

Additional file 1: Table S1. Logistic regression models and discriminatory capacity of the risk factor adjusted breast density estimates not already shown in Table 6. Odds ratios, area under the curve (AUC) of the receiver operating characteristic (ROC) and 95% confidence intervals for the models are provided. Dashes indicate features not included in each model.

Risk Factor	Gail Risk Factors Plus Absolute Dense Area			Gail Risk Factors Plus Absolute Dense Volume			Gail Risk Factors Plus Volume Percent Density			Gail Risk Factors Plus BI-RADS Breast Density		
	Odds Ratio	p-value	AUC	Odds Ratio	p-value	AUC	Odds Ratio	p-value	AUC	Odds Ratio	p-value	AUC
Demographics												
Age	1.03 (0.89-1.18)	0.71		1.05 (0.91-1.21)	0.49		1.03 (0.90-1.19)	0.63		0.96 (0.84-1.10)	0.60	
Age at Menarche	0.59 (0.37-0.94)	0.03		0.65 (0.41-1.03)	0.07		0.56 (0.35-0.88)	0.01		0.56 (0.35-0.88)	0.01	
Number of Benign Biopsies	1.00 (0.68-1.48)	0.99		0.99 (0.67-1.46)	0.96		0.99 (0.68-1.43)	0.94		1.08 (0.75-1.55)	0.69	
1st Degree Family History	0.76 (0.44-1.31)	0.32		0.76 (0.45-1.31)	0.33		0.84 (0.50-1.42)	0.52		0.92 (0.55-1.53)	0.74	
Parity												
Nulliparous	1 (N/A)	-		1 (N/A)	-		1 (N/A)	-		1 (N/A)	-	
Prior to age 30y	2.89 (1.48-5.68)	0.002		3.21 (1.63-6.32)	0.001		2.69 (1.41-5.14)	0.003		0.24 (1.19-4.21)	0.01	
Age 30y or older	2.29 (1.07-4.88)	0.03		2.41 (1.13-5.13)	0.02		2.24 (1.09-4.61)	0.03		2.01 (0.99-4.08)	0.05	
Race			0.75 (0.70-0.81)			0.74 (0.68-0.79)			0.68 (0.62-0.74)			0.64 (0.58-0.71)
Caucasian	1 (N/A)	-		1 (N/A)	-		1 (N/A)	-		1 (N/A)	-	
African-American	0.47 (0.25-0.88)	0.02		0.36 (0.19-0.69)	0.002		0.52 (0.29-0.94)	0.03		0.54 (0.30-0.97)	0.04	
Asian	0.65 (0.12-3.52)	0.62		0.42 (0.08-2.13)	0.30		0.39 (0.08-1.91)	0.24		0.45 (0.09-2.20)	0.37	
Other	1.07 (0.23-4.93)	0.93		0.90 (0.21-3.84)	0.89		0.87 (0.21-3.71)	0.85		0.81 (0.20-3.34)	0.77	
Continuous Density Estimates												
LIBRA: Absolute Dense Area	2.45 (1.86-3.24)	<0.001		-	-		-	-		-	-	
Quantra: Absolute Dense Volume	-	-		2.40 (1.80-3.21)	<0.001		-	-		-	-	
Quantra: Volume Percent Density	-	-		-	-		1.69 (1.27-2.22)	<0.001		-	-	
BI-RADS Breast Density	-	-		-	-		-	-		1.07 (0.74-1.56)	0.71	