

Supplemental Materials

Table S1. Breast cancer patient demographics

Patient Characteristics (%)	Entire Population (n=40)	Stage I (n=10)	Stage II (n=10)	Stage III (n=10)	Stage IV (n=10)
Race					
White	75	100	70	50	80
Black	17.5	0	20	50	0
Latina	2.5	0	10	0	0
Multiracial	5	0	0	0	20
Ethnicity					
Non-Spanish, Non-Hispanic	97.5	100	90	100	100
Spanish; Hispanic	2.5	0	10	0	0
Age					
30-39	10	0	20	0	20
40-49	22.5	0	20	30	40
50-59	17.5	10	20	30	10
60-69	17.5	20	10	10	30
70-79	27.5	50	30	30	0
80-89	5	20	0	0	0
Smoking History					
Never	60	60	60	40	80
Previous	32.5	30	40	40	20
Current	7.5	10	0	20	0
Tissue Site					
Breast	85	90	100	90	60
Lymph Node	2.5	10	0	0	0
Brain	7.5	0	0	10	20
Ovary	2.5	0	0	0	10
Liver	2.5	0	0	0	10
Prognosis					
Primary	82.5	90	10	90	50

Recurrence	5	10	0	0	10
Metastatic	12.5	0	0	10	40
<b>Histology</b>					
Invasive	2.5	0	0	0	0
Invasive Ductal	65	10	80	50	50
Invasive Lobular	2.5	80	0	10	0
Invasive Mammary	12.5	0	20	20	10
Adenocarcinoma	7.5	0	0	0	20
Invasive Ductal Adenocarcinoma	2.5	10	0	10	0
Carcinoma	2.5	0	0	0	10
Lobular Carcinoma	2.5	0	0	0	10
Other	5	0	0	20	0

**Table S2.** Lung cancer patient demographics

Patient Characteristics (%)		Entire Population (n=40)	Stage I (n=10)	Stage II (n=10)	Stage III (n=10)	Stage IV (n=10)
<b>Sex</b>						
	Male	57.5	40	70	70	50
	Female	42.5	60	30	30	50
<b>Race</b>						
	White	75	10	70	80	70
	Black	22.5	10	30	20	30
	Latinx	2.5	80	0	0	0
<b>Age</b>						
	40-49	5	10	0	10	0
	50-59	15	30	10	0	20
	60-69	57.5	50	50	70	60
	70-79	22.5	10	40	20	20
<b>Smoking History</b>						
	Never	7.5	0	0	10	20

Previous	55	70	70	70	10
Current	37.5	30	30	20	70
<b>Prognosis</b>					
Primary	92.5	90	100	100	80
Metastatic	7.5	10	0	0	20
<b>Histology</b>					
Adenocarcinoma	62.5	100	20	60	70
Squamous Cell	32.5	0	80	40	10
Large Cell	5	0	0	0	20

**Table S3.** Colon cancer patient demographics

Patient Characteristics (%)		Entire Population (n=37)	Stage I (n=10)	Stage II (n=10)	Stage III (n=7)	Stage IV (n=10)
<b>Sex</b>						
	Female	48.7	80	60	71.4	50
	Male	51.3	20	40	28.6	50
<b>Age</b>						
	20-29	2.7	10	0	0	10
	40-49	5.41	30	0	0	10
	50-59	32.43	10	50	14.29	30
	60-69	18.92	40	20	57.14	0
	70-79	29.73	10	30	28.57	10
	80-89	10.81	10	0	0	40
<b>Race</b>						
	White	81.1	80	70	85.7	90
	Black, African American	18.9	20	30	14.3	10
<b>Smoking</b>						
	Not documented	8.1	10	0	28.5	0
	Never smoked	45.9	40	50	42.9	50
	Previous smoker	35.1	40	40	14.3	40
	Current smoker	10.8	10	10	14.3	10
<b>Prognosis</b>						
	Primary	64.9	100	40	85.7	40
	Recurrence	5.4	0	0	0	20
	Metastatic	29.7	0	60	14.3	40
<b>Sample Type</b>						
	EDTA Plasma	54.1	50	50	71.4	50
	Serum	45.9	50	50	28.6	50

**Table S4.** Galectin concentration values for patient groups in Figure 1

Galectin	Group	N	Mean (ng/mL)	Std Dev	Range (ng/mL)	5% Quantile	95% Quantile	p-value
Gal-1	Healthy	36	18.1	3.40				
	Breast	40	23.40	7.14	11.30 - 43.92	13.64	37.15	0.0007
	Colon	37	34.33	16.85	5.38 - 88.38	15.73	73.07	≤0.0001
	Lung	40	26.83	12.81	13.41 - 83.69	15.28	47.67	0.0002
Gal-3	Healthy	36	6.73	2.00				
	Breast	40	17.05	6.65	8.85 - 38.20	9.05	31.68	≤0.0001
	Colon	37	13.56	6.67	3.21 - 30.12	4.88	29.91	≤0.0001
	Lung	39	17.84	6.90	4.52 - 37.82	6.55	29.79	≤0.0001
Gal-7	Healthy	27	2.12	5.15	0.15 - 27.26	0.16	18.66	
	Breast	40	1.70	1.75	0.46 - 11.69	0.54	3.34	.0497
	Colon	36	0.93	0.70	0.22 - 3.77	0.23	2.11	
	Lung	40	1.90	1.11	0.42 - 5.08	0.43	4.60	0.0071
Gal-8	Healthy	15	2.00	1.73	0.46 - 5.97	0.46	5.97	
	Breast	34	2.42	2.21	0.95 - 11.84	0.95	7.63	
	Colon	28	2.48	3.16	0.58 - 13.19	0.60	12.30	
	Lung	32	2.67	7.89	0.56 - 45.71	0.57	18.82	
Gal-9	Healthy	36	7	1.63				
	Breast	40	8.44	3.06	3.42 - 16.12	4.26	14.60	
	Colon	37	9.92	3.89	5.27 - 25.12	5.42	18.47	0.0005
	Lung	40	10.12	4.81	3.79 - 26.64	4.92	25.73	0.0002

**Table S5.** Galectin concentration values for patient groups in Figure 2

Gal	Cancer	Stage	Mean (ng/mL)	Std Dev	Range (ng/mL)	5% Quantile	95% Quantile	p-value
Gal-1	Breast	I	25.83	8.86	15.03 - 37.22	15.03	37.22	0.0456
		II	20.47	5.22	11.30 - 28.36	11.30	28.36	
		III	25.33	7.84	13.56 - 43.92	13.56	43.92	0.0025
		IV	21.95	5.57	15.04 - 32.13	15.04	32.13	
	Colon	I	33.14	12.89	20.43 - 63.99	20.43	63.99	≤0.0001
		II	35.80	22.33	5.38 - 88.38	5.38	88.38	0.0022
		III	33.21	18.56	21.06 - 71.37	21.06	71.37	0.0026
		IV	34.82	15.37	16.89 - 61.31	16.89	61.31	0.0014
	Lung	I	27.06	8.22	16.80 - 42.35	16.80	42.35	0.0036
		II	32.28	21.31	16.39 - 83.69	16.39	83.69	0.0364
		III	25.05	7.62	15.37 - 40.34	15.37	40.34	0.0179
		IV	22.91	8.79	13.41 - 39.01	13.41	39.01	
Gal-3	Breast	I	18.01	7.37	9.02 - 31.70	9.02	31.70	≤0.0001
		II	17.77	4.44	11.50 - 23.98	11.50	23.98	≤0.0001

Gal-7	Colon	III	16.86	8.74	8.85 - 38.20	8.85	38.20	≤0.0001
		IV	15.58	6.08	9.69 - 31.35	9.69	31.35	≤0.0001
		I	14.64	6.92	8.09 - 29.89	8.09	29.89	≤0.0001
		II	14.41	8.08	7.14 - 30.12	7.14	30.12	0.0002
		III	13.53	6.87	3.21 - 24.74	3.21	24.74	0.0235
		IV	11.65	5.23	5.07 - 20.51	5.07	20.51	0.0152
		I	19.19	6.46	11.14 - 29.79	11.14	29.79	≤0.0001
		II	17.78	9.03	4.52 - 37.82	4.52	37.82	0.0005
	Lung	III	16.23	4.93	9.09 - 24.68	9.09	24.68	≤0.0001
		IV	18.18	7.35	6.55 - 28.08	6.55	28.08	0.0004
		I	2.10	0.80	1.00 - 3.37	1.00	3.37	0.0206
		II	2.40	3.28	1.00 - 11.69	1.00	11.69	
		III	1.11	0.39	0.58 - 1.95	0.58	1.95	
		IV	1.18	0.49	0.46 - 1.69	0.46	1.69	
		I	0.82	0.57	0.22 - 1.68	0.22	1.68	0.0341
		II	0.68	0.35	0.23 - 1.24	0.23	1.24	
		III	1.38	1.23	0.23 - 3.77	0.23	3.77	
		IV	0.96	0.48	0.41 - 1.73	0.41	1.73	
	Lung	I	1.15	0.67	0.42 - 2.58	0.42	2.58	0.0341
		II	2.36	1.43	0.95 - 5.07	0.95	5.07	
		III	2.09	1.18	0.99 - 4.35	0.99	4.35	
		IV	1.99	0.76	1.05 - 3.20	1.05	3.20	
Gal-8	Breast	I	2.41	1.82	0.95 - 6.22	0.95	6.22	
		II	2.62	1.87	0.96 - 6.05	0.96	6.05	
		III	3.02	3.49	0.95 - 11.84	0.95	11.84	
		IV	1.64	0.89	1.02 - 3.77	1.02	3.77	
	Colon	I	3.12	3.78	0.67 - 11.21	0.67	11.21	
		II	1.98	1.63	0.62 - 4.51	0.62	4.51	
		III	3.14	4.99	0.58 - 13.19	0.58	13.19	
		IV	1.65	1.72	0.74 - 5.13	0.74	5.13	
	Lung	I	1.61	1.22	0.57 - 4.35	0.57	4.35	
		II	0.99	0.45	0.58 - 1.79	0.58	1.79	
		III	1.15	0.50	0.56 - 1.80	0.56	1.80	
		IV	6.85	15.71	0.70 - 45.71	0.70	45.71	
Gal-9	Breast	I	9.31	2.62	5.76 - 12.54	5.76	12.54	
		II	7.59	3.35	4.26 - 12.78	4.26	12.78	
		III	8.39	3.21	3.42 - 16.12	3.42	16.12	
		IV	8.48	3.24	4.78 - 14.69	4.78	14.69	
	Colon	I	9.04	2.53	5.79 - 12.00	5.79	12.00	
		II	9.46	3.24	5.27 - 15.85	5.27	15.85	

	III	10.57	6.47	6.97 - 25.12	6.97	25.12	
	IV	10.81	3.65	5.44 - 17.73	5.44	17.73	0.0044
Lung	I	11.27	4.16	4.92 - 20.52	4.92	20.52	0.0030
	II	10.22	6.02	5.29 - 26.00	5.29	26.00	
	III	8.30	2.59	3.79 - 12.65	3.79	12.65	
	IV	10.69	5.86	6.61 - 26.64	6.61	26.64	0.0179