Supplementary information for

EHD2 is a Predictive Biomarker of Chemotherapy Efficacy in Triple Negative Breast Carcinoma.

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Supplementary Figure 1
Supplementary figure 1: Uncropped blot of figure 2b
## Supplementary Table S1: Characteristics of the 526 breast tumors used for RT-qPCR

|                      | Number of patients (%) | Number with metastases (%) | p \(^{a}\) |
|----------------------|------------------------|----------------------------|-----------|
| **Total**            | 526 (100)              | 209 (39.7)                 |           |
| **Age**              |                        |                            |           |
| ≤50                  | 124 (23.6)             | 51 (41.1)                  | 0.59 (NS) |
| >50                  | 402 (76.4)             | 158 (39.3)                 |           |
| **SBR histological grade** \(^{b,c}\) |                    |                            |           |
| I                    | 60 (11.7)              | 12 (20.0)                  | 0.0016    |
| II                   | 240 (47.0)             | 99 (41.3)                  |           |
| III                  | 211 (41.3)             | 94 (44.5)                  |           |
| **Macroscopic tumor size** \(^{e}\) |                    |                            |           |
| ≤25mm                | 247 (47.9)             | 76 (30.8)                  | <0.0001   |
| >25mm                | 269 (52.1)             | 132 (49.1)                 |           |
| **Lymph node status** \(^{d}\) |                    |                            |           |
| 0                    | 159 (30.5)             | 48 (30.2)                  | <0.0001   |
| 1-3                  | 249 (47.8)             | 87 (34.9)                  |           |
| >3                   | 113 (21.7)             | 72 (63.7)                  |           |
| **ERa status**       |                        |                            |           |
| Negative             | 181 (34.4)             | 76 (42.0)                  | 0.095 (NS)|
| Positive             | 345 (65.6)             | 133 (38.6)                 |           |
| **PR status**        |                        |                            |           |
| Negative             | 255 (48.5)             | 110 (43.1)                 | 0.021     |
| Positive             | 271 (51.5)             | 99 (36.5)                  |           |
| **ERBB2 status**     |                        |                            |           |
| Negative             | 396 (75.3)             | 152 (38.4)                 | 0.15 (NS) |
| Positive             | 130 (24.7)             | 57 (43.8)                  |           |
| **Molecular subtypes** |                      |                            |           |
| RH- ERBB2-           | 102 (19.4)             | 38 (37.3)                  | 0.050 (NS)|
| RH- ERBB2+           | 72 (13.7)              | 36 (50.0)                  |           |
| RH+ ERBB2-           | 294 (55.9)             | 114 (38.8)                 |           |
| RH+ ERBB2+           | 58 (11.0)              | 21 (36.2)                  |           |

\(^{a}\) Log-rank test. NS : not significant  
\(^{b}\) Scarff Bloom Richardson classification.  
\(^{c}\) Information available for 511 patients.  
\(^{d}\) Information available for 521 patients.  
\(^{e}\) Information available for 516 patients.
Supplementary Table S2: Characteristics of the 423 breast tumors used to construct TMA

|                                | Number of patients (%) | Number of patients with metastases (%) | p-value<sup>a</sup> |
|--------------------------------|------------------------|----------------------------------------|--------------------|
| **TOTAL**                      | 423 (100)              | 65 (15.4)                              |                    |
| **Age**                        |                        |                                        |                    |
| <50                            | 158 (37.3)             | 24 (36.9)                              | 0.94 (NS)          |
| >50                            | 265 (62.7)             | 41 (63.1)                              |                    |
| **Histological subtypes**      |                        |                                        |                    |
| Ductal carcinoma               | 416 (98.3)             | 62 (95.4)                              | 0.077 (NS)         |
| Other                          | 7 (1.7)                | 3 (4.6)                                |                    |
| **SBR histological grade**    |                        |                                        | 0.0077             |
| I                              | 66 (15.6)              | 5 (7.7)                                |                    |
| II                             | 125 (29.6)             | 13 (20)                                |                    |
| III                            | 232 (54.8)             | 47 (72.3)                              |                    |
| **Tumor size (mm)**            |                        |                                        | <0.0001            |
| pT1 (<20)                      | 277 (65.5)             | 25 (38.5)                              |                    |
| pT2 (>20-<50)                  | 130 (30.7)             | 36 (55.4)                              |                    |
| pT3 (>50)                      | 12 (2.8)               | 4 (6.1)                                |                    |
| pT4                            | 4 (1)                  | 0 (0)                                  |                    |
| **Lymph node status**          |                        |                                        | <0.0001            |
| pNx (unknown)                  | 2 (0.5)                | 0 (0)                                  |                    |
| pN0                            | 229 (54.1)             | 27 (41.6)                              |                    |
| pN1a                           | 128 (30.3)             | 13 (20)                                |                    |
| pN2a                           | 50 (11.8)              | 16 (24.6)                              |                    |
| pN3a                           | 14 (3.3)               | 9 (13.8)                               |                    |
| **ER status**                  |                        |                                        | 0.65 (NS)          |
| Negative                       | 165 (39)               | 27 (41.5)                              |                    |
| Positive                       | 258 (61)               | 38 (58.5)                              |                    |
| **PR status**                  |                        |                                        | 0.013              |
| Negative                       | 194 (45.9)             | 39 (60)                                |                    |
| Positive                       | 229 (54.1)             | 26 (40)                                |                    |
| **ERBB2 status**               |                        |                                        | 0.022              |
| Negative                       | 340 (80.4)             | 59 (90.8)                              |                    |
| Positive                       | 83 (19.6)              | 6 (9.2)                                |                    |
| **Ki67 status**                |                        |                                        | 0.0004             |
| <14%                           | 80 (18.9)              | 2 (3.1)                                |                    |
| >14%                           | 343 (81.1)             | 63 (96.9)                              |                    |
| **Molecular subtypes**         |                        |                                        | <0.0001            |
| Luminal A                      | 125 (29.6)             | 8 (12.3)                               |                    |
| Luminal B                      | 110 (26)               | 28 (43.1)                              |                    |
| HER2+                          | 83 (19.6)              | 6 (9.2)                                |                    |
| TNBC                           | 105 (24.8)             | 23 (35.4)                              |                    |

<sup>a</sup> Chi-squared test or Fisher test if applicable
Supplementary Table S3: Characteristics of the 101 triple negative breast tumors

|                          | Number of patients (%) | Number with metastases (%) | p^a     |
|--------------------------|------------------------|----------------------------|---------|
| Total                    | 101 (100)              | 37 (36.6)                  |         |
| **Age**                  |                        |                            |         |
| ≤50                      | 38 (37.6)              | 15 (39.5)                  | 0.66 (NS)|
| >50                      | 63 (62.4)              | 22 (34.9)                  |         |
| **SBR histological grade** |                       |                            |         |
| I                        | 3 (3.2)                | 1 (33.3)                   | 0.96 (NS)|
| II                       | 18 (18.9)              | 8 (44.4)                   |         |
| III                      | 74 (77.9)              | 27 (36.5)                  |         |
| **Macroscopic tumor size** |                        |                            |         |
| ≤25mm                    | 39 (38.6)              | 11 (28.2)                  | 0.14 (NS)|
| >25mm                    | 62 (61.4)              | 26 (41.9)                  |         |
| **Lymph node status**    |                        |                            |         |
| 0                        | 48 (47.5)              | 15 (31.3)                  | 0.21 (NS)|
| 1-3                      | 39 (38.6)              | 14 (35.9)                  |         |
| >3                       | 14 (13.9)              | 8 (57.1)                   |         |

^a Log-rank test. NS : not significant

^b Scarff Bloom Richardson classification.

^c Information available for 95 patients.
Supplementary Table S4: Characteristics of the 228 triple negative breast tumors

|                      | Number of patients (%) | Number with metastases (%) | \( p^a \) |
|----------------------|------------------------|-----------------------------|-----------|
| **Total**            | 228 (100.0)            | 48 (21.1)                   |           |
| **Age**              |                        |                             |           |
| \( \leq 50 \)        | 84 (36.8)              | 16 (19.0)                   | 0.52 (NS) |
| >50                  | 144 (63.2)             | 32 (22.2)                   |           |
| **SBR histological grade**<sup>a,c</sup> |                     |                             |           |
| I                    | 2 (0.9)                | 0 (0)                       | 0.81 (NS) |
| II                   | 23 (10.1)              | 5 (21.7)                    |           |
| III                  | 202 (89.0)             | 43 (21.3)                   |           |
| **Macroscopic tumor size** |                 |                             |           |
| \( \leq 25mm \)      | 148 (64.9)             | 25 (16.9)                   | 0.0088    |
| >25mm                | 80 (35.1)              | 23 (28.8)                   |           |
| **Lymph node status**<sup>d</sup> |                     |                             |           |
| 0                    | 153 (68.6)             | 19 (12.4)                   | <0.0001   |
| 1-3                  | 40 (17.9)              | 11 (27.5)                   |           |
| >3                   | 30 (13.5)              | 17 (56.7)                   |           |

<sup>a</sup> Log-rank test. NS : not significant

<sup>b</sup> Scarff Bloom Richardson classification.

<sup>c</sup> Information available for 227 patients.

<sup>d</sup> Information available for 223 patients.
