

**Figure S2**

**Breast invasive carcinoma: 1067 patients**

Genes correlated	Pearson's rho (r)	P-value
TMUB1-BAX	0,67	5,56e <sup>-141</sup>
TMUB1-BBC3	0,59	1,69e <sup>-100</sup>
TMUB1-NOXA1	0,57	5,28e <sup>-91</sup>

Heatmap correlation index

	BAX	BBC3	NOXA1
2-1	*** p <0.001	*** p <0.001	*** p <0.001
3-1	*** p <0.001	*** p <0.001	*** p <0.001
4-1	*** p <0.001	*** p <0.001	*** p <0.001
3-2	*** p <0.001	*** p <0.001	*** p <0.001
4-2	*** p <0.001	*** p <0.001	*** p <0.001
4-3	*** p <0.001	*** p <0.001	*** p <0.001

Quartiles comparison

**Lung adenocarcinoma: 475 patients**

Genes correlated	Pearson's rho (r)	P-value
TMUB1-BAX	0,41	5,23e <sup>-21</sup>
TMUB1-BBC3	0,46	4,98e <sup>-26</sup>
TMUB1-NOXA1	0,43	9,88e <sup>-23</sup>

Heatmap correlation index

	BAX	BBC3	NOXA1
2-1	*** p <0.001	*** p <0.001	** p =0,008
3-1	*** p <0.001	*** p <0.001	*** p <0.001
4-1	*** p <0.001	*** p <0.001	*** p <0.001
3-2	ns p =0,945	ns p =0,473	ns p =0,101
4-2	* p =0,032	* p =0,014	*** p <0.001
4-3	ns p =0,130	ns p =0,394	ns p =0,187

Quartiles comparison

**Pancreatic adenocarcinoma: 164 patients**

Genes correlated	Pearson's rho (r)	P-value
TMUB1-BAX	0,51	2,49e <sup>-12</sup>
TMUB1-BBC3	0,72	2,47e <sup>-22</sup>
TMUB1-NOXA1	0,75	8,25e <sup>-32</sup>

Heatmap correlation index

	BAX	BBC3	NOXA1
2-1	ns p =0,104	*** p <0.001	*** p <0.001
3-1	*** p <0.001	*** p <0.001	*** p <0.001
4-1	*** p <0.001	*** p <0.001	*** p <0.001
3-2	ns p =0,422	ns p =0,316	ns p =0,999
4-2	*** p <0.001	*** p <0.001	* p =0,034
4-3	* p =0,019	* p =0,014	* p =0,037

Quartiles comparison

**Figure S2.** Correlation values related to heatmap showed in Figure 6 into selected tumors data. The tables on the left display the p-value of comparison in HOPS/TMUB1 quartiles among the apoptotic genes BAX, BBC3 and NOXA1.

**Table 1.** Primer sequences used in the RT-qPCR assays.

Target	Primer name	Sequence (5'→3')
<i>β-actin</i>	β-actin H F	CACTCTTCCAGCCTTCCT
	β-actin H R	CAGGTCTTTGCGGATGTC
<i>Myc</i>	Myc H F	CACACATCAGCACAACTACG
	Myc H R	CTGTCCAACCTTGACCCTCTT
<i>Tp63</i>	TP63 H F	CGTGTCCTTCCAGCAGTC
	TP63 H R	GGCAGTAGAGTTTCTTCAGTTCA