

# Comparison of Human ADM to Porcine ADM in Immediate Breast Reconstruction

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# Purpose

- Compare porcine ADM to human ADM, made by the same company
- Used for immediate breast reconstruction with tissue expanders and breast implants

# ADM Grafts

Human



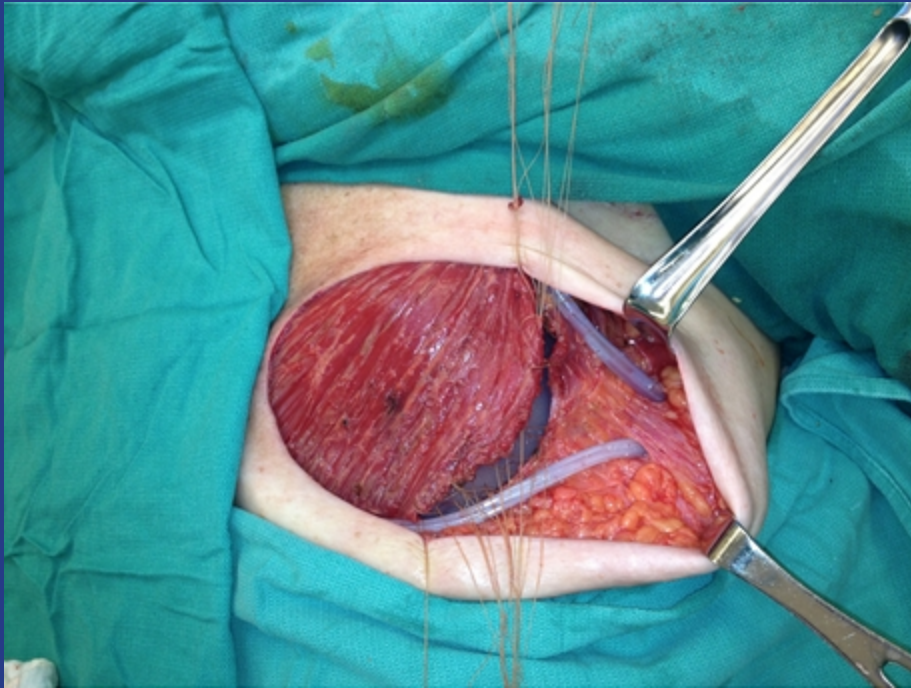
Porcine



# Immediate Breast Reconstruction with Tissue Expander Implant

Total Muscle Coverage

ADM Sling



# Method

- Retrospective, consecutive, case review
- All cases of immediate reconstruction using ADM
- Human ADM 2010 and 2011
- Porcine ADM in 2012 and 2013

# Method

- One hospital
- ACS approved Breast Cancer Center
- 4 general surgeons
- 2 plastic surgeons

# Results

- 153 patients, 234 reconstructed breasts
- Human ADM: 98 breasts, skin sparing  
0 breasts, nipple sparing
- Porcine ADM: 115 breasts, skin sparing  
21 breasts, nipple sparing



# Results

Human vs Porcine

BMI, age, ADM size similar in both groups

# Summary of Results

	<b>Mastectomy Weight</b>	<b>Initial Fill Volume</b>	<b>Implant Loss</b>	<b>Infection</b>	<b>Skin Loss</b>	<b>Seroma</b>
<b>Human ADM:</b>	793 grams	279 ml	7 (7%)	6 (6%)	4 (4%)	5 (5%)
<b>Porcine ADM</b>	622 grams	343 ml	5 (4%)	7 (5%)	13 (10%)	24 (18%)

# Results

All Porcine ADM cases:  
Skin loss 10%, Seroma 18 %

Nipple sparing mastectomy:  
Skin loss 6/21 breasts , 29 %

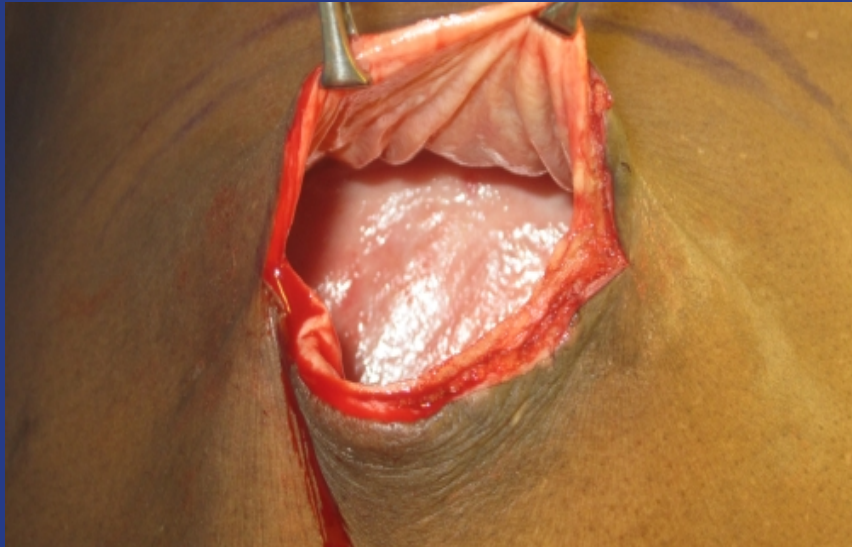
If nipple sparing mastectomy excluded from Porcine ADM group:

Skin loss for Porcine ADM is 5%  
But seroma rate still high at 18%

# Results

- Higher seroma rate for Porcine ADM
- Treated with aspiration or open drainage
- Successful reconstruction achieved
- Implant loss rates and infection rates similar to human ADM

# Incorporation of ADM Seen at Second Stage Procedure



# Conclusion

- Human ADM and Porcine ADM in immediate breast reconstruction are comparable and effective
- Higher seroma rates were found with Porcine ADM use
- Outcomes similar to other reported series

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