# Individual clinical advanced decision-making and risk evaluation for Ewing sarcoma

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# Stellingen

behorende bij het proefschrift

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1. For accurate clinically relevant estimations of the expected survival from primary diagnosis in patients with Ewing sarcoma the following four variables are important: age, tumor volume, tumor localization and disease extent. (this thesis)

2. The balance between the toxicity of intensive salvage treatments and quality of life in the remaining life span of Ewing sarcoma patients experiencing local recurrence or distant metastasis should be carefully considered. (this thesis)

3. Current practice using FDG-PET/CT might not be sufficient for detection of skeletal metastasis in Ewing sarcoma. (this thesis)

4. Decision-making should be based on information about patients and tumour characteristics at baseline together with the evolution of the disease in time (this thesis)

5. A better understanding of Ewing sarcoma biology is critical to understand oncogenesis and metastatic processes, relapse and resistance mechanisms. Prevention of metastasis and local recurrence appears to be the key to improve outcome. (this thesis)

6. Only Ewing sarcoma patients with 100% necrosis after chemotherapy should be considered good responders. (Albergo JI, Gaston CL, Laitinen M, et al. Ewing's sarcoma: only patients with 100% of necrosis after chemotherapy should be classified as having a good response. *Bone Joint J*. 2016; 98-B( 8): 1138- 1144) .

7. ‘All models are wrong, but some are useful’ – (George EP. Empirical model-building and response surfaces. *Box & Draper (1987), Wiley, p. 424*).

8. ‘The optimal local treatment for an individual patient with Ewing sarcoma should be decided through consideration of patient characteristics, the potential benefit and harm of the treatment options, and patient preference’ (Werier J, Yao X, Caudrelier JM et al. A systematic review of optimal treatment strategies for localized Ewing's sarcoma of bone after neo-adjuvant chemotherapy. *Surg Oncol*. 2016; 25(1):16-23).

9. The use of navigation in musculoskeletal oncology improves surgical margins and therefore reduced local recurrence; reduces operative time; is beneficial in complex pelvic or periarticular resections and allows for more accurate reconstruction. (Morris GV, Stevenson JD, Evans S et al. Navigation in Musculoskeletal Oncology: An Overview. *Indian J Orthop*. 2018;52(1):22–30) .

10. If you want to make the right decision, you have to accept that sometimes you might be wrong .