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St. Gallen/Vienna 2025 Summary of Key Messages on Therapy in Early Breast Cancer from the 2025 St. Gallen International Breast Cancer Conference

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Abstract
Background: In 2025, the St. Gallen Conference was held from March 12th–15th, with the largest attendance since the pandemic and more than 3,000 participants from over 100 countries. ***Summary:*** The conference chairs professionally guided through the program on Early Breast Cancer, featuring abstracts submitted from all over the world. In addition, Prof. Dr. Herold J. Burstein (USA) led the panel through the difficult topics of local and systemic treatment modalities in an excellent, clearly structured and engaging way. Almost 80 experts from all continents and more than 30 nations formed the panel and summarized the current literature in excellent presentations and discussions. ***Key Messages:*** Final voting covered the topics of genetic testing, DCIS, breast and axillary surgery, radiation therapy, systemic treatment based on subtypes, treatment of the elderly, therapy of local-regional recurrence and oligometastatic breast cancer.

Introduction

The St. Gallen Conference takes place every 2 years in Vienna, Austria. In 2025, it was held from March 12th–15th, with the largest attendance since the pandemic, more than 3,000 participants from over 100 countries. The conference chairs Univ. Prof. Dr. Michael Gnant (Medical University of Vienna, Austria), Prof. Dr. Sibylle Loibl (Goethe University Frankfurt/Main, German Breast Group [GBG] Forschungs GmbH, Neu-Isenburg, Germany), Prof. Dr. Med. Beat Thürlimann (Breast Center, Kantonsspital St. Gallen and SwissBreastCare, Bethaniens-pital, Zurich, Switzerland) and Prof. Dr. Walter Weber (University Hospital Basel, Switzerland) professionally guided through the program on Early Breast Cancer, featuring abstracts submitted from all over the world. In addition, Prof. Dr. Herold J. Burstein (USA) led the panel through difficult topics in an excellent, clearly structured and engaging way. Almost 80 experts from all continents and more than 30 nations formed the panel and summarized the current literature in excellent presentations and discussions. Final voting covered the topics of genetic testing, DCIS, breast and axillary surgery, radiation therapy, systemic treatment based on subtypes, treatment of elderly, therapy of local-regional recurrence, and oligometastatic breast cancer.

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Highlights

- Studies such as SOUND, INSEMA, and SENOMAC have revolutionized axillary therapy and set clear impulses for new standards.
- Moderate hypofraction is the standard of care for irradiation.
- For DCIS, surveillance instead of local treatment is not yet seen as a standard procedure.
- The use of gene expression profiles is of great importance but only in co-deciding on the treatment of certain BC subtypes.
- According to the majority of the panelists and the auditorium, oligometastases are generally considered curable.

A particular highlight this year was the keynote speech by Prof. Dr. Armando Giuliano, a surgical oncologist, surgeon, scientist, and medical professor in Los Angeles, CA (USA). He focused primarily on the surgical treatment of breast cancer. Among other things, he was honored for his pioneering work in the field of axillary lymph node dissection (ALND) prevention (SLNB feasibility trial, ACOSOG Z0011). Prof. Giuliano motivated young clinical researchers to pursue their research ideas with conviction, even in the face of significant criticism, which he had also experienced in his life. He emphasized that perseverance is one of the best ways to advance research. His compelling speech on the importance of clinical research, especially in an era of high-quality randomized trials, was enriched with humorous anecdotes and delivered with deep respect for the challenges of breast cancer treatment. His inspiring presentation earned him a standing ovation.

Genetics

Almost two-thirds (64%) of the panel currently opposed general genetic testing of every patient with EBC (Early Breast Cancer) up to the age of 70, but would support genetic testing for all patients under the age of 50 (77.3%). Risk-reducing mastectomy of the contralateral breast (CRRM) after EBC was considered appropriate by most panelists for patients with BRCA1 and BRCA2 pathogenic variants (PV), with additional considerations for risk and age (60.3% would not recommend it for BRCA2 PV at or after the age of 65) [1]. Additionally, 51% supported CRRM for patients with PALB2 PV, but not for those with CHEK2 or ATM PV. Last should be included in an intensified surveillance program. These variants were instead associated with an intensified screening program. The preferred method for bilateral risk-reducing mastectomy and CRRM was nipple-sparing mastectomy with immediate reconstruction [2, 3].

Radiotherapy

Radiotherapy (RT) of the breast after breast conservation surgery (BCS) is firmly established as the gold standard in the guidelines [4]. As a key message with regard to RT, there is a broad agreement that hypofractionation is the current standard for whole (WBI) and partial (PBI) breast irradiation, postmastectomy chest wall irradiation (PMRT), and regional node irradiation (RNI).

In case of a 52-year-old patient with stage 1 luminal tumor (pT1c pN0 G1, ER+ PR+ HER2−) with breast conserving surgery, the majority (43%) even voted in favor of ultrahypofractionation (5 fractions, "FAST-FORWARD" [5]) and only 40% for moderate hypofractionation (15–16 fractions). Conventional fractionation (25 fractions) was considered not any more indicated in these cases.

Also, in more advanced diseases or cases with adjuvant chemotherapy, moderate hypofractionation (PMRT and RNI) was judged as the most adequate form of irradiation (77% votes in T3N1, 58% in T3N2, respectively). Also, as part of the breast conserving concept in pT1 pN0 disease (after BCS + SLNE), most panelists voted in favor of hypofractionation, or moderate (luminal high risk 71%, TNBC 64%, luminal low risk in fit elderly 21%), or even ultrahypofractionation (luminal high risk 22%, TNBC 26%, luminal low risk in fit elderly 41%); for fit elderly (luminal low risk); also, PBI was considered (36%). There was no clear decision whether the grade of fractionation (5, 10, 15, or 16 fractions) should be modified depending on the irradiation field (WBI, PMRT, PBI, breast reconstruction).

A major point of discussion was RT after primary surgery. A large tumor alone (pT2 [4.7 cm] pN0 luminal-like G3, 57 years.) was not considered general indication for RT (65% no RT). However, in patients with node-positive, high risk disease, PMRT plus RNI was considered the better choice (e.g., 43 years, stage 2, TNBC: 94%), even if only 1 of 3 sentinel nodes were infiltrated (e.g., 66 years, stage 2, luminal-like: 49%; 41 years, low genomic risk: 47%).

As part of breast conserving therapy, in patients with clinically node-negative, small tumors (<2 cm), RT of the breast is still considered standard, as WBI (41%) or as PBI (58%). Studies in early-stage breast cancer with axillary lymph nodes (AMAROS, Alliance Z011) have confirmed that ALND can be omitted without increasing the risk of locoregional recurrence or worsening prognosis, provided RT of the lymph drainage area is performed [6, 7]. Initial data from the SENOMAC study have also shown positive results in patients after mastectomy and up to two affected axillary LN [8].

Based on the SOUND [9] and INSEMA [10] studies, 41% of panelists supported WBI – foregoing axillary

surgery – for a postmenopausal patient aged 60 with a T1c tumor, low-risk profile, and negative axillary ultrasound. That the findings of these two studies have not yet really found their way into clinical routine is reflected by the responses from the auditorium, with a distribution of 48% in favor of SLNE and PBI, and only 28% in favor of WBI.

An important issue was RT after neoadjuvant therapy. With regard to PMRT after mastectomy for a node-positive, luminal cT2 high risk tumor (3 cm, G3), 82% voted for PMRT in a 56-years-old patient with pathologically proven complete response (ypT0), but residues in the axillary lymph nodes (ypN1 [1/2] by TAD). However, for the same patient, who had an incomplete response at the primary site (0.9 cm residual tumor) but node-negative by SNLE (ypN0), the vote was nearly equivocal (48% in favor, 52% against PMRT).

With regard to axillary lymph node irradiation in ypN1sn (1 of 4), the majority voted for lymph node irradiation alone (ER−: 58%, HER2+: 69%), only 27% and 25%, respectively, favored axillary dissection, some of them both, ALND plus RNI.

A major subject of discussion was RT after NACT with micrometastases in the sentinel lymph nodes: Overall, a majority (38%–50%) voted to perform nodal irradiation only, independent of the extent of nodal infiltration (ITC in one node, micrometastases in one or two nodes) and the tumor biology (ER+/HER2−, TN, HER2+), with the exception of ER+ tumors to omit RT if ITC was found in one node. However, if micrometastases were present, a substantial proportion of panelists voted in favor of ALND (21%–44% if 1 of 4, and 37%–57% if 2 of 4 lymph nodes are infiltrated) without or even with additional axillary node irradiation.

However, with regard to de-escalation in older patients, the panel still voted rather conservatively: Though we had recently seen nice data for patients 70 years and older with low-risk stage 1 disease (EUROPA-trial [11]) favoring the alternative of adjuvant RT only against adjuvant endocrine therapy (ET) only with regard to safety and quality of life after 2 years of follow-up, most panelists voted for WBI plus adjuvant ET (59%) and only a minority (13%) choose WBI only as an option in a corresponding patient. However, it should be noted that the EUROPA study currently has a very short follow-up, and only interim analysis data have been presented. As such, the majority of the panel considers clinical implementation to be premature. Even in older patients (74 years, stage 1, luminal disease), the majority wanted to have more information on the tumor biology (Ki67, grade and genomic risk: 48%), before discussing omission of WBI. In the neoadjuvant situation, results of the Alliance A011202 and TAXIS studies must be awaited for in order to define the radiotherapeutic protocol more concretely.

DCIS

While in the past RT was considered standard in DCIS after lumpectomy, evidence is accumulating that this strict recommendation results in substantial overtreatment without prolonging the survival of these women. On the other hand, ET may be underused. Thus, this year, we observed a trend to reduce RT indication and to establish a broader use of adjuvant ET.

In younger patients (two examples, 40 years, and 55 years old) with 1–2 cm DCIS (G2, ER+), breast irradiation after lumpectomy was still considered necessary (97% and 99%, respectively); however, 64% and 59%, respectively, would add adjuvant ET. In older patients (70 years), only 64% voted for irradiation including 28% votes for additional ET, but 36% would perform neither adjuvant RT nor adjuvant ET.

Also, with regard to lesion size, there was some differentiation; in smaller lesions (<1 cm) only 48% voted for RT, in larger lesions (≥1 cm) 77%, while for lesions, 3 cm in diameter and more, all voters pleaded for breast irradiation after lumpectomy.

Differentiating the tumor biology of small lesions (G2, <2 cm), with genomic low risk, more than 43% would omit RT, giving nothing (12%) or adjuvant ET only (>31%), while with genomic high risk (G2, <2 cm) no one wanted to omit adjuvant RT and 53% voted for both, adjuvant RT and ET.

Also, the interesting data of the COMET trial were discussed; however, the panel did not endorse monitoring/surveillance [12, 13] instead of standard locoregional therapy: 90% voted for surgery of the DCIS in a patient at age 55 with less than 1 cm calcifications, and that even in a 70 years old DCIS patient. Only 19% of panelists considered ET and annual surveillance.

Surgery

For recommendations regarding risk-reducing mastectomy in women with germline mutations, the panel in general stayed within the 2023 recommendations [14]. Asked specifically at this time whether women with a known BRCA2 mutation at age 65 or older should be recommended bilateral mastectomy, 60.3% of panelists declined. For all risk-reducing mastectomies, the panel clearly endorsed bilateral nipple-sparing mastectomy (78.8%) for healthy women without a known breast tumor over bilateral skin-sparing mastectomy (16.7%), while for patients with germline mutations and a breast cancer diagnosis, the preference was less pronounced (65.2% NSM, 25.8% SSM).

With respect to breast surgery, the panel made it very clear that BCS is the surgical method of choice, and unnecessary mastectomies must be avoided [15, 16]. The

2025 SGBCC discussions gave probably the clearest message so far towards the avoidance of not-indicated mastectomies (e.g., because of wrongful perception of risk and other reasons) [17]. It became clear that clinical practice unfortunately varies regionally: 61.5% of panelists reported that 10% or fewer of their patients suitable for breast conservation eventually undergo a mastectomy, but 10.8% reported this proportion at 30% and 9.2% of panelists at even 40%.

The pivotal results of the SOUND [9] and INSEMA [10] trials were clearly discussed a lot at SGBCC 2025: the panel strongly denied extrapolation of sentinel node biopsy omission to any patient group outside these trials, e.g., a rare 100% of panelists voted "No" to SNB omission when asked about a 60-year-old patient with a 2.5 cm TNBC and negative axillary ultrasound. For HER2-overexpressing tumors, 62% of panelists recommend SNB even when hormone receptors are positive. For luminal tumors of up to 2 cm in size, grade 2, and patient age of 60 years, 53.6% of panelists endorsed the omission of SNB, whereas 15.9% would limit the omission to tumors smaller than 1 cm, and 5.8% to smaller than 15 mm. Based on limited data on lobular cancer, the majority of panelists (59.7%) declined to apply the same criteria for the omission of SNB to lobular carcinomas compared to invasive ductal carcinomas. Also, the panel clearly refused SNB omission for younger patients. It was also made very clear that – in general – de-escalation of surgery should not lead to avoidable escalation of RT.

For axillary procedures after neoadjuvant systemic therapy and residual macrometastases (ypN1 3 mm, 1 out of 4), 58% of panelists recommended nodal irradiation, whereas 18% favored ALND; however, the figures for ALND increased for TNBC, HER2-overexpressing disease, and with more residual lymph nodes affected [18].

Systemic Therapy

TNBC

The size threshold to administer adjuvant chemotherapy in a small node-negative TNBC which underwent primary surgery was 0.5 cm for 76.1% of the panel members. In a TNBC patient operated on for stage I disease where the final histology revealed a 1.1 cm G3 lesion, the most favored adjuvant chemotherapy regimen was TCb-AC in patients with 1 involved lymph node (39.7%) as well as in patients with 3 involved lymph nodes (50%). About 25% of panel members favored the addition of pembrolizumab in this adjuvant alone setting even if there is no rationale for this situation. In a pT1 pN0 TNBC, the size threshold for administering anthracyclines as part of the adjuvant chemotherapy regimen was 1.0 cm (43.9%), with 22.7% of panel members stating that they would not administer anthracyclines in stage I TNBC. In a 1.2 cm G3 N0 TNBC with a high percentage of TILs (>50%), the vast majority favored adjuvant chemotherapy: 87.1% in a 50-year-old and 76.7% in a 68-year-old patient.

In a patient with a clinically negative axilla, 71% of the panel members voted for 2.0 cm as the size threshold for initiating neoadjuvant TCb/AC/pembrolizumab in newly diagnosed TNBC. In a live voting, only 46.3% would initiate a pembrolizumab regimen in a patient with a clinically node-negative axilla and a tumor measuring 1.75 cm on ultrasound. In a stage 2, node-positive TNBC patient with medical contraindications to checkpoint inhibitor therapy, the preferred chemotherapy option for 87.1% of the panel members would be TCb-AC; only 12.9% voted for a platinum-free regimen. In a simultaneous audience vote, 79% opted for TCb-AC. Discussing the optimal neoadjuvant pembrolizumab-based chemotherapy schedule in stage II N+ TNBC, the majority (48.3%) voted for weekly paclitaxel, weekly carboplatin followed by three-weekly AC. In a stage II TNBC patient with pCR who tolerated pembrolizumab well in the neoadjuvant setting, 87.7% of panel members would continue the immunotherapy in the adjuvant setting. In a hypothetical scenario of neoadjuvant TCb/AC/durvalumab [19, 20], 62.3% would not administer adjuvant checkpoint inhibitor therapy. In a stage II TNBC patient with non-pCR (<1 cm, ypN0) after the neoadjuvant (Keynote) KN522 regimen [21, 22], 75.8% of panel members would administer adjuvant pembrolizumab together with capecitabine [23]. In a 29-year-old patient with a 2.5 cm tumor cN0 TNBC, 83.1% would favor treatment with pembrolizumab but explain to the patient that the impact of immunotherapy on future fertility is not known. In stage 2 node-positive TNBC patients with a gBRCA1mut and pCR after the neoadjuvant KN522 regimen, 84.8% would not recommend adjuvant olaparib. However, 66.2% of panel members would administer adjuvant pembrolizumab together with olaparib in a similar patient with residual tumor in the lymph nodes, which – although not a standard – is possible in the combination, according to initial safety data [24].

After neoadjuvant TCb-AC for clinical stage 1 TNBC and pCR, 63.5% of panel members would not administer any further therapy if the patient had a positive result in a tumor-specific genomic assay for minimal residual disease. 23.8% would administer capecitabine. The subsequent live question of whether there is a role for tumor-specific genomic assay testing in routine management of early-stage breast cancer, and whether the possible prognostic value is sufficient, led to a split vote of 50:50.

HER2+ EBC

Prof. Dr. Martine Piccart introduced with a reflection on 20 years of trastuzumab. In a patient who has undergone mastectomy for extensive high-grade DCIS with foci on microinvasive ER-negative HER2 3+ breast cancer, 54.7% of panel members would not recommend adjuvant paclitaxel and trastuzumab therapy at all for microinvasive disease, while 26.6% would consider this in case of 3–5 foci.

The size threshold for administering adjuvant paclitaxel and trastuzumab to a small N0 HER2+ tumor after primary surgery was 0.5 cm for 89.6% of the panel members. The size threshold for neoadjuvant chemotherapy in cN0 HER2+ EBC was 1.5 cm for 39.1% of panel members and 2.0 cm for 91.3%. In a patient with ER+ HER2+ EBC and a tumor slightly larger than 2 cm and cN0, the favored neoadjuvant regimen for the majority was TCbHP (T = taxane, Cb = carboplatin, H = trastuzumab, P = pertuzumab) (49.2%), followed by T-HP (34.9%) [25, 26]. In a similar patient who underwent primary surgery with a 2.4 cm ER+ HER2+ tumor pN0, 39.3% would recommend adjuvant TCbH and 32.8% T-H; the remaining panel members would choose a pertuzumab-based regimen. In a patient with a minor clinical response after 6× neoadjuvant TCbHP for operable stage III EBC breast cancer who would still require mastectomy and ALND, 88.9% opted for surgery and the remaining panel members for a switch to neoadjuvant anti-HER2 therapy.

In a patient with non-pCR after neoadjuvant TCHP for stage II node-positive, ER–, HER2 3+ EBC with residual tumor in breast and lymph nodes after surgery and a HER2-low result in the non-pCR specimen (HER2 2+, FISH negative), 71.4% of panel members would recommend adjuvant T-DM1 [27]. In a live vote, the preferred routine chemotherapy regimen for stage II or III HER2+ EBC was TCbHP among 74% of panel members and 54% of the audience; the remaining voters opted for an anthracycline-based regimen. The preferred neoadjuvant treatment regimen for an ER–, HER2+ inflammatory breast cancer is TCbHP for 60.3% of panel members while the remaining ones would add anthracyclines.

A few questions were asked regarding the HER2DX test. In a patient with a 3 cm ER– HER2+ EBC and a low-risk HER2DX test [28] result with a high pCR score, 50% stated in a live question that they would not have used HER2DX and 26% would recommend neoadjuvant TCbHP. In a patient with stage I HER2+ EBC and a low risk HER2DX result with an intermediate pCR score, 53.2% stated that they would not have used the test and 40.3% would opt for primary surgery followed by T-H.

ER+ HER2– EBC

Patient stratification should be based on risk of relapse and adapted to low, intermediate and high risk as outlined by Prof. Dr. Fabrice André for ER+ HER2– EBC. In discussing adjuvant chemotherapy in ER+ EBC, most of the panel members (63%) and of the audience (64%) would recommend chemotherapy if the likely benefit of distant-recurrence-free survival was 5%. Most panelists stated that, given the natural history of ER+ HER2– EBC and ductal carcinoma in situ, the appropriate duration of follow-up on clinical therapy trials for women with ER+ tumors before recommending new treatment approaches in the absence of overall survival benefit, is 10 years (56.5%).

Numerous questions addressed gene expression assays. 61.9% agreed with the statement that, based on historical outcomes of studies such as NSABP B-21 for N0 ER+ HER2-tumors 1 cm or smaller, the risk of distant metastatic recurrence with ET is sufficiently low so that genomic risk assays are unnecessary. The size threshold for ordering genomic assays in ER+ node-negative cancers to decide on chemotherapy is 0.5 cm for 32.3% and then 1 cm for all panel members. 47.6% agreed with the statement that Ki67 or similar proliferation assays performed by a high-quality pathology lab can define low/intermediate risk in HR+ cancers with comparable accuracy as multigenomic assays [29, 30].

In a 63-year-old woman with strongly ER+ PR+ G1 cT3 cN1 EBC with ductal and lobular histology, 37.5% would proceed to mastectomy as systemic treatment is unlikely to affect surgical options, while 23.4% would order a genomic signature. In the same patient with a low-risk genomic signature, 54.7% would proceed to primary surgery.

In a 63-year-old woman, after surgery for ER+ (>95%) PR+ (>95%) HER2 0 3 cm G1 multifocal lobular EBC with 6/13 lymph nodes and an Oncotype DX recurrence score of 11, 52.4% would recommend chemotherapy followed by ET plus CDK4/6 inhibitor (CDK4/6i). In a patient with a T1cN0 G2 EBC strongly ER+ and PR+ (>90% each), HER2– and Ki67 <20%, 54.1% would not order a multigene assay to determine whether to give chemotherapy.

In a 60-year-old postmenopausal woman with a T1 (1.5 cm) N2 (4 nodes involved) ER+ PR+ HER2– EBC and an Oncotype DX recurrence score of 20, 66.1% would recommend AC-T chemotherapy in addition to adjuvant endocrine treatments and only 11.9% would omit chemotherapy. In a premenopausal 42-year-old woman ER+ HER2– 1.4 cm G2 with node-negative EBC, most panel members would recommend the following adjuvant therapy: tamoxifen for an Oncotype DX score of 12 (63.9%), GnRH + AI for a score of 18 (32.3%), and chemotherapy followed by ET for a score of 23 (56.5%). In a similar patient with one involved axillary node, the majority would recommend the following adjuvant therapy: GnRH + AI or chemotherapy followed by ET for a score of 12 (both 39.3%), chemotherapy followed by ET for a score of 18 (67.1%), and chemotherapy followed by ET for a score of 23 (82%). In a similar patient with now two positive axillary lymph nodes (Oncotype DX score 12), 38.3% would recommend chemotherapy followed by

ET plus a CDK4/6i [31–33] and 46.7% would recommend the same therapy if the score was 18. 57.8% would recommend chemotherapy followed by ET plus a CDK4/6i if there was just one involved lymph node but a score of 23, and 66.1% would recommend this therapy with one lymph node but a Ki67 of 30%.

In a premenopausal woman with ER+ HER2− 1.4 cm G2 with N+ (1/3 sn) EBC and an Oncotype DX score of 18, 60% would recommend chemotherapy followed by ET plus a CDK4/6i if the patient was 31 years old but only 34.5% would recommend the same treatment if the patient was 50 years old (and 29.3% just ET plus a CDK4/6i). In the same 50-year-old patient, now with a Ki67 of 20%, 40.4% would recommend chemotherapy followed by ET plus a CDK4/6i.

In a 53-year-old woman after neoadjuvant chemotherapy for G2 EBC with a T2N1 clinical presentation with a major clinical response who had a residual 1.0 cm tumor in the breast, 57.1% would recommend an adjuvant CDK4/6i in addition to adjuvant ET in case of 3 negative Sentinel lymph nodes but 85.9% in case of 1/3 sn. In a premenopausal 45-year-old woman with G2 2.5 cm N0 breast cancer, 60.3% would recommend chemotherapy plus ET in the case of an Oncotype DX score of 21, and 40.7% in the case of Ki67 of 21% with 30.5% just recommending GnRH + AI.

For 43-year-old patient with HR+ luminal A breast cancer presenting for second opinion with just a prescription of adjuvant tamoxifen alone, 36.1% would add GnRH and a CDK4/6i for pT2 pN1 (1/6) G1, 26.7% would do this for pT2 pN0 G3, and 57.6% would just add GnRH for pT1 pN0 G3. 87.5% of panel members and 91% of the audience agreed with the statement that selection of patients with intermediate risk ER+ EBC for adjuvant CDK4/6i would be better based upon accurate estimates of risk of recurrence than on the eligibility criteria for the pivotal clinical trials. Based on the available data, 44.3% believed that there will be a clinically relevant OS advantage CDK4/6i in EBC and 42.6% stated that they did not believe in an OS advantage but would still use CDK4/6i in their current role.

For a postmenopausal patient has with 2.1 cm, ER+ G2 EBC, in N0 disease, 62% would recommend chemotherapy plus AI with an Oncotype DX score of 26, and 39.7% with a KI67 of 26%. In case of 1/3 sn (1 positive of 3 removed sentinel nodes), 54.7% would recommend CDK4/6i plus AI with an Oncotype DX score of 18, and 53.2% with a Ki67 of 18%. In case of 2/4sn, 53.1% would recommend CDK4/6i plus AI with an Oncotype DX score of 11, and 51.6% with a Ki67 of 11%.

A few patient cases were voted live in Vienna. In a 50-year-old patient with a 3–4 cm G3 cN0 EBC and low ER (5%, confirmed by repeat testing), PR <1%, and HER2−, 82% of panel members and 74% of the audience would recommend neoadjuvant pembrolizumab with concurrent taxane followed by AC.

In a 60-year-old postmenopausal woman with T1cN1 ER+ PR+ HER2− EBC affecting 3/11 lymph nodes and an Oncotype DX Score of 13, 71% would not recommend chemotherapy in addition to adjuvant endocrine treatments. In a similar patient with now 4/11 lymph nodes, only 34% would now omit chemotherapy; 64% would recommend AC-T and 31% TC.

In a 57-year-old postmenopausal woman with a 2.1 cm N0 ER+ with an Oncotype DX score of 25, 38% would recommend AI + CDK4/6i and 41% AI alone as adjuvant treatment; only 22% would opt for a chemotherapy-based strategy. For a 63-year-old woman with G1 strongly ER+ and PR+ clinical T3N1 EBC, a low-risk genomic score and ductal and lobular histology who received 6 months of neoadjuvant endocrine treatment with substantial clinical response and had residual tumor in the breast and in 3 of 11 axillary lymph nodes. A total of 50% of panel members and 71% of the audience would recommend adjuvant chemotherapy in addition to optimal ET.

Regarding the recommended duration of adjuvant ET in a patient with a 1.8 cm G2, HER2− EBC, most panel members voted 7–8 years in ER+ with 1/4 positive lymph nodes (73.4%), 7–8 years for ER+ N0 with an Oncotype DX recurrence score of 28 (or MammaPrint "high" score) (45.3%) and 10 years for ER+ with 3/8 positive (52.4%). Regarding type of adjuvant chemotherapy, 72.9% recommended TC in a postmenopausal woman with G2 T2 (2.4 cm) N0 ER+ PR+ HER2− EBC and an Oncotype DX recurrence score of 28 (or MammaPrint High 1) result. In a similar patient but now N+ (2/3sn), the majority (85%) recommended AC-T. In a similar N0 patient but now with an Oncotype DX recurrence score of 32 (or MammaPrint High 2), 71.7% recommended again AC-T. In a similar N0 patient but now with a T1 (1.8 cm) G3 tumor, again 66.1% recommended AC-T.

For a patient with a history of node-positive breast cancer presenting in her 4th year of adjuvant AI therapy with a positive ctDNA result in a tumor-specific minimal residual disease test and negative staging examinations, 60.3% would continue the AI and repeat the scans every 6–12 months. In a similar patient with an ESR1 mutation in agnostic genomic testing for residual cancer, 33.9% would just continue the AI, 32.2% would continue the AI and repeat the scans every 6–12 months, and 28.8% would switch therapy to fulvestrant.

In a 49-year-old woman with a gPALB2mut and ER+ HER2− EBC who meet the eligibility criteria of the OLYMPIA study, 68.3% would offer adjuvant olaparib in addition to standard chemotherapy and/or ET. For men with ER+ HER2− EBC who do not warrant chemotherapy, standard ET should be tamoxifen in stage I (92.1%) and in stage II disease (69.4%). 91.7% agreed that men with ER+ EBC should be offered CDK4/6i treatment based on the same criteria as women with EBC.

Survivorship

There was an agreement that the follow-up after diagnosis of early-stage breast cancer by a cancer specialist should last at least 5 years, as shown in Figure 1. However, some voted for 5 years (39%), some for 10 years (29%), some for indefinite (27%). Ultimately, the optimal time window for follow-up care for breast cancer remains unclear for both – the panelists and the auditorium. However, the time-varying course of the disease could stimulate to discuss different intervals according to tumor biology.

It was particularly important to the panel (93.1%) to ask questions relating to sexuality as they are usually neglected in everyday clinical practice. However, problems in this area in particular can significantly impair adherence to endocrine therapies.

Treatment of Locoregional Recurrence of Breast Cancer

For all patients discussed in this section, staging without evidence of stage IV disease was assumed. For a patient with local recurrence of a 1.5 cm breast tumor 3 years after first diagnosis of TNBC with T1N0, breast conserving therapy, radiation and adjuvant AC/T chemotherapy the panel's preferred treatment options varied: 37.7% favored mastectomy followed by adjuvant TCb chemotherapy. 27.5% would treat the patient neoadjuvant with TCb and pembrolizumab, while 21.7% would omit pembrolizumab and would only choose TCb within a neoadjuvant setting. Only 8.7% opted for mastectomy and 4.3% for lumpectomy and re-radiation. The low preference for re-irradiation reflects the uncertainty of the option of a safe re-irradiation and highlights the need for an interdisciplinary tumor board.

In the case of ER+/PR-low and HER2– in breast recurrence after primary BC diagnosis with an ER+/PR+ and HER2– tumor treated with BCS, irradiation and while on AI, 70.1% considered genomic risk signature testing informative for assessing the potential benefits of chemotherapy. The question of the duration of time for a partial re-irradiation after BCS was answered at 5 years by 75% of the panelists.

Oligometastatic Breast Cancer

The term "oligometastasis," first described by Hellmann and Weichselbaum in 1995, represents an intermediate state between local and systemic disease, where radical focal treatments targeting all metastatic lesions might have a curative potential. Approximately, 40% of metastatic breast cancer cases are oligometastatic [34]. For a patient who will be treated curatively with an oligometastastic disease with a single sternum metastasis

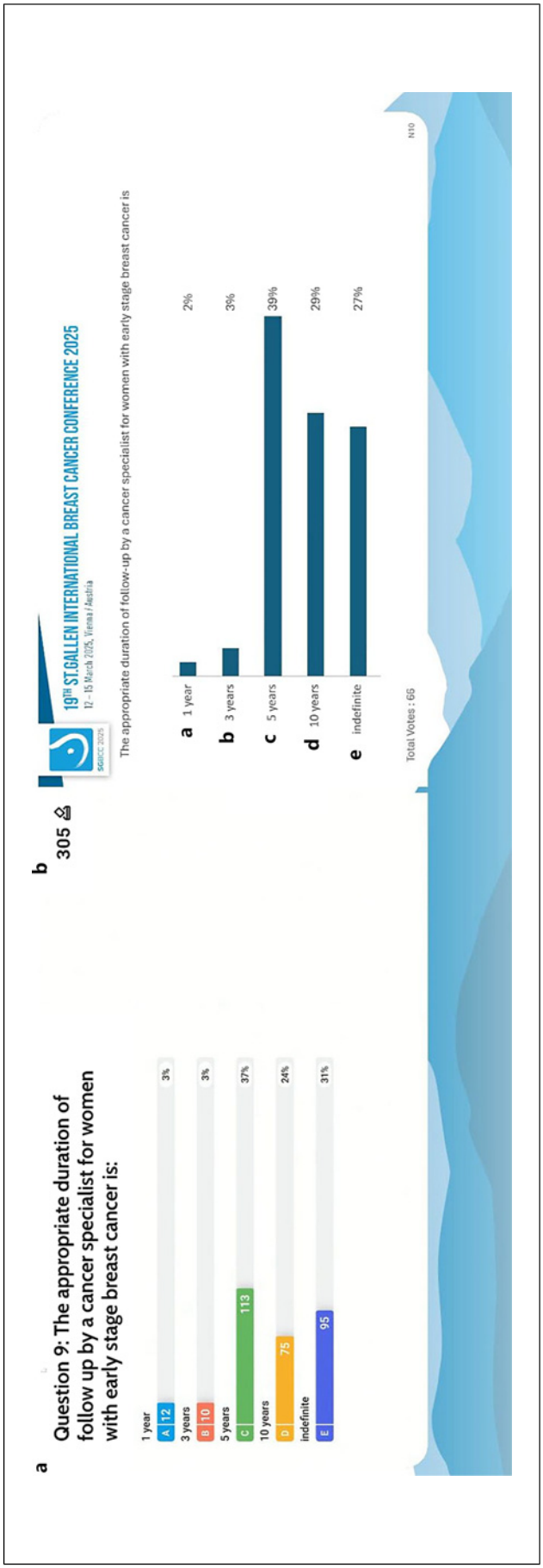

Fig. 1. Voting of the auditorium (**a**) and the panel (**b**): follow-up after diagnosis of early-stage breast cancer by a cancer specialist should last at least 5 years.

and a clinically negative axilla, 71.2% of the panelists would opt for sentinel lymph node surgery, 21.2% would decide to avoid axilla surgery, 6.5% would prefer an ALND and 1.5% an axillary irradiation alone.

If an oligometastatic disease including only an isolated lesion in the iliac crest is newly diagnosed in a 47-year-old women with a T2N1 tumor ER negative and HER2 positive at the same time treated with induction of TCbHP therapy and showed a good clinical response (resolution of the tumor in the lymph node, small residual tumor in the breast, and sclerosis of the only known bone lesion) 76.5% of the panelists would recommend breast and axillary surgery followed by postsurgical irradiation and maintenance of HP [35]. A total of 14.7% would avoid surgery as well as postsurgical irradiation and opt for HP maintenance only. 8.8% would also do the last, but combined with breast and axillary surgery.

The 47-year-old woman with the same tumor presented with a headache and a lesion of the right isolated lobe and mild surrounding edema after reception of the CNS lesion; stereotactic RT and systemic treatment with TDxd have been applied and resulted in a good clinical response in the breast and axilla. For further treatment, most (51.7%) decided to maintain TDxd only [36]; 29.4% would also prefer TDxd, but furthermore surgery followed by irradiation. Only 14.7% would switch systemic treatment to TCbHP.

Optimal treatment for a 53-year-old patient with T3NX TNBC (PDL1-negative), one metastatic liver lesion and a substantial clinical response to induction with TCb/AC plus pembrolizumab followed by mastectomy and SLNB and a residual tumor of 1.3 cm seems to be ongoing pembrolizumab, irradiation and capecitabine for 45.2%. The panelists were not unanimous in this respect, as shown by the 29% who chose to continue pembrolizumab alone, while 25.8% also opted for pembrolizumab and RT.

AI plus CDK4/6i for metastatic breast cancer would be the preferred therapy for a 63-year-old patient with an oligometastatic disease of the bones and after surgery for an ER/PR+ and HER2− 2.8 cm tumor and 3 positive lymph nodes, as indicated by 75% of the panelists. 21.3% would opt for an adjuvant treatment and therefore chemotherapy, followed by irradiation and followed by AI and CDK4/6i.

If oligometastatic disease was limited to a single metastasis in the sternum, axilla is clinically negative and the question is what to do with the axilla, 68.1% would perform sentinel surgery, 21.7% would prefer to forego axilla surgery. 8.7% would opt for irradiation and only 1.4% for ALND. In summary, and in line with the opinion of the majority of both the panelists (87.1%) and the auditorium (93%), the possibility of curative treatment in oligometastatic breast cancer is strongly considered [37]. However, treatment should follow specific criteria, such as single-organ involvement [38–41].

Conclusion

A key trend in future breast cancer therapies is de-escalation, particularly in the area of surgical axillary procedures. The consequences of complementary therapies have not yet been conclusively clarified. However, it was repeatedly emphasized at the St. Gallen conference that de-escalation in one area of therapy should not simultaneously mean escalation in other therapeutic areas. Further study results will be necessary to clarify these aspects in the future. Altogether, many controversial topics have been solved or at least been addressed, and we are looking forward to the full consensus manuscript as well as to the 20th SGBCC to be held in Vienna between 17 and 20 March 2027.

Conflict of Interest Statement

Nina Ditsch is on the advisory boards of Gilead, Lilly, MSD, Novartis, Pfizer, Roche, Seagen, and Exact Sciences; participated in lectures and speakers bureaus at AstraZeneca, Daiichi-Sankyo, Exact Sciences, Pierre-Fabre, I-Med-Institute, Merit-Medical, pfm medical, Medi-Seminar GmbH, Roche, Lilly, Pfizer, Gilead, Novartis, Onkowissen, Jörg Eickeler Kongress, and if-Kongress; received manuscript support from pfm medical ag; and received trial funding from Gilead and BZKF. Michael Gnant received personal fees/travel support from Amgen, AstraZeneca, Bayer, Daiichi-Sankyo, EliLilly, EPG Health (IQVIA), Menarini-Stemline, MSD, Novartis, Pierre-Fabre, and Veracyte. Christoph Thomssen received honoraria as compensation for lectures and medical expertise from Rottalinn-Kliniken, Klinikum Basel, Onkowissen TV, ESMO, and BfArM (Federal Institute for Drugs and Medical Devices). Nadia Harbeck received honoraria for lectures and/or consulting from AstraZeneca, Daiichi-Sankyo, Gilead, Lilly, MSD, Novartis, Pierre-Fabre, Pfizer, Roche, Sandoz, Seagen, and Viatris and is co-director of West German Study Group (WSG). Nina Ditsch, Michael Gnant, Christoph Thomssen, and Nadia Harbeck were members of the journal's Editorial Board at the time of submission.

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Author Contributions

Nina Ditsch, Michael Gnant, Christoph Thomssen, and Nadia Harbeck contributed equally to this work including; made substantial contributions to the conception, analysis, or interpretation of data for the work; drafted the work or reviewing it critically for important intellectual content; gave final approval of the version to be published; and agre to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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