

Laboratory for Quantitative Medicine
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Adjuvant Multi-agent Chemotherapy and Tamoxifen Usage Trends for Breast Cancer in the United States

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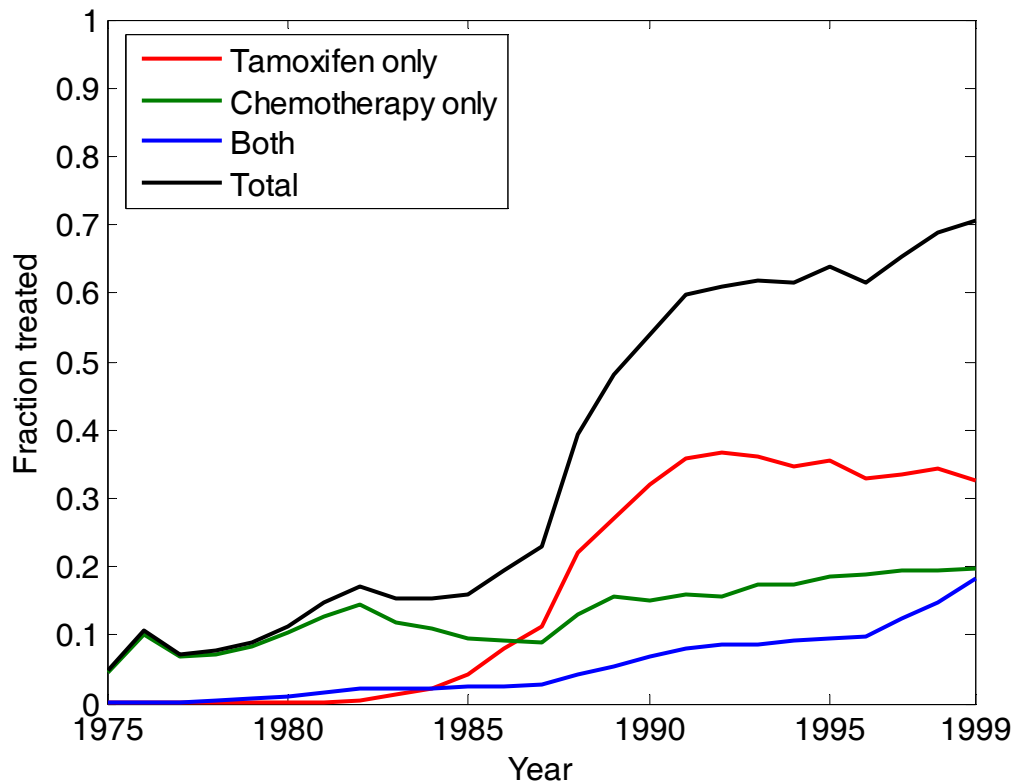
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Overall Adjuvant Therapy Dissemination Trends

Mariotto et al.¹ evaluated trends in the use of adjuvant multi-agent chemotherapy, tamoxifen, and the combination of both treatments for early-stage breast cancer in the United States from 1975 through 1999. These trends were presented as a function of age and stage. To create a broader population-level estimate of the dissemination of adjuvant therapy in the United States, we took this data and aggregated them based upon appropriate yearly age and stage distributions found in the SEER registry. Weighted averages were then obtained for tamoxifen only, chemotherapy only, both, and the overall total adjuvant therapy usage trend.



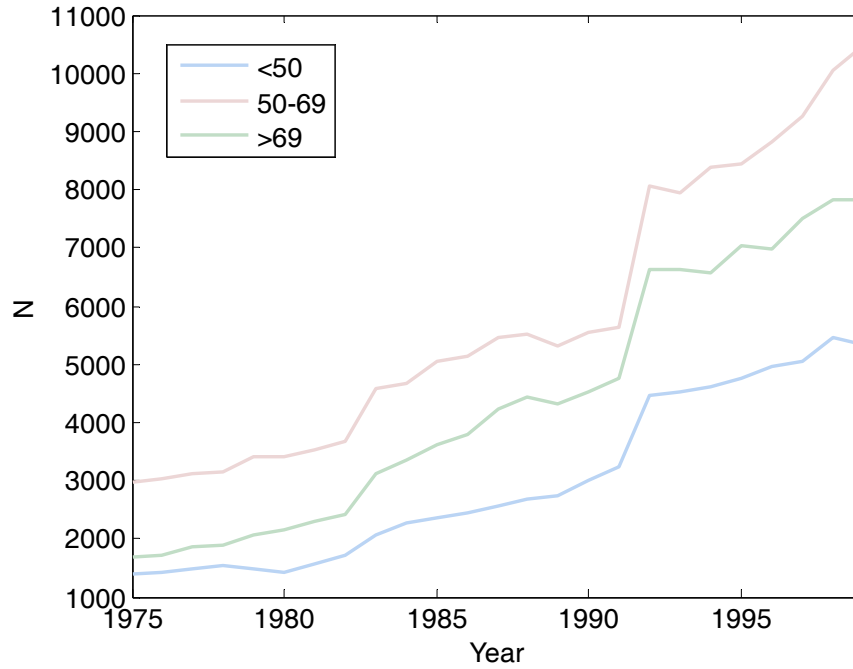
The appendix contains the details behind the calculations.

¹ Mariotto A, Feuer EJ, Harlan LC, Wun LM, Johnson KA, Abrams J. Trends in Use of Adjuvant Multi-Agent Chemotherapy and Tamoxifen for Breast Cancer in the United States: 1975–1999. *J Natl Cancer Inst* 94: 1626-1634.

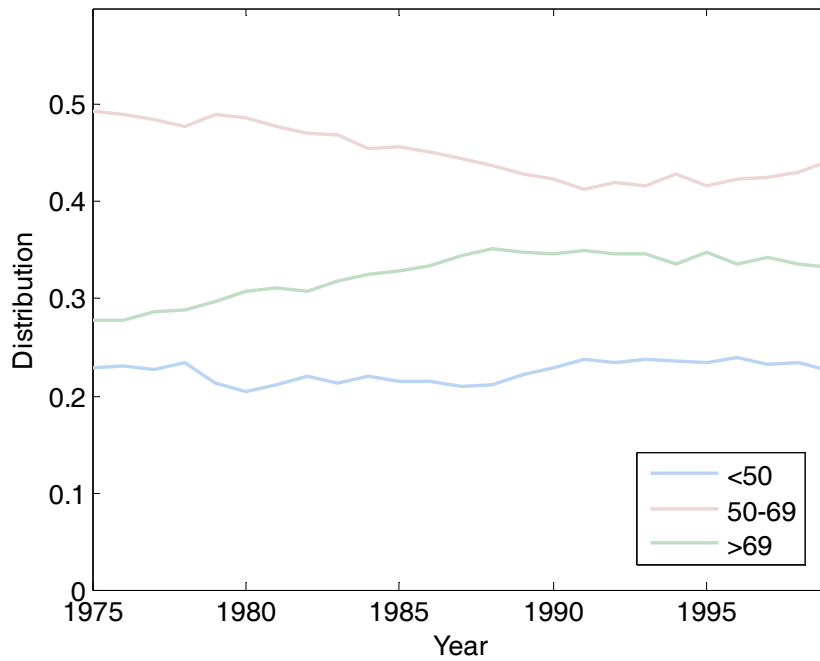
APPENDIX

Age distribution in SEER by year:

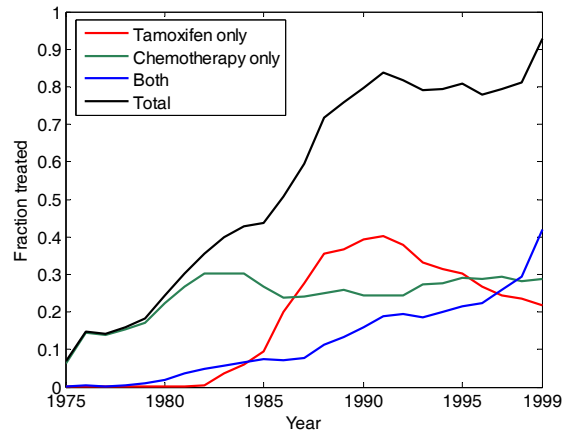
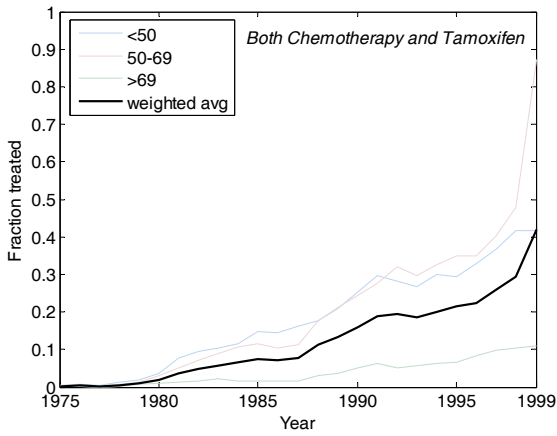
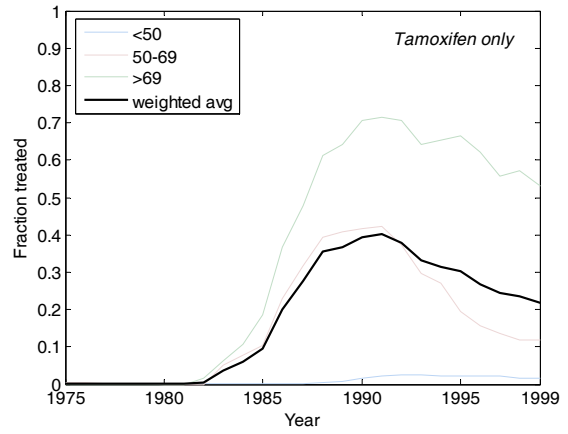
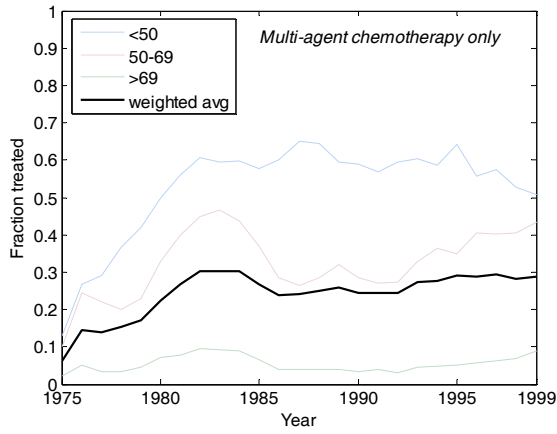
Number of patients of each age group by year of diagnosis



Percentage of patients of each age group by year of diagnosis



Fraction treated for Stage II+/IIIA, weighted average based on age distribution:



Fraction treated for Stage II-, weighted average based on age distribution:

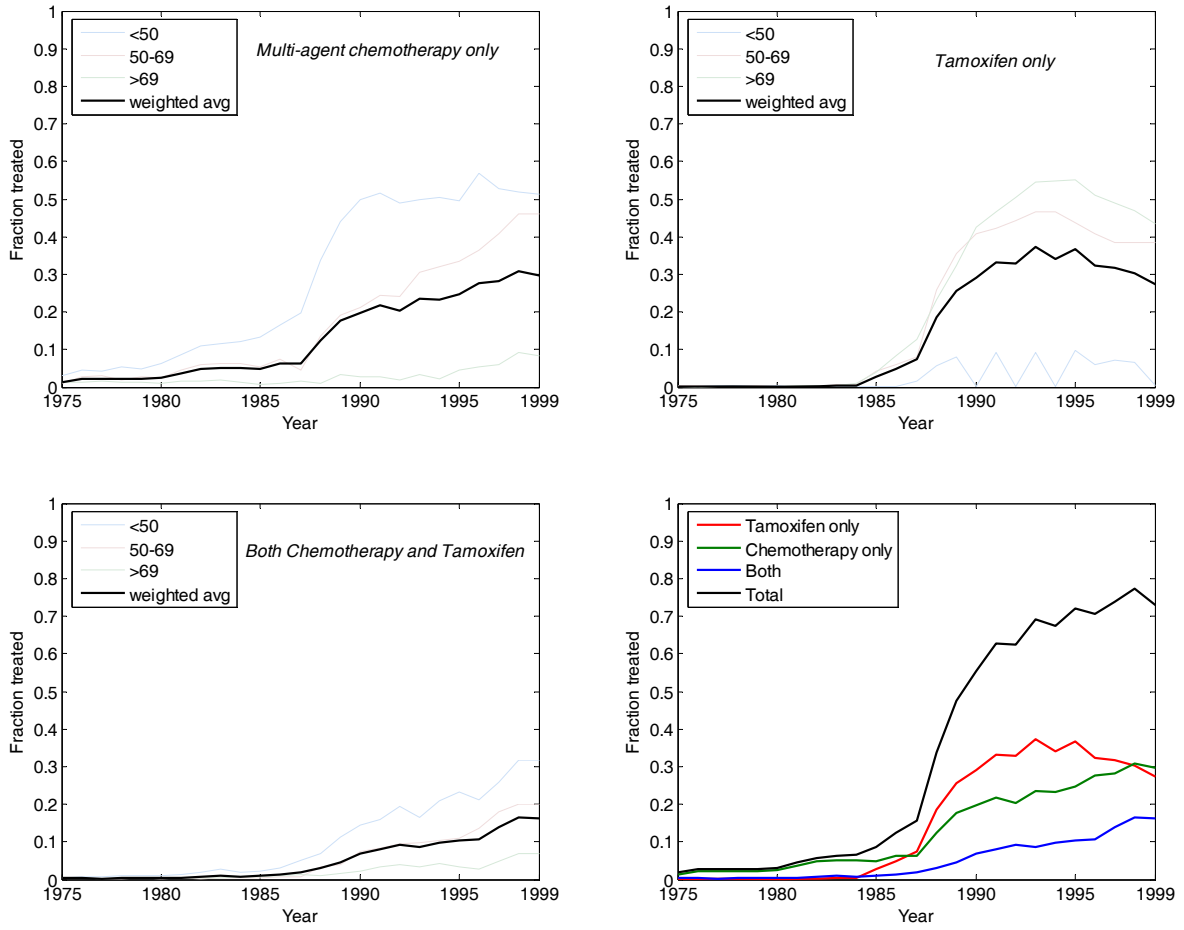
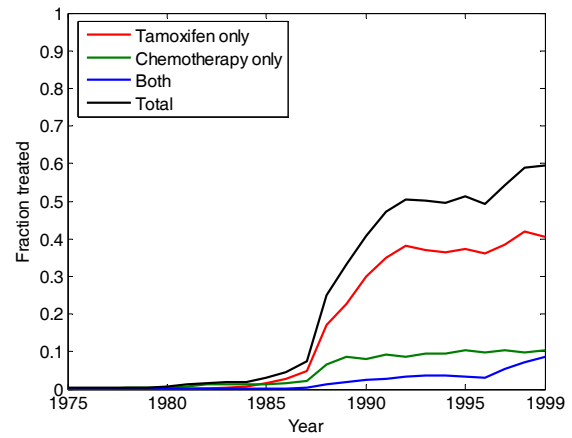
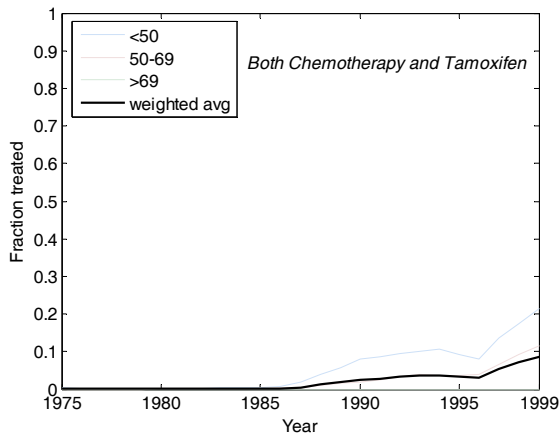
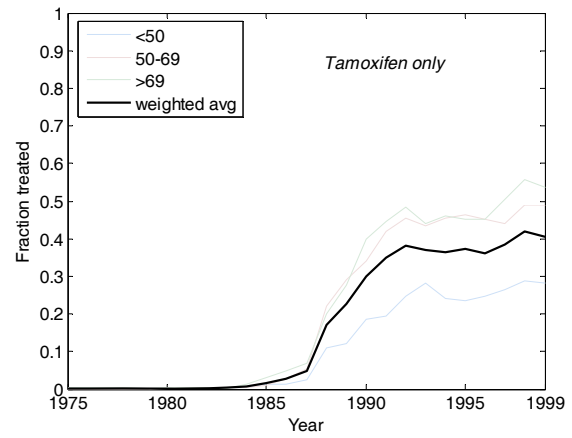
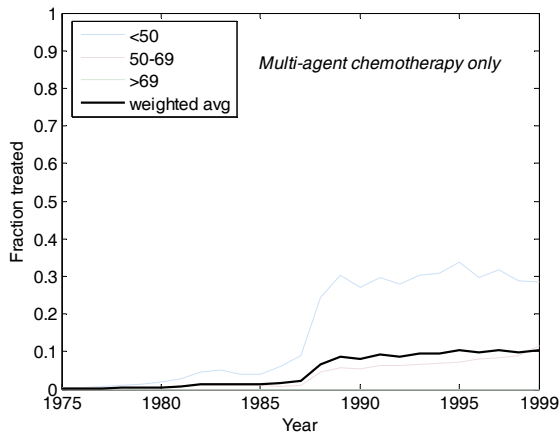


Figure 1.

Fraction treated for Stage I, weighted average based on age distribution:

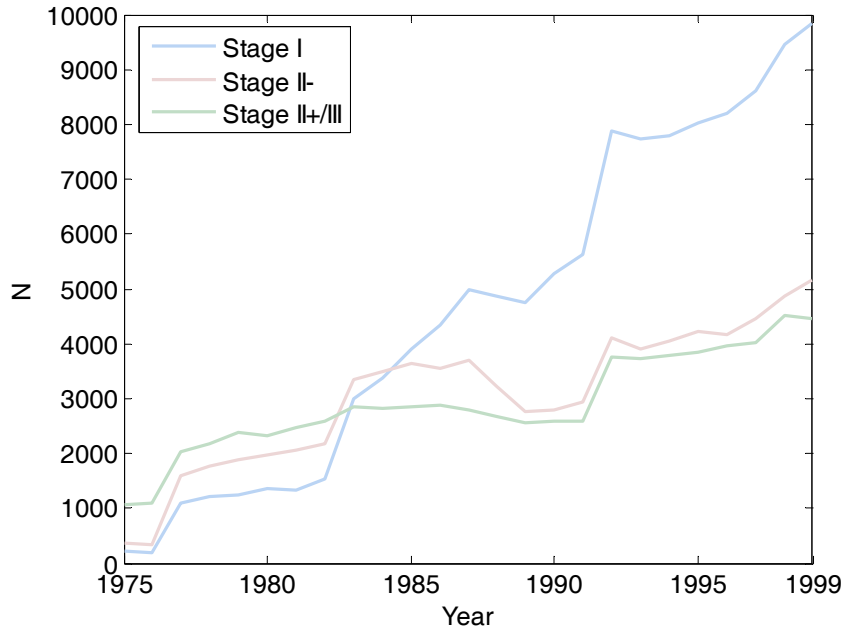


Stage distribution in SEER by year:

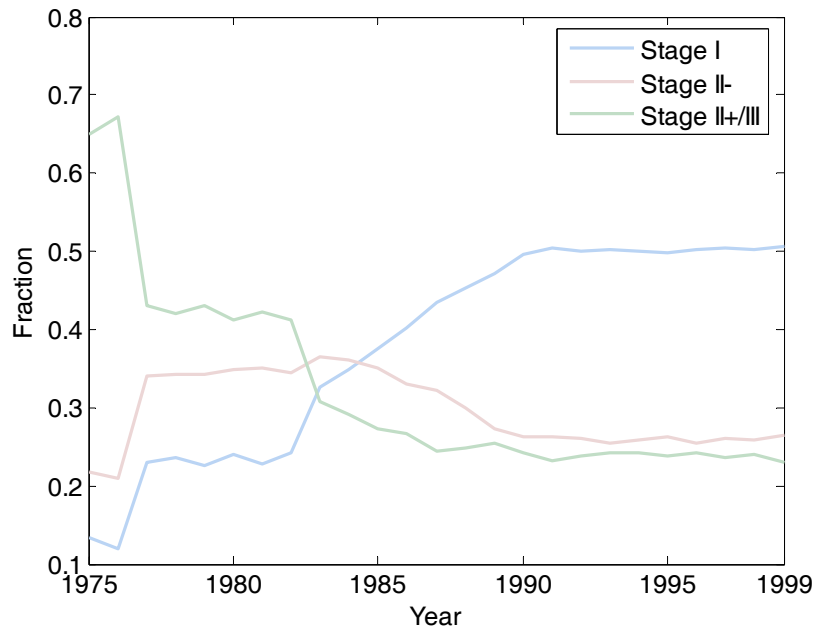
Characteristics of tumor stages (as outlined by the AJCC)

Stage I	2 cm or less; node negative
Stage II-	2cm or less; 1-3 positive nodes or 2-5cm; node negat
Stage II+/III	2cm or less; >9 positive nodes or 2-5cm; 1 or more positive nodes or >5cm

Number of patients in each stage group



Percentage of patients in each stage group



Weighted By Both Age and Stage:

