

Prospective Analysis of Breast Revision-Augmentation on Body Image Using the BREAST-Q in More Than 2000 Women: Results From a Nationwide Study

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ABSTRACT

Purpose: A large, 10-year, prospective, multicenter study was conducted to acquire post-approval data on Natrelle[®] round silicone-filled breast implants. This analysis evaluated changes in body image over time in subjects who had undergone revision-augmentation with these silicone implants.

Materials and Methods: Adult revision-augmentation subjects received 2 validated BREAST-Q scales measuring body image (satisfaction with breasts and psychosocial well-being) as a Web-based survey. Surveys were completed preoperatively and postoperatively at year 1 and year 4. Scores were transformed to a 100-point scale, with higher scores indicating better outcomes. Effect size and z-test *P* values were calculated.

Results: Preoperatively, 2198 subjects with silicone implants completed the satisfaction with breasts questionnaire and 2225 subjects completed the psychosocial well-being questionnaire. The satisfaction with breasts and the psychosocial well-being questionnaires were completed postoperatively by 2011 (91.5%) and 1996 (89.7%) subjects, respectively, at year 1, and by 1996 (90.8%) and 1580 (71%) subjects, respectively, at year 4. Significant improvements in body image as assessed by the 2 BREAST-Q scales were observed at year 1 and were maintained through year 4. Mean satisfaction with breasts scores increased from 51.8 preoperatively to 84.4 at year 1 ($P<0.0001$; mean change from baseline, 32.4) and 81.7 at year 4 ($P<0.0001$; mean change from baseline, 29.8). Effect sizes for satisfaction with breasts were large at year 1 (1.26) and at year 4 (1.16). Mean psychosocial well-being scores increased from 68.9 preoperatively to 87.4 at year 1 ($P<0.0001$; mean change, 18.4) and to 84.5 at year 4

($P < 0.0001$; mean change, 15.2). Effect sizes for psychosocial well-being were large at year 1 (0.82) and medium at year 4 (0.68).

Conclusions: Women who have undergone revision-augmentation with Natrelle silicone breast implants experienced significant improvements in body image that were stable over time. These data from a large number of subjects support the effectiveness of revision-augmentation with Natrelle silicone implants for improving women's quality of life.