Almost 300,000 mastectomies are performed in the United States each year as either preventative or curative breast cancer treatment. Many surgeries, however, require additional procedures. Small amounts of breast tissue left behind cause cancer reoccurrence in almost four percent of patients. Surgical reconstruction fails in over 15 percent of women because of insufficient skin post mastectomy. The disclosed technique reduces the risk of over and under resection by using antibodies that label breast tissue visibly. This marker enables more effective mastectomies by providing a clear distinction between breast tissue and subcutaneous fat.

**TECHNOLOGY SUMMARY**

Almost 300,000 mastectomies are performed in the United States each year as either preventative or curative breast cancer treatment. Many surgeries, however, require additional procedures. Small amounts of breast tissue left behind cause cancer reoccurrence in almost four percent of patients. Surgical reconstruction fails in over 15 percent of women because of insufficient skin post mastectomy. The disclosed technique reduces the risk of over and under resection by using antibodies that label breast tissue visibly. This marker enables more effective mastectomies by providing a clear distinction between breast tissue and subcutaneous fat.

**STAGE OF DEVELOPMENT**
- Antibodies developed and shown to mark breast tissue.
- Ongoing testing in tissue samples.
- Optimization of antibody still required.

**FEATURES AND BENEFITS**
- Distinguishes between breast tissue and subcutaneous fat.
- Improves success of breast reconstruction by ensuring sufficient healthy tissue remains.
- Reduces the risk of recurrent breast cancer.

**TECHNOLOGY TYPE**
Biomarkers
Antibody
Oncology
Mastectomy

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Aaron Duffy
Technology Manager
aaron.duffy@tvc.utah.edu
801-585-1377

**INVENTOR PROFILE**
James Willcockson, M.D., Resident - Plastic Surgery
Alvin Kwok, M.D., M.P.H., Assistant Professor - Surgery
Shawn C. Owen, Ph.D., Assistant Professor – Pharmaceutical Chemistry