A

All subtypes

1 — Normal Tissues n=66

2 — DCIS tumors n=180

3 — Invasive tumors n=100

4 — Metastatic tumors n=165

■ Very weak staining   ■ weak staining   ■ Moderate staining   ■ Strong staining   ■ Very strong staining

B

All subtypes (n=326)

□ IRISOE (n=276)   ■ IRIS^low (n=50)

Percentage of tumors

AKT1 / AKT2 / p-AKT — Pos. Neg. Pos. Neg. Pos. Neg.

TNBC tumors (n=72)

□ IRISOE (n=63)   ■ IRIS^low (n=9)

Percentage of tumors

AKT1 / AKT2 / p-AKT — Pos. Neg. Pos. Neg. Pos. Neg.

C

Non-TNBC tumors (n=53)

Percentage DFS — IRIS⁻ / IRIS⁺ — p=0.2 — Months elapsed

TNBC tumors (n=43)

Percentage DFS — IRIS⁻ / IRIS⁺ — p=0.05 — Months elapsed

Percentage OS — IRIS⁻ / IRIS⁺ — p=0.6 — Months elapsed

Percentage OS — IRIS⁻ / IRIS⁺ — p=0.04 — Months elapsed

Suppl. Fig. 1

Supplement Figure 1. IRISOE in aggressive TNBC tumors correlates with worse outcomes.

(A) The expression of IRIS in normal/near cancer tissues (n=66), DCIS (n=180), invasive tumors (n=100), and metastatic tumors (n=165). (B) Correlation in breast cancer cohort of all subtypes (n=326) or TNBC tumors (n=72) between IRISOE (with cutoff defined as expression ≥2fold compared to normal samples) vs. IRIS^{low} (expressing normal tissues level) and AKT1, AKT2 and p-AKT expression extrapolated from cell counting in at least 10 high power fields (HPF) of each tumor. (C) Kaplan Meier curves of DFS and OS in non-TNBC (n=53) and TNBC (n=43) patients. Data modified from (16,19,29).