Figure S1: Pharmacokinetic analyses of mouse blood plasma after treatment with low doses of aspirin to establish clinically relevant dosing regimen in mice.

A

B

| Dose of aspirin (mg) | AUC (ug/hr/mL) |
|----------------------|----------------|
| 7.5mg/kg             | 8.19           |
| 30mg/kg              | 26.6           |

| Dose of aspirin (mg) | AUC (ug/hr/mL) |
|----------------------|----------------|
| 7.5mg/kg             | 344            |
| 30mg/kg              | 592            |

| K (h⁻¹) | AUC (ug/hr/mL) |
|----------|----------------|
| 1.00     | 7.29           |
| 0.92     | 24.3           |

| K (h⁻¹) | AUC (ug/hr/mL) |
|----------|----------------|
| 0.15     | 7.29           |
| 0.14     | 24.3           |

C

Salicylate

\[ y = 0.392x \]
\[ R^2 = 0.9559 \]

D

| mg | AUC | mg/kg | AUC |
|----|-----|-------|-----|
| 75 | 24.4| Mouse | 30  | 24.3|
| 300| 117.6| Mouse | 120 | 117.5|

E

Implantation  Resection  Euthanasia

Aspirin  IVIS imaging

F

Implantation  Resection  Euthanasia

Aspirin  IVIS imaging (HCC1954 model only)

SOC
Figure S2. Pre-treatment of low dose aspirin reduces the growth of the primary tumor, delays reoccurrence metastasis in the MDA-MB 231/LN2-4/H2N Her2+ model of breast banker as shown by bioluminescence.
Figure S3. Confirmation of the resistance of HCC1954 to HER2 standard of care therapy

A

Vehicle Vehicle + SOC 30 mg/kg Aspirin

H&E

Pancytokeratin

B

C

Metastatic lesions

Metastatic lesions

Vehicle Vehicle + SOC 30 mg/kg Aspirin + SOC 120 mg/kg Aspirin + SOC

Vehicle Vehicle + SOC 30 mg/kg Aspirin + SOC 120 mg/kg Aspirin + SOC
Figure S4: Triple-negative PDX tumor TN173 metastasises via the blood and not by the lymphatics.