Supplementary Material: Prospective Assessment of Systemic MicroRNAs as Markers of Response to Neoadjuvant Chemotherapy in Breast Cancer

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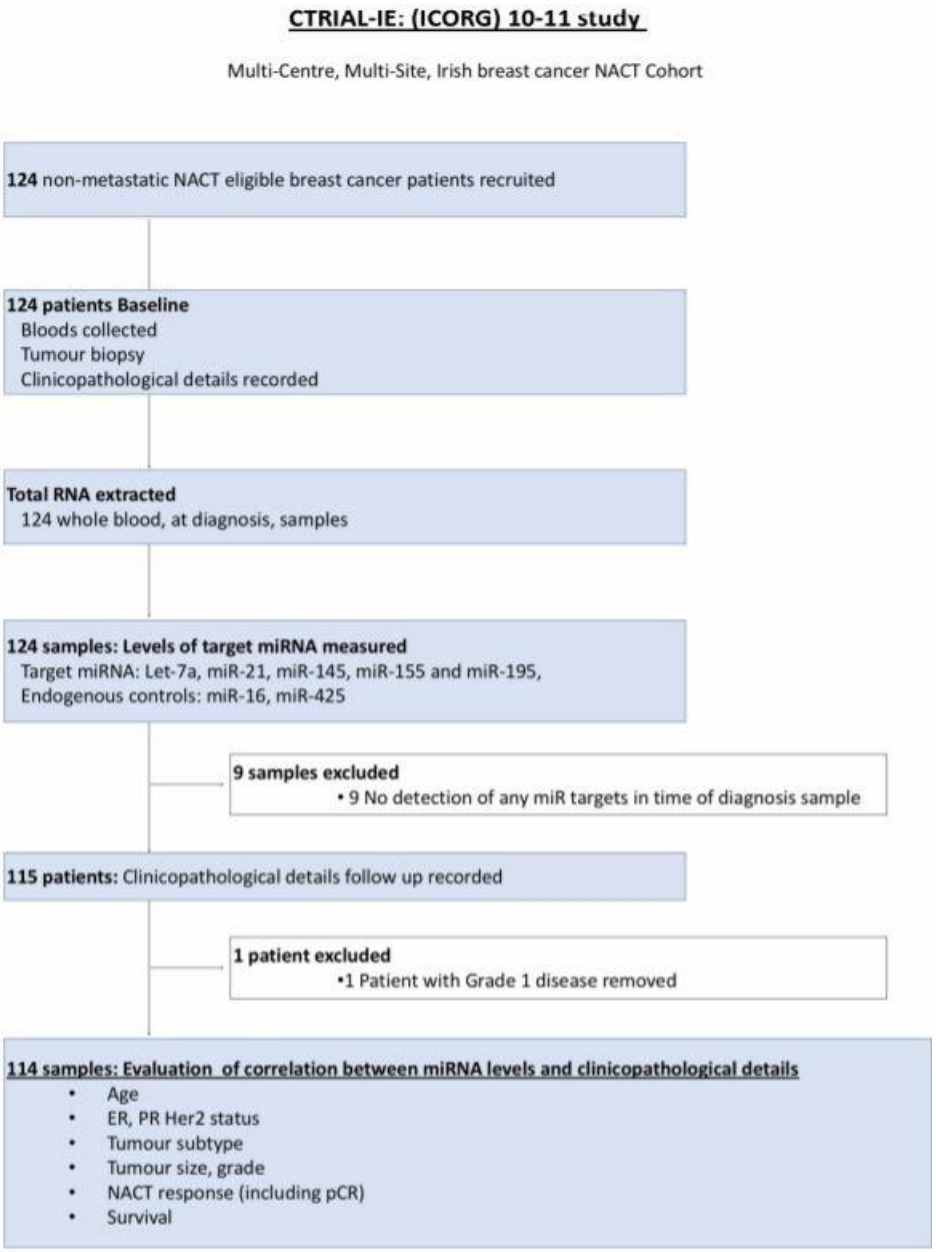

Figure S1. Study Enrollment and analysis Flow Diagram. Illustrates cohort recruitment and sample analysis workflow. Final $n = 114$ patient samples analyzed.

A

	Odds Ratio (95 CI)
	Dependent variable:
	Responders
Let.7a	0.874 (0.522, 1.463)
Constant	0.820 (0.559, 1.202)
Observations	108
R^2	0.003
χ^2	0.264 (df = 1)
Note:	*p<0.1; **p<0.05; ***p<0.01

B

	Odds Ratio (95 CI)
	Dependent variable:
	Responders
miR.145	1.004 (0.522, 1.931)
Constant	0.845 (0.578, 1.236)
Observations	107
R^2	0.00000
χ^2	0.0001 (df = 1)
Note:	*p<0.1; **p<0.05; ***p<0.01

C

	Odds Ratio (95 CI)
	Dependent variable:
	Responders
miR.155	0.954 (0.603, 1.507)
Constant	0.873 (0.596, 1.280)
Observations	109
R^2	0.001
χ^2	0.042 (df = 1)
Note:	*p<0.1; **p<0.05; ***p<0.01

Figure S2. Univariate analysis of Let 7a, miRNA-145 and miRNA-155 expression as an independent predictor of response. (**A**) Let 7a. (**B**). miRNA-145. (**C**) miRNA-155. Observations = *n* (indicated for each).

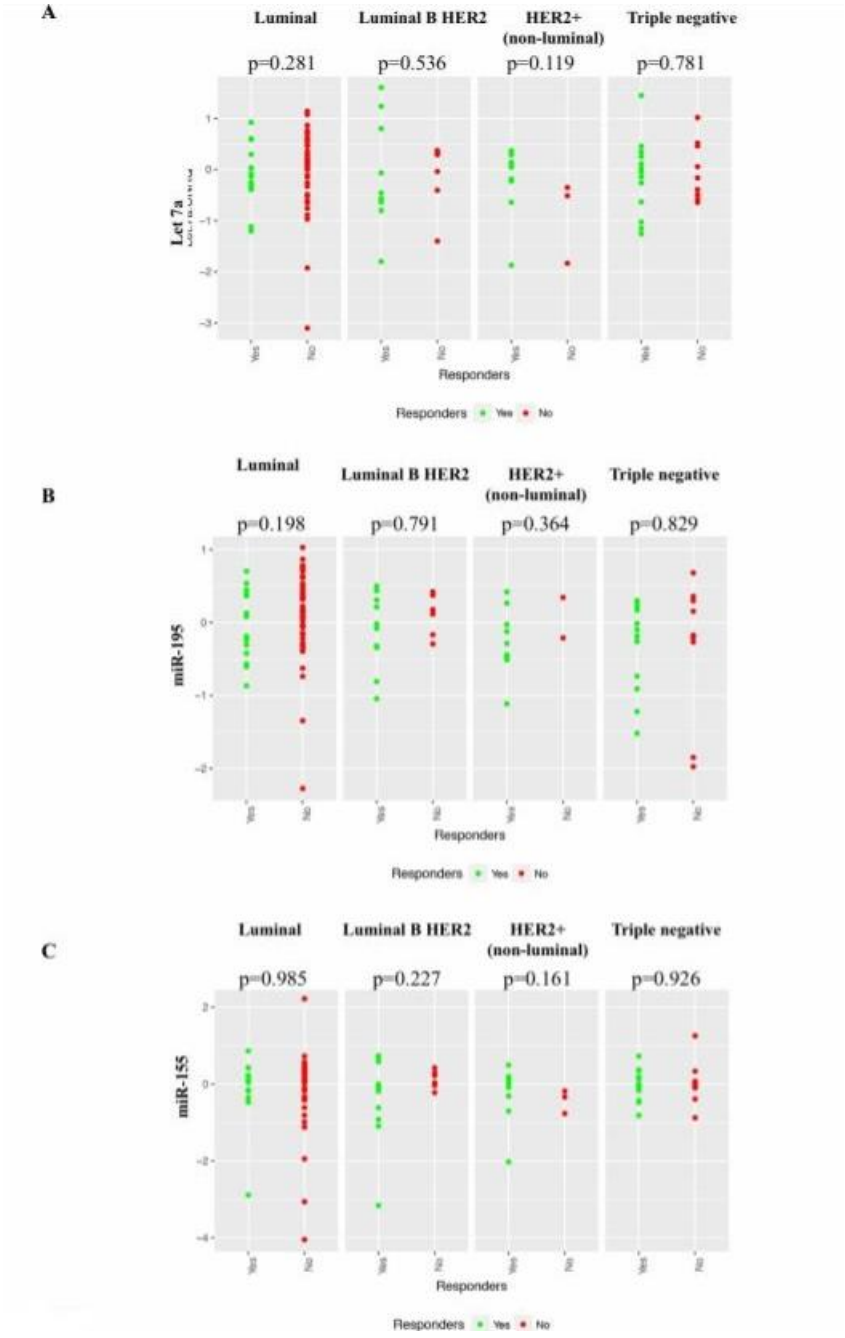

Figure S3. Variation in expression of each target miRNA by response to NACT was assessed in the four breast cancer subtypes. (**A**) Let 7a. (**B**) miR-195. (**C**) miR-155. Luminal (responders n = 15, non-responders n = 41), Luminal B Her2 (responders n = 12, non-responders n = 7), Her2+ (non-luminal) (responders n = 10, non-responders n = 3), Triple negative (responders n = 14, non-responders n = 9). $p < 0.05$ considered significant.

Table S1. Diagnostic accuracy of miRNA and complete response.

Target miRNA	Complete Response AUC (Sensitivity, Specificity)
Let-7a	56.8% (45.2%, 68.5%)
miR-21	58.3% (46.7%. 69.9%)
miR-145	51.5% (39.4%, 63.6%)
miR-155	53.9% (42.5%, 65.3%)
miR-195	67.1% (56.0%, 78.3%)