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St. Gallen Consensus Conference 2019: Revision of the Consensus Discussion on the Treatment of Early Breast Cancer and Comparison with the Recommendation of St. Gallen Consensus Conference 2017

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Abstract

For the third time, the Congress of St. Gallen was held in Vienna - Austria. This conference is an opportunity to discuss different therapeutic options for early breast cancer. Our document is an update of the St. Gallen recommendations and a comparison with the previous recommendations of the St. Gallen 2017 conference to present the new localized breast cancer treatment strategy.

Keywords: Breast cancer; St. Gallen Consensus Conference; Recommendation; Therapeutic de-escalation

Introduction

St. Gallen Consensus Conference 2019 is one of the important conferences of early breast cancer. For the 3rd time it took place in Vienna in Austria. The conference had 3000 participants from 105 countries during 3 days (March 20-23) to discuss the different aspects of management of early breast cancer: surgical treatment, local and systemic treatment.

Materials and methods

Our paper reports the different recommendation of St. Gallen conference 2019 and compared it with the recommendations of St. Gallen conference 2017 in order to present the new strategy on the treatment of localized breast cancer in the field of surgery of the primary tumor, management of the axillae, radiotherapy, pathology, Adjuvant endocrine therapy, adjuvant and neoadjuvant chemotherapy, adjuvant bone-targeted therapies, fertility preservation and pregnancy after breast cancer, genetic testing, life style, and ductal carcinoma in situ.

Surgery of the primary tumor

The recommendations of St. Gallen conference 2017 of de-escalation of surgery in specific situations were confirmed. The panel refused requirements for breast-conserving surgery should be stricter for lobular cancers (yes 22%, no 73%) and for an extensive intraductal component (yes 31%, no 62%). For the margin of breast-conserving procedures: The concept 'no tumor on ink' validated for unifocal residual breast cancers in 2017 was again validated by most of the panel and even for multifocal residual tumors (yes 83%).

The panel was no real consensus on the management of focally involved margins and considered that the principles of radicality should be recommended for the moment [1]. The panel declined also the skin-sparing and nipple-sparing for patients with baseline inflammatory breast cancer, even when a complete clinical response is achieved (yes 83%). The voting was less clear for tumor proximity to the skin (yes 38%, no 40%) and centrally located tumors near the nipple to be excluded from these interventions (yes 38%, no 43%).

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Management of the axillae

The panel of St. Gallen conference 2019 validated the forgoing even sentinel lymph node biopsy (SLNB) in specific low-risk or comorbidity situations (T1 luminal A, age >70 years, comorbidities) and he proposed a complement axillary ultrasound in such exceptional cases. This attitude was refused for T2 tumor. When asked about the application of the “Z011” criteria in clinical practice, 42% said that axillary radiotherapy is not necessary at all patients, 25% reserved axillary radiotherapy for cases with an aggressive histological type such as triple negative, and 29% said that axillary radiotherapy should be added for all patient [2].

For the first time, the panel confirmed the regional nodal irradiation [RNI] for patients treated by conservative treatment with 1-2 positive sentinel nodes associated to triple negative breast cancer or positive endocrine receptor + or HER2 +. 48% of panelist confirmed that axillary radiotherapy should be given according to the AMAROS criteria, 17% following with axillary lymph node dissection (ALND), and 8% suggested that axillary radiotherapy should take into account the molecular profile of the tumor. In the case of absence of RNI, ALND should be realized (66%).

For patient with clinical node positive but downstaging via primary systemic therapy the panel recommended ALND if sentinel ganglion had 3 or more of negative node. If the finding is less than 3 negative nodes: the recommendation of ALND is not validated by the panel. (yes 44%, no 54%) already not recommended also in 2017. However, the panel also recommends ALND in patient with clinical node positive but c N0 via primary systemic therapy situations when a micrometastasis has been found in sentinel ganglion (yes 64%, no 25%) contrary in 2017 the vote was not clear in this case.

Radiotherapy

The panel confirmed in this year the 2019 recommendation of hypo-fractionated treatment as a standard for the majority of patients and partial breast irradiation in option for the risk test according to ASTRO/GEC-ESTRO guidelines. The panel clearly agreed that irradiation should be applied to regional nodes in all patients with ≥ 4 positive nodes (94%), but in cases of 1-3 positive nodes, a majority (56%) indicated that regional node irradiation should only be administered if aggressive histological types were identified (triple negative, residual disease after systemic therapy). 44% of panelist decided that regional nodal irradiation should be indicted for patient with clinical node positive had received a primary systemic therapy and the sentinel lymph node biopsy has retrieved a negative sentinel node.

For radiotherapy post mastectomy, the vote was in favor of a Radiotherapy (PMRT; chest wall and RNI) in the tumors with pT3 pN1 and adverse features such as triple negative, and in the tumors with pT2pN0 and bad features, contrary in 2017, the radiotherapy post mastectomy was reserved exclusively for a ganglionic invasion superior to 4 ganglions.

For patients who have had mastectomy and immediate breast reconstruction, the panel stated that PMRT indications

should remain the same as for those without immediate breast reconstruction (75%). the percentage of the panelists rose to 62% willing to forgo radiotherapy in such cases when the age limit was set to 80 years.

Pathology

The panel confirmed at this conference the need to report tumor-infiltrating lymphocytes as prognostic and predictive biomarkers already validated in 2017, but only 27% of the panelist confirms the appearance of this indicator in their current practice and 79% of panelist confirmed that they would not decide upon indication for or de-escalation of chemotherapy based on high tumor-infiltrating lymphocytes. The panel did not recommend routine reporting of PD-L1 in early breast cancer.

The panelists confirmed in this conference the interest of gene expression signatures as prognostic markers for chemotherapeutic prescription in RH + HER2- N0 (90%) cases. the use of the genomic test was less important if the tumor size exceeded to 5 cm = T3. (74%) and 64% of panelists confirm the indication of chemotherapy if ganglionic infiltration is greater than 4. For endocrine receptor, 28% the panelist stated that there is a need for better evaluation of ideal cut-offs for prescription of endocrine therapy for ER+ tumors, mainly with ER levels <10% whereas 38% would recommend prescription with levels of $\geq 10\%$.

Adjuvant endocrine therapy

For premenopausal patient

With regard to ovarian function suppression, 37.8% of the panel considered that lymph node infiltration is ≥ 1 was an indication strong enough for ovarian function suppression, and only 17.8% agreed that the 2017 recommendation for infiltration greater than or equal to 4 lymph node indicates ovarian function suppression. The presence of an unfavorable result in the multigenic test and the presence of anterior chemotherapy also validated by the panel to indicate ovarian function suppression and Her 2 status was judged as insufficient indicator to use ovarian function suppression.

Thus, the panel considered that an ovarian function suppression should be added to an endocrine therapy (tamoxifen or inhibitor of aromatase according to the tolerance) for the patients having pN + ER + PR + G3, adjuvant chemotherapy planned. The duration of SO suppression was limited to 5 years. 79.6% of the panel validated the 2017 recommendation to continue tamoxifen up to 10 years with stage 2 (N+) or stage 3 disease.

For postmenopausal patients

The majority of the panel considered that the endocrine therapy by inhibitor of aromatase was recommended for most postmenopausal patients with a high risk, so the panel validated the same recommendation of 2017: The Ki67, the grade 3, and the HER2 were indicator to indicate the aromatase inhibitor. For duration of adjuvant endocrine therapy 72.3% would not continue tamoxifen after 5, and 78.3% would not do so after 5 years of an AI in stage I disease. For stage 2 (n0) 68.1% would continue tamoxifen after 5 years, but 59.2% would not after 5 years of an AI. With stage 2 (N+) disease, 97.9% of the panel would continue tamoxifen after 5 years, and 81.2% after 5 years of an AI

Neoadjuvant endocrine therapy

In this conference, the panel validated option of use endocrine therapy in neoadjuvant treatment for postmenopausal patients with luminal A tumor. The duration of this indication was the time of obtaining the reduce of tumor size or at least 6 months.

Adjuvant and neoadjuvant chemotherapy

Luminal cancer

In this conference the panel confirmed that lymph node infiltration in sentinel node indicated the adjuvant chemotherapy. For patient with lymph node infiltration is greater than 4 the majority (64.6%) of the panel indicated the chemotherapy but only 20.8% of the panelists, chemotherapy should be provided to patients with 2-3 positive lymph node. The panel confirmed also the 2017 recommendation that genetic test indicated adjuvant chemotherapy.

For patient younger than 50 years with negative lymph node and recurrent score of 21- 25, 41.7% of the panelists voted for chemotherapy and endocrine therapy, 25% for ovarian function suppression and endocrine therapy, 10.4% for the combination of chemotherapy, ovarian function suppression, and endocrine therapy, and 16.6% for tamoxifen only. For postmenopausal patient with recurrence score >26, 57.1% voted for chemotherapy for selected patients, depending on other histopathologic characteristics and patients' preferences. 38.8% of the panelists felt that chemotherapy should be routinely administered to this population, and only 4.1% supported chemotherapy only for an RS >30. The majority of the panel decided that chemotherapy was not indicated for patients with age >50 years, 1-2 positive lymph node (78.7%) and recurrence score < 11 according to plan B trial or MammaPrint. The majority of the panel recommend forgoing chemotherapy even if age < 50 years. For neo-adjuvant therapy, the endocrine therapy neoadjuvant was indicated by the panel in postmenopausal patients and this treatment should be administered with period over than 6 mounts. The neoadjuvant protocol in this case combining alkylators and taxanes (55.4%) was preferred than anthracyclines, alkylators, and taxanes (31.2%).

Triple negative breast cancer (TNBC)

In this conference and contrary of the 2017 recommendation, the panel has tended to adopt regimens without anthracyclines which has been validated by 52.2 % who have indicated a protocol of alkylators and taxanes, against 30.4 % who opted for anthracyclines, alkylators, and taxanes in stage I of the disease. For stage 2 and 3 the reference protocol remains anthracycline with 93.3% of the vote that it has validated. The panel has maintained the 2017 recommendation for the use of platinum-based regimen in neoadjuvant therapy. The use at the moment is reserved for mutated BRCA1 tumor although the efficacy on the pathologic complete response is not certain for the moment. Also, in patients with residual tumor in axillary lymph node or in the breast (≥ 1 cm residual cancer and/or LN+) after prior chemotherapy, 83.3% would prefer to add capecitabine to adjuvant treatment. Yet even if residual tumor was < 1cm with negative lymph node, 51% would still recommend capecitabine and 38.8% would not recommend further chemotherapy. For patients with small tumor p T1a N0 and

contrary of 2017 recommendation, the panel validated the CMF protocol as adjuvant therapeutic option. the oral schema was the best voted with 4-6 cure.

Overexpression HER₂ breast cancer

Also, in this conference and contrary to the recommendation of 2017 in small tumor p T1An0, the anti-HER2 therapy was supported by 42.6% while 55.6% did not, and receptor expression was not an indicator for opting to treat or not. the tendency to abandon protocol with anthracyclines in the stage I of disease was confirmed in this type of tumors: 73.5% supported TH adjuvant treatment (taxane and trastuzumab), 4.1% supported THP treatment, and only 12.2% supported AC treatment followed by TH (with or without P). For stage II and III the reference protocol stayed the same: AC or EC followed by taxane in combination with Trastuzumab and Pertuzumab. In 2019 the recommendation of pertuzumab in neoadjuvant treatment was in stage II and III, 48.9% refused the use of pertuzumab for stage I. In stage 2 (N+) and stage 3, 76.6% agreed that pertuzumab should be added in all cases. The majority of the panel validated adjuvant anti Her 2 therapy during 12 months and didn't support a 6-month administration. 98% of the panelist validated 2017 recommendation of neoadjuvant treatment in tumor TNBC and HER2+ with stages 2 and 3. For residual cancer after prior chemotherapy the TDM1 has been recommended regardless of the previous treatment (with or without pertuzumab). In the case of pathologic complete response after neoadjuvant therapy for HER2+ disease with a primary positive axilla, 38.6% of the panelists would recommend trastuzumab, 47.7% would recommend trastuzumab and pertuzumab, and 9.1% would recommend trastuzumab and pertuzumab only for negative endocrine receptor disease. For patients with primary node negative disease who have received neoadjuvant treatment with trastuzumab and pertuzumab, 52.2% would recommend adjuvant trastuzumab, 26.1% would recommend trastuzumab and pertuzumab, and 13.0% would prefer the combination of trastuzumab and pertuzumab only for negative endocrine receptor disease.

Adjuvant Bone-Targeted Therapies

In this conference, the panel validated the 2017 recommendation of the use of the bisphosphonate in adjuvant treatment to improve the survival without disease in postmenopausal patients regardless of bone mineral density. However, when asked how frequently in the clinical routine they use bisphosphonates, only 42.6% responded "yes," confirming that they were using it, and 40.4% responded "no". Also, the bisphosphonate in the adjuvant treatment of premenopausal women and treatment with denosumab have not been validated by the panel in 2019.

Fertility Preservation and Pregnancy after Breast Cancer

For patients who want to be pregnant in the future, the panel recommend the ovarian function suppression in the case of positive endocrine receptor.

The panelist did not also support to interrupt endocrine therapy for patients who are planning on becoming pregnant within 5 years following surgery, but after 18 months 78.0% believed that interruption of endocrine therapy is reasonable and validated the proposal of the panel of the 2017 conference.

Genetic Testing

In this conference, the panel has discussed to increase genetic counselling. Thus, for patients aged <35 years at diagnosis, 95.9% of the panel would have advised genetic counselling, but 65.3% of the panelists did not agree that genetic counselling should be considered in unselected patients at ages <50 years. For patients with triple negative cancer and aged < 60 the panel confirmed the recommendation of genetic counselling in this case but 59.2% was supported the genetic test for TNBC patients at any age.

Ductal Carcinoma in situ

For ductal carcinoma in situ, the de-escalation treatment has been discussed by the panel. Thus, for patients aged <50 years and where low grade in situ ductal carcinoma was detected by screening and they had treated by surgical treatment and a clear

margin of >5 mm was achieved, the panel recommend omission of the radiotherapy. Also, for patients with favorable prognostic features and clear margins of ≥ 5 mm, 66.7% voted for no endocrine therapy and radiotherapy.

Life style

In this year, it was confirmed the 2017 recommendation that there is no special consensus for a diet for breast cancer patients to prevent relapse but confirms that weight gain should be avoided. Regarding an exercise regimen to be recommended as a standard of care, a great majority of 84.1% supported this idea.

Conclusion

St. Gallen Consensus Conference 2019 presented new approaches to treat patients with precocious breast cancer based on new therapeutic studies and taking into account the daily practice of panelists.

-	St. Gallen Consensus Conference 2019	St. Gallen Consensus Conference 2017
Surgery of the primary tumor, including after primary systemic therapy:	<ul style="list-style-type: none"> -The breast-conserving surgical should be practiced for all histologic types of breast cancer <ul style="list-style-type: none"> - “no tumor on ink” - refusal of the skin-sparing and nipple-sparing for patients with baseline inflammatory breast cancer, even when a complete clinical response is achieved. 	<p>The breast-conserving surgical for all histologic types of breast cancer</p> <ul style="list-style-type: none"> - “no tumor on ink” - the nipple-sparing was option for patients after prior chemotherapy with pathologic complete reponse.
Management of the Axillae:	<ul style="list-style-type: none"> -For patient with clinical node positive but downstaging via primary systemic therapy the panel recommended ALND if sentinel ganglion had 3 or more of negative node. If the finding is less than 3 negativenodes: the recommendation of ALND is not validated. -The recommendation ALND in patient with clinical node positive but c N0 via primary systemic therapy situations when a micrometastasis has been found in sentinel ganglion. -the abundance of sentinel lymph node biopsy in patients with specific low-risk (T1 luminal A, age >70 years, comorbidities) and the proposal of a complement axillary ultrasound. This attitude was refused for T2 tumor. <ul style="list-style-type: none"> - “Z011” criteria in clinical practice: <ul style="list-style-type: none"> ❖ 42% said that axillary radiotherapy is not necessary at all patients ❖ 25% reserved axillary radiotherapy for cases with an aggressive histological type such as triple negative, ❖ 29% said that axillary radiotherapy should be added for all patient. -The recommendation of RNI for patients treated by conservative treatment with 1–2 positive sentinel nodes associated to triple negative breast cancer or positive endocrine receptor + or HER2+. -AMAROS criteria: <ul style="list-style-type: none"> ❖ 48% of panelist confirmed that axillary radiotherapy should be given ❖ 17% following with axillary lymph node dissection (ALND). ❖ 8% suggested that axillary radiotherapy should take into account the molecular profile of the tumor. ❖ In the case of absence of RNI, ALND should be realized (66%). 	<ul style="list-style-type: none"> -For patient with clinical node positive but downstaging via primary systemic therapy the panel recommended ALND if sentinel ganglion had 3 or more of negative node. If the finding is less than 3 negative nodes: the recommendation of ALND is not validated. -The vote for ALND was not clear in patient with clinical node positive but c N0 via primary systemic therapy situations when a micrometastasis has been found in sentinel ganglion. <ul style="list-style-type: none"> - No data -No data - No data - No data

Radiotherapy:	<ul style="list-style-type: none"> -The recommendation of hypo-fractionated treatment as a standard for the majority of patients and partial breast irradiation in option for the risk test according to ASTRO/GEC-ESTRO guidelines. -The recommendation of irradiation should be applied to regional nodes in all patients with ≥ 4 positive nodes. -The recommendation of regional node irradiation in 1–3 positive if aggressive histological types were identified (triple negative, residual disease after systemic therapy) -For radiotherapy post mastectomy: the vote was in favor of a Radiotherapy (PMRT; chest wall and RNI) in the tumors with pT3 pN1 and adverse features such as triple negative, and in the tumors with pT2pN0 and bad features. -For patients who have had mastectomy and immediate breast reconstruction, the panel stated that PMRT indications should remain the same as for those without immediate breast reconstruction (75%). -The refusal of the radiotherapy in such cases when the age limit was set to 80 years. 	<p>The recommendation of hypo-fractionated treatment as a standard for the majority of patients and partial breast irradiation in option for the risk test according to ASTRO/GEC-ESTRO guidelines.</p> <p>The recommendation of irradiation should be applied to regional nodes in all patients with ≥ 4 positive nodes.</p> <ul style="list-style-type: none"> -The recommendation of regional node irradiation in 1-3 positive if aggressive histological types were identified -The radiotherapy post mastectomy was reserved exclusively for a ganglionic invasion superior to 4 ganglions -No data <p>-The radiotherapy of elderly patient was being discussed with no clear consensus.</p>
Pathology:	<p>The recommendation to report tumor-infiltrating lymphocytes as prognostic and predictive biomarkers</p> <p>the confirmation of gene expression signatures is prognostic markers for chemotherapeutic prescription in RH + HER2- N0.</p> <p>-For endocrine receptor, 28% the panelist stated that there is a need for better evaluation of ideal cut-offs for prescription of endocrine therapy for ER+ tumors, mainly with ER levels $<10\%$ whereas 38% would recommend prescription with levels of $\geq 10\%$.</p>	<p>The recommendation to report tumor-infiltrating lymphocytes as prognostic and predictive biomarkers</p> <p>the confirmation of gene expression signatures is prognostic markers for chemotherapeutic prescription in RH + HER2- N0.</p> <p>-No data</p>
Adjuvant Endocrine Therapy: for Premenopausal Patient	<p>ovarian function suppression: 37.8% of the panel considered that lymph node infiltration is ≥ 1 was an indication strong enough for ovarian function suppression,</p> <p>-The presence of an unfavorable result in the multigenic test and the presence of anterior chemotherapy also validated to indicate ovarian function suppression and Her2 status was judged as insufficient indicator to use ovarian function suppression.</p> <p>-The ovarian function suppression should be added to an endocrine therapy for the patients having pN + ER + PR + G3, adjuvant chemotherapy planned.</p> <p>-The duration of SO suppression was limited to 5 years.</p> <p>-The continuation of tamoxifen up to 10 years with stage 2 (N+) or stage 3 disease.</p>	<p>The recommendation of ovarian function suppression for patient with infiltration ≥ 4 lymph node.</p> <p>-No data</p> <p>-The continuation of tamoxifen up to 10 years with stage 2 or stage 3 disease.</p>
Adjuvant Endocrine Therapy: For Postmenopausal Patients	<p>-The recommendation of aromatase inhibitor (AI) was the standard endocrine therapy for most postmenopausal patients with a high risk and the Ki67, the grade 3, and the HER2 were indicator to indicate the aromatase inhibitor.</p> <p>Stage I: AI during 5 years.</p> <p>Stage 2 (N0): the continuation of tamoxifen after 5 years and not for AI after 5 years</p> <p>With stage 2 (N+) the continuation of tamoxifen and AI after 5 years</p>	<p>-The recommendation of aromatase inhibitor was the standard endocrine therapy for most postmenopausal patients with a high risk and the Ki67, the grade 3, and the HER2 were indicator to indicate the aromatase inhibitor.</p>

Neoadjuvant endocrine therapy	<p>The recommendation of the use endocrine therapy in the neoadjuvant treatment for postmenopausal patients with luminal A tumor.</p> <p>The duration of this indication was the time of obtaining the reduce of tumor size or at least 6 months.</p>	-No data
Adjuvant and neoadjuvant chemotherapy: Luminal cancer	<p>The indication of chemotherapy.</p> <p>For patient with lymph node infiltration is greater than 4.</p> <p>The genetic test indicated adjuvant chemotherapy.</p> <p>For patient younger than 50 years with negative lymph node and recurrent score of 21- 25:</p> <ul style="list-style-type: none"> ❖ 41.7% voted for chemotherapy and endocrine therapy. ❖ 25% for ovarian function suppression and endocrine therapy. ❖ 10.4% for the combination of chemotherapy, ovarian function suppression, and endocrine therapy. ❖ 16.6% for tamoxifen only. <p>For postmenopausal patient with recurrence score >26:</p> <ul style="list-style-type: none"> ❖ 57.1% voted for chemotherapy for selected patients, depending on other histopathologic characteristics and patients' preferences. ❖ 38.8% felt that chemotherapy should be routinely administered to this population, ❖ 4.1% supported chemotherapy only for an RS >30. <p>The majority of the panel decided that chemotherapy was not indicated for patients with age >50 years, 1-2 positive lymph node (78,7%) and recurrence score < 11 according to plan B trial or MammaPrint. The majority of the panel recommend forgoing chemotherapy even if age< 50 years.</p> <p>-For neoadjuvant therapy, the endocrine therapy neoadjuvant was indicated by the panel in postmenopausal patients and this treatment should be administered with period over than 6 months.</p> <p>-The neoadjuvant protocol combining alkylators and taxanes was preferred than anthracyclines, alkylators, and taxanes.</p>	<p>The indication of chemotherapy.</p> <p>For patient with lymph node infiltration is greater than 4.</p> <p>The genetic test indicated adjuvant chemotherapy.</p> <p>-No data</p> <p>-No data</p> <p>-No data</p> <p>-No data</p> <p>The standard neoadjuvant protocol was anthracycline, Alkylators, and taxanes.</p>
Triple negative breast cancer (TNBC)	<p>The recommendation of a protocol of alkylators and taxanes, against in stage I of the disease.</p> <p>For stage 2 and 3 the reference protocol remains anthracycline</p> <p>The use of platinum-based regimen in neoadjuvant therapy at the moment is reserved for mutated BRCA1 tumor.</p> <p>In patients with residual tumor in axillary lymph node or in the breast (≥ 1 cm residual cancer and/or LN+) after prior chemotherapy, the use of capecitabine as adjuvant treatment was validated.</p> <p>For patients with small tumor p T1a N0 the CMF protocol as adjuvant therapeutic option was validated.</p>	<p>-the reference protocol remains anthracycline, alkylators and taxanes in all stages.</p> <p>-The use of platinum-based regimen in neoadjuvant therapy at the moment is reserved for mutated BRCA1 tumor.</p> <p>-No consensus for adjuvant treatment for patient with residual cancer after prior chemotherapy</p>

Overexpression HER2 breast cancer:	<p>-the recommendation of HER2 therapy in small tumor p T1aN0.</p> <p>In the stage I: TH adjuvant treatment For stage II and III: AC or EC followed by taxane in combination with Trastuzumab and Pertuzumab.</p> <p>Pertuzumab in neoadjuvant treatment was in stage II and III, The majority of the panel validated adjuvant anti Her2therapy during 12 months and didn't support a 6-month administration.</p> <p>For residual cancer after prior chemotherapy the TDM1 has been recommended regardless of the previous treatment (with or without pertuzumab).</p> <p>In the case of pathologic complete response after neoadjuvant therapy for HER2+ disease with a primary positive axilla, 38.6% of the panelists would recommend trastuzumab, 47.7% would recommend trastuzumab and pertuzumab, and 9.1% would recommend trastuzumab and pertuzumab only for negative endocrine receptor disease.</p> <p>For patients with primary node negative disease who have received neoadjuvant treatment with trastuzumab and pertuzumab, 52.2% would recommend adjuvant trastuzumab, 26.1% would recommend trastuzumab and pertuzumab, and 13.0% would prefer the combination of trastuzumab and pertuzumab only for negative endocrine receptor disease.</p>	<p>-No treatment in small tumor p T1aN0.</p> <p>-AC or EC followed by taxane in combination with Trastuzumab and Pertuzumab was the standard treatment for all stages of disease.</p> <p>-Pertuzumab in neoadjuvant treatment for all patient with stages II and III</p> <p>Adjuvant Anti HER2 therapy during 12 months for all patient.</p> <p>-Trastuzumab and pertuzumab were the adjuvant treatment in all cases (with residual cancer after prior chemotherapy or without)</p>
Adjuvant Bone-Targeted Therapies:	<p>-The use of the bisphosphonate in adjuvant treatment to improve the survival without disease in postmenopausal patients regardless of bone mineral density.</p> <p>-The non-validation of bisphosphonate in the adjuvant treatment of premenopausal women and treatment with denosumab have not been validated</p>	<p>-The use of the bisphosphonate in adjuvant treatment to improve the survival without disease in postmenopausal patients regardless of bone mineral density.</p> <p>-The non-validation of bisphosphonate in the adjuvant treatment of premenopausal women and treatment with denosumab have not been validated</p>
Fertility Preservation and Pregnancy after Breast Cancer:	<p>For patients who want to be pregnant in the future, the panel recommend the ovarian function suppression in the case of positive endocrine receptor. The panelist did not also support to interrupt endocrine therapy for patients who are planning on becoming pregnant</p> <p>within 5 years following surgery, but after 18 months 78.0% believed that interruption of endocrine therapy is reasonable and validated the proposal of the panel of the 2017 conference.</p>	
Genetic Testing:	<p>-For patients aged <35 years at diagnosis, the panel recommended the genetic counselling;</p> <p>the panelists did not agree that genetic counselling should be considered in unselected patients at ages <50 years,</p> <p>-For patients with triple negative cancer and aged < 60 the panel confirmed the recommendation of genetic counselling in this case but 59.2% was supported the genetic test for TNBC patients at any age.</p>	<p>-The panel recommended BRCA-1 and BRCA-2 genetic tests for:</p> <ul style="list-style-type: none"> - patients with a strong family history of breast cancer regardless of age; - women diagnosed at age 40 regardless of subtype - women with triple negative breast cancer with age<60 years <p>-Multigene testing may be offered to patients who had the criteria for hereditary cancer syndromes, including Lynch syndrome.</p>
Ductal Carcinoma in situ	<p>- patients aged <50 years and where low grade in situ ductal carcinoma was detected by screening and they had treated by surgical treatment and a clear margin of >5 mm was achieved, the panel recommend omission of the radiotherapy and the endocrine therapy.</p>	<p>the tumor-free margin ≥ 2</p> <p>the endocrine therapy remains an adjuvant treatment option to prevent relapse</p>
Lifestyle:	<p>-No special consensus for a diet for breast cancer patients to prevent relapse but confirms that weight gain should be avoided. Regarding an exercise regimen to be recommended as a standard of care.</p>	<p>-No special consensus for a diet for breast cancer patients to prevent relapse but confirms that weight gain should be avoided. Regarding an exercise regimen to be recommended as a standard of care</p>

Table 1: The comparison of the 2019 St. Gallen recommendations with the previous recommendations of the St. Gallen 2017.

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