JM, Mun GH, Pyon JK, Bang SI. Risk Factors for Complications in Immediate Expander-Implant Breast Reconstruction for Non-obese Patients: Impact of Breast Size on Complications. Aesthetic Plast Surg. 2016;40(1):71–78. doi:10.1007/s00266-015-0568-7

**QS26**

**NSQIP for Monitoring Outcomes after Implant-Based Breast Reconstruction: is it Enough?**

Joseph Banuelos, MD, Sharon A. Nehring, RN, BSN, Amjed Abu-ghname, MD, Editt Nikoyan, MS, Jorys Martinez-Jorge, MD, Oscar J. Manrique, MD, Minh-Doan Nguyen, MD, Steven L. Moran, MD, James W. Jakub, MD, Tina J. Hieken, MD, Basel Sharaf, MD, DDS

Mayo Clinic, Rochester, MN, USA

**PURPOSE:** Implant based breast reconstruction (IBR) accounts for 70% of post-mastectomy breast reconstructions in the United States. Improving the quality of surgical care in IBR patients through accurate measurements of outcomes is necessary. The purpose of this study is to compare data from the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) with our institution’s electronic health records database.

**METHODS:** Data was collected and recorded for all patients undergoing IBR at our institution from 2015 to 2017. The data was completely identified and compared with our institutional NSQIP database for demographics and complications.

**RESULTS:** The electronic health records data search identified 768 IBR patients in three years and NSQIP reported on 229 (30%) patients. Demographics were reported similarly among the 2 databases. Rates of implant infections (6.6% Vs. 1.8%; p=0.003) and wound dehiscence (4.3% Vs. 0.4%; p=0.003) were not reported similarly between our database and NSQIP. However, the rates of hematoma (2.3% Vs. 1.8%) and skin flap necrosis (2.9% Vs. 1.8%) were comparable between the two databases. In our database, 35% of all complications presented after 30 days of surgery.

**CONCLUSIONS:** Databases built on partial sampling, such as the NSQIP, may be useful for demographic analyses, but fall short of providing data for complications following IBR, such as infections and wound dehiscence. These results highlight the utility and importance of complete databases. National comparisons of clinical outcomes for implant-based breast reconstruction should be interpreted with caution when using partial databases.

**QS27**

**Alloplastic Facial Implants: A Systematic Review Analyzing Outcomes and Uses in Aesthetic and Reconstructive Facial Surgery**

Jeremie D. Oliver, MD, MS Candidate¹, Annica C. Eells, MD Candidate², Daniel Boczar, MD³, Andrea Sisti, MD³, David J. Restrepo, MD³, Maria T. Huayllani, MD³, Brian D. Rinker, MD³, Antonio Jorge Forte, MD, MS PhD³

¹Mayo Clinic, Rochester, MN, USA, ²Mayo Clinic, Scottsdale, AZ, USA, ³Mayo Clinic, Jacksonville, FL, USA

**PURPOSE:** Alloplastic materials in facial surgery have been used successfully for various applications in the reconstructive restoration or aesthetic augmentation of the facial skeleton. Among its most popular uses are repairs of the orbital floor, malar augmentation, and auricular reconstruction in the setting of traumatic injury or congenital microtia. The objective of this study was to conduct a comprehensive systematic review of alloplastic implant materials utilized in the face stratified by anatomical distribution, indication, specific material used, and respective outcomes.

**METHODS:** A comprehensive systematic review of published literature on alloplastic facial implant data was conducted utilizing Medline/PubMed database without timeframe limitations. Articles were stratified by (1) anatomical localization in the face, including the zygoma, nose, mandible, orbit, frontal bone, maxilla, and glabella, as well as (2) indication for use (aesthetic vs reconstructive). All demographics, post-operative complications data, and reported cosmetic outcomes were recorded. Results were considered statistically significant at p < 0.05.

**RESULTS:** A total of 23 case series’ and 32 isolated case reports were identified to meet the inclusion criteria. From the case series’ data, 2100 patients were included. Overall, polytetrafluoroethylene implants were associated with a