Conclusion. This international survey shows the ambiguity in axillary treatment of patients with clinically negative/sentinel node positive patients worldwide. Hopefully, both future trials and trials which are currently being conducted will lead to more international consensus on the optimal axillary treatment regimens in these patients.
Conflict of interest: No conflict of interest.

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COMPLETE PATHOLOGIC RESPONSE RECTAL CANCERS (CORSICA) EYSAC.1 STUDY

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Background. About 20% of rectal cancers who underwent neoadjuvant treatment achieve a pathological complete response in the surgical specimen (ypT0); however, about 10% of ypT0 present metastatic nodes (ypN+).
Material and methods. This international, retrospective, multicentre cohort study officially launched on December 2017 as a worldwide call, included all consecutive rectal cancers treated from 2012 to 2017 with total mesorectal (TME) or local excisions (LE) with a pathological diagnosis consistent with ypT0, independently from N status. Each center participated with a junior and a senior investigator. Patients were excluded from data analysis if follow-up was missing or less than 3 months or if presenting peri-operative mortality (Clavien 5). Outcome measures included overall (OS), disease free (DFS) and disease specific (DSS) survivals. This study was registered on ClinicalTrials.gov, number NCT03351959.
Results. Some 729 ypT0 rectal cancers from 45 European, Australian and South American centers were registered for the retrospective evaluation. 674 ypT0 patients were eligible for data analysis: 95% treated with TME and about 5% treated with LE. Among those who underwent TME, 7% were ypN+. Mean follow-up was of 31.0 months (median 26.0 months). About 58% of the patients did not complete post-operative adjuvant treatments. 46 patients (6.8%) experienced a relapse (37% local and 63% at a distant site). Mean time to relapse was of 21.1 months (media 17.5 months). Kaplan Meier survival curves comparing patients treated with LE vs TME did not document differences of statistical value for OS, DFS, DSS outcomes (Log rank test respectively p 0.7, p 0.92 and p 0.39). Opposite when survivals of patients who underwent TME were analyzed according to the nodal status, significant worse OS, DFS and DSS were documented in the ypN+ subgroup (Log rank test respectively p 0.007, p 0.05 and p 0.02).
Conclusion. Persistence of nodal metastasis in the surgical specimen is a worse prognostic factor also in ypT0 rectal cancers. However, also survivals curves following LE provided homogeneous results comparing TME. These findings support the conclusion that organ preservation with LE is a feasible and safe option for rectal cancers who underwent complete response, given the identification of factors predicting the absence of nodal metastases in the surgical specimen.
Conflict of interest: No conflict of interest.

Scientific Symposium
Tissue Regenerative Surgery and Oncological Safety of Fat Grafting

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REOPERATIONS DUE TO INADEQUATE SURGICAL MARGINS AND RISK OF LOCAL RECURRENCE IN BREAST CANCER: COMPARISON BETWEEN CONVENTIONAL AND ONCOPLASTIC BREAST CONSERVING SURGERY

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Background: This retrospective cohort study aims to evaluate insufficient surgical margins, re-operations and local recurrences after conventional or oncoplastic breast conserving surgery (BCS).
Material and methods: We reviewed 1805 consecutive patients with invasive breast cancer (N = 1712) or ductal carcinoma in situ (N = 93) who underwent BCS at our center between January 2010 and December 2012. The patients were categorized into two groups, conventional or oncoplastic BCS. Multiple oncoplastic techniques were used: racket mammoplasty (N = 184), round block (N = 171), rotation mammoplasty (N = 116), superior pedicle mammoplasty (N = 41), inferior pedicle mammoplasty (N = 10), S-mammoplasty (N = 21), J-mammoplasty (N = 20), wise-amputation (N = 7), mastopexy (N = 26) and batwing mammoplasty (N = 17).
Results: Conventional BCS was performed in 1192 patients (66.0%) and oncoplastic BCS in 617 (34.0%). Patients with oncoplastic BCS had more often multifocal ($p < 0.001$) and larger tumors ($p < 0.001$) with larger resection specimens ($p < 0.001$). The amount of resected tissue varied substantially depending on the oncoplastic technique. Patients treated with oncoplastic BCS were slightly younger ($p < 0.001$) and their tumors were more aggressive according to histological grade ($p < 0.001$) and lymph node status ($p < 0.001$). There was no difference in surgical margins ($p = 0.671$) or reoperation rates ($p = 0.471$), however. After oncoplastic BCS, reoperation was more often mastectomy (69.6%) compared to conventional BCS group (54.6%) but there was no statistically significant difference ($p = 0.068$). There was no difference in local recurrences ($p = 0.174$) or in overall survival ($p = 0.073$) during a median follow-up time of 74 months.
Conclusions: Oncoplastic BCS was used for larger, multifocal and more

		Conventional BCS N = 1192	Oncoplastic BCS N = 613	*p-value*
		Count (%)	*Count (%)*	
Tumor	Impalpable	750 (62.9%)	256 (41.8%)	<0.001
	Palpable	442 (37.1%)	357 (58.2%)	
Reoperation due to inadequate margins	No	1095 (91.9%)	557 (90.9%)	0.471
	Yes	97 (8.1%)	56 (9.1%)	
Reoperation	Re-excision	44 (45.4%)	17 (30.4%)	0.068
	Mastectomy	53 (54.6%)	39 (69.6%)	
Multifocal breast tumor	No	1068 (89.6%)	513 (83.7%)	<0.001
	Yes	124 (10.4%)	100 (16.3%)	
Histological grade	1	417 (35.0%)	176 (28.8%)	<0.001
	2	500 (42.0%)	238 (38.9%)	
	3	274 (23.0%)	198 (32.4%)	
Lymph node status	pN0i- or pN0i+	894 (75.0%)	416 (67.9%)	<0.001
	pN1mic	85 (7.1%)	36 (5.9%)	
	pN1-	213 (17.9%)	161 (26.3%)	
		Mean (SD)	*Mean (SD)*	
Age (years)		62 (9.85)	60 (9.47)	<0.001
Tumor size (mm)		13 (7.42)	18 (9.22)	<0.001
Specimen weight (g)		69 (48.74)	152 (235.45)	<0.001
Smallest lateral surgical margin (mm)		10.5 (5.98)	10.7 (7.27)	0.671

aggressive tumors. Nevertheless, no difference in reoperation rate or local recurrences were found. Oncoplastic BCS is as safe as conventional BCS enabling breast conserving for patients who otherwise were candidates for mastectomy.

Conflict of interest: No conflict of interest.

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COMPARISON OF DIFFERENT DOSES OF SUPERPARAMAGNETIC IRON OXIDE FOR SENTINEL NODE BIOPSY IN BREAST CANCER: THE SUPERPARAMAGNETIC IRON OXIDE FOR SENTINEL NODE IN BREAST CANCER : (SUNRISE) RANDOMIZED TRIAL

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Background. Sentinel lymph node biopsy (SLNB) is the standard for axillary staging in breast cancer, Techniques for SLN include the use of radioisotope, blue dye, or a combination of both. Sentinel lymph node biopsy with 2 mL of superparamagnetic iron oxide (SPIO) tracer has shown to be non-inferior to the standard radioisotope technique in several studies. The aim of this study is to assess if the efficacy of SLN detection using Sentimag®/SiennaXP®, with different doses of the SPIO is non inferior to the conventional technique (radioisotope).
Material and methods. Patients with stage I breast cancer who underwent breast conservative surgery and sentinel lymph node biopsy were assigned consecutively (1:1:1) to one of the three groups defined by the different SPIO dose, group 1 (1mL), group 2 (1.5 mL) and group 3 (2 mL). Patient and tumor characteristics were analysed. Detection rate was assessed with both tracers for more than 90% concordance rates. Patients filled a questionnaire related to the presence of skin discoloration at 1 month post-operative visit, at 6 months and at 12 months. Patients signed a consent form.
Results. From September 2016 to July 2018, 135 patients were included in the trial, 45 in each group. Median age in group 1 was 58 years old, 63 y/o in group 2 and 65 y/o in group 3. (p=0.03). Detection rate by Tc 99 was successful in 44 (97.8%), 43 (95,6%) and in 45 (100%) in 1, 1,5 and 2 mL respectively. Detection rate by Sienna XP was successful in 44 (97.8%), 44 (97,8%) and in 45 (100%) in 1, 1,5 and 2 mL respectively. Concordance rates per patient between techniques was 95,6% for 1 mL, 93.3% for 1,5 mL and 100% for 2 mL. The SLN was positive in 8 (17,8%) in 1 mL, in 7 (15,6%) in 1,5 mL and in 7 (15,6%) in 2 mL. Concordance rates per patient with + SLN was 97,8% for 1 mL, 97,8% for 1,5 mL and 100% for 2 mL. P = 0, 9197. At 1 month follow up, patients in group 1 had less skin tattoo when compared with patients in group 2 and 3 (p= 0.02). There were no significant differences related to skin staining intensity by doses. On multivariate analysis, age and dose were significant associated for skin discoloration.
Conclusions. SLN with 1mL dose of SPIO has shown non-inferiority in the detection of SLN when compared to 1.5 and 2 mL. Increasing age and dose increased the risk of developing skin staining. Even though, most of the patients were not concern about the skin staining. Rates of discontinuation of skin discoloration will be assessed at 6 months follow up.
Conflict of interest: No conflict of interest.

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EVALUATION OF THE RETROGLANDULAR ONCOPLASTIC TECHNIQUE AS A STANDARD LEVEL I ONCOPLASTIC BREAST-CONSERVING SURGERY. A RETROSPECTIVE CLINICO-PATHOLOGICAL STUDY OF 102 BREAST CANCER PATIENTS.

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Background: Oncoplastic breast conserving surgery (OBCS) techniques are mainly performed from the front side through a skin incision placed on the breast skin envelope. This study presents the surgical technique of a novel Level I OBCS performing tumourectomy from retroglandular exploration through a skin incision placed in the inferior mammary fold.
Patients and methods: A retrospective single centre cohort study was performed involving early-stage breast cancer patients (n=102). Patients' characteristics and postoperative complications were recorded. The quality of life was rated by BREAST-Q. Aesthetic outcomes were evaluated by the Breast Cancer Conservative Treatment (BCCT.core) software and five-point Likert scale.
Results: The mean specimen weight was 49.8 g, the mean pathological tumour size was 15 mm. Due to positive surgical margins 13.7% re-excisions and 2.9 % mastectomies were performed. The mean operation time was 40 minutes. Minor and major morbidity rates were 13.7% and 10.8%. Median Likert scale score was 4.3, the objective outcome by the BCCT.core showed a median of the overall aesthetic outcome of 2.1 points.
Conclusion Retroglandular OBCS is a novel concept, effective Level I oncoplastic technique for radical resection of breast tumours $\leq$ 3 cm. Further advantages of the technique are the preservation of the initial natural shape of the breast, its safe, that it enables completion nipple-sparing mastectomy and the lack of need of contralateral symmetrisation. A disadvantage is the tendency for seroma formation. Limitation of the study is the short follow-up thus no conclusion can be drawn from the oncological point of view.
Conflict of interest: No conflict of interest.

Scientific Symposium
New Trends in HPB Surgery (Resection of Oligomets, Transplant)

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ELECTROMAGNETIC SURGICAL NAVIGATION SYSTEM FOR OPEN LIVER SURGERY: PRELIMINARY RESULTS

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Background: Due to the lack of real-time information on tumor localization and patient-specific anatomy during liver resections, 2 to 23% of procedures result in irradical resections. To improve radical resections rates and reduce morbidity, we introduce and evaluate an in-house-developed electromagnetic (EM) navigation system for real-time visualization and guidance during open liver surgery.
Material and methods: To enable real-time tracking of the tumor, three EM patient trackers were attached to superficial bony landmarks of the patient. After laparotomy, one EM-sensor and 4 surgical clips were placed on the liver surface, in close proximity to the target tumor, followed by an intraoperative CT scan with i.v. iodine contrast, visualizing main blood vessels, the sensor and the clips. The scan was directly correlated to a diagnostic MRI scan containing a 3D model of the liver. During the procedure, an electromagnetically-tracked-pointer was used for anatomical guidance within the model, visualized on OR screens. Accuracy of the system was assessed in five patients by pointing at 4 surgical clips, visible in intraoperative CT scan, and on visible anatomical landmarks.
Results: This novel technology resulted in accurate and intuitive real-time visualization of liver anatomy and tumor location, which could be confirmed by intraoperative checks on visible anatomical landmarks. Based on 40 accuracy measurement verified by intraoperative CT, the