

# Spanish Society of Medical Oncology (SEOM) guidelines are methodologically good but with opportunities for improvement: a critical appraisal using AGREE II and AGREE-REX

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## Background

Since 2014, open-access guidelines from the Spanish Society of Medical Oncology (SEOM) are available to facilitate clinical practice providing a practical view of the most relevant considerations concerning several cancer-related scenarios. To date, no independent assessment of its quality has been conducted.

## Aim

To critically assess the methodological quality of SEOM guidelines on cancer treatment

## Methods

### Clinical Review

- MEDLINE/PubMed, guidelines repositories, and other sources from 2014 onwards.
- Appraisal of Guidelines for Research & Evaluation II (AGREE II) and AGREE-REX tools were used to assess the quality of the guidelines.



## Results



- 33 guidelines 84.8% "high quality".
- The highest median standardized scores (96.3) were observed in the domain "clarity of presentation", whereas "applicability" was distinctively low (31.4), with only one of the guidelines scoring above 60%.
- Regarding "rigour of development", the median standardized score was 74.3, and 28 of the guidelines scored above 60%.

Guidelines, author year	Items																						
	Domain 1				Domain 2				Domain 3						Domain 4			Domain 5			Domain 6		
	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20	I21	I22	I23
Breast, Ayala 2018	7.0	5.7	6.0	3.7	1.0	4.3	3.3	3.3	7.0	5.3	5.7	6.3	7.0	1.0	7.0	6.0	6.0	2.0	3.0	2.3	1.3	4.0	7.0
Breast, Chacón López-Muñiz 2019	7.0	5.0	5.7	5.3	1.0	4.0	4.3	2.3	5.7	4.3	5.7	7.0	7.0	1.0	6.7	6.3	5.3	3.7	2.7	2.0	2.0	4.0	7.0
Breast and ovarian, González-Santiago 2019	7.0	6.7	5.7	5.3	1.3	6.0	4.3	5.3	5.0	4.0	4.7	5.3	7.0	1.0	7.0	6.0	6.3	1.7	4.0	1.3	1.0	4.3	7.0
Cervix, de Juan Ferré 2019	3.3	4.7	3.3	4.7	1.0	3.7	4.0	2.7	5.7	4.3	5.0	6.3	7.0	1.0	6.7	6.3	5.7	3.3	3.0	4.0	2.7	4.0	7.0
Colorectal, Gómez-España 2018	7.0	7.0	6.7	5.3	1.0	4.7	5.7	6.3	6.3	6.7	6.3	6.7	7.0	1.0	7.0	7.0	7.0	5.3	1.7	1.7	1.0	4.0	7.0
Colorectal, Guillén-Ponce 2019	5.0	6.7	6.0	5.0	1.0	4.7	6.0	6.7	6.7	5.7	6.7	6.7	7.0	1.0	7.0	7.0	7.0	6.0	5.0	5.0	1.0	4.0	7.0
Endometrial, Barceina-Cinesta 2021	7.0	6.3	6.7	4.7	1.0	5.7	5.0	5.7	6.3	6.7	6.7	7.0	7.0	1.0	6.7	6.7	5.7	4.7	4.3	2.3	1.0	4.0	7.0
Gastric and GE junction, Martín-Richard 2019	6.3	6.0	4.7	5.7	1.0	5.0	3.7	2.3	6.0	3.3	5.7	5.7	7.0	1.0	5.3	5.7	6.7	4.7	1.0	1.0	1.0	4.0	7.0
Gastrointestinal sarcomas, Poveda 2016	7.0	7.0	7.0	5.7	1.0	6.0	7.0	6.7	7.0	6.7	7.0	7.0	7.0	1.0	7.0	7.0	7.0	6.0	6.3	1.7	1.7	4.0	7.0
Glioblastoma, Martínez-García 2017	7.0	6.0	6.7	6.7	1.0	6.7	4.3	6.7	6.7	6.3	6.3	6.7	7.0	1.0	7.0	7.0	7.0	6.3	6.7	3.3	6.3	4.0	7.0
Glioma, Balaña 2017	5.7	5.3	7.0	5.3	1.0	4.0	6.0	3.7	5.3	4.7	4.7	6.3	7.0	1.0	6.7	6.7	6.3	2.0	1.7	2.0	1.0	4.0	7.0
Glioma, Sepúlveda-Sánchez 2018	7.0	6.3	6.3	7.0	1.0	5.7	6.3	1.7	7.0	6.0	6.7	7.0	7.0	1.0	7.0	7.0	7.0	4.3	1.7	1.7	3.0	4.0	7.0
Head and neck, Mesia 2020	6.0	5.7	5.0	6.3	1.0	5.3	5.3	4.3	6.7	5.3	5.3	6.7	7.0	1.0	7.0	7.0	7.0	3.3	1.7	1.3	1.0	4.0	7.0
Hepatocellular, Reig 2021	7.0	6.0	6.3	6.7	1.7	6.0	5.0	5.0	6.7	7.0	7.0	6.0	7.0	1.0	7.0	7.0	6.7	3.7	3.3	3.7	1.0	4.0	7.0
Kidney, Lázaro 2019	7.0	6.0	5.7	6.0	1.0	5.7	4.7	2.3	7.0	5.3	6.7	7.0	7.0	1.0	7.0	7.0	7.0	4.7	2.3	5.0	3.0	4.0	7.0
Lung, Dómine 2019	3.0	5.3	4.7	5.0	2.0	5.0	4.7	5.7	5.7	5.0	6.7	6.3	7.0	1.0	6.7	6.7	6.7	5.0	4.7	1.7	1.7	4.7	7.0
Lung, Majem 2018	4.3	5.7	6.0	5.0	1.0	5.0	5.0	5.7	6.3	4.7	4.3	6.7	7.0	1.0	7.0	6.7	6.7	2.7	2.3	2.7	1.0	4.0	7.0
Lymphoma (follicular non-Hodgkin), Provencio 2019	5.0	5.7	5.3	5.7	1.0	5.3	7.0	5.3	5.7	5.7	6.3	7.0	7.0	1.0	7.0	7.0	7.0	2.3	2.3	2.0	1.0	4.0	7.0
Lymphoma (Hodgkin), Rueda Domínguez 2015	4.7	6.0	5.3	6.0	1.0	5.0	7.0	3.7	1.3	1.3	6.7	7.0	7.0	1.0	7.0	7.0	7.0	1.7	1.7	2.0	3.0	4.0	7.0
Medulloblastoma, Luque 2020	7.0	6.3	6.0	6.0	1.0	5.0	5.3	5.7	6.7	5.0	6.7	6.7	7.0	1.0	6.7	7.0	7.0	5.3	4.7	2.7	1.0	4.0	7.0
Melanoma, Majem 2020	5.7	6.0	5.0	6.0	1.0	5.0	4.7	5.3	6.0	5.0	5.3	6.7	7.0	1.0	7.0	6.7	7.0	3.3	2.0	1.7	1.0	4.0	7.0
Mesotelioma, Nadal 2020	5.0	6.3	6.3	5.0	1.0	6.0	7.0	6.7	6.3	5.7	7.0	7.0	7.0	1.0	7.0	7.0	7.0	3.7	3.3	1.7	1.0	4.3	7.0
Nasopharynx, Rueda Domínguez 2021	7.0	6.3	5.3	5.7	1.0	5.3	5.7	5.3	7.0	5.3	6.7	7.0	7.0	1.0	7.0	7.0	7.0	3.3	2.3	2.0	1.0	4.0	7.0
Neuroendocrine, González-Flores 2018	7.0	6.3	5.7	6.0	1.0	5.7	5.3	3.3	6.7	6.7	6.7	7.0	7.0	1.0	7.0	7.0	7.0	3.0	3.3	4.7	1.0	4.0	7.0
Ovarian, Redondo 2020	7.0	6.7	6.7	5.3	1.0	6.3	5.3	7.0	7.0	6.7	6.3	7.0	7.0	1.0	7.0	7.0	6.0	5.0	4.3	1.7	1.0	4.3	7.0
Pancreatic and biliary, Gómez-España 2020	5.3	6.3	5.7	5.3	1.7	5.0	3.7	3.0	5.7	5.7	6.0	6.7	7.0	1.0	6.7	7.0	7.0	4.7	2.3	2.3	3.3	4.0	7.0
Prostate, González del Alba 2020	7.0	6.3	6.0	6.3	1.0	5.7	5.7	4.3	6.3	6.0	6.7	6.7	7.0	1.0	6.7	6.7	7.0	5.7	3.3	6.0	2.0	4.0	7.0
Rectal, Capdevila 2021	5.7	6.3	6.7	5.0	1.0	5.3	6.0	7.0	7.0	6.3	6.7	7.0	7.0	1.0	7.0	7.0	7.0	2.3	5.7	1.0	1.0	4.0	7.0
Sarcoma, de Juan Ferré 2020	7.0	6.3	6.7	5.3	2.0	4.3	7.0	6.7	6.7	6.7	6.7	6.7	7.0	1.0	7.0	7.0	7.0	6.3	6.3	3.0	2.7	3.3	7.0
Testicular, Aparicio 2016	7.0	3.0	5.0	3.3	1.0	3.0	4.7	2.0	6.0	3.3	5.7	7.0	7.0	1.0	7.0	6.3	5.7	1.0	3.0	1.0	2.3	3.3	7.0
Thymic epithelial, Remon 2021	7.0	6.0	6.7	6.0	1.0	5.3	6.7	7.0	6.7	5.7	6.0	6.7	7.0	1.0	7.0	7.0	7.0	4.3	4.7	2.3	1.0	4.0	7.0
Thyroid, Gallardo 2019	7.0	5.7	5.3	4.7	1.0	4.7	6.3	5.3	6.7	5.7	6.3	6.7	7.0	1.0	7.0	7.0	7.0	4.0	4.3	4.3	2.3	3.7	7.0
Urothelial bladder, González del Alba 2018	7.0	6.7	6.7	5.3	1.0	5.3	4.3	6.7	5.7	5.3	6.0	6.3	7.0	1.0	7.0	7.0	7.0	2.7	2.3	4.0	1.0	4.0	7.0

SEOM's guidelines did not include in their formulation the views and preferences of the target population. Moreover, they did not specify the updating methods either.

## Conclusions

The SEOM guidelines on cancer treatment have been developed with acceptable methodological rigour although they have some drawbacks that could be improved in the future, such as clinical applicability and items regarding patient views and preferences.

## Relevance and importance to patients

Clinical guidelines are also available to cancer patients and contain specific recommendations that aim to optimize health care. A valid guideline has the potential to impact on healthcare outcomes, but also to facilitate empowerment by patients.



## References

Santero M, de Mas J, Rifà B, Clavero I, Rexach I, Bonfill Cosp X. Assessing the methodological strengths and limitations of the Spanish Society of Medical Oncology (SEOM) guidelines: a critical appraisal using AGREE II and AGREE-REX tool. Clin Transl Oncol. 2023 Jun 27. doi: 10.1007/s12094-023-03219-0. Epub ahead of print. PMID: 37368198.