

# Saudi Oncology Society clinical management guidelines development

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The incidence of cancer in the Kingdom of Saudi Arabia (KSA) has been increasing. The total number of cancer cases reported to the Saudi Cancer Registry (SCR) in 2010 was 13,706.<sup>1</sup> Overall, cancer was slightly more prevalent among women than men. Cancer affects 6,579 (48%) males and 7,127 (52%) females, with a male to female ratio of 0.92:1. Ten thousand two hundred and thirty cases were reported among Saudis, 3,265 non-Saudis, and 211 of unknown nationality. The overall age-standardized incidence rate for Saudis with a world standard population reference was 84/100,000 (76.7/100,000 in males and 91.2/100,000 in females).<sup>1</sup>

The Saudi Oncology Society (SOS) was founded in 2007.<sup>2</sup> Its objectives were to 1) advance the scientific intellect, 2) improve the performance of its members in cancer management, 3) create opportunities for members to participate in the development of cancer management, and 4) participate in the development of standards of care for cancer management and auditing the performance. Hence, the SOS formulated a committee to develop guidelines for management of the most common malignancies reported in KSA. The guidelines have been developed with the aim of providing the most consistent medical practice based on scientific evidence or consensus from local experts, and to ultimately direct the resources to the best available treatment protocols.

Clinical management guidelines for cancer have been developed by many international societies, including the National Comprehensive Cancer Network (NCCN),<sup>3</sup> American Society of Clinical Oncology (ASCO),<sup>4</sup> and European Society for Medical Oncology (ESMO).<sup>5</sup> Differences in these guidelines exist depending on the way they are presented, the system for level of

evidence adopted, and some recommendations. The latter may be related to the strength of the evidence available. Literature suggests that development of local guidelines rather than the use of international guidelines provides a “sense of ownership,” which is associated with increasing likelihood that the guidelines will be adopted.<sup>6,7</sup> In addition, evidence from a meta-analysis has shown a greater effect for national guidelines rather than hospital-based guidelines.<sup>8</sup>

It is believed that national guidelines are needed in the most common cancer sites. These guidelines were developed with participation of representatives and experts in the fields from all health service sectors, and are intended to be implemented by all multidisciplinary groups involved in the care of cancer patients. This includes all cancer centers reporting to the Ministry of Health (MOH), and all cancer centers and departments from different health service sectors. In addition, these guidelines should be enforced by the MOH for all privately owned cancer treating hospitals.

There are various methods for guideline development. The systematic explicit approach described by Eddy,<sup>9</sup> consists of a thorough review of the published literature graded according to its scientific validity, a health economic analysis, and then a subsequent ranking of the possible options. A group of experts in the field then choose their preferred option. Another approach is the consensus conference or working party. A group of well-informed experts gather and debate the issues until a consensus is achieved. The approach is similar to the explicit method in reverse: the contributors present their own preference first and then the use of the scientific evidence to support it. To achieve consensus, it is often necessary to accommodate several preferences in the

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final guidelines, and so the final product is often less restrictive, but more complex.<sup>10</sup> Haines and Hurwitz<sup>11</sup> recommend a synthetic method of developing local clinical guidelines, and this is now the more preferred approach. For each topic, a working party composed of one specialist and one general medical practitioner is commissioned. They prepare a draft, which is clarified by an editorial panel, whose role is to ensure consistency of style, make sure the guideline is understandable and can be used by non-specialists, and it represents a broad body of opinions. This draft is circulated for comments among the local doctors, and a final draft is published after consideration of all the comments received.<sup>10</sup>

The method used in the development of the SOS guidelines was similar to the second approach described previously. The topics of interest were deliberated by the SOS board members. A local expert was nominated, who in turn communicated with the leadership of all known cancer centers across Saudi Arabia to nominate a representative. Only experts in the field were included in the guideline committee and those were defined based on the practice they have and their publications. Experts represented all different specialties involved in the care of gastrointestinal cancer. This included medical oncologists, radiation oncologists, thoracic, colorectal and hepatic surgeons, and pathologists. Recently, a biostatistician was invited to the group to help in the analysis of complicated publications. The experts then met to further define the topics and questions to be covered. It was agreed that rare scenarios would not be tackled in the guideline document. The group coordinator then prepared the initial working draft with the specific points/questions to be addressed. It was agreed that the presentation of the guidelines will follow the same format of previously published guidelines (bulleted format, common scenarios to be addressed).<sup>12,13</sup> The draft had to address the recommended work-up and staging evaluation of the specific cancer, the staging system used and the prognostic stratification, and the treatment options according to the stage of the cancer. The draft was circulated among all members for critique and feedback. Several meetings were then held to discuss the document and present the evidence from the literature. A search for evidence was carried out using PubMed, Medline, and Cochrane databases. In case of disagreement where the evidence was poor, voting took

place to decide on the recommendation. The final draft was then circulated among all members of the group for final approval.

**Level of evidence.** The levels of evidence were originally described in a report by the Canadian Task Force on the Periodic Health Examination in 1979.<sup>14</sup> The purpose of the report was to develop recommendations on the periodic health exam and base those recommendations on evidence in the medical literature. The authors developed a system of rating evidence when determining the effectiveness of a particular intervention. The evidence was taken into account when grading recommendations. Since the introduction of levels of evidence, several other organizations, and journals have adopted variation of the classification system. Diverse specialties often asked different questions and it was recognized that the type and level of evidence needed to be modified accordingly. For example, the level of evidence system used in therapeutic studies differed from the level of evidence used in prognostic or diagnostic studies.<sup>15-17</sup>

The SOS adopted a simple and easy-to-use level of evidence that can be easily understood. The SOS has used this level of evidence in all other published guidelines.<sup>18</sup> Since the final document was a consensus from all experts in the field within KSA, no external or internal peer review of the document was performed.

Financial support for the meetings was provided through the SOS. Final guidelines were submitted for publication in a local journal. The guidelines will then be posted on the SOS website after publication. Dissemination of the guidelines will be carried out through lectures by members of the working group/committee in different parts of the Kingdom, presentation in the annual SOS meeting, and through distribution the published guidelines by mail to all centers that manage cancer patients.

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