**Supplemental Figure 1. Flow chart showing exclusion criteria and development of analytical cohort**

Female, diagnosed with first primary breast cancer from 1998-2012

N=342,918

Diagnosis not microscopically confirmed

N=204

Stage 0, IV or unknown

N=88,932

Unknown chemotherapy timing N=2,517

Paget’s disease

N=3

Unknown tumor size N=1,781

Unknown chemotherapy receipt

N=4,450

No surgery, unknown surgery or surgery other than unilateral/bilateral mastectomy or breast conserving surgery

N=5,374

Unknown lymph node status

N=2,365

Diagnosed by mammography only N=465

Not death certificate or autopsy only

N=253,956

Diagnosed on death certificate or autopsy only

N=30

Microscopically confirmed diagnosis

N=253,752

Stage I-III

N=253,986

**ANALYTICAL COHORT**

**N=236,797**