

**Table S1 Relationships of expression with characteristics before neoadjuvant chemotherapy.**

Characteristics	Total (n = 82)	Expression of HDAC1		p	Expression of xCT		p
		Low (n= 42, 51.2%)	High (n = 40, 48.8%)		Low (n = 27, 32.9%)	High (n = 55, 67.1, %)	
Age				0.522			0.680
Age < 35	10(12.2)	7(16.7)	3(7.5)		4(14.8)	6(10.9)	
35≤Age≤50	39(47.6)	19(45.2)	20(50)		11(40.7)	28(50.9)	
Age > 50	33(40.2)	16(38.1)	17(42.5)		12(44.4)	21(38.2)	
Menopausal Status				0.522			0.945
Premenopausal	46(56.1)	25(59.5)	21(52.5)		15(55.6)	31(56.4)	
Postmenopausal	36(43.9)	17(40.5)	19(47.5)		12(44.4)	24(43.6)	
Clinical T stage				0.183			0.579
T2	55(67.1)	31(73.8)	24(60)		17(63)	38(69.1)	
T3	27(32.9)	11(26.2)	16(40)		10(37)	17(30.9)	
Clinical N Stage				0.396			0.214
N0	37(45.1)	20(47.6)	17(42.5)		13(48.1)	24(43.6)	
N1	21(25.6)	12(28.6)	9(22.5)		4(14.8)	17(30.9)	
N2	13(15.9)	7(16.7)	6(15)		7(25.9)	6(10.9)	
N3	11(13.4)	3(7.1)	8(20)		3(11.1)	8(14.5)	
ER Status				0.088			0.168
ER negative	28(34.1)	18(42.9)	10(25)		12(44.4)	16(29.1)	
ER positive	54(65.9)	24(57.1)	30(75)		15(55.6)	39(70.9)	
PR Status				1.000			1.000
PR negative	76(92.7)	39(92.9)	37(92.5)		25(92.6)	51(92.7)	
PR positive	6(7.3)	3(7.1)	3(7.5)		2(7.4)	4(7.3)	
Her2 Status				0.173			0.897
Her-2 negative	60(73.2)	28(66.7)	32(80)		20(74.1)	40(72.7)	
Her-2 positive	22(26.8)	14(33.3)	8(20)		7(25.9)	15(27.3)	
Molecular subtypes				0.388			0.518
Luminal A-like	6(7.3)	3(7.1)	3(7.5)		2(7.4)	4(7.3)	
Luminal B-like	48(58.5)	21(50)	27(67.5)		13(48.1)	35(63.6)	
Her-2 enriched	10(12.2)	6(14.3)	4(10)		4(14.8)	6(10.9)	
Triple negative	18(22.0)	12(28.6)	6(15)		8(29.6)	10(18.2)	
Ki67				0.271			0.825
Ki67<30	26(31.7)	11(26.2)	15(37.5)		9(33.3)	17(30.9)	
Ki67≥30	56(68.3)	31(73.8)	25(62.5)		18(66.7)	38(69.1)	

**Table S1 (Continued) .**

Characteristics	Expression of GPX4			Expression of ABCB1		
	Low	High	p	Low	High	p
	(n = 22, 26.8%)	(n = 60, 73.2%)		(n = 73, 89.0%)	(n = 9, 11.0%)	
Age			1.000			1.000
Age < 35	3(13.6)	7(11.7)		9(12.3)	1(11.1)	
35≤Age≤50	10(45.5)	29(48.3)		35(47.9)	4(44.4)	
Age > 50	9(40.9)	24(40)		29(39.7)	4(44.4)	
Menopausal Status			0.182			1.000
Premenopausal	15(68.2)	31(51.7)		41(56.2)	5(55.6)	
Postmenopausal	7(31.8)	29(48.3)		32(43.8)	4(44.4)	
Clinical T stage			0.897			0.711
T2	15(68.2)	40(66.7)		48(65.8)	7(77.8)	
T3	7(31.8)	20(33.3)		25(34.2)	2(22.2)	
Clinical N Stage			0.023			0.568
N0	9(40.9)	28(46.7)		31(42.5)	6(66.7)	
N1	5(22.7)	16(26.7)		19(26)	2(22.2)	
N2	1(4.5)	12(20)		12(16.4)	1(11.1)	
N3	7(31.8)	4(6.7)		11(15.1)	0(0)	
ER Status			0.798			0.156
ER negative	8(36.4)	20(33.3)		27(37)	1(11.1)	
ER positive	14(63.6)	40(66.7)		46(63)	8(88.9)	
PR Status			0.657			0.514
PR negative	20(90.9)	56(93.3)		68(93.2)	8(88.9)	
PR positive	2(9.1)	4(6.7)		5(6.8)	1(11.1)	
Her2 Status			0.081			0.054
Her-2 negative	13(59.1)	47(78.3)		56(76.7)	4(44.4)	
Her-2 positive	9(40.9)	13(21.7)		17(23.3)	5(55.6)	
Molecular subtypes			0.268			0.298
Luminal A-like	2(9.1)	4(6.7)		5(6.8)	1(11.1)	
Luminal B-like	12(54.5)	36(60)		41(56.2)	7(77.8)	
Her-2 enriched	5(22.7)	5(8.3)		9(12.3)	1(11.1)	
Triple negative	3(13.6)	15(25)		18(24.7)	0(0)	
Ki67			0.583			1.000
Ki67<30	8(36.4)	18(30)		23(31.5)	3(33.3)	
Ki67≥30	14(63.6)	42(70)		50(68.5)	6(66.7)	

Abbreviations: T, tumor; N, nodal; ER estrogen receptor; PR, progesterone receptor; Her-2, human epidermal growth factor receptor 2; Data are given as n (%) HDAC1, histone deacetylases 1; xCT, glutamate-cysteine reverse transporter protein; GPX4, glutathione peroxidase 4; ABCB1, ATP binding cassette subfamily B member 1.