## **Appendix 1 Search strategy for MEDLINE and Embase**

- 1. lung neoplasm.mp. or exp Lung Neoplasms/
- 2. (lung adj3 metastas\*).mp.
- 3. (pulmonary adj3 metastas\*).mp.
- 4. pulmonary neoplasm.mp.
- 5. lung cancer.mp.
- 6. pulmonary cancer.mp.
- 7. 1 or 2 or 3 or 4 or 5 or 6
- 8. metastasectomy.mp. or Metastasectomy/
- 9. (pneumonectomy adj3 metastas\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating subheading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 10. (lobectomy adj3 metastas\*).mp.
- 11. (metastas\* adj3 resection).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating subheading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 12. (metastas\* adj3 surg\* resection).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating subheading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 13. 8 or 11 or 12
- 14. 7 and 13
- 15. lymph node.mp. or Lymph Nodes/
- 16. Lymphatic Metastasis/
- 17. Lymphatic Metastasis.mp.
- 18. lymph node excision.mp. or Lymph Node Excision/
- 19. Sentinel Lymph Node Biopsy/11929
- 20. Sentinel Lymph Node Biopsy.mp.
- 21. (lymph\* adj2 metastas\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating subheading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 22. 15 or 16 or 17 or 18 or 19 or 20 or 21
- 23. 14 and 22
- 24. 9 or 10 or 23

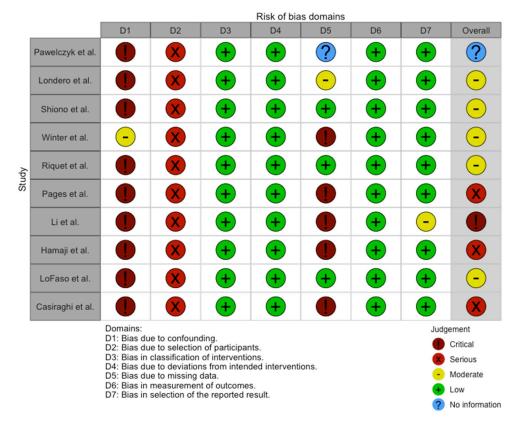
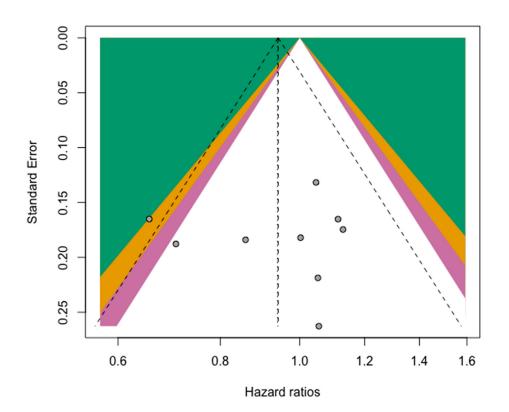


Figure S1 Traffic light plot of the risk of bias.



 $Figure \ S2 \ {\rm Funnel \ plot \ of \ the \ overall \ survival}.$ 

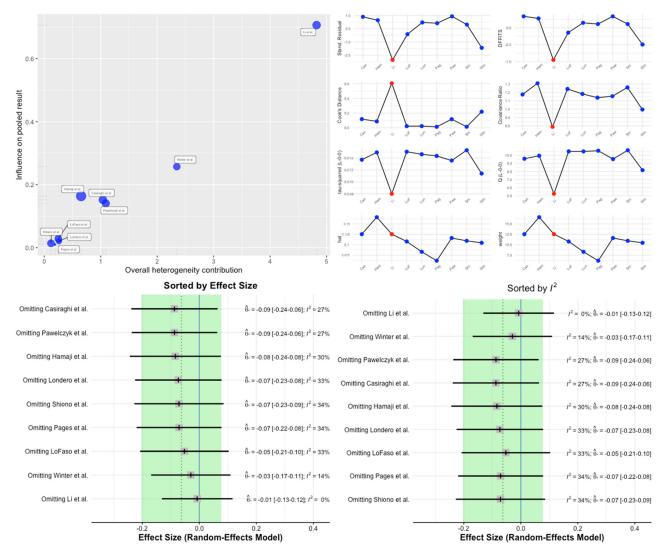


Figure S3 Results of the leave-one-out analysis. The study by Li et al. was identified as a potentially influencial outlier.

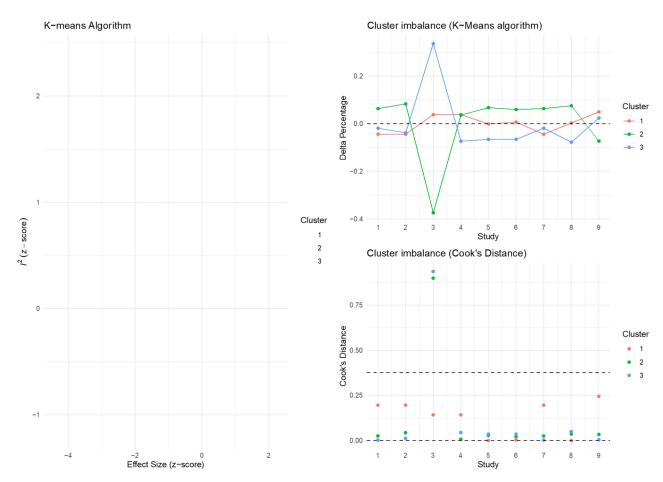


Figure S4 Graphic display of study heterogeneity (GOSH) plot. Clustering was performed using a K-means algorithm.

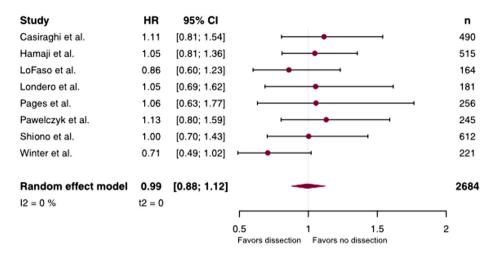


Figure S5 Forest plot of the overall survival after lymph node dissection excluding the study by Li et al.

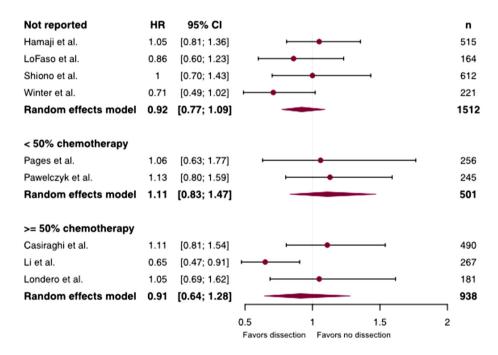


Figure S6 Forest plot of the overall survival after lymph node dissection by chemotherapy regiment.

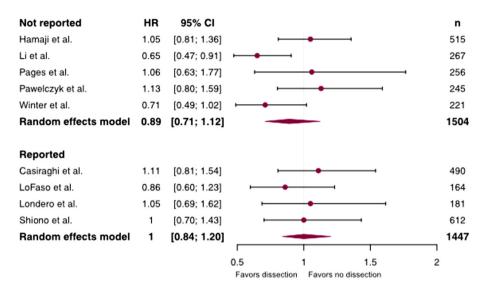


Figure S7 Forest plot of the overall survival after lymph node dissection by reported resection status.

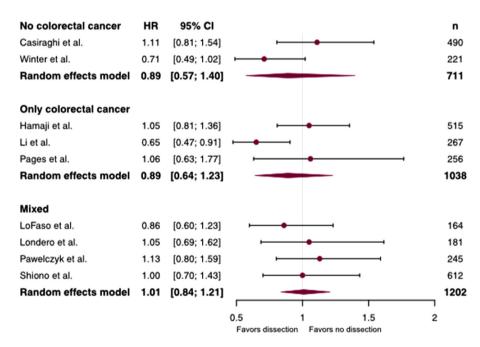


Figure S8 Forest plot of the overall survival after lymph node dissection by inclusion of colorectal cancer patients.

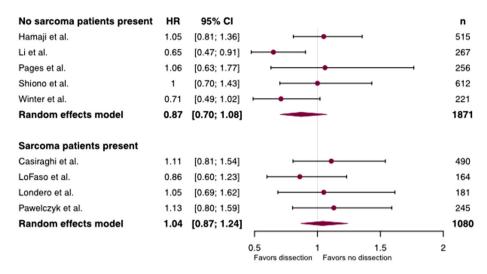


Figure S9 Forest plot of the overall survival after lymph node dissection by inclusion of sarcoma patients.

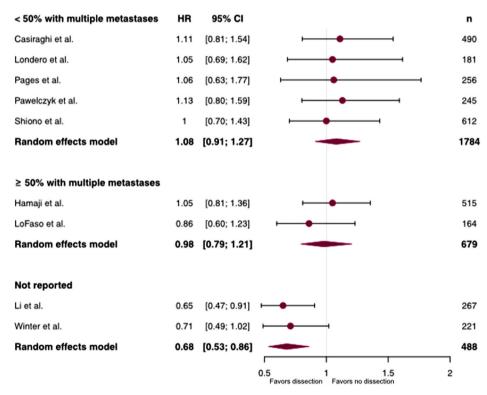


Figure S10 Forest plot of the overall survival after lymph node dissection by percentage of patients with multiple metastases in the study.