

## **BRCA1 interactors - Rad50 and BRIP1: As prognostic and predictive molecules for the severity of Triple-Negative Breast Cancer**

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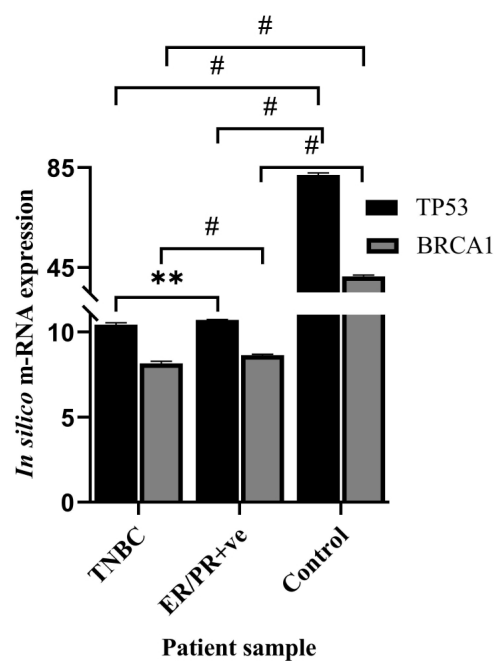
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### **Author contribution:**

**Katheeja Muhseena N:** Original draft, investigation, data curating and statistical analysis, making figures and writing the manuscript. **Dr. Ranajith Das:** Guided Ms. Katheeja Muhseena N in data curation from TCGA database and contributed in statistical analysis of the same. **Dr. Shankar Prasad Das:** Visualization, review, editing and intellectual inputs in the manuscript. **Dr. Suparna Laha:** Original draft, conceptualization, methodology, analysis and interpretation of the data, proofreading, supervision and project administration.

**Running title:** BRCA1 interactors regulate severity of TNBC

A.



**Figure S1. Differential expression of TP53 and BRCA1 in triple-negative breast cancer and luminal type.** The m-RNA expression of BRCA1 and TP53 in TNBC (N=109) and ER/PR+ve (N=371) patient sample were extracted from TCGA database and compared between BRCA1 and TP53 mRNA expression in TNBC and luminal type. X-axis represents the breast cancer subtype and Y-axis represents the mRNA expression. Data were analysed by one-way ANOVA and paired T-test. (SEM is shown as error bar. \* $P < 0.05$ , \*\*  $P < 0.005$  and #  $P < 0.0001$ )

**SupplementaryTable 1. Antibody used for the western blot,Immunofluorescence and Immunophenotyping.**

| Sl.No. | Name of the protein     | 1 <sup>o</sup> antibody company                                      | 2 <sup>o</sup> antibody Company                           |
|--------|-------------------------|----------------------------------------------------------------------|-----------------------------------------------------------|
| 1.     | BRCA1                   | BRCA1 (6B4), MA1-23164<br>Thermo scientific                          | Antimouse, #7074, CST                                     |
| 2.     | TP53                    | Tp53 , CST                                                           | Anti rabbit, #7074, CST                                   |
| 3.     | BRIP1                   | BRIP1,#4578, CST                                                     | Anti rabbit, #7074,CST                                    |
| 4.     | BACH1                   | BACH1 (F-9)(sc-271211),<br>Santa Cruz                                | Anti mouse, #7076,Cloude<br>clone                         |
| 5.     | KU70                    | KU70(N3H10) MA5-13110,<br>Thermoscientific                           | Anti mouse, #7076, CST                                    |
| 6.     | RAD50                   | RAD50(PAK11HU01),<br>Cloude clone                                    | Anti rabbit, #7074, CST                                   |
| 7.     | Pp53                    | Pp53, CST                                                            | Anti rabbit, #7074, CST                                   |
| 8.     | Beta actin              | Beta actin, CST                                                      | Anti rabbit, #7074,CST                                    |
| 9.     | Ki67                    | Ki67, PA5-<br>16785Thermofisher scientific                           | Goat Anti<br>rabbitIgG,DyLight™ 488,<br>Thermo scientific |
| 11.    | Phospho-Histone<br>H2AX | Phospho-Histone<br>H2AX(Ser140) 3F2, MA1-<br>2022, Thermo scientific | Goat antimouseIgG, DyLight<br>™ 594, Thermo scientific    |
| 12.    | CD44                    | Anti-CD44 antibody [F10-44-<br>2] (PE/Cy7®) ab46793                  | -                                                         |
| 13.    | CD24                    | Anti-CD24<br>antibody[SN3](FITC)<br>ab30350                          | -                                                         |
| 14.    | Phospho-p53             | Phospho-p53(Ser 15)<br>Antibody #9284                                | Anti rabbit, CST                                          |
| 15.    | Beta-actin              | Beta actin, #4967                                                    | Anti rabbit, CST                                          |