

Table1, Supplemental Digital Content 4: Patient Demographics and Surgical Procedures (n = 11)

Patient	Age	BMI	Type of Mastectomy	Measured Side*	Expander vs. Implant	Smoking	Diabetes
P1	31	28.0	Nipple Sparing	Right	Expander	No	No
P2	42	41.4	Skin Sparing	Right	Expander	No	Yes
P3	64	32.39	Skin Sparing	Right	Implant	No	Yes
P4	44	20.7	Skin Sparing	Right	Delayed	No	No
P5*	66	27.9	Skin Sparing	Left	Expander	No	No
P6	36	17.73	Nipple Sparing	Right	Delayed	No	No
P7	38	32.64	Skin Sparing	Right	Expander	Yes	Yes
P8**	41	28.12	Skin Sparing	Right	Expander	Yes	No
P9	41	21.43	Nipple Sparing	Right	Expander	No	No
P10	50	27.37	Skin Sparing	Right	Expander	Nicorette	No
P11	44	26.95	Skin Sparing	Left	Expander	No	No

* **P5** underwent single side mastectomy. All others underwent bilateral mastectomy.

** **P8** was the only one who developed wound dehiscence and implant exposure after breast reconstruction. However, both measurements (scDCT and SPY-PHI) did not capture any abnormal regional flow/perfusion in this patient who was a smoker. Nicotine may inhibit endothelial-dependent vasodilatation, which is often associated with the reduction in tissue oxygenation.