CoMPaS correctly describes the growth period of the PT, which corresponds to the TNM and ER/PR/HER2/Ki-67 subtypes classification, the growth period of the sdMTSs and the 1–15-year survival of BC patients, taking into account TNM and ER/PR/HER2/Ki-67 subtypes classification. CoMPaS correctly describes the growth of the PT in ER/PR/HER2/Ki-67 subtypes of BC patients and helps to calculate the different recurrence periods, depending on the TVD\text{total} when sdMTSs might appear.

**Conclusion(s):** CoMPaS and the corresponding software tool can help (Tyuryumina E. et al, 2017, 2018, 2019, 2020):

1. to optimize the process of detecting the different recurrence periods for sdMTSs in BC patients with different tumor subtypes ER/PR/HER2/Ki-67 and the growth rate of the PT and sdMTSs;
2. to start the early treatment of small sdMTSs in BC patients with different tumor subtypes ER/PR/HER2/Ki-67;
3. to increase the survival of BC patients with sdMTSs of different tumor subtypes ER/PR/HER2/Ki-67; and
4. to consider the patient to be almost healthy if sdMTSs do not appear during the different recurrence periods.

**Conflict of Interest:** No significant relationships.

**P109**

**Effectiveness of breast-conserving treatment for minimal residual tumors after neoadjuvant breast cancer therapy**

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**Goals:** 1. To determine the frequency of detecting a minimal residual tumour of breast using physical methods (examination, palpation), radiation diagnostic methods: ultrasound, SPECT, mammography, vacuum aspiration biopsy or another type of biopsy and/or detection of metastases in regional lymph nodes (directed signal biopsy) in addition to the standard pathomorphological examination of the surgical specimen and regional (including sentinel) lymph nodes. 2. To study the long-term results of patients (local-regional recurrence, survival) with residual (including minimal disease) and with regression (pCR) after neoadjuvant systemic therapy, in comparison with patients with primary minimal breast cancer. 3. Develop an algorithm for treating patients with minimal residual disease and complete clinical response to neoadjuvant systemic therapy for breast cancer.

**Methods:** Retrospective analysis of data on neoadjuvant systemic treatment of patients with primary resectable and locally advanced forms of breast cancer, carried out at the Petrov National Medical Research Center of Oncology of the Ministry of Health of Russian Federation in the period from 2011 to 2019. The rates of disease (relapse)-free and overall survival of patients with residual (minimal) disease, after neoadjuvant systemic therapy (150 patients) and with primary minimal breast cancer (150 patients), based on data obtained from the database of the cancer registry of breast tumors (without randomization, only taking into account the stratification of other characteristics: breast cancer phenotype, grade of malignancy, proliferative activity KI67).

**Results:** Survival rates between the two groups are comparable, however, in the group of patients who have achieved pCR and regression of lesion to the size of minimal carcinoma, survival rates depend on the molecular subtype and the initial stage of the disease, as well as the quality of life. The pCR rate frequency correlates with the biological subtype of the tumor: pCR is most often recorded in HER2 overexpressing, triple negative and luminal B breast cancer subtypes.

**Conclusion(s):** The development of an effective breast-conserving treatment of minimal residual tumors after neoadjuvant therapy for breast cancer will make it possible to abandon crippling, massive surgical interventions (radical mastectomy with ALD), ensuring rapid rehabilitation and a high quality of life for patients.

**Conflict of Interest:** No significant relationships.

**P110**

**Evaluation of incidental implantation of tumor cells after diagnostic needle biopsy in breast cancer patients**

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**Goals:** Implantation within the biopsy scar using core needle biopsy (CNB) or vacuum aspiration biopsy (VAB) has been noted as a risk factor for ipsilateral breast cancer recurrence (IBTR). However, the risk factors for implantation have not yet been adequately studied. Thus, we aimed at evaluating the practical characteristics of and the risk factors for implantation at our hospital.

**Methods:** We retrospectively reviewed 4400 consecutive breasts of patients who underwent CNB or VAB followed by breast cancer surgery without neoadjuvant chemotherapy or endocrine therapy between January 2012 and September 2020. Implantation is defined as the presence of tumor cells within a biopsy scar between the tumor and the skin, as reported in postoperative pathological reports. The clinicopathological characteristics of these cases resulting in implantation were compared with those of non-implantation cases, and their risk factors were evaluated using multivariate analysis.

**Results:** Implantations were observed in 58 (1.32%) eligible cases. The average age was 54.8 years; 49 patients underwent CNB and 9 underwent VAB. The implantation group had more ER-positive tumors close to the nipple (E area) and invasive micropapillary carcinomas than the non-implantation group. In multivariate analysis, ER-positive tumors close to the nipple (E area) were identified as risk factors for implantation.

**Conclusion(s):** The number of cases with implantation within a biopsy scar was limited. We found that cases with implantations are significantly likely to have ER-positive tumors close to the nipple (E area) and invasive micropapillary breast carcinomas. It is worthwhile to include biopsy scars in excision specimens and skin incisions in the case of having these characteristics in order to prevent IBTR.

**Conflict of Interest:** No significant relationships.

**P111**

**Comparing MammaPrint and BluePrint results between core needle biopsy and surgical resection breast cancer specimens**

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**Goals:** The COVID-19 pandemic continues to strain healthcare systems globally. The ESMO COVID-19 adapted recommendations advocate for the use of pre-operative/neoadjuvant endocrine therapy as a strategy to defer surgery by 6–12 months in clinical stage I-II breast cancers to prioritize resources for patients that require urgent care. Accurate risk assessment is an integral component of this prioritization process. Adjuvant studies such as MINDACT showed that up to 46% of clinically high risk tumors were classified as genomic Low Risk with MammaPrint, and still have excellent outcomes at 8-yrs with endocrine therapy alone, highlighting the potential for overtreatment if using clinical-risk alone. Here, gene expression results with MammaPrint (MP) and BluePrint (BP) were