

Protein Conformational Changes in Breast Cancer Sera Using Infrared Spectroscopic Analysis

Hemendra Ghimire, Chakravarthy Garlapati, Emiel A. M. Janssen, Uma Krishnamurti, Gengsheng Qin, Ritu Aneja, and A. G. Unil Perera

Supporting Information

Breast cancer (BC) patients' information

Table S1. Information about the patients: Biopsy results such as Invasive lobular carcinoma (ILC), Invasive ductal carcinoma (IDC), Ductal Carcinoma In-Situ (DCIS) confirmed the BC diagnoses. The tumor grading assessment was performed based on the national cancer institute (NCI) guidelines. Grade-2 denotes the intermediate grade or moderately differentiated tumor where as grade-3 denotes a high grade or poorly differentiated tumor.

ID	1	2	3	4	5	6	7	8	9	10
Age years	41.95	56.55	65.36	46.98	50.39	37.86	58.24	30.97	65.97	63.75
BMI	40.09	28.63	33.43	38.52	54.8	N/A	21.14	33.59	25.96	22.78
Menstrual Status	Pre menopausal	Post menopausal	Post menopausal	N/A	N/A	Pre menopausal	Unknown	Pre menopausal	Post menopausal	N/A
BC Discovery	Screening	Screening	Accidental	Accidental	Screening	Accidental	Self-exam	Self-exam	Self-exam	Pain
History	No	Yes	No	No	No	No	Yes	No	No	Yes
Tumor Size	.9 x .9 x 1.1cm	1 x .8cm	1.99x1.82 x1.14cm	5.3x3.9 cm	2.5 cm	6.6 x 3.9 x 4.2 cm	5 cm	2.4 x 2.1 cm	5.0 cm	7.0 x 5.3 x 3.7 cm
Laterality Biopsy	Right	Right	Left	Right	Right	Left	Left	Right	Left	Left
Biopsy Results	ILC	IDC	IDC	IDC	IDC	IDC	IDC	IDC	IDC	IDC

Type of Surgery	Lymph Nodes	Malignant Grade
Mastectomy	Yes	2
Mastectomy SLNB	Yes	3
Mastectomy	Yes	3
Partial Mastectomy (lumpectomy) SLNB	No	3
Mastectomy ALND	Yes	3
Mastectomy SLNB	No	3
Mastectomy SLNB	No	3
Partial Mastectomy (lumpectomy) SLNB	Yes	3
Partial Mastectomy (lumpectomy) SLNB	No	2
Mastectomy SLNB	No	3

Table S1. shows the breast cancer (BC) patients clinical information. The age of BC patients ranges from 30 years to 65 years and the age of control volunteers lies within this interval (41 to 58 years). The median age for BC patients and control volunteers remains similar; 53 years for BC and 52 years for controls. All BC patients were triple-negative (the hormone receptor subtype; estrange receptor (ER), progesterone receptor (PR) and human epidermal growth factor receptor-2 (HER2/neu) status was negative).