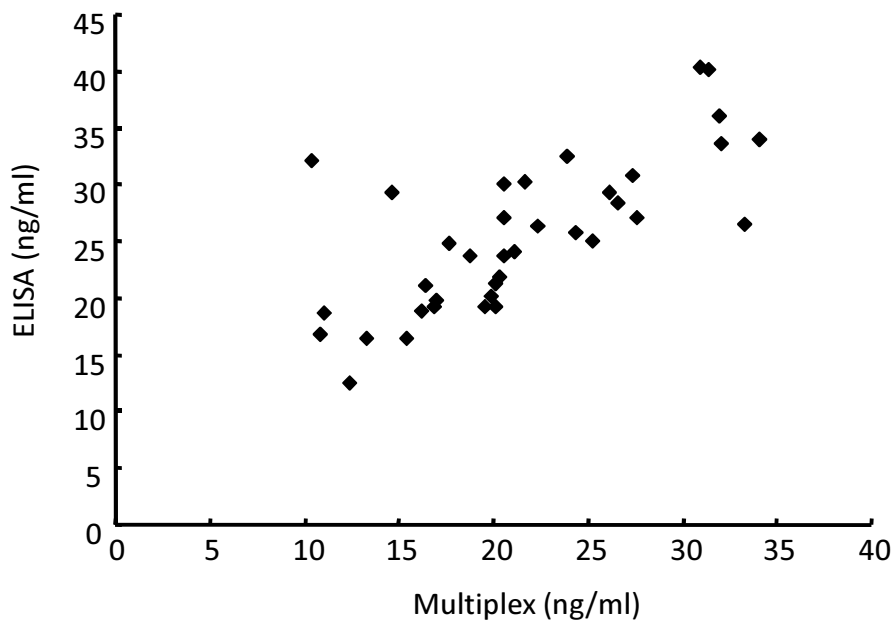


Supporting information

Supplementary Figure S1



Supplementary Figure S1: Comparison of the multiplex bead-based assay and ELISA.

The sIL6R level of 37 patients in the CRT-discovery Cohort was determined by the multiplex bead-based assay (X-axis) and ELISA (Y-axis).

Supplementary Table S1. Pathological criteria for evaluation of therapeutic efficacy.

Grade 0 Ineffective

No recognizable cytological or histological therapeutic effect

Grade 1 Slightly effective

Apparently viable cancer cells (including cells having eosinophilic cytoplasm with vacuolation and swollen nuclei) account for 1/3 or more of tumor tissue, but there is some evidence of degeneration of cancer tissue or cells.

Grade 1a Viable cancer cells accounting for 2/3 or more of tumor tissue

Grade 1b Viable cancer cells accounting for 1/3 or more, but less than 2/3, of tumor tissue

Grade 2 Moderately effective

Viable cancer cells account for less than 1/3 of tumor tissue, while other cancer cells are severely degenerated or necrotic

Grade 3 Markedly effective

No viable cancer cells are evident

Supplementary Table S2. List of 84 cytokines and related proteins analyzed by the Multiplexed immunobead-based assay.

No.	Name	Kit name	Manufacturer
1	Adiponectin	Human Obesity MultiAnalyte Profiling Base Kit	R & D
2	Adipsin	Human Obesity MultiAnalyte Profiling Base Kit	R & D
3	Beta 2-microglobulin	Acute Phase 4-Plex Panel	Invitrogen
4	CRP	Acute Phase 4-Plex Panel	Invitrogen
5	EGF	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
6	ENA78	Cytokine Assay Human	Panomics
7	Eotaxin	Cytokine Assay Human	Panomics
8	FGF-2	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
9	FGF-basic	Cytokine Assay Human	Panomics
10	Flt-3 ligand	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
11	Fractalkine	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
12	Gc Globulin	Acute Phase 4-Plex Panel	Invitrogen
13	G-CSF	Cytokine Assay Human	Panomics
14	GM-CSF	Cytokine Assay Human	Panomics
15	GRO-alpha	Cytokine Assay Human	Panomics
16	Haptoglobin	Acute Phase 4-Plex Panel	Invitrogen
17	HGF	MAP Human Serum Adipokine Panel B	Milliplex
18	IFN-a2	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
19	IFN-g	Cytokine Assay Human	Panomics
20	IL-10	Cytokine Assay Human	Panomics
21	IL-12p40	Cytokine Assay Human	Panomics
22	IL-12p40	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
23	IL-12p70	Cytokine Assay Human	Panomics
24	IL-13	Cytokine Assay Human	Panomics
25	IL-15	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
26	IL-17	Cytokine Assay Human	Panomics
27	IL-17	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
28	IL-17F	Cytokine Assay Human	Panomics
29	IL-1alpha	Cytokine Assay Human	Panomics
30	IL-1beta	Cytokine Assay Human	Panomics
31	IL-1ra	Cytokine Assay Human	Panomics
32	IL-2	Cytokine Assay Human	Panomics
33	IL-3	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
34	IL-4	Cytokine Assay Human	Panomics
35	IL-5	Cytokine Assay Human	Panomics
36	IL-6	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
37	IL-7	Cytokine Assay Human	Panomics
38	IL-8	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
39	IL-9	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
40	Insulin	MAP Human Serum Adipokine Panel B	Milliplex
41	IP-10	Cytokine Assay Human	Panomics
42	Leptin	Cytokine Assay Human	Panomics
43	MCP-1	Cytokine Assay Human	Panomics
44	MCP-3	Cytokine Assay Human	Panomics
45	MDC	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
46	MIG	Cytokine Assay Human	Panomics
47	MIP-1a	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
48	MIP-1b	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
49	MMP-1	Cytokine Assay Human	Panomics
50	MMP-13	Cytokine Assay Human	Panomics

51	MMP-2	Cytokine Assay Human	Panomics
52	MMP-3	Cytokine Assay Human	Panomics
53	MMP-9	Cytokine Assay Human	Panomics
54	NGF	Cytokine Assay Human	Panomics
55	PAI-1 active	MAP Human Serum Adipokine Panel A	Milliplex
56	PAI-1 total	Human Obesity MultiAnalyte Profiling Base Kit	R&D
57	PDGF-BB	Cytokine Assay Human	Panomics
58	RANTES	Cytokine Assay Human	Panomics
59	Resistin	MAP Human Serum Adipokine Panel A	Milliplex
60	SAA	SAA Human Singleplex Bead Kit	Invitrogen
61	sCD30	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
62	sCD40L	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
63	sEGFR	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
64	sE-selectin	Human Adhesion Molecule MultiAnalyte Profiling Base Kit	R&D
65	sgp130	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
66	sICAM-1	Human Adhesion Molecule MultiAnalyte Profiling Base Kit	R&D
67	sIL-1RI	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
68	sIL-1RII	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
69	sIL-2Ra	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
70	sIL-2Ra	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
71	sIL-4R	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
72	sIL-6R	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
73	sP-Selectin	Human Adhesion Molecule MultiAnalyte Profiling Base Kit	R&D
74	sRAGE	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
75	sTNF-RI	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
76	sTNF-RII	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
77	sVCAM-1	Human Adhesion Molecule MultiAnalyte Profiling Base Kit	R&D
78	sVEGF-R1	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
79	sVEGF-R2	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
80	sVEGF-R3	MAP Human Soluble Cytokine Receptor-Premixed 14-plex	Milliplex
81	TGF-a	MAP Human Soluble Cytokine/Chemokine Panel	Milliplex
82	TNF-alpha	Cytokine Assay Human	Panomics
83	TNF-beta	Cytokine Assay Human	Panomics
84	VEGF	Cytokine Assay Human	Panomics

Supplementary Table S3. correlation coefficient between 6 biomarkers

	MMP3	IFNA2	Insulin	MIP1A	sIL6R	MIP1B
MIP1B	0.269287	0.1641825	0.0673247	0.5742265	0.2140135	
sIL6R	0.3218302	-0.068237	0.3459268	0.3489666		
MIP1A	0.2627102	0.5819163	0.080355			
Insulin	0.063862	-0.139248				
IFNA2	0.0040134					
MMP3						

Abbreviations: MIP1B, macrophage inflammatory protein 1- β ; soluble interleukin-6 receptor, sIL6R; MIP1A, macrophage inflammatory protein 1- α ; IFNA2, interferon α 2; MMP3, matrix metalloproteinase 3.