

Abstract Submitted
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Multiple imputation as a means to assess Mammographic vs. Ultrasound technology in Determine Breast Cancer Recurrence IRENE B. HELENOWSKI, Northwestern University, HAKAN DEMIRTAS, University of Illinois - Chicago, SEEMA KHAN, Northwestern University, FIRAS ELADOUMIK-DACHI, Genesis HealthCare System, ALI SHIDFAR, Northwestern University — Tumor size based on mammographic and ultrasound data are two methods used in predicting recurrence in breast cancer patients. Which technology offers better determination of diagnosis is an ongoing debate among radiologists, biophysicists, and other clinicians, however. Further complications in assessing the performance of each technology arise from missing data. One approach to remedy this problem may involve multiple imputation. Here, we therefore examine how imputation affects our assessment of the relationship between recurrence and tumor size determined either by mammography or ultrasound technology. We specifically employ the semi-parametric approach for imputing mixed continuous and binary data as presented in Helenowski and Demirtas (2013).

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