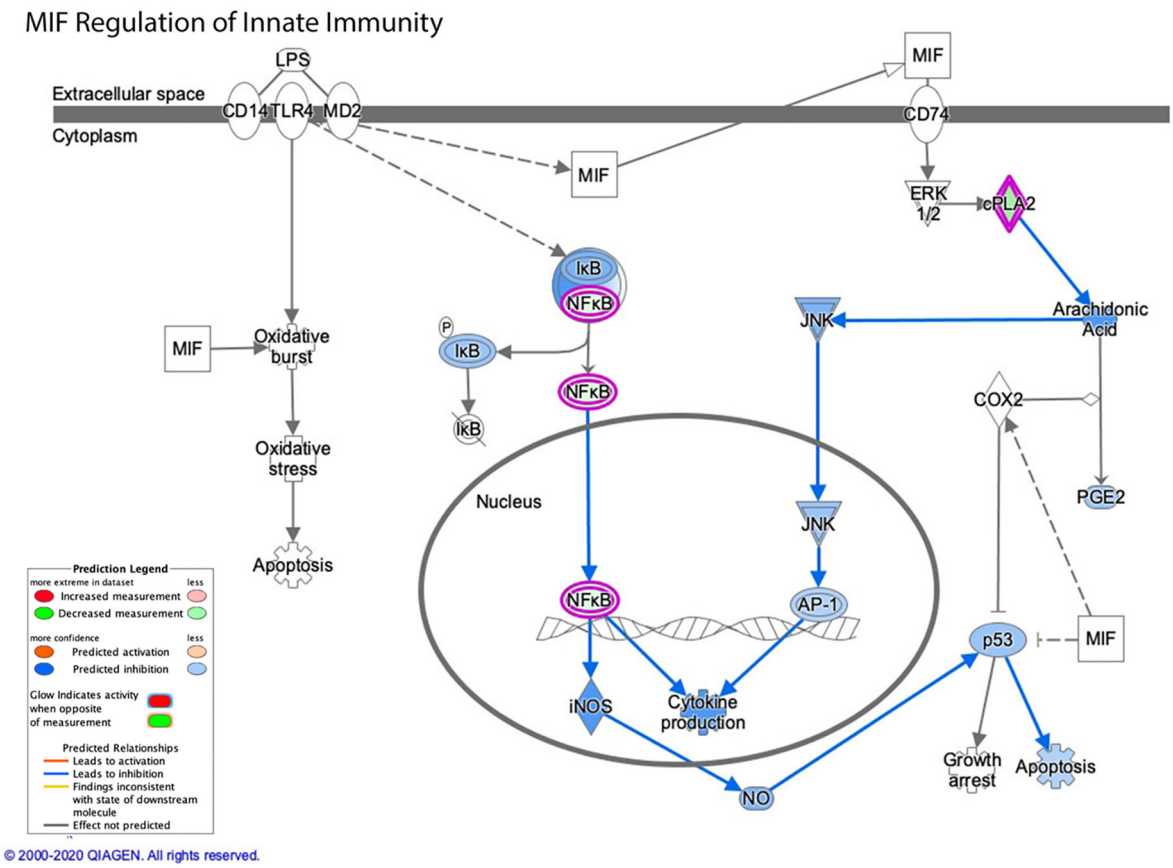

Figure S2 IPA for the MIF-mediated glucocorticoid regulation pathway. IPA, Ingenuity Pathway Analysis; MIF, macrophage migration inhibitory factor.

https://dx.doi.org/10.21037/tau-21-158

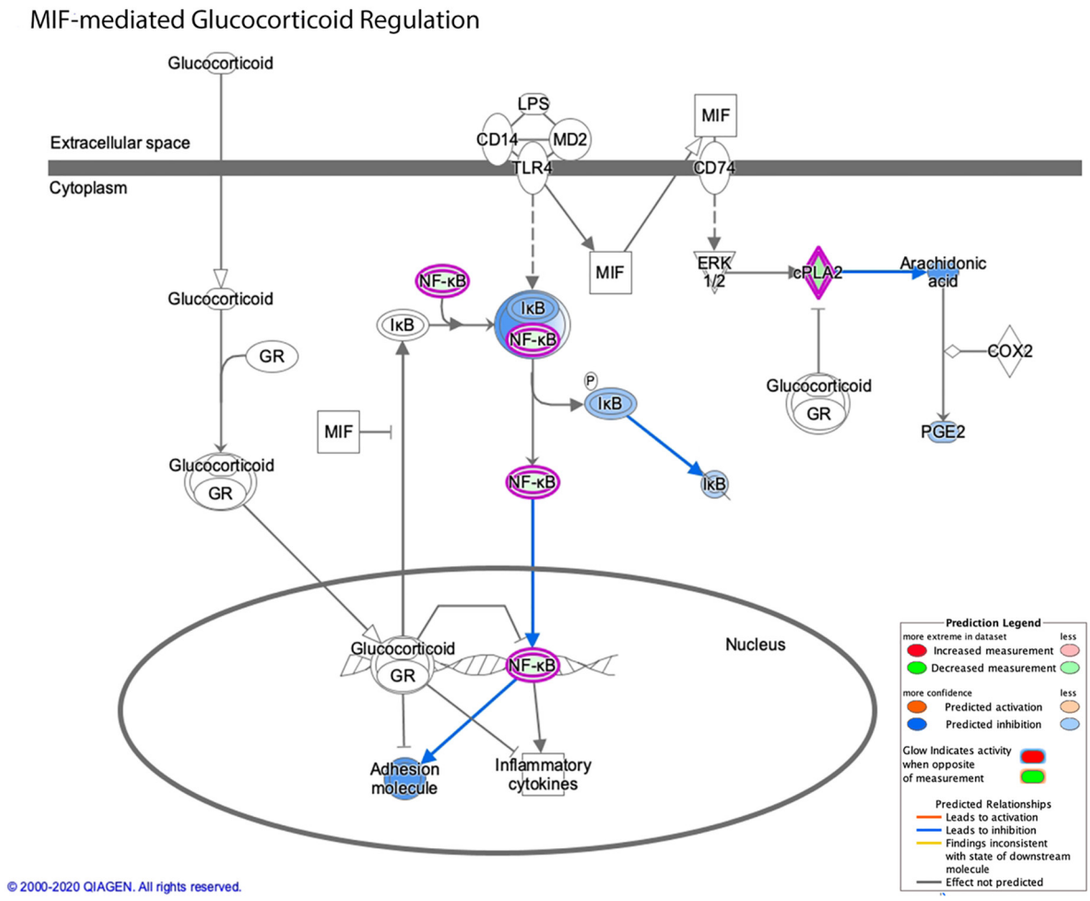

Figure S3 IPA for the p38 MAPK signaling pathway. IPA, Ingenuity Pathway Analysis.

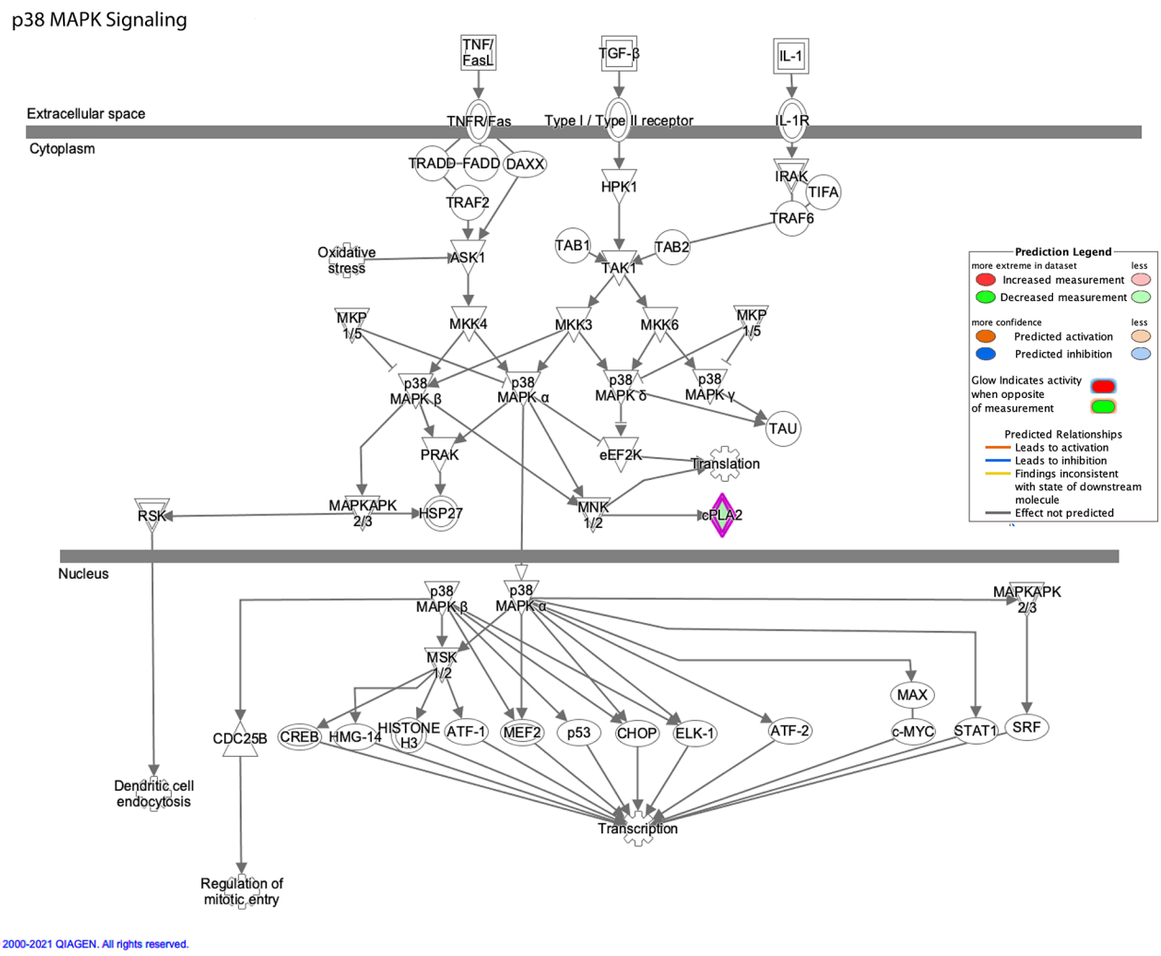

Figure S4 Diagram showing number of SNPs remaining after each filtering step. (A) The top blue circle shows the total number of raw RNA SNPs called, followed by numbers after filtering for nonsynonymous only SNPs, statistically significant SNPs, and then SNPs that were in a gene that was also considered differentially expressed between groups. (B) The same process is depicted for DNA SNPs. SNPs, single nucleotide polymorphisms.

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Table S2 Specific RNA variants that can be linked to differentially expressed genes on RNAseq

Gene	Chromosome	Position	Reference	Alternate	Type	Expression (log2 fold change)	Ratio in responders	Ratio in non-responders	P value (raw)
JCHAIN	Chr 4	70656441	TACG	T	Nonframeshift substitution	–2.082	0/17	11/20	<0.001
S100A7	Chr 1	153458930	C	G	Nonframeshift substitution	–3.534	1/17	9/20	0.026
CLEC2B	Chr 2	9854422	A	AT	Frameshift subsitution	–2.116	2/17	10/20	0.041
ANXA10	Chr 4	168162543	A	C	Nonframeshift substitution	–2.588	3/17	12/20	0.046

Change in expression is represented as log2-fold change in comparison to the entire durable responder group. The ratio of each RNA variant in the durable responders versus non-durable responders is compared using Fisher's exact test.

Table S3 DNA variants identified using the *TST170* gene panel that differed between durable responders and non-durable responders

Gene	Chromosome	Position	Reference	Alternate	Type	Ratio in responders	Ratio in non-responders	P value (raw)
MCL1	Chr 1	150579476	C	–	Frameshift Deletion	10/17	3/20	0.007
Msh-6	Chr 2	47803501	C	–	Frameshift Deletion	7/17	2/20	0.034

Ratios were compared using Fisher's exact test.

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