

Impact Of Postmastectomy Radiotherapy On Complications Following Prepectoral Vs Subpectoral Breast Reconstruction

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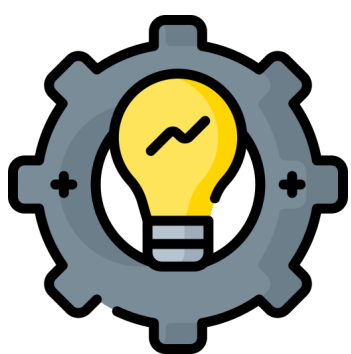
Background:

- PMRT is associated with altered cosmetic outcomes and higher complication rates in implant-based reconstruction
- Conventional wisdom suggests that muscle coverage is somewhat protective against PMRT-related complications.
- Outcomes of prepectoral IBR using ADM in the setting of PMRT are not well defined.

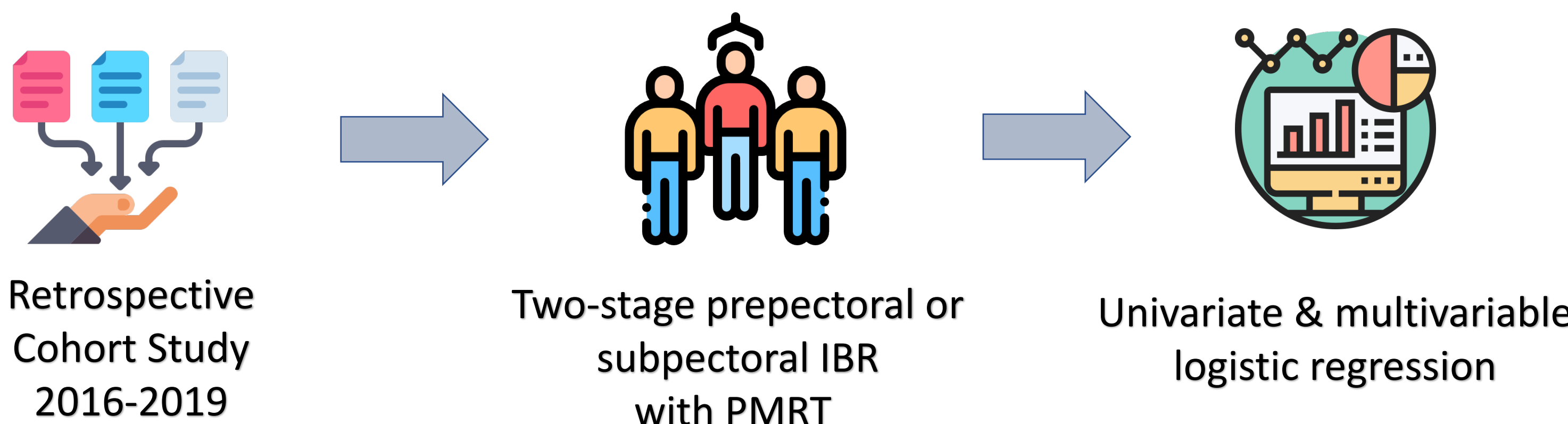


Objective:

- We compared surgical outcomes in patients who underwent two-stage prepectoral versus subpectoral IBR in the setting of PMRT.



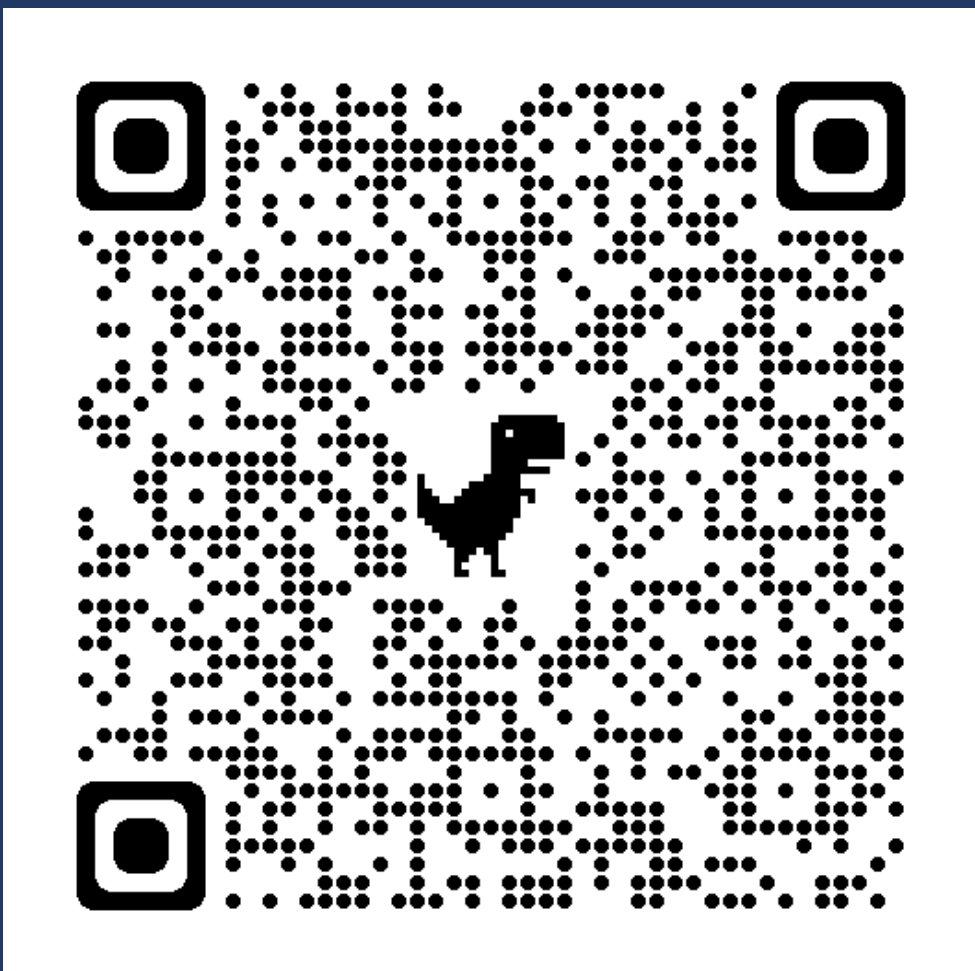
Methods:



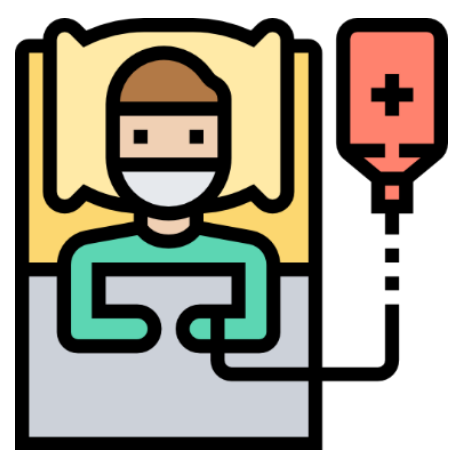
Device placement plane **IS NOT** significantly associated with complication rates in the setting of PMRT.

Pectoralis muscle coverage **does not offer protection** from radiation-associated complications in IBR.

Two-stage prepectoral IBR provides safe long-term outcomes with acceptable complication rates **comparable to subpectoral IBR.**



Results:



172 patients

101 Prepectoral IBRs

78 Subpectoral IBRs

Breast-related complications

26.7%

vs.

21.8%

$P = .274$

Device infection

18.8%

vs.

15.4%

$P = .307$

Skin flap necrosis

5.0%

vs.

1.3%

$P = .232$

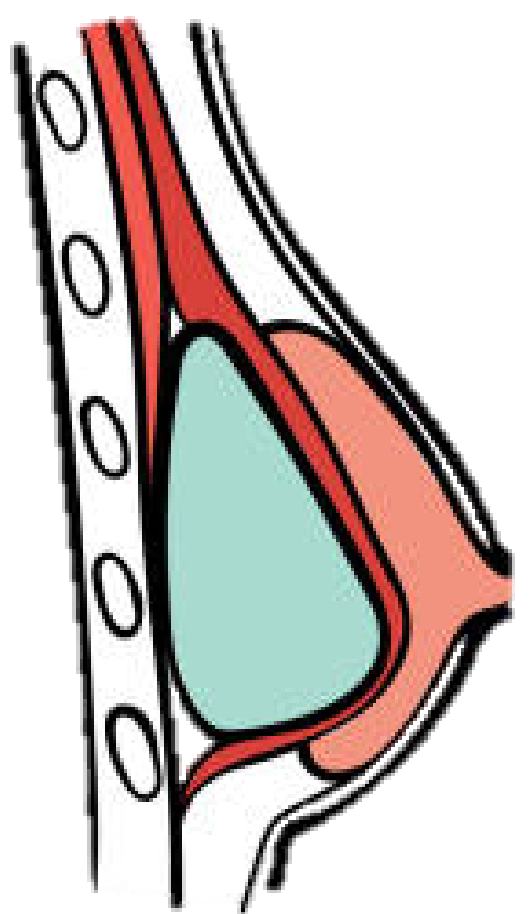
Device explantation

20.8%

vs.

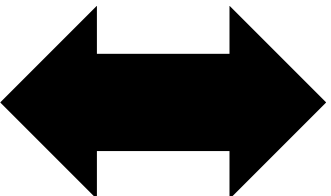
14.1%

$P = .117$



Subpectoral IBR

No difference in



Breast-related complications

HR, 0.75; 95% CI, 0.41-1.36

Device infection

HR, 0.73; 95% CI, 0.35-1.49

Device explantation

HR, 0.58; 95% CI, 0.28-1.19