

variability explained by predictor variables. By expanding the scope of the study and potentially using the results as a basis for further hypothesis generation for subsequent studies, potential benefits can be expected for future patients.

Conflict of Interest: No conflict of Interest

P076

Long-term outcome after omission of open surgical resection of B3-lesions of the breast

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Goals: B3-lesions of the breast are a heterogeneous group of neoplasia, associated with a higher risk of breast cancer. Recent studies show a low upgrade rate to malignancy after subsequent open surgical resection of most B3-lesions if they were detected by vacuum-assisted biopsy (VAB). However, long-term follow-up data after VAB-detection have yet to be published. The primary aim of this study was to prove whether follow-up of B3 lesions is a beneficial and reliable alternative to surgical resection regarding the long-term outcome. The secondary objective was to define patient and lesion characteristics implying the necessity of surgical excision.

Methods: This prospective multi-center study was performed between 2010–2019 at 8 Swiss breast centers. A total of 278 women (mean age 53.5 ± 10.7 years) with 286 B3-lesions, who did not undergo surgical resection and at least a follow-up of 24 months were included. Any event during follow-up (DCIS, invasive cancer, new B3-lesion) was recorded. Data were compared between women who experienced an event during follow-up and women who did not. The results for the different B3-lesions were analyzed by using the t-test and Fisher's exact test. A p-value of < 0.05 was considered to be statistically significant.

Results: Mean follow-up interval of included women was 59 months (range 24–143 month) with 52% (148/286) having a follow-up of more than 5 years. A total of 44 women experienced an event during long-term follow-up with a peak after 6.5 years. Invasive breast cancer was diagnosed in 16 women (36.4%) and DCIS in 3 women (6.8%). The initial histology of the B3 lesion influenced the later occurrence of a malignant lesion during follow-up ($p < 0.05$). The highest upgrade-rate was observed for ADH (24%), whereas all other B3-lesions showed an upgrading ipsi- and contralateral between 0%–6%. Results were not influenced by the VAB-method (Mammography-, Ultrasound-, or MRI-guided), nor by radiological lesion characters, nor by patient's age or menopausal status.

Conclusion(s): VAB followed by long-term follow-up is a safe alternative to open surgical resection in most B3-lesions with a low upgrade-rate of <6%. Only in ADH a higher upgrade rate occurred (24%). Based on our results radiological follow-up should be performed bilateral, preferably by the initially diagnosing technique. As we observed a late peak of breast malignancies after B3-lesions, surveillance should be continued for a longer time (>10 years). The knowledge of these long-term outcome results will be helpful for treatment-decisions and definition of the optimal radiological follow-up regimen.

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Rapid Point of Care Germline Genetic Testing Pathway with Increased Eligibility Criteria in a Large Integrated Health Care System

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Goals: At Kaiser Permanente Northern California (KPNC), we follow the NCCN genetic testing guideline, and the tests are offered to

eligible patients after genetic counselors meet with patients for pretest counseling. The current model of testing cannot be scaled to meet the increasing demand. The primary goal of the study was to evaluate the rate of genetic testing if breast care coordinators (BCCs) embedded in the breast treatment team offer and order the test at the time of the initial intake/diagnosis. The second aim was to compare the percent of patients identified with a pathogenic or likely pathogenic variant (P/LP) when the eligibility is expanded to include all patients ≤65 yo. vs ≤45 yo.

Methods: This is a retrospective, quality review of a new genetic testing pathway with expanded eligibility criteria (mainly, ≤65 yo) at four breast programs from December 1, 2020 to June 30 2021. At the four sites (total n = 502), BCCs offered and ordered germline 62-gene hereditary cancer panel testing (Invitae lab) at the time of breast cancer intake and sent only those patients requiring medical genetics follow-up (P/LP, VUS-variants of uncertain significance, and positive cancer family history screening but >65 yo) to genetics. For the other ten non-pilot sites, breast cancer patients (total n = 1792) who met our genetic testing guideline (≤45 yo and guideline based) were offered genetic testing after the pre-testing counseling with genetic counselors. Testing rates and testing results were compared between pilot sites and non-pilot sites.

Results: Patient and disease characteristics were similar at pilot and non-pilot sites (table 1). A higher percent of patients at pilot vs non-pilot sites were tested (61.6% vs 31.7%). Testing at pilot sites was higher for each of our age groups (table 2). The testing rate was higher across racial/ethnic groups at the pilot sites. The median time from the breast biopsy to genetic test result was 22 days at the pilot vs 33 days at the non-pilot sites. Among all patients at the pilot sites, 5.8% were identified to have P/LPs in high-risk genes, 6.6% had P/LPs in moderate risk genes, and 21.5% in non-breast cancer genes. At non-pilot sites, P/LPs were identified in 3.6%, 3.4% and 12.3% of patients, respectively. At the pilot sites, P/LP for any tested gene were identified in 33% of patients; for non-pilot sites it was 19%.

Table 1. Patient and disease characteristics at Pilot and Non-Pilot Sites

Characteristic	Pilot N(%)	Non-Pilot N(%)	P Value
Overall	502	1792	
Age at diagnosis (years)			0.855
<46	46 (9.2)	178 (9.9)	
46–65	214 (42.6)	767 (42.8)	
>65	242 (48.2)	847 (47.3)	
Family hx of breast cancer			0.007
Yes	221 (44.0)	670 (37.4)	
No	281 (56.0)	1122 (62.6)	
Family hx of ovarian cancer			0.033
Yes	41 (8.2)	100 (5.6)	
No	461 (91.8)	1692 (94.4)	
Race/ethnicity			0.228
Non-Hispanic White	355 (70.7)	1225 (68.4)	
Other	147 (30.3)	567 (31.6)	
Tumor subtype			0.094
Triple Negative	43 (8.6)	123 (6.9)	
Clinical /path Stage			0.24
stage 0	72 (14.3)	273 (15.2)	
stage 1	286 (57.0)	1087 (60.7)	
stage 2	48 (9.6)	129 (7.2)	
stage 3	12 (2.4)	44 (2.5)	
Unknown	84 (16.7)	259 (14.5)	