

Supplementary File

Table S1. Correlation of the studied variables and complications in the univariate analysis

	Any early complication	P	Any late complication	P
Age				
< 50 years (n = 127)	19.2%	0.011	4.9%	0.536
≥ 50 years (n = 124)	33.3%		3.3%	
Overweighed				
BMI ≤ 25 kg/m ² (n = 84)	15.8%	0.006	3.6%	0.805
BMI > 25 kg/m ² (n = 167)	32.5%		4.3%	
Obesity				
BMI ≤ 30 kg/m ² (n = 170)	19.4%	< 0.0001	48.8%	0.388
BMI > 30 kg/m ² (n = 81)	41.8%		2.5%	
Diabetes mellitus				
No (n = 233)	24.2%	0.001	4.4%	0.362
Yes (n = 18)	61.1%		0	
Hypertension				
No (n = 164)	24.1%	0.170	2.5%	0.097
Yes (n = 87)	32.2%		7.0%	
Smoking history				
No (n = 179)	27.7%	0.643	4.0%	0.990
Former (n = 46)	21.7%		4.4%	
Yes (n = 26)	30.8%		3.8%	
Oncologic surgery				
Mastectomy (n = 172)	23.8%	0.192	4.8%	0.393
Other (n = 79)	31.6%		2.5%	
Timing of reconstruction				
Immediate (n = 229)	27.9%	0.071	4.4%	0.409
Late (n = 15)	6.7%		0	

Type of implant				
Expander (n = 221)	26.2%	0.961	7.7%	0.842
Permanent implant (n = 30)	26.7%		6.7%	
Implant placement				
SM partial (n = 112)	29.3%	0.732	1.1%	0.062
SM total (n = 139)	27.2%		6.1%	
CL mastoplasty				
No (n = 226)	26.5%	0.784	4.6%	0.275
Yes (n = 25)	24.0%		0	
Chemotherapy				
No (n = 59)	38.9%	0,001	5.5%	0.335
Neoadj (n = 87)	13.3%		5.8%	
Adjuvant (n = 105)	30.8%		1.9%	
Radiotherapy				
No (n = 84)	30.9%	0.235	2.4%	0.327
Yes (n = 167)*	23.9%		5.0%	
Expansion volume				
≤ 550 ml (n = 146)	30.5%	0,202	8.9%	0.346
> 550 ml (n = 105)	23.3%		5.7%	

BMI — body mass index; IV — included valve; SM — submuscular; CL — contralateral; Neoadj — neoadjuvant; *137 (82%) with irradiation of supraclavicular/axillary lymph nodes

Table S2. Results of the multivariate analysis, with the selected variables and their statistical significance for each endpoint

Variables	Complications				
	Overall	Early			Late
		2nd surgical intervention	Implant loss	Acute Infection	
Diabetes mellitus	0.015	0.034	–	0.026	–
BMI ≥ 30 kg/m ²	0.001	0.007	< 0.0001	0.082	0.018
Hypertension	–	0.044	–	–	0.004

Implant placement*	–	–	–	–	0.056
Neoadjuvant chemotherapy#	0.001	–	0.018	0.028	–
Acute infection	–	0.023	< 0.0001	–	–

BMI — body mass index; *subpectoral total worse; #“Protective” factor

Table S3. Odds ratios, respectively, for the risk of having early complications, second surgical intervention, implant loss and late complications, according to the significant correlated variables and radiotherapy

	Odds Ratio	95% Confidence Interval	p
Early complication			
Diabetes Mellitus	3.409	1.229–9.455	0.018
BMI \geq 30 kg/m ²	2.649	1.604–4.375	< 0.0001
Neoadjuvant CT	0.383	0.226–0.649	< 0.0001
2nd surgical intervention			
Diabetes Mellitus	3.572	1.168–10.923	0.026
Hypertension	0.393	0.172–0.899	0.027
BMI \geq 30 kg/m ²	3.106	1.532–6.297	0.002
Adjuvant RT	0.654	0.309–1.381	0.265
Implant loss			
BMI \geq 30 kg/m ²	5.363	2.329–12.349	0.000
Neoadjuvant CT	0.303	0.110–0.834	0.021
Adjuvant RT	0.673	0.272–1.668	0.392
Late complications			
Hypertension	4.783	1.967–11.628	0.001
BMI \geq 30 kg/m ²	0.170	0.048–0.607	0.006
Implant placement	3.550	1.261–9.993	0.016
Adjuvant RT	0.589	0.216–1.602	0.300

CT — chemotherapy; RT — radiotherapy