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Optimizing target volume definition and treatment accuracy in esophageal cancer

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STELLINGEN

1. It is feasible and safe to implant gold or liquid fiducial markers on (echo)endoscopically determined tumor borders in esophageal cancer patients (*Hoofdstuk 2-3, dit proefschrift*).
2. (Echo)endoscopically placed fiducial markers on esophageal tumor borders correlate significantly with macroscopic tumor on histopathology and hence the gross tumor volume (*Hoofdstuk 5, dit proefschrift*).
3. Fiducial markers clearly show an advantage in terms of reduced geographic misses and reduced delineation variation on a standard planning CT. This will translate into a smaller clinical target volume-to-planning target volume margin (*Hoofdstuk 4, dit proefschrift*).
4. Clinical target volume margins around the gross tumor volume, to compensate for microscopic tumor spread, can be limited to 1 - 1.5 cm when the gross tumor volume is delineated with the aid of fiducial markers placed on (echo)endoscopically determined tumor borders (*Hoofdstuk 5, dit proefschrift*).
5. A mid-position strategy in esophageal cancer radiotherapy is superior to an internal target volume motion management strategy, in terms of dose to the organs at risk, without compromising the coverage of the clinical target volume (*Hoofdstuk 8, dit proefschrift*).
6. The clinically used planning target volume margin in esophageal cancer radiotherapy should be anisotropic and region-dependent, with largest expansion in craniocaudal direction and at the distal region of the esophagus (*Hoofdstuk 9, dit proefschrift*).
7. Surgery fails at the periphery, radiotherapy at the center (*Onbekend*).
8. De uitvinding van de ijskast heeft meer gedaan voor de gemiddelde levensverwachting van de mens dan de geneeskunde (*Jean Le Fois*).
9. Only when the dust settles, you will see if you are riding a horse or a donkey (*Onbekend*).