



Corrigendum to “Geometric uncertainties in voluntary deep inspiration breath hold radiotherapy for locally advanced lung cancer” [Radiother. Oncol. 118 (2016) 510–514]



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The authors regret that in the abovementioned article, an error was found. The study evaluated inter- and intra-fractional uncertainties in the position of the peripheral tumour, mediastinal lymph nodes and the differential motion between the tumour and the nodes in deep inspiration breath hold (DIBH) for radiotherapy of patients with locally advanced non-small cell lung cancer.

Based on the uncertainties, planning target volume (PTV) margins were calculated for different clinical scenarios and image guidance strategies. The reported margins for peripheral tumour (T) in DIBH are unfortunately incorrect. By mistake, wrong values

for intra-fractional uncertainty were used for margin calculation. Margins, based on correct values, are slightly smaller (0.2–1.2 mm). Table 4, with correct values is presented below.

The mistake, made in the original paper, however, does not significantly affect the reported results or change the conclusions about PTV margins, which are slightly smaller for DIBH than for free breathing radiotherapy. As we also stated in the original paper, the margins presented were not intended to be applied “as is” but provided a way of comparing impact of different motion management and image guidance strategies.

Table 4
PTV margins.

Free breathing	Target	LR [mm]	AP [mm]	CC [mm]
Tumour motion <5 mm	Peripheral tumour	5.0	6.0	6.0
	Mediastinal nodes	5.0	7.0	6.0
Tumour motion 15 mm in CC	Peripheral tumour	5.0	6.0	8.0
	Mediastinal nodes	5.0	7.0	9.0
DIBH	Target complexity	LR [mm]	AP [mm]	CC [mm]
IGRT strategy	Single target			
	Peripheral tumour	2.7	4.3	3.3
	Central tumour	2.8	4.6	3.5
Tumour registration	Complex target			
	Peripheral tumour	2.7	4.3	3.3
	Mediastinal nodes	10.4	6.3	10.4
Carina match	Peripheral tumour	9.7	6.2	9.4
	Mediastinal nodes [*]	2.8	4.0	3.7
	Mediastinal nodes ^{**}	5.1	6.1	5.4
Bone registration	Peripheral tumour	4.7	7.8	10.9
	Mediastinal nodes	8.8	10.7	8.0

LR – left–right direction; AP – anterior–posterior direction; CC – crano–caudal direction; DIBH – deep inspiration breath hold.

^{*} Missing uncertainty for the positional variation between the carina and the lymph nodes.

^{**} Assuming the positional variation between the carina and the lymph nodes as found in free breathing [20].

DOI of original article: <https://doi.org/10.1016/j.radonc.2015.11.004>

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<https://doi.org/10.1016/j.radonc.2019.01.025>

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