

Supplementary Material:

Supplementary Tables

Supplementary Table S1. Adverse events that led to dose interruption or reduction

Adverse Events	*N of AEs	%
ALT (G2/3/4) ^a	9	33.3%
Rash (G2/3) ^b	9	33.3%
Diarrhea (G3)	2	7.4%
Confusion (G2)	1	3.7%
hyperglycemia (G3)	1	3.7%
Pruritis (G3)	1	3.7%
Pneumonitis (G2)	1	3.7%
Tremor (G3)	1	3.7%
Dizziness (G3)	1	3.7%
LVEF (G3)	1	3.7%
Total	27	100%

a, ALT: G2 (n=2), G3 (n=6), G4 (n=1); b, Rash: G2 (n=1), G3 (n=8). *Note that some patients experienced multiple AEs.

Supplementary Table S2. Treatment-related Psychiatric Adverse Events (AEs)

AE	Grade 1	Grade 2	Number (%) of patients
Anxiety	2 ^A	1 ^B	3 (9.7%)
Confusion		1	1 (3.2%)
Depression	4 ^A	1 ^B	5 (16.1%)
N patients	5	2	7 (22.6%)

A: 1 patient had both grade 1 anxiety and grade 1 depression
B: 1 patient had both grade 2 anxiety and grade 2 depression

Supplementary Table S3. All observed coding mutations with detailed annotations

Available for download online as a spreadsheet.

Supplementary Table S4.**PgR Status of the Primary versus Metastatic (Recurrent) Disease of the 29 Evaluable Patients**

Patients with de novo stage IV				Patients who recurred from an initial early stage cancer			
Primary\Metastatic PgR status	Negative N (%)	Positive N (%)	Total	Primary\Recurrent PgR status	Negative N (%)	Positive N (%)	Total
Negative, N (%)	0	0	0	Negative, N (%)	6 (75%)	2 (25%)	8
Positive, N (%)	0	4	4	Positive, N (%)	5 (33.3%)	10 (66.7%)	15
Unknown, N	0	0	0	Unknown, N	0	2	2
Total	0	4	4	Total	11	14	25

PgR positive is defined as at least 10% cells staining positive, or allred score more than 3.

Supplementary Figure Legends

Supplementary Fig. S1. Buparlisib dosing intensity by treatment cohorts

Average daily doses of buparlisib each cycle during the first 12 cycles by treatment cohort are shown. For phase IB, the average daily doses of buparlisib on drug administration days as well as on all days each cycle were graphed.

Supplementary Fig. S2. Mutations in selected genes observed in this trial in contrast to that in COSMIC data base

A. PIK3CA B. AKT1 C. ERBB2 D. ESR1

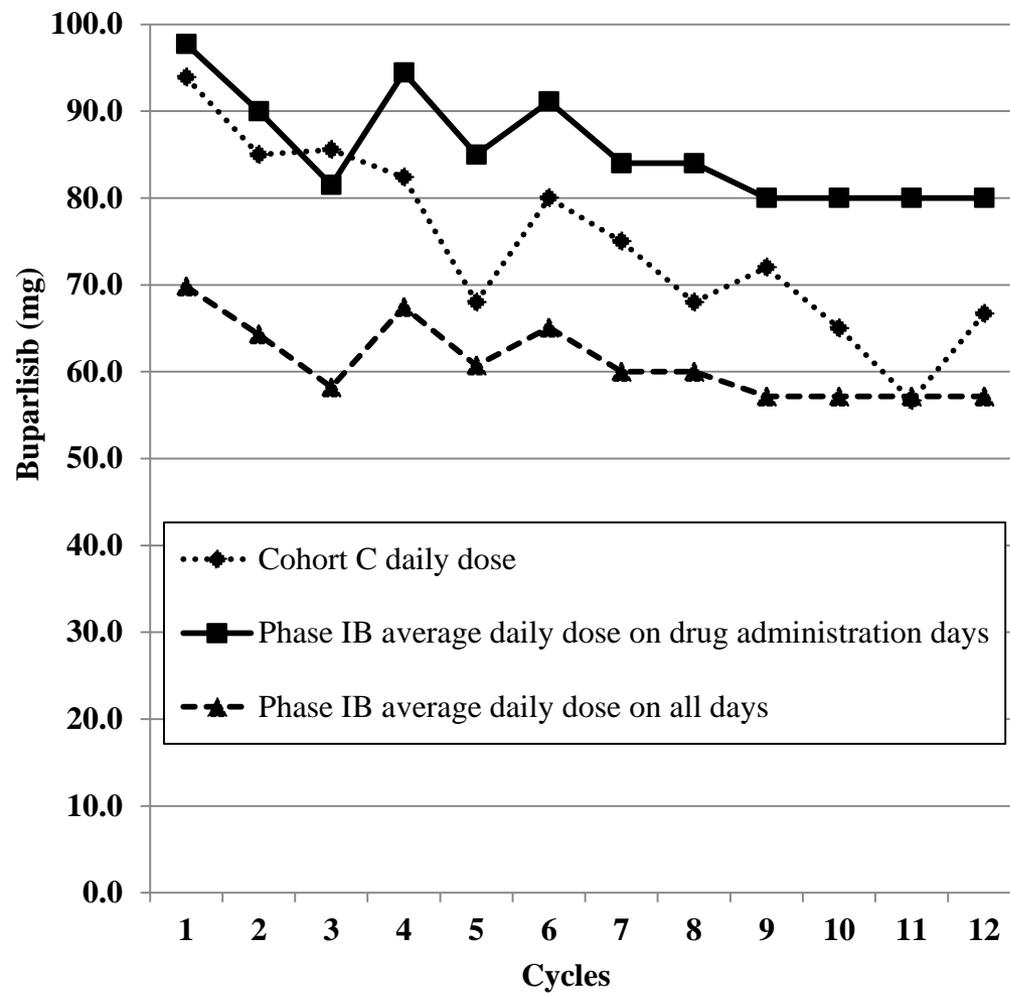
Supplementary Fig. S3 Immunohistochemistry (IHC) for PTEN expression on archival tumor specimens

The positive stromal cell staining was used as internal control. Sections of MCF-7 (positive for PTEN) and BT-549 (negative for PTEN) cell blocks were also included in staining as positive and negative controls, respectively.

Supplementary Fig. S4 Kaplan-Meier Plot of Progression Free Survival Estimate by PgR status

Kaplan-Meier Plot of PFS by PgR status of the primary breast cancer (A) or recurrent/metastatic disease (B) demonstrated a trend toward worse outcome with negative PgR status.

Suppl. Fig 1

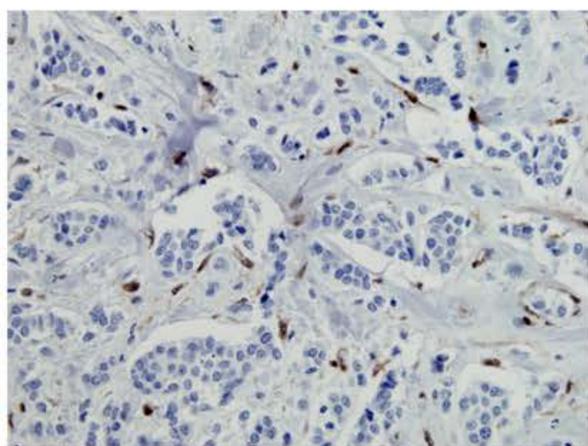


Supplementary figure S3

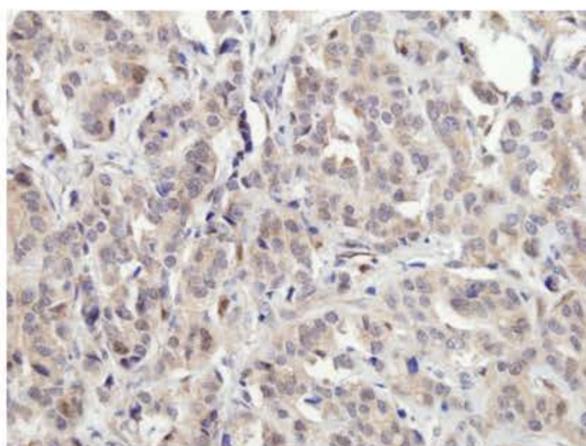
Negative

Positive

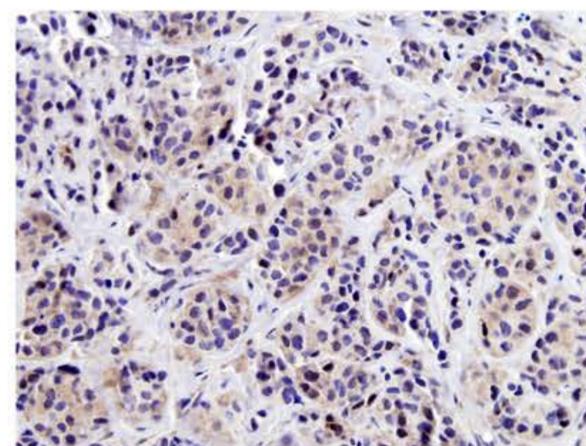
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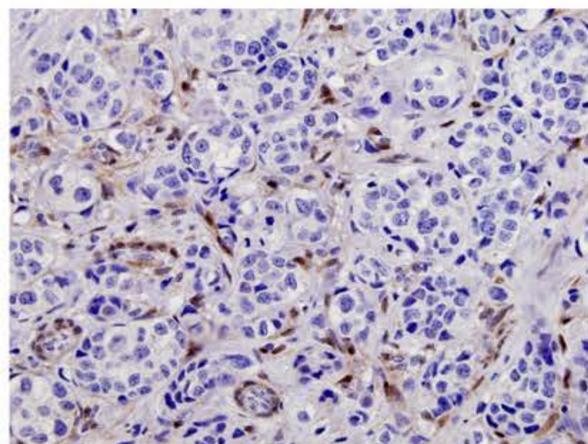
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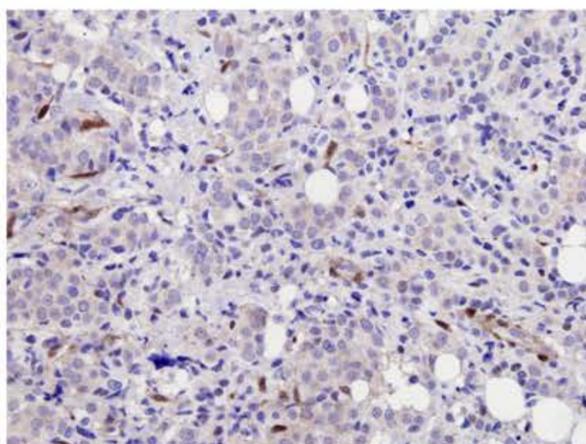
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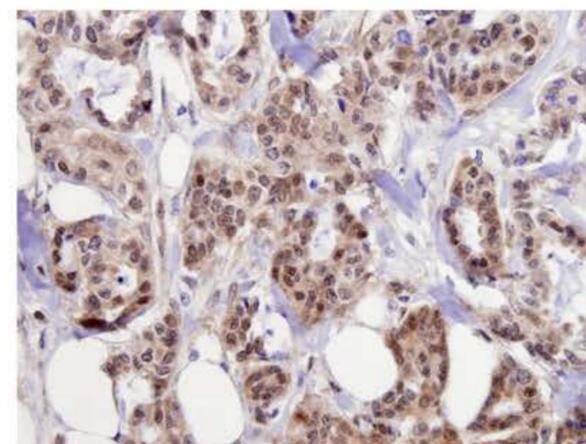
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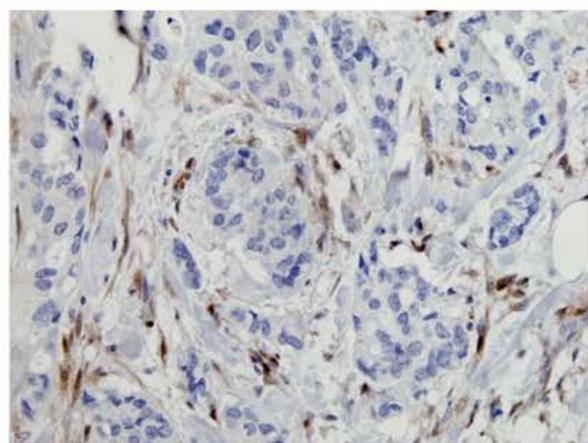
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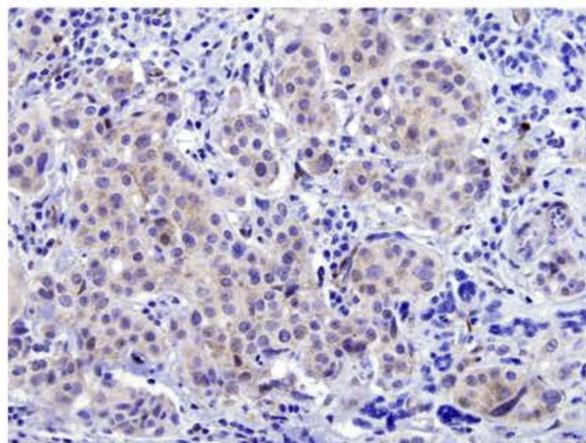
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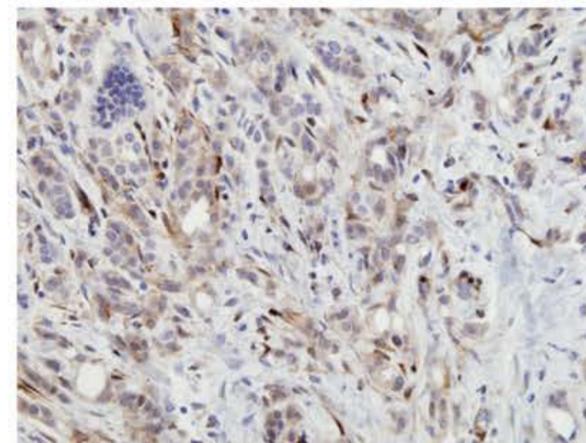
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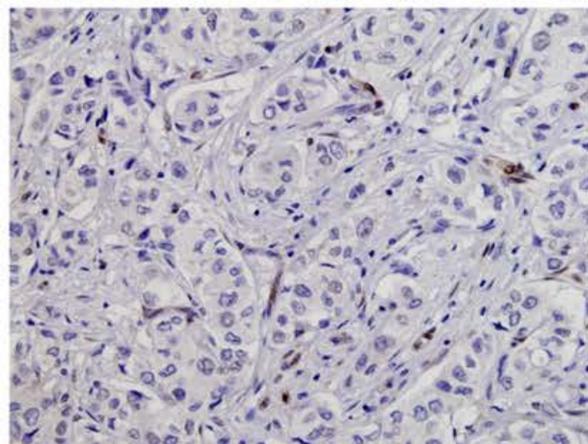
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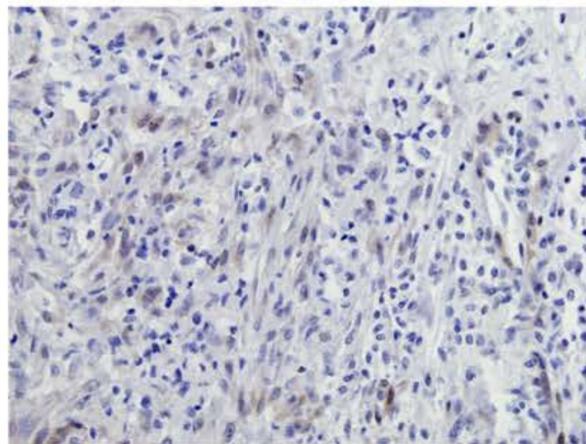
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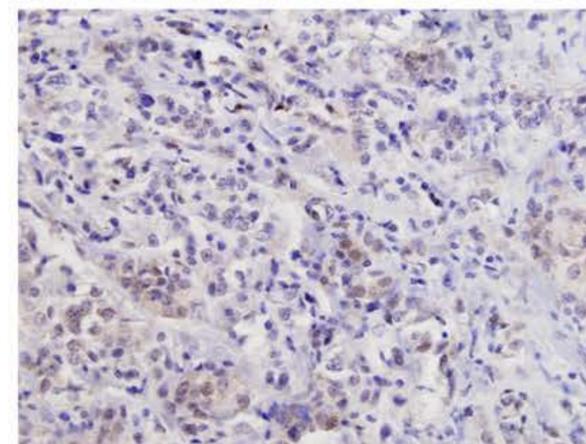
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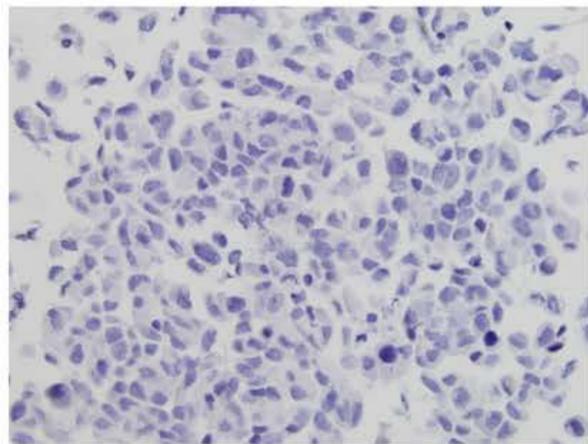
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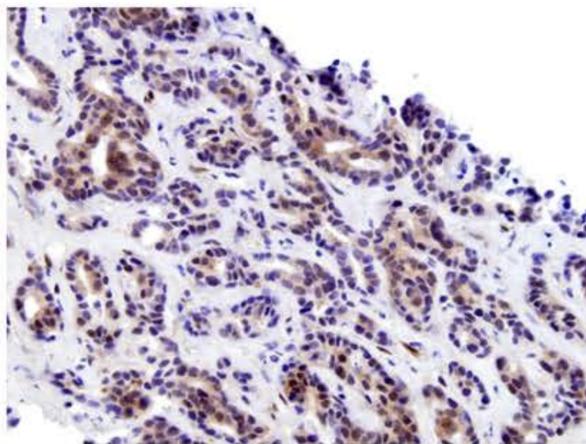
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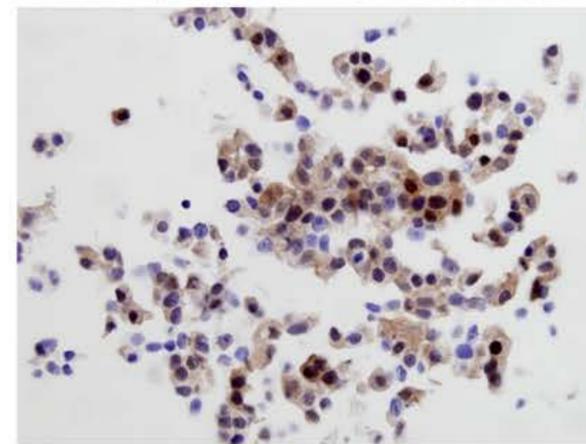
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BT-549



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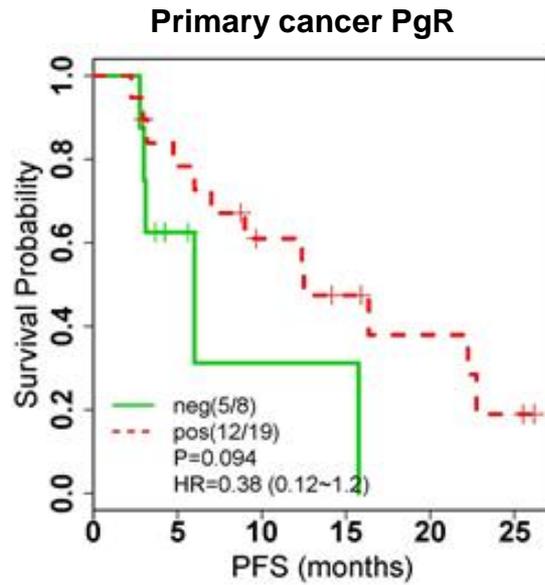


MCF-7

PTEN

Supplementary Figure S4

A



B

