first FG was 23 months (range 0-257). 336 FG interventions were performed (median per patient: 1, range 1-9). At median follow-up of 38.9 months, 35 pts relapsed (10 locoregional, 25 distant relapses). Cumulative Incidence of relapse according to clinico-pathological subgroups is reported in the table. Semestral hazard rates of relapse in the three years after FG were: 0.010, 0.053, 0.034, 0.007, 0.039, and 0.038, respectively. 59 pts (29%) underwent additional breast imaging over standard recommendation (range 1-6 per patient), and 40 (20%) pts underwent breast biopsies (range 1-4, 10 confirmed a local recurrence).

Table: 256P

Clinicopathological factors		Number of patients (%)	3-years cumulative incidence of relapse	Hazard Ratio (95% CI)
HR status	HR negative	26 (13%)	13%	ref
	HR positive	170 (87%)	16%	1.57 (0.47-5.18)
HER2 status	HER2 positive	46 (24%)	10%	ref
	HER2 negative	143 (76%)	16%	1.93 (0.74-2.05)
Stage at diagnosis	Stage I	81 (42%)	11%	ref
	Stage II	67 (34%)	17%	2.84 (1.06-7.62)
	Stage III	47 (24%)	23%	4.42 (1.68-11.63)
Interval from surgery to first FG	>2 years	99 (48%)	16%	ref
	<2 years	107 (52%)	17%	1.07 (0.55-2.08)
Type of breast surgery	Mastectomy	180 (87%)	15%	ref
	Conservative	26 (13%)	25%	1.53 (0.63-3.69)
Overall Population		206 (100%)	17%	-

Conclusions: This study describes a not negligible rate of recurrence in BC pts receiving FG, especially in stage III and conservative surgery pts. High risk of relapse in the first years after FG might suggest a potential relation between the procedure and events. Moreover, a significant proportion of pts underwent additional breast imaging and biopsies, which can adversely affect quality of life. A careful discussion in multidisciplinary setting is crucial for proper pts selection.

Legal entity responsible for the study: Valentina Guarneri.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

256P Oncological outcome of fat grafting for breast reconstruction after cancer

G. Griguolo[1], F. Miglietta[1], M.V. Dieci[1], V. Vindigni[2], F. Bassetto[2], E. De Antoni[2], I. Polico[3], A. Marchet[4], E. Baldan[3], G. Vernaci[1], T. Saibene[5], S. Michieletto[5], V. Guarneri[1]

[1]Department of Surgery, Oncology and Gastroenterology, University of Padova, Istituto Oncologico Veneto IRCCS, Padua, Italy, [2]Plastic Surgery Clinic, University of Padova, Padua, Italy, [3]Diagnostic Senology Unit, Istituto Oncologico Veneto - IRCCS, Padua, Italy, [4]Clinica Chirurgica 1, Azienda Ospedaliera di Padova, Padua, Italy, [5]Breast Surgery Unit, Istituto Oncologico Veneto - IRCCS, Padua, Italy

Background: Fat grafting (FG) has become widely used in breast reconstruction after breast cancer (BC). FG might express protumorigenic factors or alter radiological aspect of the breast, raising some concerns on its oncological safety. The aim of the study was to describe clinical outcome of patients (pts) undergoing FG.

Methods: Records of 424 pts who underwent FG between 2010 and 2017 at the Plastic Surgery Dept. of Padova University were reviewed. Pts without invasive BC or not followed at Istituto Oncologico Veneto were excluded, leaving 206 pts for analysis. Cumulative Incidence of relapse was calculated from first FG. Association between clinico-pathological factors and relapse was explored.

Results: Patients were mostly post-menopausal (n = 115, 56%) and the majority had HR+/HER2- BC (n = 134, 65%). Eight pts (4%) were BRCA-mut carriers. Disease stage at diagnosis was: I (42%), II (34%), III (24%). Median interval from surgery to