



In response to Chuong et al.

To the Editor,

We thank Dr. Chuong and colleagues for their interest in our recent work “Treatment planning for MR-guided SBRT of pancreatic tumors on a 1.5 T MR-Linac: a global consensus protocol” [1]. In their letter, the authors recommend the inclusion of a clinical target volume (CTV) in treatment planning for MR-guided SBRT for locally advanced pancreatic cancer (LAPC), thereby targeting not just the macroscopic disease but also nearby perineural or lymphatic areas highly suspect for microscopic involvement.

The concept of elective irradiation to address potential occult disease is indeed compelling, but it is evident that this is still a controversial practice. There is at present limited evidence from prospective studies demonstrating that a CTV results in improved clinical outcomes. Current literature is largely retrospective, and significant variation exists in CTV definition, patient selection, and the appropriate dose to the elective regions [2–6].

The main objective of our consensus study was standardization and dosimetric harmonization across multiple centers. The focus within our consortium was on the gross tumor volume (GTV) and most important organs at risk. This approach also aligns with current guidelines, which do not recommend elective nodal irradiation for pancreatic cancer SBRT [7,8].

We appreciate the dialogue initiated by Dr. Chuong and colleagues, and agree that a collaborative effort towards standardization of CTV definition and dose prescription could be a future endeavor. This could pave the way for solid, prospective clinical evidence demonstrating the benefits of CTV inclusion.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] Grimbergen G, Eijkelenkamp H, Snoeren LMW, Bahij R, Bernchou U, van der Bijl E, et al. Treatment planning for MR-guided SBRT of pancreatic tumors on a 1.5 T MR-Linac: A global consensus protocol. *Clin Transl Radiat Oncol* 2024;47: 100797. <https://doi.org/10.1016/j.ctro.2024.100797>.
- [2] Kharofa J, Mierzwa M, Olowokure O, Sussman J, Latif T, Gupta A, et al. Pattern of marginal local failure in a phase II trial of neoadjuvant chemotherapy and stereotactic body radiation therapy for resectable and borderline resectable pancreas cancer. *Am J Clin Oncol* 2019;42(3):247–52. <https://doi.org/10.1097/COC.0000000000000518>.
- [3] Zhu X, Ju X, Cao Y, Shen Y, Cao F, Qing S, et al. Patterns of local failure after stereotactic body radiation therapy and sequential chemotherapy as initial treatment for pancreatic cancer: Implications of target volume design. *Int J Radiat Oncol Biol Phys* 2019;104(1):101–10. <https://doi.org/10.1016/j.ijrobp.2019.01.075>.
- [4] Chuong MD, Bryant J, Mittauer KE, Hall M, Kotecha R, Alvarez D, et al. Ablative 5-fraction stereotactic magnetic resonance-guided radiation therapy with on-table adaptive replanning and elective nodal irradiation for inoperable pancreas cancer. *Pract Radiat Oncol* 2021;11(2):134–47. <https://doi.org/10.1016/j.prro.2020.09.005>.
- [5] Miller JA, Toesca DA, Baclay JRM, Vitzthum LK, Dubrowski P, Pollom EL, et al. Pancreatic stereotactic body radiation therapy with or without hypofractionated elective nodal irradiation. *Int J Radiat Oncol Biol Phys* 2022;112(1):131–42. <https://doi.org/10.1016/j.ijrobp.2021.07.1698>.
- [6] Chuong MD, McAllister N, Carvallo N, Chundru S, Herrera R, Kaiser A, et al. Patterns of locoregional failure after ablative 5-fraction stereotactic MR-guided on-table adaptive radiation therapy for pancreatic cancer. *Int J Radiat Oncol Biol Phys* 2023; 117(2):S14–5. <https://doi.org/10.1016/j.ijrobp.2023.06.231>.
- [7] Palta M, Godfrey D, Goodman KA, Hoffe S, Dawson LA, Dessert D, et al. Radiation therapy for pancreatic cancer: executive summary of an ASTRO clinical practice guideline. *Pract Radiat Oncol* 2019;9(5):322–32. <https://doi.org/10.1016/j.prro.2019.06.016>.
- [8] Brunner TB, Haustermans K, Huguet F, Morganti AG, Mukherjee S, Belka C, et al. ESTRO ACROP guidelines for target volume definition in pancreatic cancer. *Radiother Oncol* 2021;154:60–9. <https://doi.org/10.1016/j.radonc.2020.07.052>.

Guus Grimbergen^{*}, Martijn P.W. Intven, Gert J. Meijer
Department of Radiation Oncology, University Medical Center Utrecht, the Netherlands

^{*} Corresponding author at: Department of Radiation Oncology, University Medical Center Utrecht, Heidelberglaan 100, 3584CX Utrecht, the Netherlands.
E-mail address: g.grimbergen@umcutrecht.nl (G. Grimbergen).