family members following a request for use of their stored DNA for confirmation or exclusion of the familial risk associated with Li-Fraumeni Syndrome. Eligibility assessment was based on written informed consent, indicating approval by the deceased patients for storage of germline DNA. This enabled further testing using whole exome sequencing (WES) on behalf of at-risk family members.

**Results:** The TP53 variants were excluded in the germline DNA of both breast cancer patients. Review of the histopathology and immunohistochemistry reports provided insight into the drug response reported. A strong family history of cancer was reported in Case 2, for whom an adapted WES report was generated for genetic counselling of at-risk family members, using the PSGT framework.

**Conclusion(s):** The high CD8+FoxP3 ratio indicates a good prognosis of the disease. The percentage of CD4+ T-lymphocytes less than 50% indicates a good prognosis and a high ten-year survival rate. Severe (more than 10%) CD8+ lymphoid infiltration increases ten-year survival (80%) and overall survival (92%) in pts with pT1-2N0. Relapse-free ten-year survival rates were higher in the group without PD-L1 expression (70% versus 41%) in the presence of PDL-1 expression (p = 0.02) (F4).

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

**PI18 The role of tumor-infiltrating lymphocytes, prognostic and predictive significance in breast cancer**


**Goals:** The immune system can have a significant impact on the prognosis as well as the performance of chemotherapy.

**Methods:** Using TMA we have shown a quantitative assessment of the subpopulation of CD4+, CD8+, FoxP3, CD8/FoxP3, PD-L1 of T-lymphocytes. In order to study the significance of the immunological aspects of the antitumor response, 638 cases were studied with regulatory genes-PD, PDL-1 and FOXP3 were studied. Of these, 281/633/548 patients were also tested for T-cell response markers CD3, CD4 (regulatory lymphocytes) and CD8 (cytotoxic).

**Results:** TILs were assessed in 1152 cases, of which 67% level was low, 25% moderate and 8% severe. Among the studied patients, 296 had a CD4+ percentage equal to or less than 50%. The 10-year overall survival rate of patients in this group reached 93%, which is considered a favorable group (p < 0.05) for early BC (stages T1-T2, N0). In 98 patients, the CD4+ percentage exceeded more than 50%. 10-year overall survival of patients was significantly lower than 82% (p < 0.05) (F2). There was no significant correlation between the degree of CD4+ lymphoid infiltration and disease-free survival rates (p = 0.27), although with a high CD4+ level (>50%) of cases, 10-year overall survival rates decreased (F3).

**Conclusion(s):** The presence of FoxP3 expression in ER+ breast cancer on TILs is significantly associated with a trend towards a lower overall survival rate (p = 0.06). Foxp3-regulatory TILs are a poor prognostic indicator in ER+BC, but a favorable prognostic factor in HER2+ ER-subtype BC.

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

**PI19 The level of adherence to medical standards as a prognostic factor for breast cancer recurrence**

V. Mitova1, I. Gavrilov2, R. Gorov1, V. Mangusheva3, V. Mitova1,1: General Surgery Department, Lozenetz University Hospital, Sofia, Bulgaria; 2Thoracic Surgery Department, National Hospital of Oncology, Sofia, Bulgaria; 3Wesley Medical Center Wichita, Wichita, United States

**Goals:** Breast cancer recurrences are among the leading causes of deaths related to this malignancy’s progression. Many experts have tried to create several clinical calculators, also known as nomograms, to predict treatment outcomes, survival, and to prognose recurrent disease. To these date, no analyses have reported the level of adherence to medical standards and their relation to the recurrence rate.

**Methods:** We retrospectively analysed data from 263 patients diagnosed and treated for local recurrence of breast cancer between January, 2012, and March, 2020, at two Bulgarian centers - National Hospital of Oncology and Lozenetz University Hospital. Primary breast cancers were treated in many different hospitals. The level of adherence to medical standards was assessed by 4a, 10a, 10b, 10c, 11a, 11c, 12a, 13a, and 13b quality indicators (Q6) adopted by European Society of Breast Cancer Specialists (EUSOMA).

**Results:** The median age was 45.2 years at the time of first diagnosis. The time interval between the primary tumor and the recurrence was from 1 month to 36 years. 44.9% of patients had family history of breast cancer. The majority of primary tumors were in T1 stage - 68.82% (T1a - 1.5%, T1b - 49%, T1c - 18.3%), and only 0.8% of them were in T3. Regional lymph nodes could not be assessed (Nx) in 11.4% of patients with primary tumors, which leads to a significant decrease in level of adherence to medical standards in these patients. 67.3% of relapsing patients had high estrogen receptor (ER+) titers (>50%). We reported HER2-negative status in 79.8% of patients with the primary cancer and in 95.2% of relapsing patients. The level of adherence to medical standards is faintly 76.3% in primary tumors. The results include significant differences in the level of adherence to medical standards according to the patients’ age and clinical treatment, and can be used as prognostic factors.

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