St Gallen International Expert Consensus on the primary therapy of early breast cancer: an invaluable tool for physicians and scientists

The St Gallen Breast Cancer Conference is the only international conference that focuses exclusively on the primary therapy of early breast cancer. Since 1978, it has been held in St Gallen, Switzerland and, as of 2015, in Vienna, Austria, mainly to accommodate the increasing number of participants. This biennial congress starts with an intensive update on the latest developments in the biology of primary breast cancer, as well as the most recent advances in the prevention and multidisciplinary management of this disease. The last day of the congress, a selected group of international experts and opinion leaders in breast cancer research and treatment review the current evidence and its application to managing breast cancer. This leads to biennial consensus recommendations that aim mainly to assist physicians to improve how they manage their patients’ disease.

Beyond the St Gallen consensus recommendations, guidelines for primary breast cancer are also published by organizations such as the European Society of Medical Oncology [1] or the National Comprehensive Cancer Network, the latter comprising 26 leading institutions in the United States [2]. These guidelines and recommendations are complementary and reflect the way different expert panels evaluate the available evidence on breast cancer management.

The recommendations of the 14th St Gallen Breast Cancer Conference Experts have been published in this issue of Annals of Oncology [3]. This year, the panel comprised 48 experts, including 32 medical oncologists, 8 surgical oncologists, 3 gynecologists, 3 radiation therapy oncologists, 1 pathologist and 1 biostatistician. A total of 27 experts were from Europe, 14 from North America and 7 from Asia/Australia, making the St Gallen consensus unique because of its international breadth. The panel was asked 190 clinically relevant questions that have been provided as an appendix to the main article [3]. These questions covered four main topics: (i) locoregional treatment, including surgery of the breast/axilla and radiotherapy (37 questions); (ii) pathology, including multigene signatures (23 questions); (iii) systemic treatment (96 questions); and (iv) other topics, such as breast cancer management in the elderly, young, pregnant women, and males (33 questions). For the majority of the questions, the experts could reply using one of the following three options: yes, no, abstain. For other questions, the experts could choose between several proposals or abstain.

In this editorial, we sought to provide the agreement of the panel according to the above four topics as a way to better understand what areas in breast cancer management need more clinical research and eventually consensus efforts such as the ones provided by the St Gallen conference. To this aim, for each question we calculated the percentage (%) of experts who abstained and, for those who did not abstain, we calculated the % of agreement. Results on the % of experts who abstained and the % agreement among experts were summarized as median (range) (Table 1). To report % agreement among experts, we also used four arbitrarily defined categories: low, moderate, strong, and excellent agreement, corresponding to an agreement of 50%–65%, 66%–80%, 81%–90%, and >90%. We calculated the % agreement among the experts for all 190 questions and for the questions of each of the above four topics separately.

Overall for the 190 questions, we observed a median agreement of 78% (40–100%) (Table 1) with low, moderate, strong, and excellent agreement in 28%, 28%, 16%, and 27% of the questions, respectively (Figure 1). Interestingly, the median % agreement was lower in pathology and higher in locoregional treatment (Table 1, Figure 1). Indeed, excellent agreement was observed in 43% of questions related to locoregional treatment, 28% of questions related to systemic treatment, 24% of questions related to other topics, and only 4% of questions related to pathology/multigene signatures. The differences in the % agreement among the different topics could be, at least partly, attributed to the differences in the level of evidence that is currently available. For example, there are strong data for radiotherapy indications from individual patient data meta-analyses by the Early Breast Cancer Trialists Group [4], whereas the indications for using multigene signatures could be further refined once the results of ongoing randomized trials such as TailorX and MINDACT are reported [5].

One might speculate that questions with low or moderate level of agreement are those for which there is a lack of conclusive evidence, or for which different interpretations of available evidence exist according to cultural or other differences associated with the panel composition. Commonly, these questions

<table>
<thead>
<tr>
<th>Topic questions</th>
<th>Percent abstention, median (range) (%)</th>
<th>Percent in agreement, median (range) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locoregional treatment</td>
<td>4 (0–32)</td>
<td>82 (52–100)</td>
</tr>
<tr>
<td>Pathology/multigene signatures</td>
<td>14 (0–40)</td>
<td>73 (46–100)</td>
</tr>
<tr>
<td>Systemic treatment</td>
<td>3 (0–63)</td>
<td>78 (40–100)</td>
</tr>
<tr>
<td>Other topics</td>
<td>3 (0–13)</td>
<td>73 (50–97)</td>
</tr>
<tr>
<td>All questions</td>
<td>3 (0–63)</td>
<td>78 (40–100)</td>
</tr>
</tbody>
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are being addressed in ongoing clinical trials. Where this is not the case, these are the questions that should be prioritized for future research.

The St Gallen Breast Cancer Conference Expert consensus recommendations provide a unique snapshot of the areas of agreement and disagreement among international experts on the most relevant questions for breast cancer management. Not only can this assist physicians improve the management of early breast cancer cases, it can also suggest areas where more clinical research is needed.

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disclosure

The authors have declared no conflicts of interest.

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