Reviewer's comment concerning "Predictive value of seven preoperative prognostic scoring systems for spinal metastases" (ESJO-D-08-00148R1/A. Leithner et al.)

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This paper compares seven scoring systems to assess their effectiveness in predicting overall survival time in patients with spinal metastases. Sixty-nine patients were evaluated in a prospective fashion using the eight parameters that constitute these different scoring systems.

The following preoperative predictive systems were assessed: Tokuhashi score; Sioutos score; Tomita score; Van der Linden score and Bauer score.

The basic intention of this paper is interesting. Many scores have been evaluated in the past, but there is a lack of one clinical useful single score. In the clinical daily routine it is always necessary to use more scores with different focuses.

Due to this paper the modified Bauer scoring system appears to be the most effective tool. Of the seven parameters assessed location, general condition, number of extraspinal bone metastases, number of visceral metastases, primary tumor, severity of spinal cord palsy and pathological fractures only two, visceral metastases and origin of primary tumor were significant.

Nevertheless, to make a recommendation 69 patients included in this work with low numbers concerning each type of primary tumor are not enough to give a significant answer on the initial hypothesis of this paper. Therefore, one must also remain skeptical about drawing definitive conclusions [breast (12), multiple myeloma (10), prostate

(7), metastasizing hemangioendothelioma (1), hemangiopericytoma (1), thyroid (1), non-Hodgkin lymphoma (1), kidney (15), uterus (2), tonsil (1), epipharynx (1), femoral synovial sarcoma (1), malign thymoma (1), lung (6), melanoma (2), malignant teratoma (1), liver (1), stomach (1), colon (1), sigma (1), rectum (1), pancreas (1)].

In addition, scores for spinal metastases may furthermore be highly influenced by the effectiveness of existing interdisciplinary therapies present at the time of the creation of the score. However, the prementioned scores have been evaluated in range of two decades.

New developments in medical oncology (like tyrosine kinase inhibitor for renal cell carcinoma) and radiotherapeutic fields, as well as in the surgical field (like kyphoplasty) will influence the overall survival time and therefore the existing scores by itself.

Due to the increasing numbers of patients suffering on metastases of the spine and the upcoming developments in interdisciplinary therapies for each tumor type, a prospective multicenter study is mandatory. Within a multicenter study, maybe under the patronage of the European Spine Society enough patients could be included, especially considering each primary tumor type.

If and only if this is done a current concept with definitive conclusions could be created in my opinion.

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