

## World Congress on **Breast Cancer**

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### **The role of intraoperative fluoroscopy to improve negative margin resection of partial mastectomies: A single institution experience**

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The estimated positive margin rate for partial mastectomies for in situ or invasive breast cancer is between 15% - 24% though reported rates widely vary. In an attempt to decrease the positive margin rate for partial mastectomies, intraoperative fluoroscopy was added to the pre-incision operative planning as an additional tool to improve intraoperative accuracy. Beginning in January 2011 – December 2014, 220 women underwent a wire guided partial mastectomy with the pre-incision aid of intraoperative fluoroscopy. Surgical planning was based on the fluoroscopic images as well as the mammographic images taken post wire placement. All excised specimens were immediately evaluated with a specimen radiograph. Final margin status was assessed on permanent section. Positive margins were defined as tumor on ink. Close margins were considered negative if no tumor was seen on the inked margin. Margin status was compared to national rates as well as institutional rates prior to the addition of fluoroscopy. Despite vigorous fluoroscopic mapping, the overall positive margin rate did not decrease compared to the historic rates. It specifically had no impact on margins for DCIS or invasive lobular carcinoma. Overall, intraoperative fluoroscopy did not improve the negative margin rate compared to standard techniques for a partial mastectomy. The role of intraoperative fluoroscopy was most beneficial for planning surgery in difficult locations such as deep tumors in large breasts. It was also a useful teaching tool for junior residents learning three dimensional surgical planning. The role of intraoperative fluoroscopy should be determined on an individual patient basis.

#### **Biography**

James M McLoughlin earned his MD from Rush University in Chicago, IL and completed a general surgery residency at Baylor University Medical Center in Dallas, TX. He completed a surgical oncology fellowship at the H. Lee Moffitt Cancer in Tampa, FL. His practice is primarily focused on the care of breast cancer patients. His research interest is in improving clinical and surgical outcomes and identifying disparities in cancer outcomes.

#### **Notes:**