Supplementary Table 1. GSEA results demonstrates enrichment of several cancer-immunity gene sets.

ID	Gene set	setSize	Enrichment Score	NES	P value
hsa03010	Ribosome	121	0.975824	1.658352	2.82E-08
hsa04514	Cell adhesion molecules (CAMs)	69	-0.87573	-2.3094	2.22E-07
hsa05168	Herpes simplex virus 1 infection	154	-0.73371	-2.09157	2.82E-06
hsa05332	Graft-versus-host disease	27	-0.94435	-2.21181	3.46E-06
hsa05320	Autoimmune thyroid disease	29	-0.94127	-2.21258	9.67E-06
hsa05330	Allograft rejection	29	-0.94093	-2.21177	9.67E-06
hsa04672	Intestinal immune network for IgA production	33	-0.9144	-2.16648	3.03E-05
hsa05323	Rheumatoid arthritis	42	-0.89388	-2.22565	9.50E-05
hsa05169	Epstein-Barr virus infection	107	-0.75626	-2.07799	0.000146
hsa05140	Leishmaniasis	39	-0.87042	-2.13742	0.000299
hsa05152	Tuberculosis	87	-0.78528	-2.12068	0.000372
hsa05321	Inflammatory bowel disease (IBD)	34	-0.86944	-2.07558	0.001913
hsa04640	Hematopoietic cell lineage	51	-0.83138	-2.12788	0.002024
hsa05150	Staphylococcus aureus infection	37	-0.85406	-2.06483	0.003122
hsa04650	Natural killer cell mediated cytotoxicity	67	-0.76632	-1.97828	0.003122
hsa04612	Antigen processing and presentation	44	-0.81658	-2.01846	0.004466
hsa04940	Type I diabetes mellitus	29	-0.88536	-2.08114	0.004466
hsa04658	Th1 and Th2 cell differentiation	47	-0.81765	-2.071	0.005318
hsa05310	Asthma	17	-0.94195	-2.13056	0.005318
hsa04142	Lysosome	60	-0.76615	-1.97725	0.008891
hsa05322	Systemic lupus erythematosus	36	-0.83825	-2.00237	0.014665
hsa05170	Human immunodeficiency virus 1 infection	92	-0.67782	-1.88007	0.020725
hsa05133	Pertussis	33	-0.82012	-1.94309	0.02184
hsa05167	Kaposi sarcoma-associated herpesvirus infection	76	-0.70701	-1.87221	0.022154

hsa05145	Toxoplasmosis	54	-0.75039	-1.99552	0.033306
hsa04144	Endocytosis	88	-0.62324	-1.68184	0.039926
hsa04921	Oxytocin signaling pathway	49	0.891291	1.522232	0.045076