



## BACKGROUND

- Breast reconstruction rates are increasing worldwide
- Use of implants the most commonly employed technique
- Acellular dermal matrices (ADM) widely used – still uncertainty regarding the effect of their use in outcomes and complications

## AIM

To evaluate the outcomes and complication rates associated with use of ADM in implant - based breast reconstruction (IBR)

## METHODS

- Retrospective cohort study
- Breast cancer patients who underwent IBR with ADM between 2008 – 2013 identified from a prospectively collected database
- Data included patient demographics, surgical indications and procedural and adjuvant treatment details
- Surgical complications were recorded
- Simple descriptive statistics and non-parametric statistical analyses were performed

## RESULTS

- 110 patients comprising 175 mastectomies included in the analysis
- 79 therapeutic mastectomies / 96 risk-reducing mastectomies
- Median age: 46 (19 – 75) years, median BMI: 22.6 (16.2 – 41.5)
- 8 patients (7.3%) smokers, 11 patients (10%) previous radiotherapy
- Median mastectomy weight: 244 (185 – 335) gr
- Median follow-up: 2.9 (2.1 – 3.9) years
- Age, BMI, smoking status and previous radiotherapy were not associated with development of complications on regression analysis
- Of the 85 patients planned for one-stage procedure 10 required planned implant exchange

## Reconstruction type, N=175

Implant type	Number of mastectomies (%)
• Anatomical fixed volume	109 (62.3)
• Round fixed volume	8 (4.6)
• Permanent expandable	56 (32)
• Tissue expander	2 (1.1)

## Surgical complications

Type of complication	Number of mastectomies (%)
At least one complication	40 (22.8)
Infection	4 (2.3)
Inflammatory skin reaction	14 (8)
Haematoma	5 (2.9)
Seroma	15 (8.6)
Skin necrosis	3 (1.7)
Nipple necrosis	3 (1.7)
Dehiscence	9 (5.1)
Capsule formation	4 (2.3)
Implant loss	3 (1.7)

## CONCLUSION

Acellular dermal matrices – assisted IBR is a safe and effective option. Patient selection and surgical experience in high – volume centres are keys to success