SUPPLEMENTAL DATA

Supplemental Figure Legend

Figure S1. LC3B staining with brown chromogen in normal tissues from YTMA96 as follows: (a) normal brain tissue; (b) normal renal tubular epithelium; c) an area in close proximity to ovarian carcinoma containing an LC3B-positive infiltrating macrophage (mϕ) along with LC3B-negative lymphocytes (L); d) breast carcinoma-infiltrating macrophage (mϕ); e) breast carcinoma-associated stromal fibroblasts; f) melanoma-associated stromal fibroblasts abutting a primary invasive melanoma. Arrows denote LC3B punctate staining.

Table S1: Multitumor microarray YTMA96--LC3B staining intensity.

	LC3B % moderate-strong staining (Mean ±SD)	n =
Astrocytoma	97 ± 7	11
Hepatocellular carcinoma	96 ± 5	18
Lymphoma non-Hodgkins	95 ± 10	10
Prostate carcinoma	95 ± 11	19
Gastric carcinoma	93 ± 6	14
Glioblastoma	93 ± 5	11
Ovarian carcinoma	93 ± 7	14
Thyroid papillary carcinoma	89 ± 11	12
Lung carcinoma	87 ± 13	18
Malignant melanoma	86 ± 18	20
Endometrial carcinoma	85 ± 13	13
Bladder carcinoma	84 ± 11	20
Colon carcinoma	83 ± 8	14
Sarcoma	80 ± 11	16
Squamous cell carcinoma	80 ± 7	15
Pancreatic carcinoma	76 ± 19	11
Breast carcinoma	72 ± 13	20
Lymphoma Hodgkins	68 ± 24	10
Renal cell carcinoma	63 ± 34	12
Testis germ cell carcinoma	60 ± 12	14

Results represent the mean ± SD of the percentage of tumors with moderate to strong staining intensities on multitumor microarray YTMA96. Tumors were scored on a 0-3^{+} scale with 0/1+ = none to weak (not shown) and 2+/3+ = moderate to strong (shown above). Two slides of YTMA96 were stained with anti-LC3B using a brown chromogen. Both slides were scored independently by two observers and the were data combined such that the means represent a total of 4 data sets.

Table S2: Breast cancer array YTMA49--Clinicopathologic criteria vs LC3B staining intensity (AQUA score).

Histologic Grade	n	LC3B mean ± std	p = 0.2034
1	10	20.9 ±7.4	
2	167	34.8 ± 25.9	
3	117	32.7 ± 23.5	
Nuclear Grade			p < 0.0001
1	95	17.9 ± 12.2	
2	292	24.8 ± 18.4	
3	156	40.0 ± 30.1	
Tumor Size			p = 0.0117
< 2 cm	187	23.4 ± 18.3	
2-5 cm	259	28.9 ± 24.3	
≥ 5 cm	88	31.1 ± 27.8	
Positive Nodes			p < 0.0001
0 (node neg.)	286	21.2 ± 18.5	
1-3	139	37.0 ± 27.9	
4-9	92	30.4 ± 23.0	
≥10	60	29.7 ± 17.2	
Patient Age			p < 0.0001
< 50 years	170	37.9 ± 46.4	
≥ 50	425	26.8 ± 20.9	
Estrogen Receptor			p = 0.0009
Negative	261	30.9 ± 26.2	
Positive	326	24.6 ± 18.9	
Prog. Receptor			p = 0.0043
Negative	267	30.3 ± 24.5	
Positive	320	24.9 ± 20.6	
HER2/neu			p = 0.2943
0	341	26.7 ± 21.7	
1	113	28.7 ± 24.7	
2	41	29.4 ± 25.7	
3	61	32.5 ± 22.9	

Table S3: Breast cancer array YTMA49--Clinicopathologic criteria vs relative risk (univariate survival statistics).

Histologic Grade	Rel Risk	95% C.I.	p = 5142
1	1.00		
2	1.15	(0.505-2.632)	
3	1.36	(0.589-3.118)	
Nuclear Grade			p = 0.0064
1	1.00		
2	1.10	(0.789-1.540)	
3	1.64	(1.149-2.338)	
Tumor Size			p < 0.0001
< 2 cm	1.00		
2-5 cm	1.73	(1.287-2.332)	
≥ 5 cm	2.93	(2.082-4.134)	
Positive Nodes			p < 0.0001
0 (node neg)	1.00		
1-3	1.96	(1.460-2.633)	
4-9	2.37	(1.705-3.300)	
≥10	3.22	(2.243-4.055)	
Patient Age			p < 0.1215
< 50 years	1.00		
≥ 50	1.24	(0.945-1.619)	
Estrogen Receptor			p = 0.0032
Positive	1.00		
Negative	1.43	(1.126-1.805)	
Prog. Receptor			p = 0.0013
Positive	1.00		
Negative	1.47	(1.163-1.863)	
HER2/neu			p = 0.4339
0	1.00		
1	0.98	(0.719-1.345)	
2	1.17	(0.732-1.857)	
3	1.19	(0.794-1.714)	

Table S4: Melanoma microarray YTMA20--Clinicopathologic criteria vs LC3B staining intensity (AQUA score).

Primary tumors (invasive)			
Breslow Depth	n	LC3B mean ± std	p = 0.0479
≤ 1mm	58	23.0 ± 13.8	
1 – 2 mm	48	21.0 ± 13.6	
2 – 4 mm	58	21.6 ± 18.7	
> 4 mm	44	32.6 ± 24.1	
Clark Level			p = 0.1066
II	24	18.3 ± 13.5	
III	70	21.2 ± 14.2	
IV	84	24.0 ± 17.4	
V	26	33.4 ± 28.9	
TILs			p = 0.6681
Absent	10	19.8 ± 10.9	
Sparse	25	22.0 ± 19.3	
NonBrisk	65	25.9 ± 20.2	
Brisk	29	23.1 ± 16.1	
Ulceration			p = 0.1094
Absent	81	27.5 ± 14.9	
Present	49	22.1 ± 23.0	
Sex			p = 0.1973
Male	71	23.1 ± 15.3	
Female	61	23.8 ± 19.8	
Age			p = 0.0375
<60	65	27.4 ± 21.4	
≥60	67	20.7 ± 14.2	
Metastatic tumors			
Location	n	LC3B mean ± std	p = 0.4092
Lymph Node	86	38.6 ± 36.9	
Skin	43	30.6 ± 24.8	
Distant	32	33.4 ± 31.4	

Table S5: Multitumor array YTMA96--Mitotic figures vs LC3B staining intensity.

	LC3B expression		
	0/1+	2+/3+	p-value
Mitotic figures observed	2	89	$p < 0.002$
Mitotic figures expected	15	76	

Mitotic figures were counted in two slides of multitumor array YTMA96 stained for LC3B. The expected number of mitotic figures was based on a random distribution between LC3B low- and high-staining tumors comprising 16% and 84% of the total respectively (Table S5). The p-value was calculated through Pearson's chi-squared test with Yates' continuity correction.

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Punctate LC3B..

Figs 1-6

Supplemental Fig S1

Fig S1