ESMO-MCBS: setting the record straight

Authors' reply

We thank Cherny and colleagues[1] for their critical appraisal of our Policy Review[2] and congratulate them on developing an evidence-based and transparent scale for appraising systemic cancer therapies.[3,4] Transparency in methodology, however, does not guarantee ease in interpretation and use. Inter-observer variation in using the scale was found to be a potential issue.[5] This issue highlights the subjective component to appraising evidence, and that a rule-based approach will always be open to interpretation, as the ESMO-MCBS authors identify.

Beyond their point-to-point comments, however, remains the overall message that our multi-stakeholder assessment tried to convey: not all cancer treatments are equal. Neither in design, development, and evolution, nor in their costs or the benefits they aspire to bring to the patient. ESMO claims their tool can directly be transferred and applied to cancer interventions other than systemic cancer therapies. We do not agree. It would be incorrect to assume, as suggested by Cherny and colleagues, that the differences can be addressed just by field testing the ESMO-MCBS, without further development and dedicated input from locoregional treatment experts. Surgical and radiation therapies are intrinsically different from systemic therapies, not only in their intention and application, but also because of their focus on patients who have less advanced disease.

The diversity of interventions does not lend itself to one standardised approach to the generation and appraisal of evidence.[2] How does one, for example, evaluate radiotherapy image guidance, or new instruments or technologies? Even new therapeutic schemes conducive to evaluation in randomised studies would require modification to the scale to optimally capture their true benefits. A commonality between surgical and radiation oncology is their outcome's operator-dependency, which current scales such as the ESMO-MCBS do not consider. Learning curves and incremental therapeutic improvements call for a broader perspective to evidence generation, from strictly randomised clinical trials to pragmatic real-world evidence.[6]

Our examples also illustrate the need to consider relevant outcome measures, such as locoregional control, organ preservation, and re-intervention rates. Evaluation via quality of life as a proxy measure does not recognise the specific objectives of non-systemic cancer therapies and neglects the ongoing efforts, with patients' involvement, to develop dedicated core outcome sets to accurately capture benefit.

Although patient involvement has been encouraged in the past few years, the ESMO-MCBS scale was not intended for use by patients or the general public. Moreover, the information provided by the tool does not necessarily support any direct patient engagement. By contrast, our multi-stakeholder collaboration[2] highlighted the demand for a strong patient-centric, collaborative approach.[7]

Disregarding the intrinsic differences between systemic and non-systemic cancer therapies by enforcing the use of a one-fits-all tool prevents a genuine understanding of the value of various oncology innovations, falls short of recognising the truly multidisciplinary approach to cancer care, and might prevent the achievement of the best outcomes for patients.

KO is chair and co-director of the International Brain Tumour Alliance, which has received grants for its work programme from Magforce, Elekta, Bristol-Myers Squibb, Novocure, AbbVie, Pfizer, Medac, Photonamic, Novartis, Celldex, Lilly, Northwest Biotherapeutics, VBL, Roche, and Apogenix. KO also reports personal fees from Bristol-Myers Squibb the context of the submitted work. YL reports receiving personal fees from AstraZeneca outside the context of the submitted work. All other authors declare no competing interests.

*Yolande Lievens, Riccardo Audisio, Ian Banks, Laurence Collette, Cai Grau, Kathy Oliver, Richard Price, Ajay Aggarwal
yolande.lievens@uzgent.be

Department of Radiation Oncology, Ghent University Hospital and Ghent University, Ghent B-9000, Belgium (YL); Department of Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden (RA); Patient Advisory Committee, European Cancer Organisation, Brussels, Belgium (IB); Statistics Department (LC) and Policy Division (RP), European Organisation for Research and Treatment of Cancer, Brussels, Belgium; Department of Oncology and Danish Centre for Particle Therapy, Aarhus University Hospital, Aarhus, Denmark (CG); International Brain Tumour Alliance, Surrey, UK (KO); Department of Clinical Oncology, Guy's & St Thomas' NHS Trust, London, UK (AA); and Institute of Cancer Policy, King's College London, London, UK (AA)

1 Cherny NI, Tabernero J, de Vries EGE. ESMO-MCBS: setting the record straight. *Lancet Oncol* 2019; **20:** e192.
2 Lievens Y, Audisio R, Banks I, et al. Towards an evidence-informed value scale for surgical and radiation oncology: a multi-stakeholder perspective. *Lancet Oncol* 2019; **20:** e112–23.
3 Cherny NI, Sullivan R, Dafni U, et al. A standardised, generic, validated approach to stratify the magnitude of clinical benefit that can be anticipated from anticancer therapies: the European Society for Medical Oncology Magnitude of Clinical Benefit Scale (ESMO-MCBS). *Ann Oncol* 2015; **26:** 1547–73.
4 Cherny N, Dafni U, Bogaerts J, et al. ESMO-Magnitude of Clinical Benefit Scale version 1.1. *Ann Oncol* 2017; **28:** 2340–66.
5 Davis C, Naci H, Gurpinar E, et al. Availability of evidence of benefits on overall survival and quality of life of cancer drugs approved by European Medicines Agency: retrospective cohort study of drug approvals 2009–13. *BMJ* 2017; **359:** 4530.
6 Lievens Y. Access to innovative radiotherapy: how to make it happen from an economic perspective? *Acta Oncol* 2017; **56:** 1353–58.
7 Addario BJ, Fadich A, Fox J, et al. Patient value: perspectives from the advocacy community. *Health Expect* 2018; **21:** 57–63.