

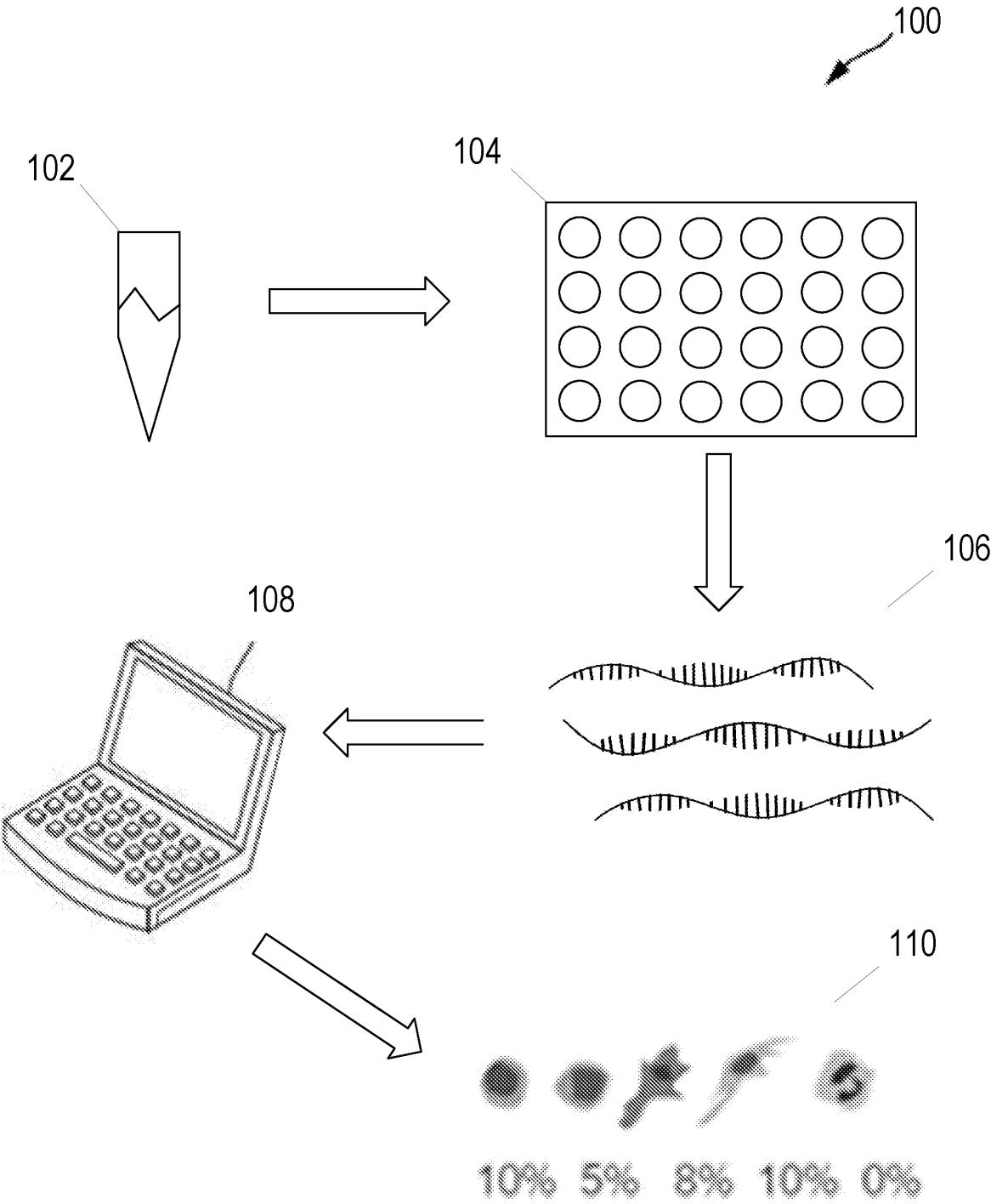


FIG. 1A

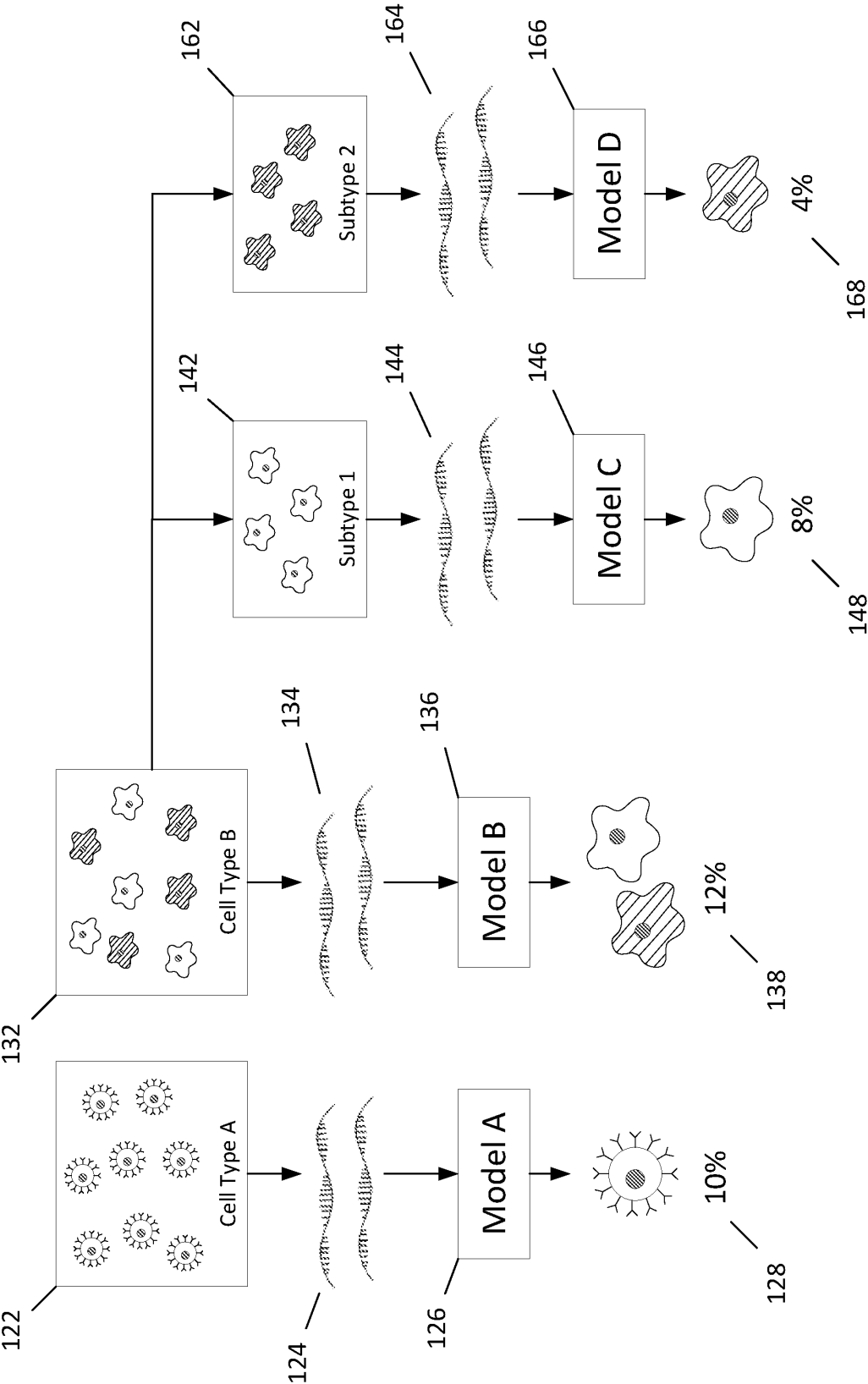
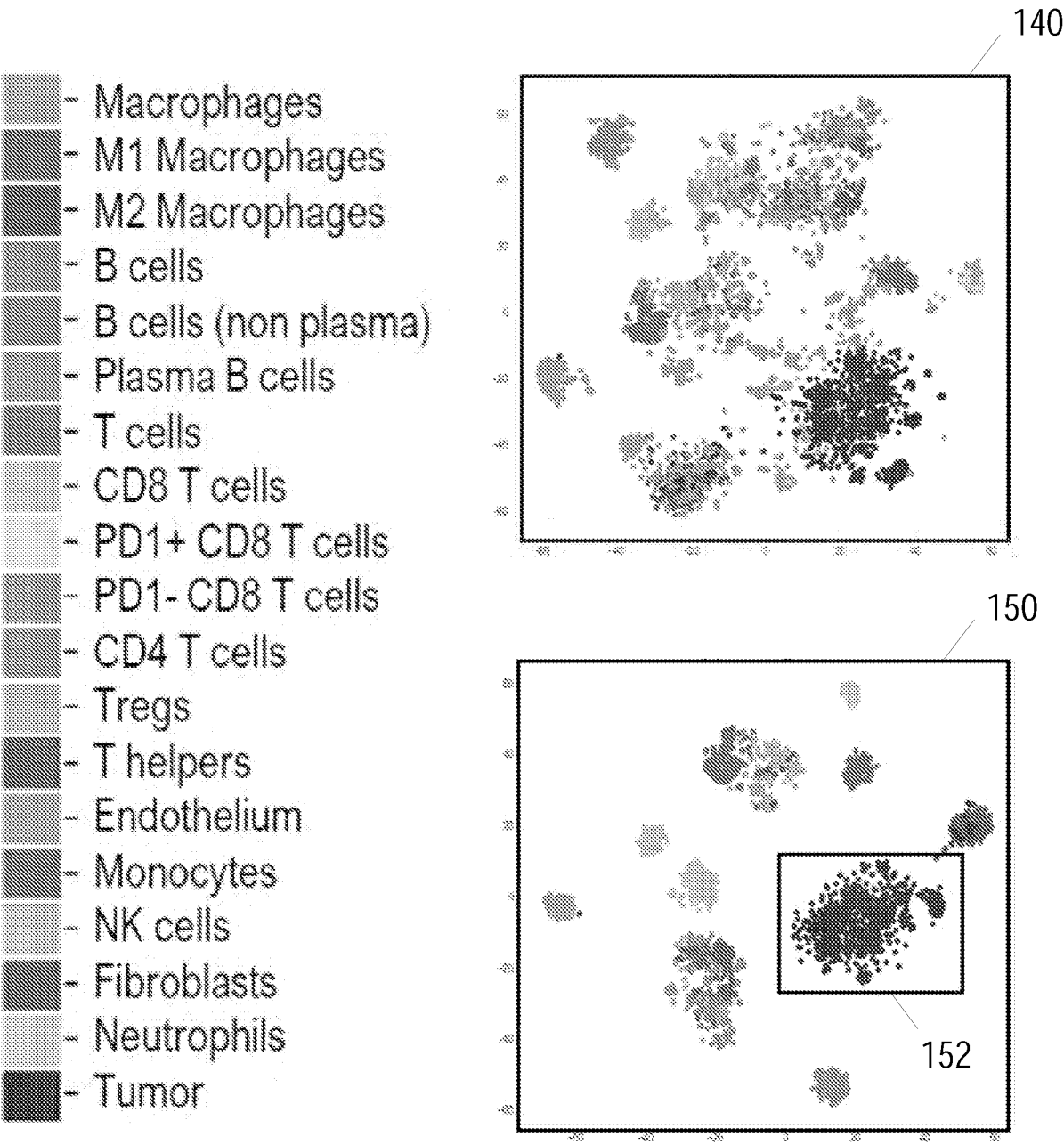


FIG. 1B



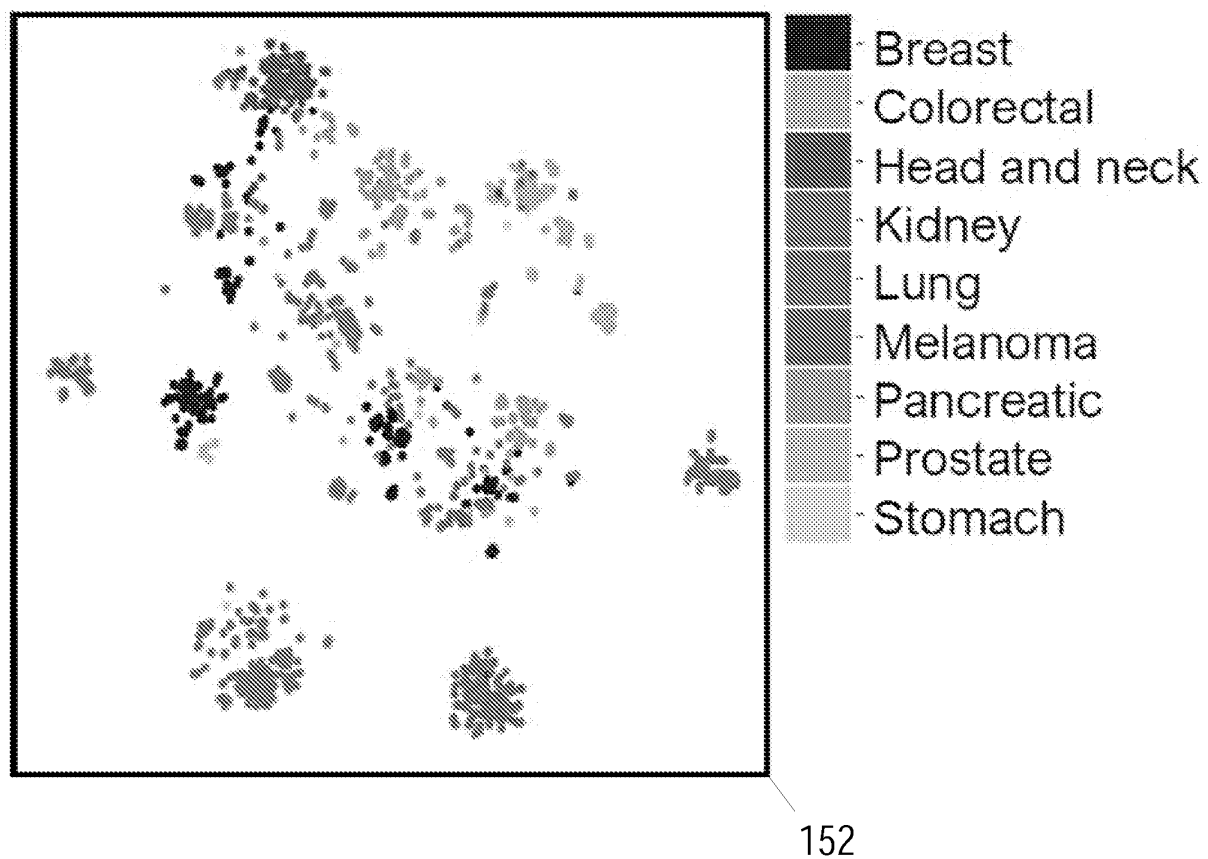


FIG. 1D

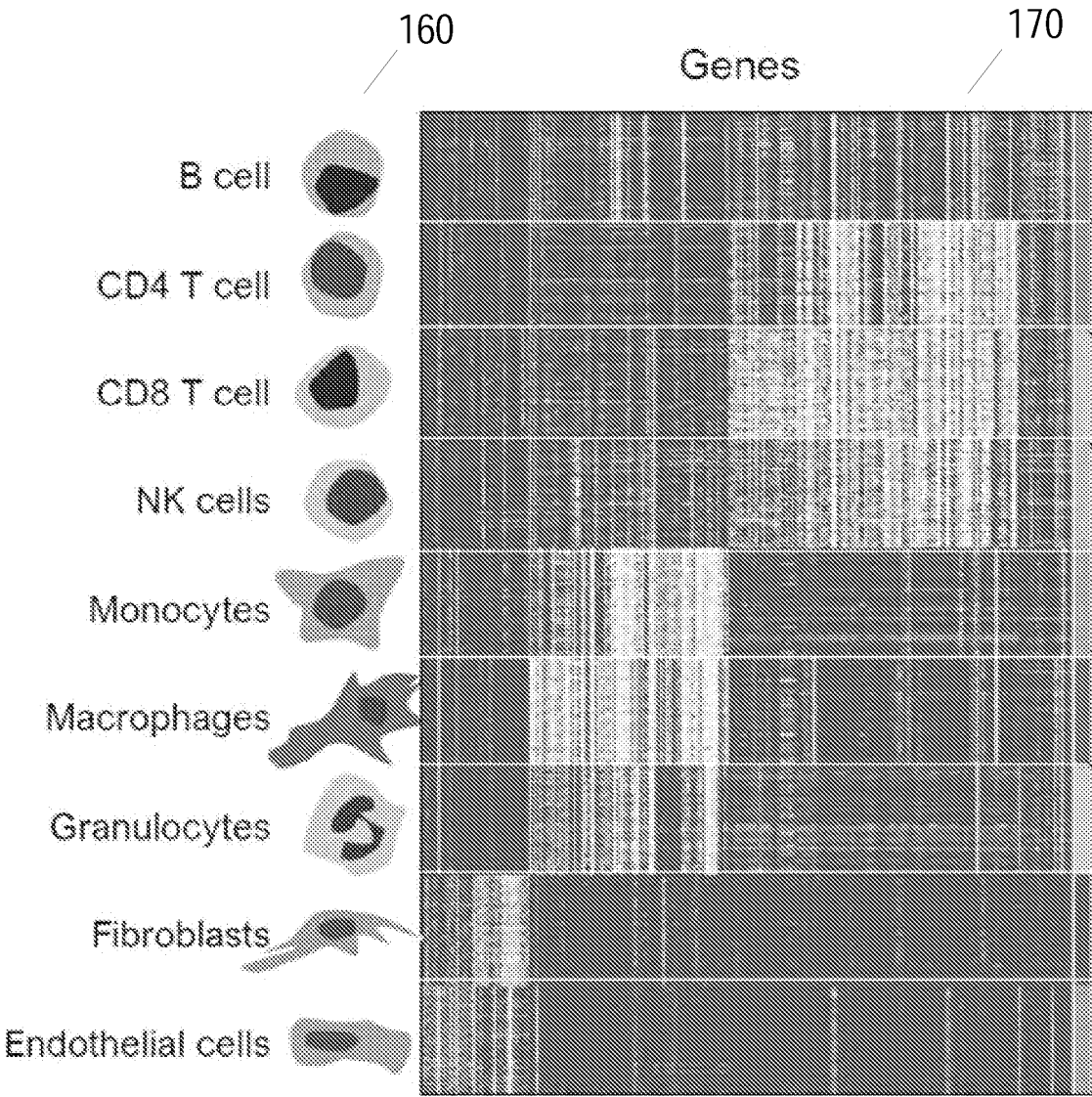


FIG. 1E

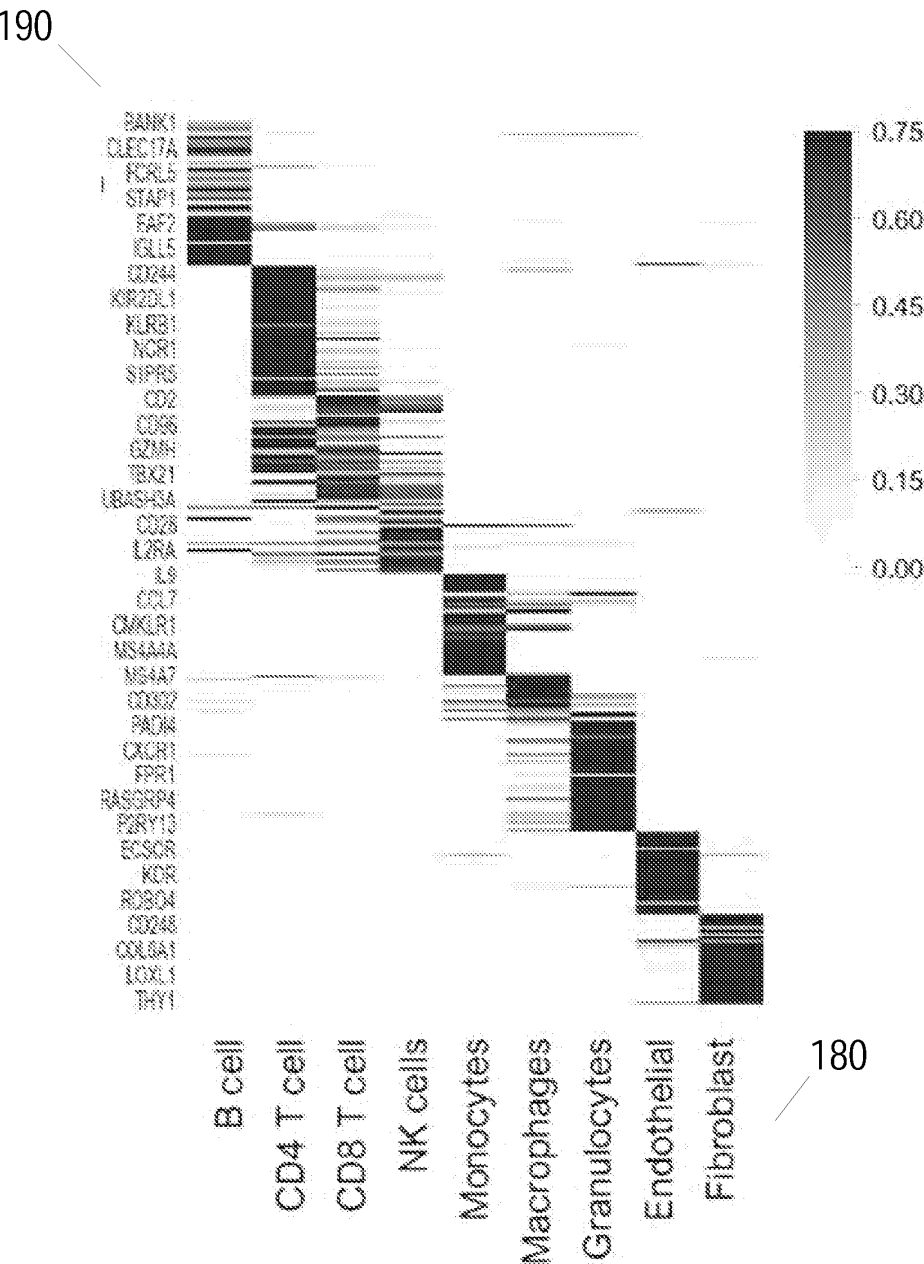


FIG. 1F

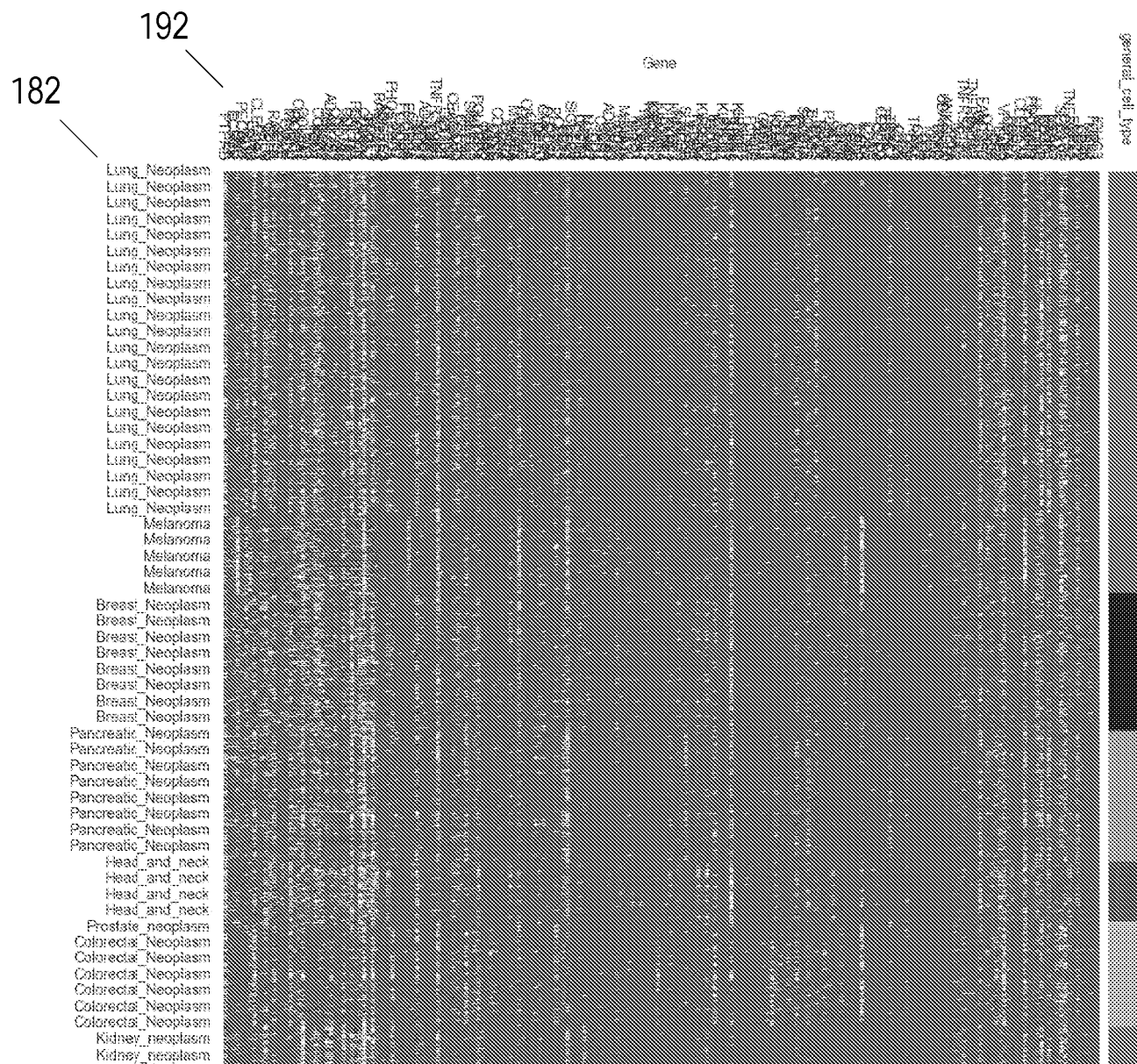


FIG. 1G

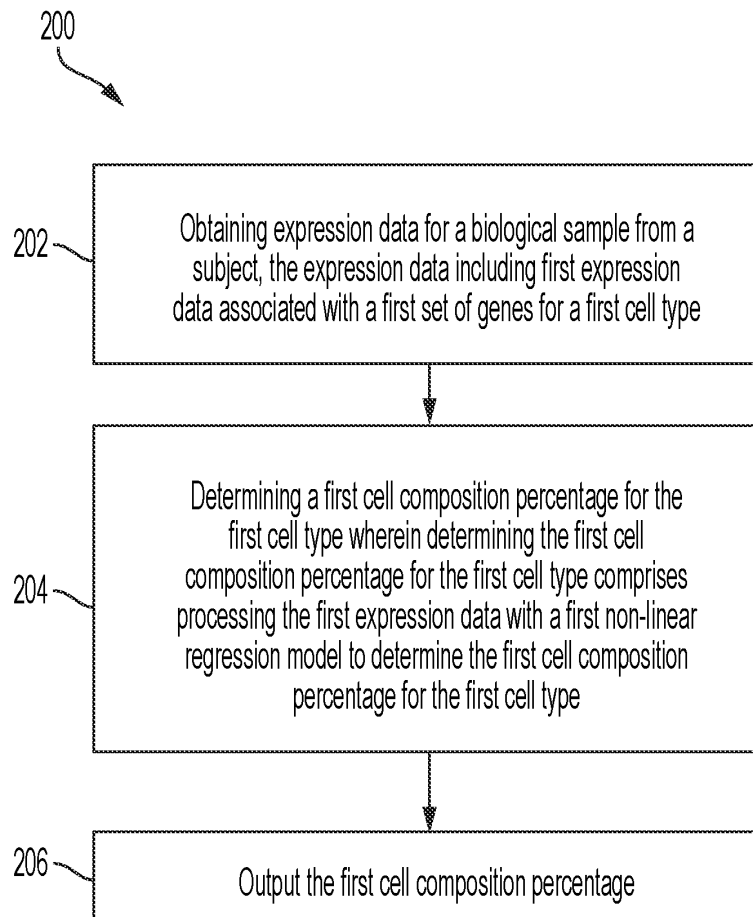


FIG. 2A

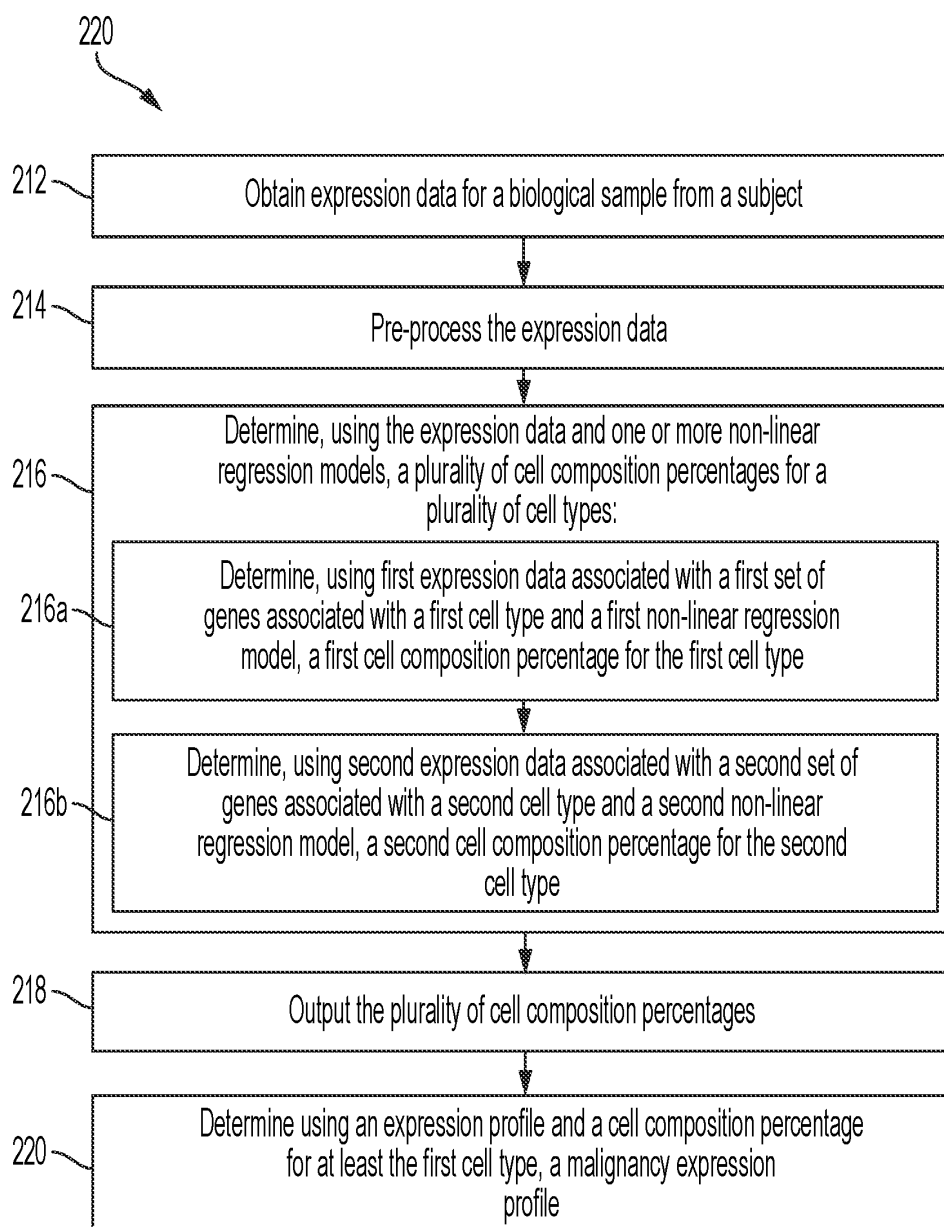


FIG. 2B

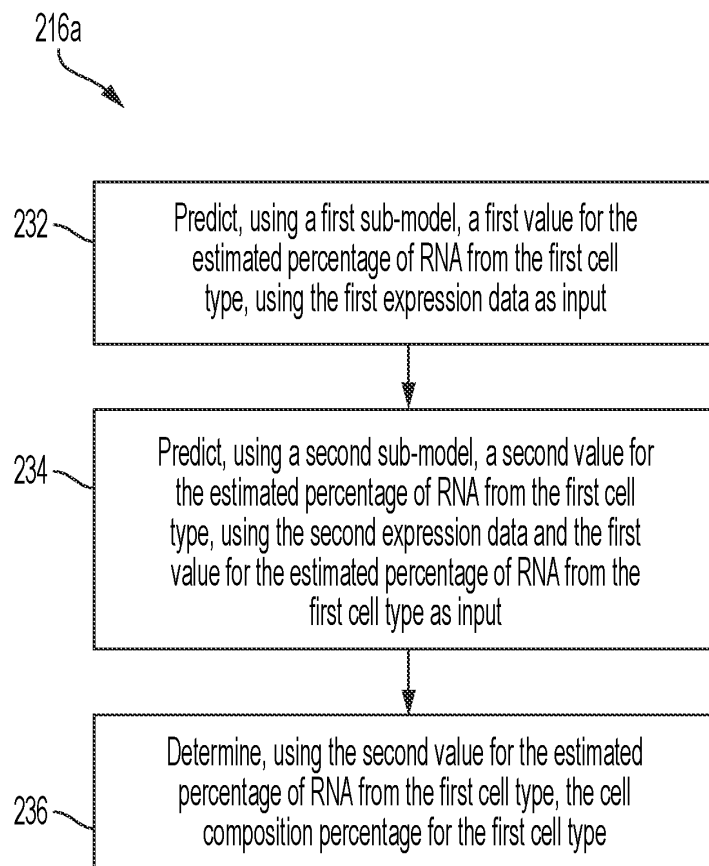


FIG. 2C

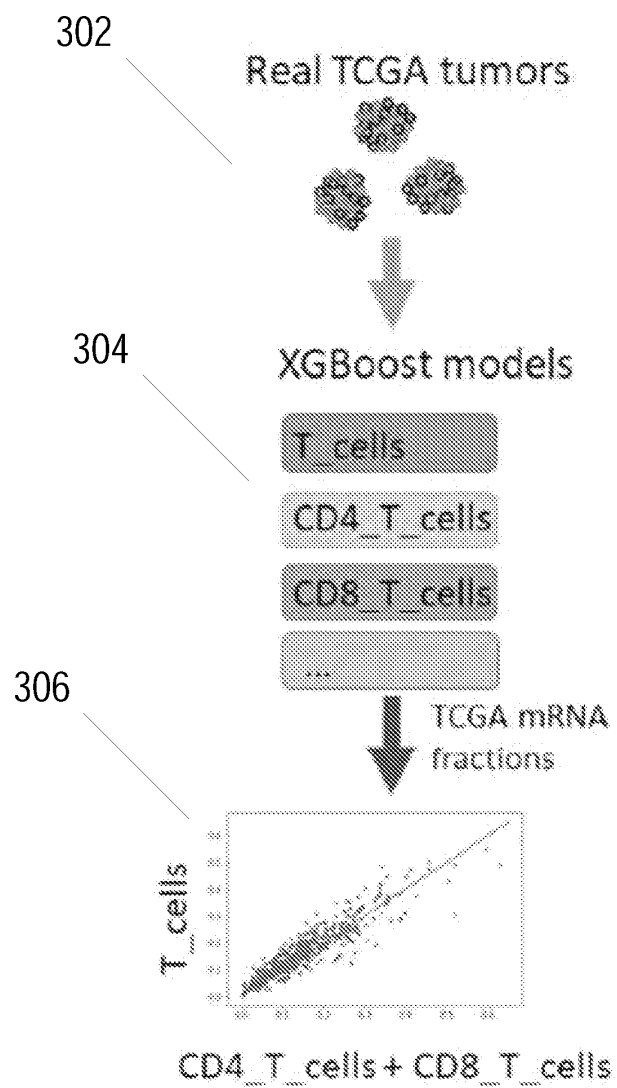


FIG. 3A

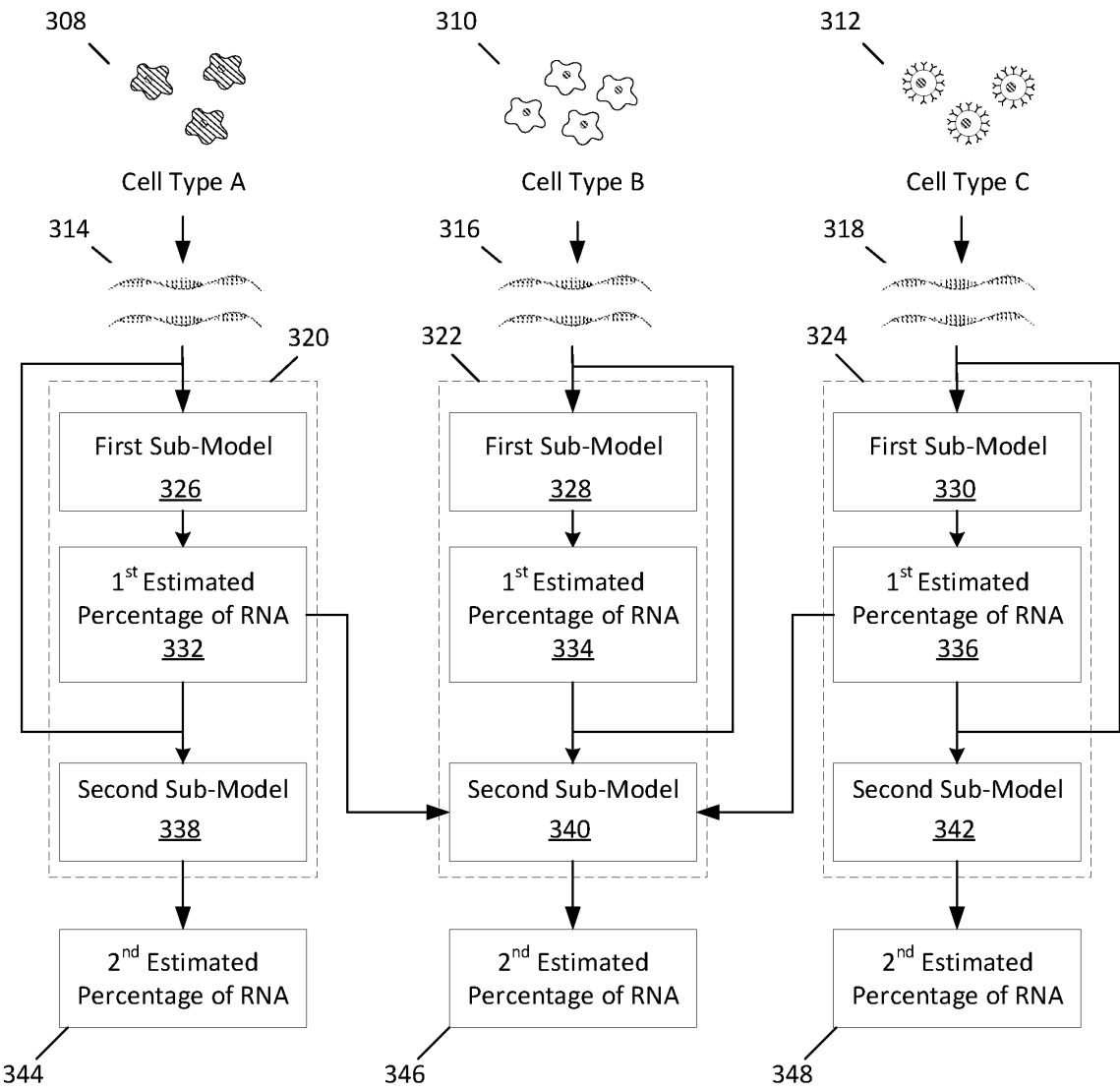


FIG. 3B

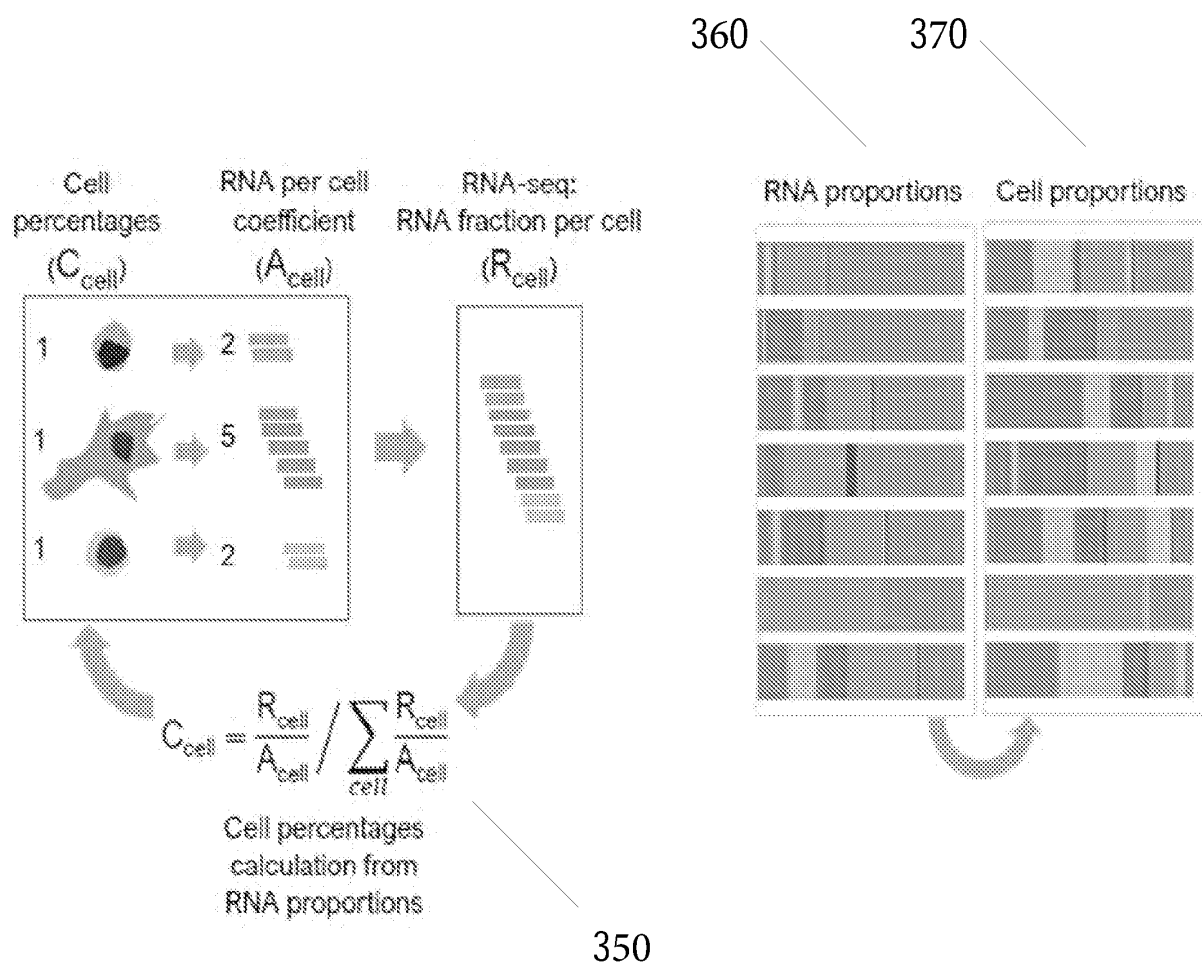
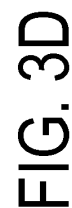


FIG. 3C



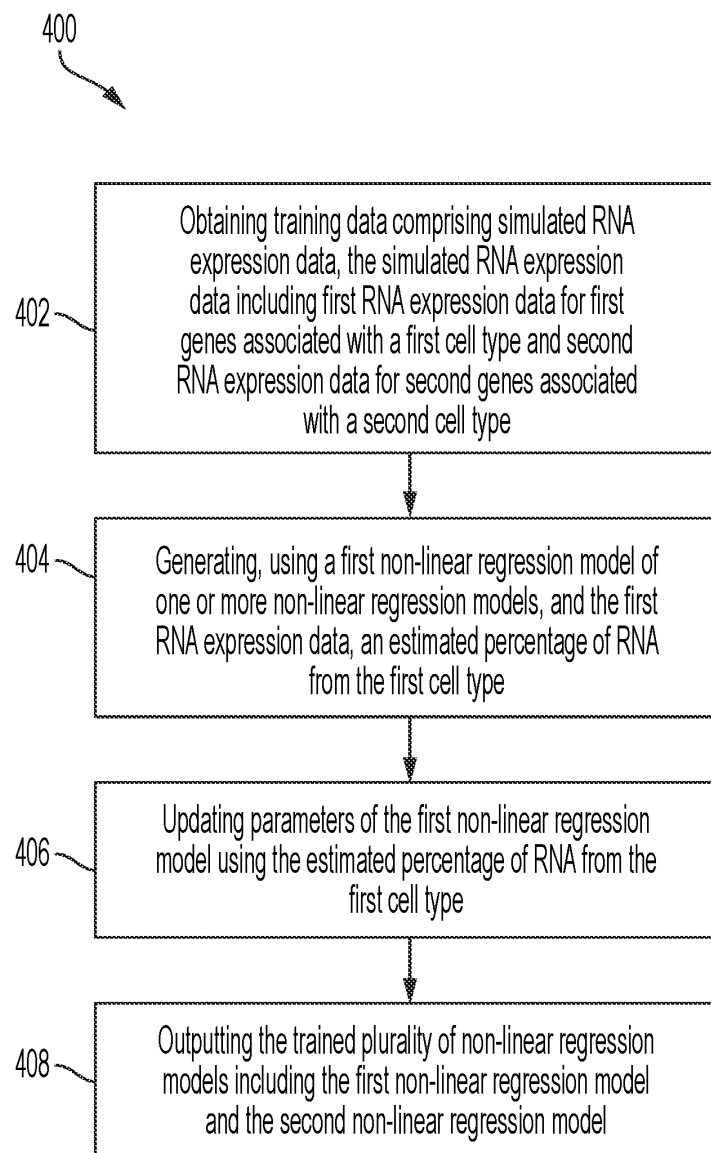


FIG. 4

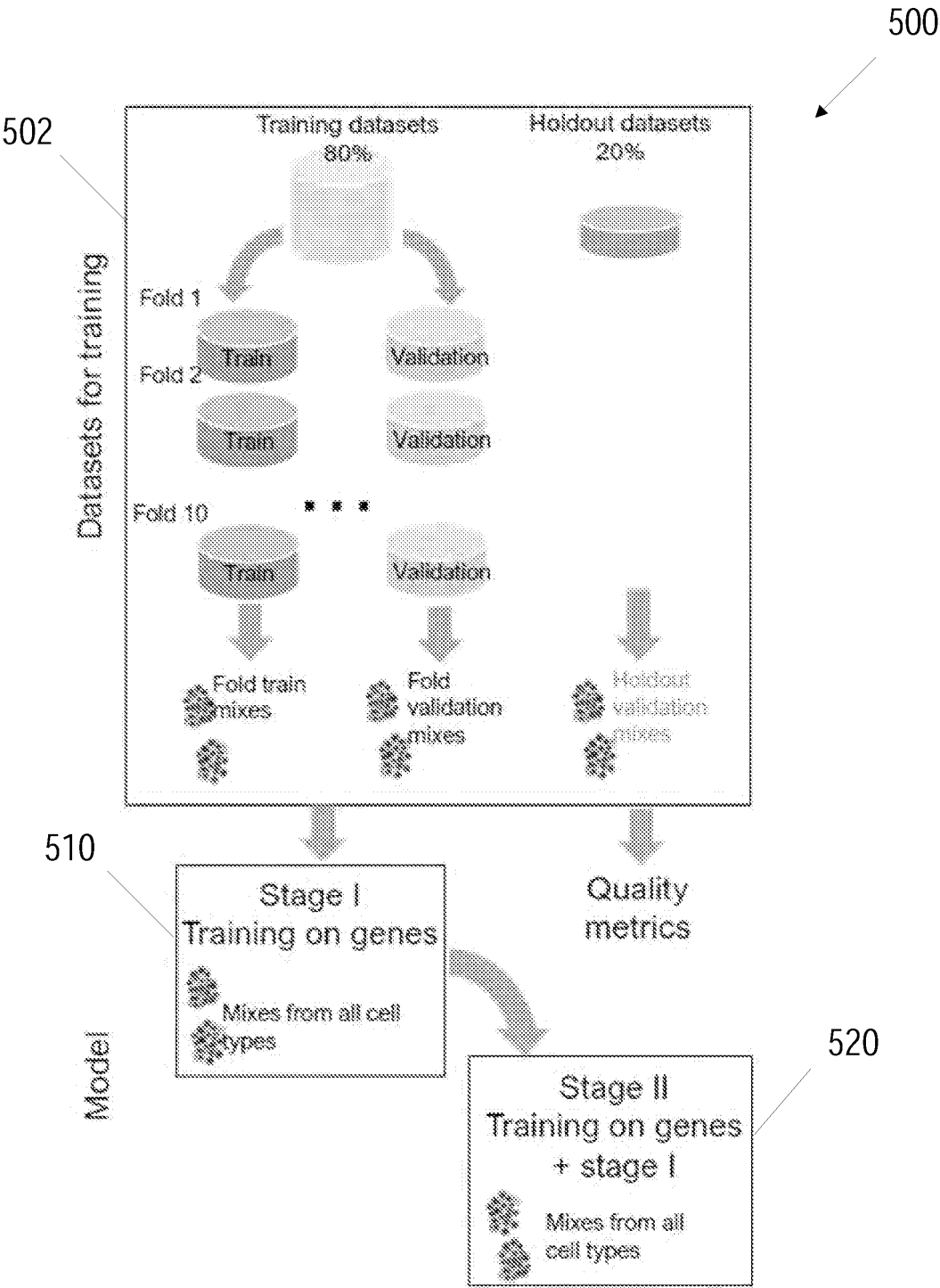


FIG. 5A

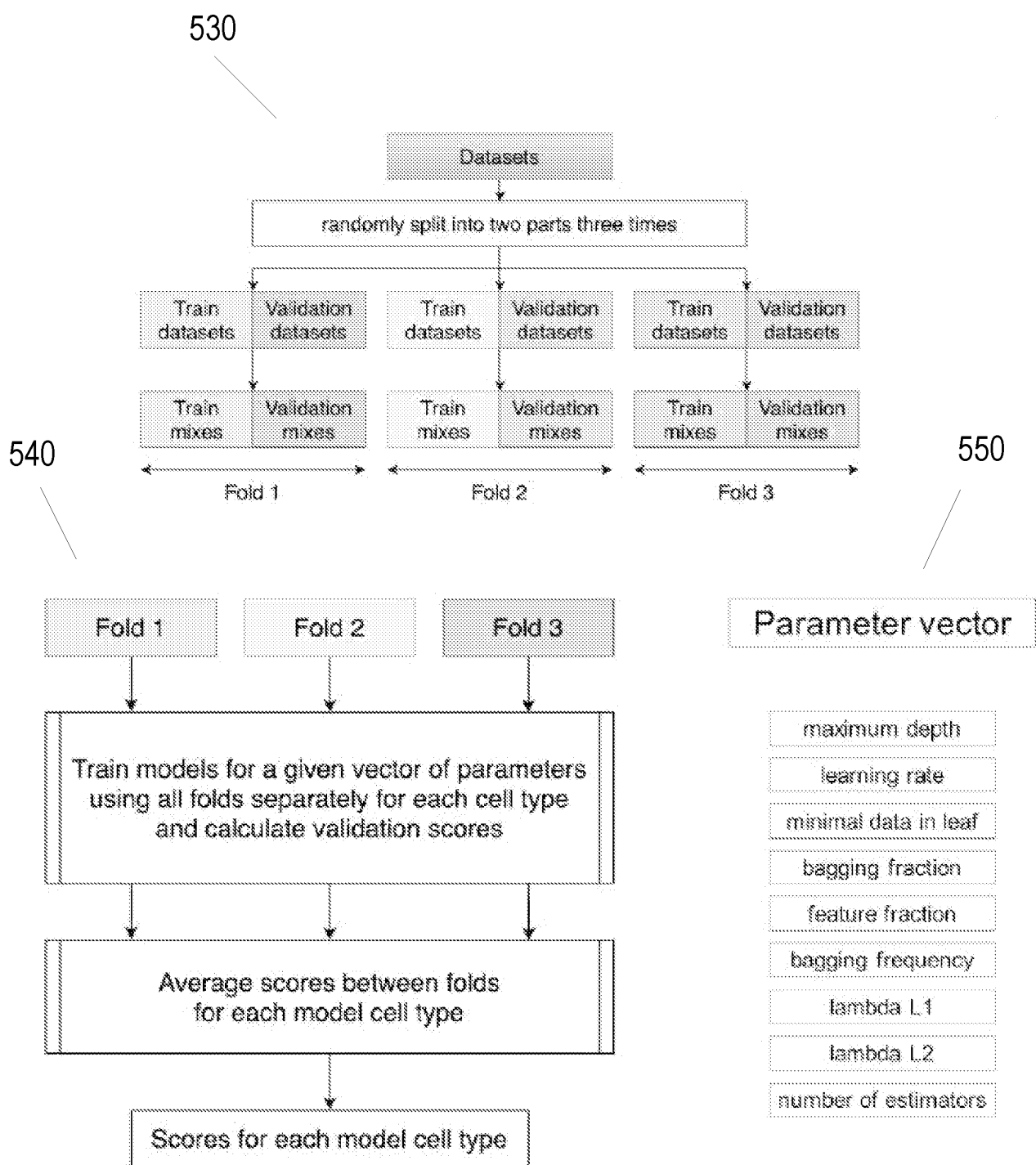


FIG. 5B

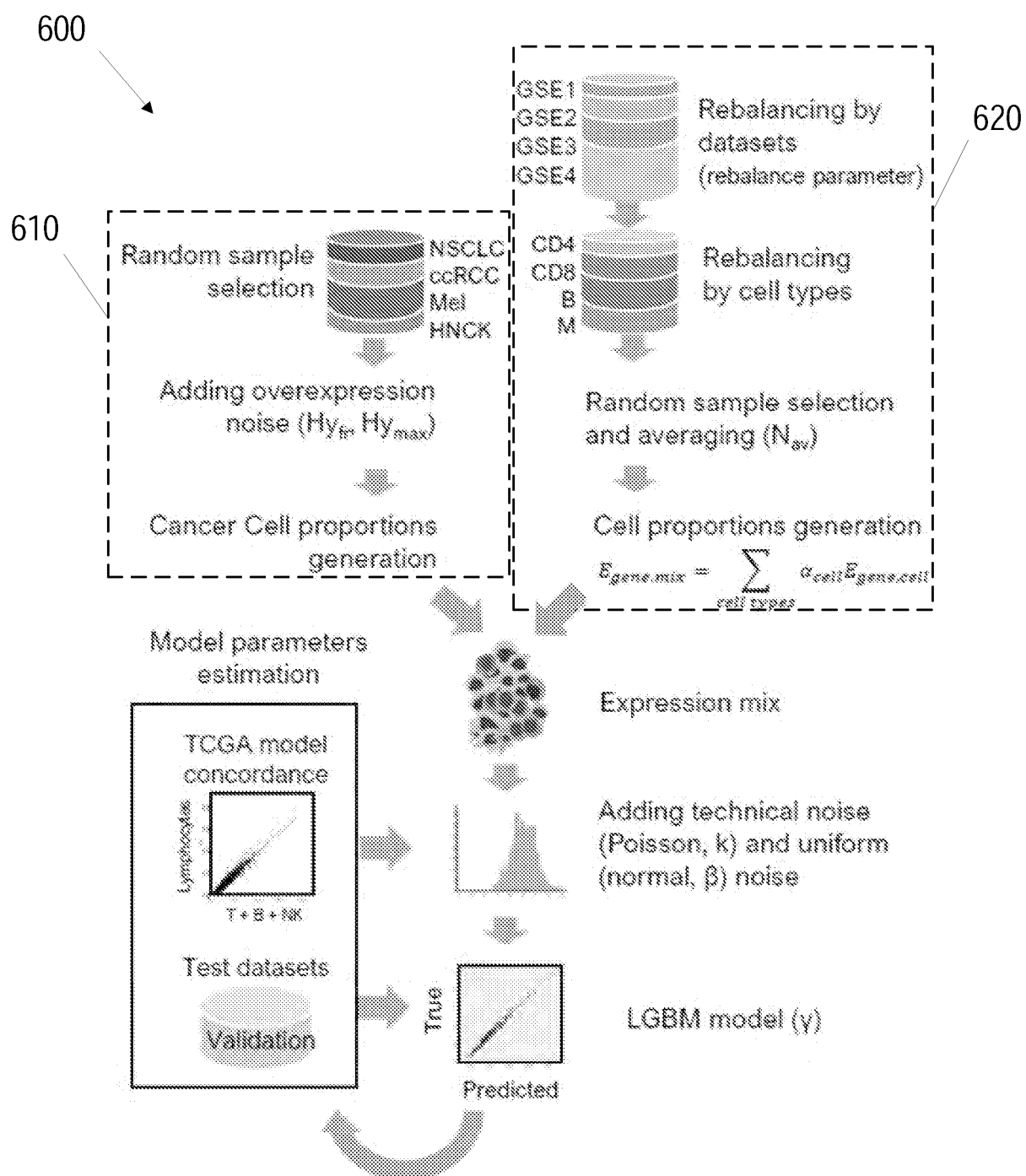


FIG. 6A

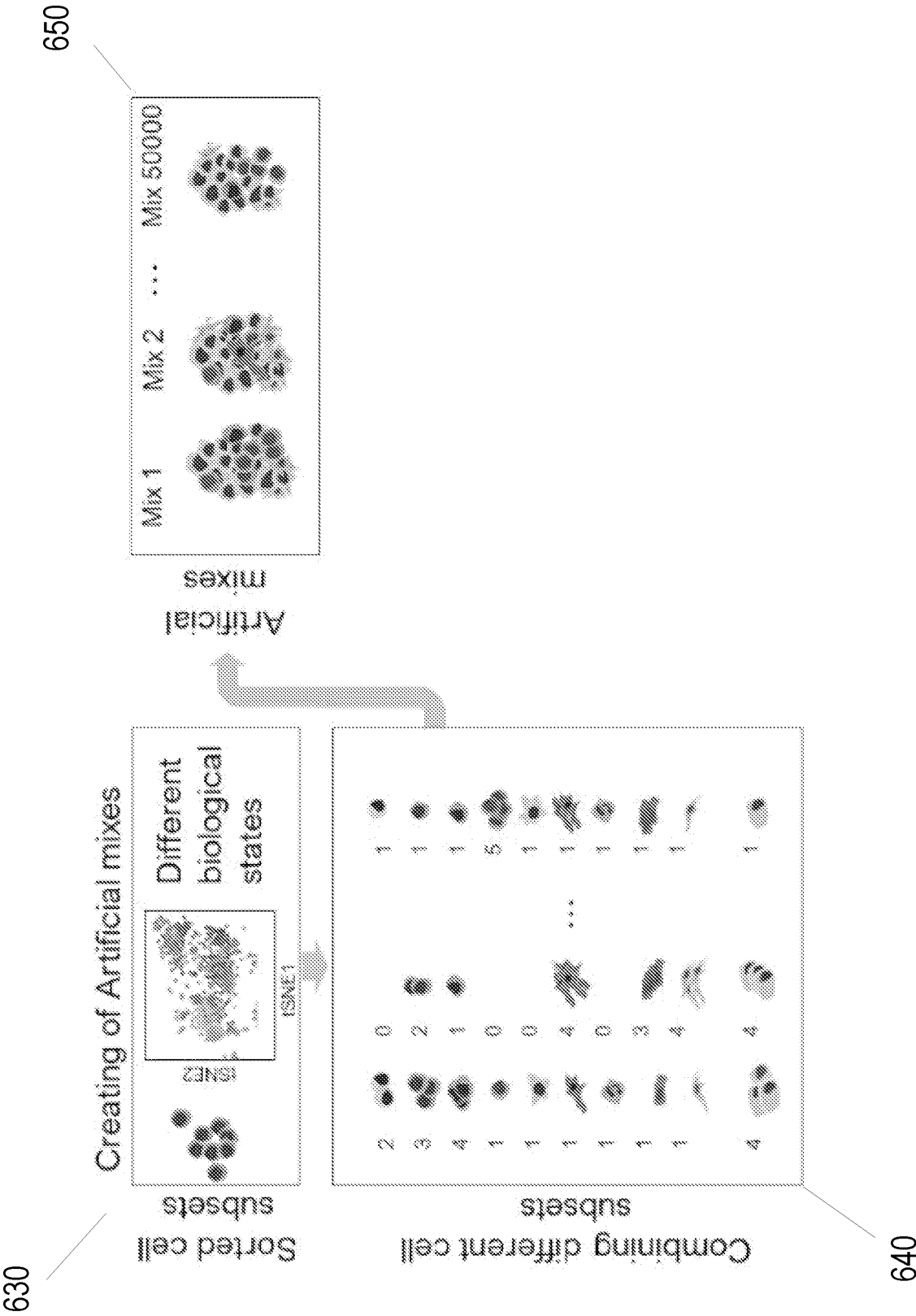


FIG. 6B

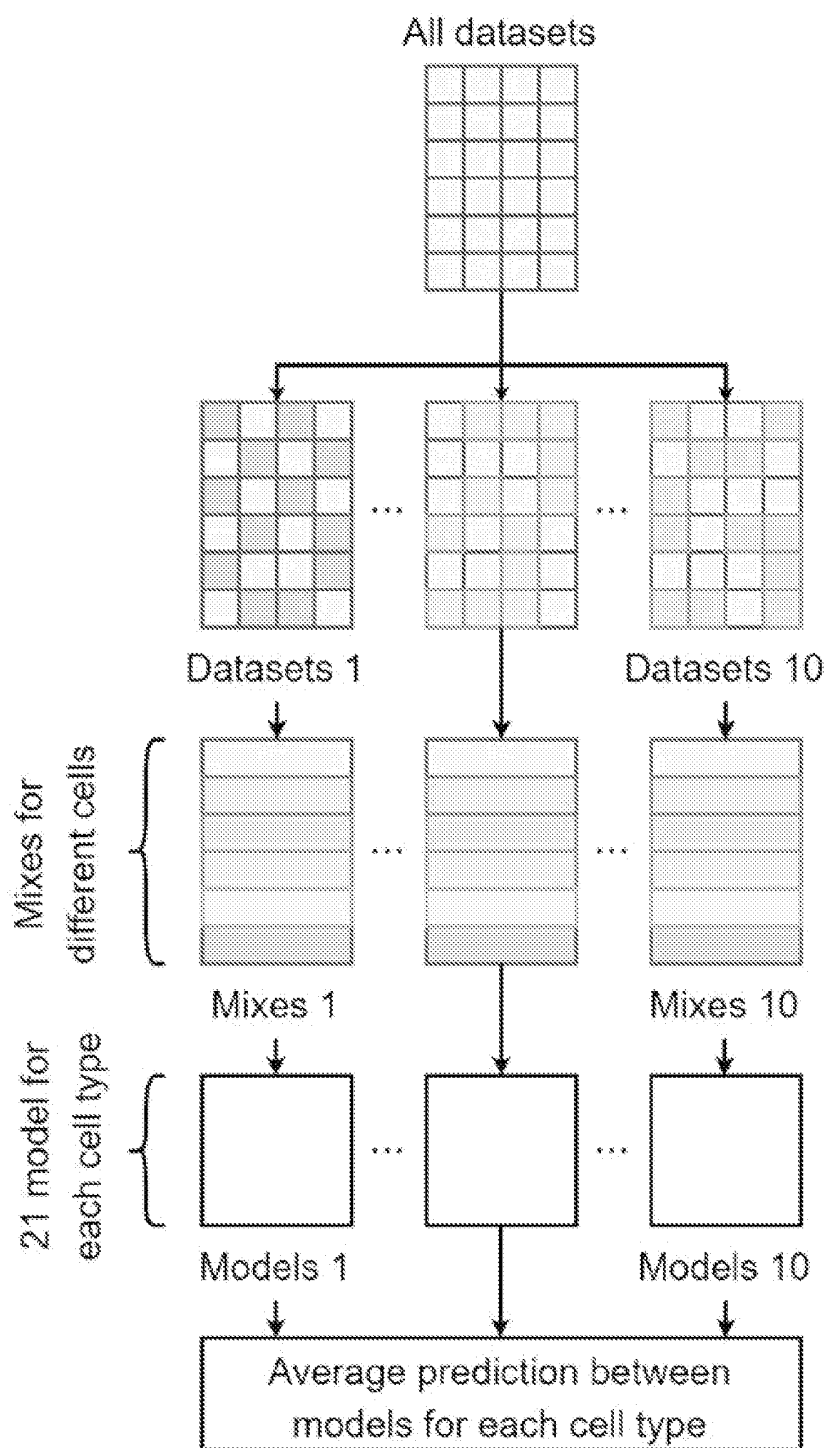


FIG. 6C

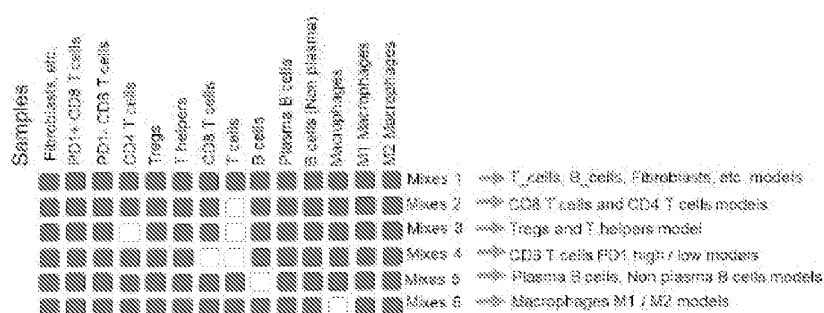


FIG. 6D

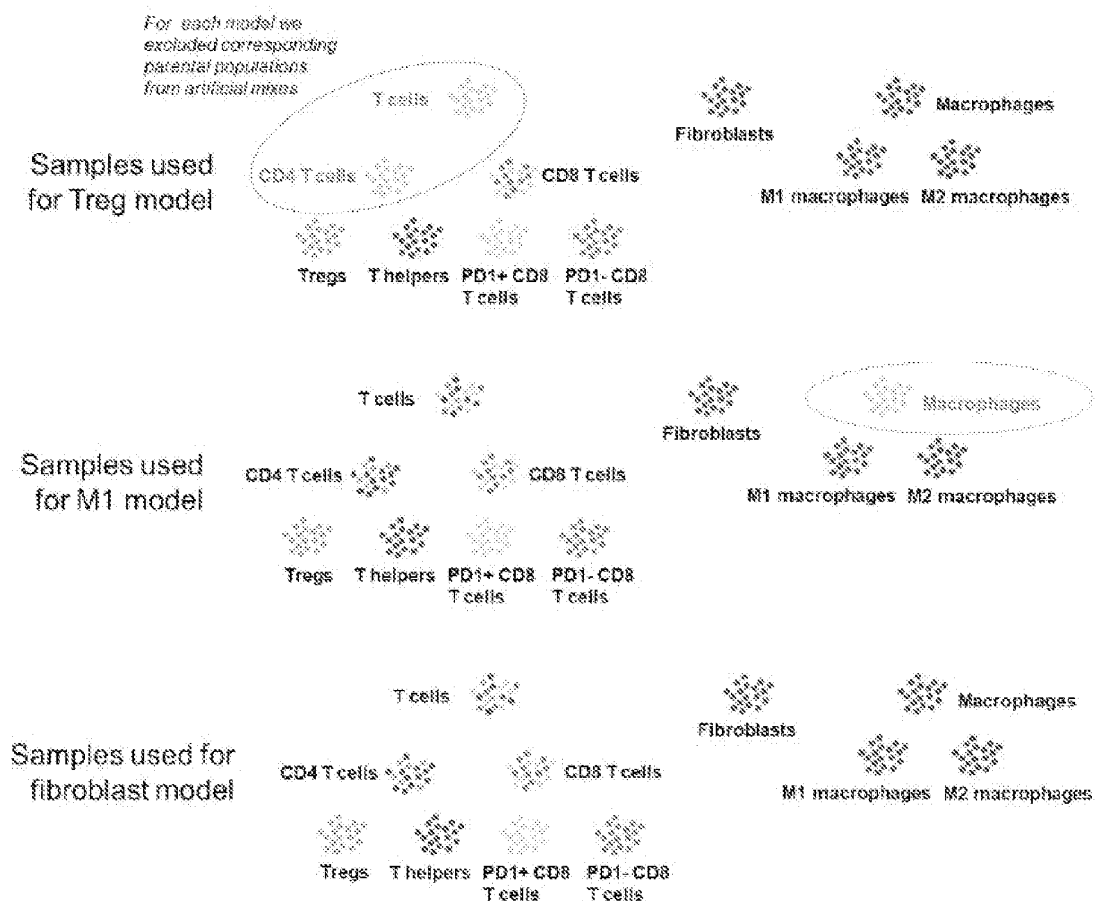


FIG. 6E

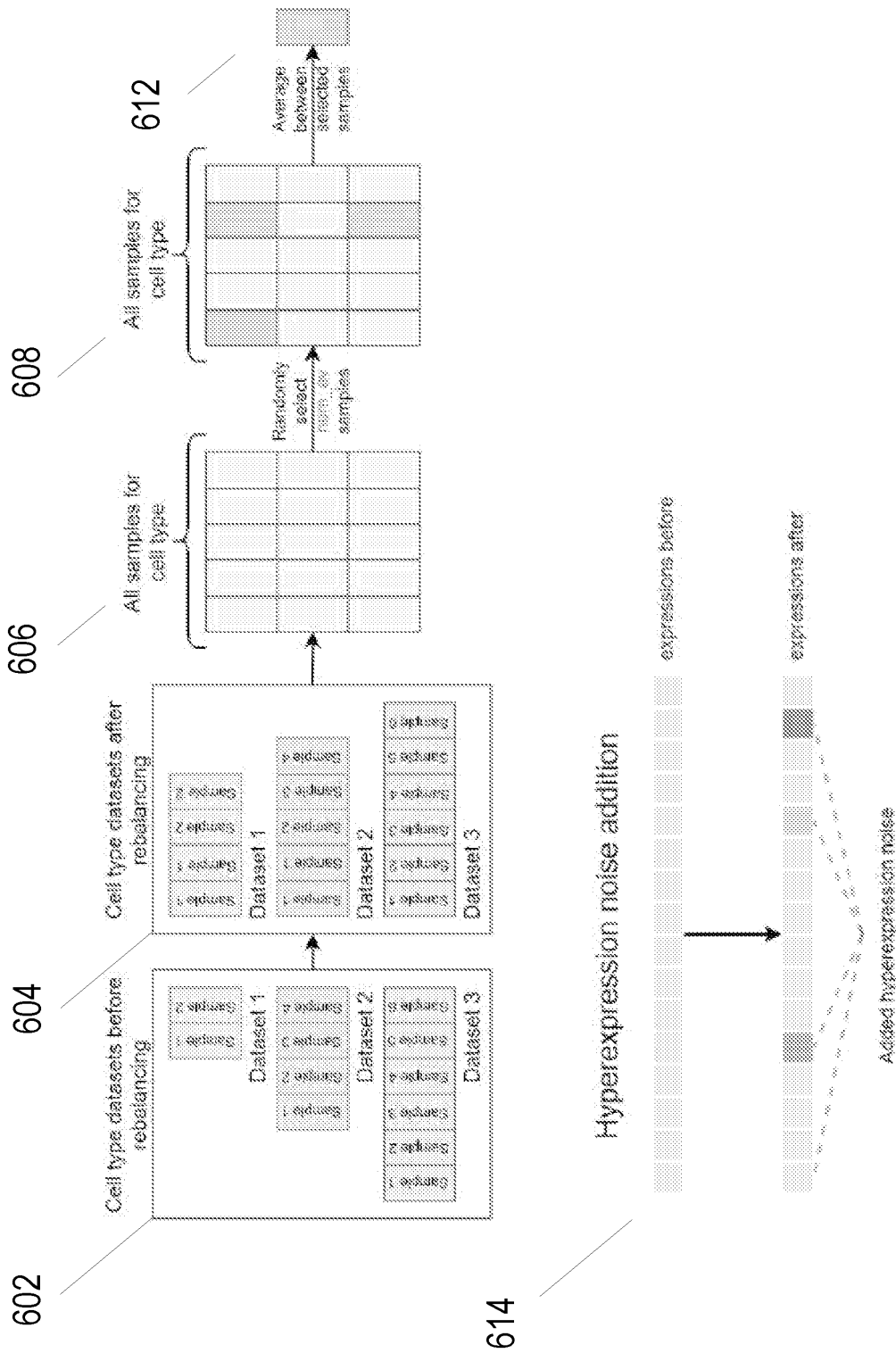


FIG. 6F

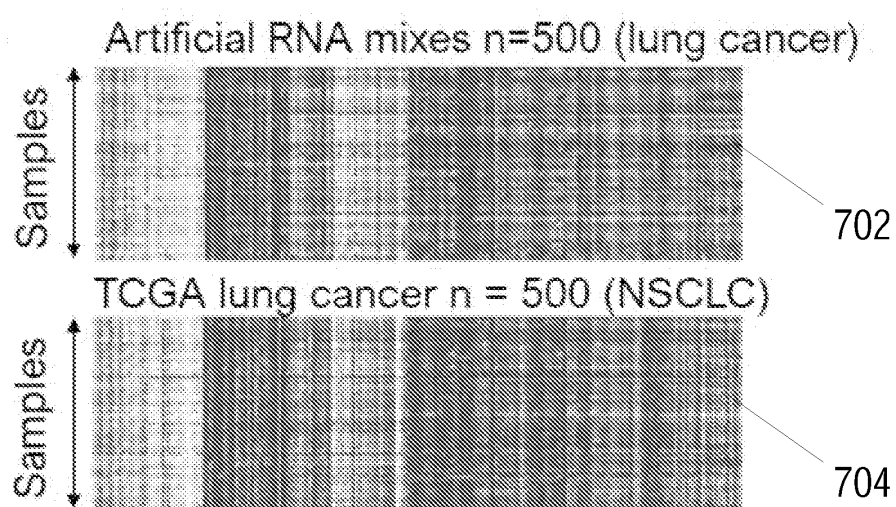


FIG. 7A

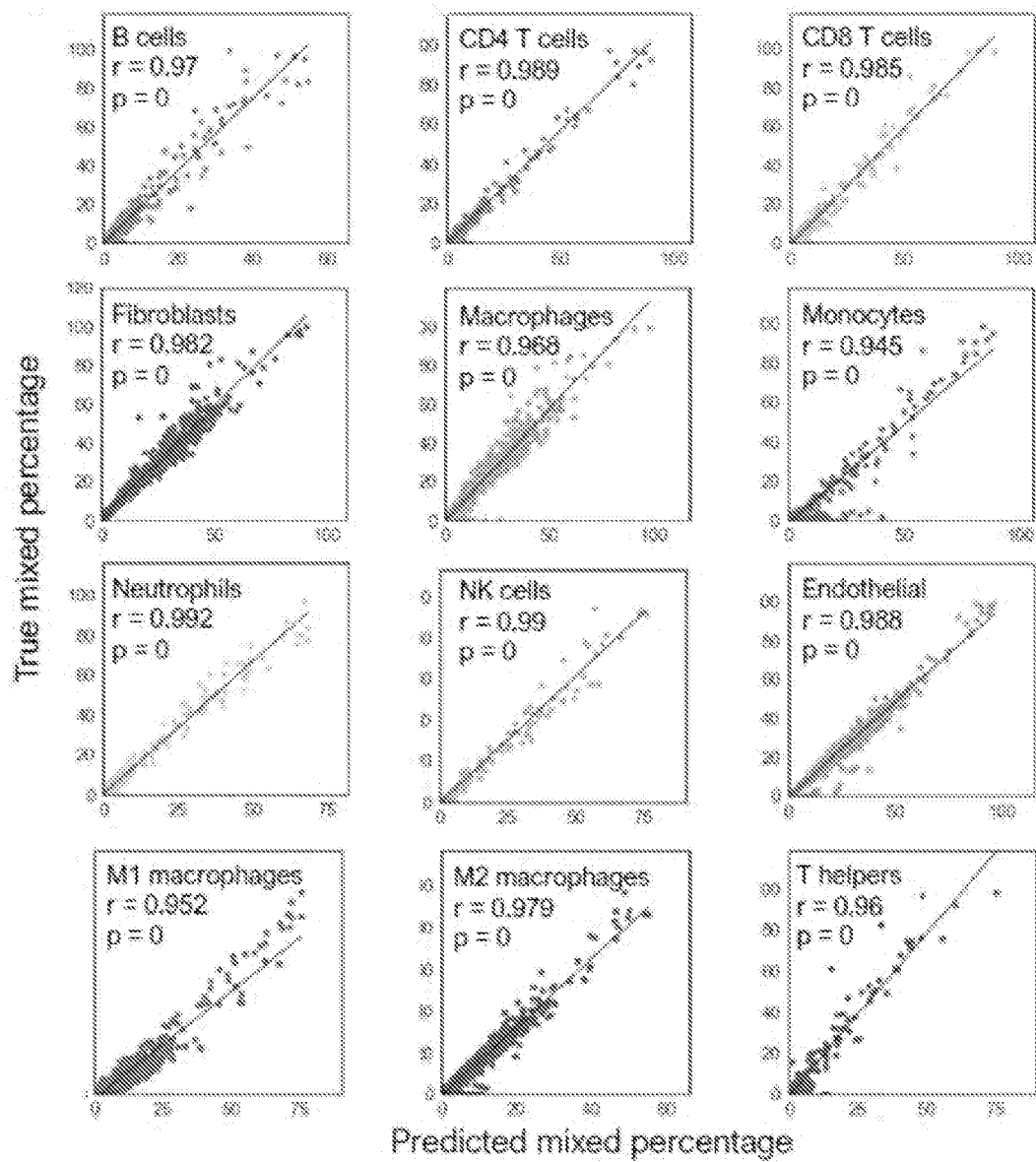


FIG. 7B

B cells	0.97	0.83	0.97	0.94	0.93	0.94	0.76	0.87	0.82	0.95	0.97	0.98	0.97
T cells	0.99	0.56	0.89	0.95	0.94	0.96	0.75	0.91	0.71	0.94	0.9	0.88	0.96
CD4 T cells	0.99	0.62	0.77	0.95	0.93			0.86	0.67	0.78	0.82	0.8	
Tregs	0.91			0.9	0.89			0.78					
T helpers	0.95			0.84	0.8								
CD8 T cells	0.99	0.56	0.9	0.95	0.95			0.72	0.74	0.8	0.94	0.94	0.97
NK cells	0.99		0.96	0.97	0.97	0.97	0.82	0.86	0.83	0.96	0.93	0.93	0.98
Neutrophils	0.99		0.96	0.9	0.9	0.97	0.87	0.91	0.88	0.96	0.97		0.96
Monocytes	0.95		0.87	0.83	0.93	0.92	0.7	0.65	0.74	0.61	0.69		0.12
Macrophages	0.97	0.77	0.94	0.87	0.86	0.91	0.66	0.94	0.7			0.81	
M1 Macrophages	0.96		0.97	0.82	0.8	0.95	0.73	0.74	0.79				
M2 Macrophages	0.98		0.68	0.97	0.97	0.59	0.47	0.89	0.58				
Endothelial cells	0.99	0.86						0.91				0.96	0.99
Fibroblasts	0.98	0.9						0.94				0.93	0.97
	Kassandra	CIBERSORTX (HNSC)	CIBERSORTX (LM22)	Quantiseq	Quantiseq (Tumor)	Fardeep-absolute	Fardeep-relative	Xcel	CIBERSORT	ABIS	EPIC BRef	EPIC TRef	MCP-counter

FIG. 7C

+ Cancer cell overexpression noise

B cells	0.96	0.15	0.91	0.81	0.8	0.53	0.81	0.85	0.86	0.95	0.94	0.94	0.88
T cells	0.99	0.48	0.78	0.67	0.67	0.96	0.77	0.91	0.71	0.93	0.68	0.66	0.69
CD4 T cells	0.99	0.63	0.74	0.69	0.69	0.88	0.78	0.9	0.74	0.81	0.7	0.75	
Tregs	0.92			0.77	0.76	0.73	0.71	0.79					
T helpers	0.96			0.51	0.5								
CD8 T cells	0.99	0.53	0.89	0.89	0.89	0.81	0.55	0.72	0.73	0.85	0.89	0.82	0.8
NK cells	0.99		0.95	0.82	0.74	0.97	0.87	0.92	0.88	0.96	0.94	0.93	0.52
Neutrophils	0.99		0.95	0.77	0.77	0.97	0.84	0.89	0.87	0.94	0.87		0.74
Monocytes	0.96		0.83	0.67	0.68	0.93	0.72	0.63	0.75	0.62	0.57		0.068
Macrophages	0.97	0.67	0.81	0.76	0.75	0.91	0.65	0.93	0.73			0.83	
M1 Macrophages	0.96		0.95	0.77	0.76	0.94	0.78	0.73	0.84				
M2 Macrophages	0.99		0.67	0.82	0.8	0.62	0.53	0.86	0.52				
Endothelial cells	0.99	0.64						0.92				0.92	0.86
Fibroblasts	0.98	0.7						0.94				0.92	0.96
	Kassandra	CIBERSORTX (HNSC)	CIBERSORTX (LM22)	Quantiseq	Quantiseq (Tumor)	Fardeep-absolute	Fardeep-relative	Xcel	CIBERSORT	ABIS	EPIC BRef	EPIC Tref	MCP-counter

FIG. 7D

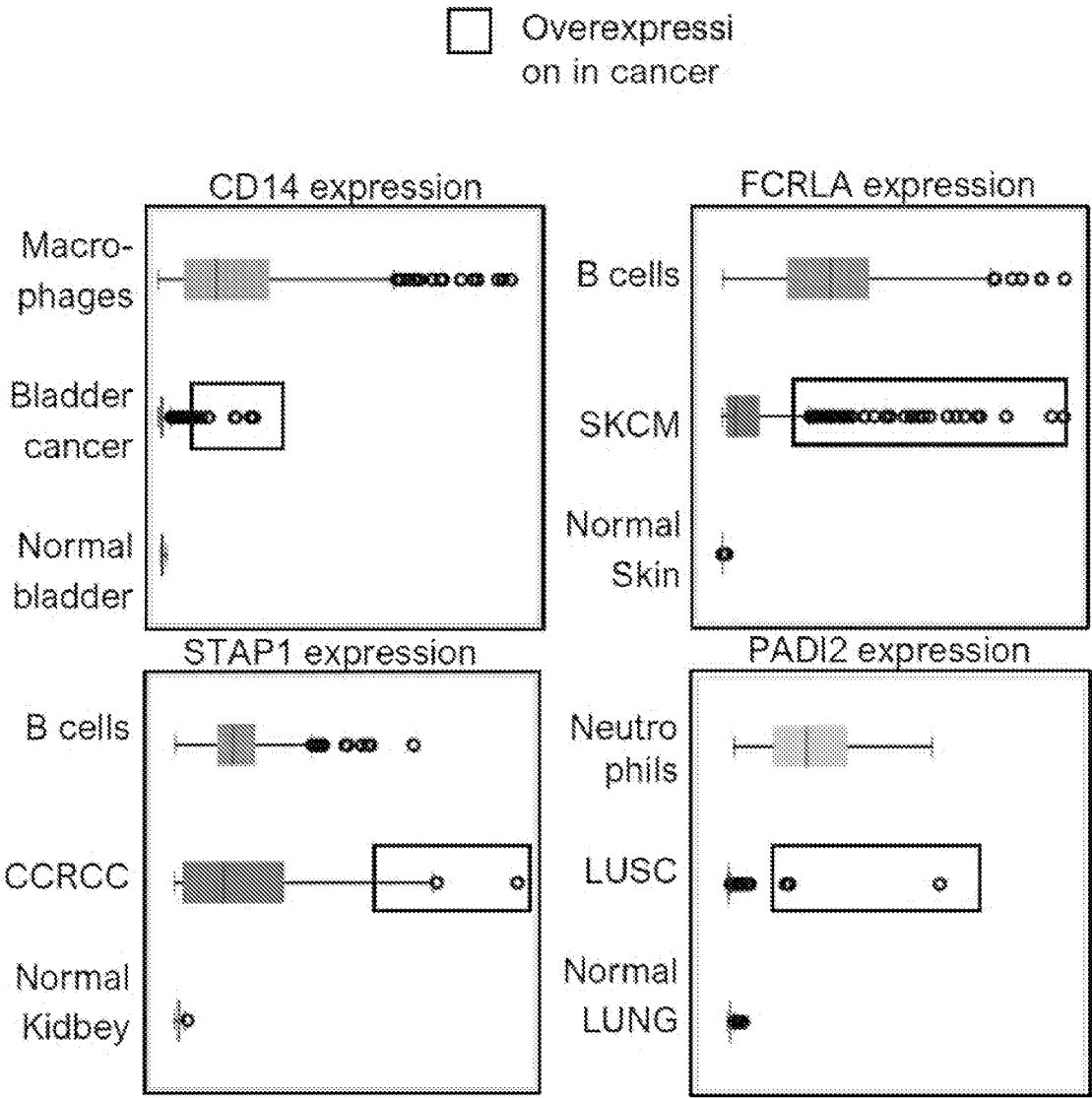


FIG. 7E

Predictions	B cells	87	0.1	0.1	0.1	0.1	0.1	3.9	0.9	0	0.1	0.3	0	0.2	0.1	0.2
	T cells	0.5	96	95	93	94	90	6.1	2.3	2.5	1.3	1	0.2	0.3	0.2	0.4
	CD4 T cells	0.3	55	94	91	94	1.2	0.7	0.8	0.8	0.2	0.6	0	0	0	0.1
	Tregs	0.1	3.4	10	89	21	0	0.1	0	0	0.1	0.3	0	0	0	0
	T helpers	0.2	52	84	1.9	73	1.2	0.6	0.8	0.8	0.1	0.3	0	0	0	0
	CD8 T cells	0.2	0	0.5	1.7	0.2	85	3.4	1.5	1.7	1.1	0.4	0.2	0.2	0.2	0.3
	NK cells	0.2	1.1	0.8	0.2	1.1	7.9	88	0.8	0	0.1	1	0	0.1	0	0.1
	Monocytes	0	2.1	3.2	0	2.2	1.5	0	86	0.9	28	1.9	3.8	0	0	0
	Neutrophils	0	0.2	0.2	0	0.6	0.3	0.3	8.7	96	0.5	0.4	0.4	0	0.1	0
	Macrophages	0	0.1	0.1	0	0	0.1	1	0.6	0	70	91	78	0	0	0.1
	M1 Macrophages	0	0.1	0.1	0	0	0.1	0.3	0.2	0	50	89	10	0	0	0
	M2 Macrophages	0	0	0	0	0	0.1	0.8	0.3	0	13	2	67	0	0	0
	Endothelial cells	0	0	0	0	0	0	0	0	0	0	0	0	98	0	1.7
	Fibroblasts	0	0	0	0	0	0	0	0	0	0	0	0	0.1	95	1.5
	Other	12	0	0.2	6.4	1.5	0.1	0.1	0.2	0.3	0.4	4	18	1.3	0.6	96
		B cells	T cells	CD4 T cells	T regs	T helpers	CD8 T cells	NK cells	Monocytes	Neutrophils	Macrophages	M1 Macrophages	M2 Macrophages	Endothelial cells	Fibroblasts	Cancer cells
		Samples														

FIG. 7F

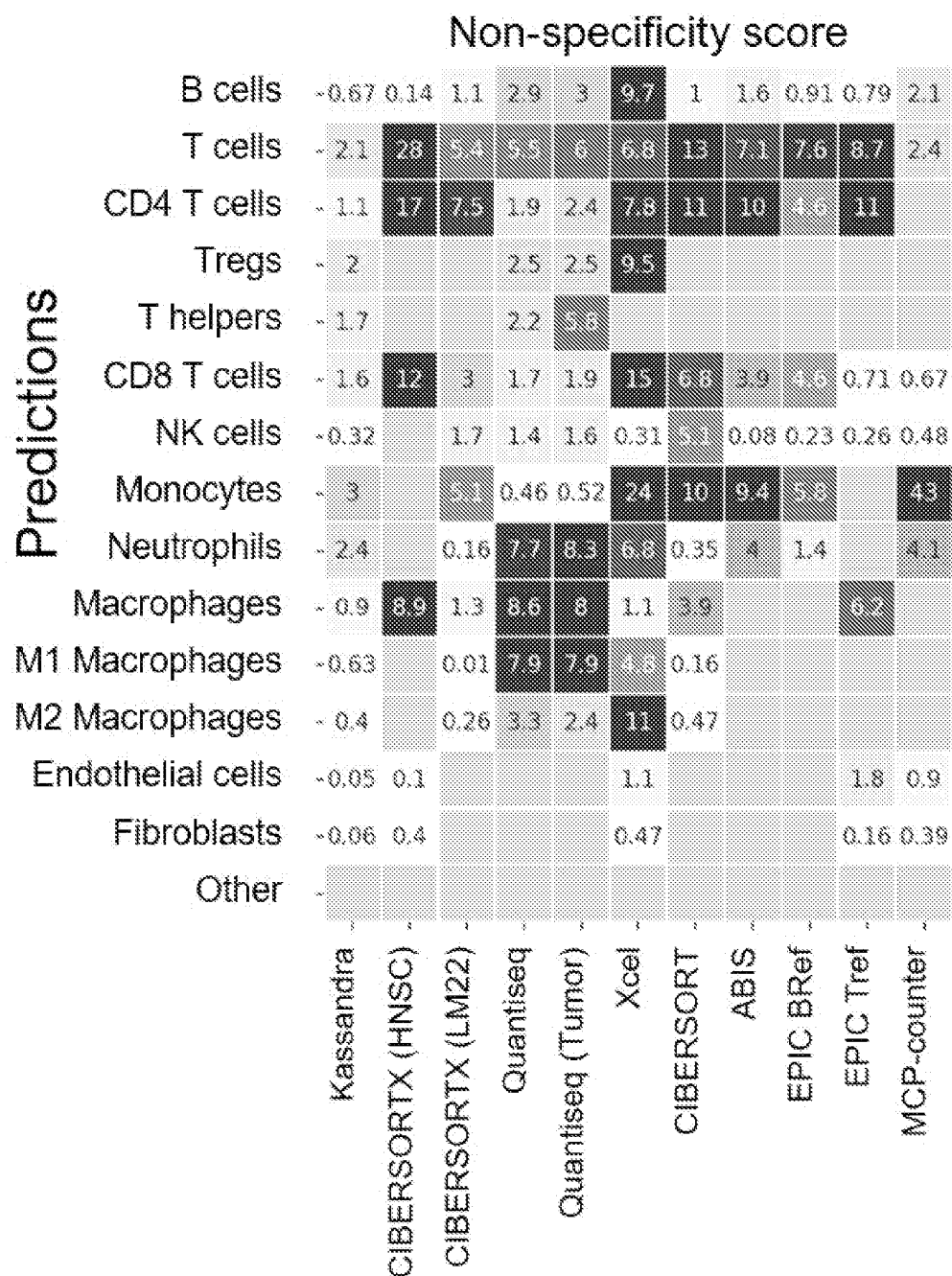


FIG. 7G

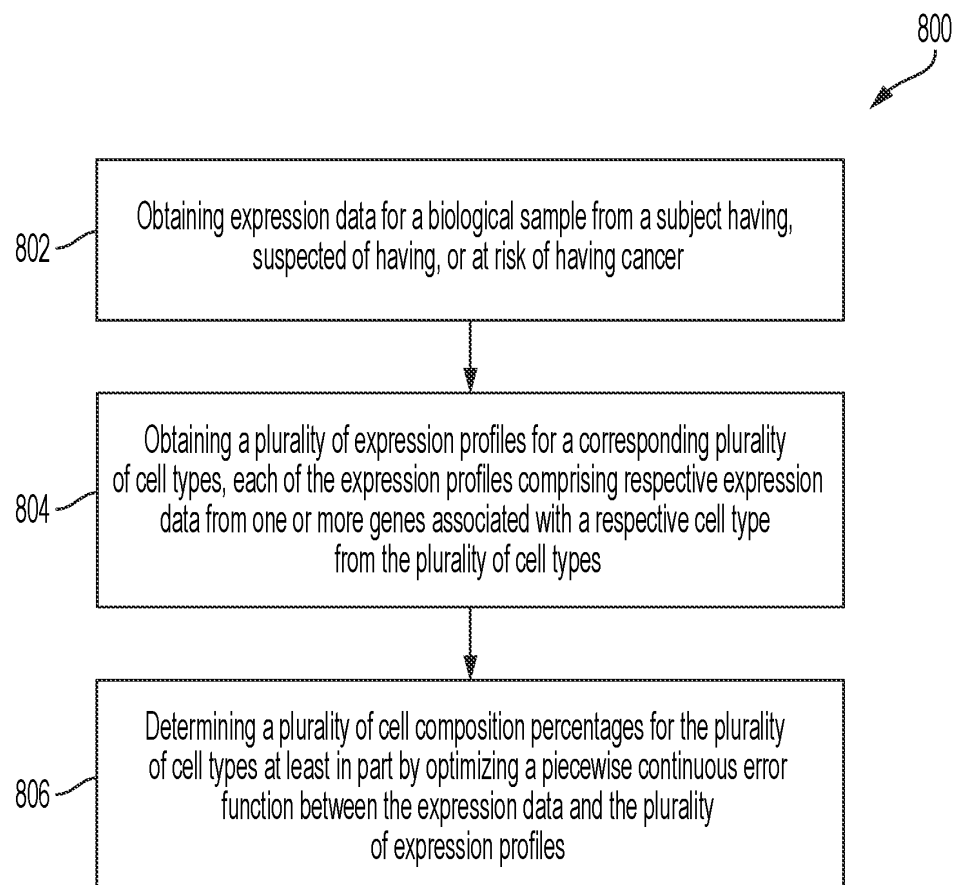


FIG. 8

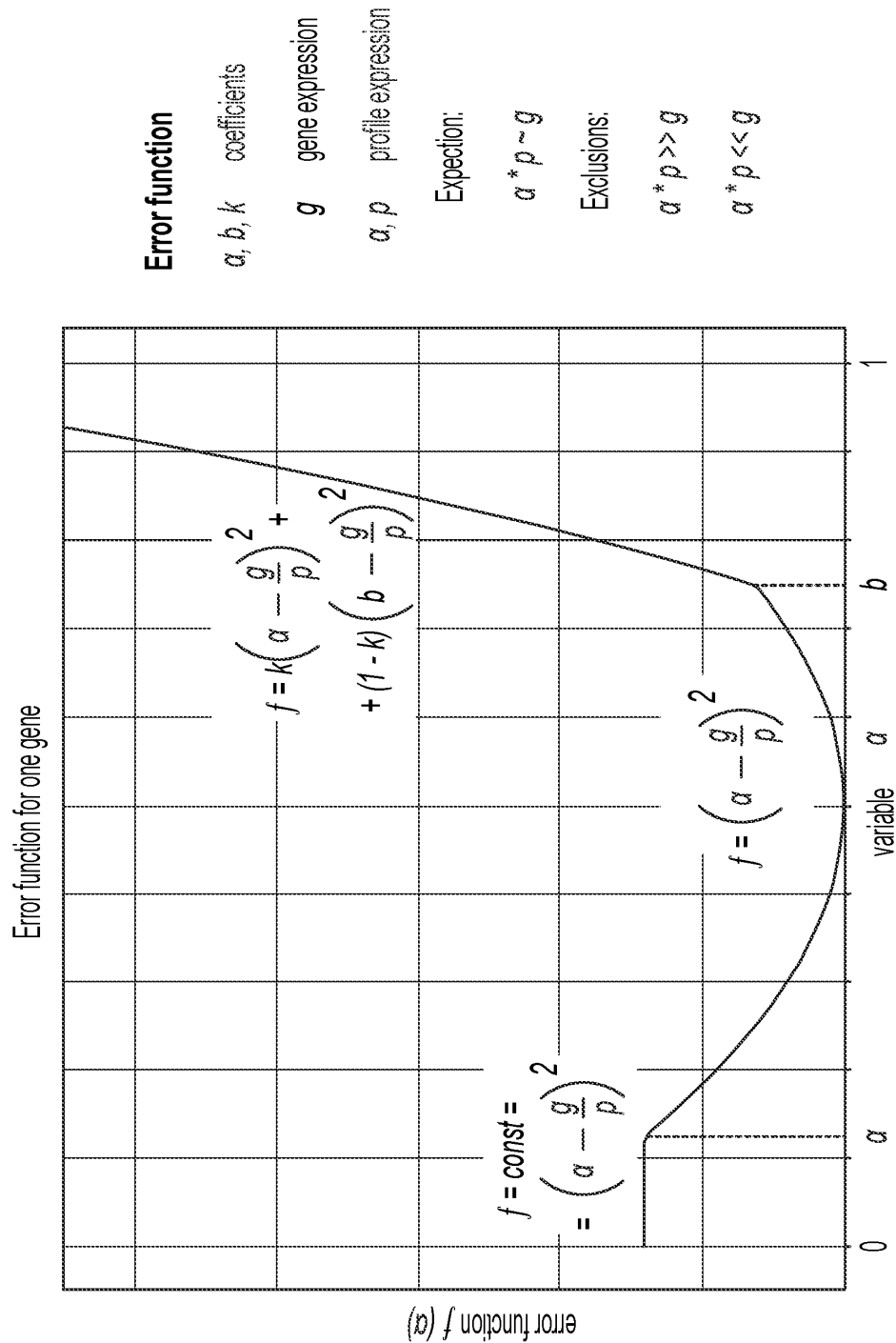


FIG. 9B

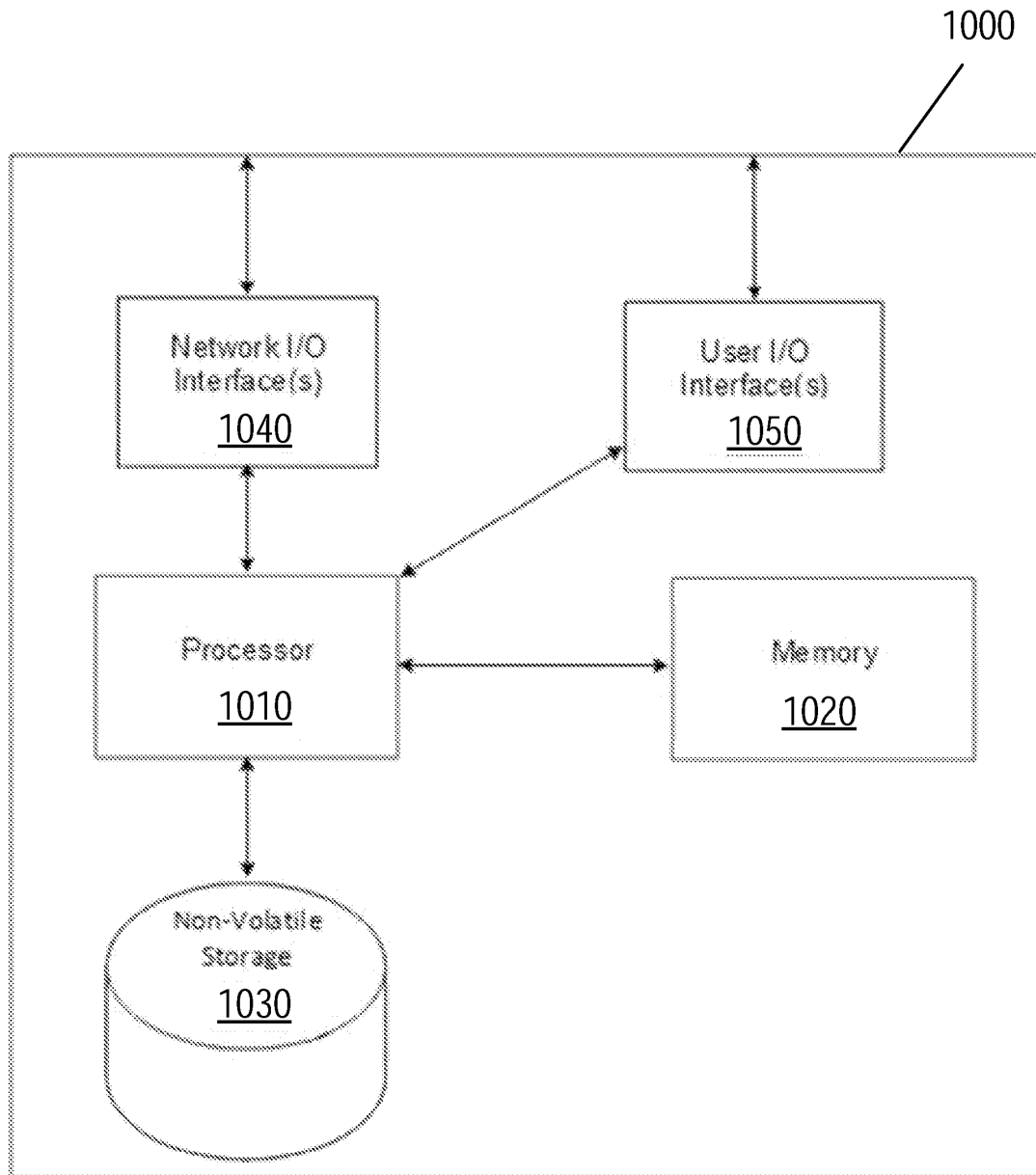


FIG. 10

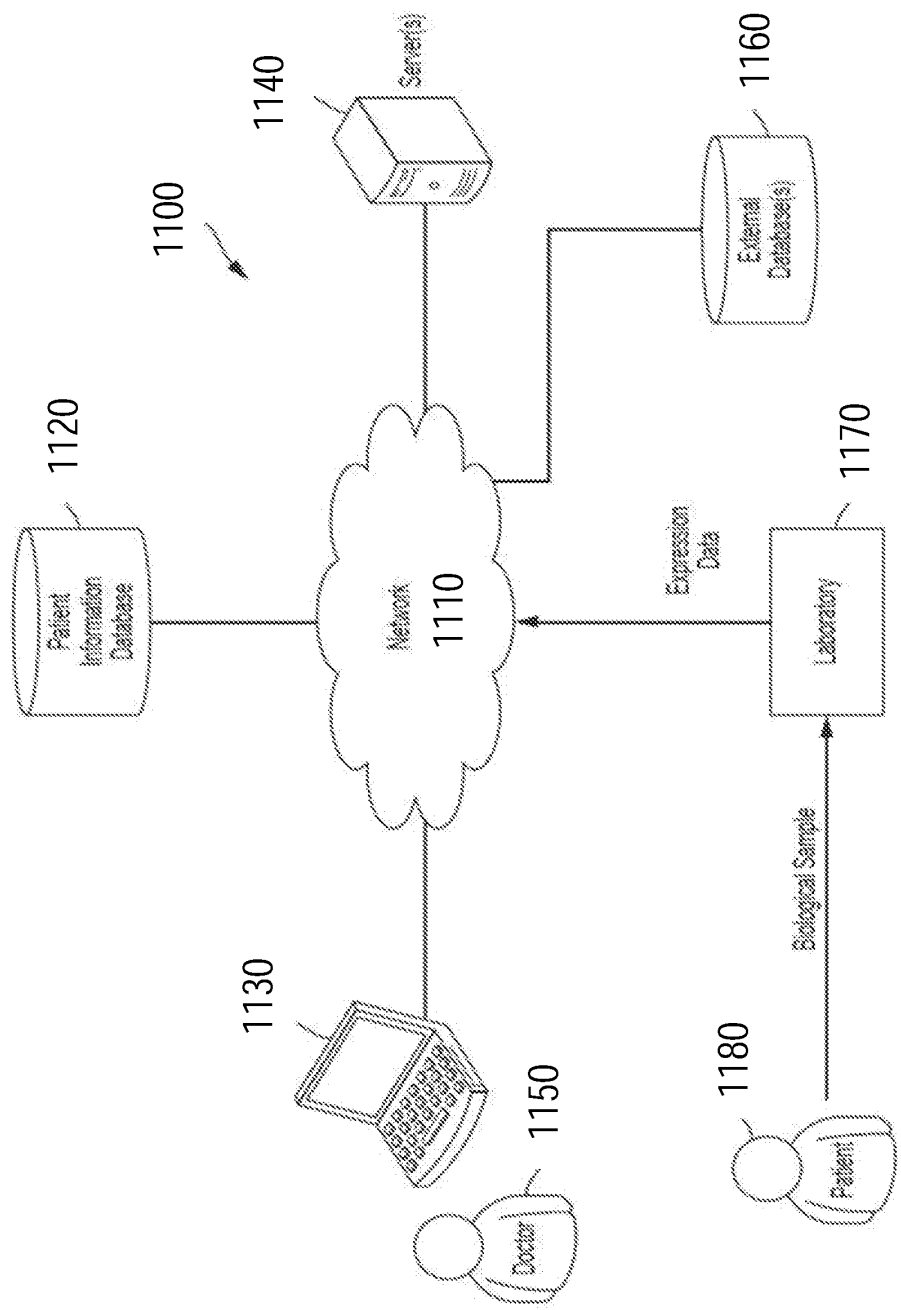


FIG. 11

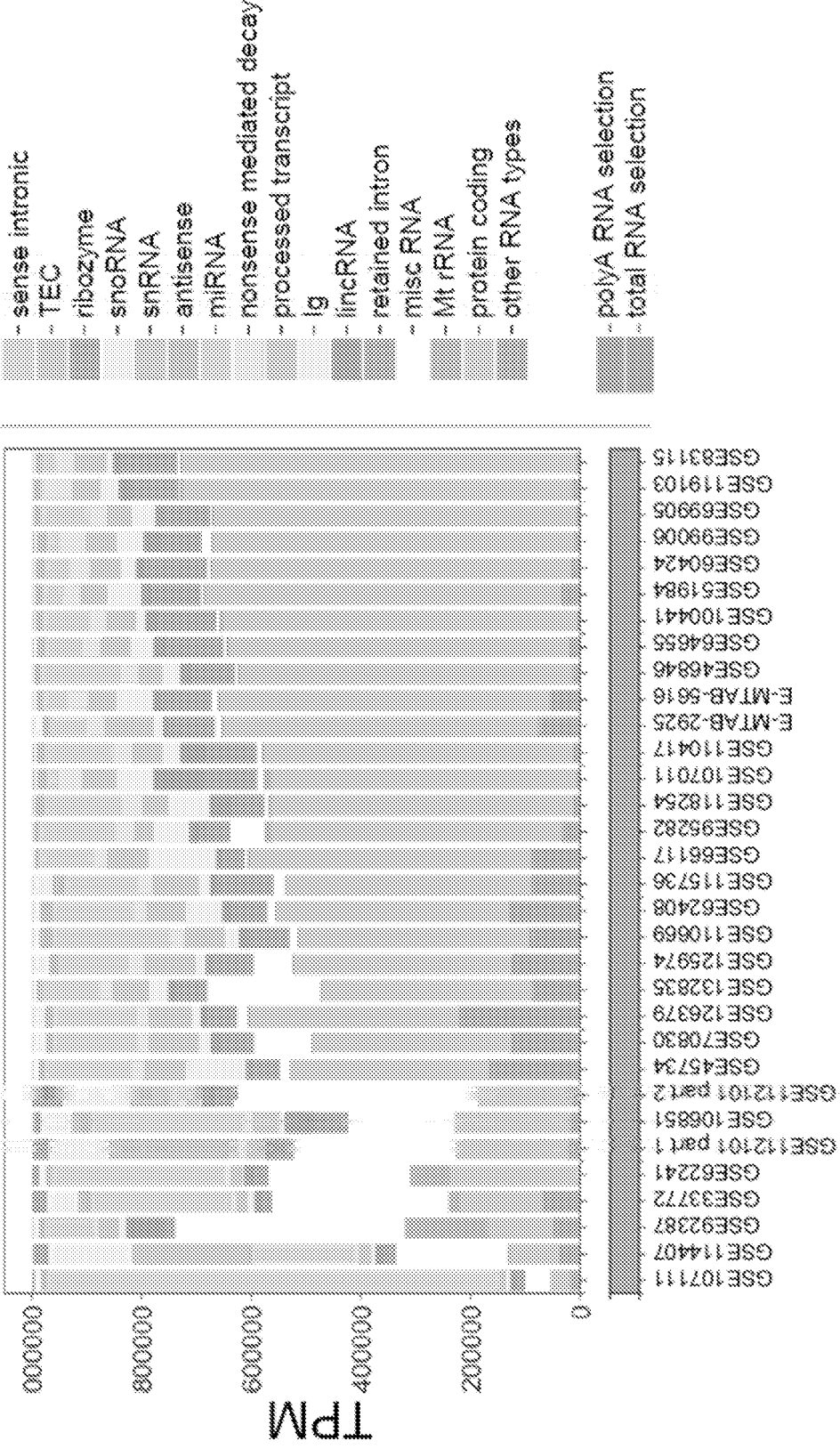


FIG. 12A

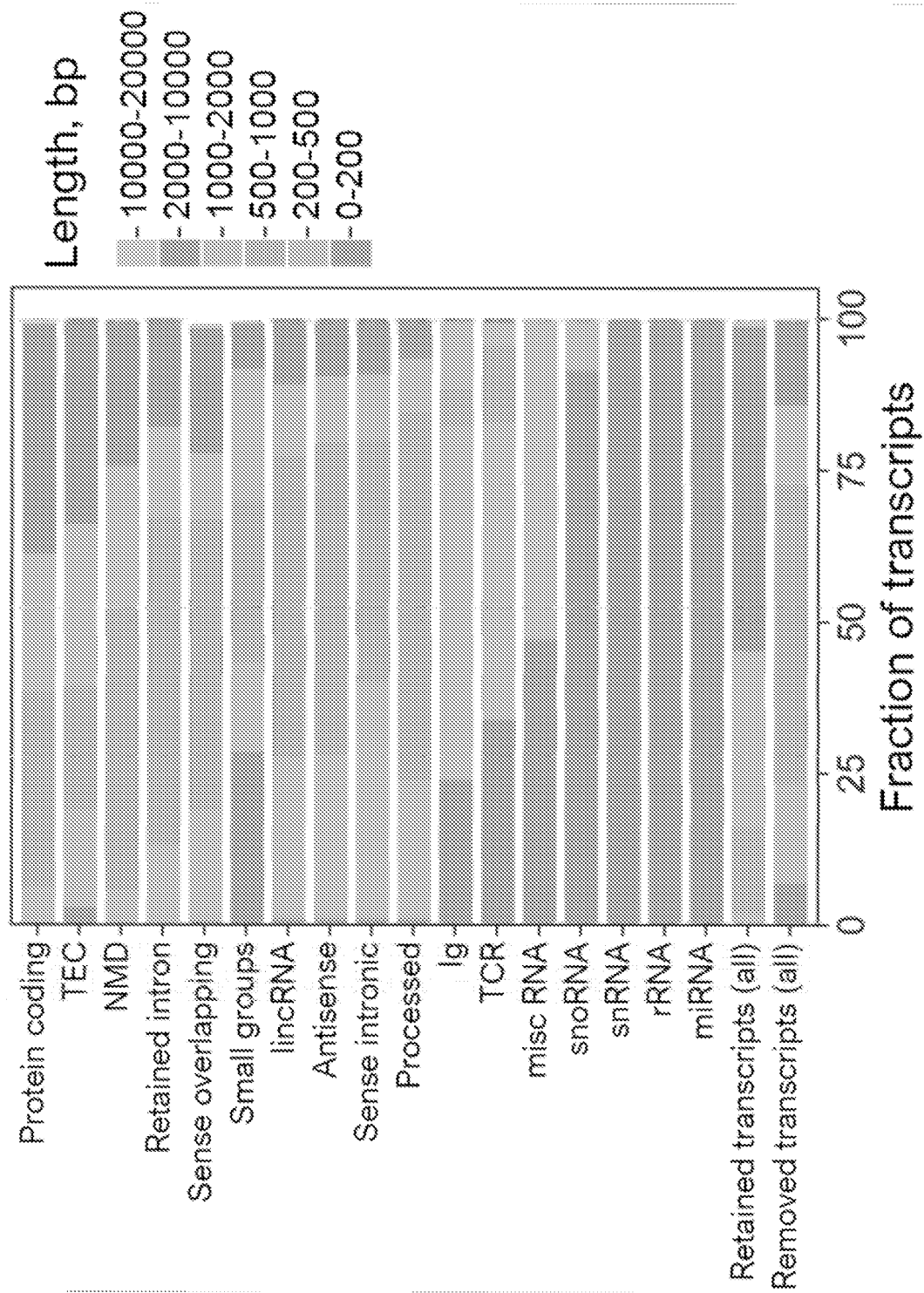


FIG. 12B

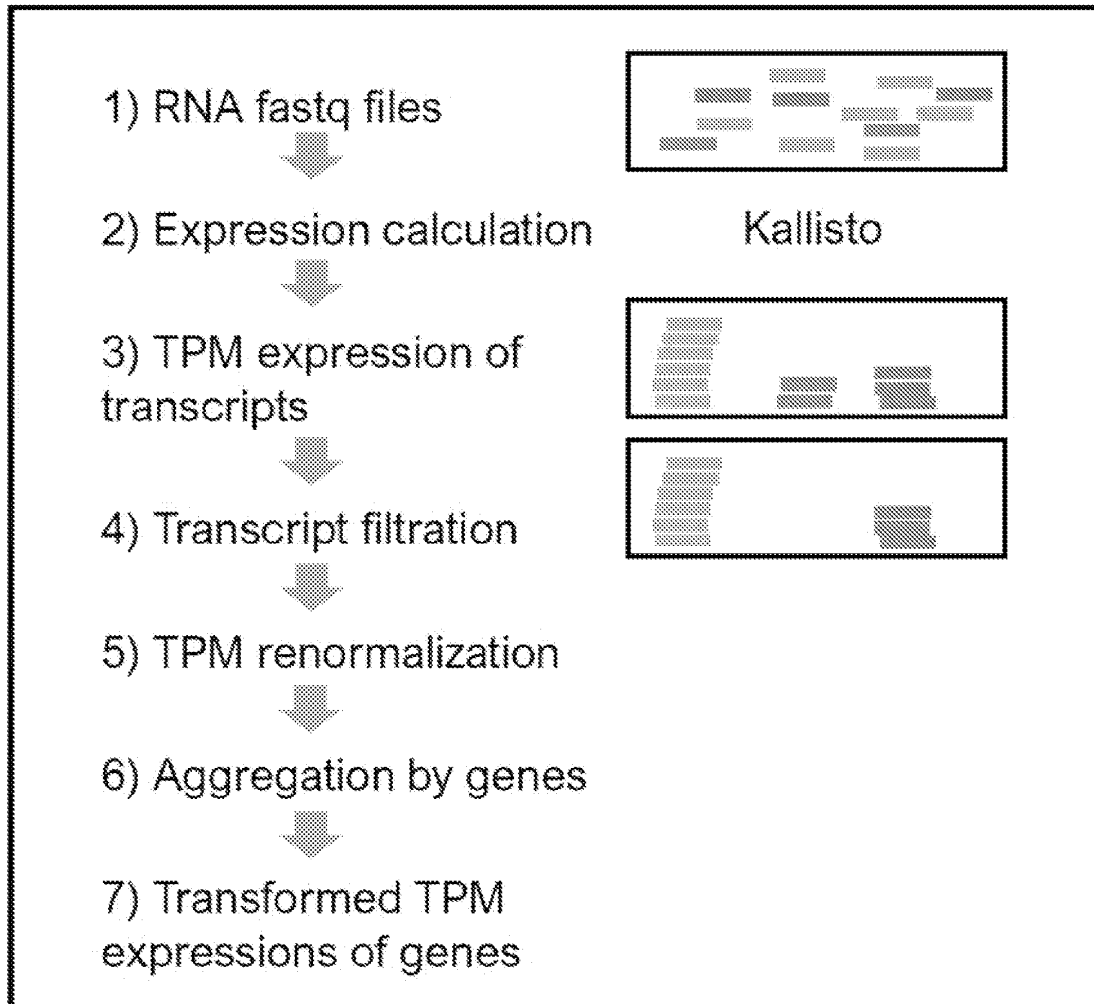


FIG. 12C

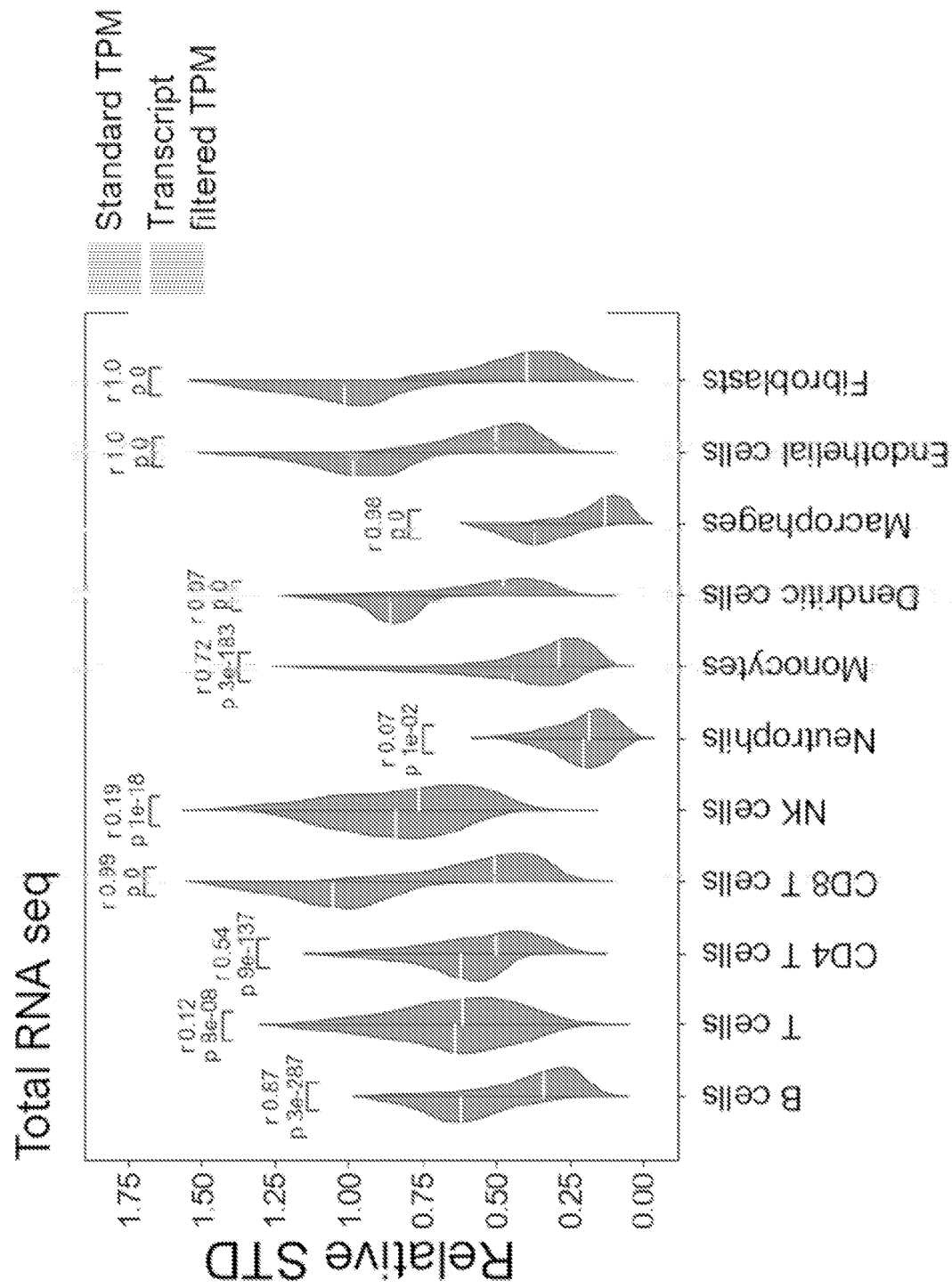


FIG. 12D

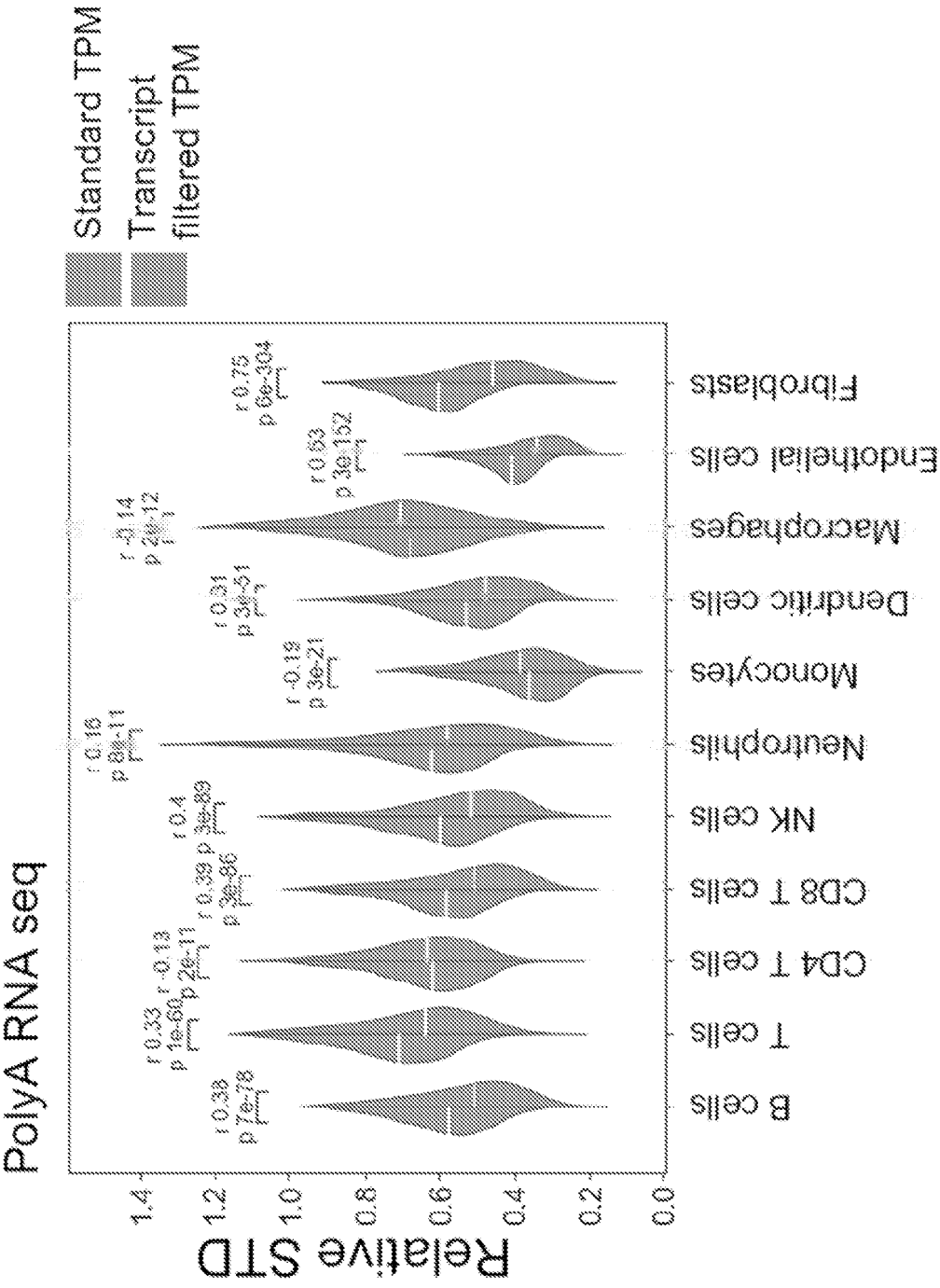


FIG. 12E

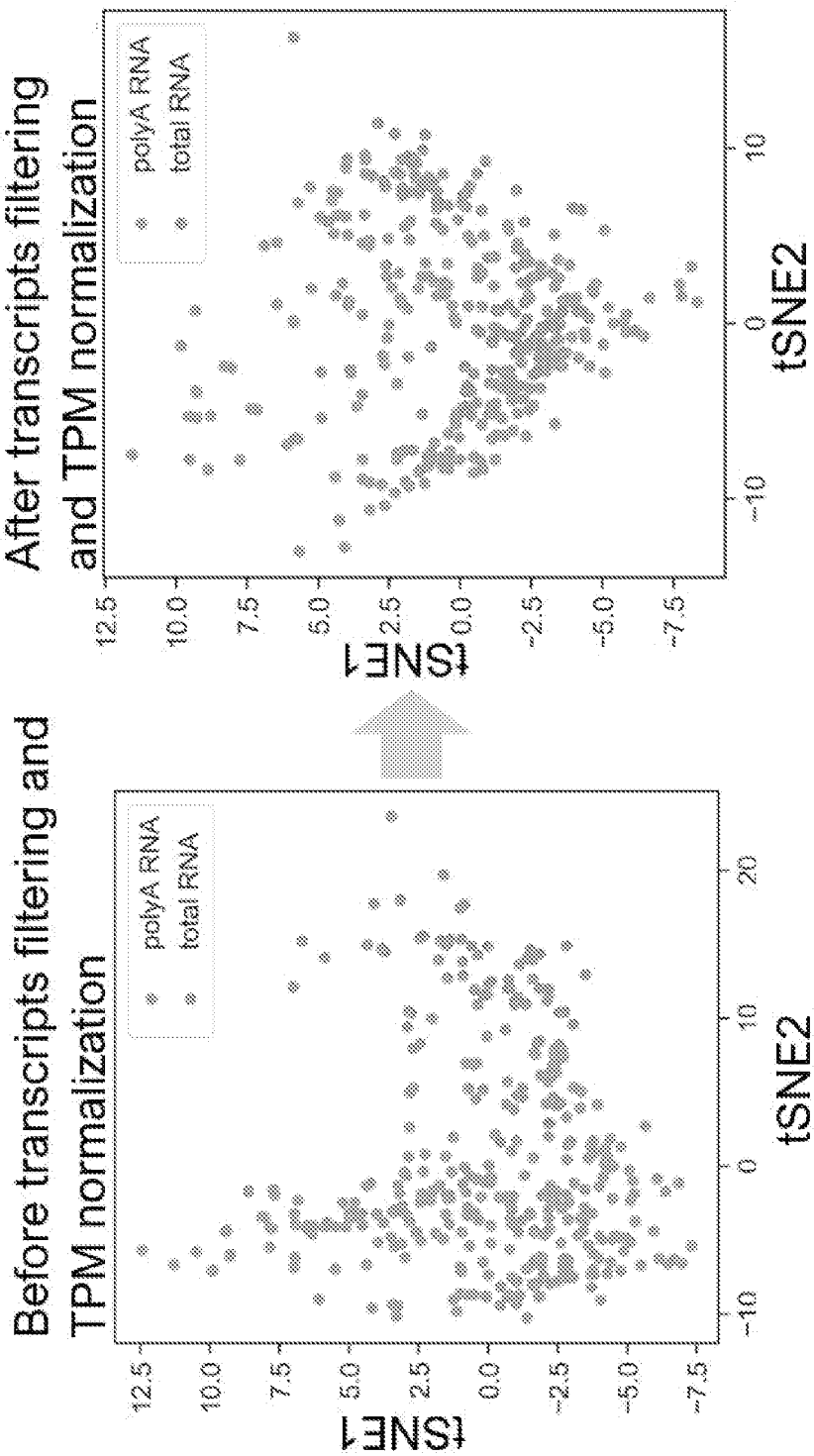


FIG. 12F

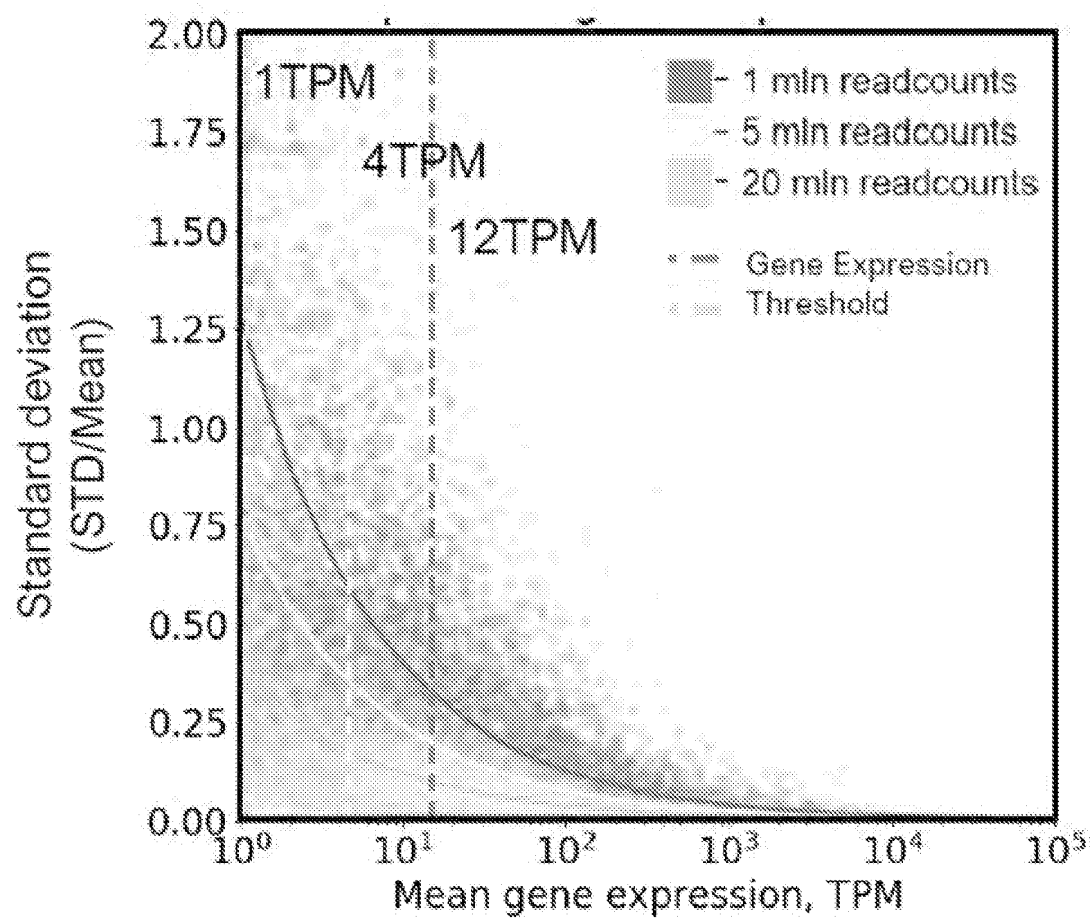


FIG. 12G

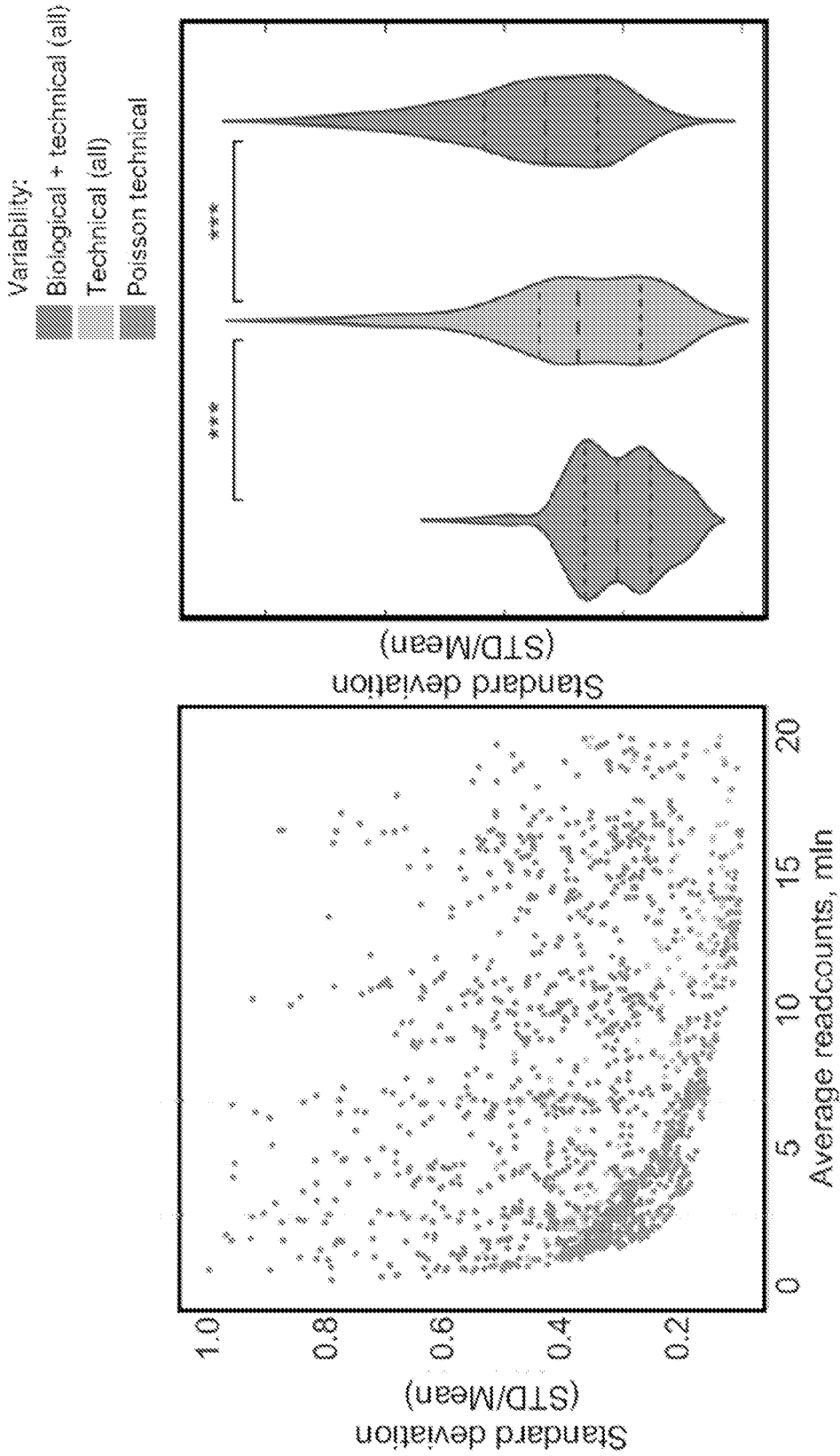


FIG. 12H

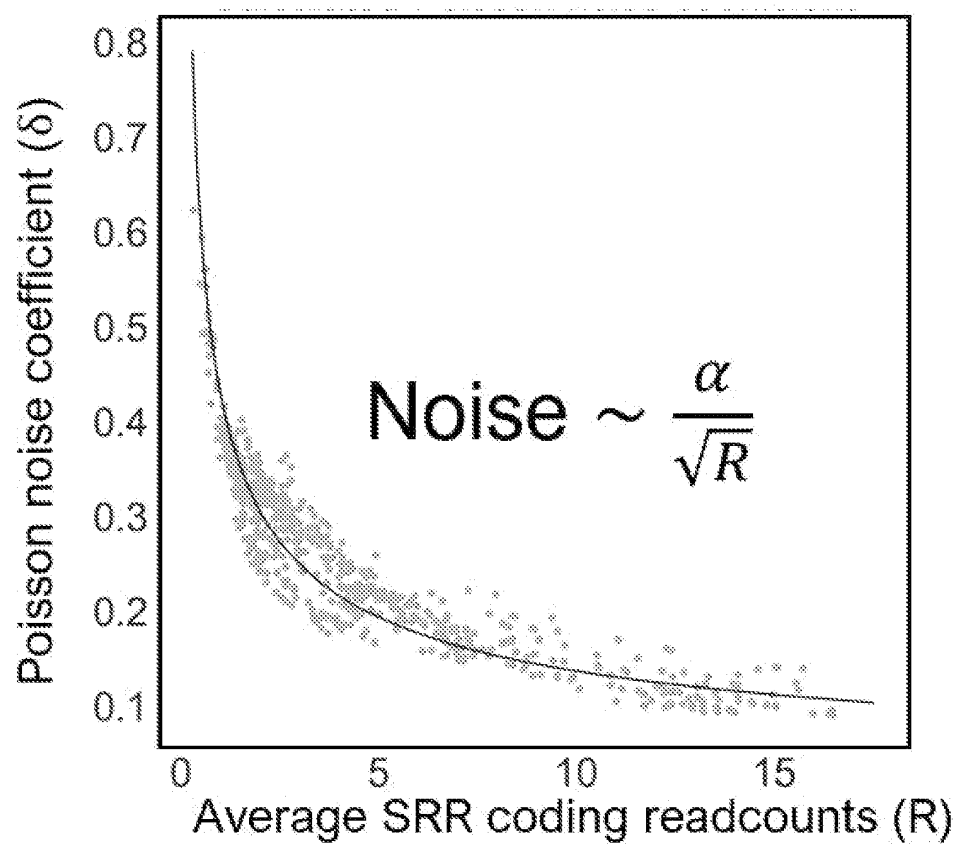


FIG. 12I

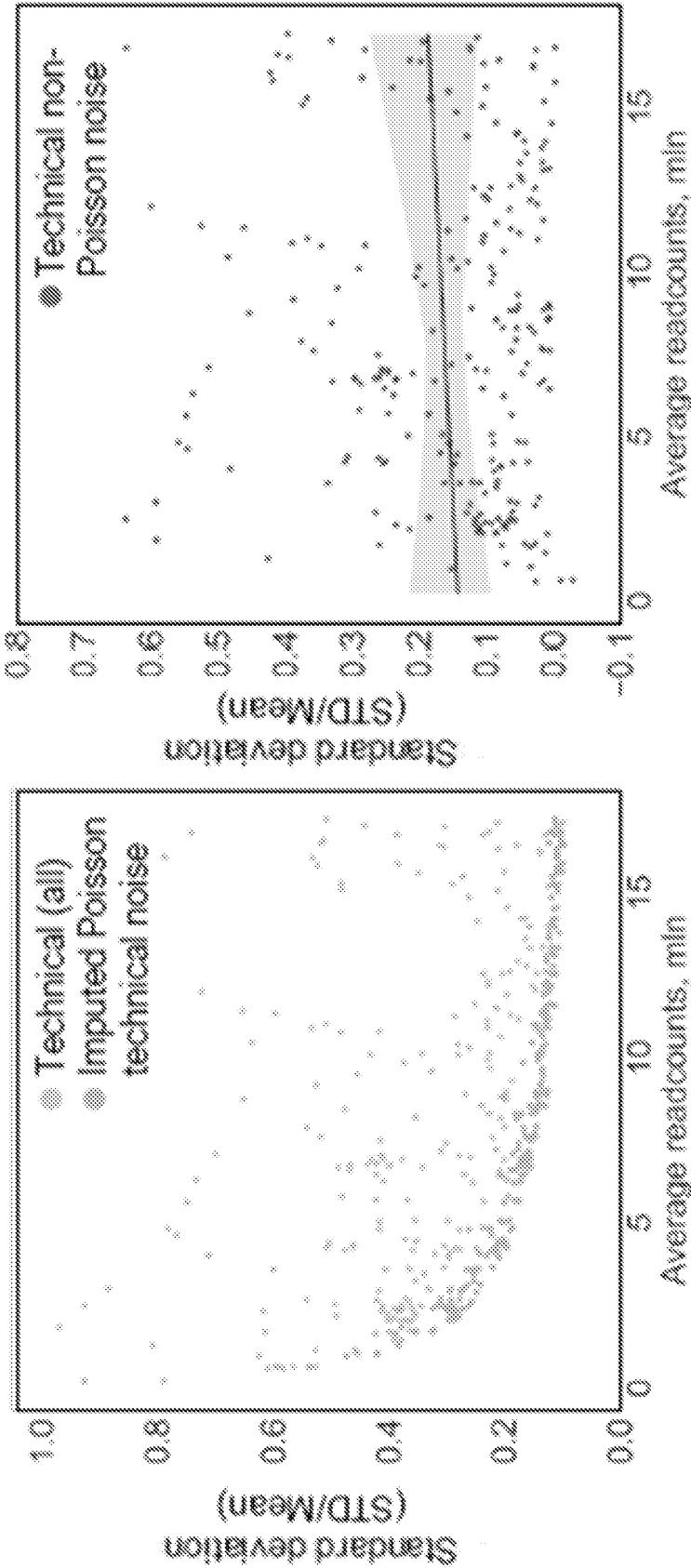


FIG. 12J

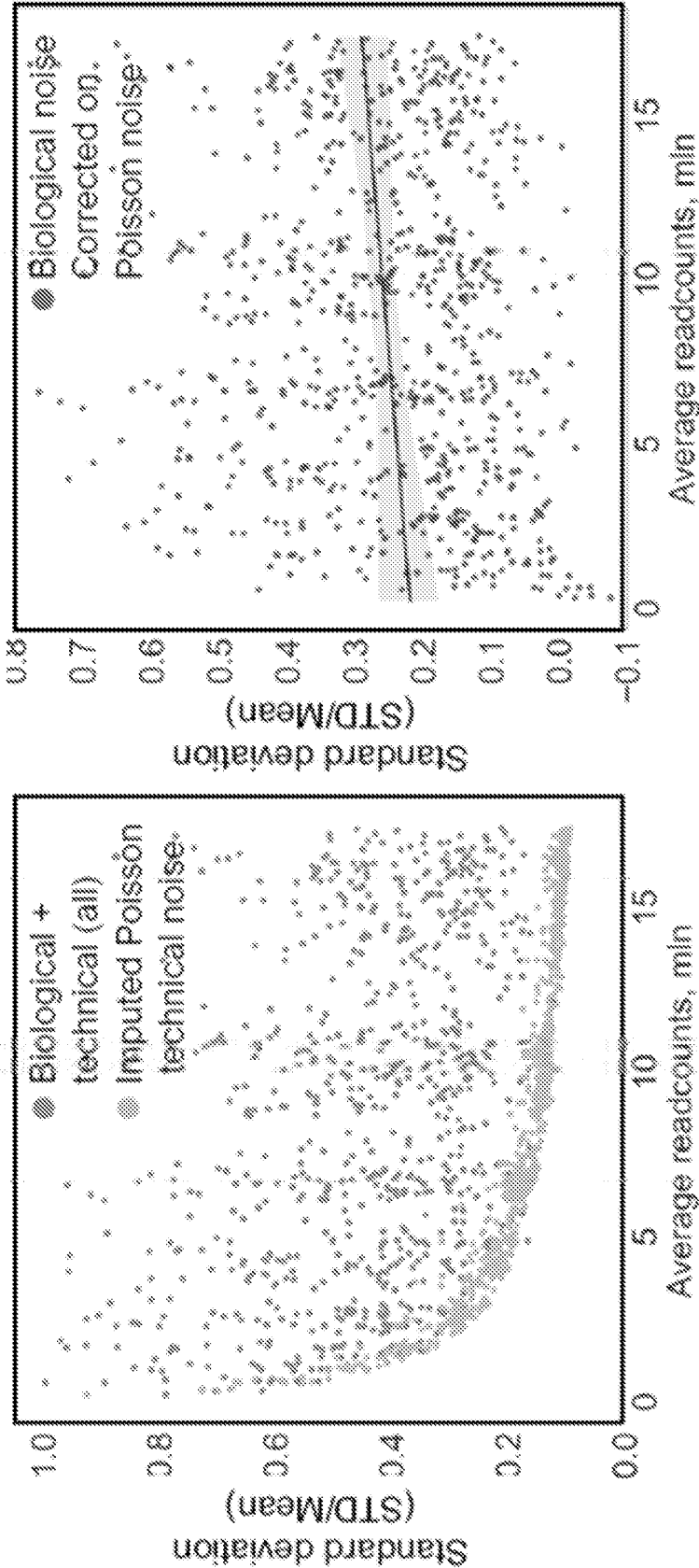


FIG. 12K

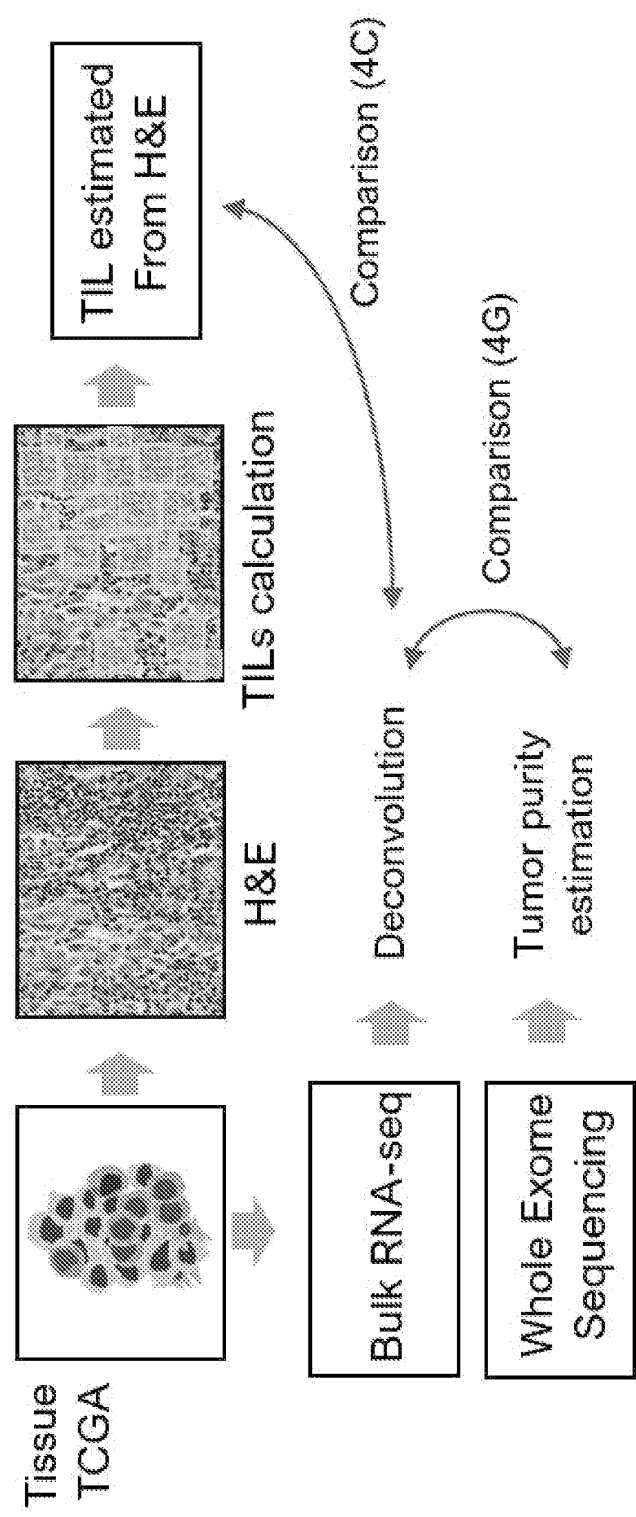


FIG. 13A

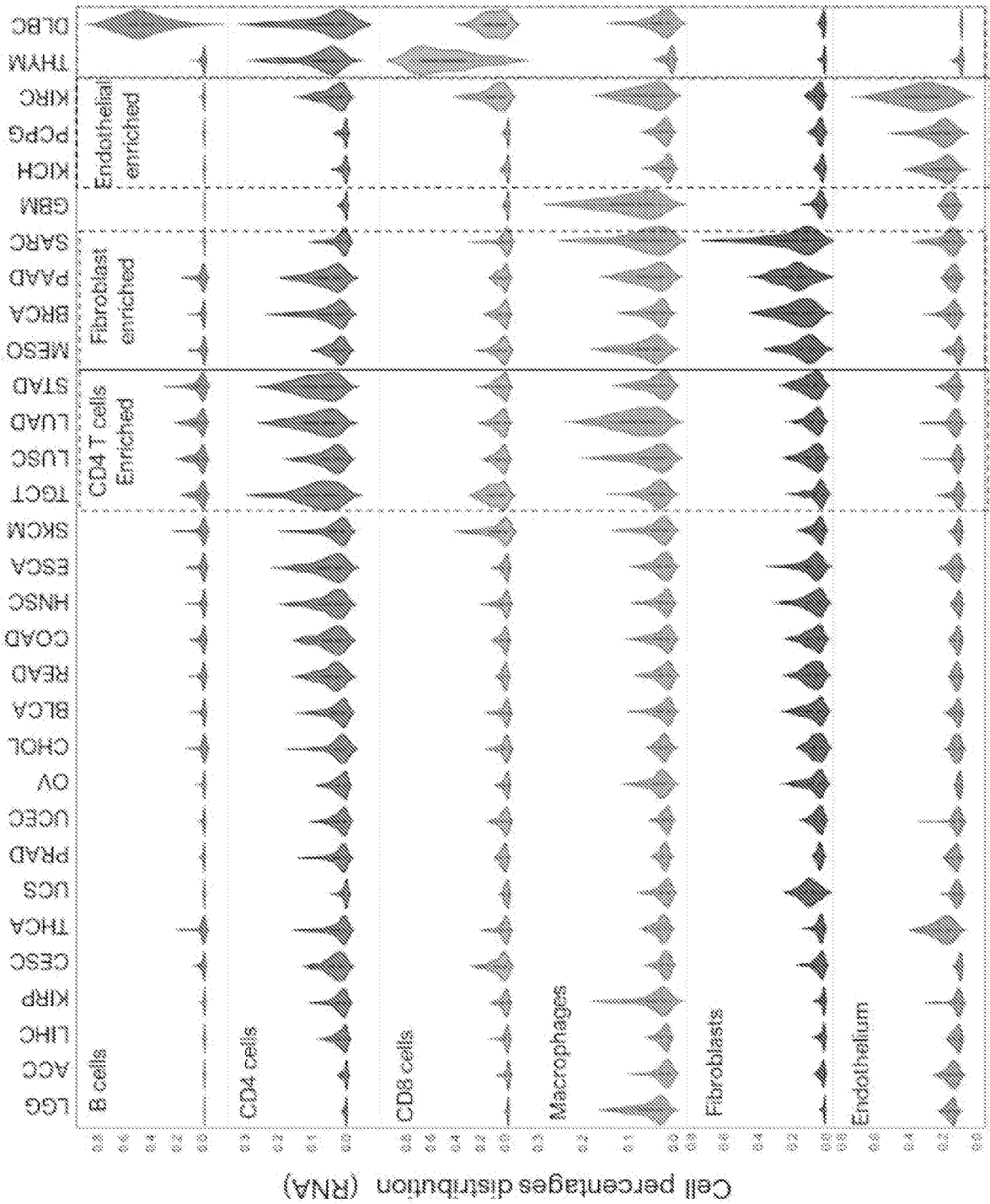


FIG. 13B

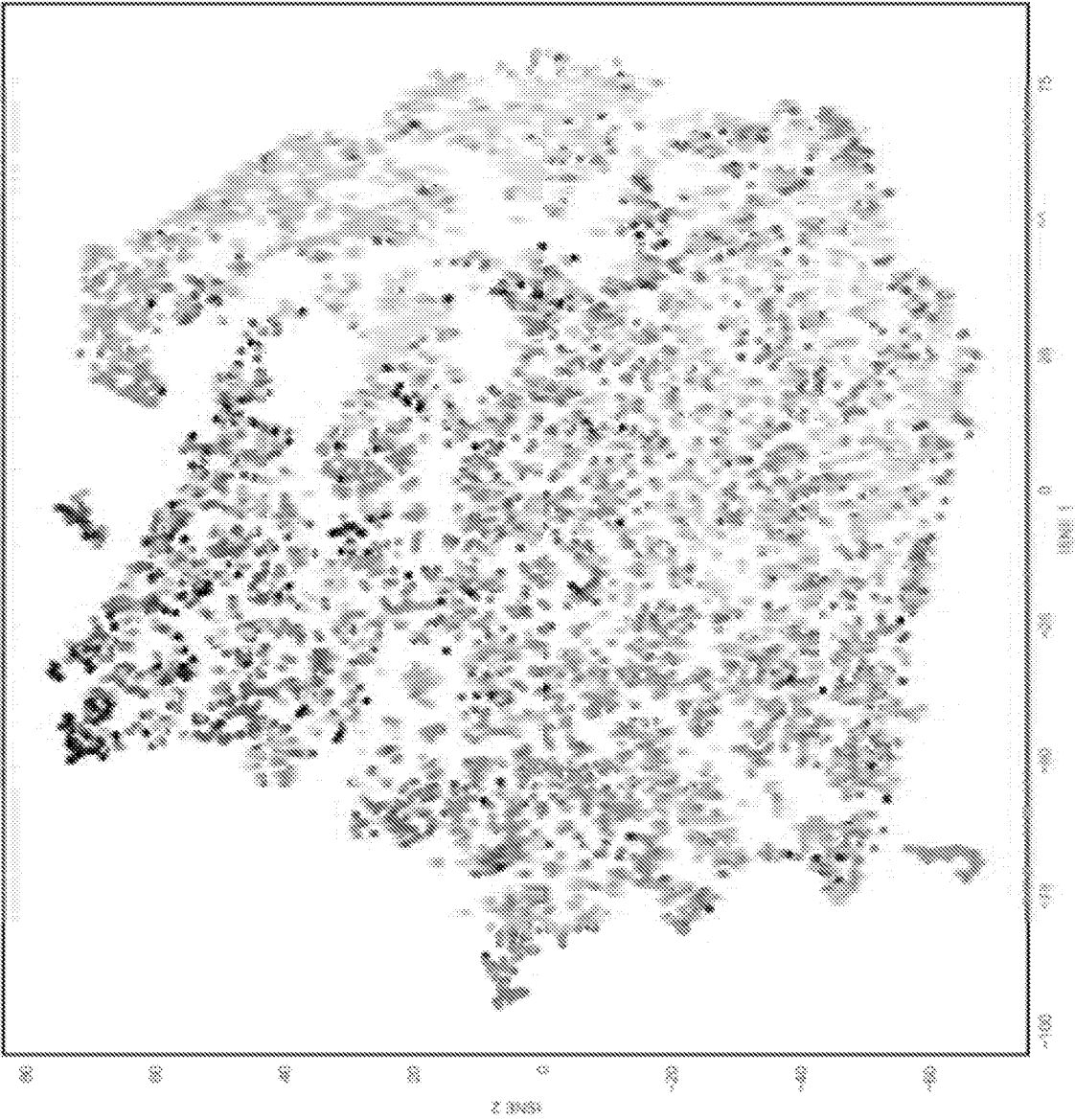


FIG. 13C

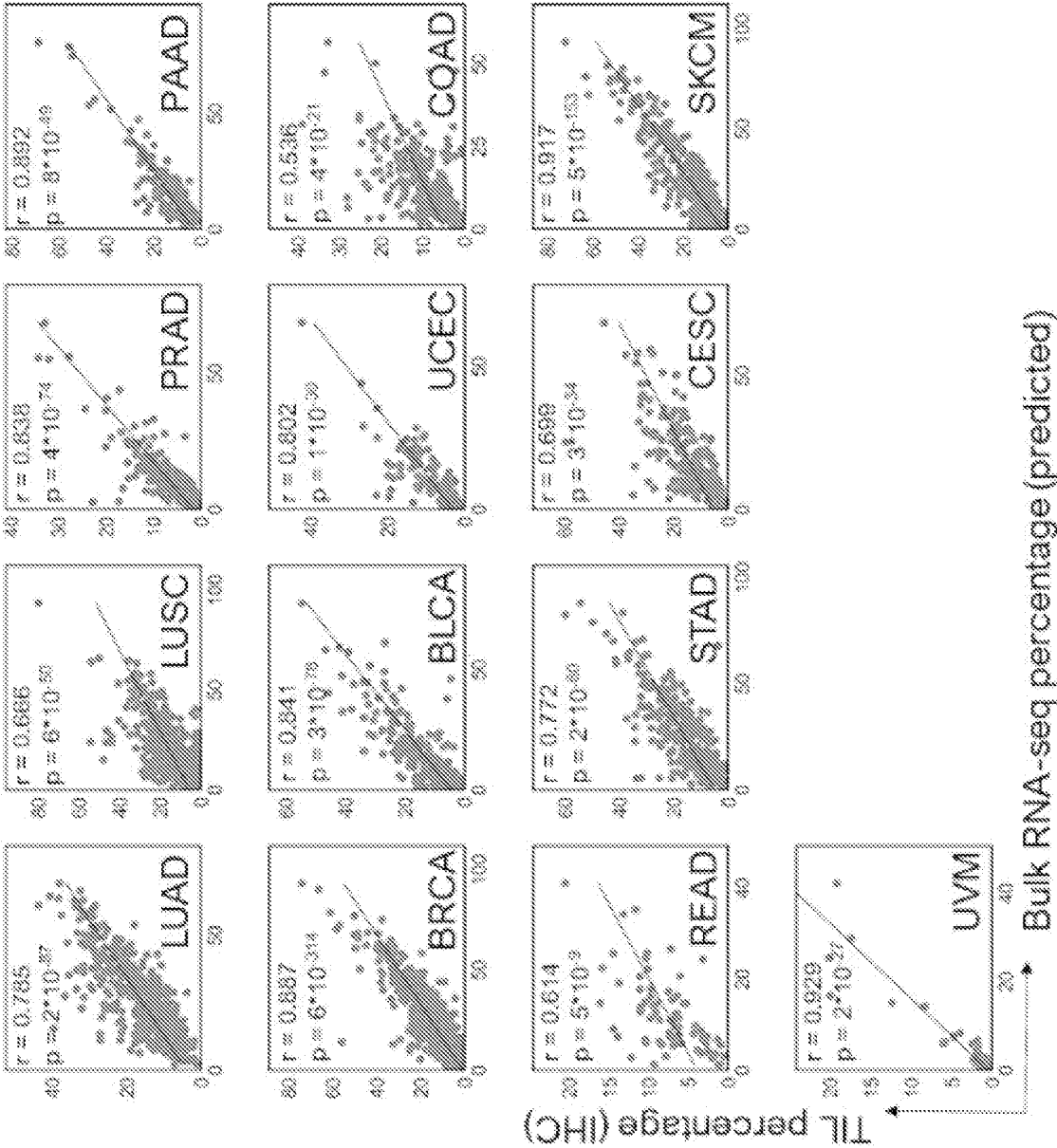


FIG. 13D

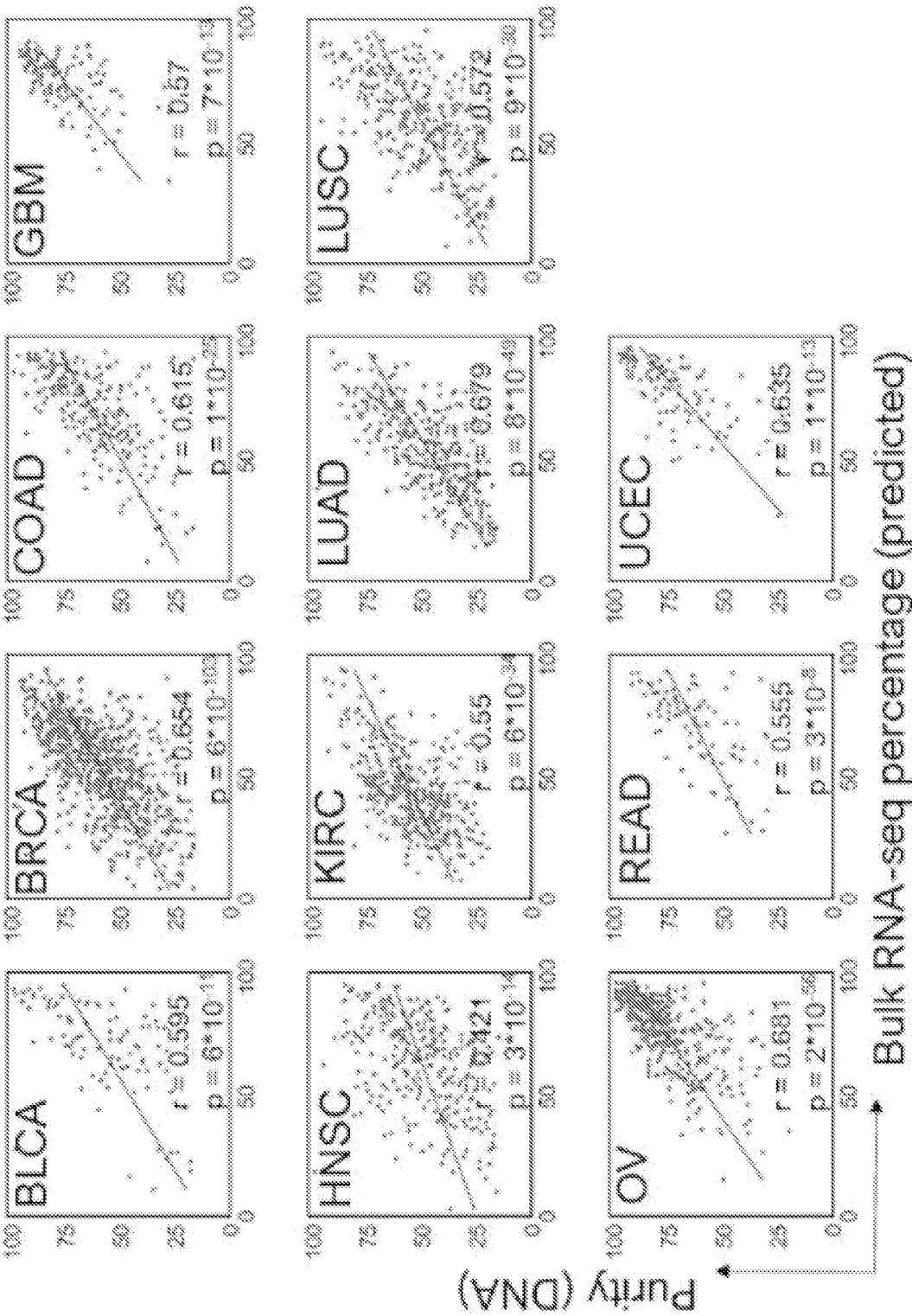


FIG. 13E

ACC	0.91	0.58	0.42	0.59	0.87	0.46
BLCA	0.71	0.48	0.53	0.64	0.72	0.56
BRCA	0.77	0.45	0.13	0.65	0.76	0.66
CESC	0.66	0.52	0.11	0.55	0.68	0.53
COAD	0.78	0.71	0.57	0.57	0.76	0.6
GBM	0.67	0.58	0.46	0.47	0.66	0.29
HNSC	0.65	0.45	0.36	0.53	0.68	0.52
KICH	0.83	0.8	0.53	0.73	0.87	0.7
KIRC	0.59	0.22	0.36	0.52	0.63	0.52
KIRP	0.78	0.59	0.16	0.66	0.76	0.62
LGG	0.77	0.29	0.45	0.63	0.75	0.3
LIHC	0.69	0.013	0.21	0.47	0.63	0.44
LUAD	0.82	0.58	0.34	0.65	0.8	0.48
LUSC	0.78	0.6	0.5	0.65	0.75	0.63
OV	0.63	0.44	0.4	0.49	0.69	0.39
PRAD	0.58	0.32	0.26	0.42	0.51	0.32
READ	0.76	0.55	0.62	0.55	0.67	0.62
SKCM	0.92	0.75	0.33	0.66	0.85	0.65
THCA	0.84	0.39	0.099	0.72	0.86	0.63
UCEC	0.71	0.37	0.23	0.54	0.69	0.29
UCS	0.57	0.35	0.31	0.55	0.63	0.26

Kassandra
EPIC TRef
CIBERSORTX (HNSC)
CIBERSORTX (LM22)
Fardeep-absolute
Quantiseq (Tumor)

FIG. 13F

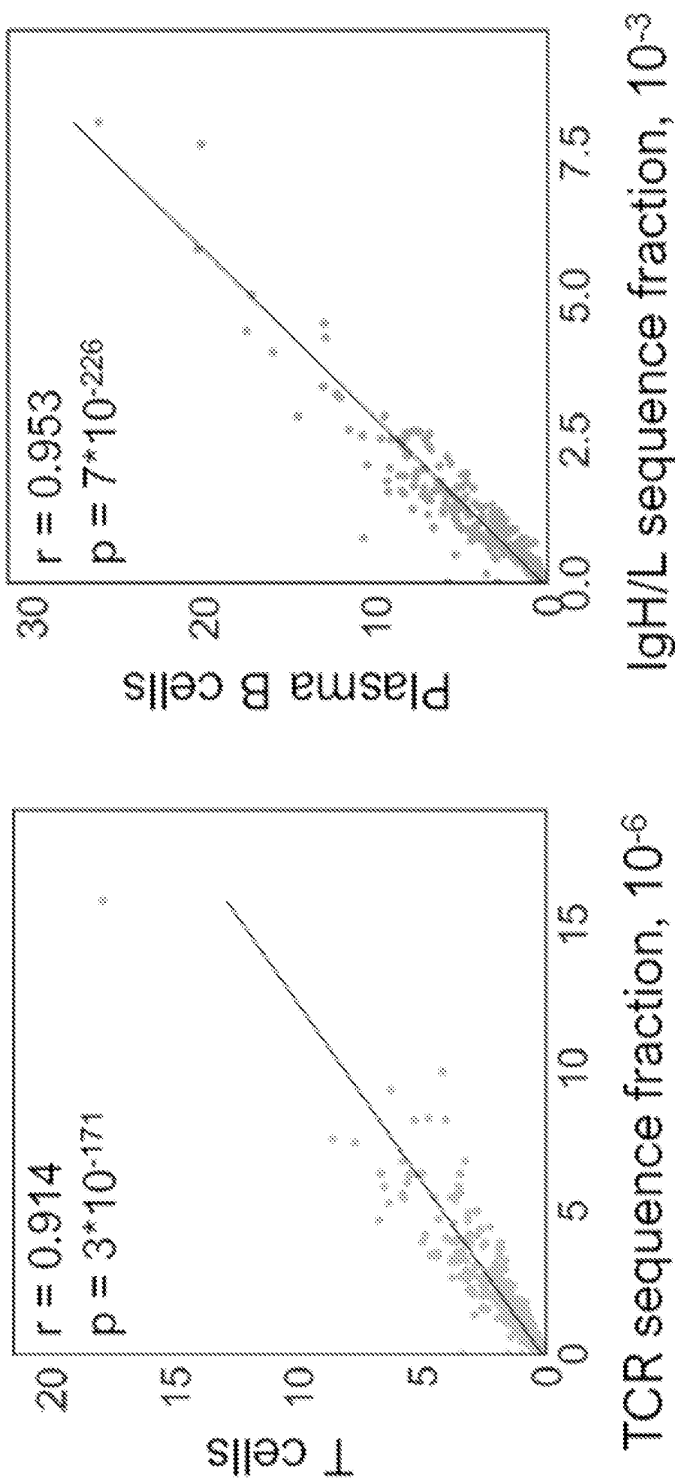


FIG. 13G

FIG. 13H

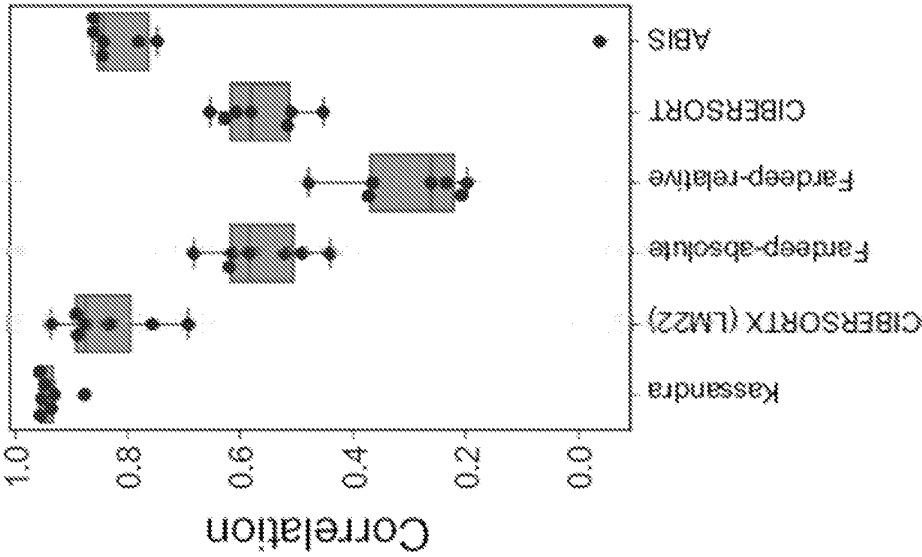


FIG. 13J

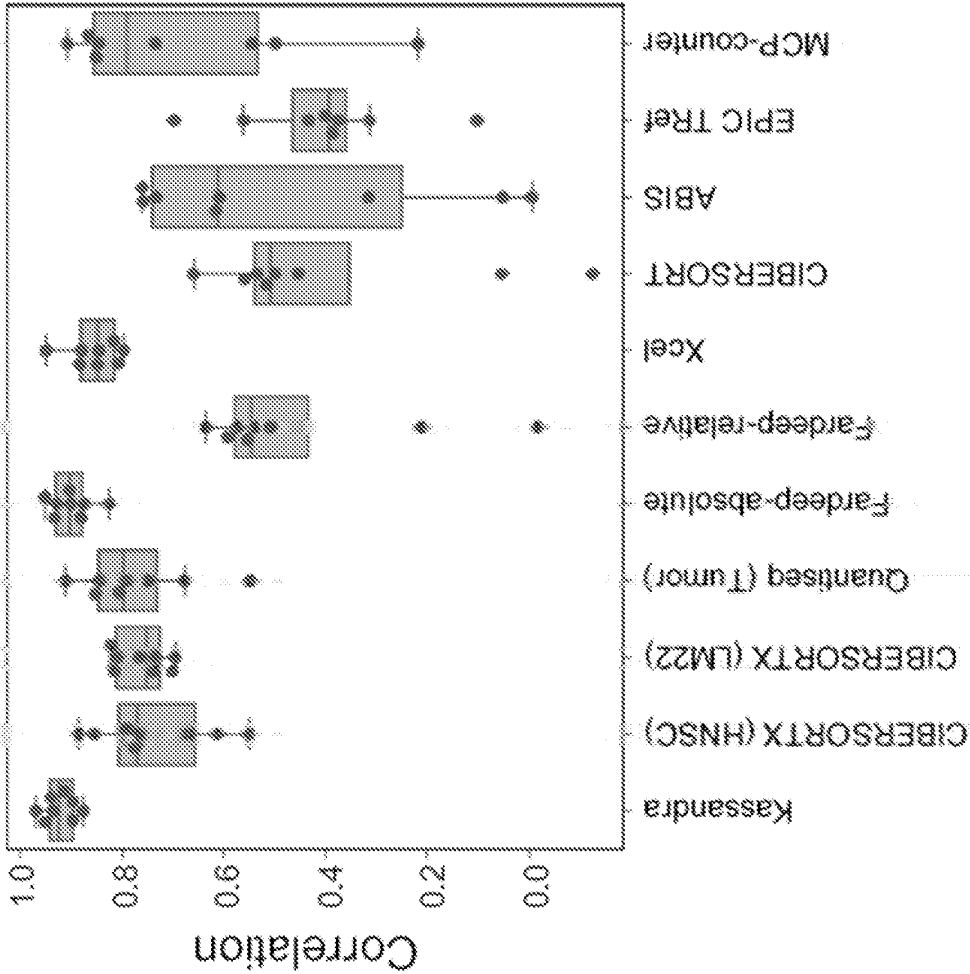


FIG. 13I

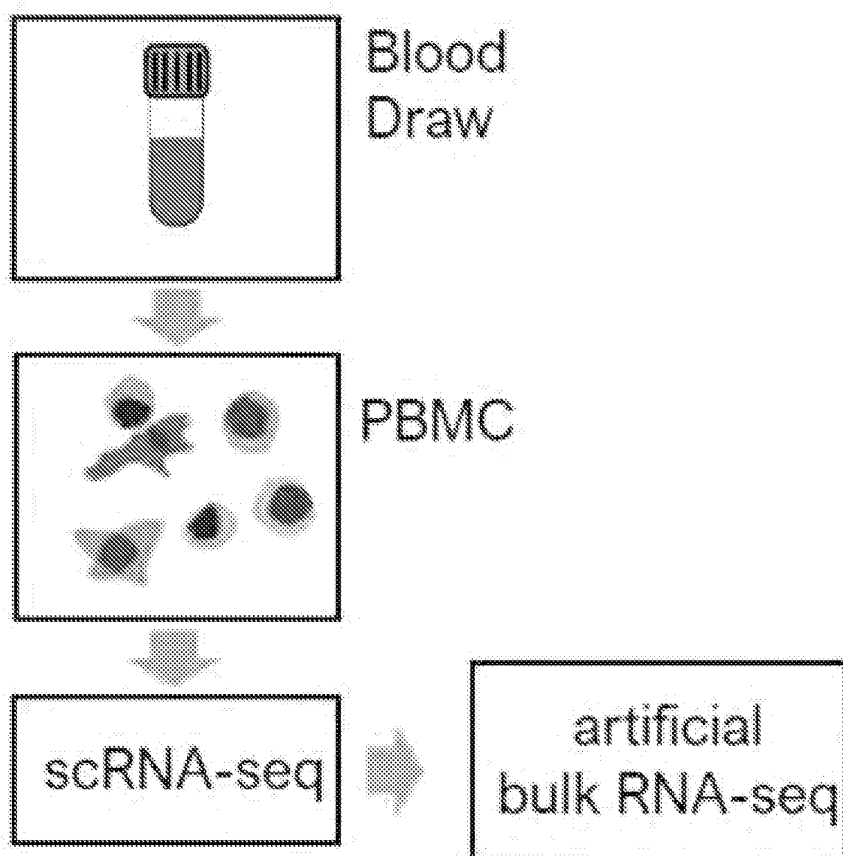


FIG. 14A

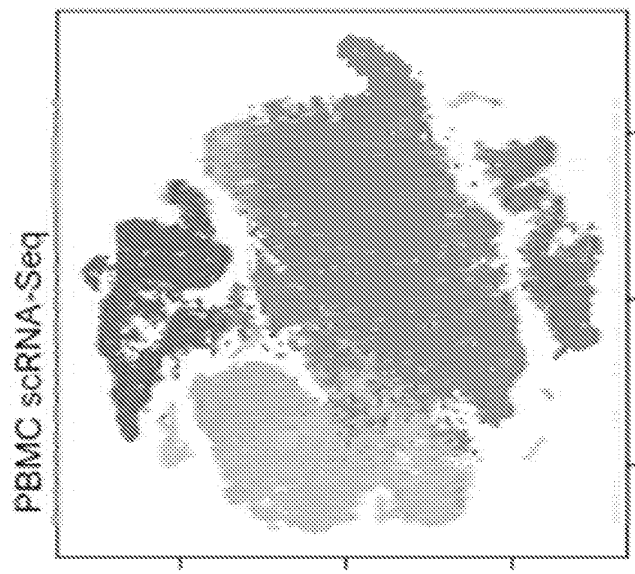


FIG. 14B

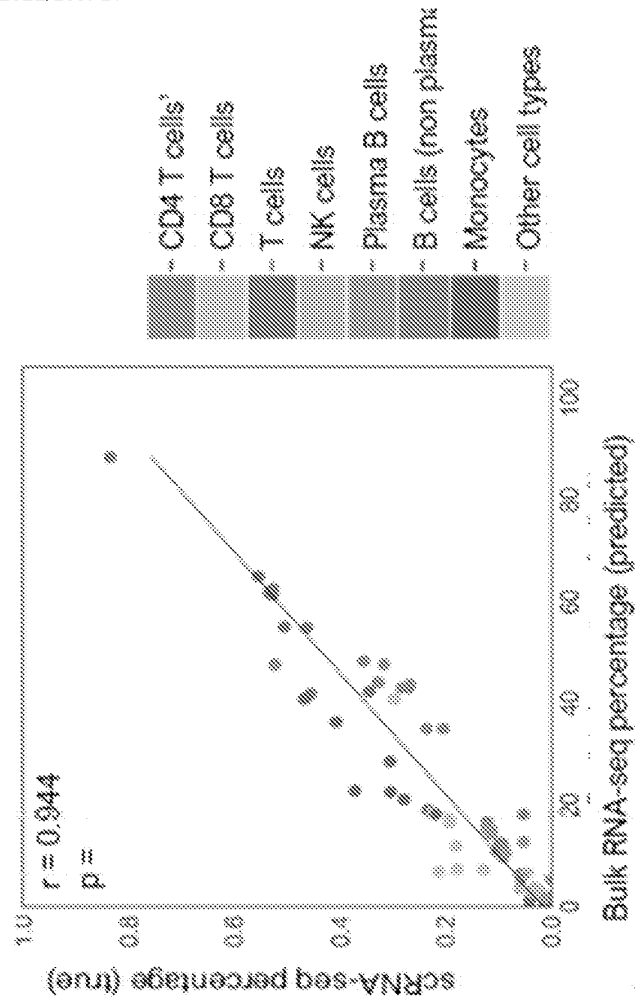


FIG. 14C

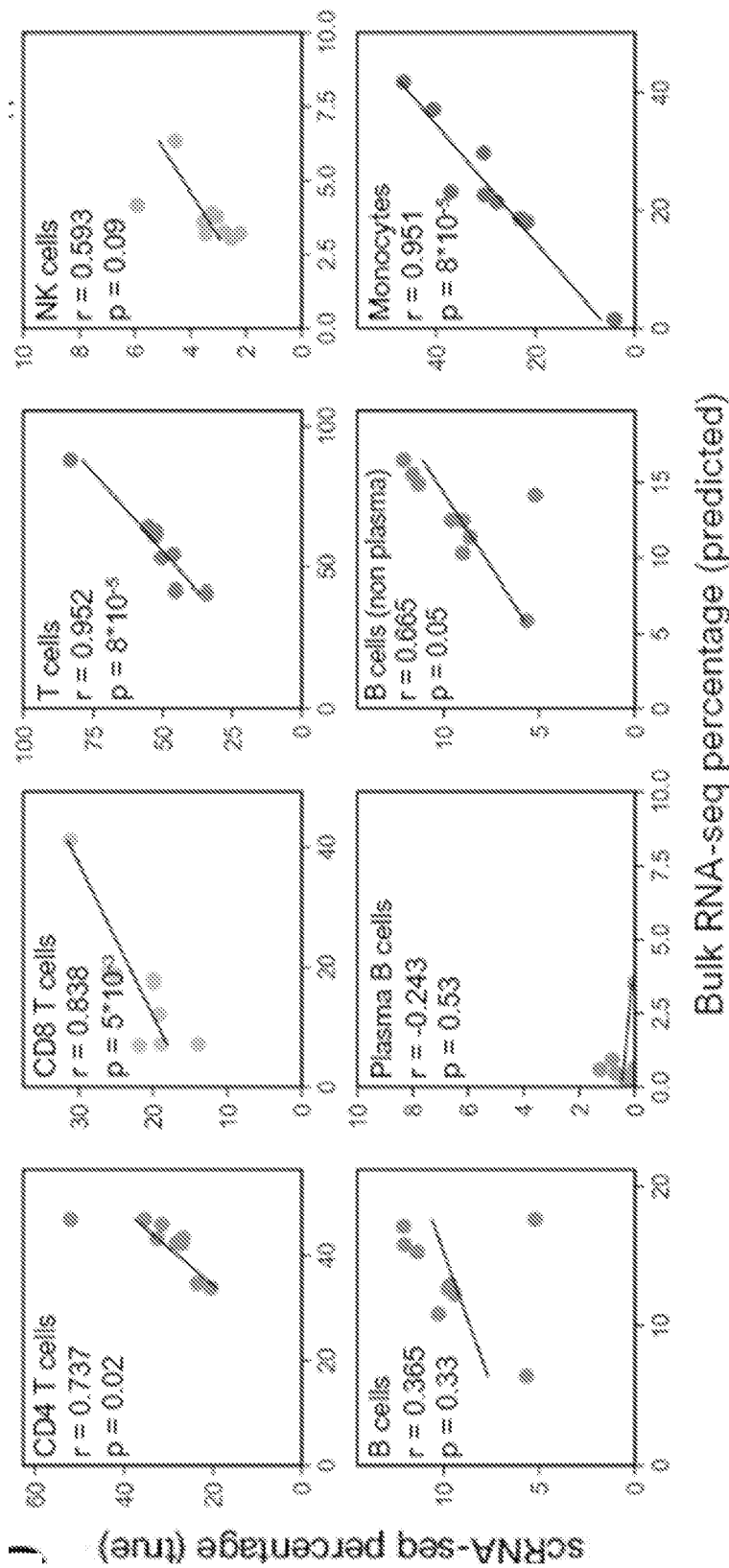


FIG. 14D

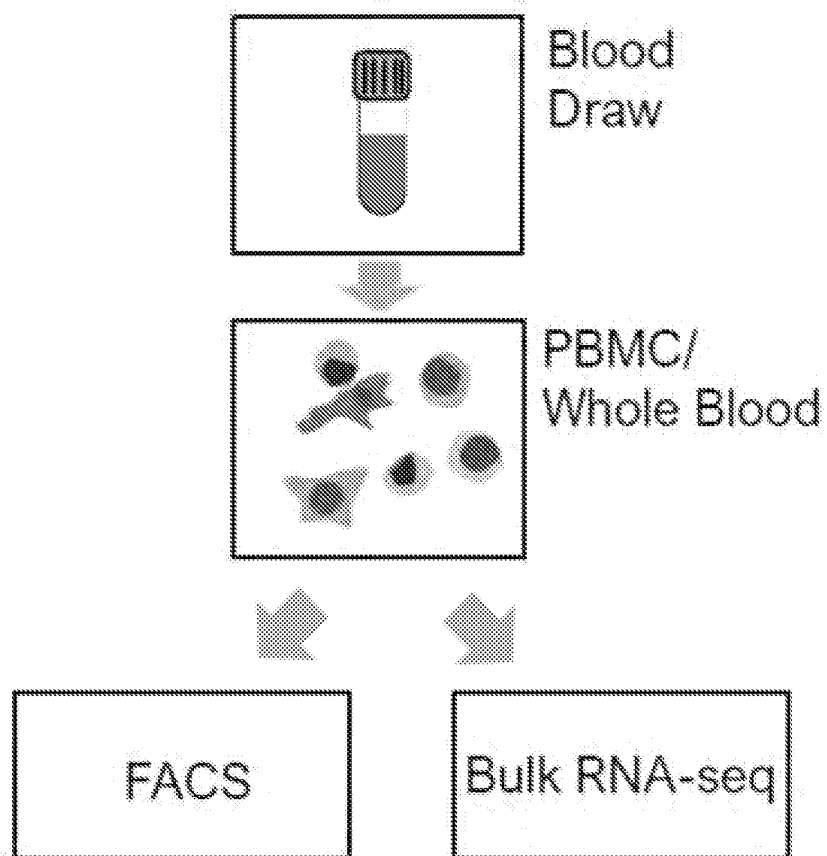


FIG. 14E

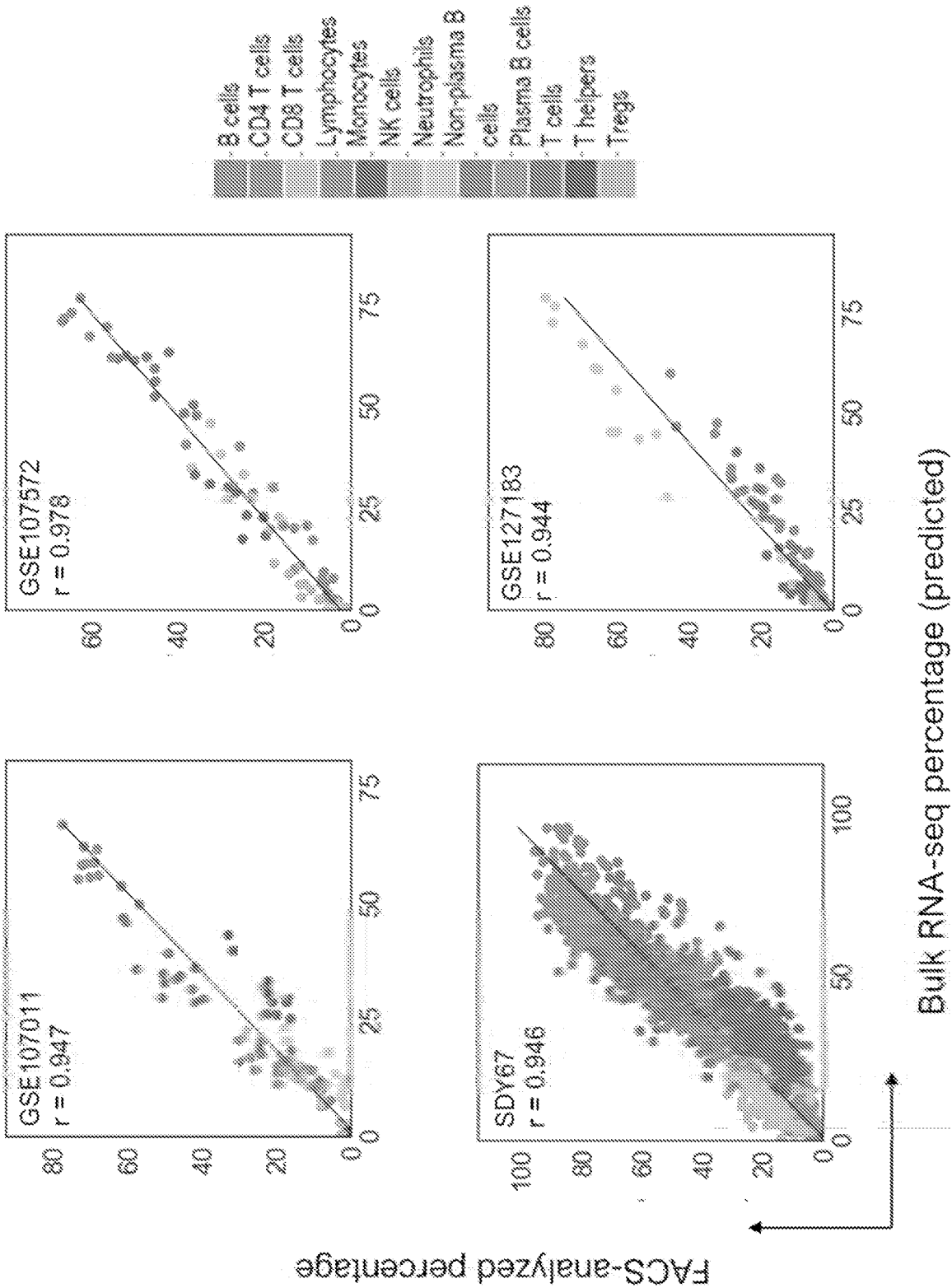


FIG. 14F

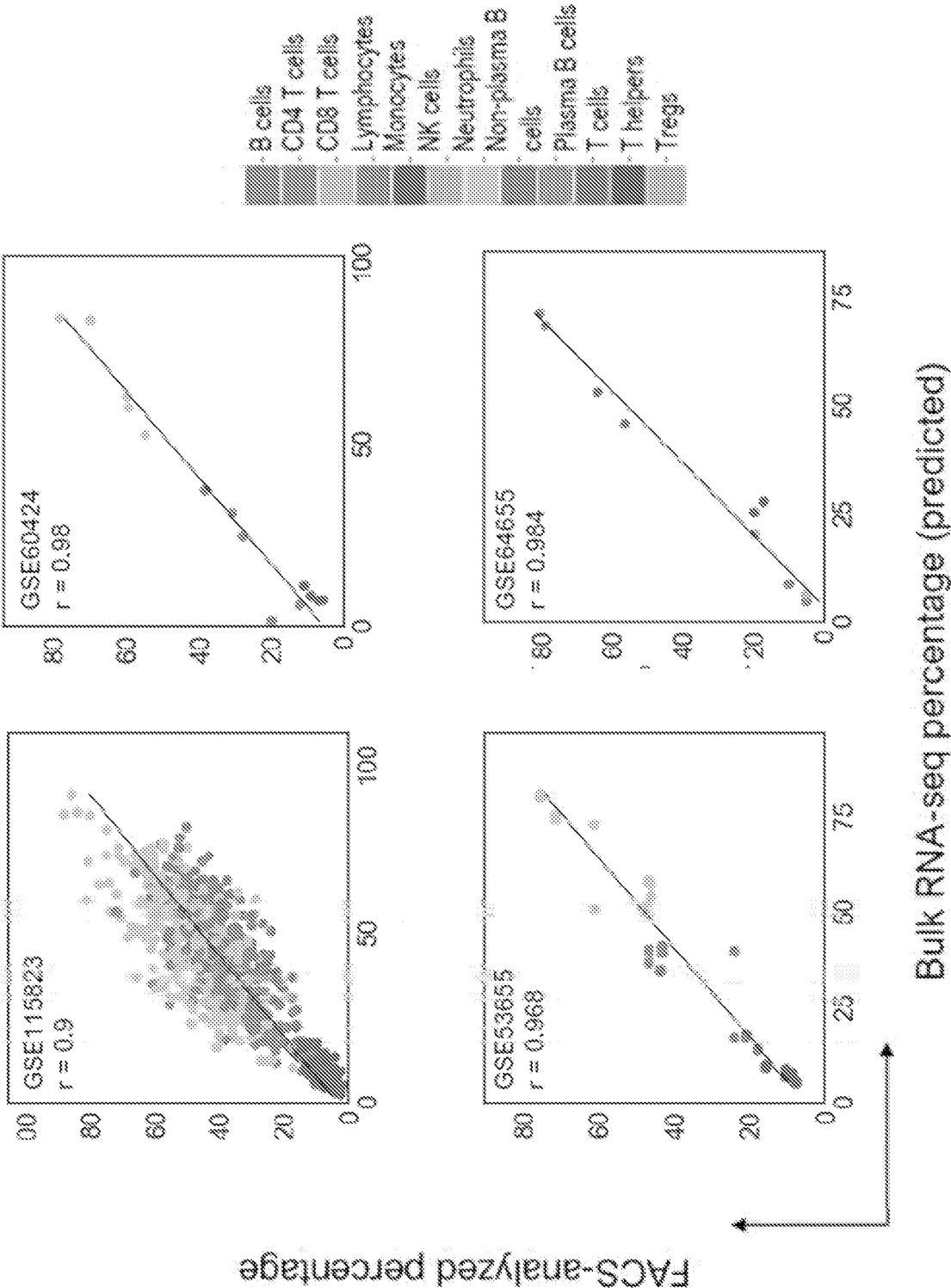


FIG. 14G

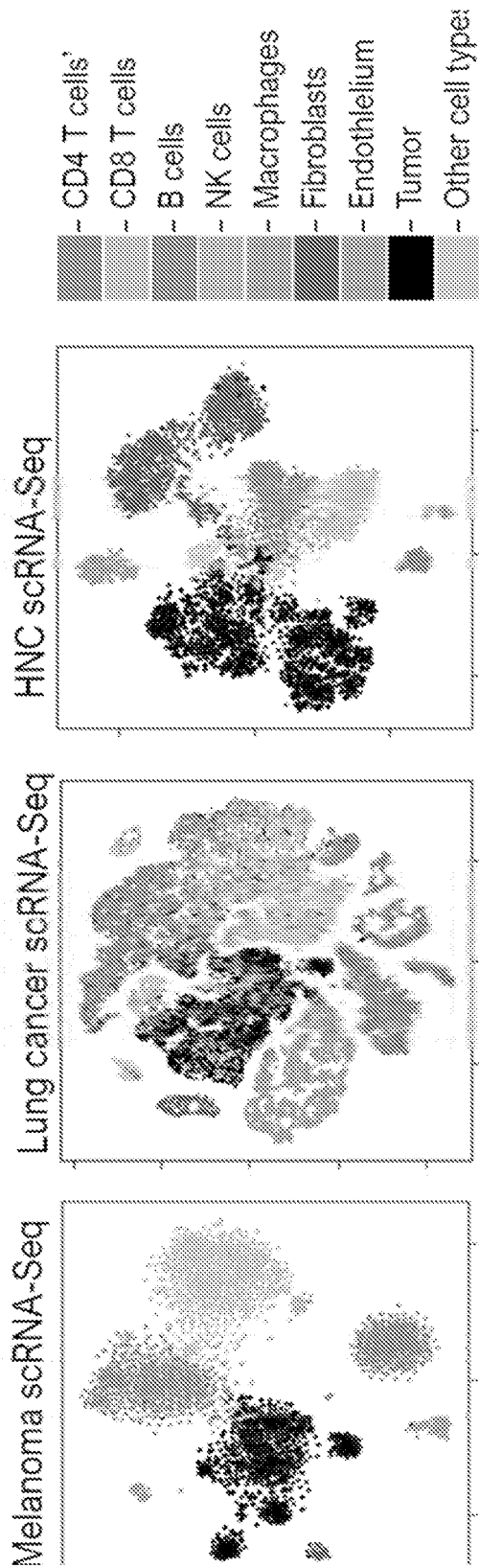


FIG. 15A

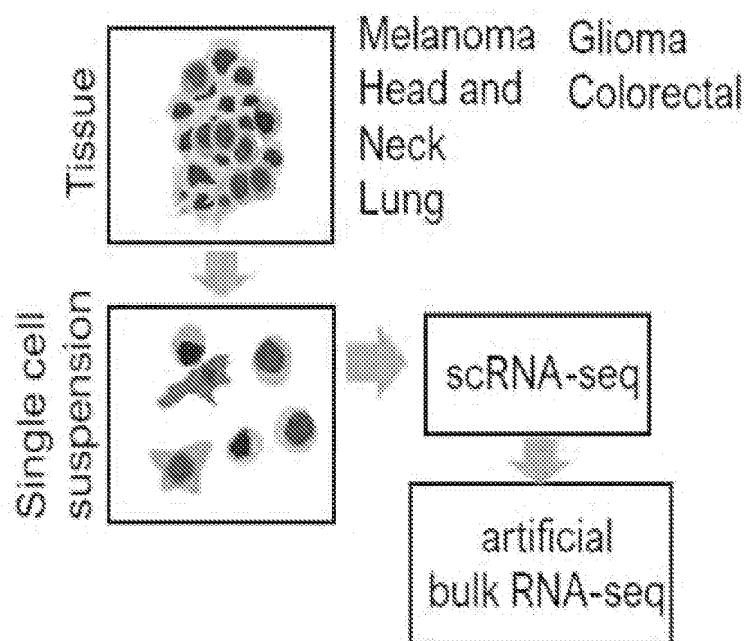


FIG. 15B

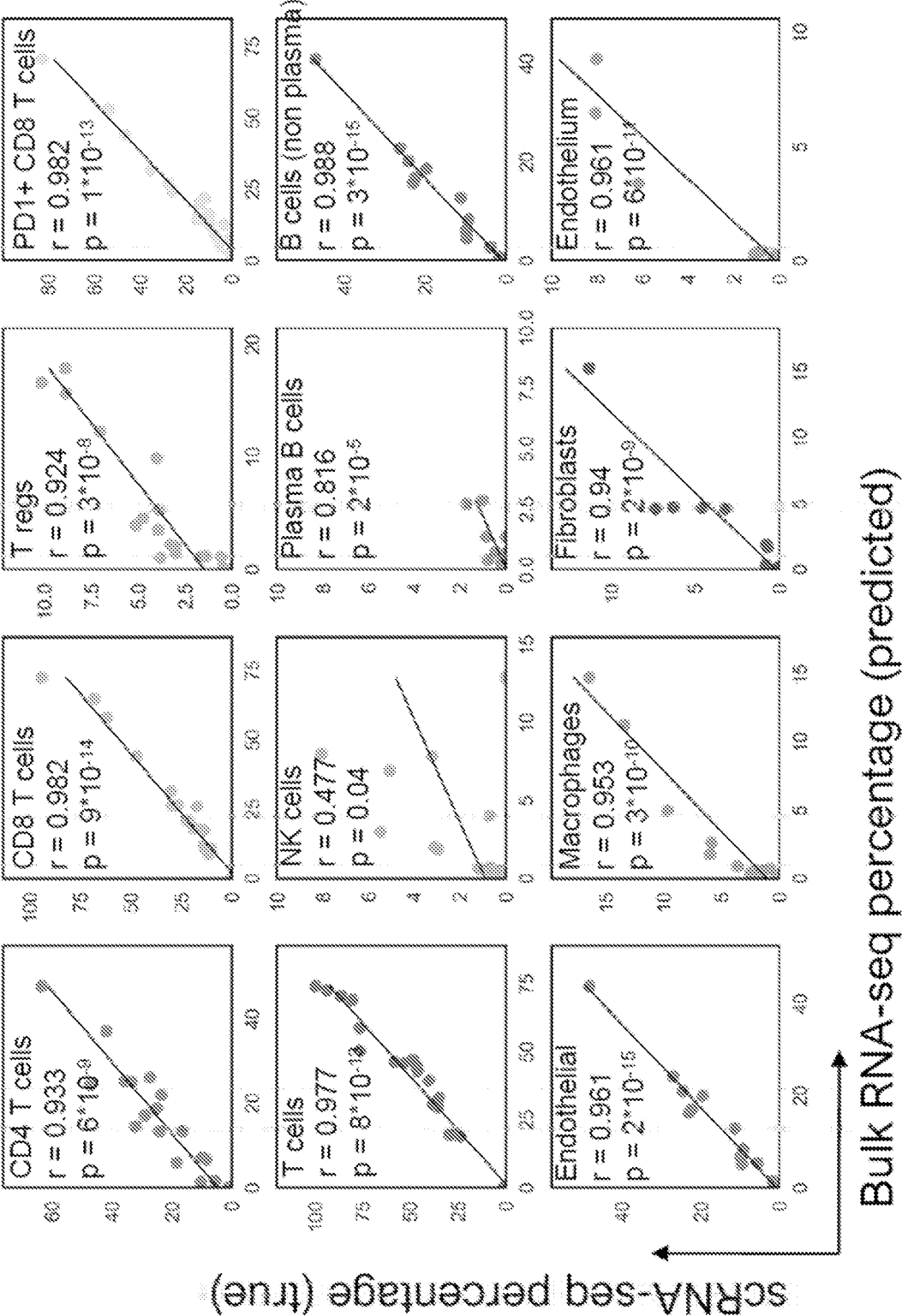


FIG. 15 C

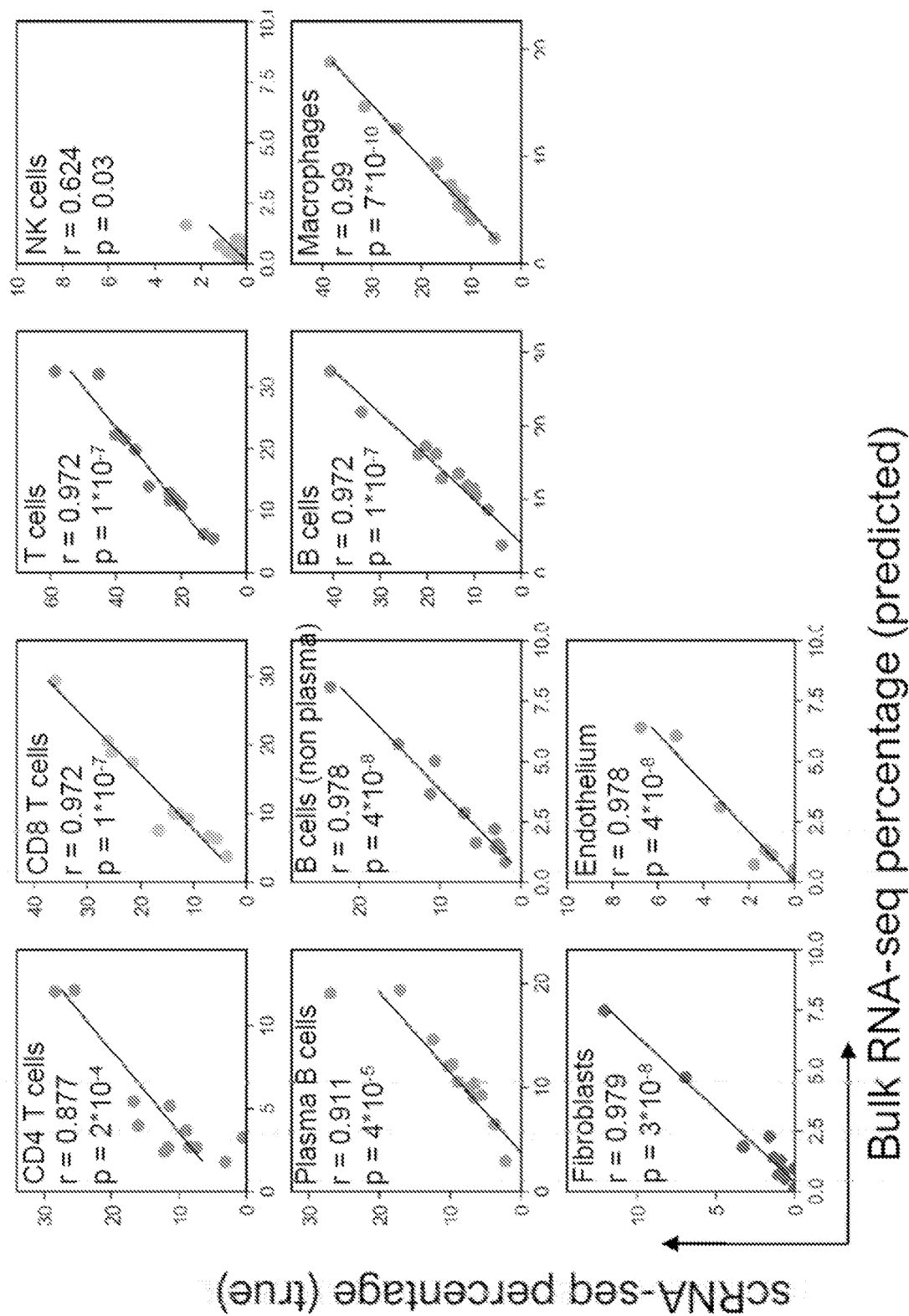


FIG. 15 D

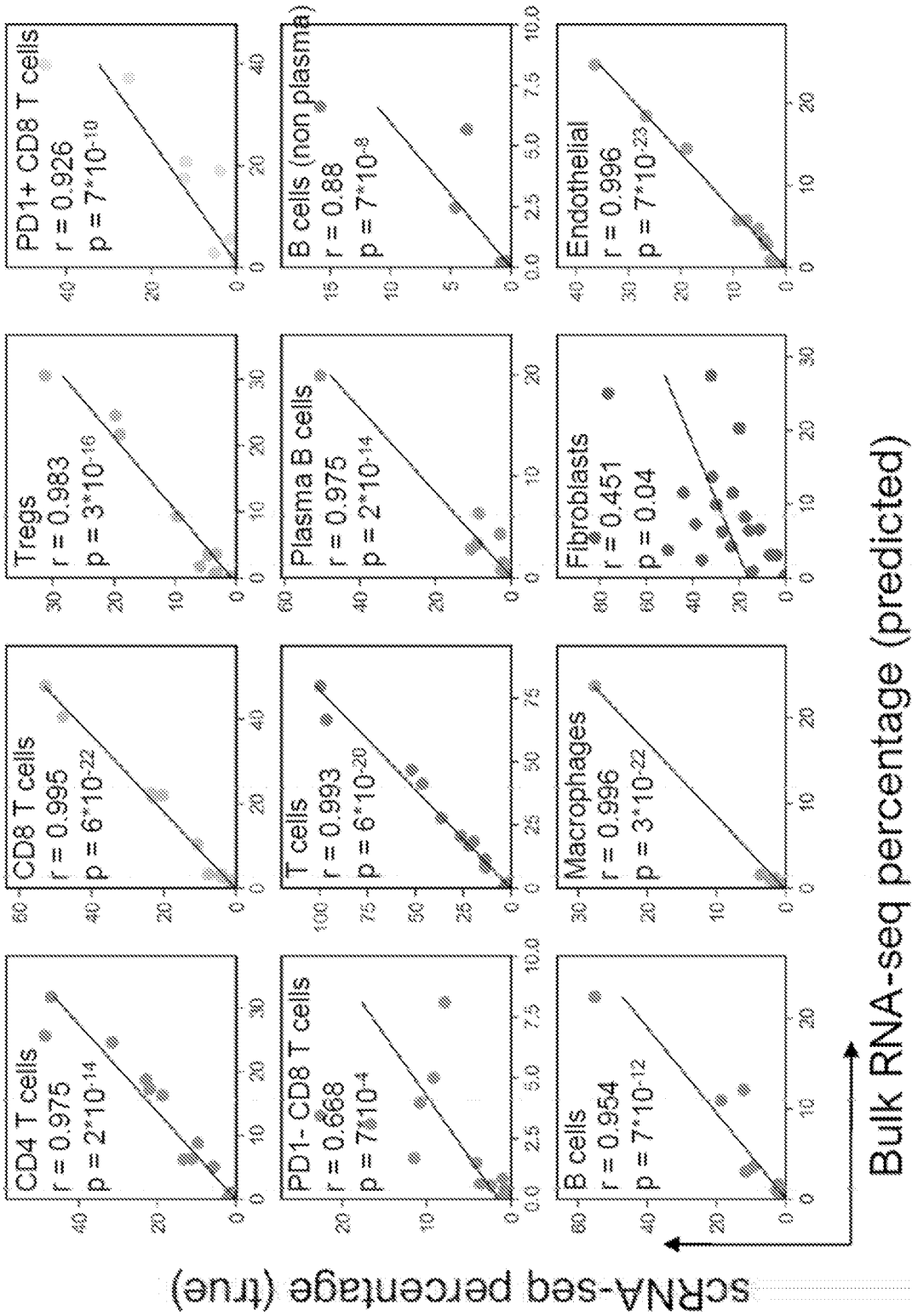


FIG. 15E

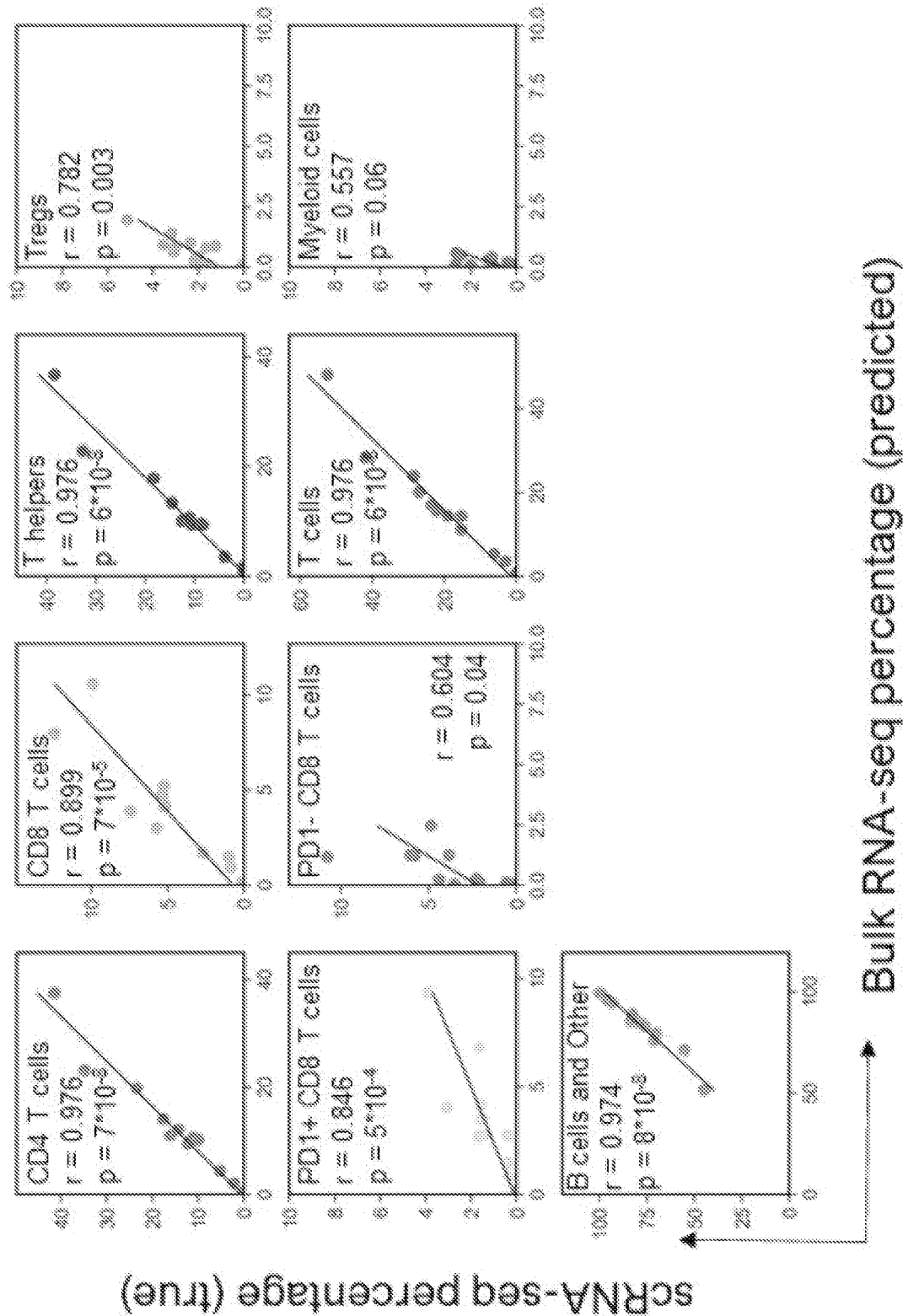


FIG. 15F

B_cells	0.76	0.7	0.52	0.77	0.81	0.45	0.61	0.52	0.6	0.48	0.72	0.72	0.82
CD4_T_cells	0.67	0.63	0.11	0.39	0.47	0.44	0.32		0.39	0.39	0.39	0.46	0.68
CD8_T_cells	0.95	0.81	0.81	0.67	0.69	0.91	0.81	0.91	0.95	0.73	0.9	0.9	0.79
CD8_T_cells_PD1_high	0.95												
CD8_T_cells_PD1_low	0.65												
Endothelium	0.98				0.94	0.83		0.96					0.98
Fibroblasts	0.75				0.81	0.91		0.91					0.89
Macrophages	0.92		0.37		0.96	0.96	0.43		0.8	0.35	0.66	0.78	0.58
Monocytes	0.95	0.89	0.94	0.69			0.89	0.85	0.88	0.93	0.7	0.68	0.96
NK_cells	0.47	0.075	0.46	0.61	0.82		0.65	0.31	0.19	0.21	0.34	0.45	0.55
T_cells	0.93	0.73	0.57	0.6	0.64	0.69	0.66	0.93	0.73	0.65	0.72	0.74	0.8
Tregs	0.95								0.73	0.63	0.48	0.48	0.82
Lymphocytes	0.97	0.9	0.65	0.93	0.94		0.93		0.93	0.67	0.9	0.89	0.92
Plasma_B_cells	0.69	0.53	0.39				0.55		0.3	0.27			
Dendritic_cells		0.65	0.63			0.63	0.68		0.4	0.16	0.23	0.62	0.2
Mast_cells			0.91			0.97	0.93						
	Kassandra	CIBERSORTX (HNSC)	CIBERSORTX (LM22)	Quantiseq	Quantiseq (Tumor)	Fardeep-absolute	Fardeep-relative	Xcel	CIBERSORT	ABIS	EPIC BRef	EPIC TRef	MCP-counter

FIG. 15G

B_cells	2.8	7.3	9.1	6.6	5.5	11	9.5	11	11	7.2	6.8
CD4_T_cells	1.9	4.3	5.5				3.7	4.5	7.3		
CD8_T_cells	2.5	3.2	4.3				5.3	6.2	4.1		
CD8_T_cells_PD1_high	8.8	14	22	8.9	8.3	30	26	30	22	14	14
CD8_T_cells_PD1_low	6.4	8.2	14	7.8	11	14	12	14	15	13	14
Endothelium	1.7							4.1	2.8	12	11
Fibroblasts	2.6	8.9	9.8	6.1	7	15	14	16	9.7	8	7.7
Macrophages	3.1										
Monocytes	3.1										
NK_cells	0.99	4.2	6.8	3.8	3.2		1.1	1	7.7	6.7	1.7
T_cells	9.7	15	32	9	9.7		37	39	30	16	17
Tregs	3.6		8.6		6.3	7.1	7.1	7.4	8.9	12	7.8
Lymphocytes	0.82				1.3	2.6					
Plasma_B_cells	6.8				7.3	9.1					
Dendritic_cells											
Mast_cells											
	Kassandra	ABIS	CIBERSORT	EPIC BRef	EPIC TRef	CIBERSORTX (HNSC)	CIBERSORTX (LM22)	Fardeep-absolute	Fardeep-relative	Quantiseq	Quantiseq (Tumor)

FIG. 15H

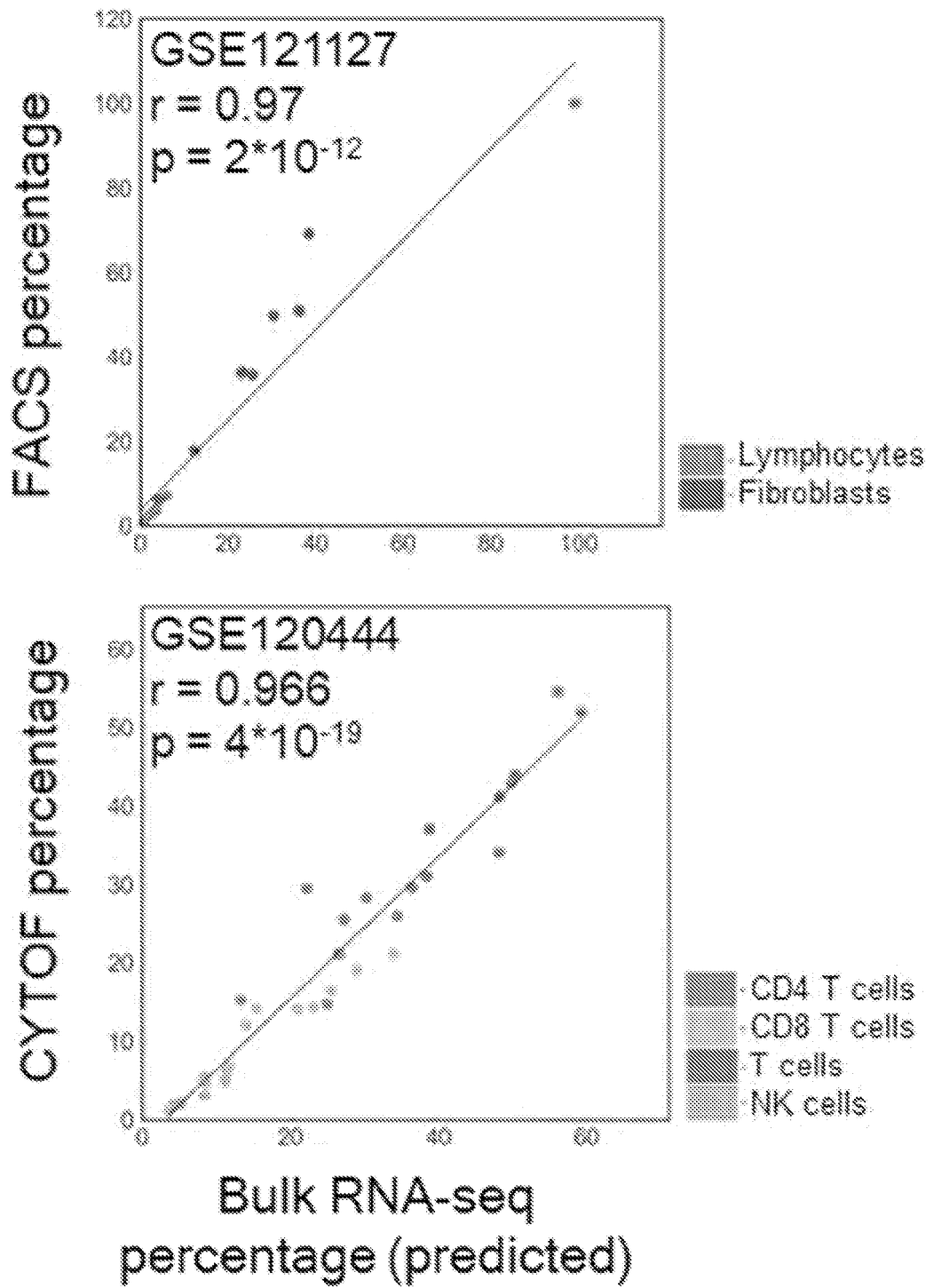


FIG. 15I