

**Table S1.** Breast Cancer 360 Biological signatures

<b>PROCESSES</b>	<b>SIGNATURES</b>
Breast cancer subtyping	PAM50 Molecular subtyping
	Claudin-Low subtyping
	Triple Negative Breast cancer subtyping
Breast cancer receptor signaling	ESR1 gene expression
	PGR gene expression
	ERBB2 gene expression
	Estrogen receptor signaling
Tumor responsiveness	Antigen processing machinery
	HRD
	BRCA
	P53
Tumor regulation	Apoptosis
	Proliferation
	Differentiation
	FOXA1 gene expression
Inhibitory tumor mechanisms	IDO1 gene expression
	PD-L1 gene expression
Stromal factors	Endothelial cells
	Stromal abundance
Inhibitory metabolism	Hypoxia
Anti-tumor immune activity	Tumor Inflammation Signature (TIS)
	Cytotoxicity
	Interferon gamma signaling
	MHC class II antigen presentation
Inhibitory immune signaling	Inflammatory chemokines
	PD-1 gene expression
	TIGIT gene expression
Immune cell population abundance	Cytotoxic cell abundance
	CD8+ T Cell abundance
	Macrophage abundance
	Mast cell abundance
	Treg abundance

**Table S2.** Summary of the most frequent adverse events (AE).

Safety Population n=58	LTZ (N=21)		LTZ + mVNB (N=19)		mVNB (N=18)	
	N	%	N	%	N	%
Arthralgia	2	9.5	2	10.5	0	0.0
Asthenia	1	4.8	0	0	3	16.7
Diarrhea	0	0	1	5.3	2	11.1
Hot flushes	2	9.5	0	0	1	5.6
Nausea	0	0	3	15.8	2	11.1