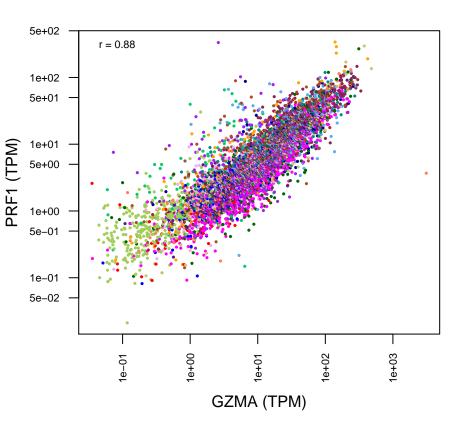
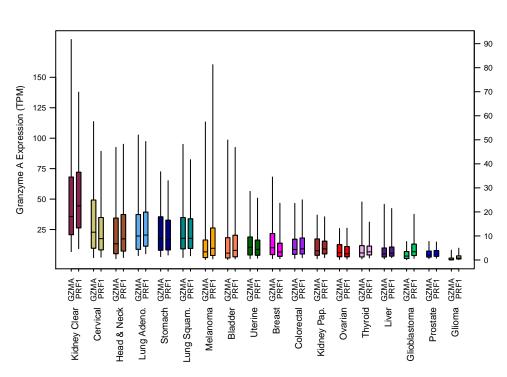
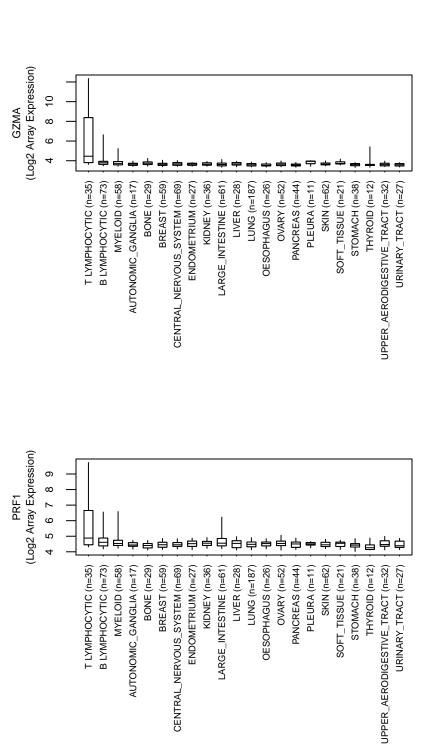
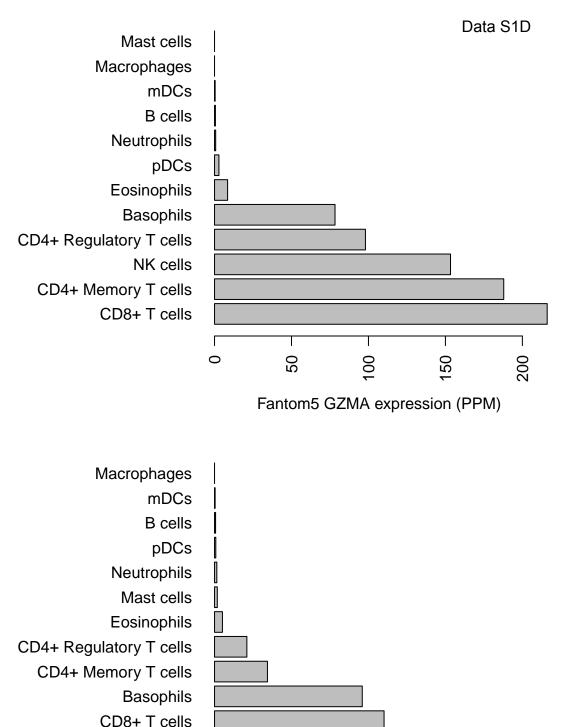
Data S1A





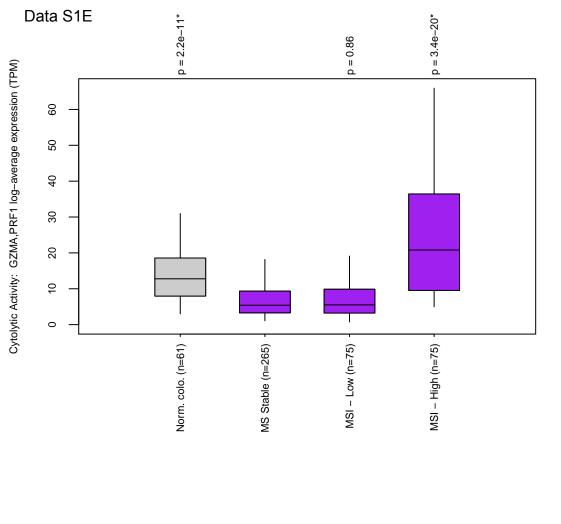
Perforin Expression (TPM)

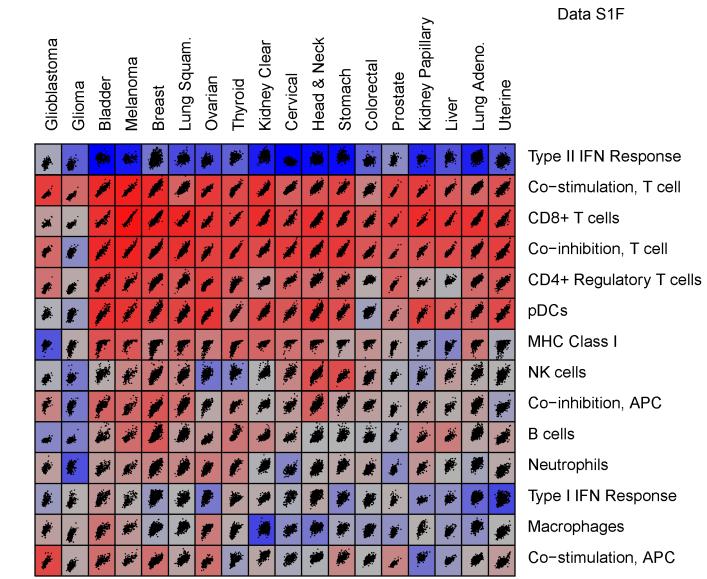


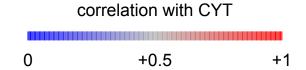


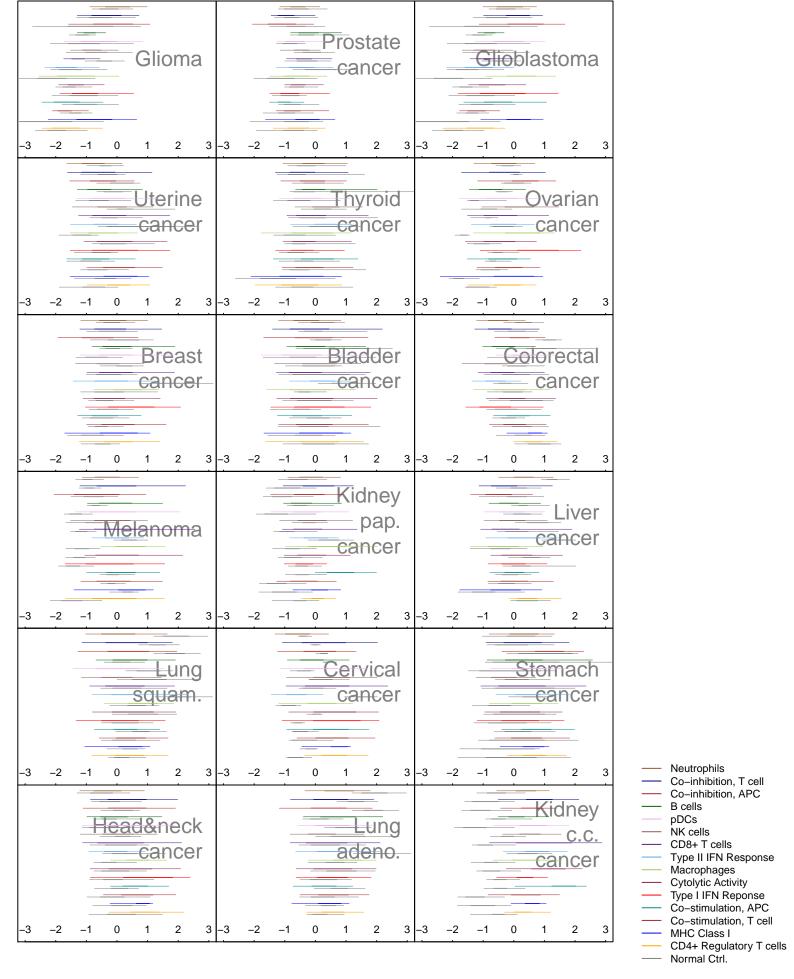
NK cells

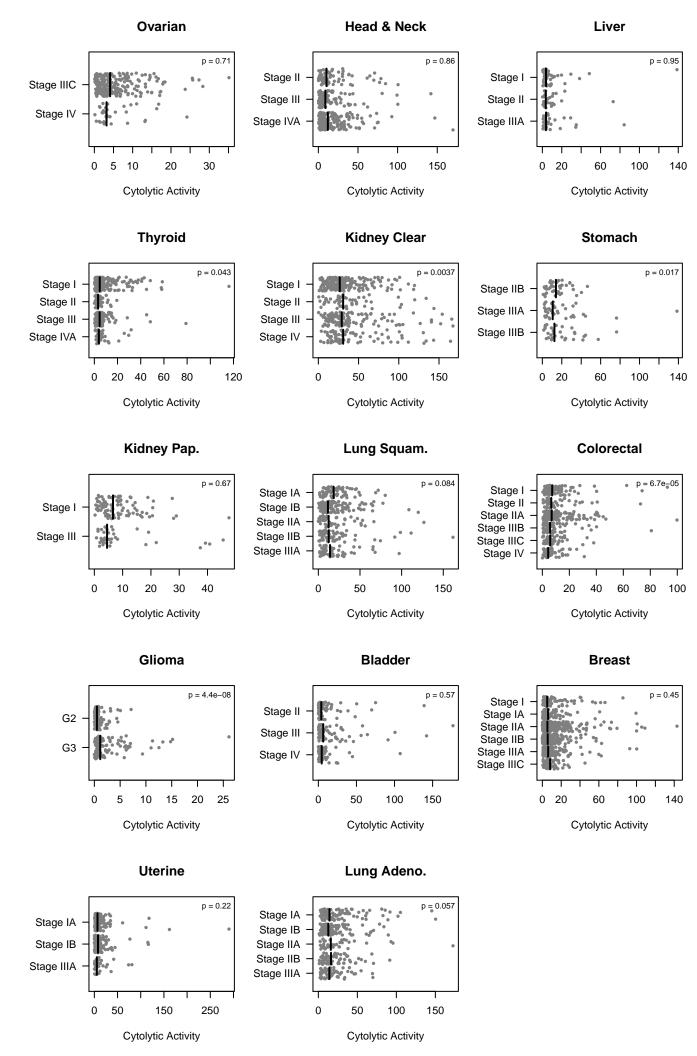
Fantom5 PRF1 expression (PPM)





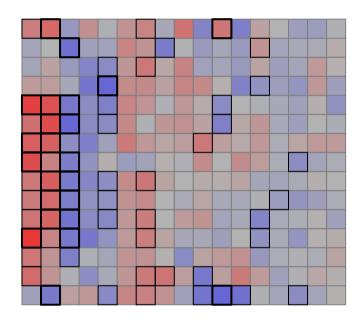


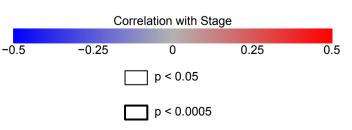






Type I IFN Reponse
 NK cells
 Neutrophils
 B cells
 Co-stimulation, T cell
CD4+ Regulatory T cells
 Co-stimulation, APC
 MHC Class I
 Co-inhibition, T cell
 pDCs
 CD8+ T cells
 Cytolytic Activity
 Co-inhibition, APC
 Macrophages
Type II IFN Response





4	0.033		0.72	0.44	2.4e-05	0.54	0.52	52 0.65	0.21	0.21	0.11	1	1 0.84	4 0.1	0.27	0.82
0.4 0.8		l	B cells-	B cells-	B cells-		B cells-	B cells-	B cells-	B cells- Co-stimulation,	B cells- Co-stimulation,	B cells- Co-inhibition,	B cells- Co-inhibition,	B cells- Type I IFN	B cells-	B cells-
Fraction Surviving Patients 0.4 0.8 0.0	0.001	0.72	T cells	CD8+ T cells	Macrophages		NK cells	pDCs	MHC Class I	APC	T cell	APC	T cell	Response	Reponse	Cytolytic Activity
	CD4+ Regulatory T	CD4+ Regulatory cells-		CD4+ Regulatory T cells- CD8+ T cells	T cells-	T cells-	CD4+ Regulatory T cells- NK cells	CD4+ Regulatory T cells- pDCs	CD4+ Regulatory T cells- MHC Class I	CD4+ Regulatory T cells- Co-stimulation, APC	CD4+ Regulatory T cells- Co-stimulation, T cell	CD4+ Regulatory T cells- Co-inhibition, APC	CD4+ Regulatory T cells- Co-inhibition, T cell	CD4+ Regulatory T cells- Type I IFN Response	Type II IFN	CD4+ Regulatory T cells- Cytolytic Activity
	0.0078	0.44			0.00022	0.06					0.9				repende	
		CD8+ T cells- 3 cells	CD8+ T cells- CD4+ Regulatory T cells		CD8+ T cells- Macrophages	CD8+ T cells- Neutrophils	CD8+ T cells- NK cells	CD8+ T cells- pDCs	CD8+ T cells- MHC Class I	CD8+ T cells- Co-stimulation, APC	CD8+ T cells- Co-stimulation, T cell	CD8+ T cells- Co-inhibition, APC	CD8+ T cells- Co-inhibition, T cell	CD8+ T cells- Type I IFN Response	CD8+ T cells- Type II IFN Reponse	CD8+ T cells- Cytolytic Activity
	0.36	2.4e-05		0.00022		0.00033	0.15	0.0011	0.061		1.4e-05					2.8e-05
		Macrophages- 3 cells	1 cens	Macrophages- CD8+ T cells	0.00033	Macrophages- Neutrophils	Macrophages- NK cells	·	Macrophages- MHC Class I	Macrophages- Co-stimulation, APC	Macrophages- Co-stimulation, T cell	Macrophages- Co-inhibition, APC	Macrophages-Co-inhibition, T cell	Macrophages- Type I IFN Response	Macrophages- Type II IFN Reponse	Macrophages- Cytolytic Activity 0.37
	N.	Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-		Neutrophils-		Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-	Neutrophils-
		3 cells	T cells	CD8+ T cells	Macrophages		NK cells	pDCs 0.47	MHC Class I	Co-stimulation, APC	Co-stimulation, T cell	Co-inhibition, APC 0.87	Co-inhibition, T cell	Type I IFN Response 0.41	Reponse	Cytolytic Activity
	NK cells N	NK cells- 3 cells	NK cells- CD4+ Regulatory T cells			NK cells- Neutrophils		NK cells-pDCs	NK cells- MHC Class I	NK cells- Co-stimulation, APC	NK cells- Co-stimulation, T cell	NK cells- Co-inhibition, APC	NK cells- Co-inhibition, T cell	NK cells- Type I IFN Response		NK cells- Cytolytic Activity
	0.037	0.65	1 00113			0.2	0.47	·	0.33					·	Reported	
	pDCs pI	DDCs- B cells	pDCs- CD4+ Regulatory T cells		pDCs- Macrophages	pDCs- Neutrophils	pDCs- NK cells	<u></u>	pDCs- MHC Class I	pDCs- Co-stimulation, APC	pDCs- Co-stimulation, T cell	pDCs- Co-inhibition, APC	pDCs- Co-inhibition, T cell	pDCs- Type I IFN Response	pDCs- Type II IFN Reponse	pDCs- Cytolytic Activity
	0.4	0.21		0.045	0.061	0.21	0.11	0.33		0.99						0.047
		MHC Class I- 3 cells	1 cens	MHC Class I- CD8+ T cells	Macrophages	Neutrophils	MHC Class I- NK cells	MHC Class I-pDCs 46 0.098	0.99	Co-stimulation, APC	MHC Class I- Co-stimulation, T cell	MHC Class I- Co-inhibition, APC	MHC Class I- Co-inhibition, T cell	MHC Class I- Type I IFN Response	MHC Class I- Type II IFN Reponse	MHC Class I- Cytolytic Activity
	C	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation,		Co-stimulation, APC-	Co-stimulation, APC-	Co-stimulation,	Co-stimulation,	Co-stimulation,	Co-stimulation.
		APC- 3 cells 0.11	CD4+ Regulatory T cells	CD8+ T cells	Macrophages	Neutrophils	APC- NK cells	pDCs	APC-MHC Class I	0.00063	Co-stimulation, T cell	Co-inhibition, APC 0.092	Co-inhibition, T cell	Type I IFN Response	Type II IFN Reponse	APC- Cytolytic Activity 0.22
	Co-stimulation,	Co-stimulation,	Co-stimulation, T cell- CD4+ Regulatory T cells	Co-stimulation, T cell- CD8+ T cells			Co-stimulation, T cell- NK cells	Co-stimulation, T cell- pDCs	Co-stimulation, T cell- MHC Class I	Co-stimulation, T cell- Co-stimulation, APC		Co-stimulation, T cell- Co-inhibition, APC	Co-stimulation, T cell- Co-inhibition, T cell	Co-stimulation, T cell- Type I IFN Response	Co-stimulation, T cell- Type II IFN	Co-stimulation, T cell- Cytolytic Activity
0.8 0.0	0.019	1	1 0.46								0.092		0.96	Response 0.032	Reponse 0.07	
	Co-inhibition, Al	Co-inhibition, APC- 3 cells	CD4+ Regulatory		APC-	APC-	Co-inhibition, APC- NK cells	APC-	Co-inhibition, APC- MHC Class I	Co-inhibition, APC- Co-stimulation, APC	Co-inhibition, APC- Co-stimulation, T cell		Co-inhibition, APC- Co-inhibition, T cell	Co-inhibition, APC- Type I IFN Response	Type II IFN	Co-inhibition, APC- Cytolytic Activity
	0.12	0.84	4 0.45	0.018	6e-05	0.62	0.6	0.6	0.31	0.2	0.068	0.96		0.092	0.34	0.14
0.0	Co-inhibition, T	Co-inhibition, cell- 3 cells	T cell– CD4+ Regulatory T cells	CD8+ T cells	T cell- Macrophages	Neutrophils	Co-inhibition, T cell- NK cells		Co-inhibition, T cell- MHC Class I	T cell- Co-stimulation, APC	T cell- Co-stimulation, T cell	T cell- Co-inhibition, APC	0.092	T cell- Type I IFN Response	T cell-	Co-inhibition, T cell- Cytolytic Activity
0.4 0.8	Ty	ype I IFN	Type I IFN Response-	Type I IFN	Type I IFN	Type I IFN	Type I IFN	Type I IFN	Type I IFN	Type I IFN Response-	Type I IFN Response-	Type I IFN Response-	Type I IFN Response-	~-	Type I IFN Response-	Type I IFN
	_ · · ·	Response- 3 cells	CD4+ Regulatory T cells	CD8+ T cells	Macrophages	Neutrophils	Response- NK cells		Response- MHC Class I	Co-stimulation, APC	Co-stimulation, T cell	Co-inhibition, APC	Co-inhibition, T cell	0.14	Type II IFN Reponse	Response– Cytolytic Activity 0.052
0.4	lype II IFN R	Type II IFN Reponse- 3 cells	Type II IFN Reponse- CD4+ Regulatory T cells	Type II IFN Reponse- CD8+ T cells	Reponse-	Reponse-	Type II IFN Reponse- NK cells	Reponse-	Type II IFN Reponse- MHC Class I	Type II IFN Reponse- Co-stimulation, APC	Type II IFN Reponse- Co-stimulation, T cell	Type II IFN Reponse- Co-inhibition, APC	Type II IFN Reponse- Co-inhibition, T cell	Type II IFN Reponse- Type I IFN Response		Type II IFN Reponse- Cytolytic Activity
	0.009	0.82				0.37								<u> </u>	0.052	
0: _	Cytolytic Activity B	Cytolytic Activity— 8 cells	T cells		Macrophages	·	Cytolytic Activity- NK cells		Cytolytic Activity- MHC Class I	Cytolytic Activity- Co-stimulation, APC	Cytolytic Activity- Co-stimulation, T cell	Cytolytic Activity- Co-inhibition, APC	Cytolytic Activity— Co-inhibition, T cell	Cytolytic Activity- Type I IFN Response	Cytolytic Activity- Type II IFN Reponse	
	0 2 4 6 8 100									00 2 4 6 8 10				100 2 4 6 8 10		