

ERRATUM**“Evaluation of a combined respiratory-gating system comprising the TrueBeam linear accelerator and a new real-time tumor-tracking radiotherapy system: A preliminary study” [JACMP, 17(4), 2016]**

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After the publication of the manuscript titled “Evaluation of a combined respiratory-gating system comprising the TrueBeam linear accelerator and a new real-time tumor-tracking radiotherapy system: a preliminary study”¹, an error was discovered in measured delay time ($\Delta t_{\text{gate-on}}$) and Table 1 ($\Delta t_{\text{beam-on}}$).

The incorreced data have been removed from the results. Additionally, correct data have been added to generate a new Table 1 (shown below). The specific values for $\Delta t_{\text{gate-on}}$ and $\Delta t_{\text{beam-on}}$ have got smaller, but all of the original findings and conclusions remain valid.

The new corrected table 1 values have resulted in the following changes (**bold italics**) to the text of the manuscript.

Abstract

The total time delay between TrueBeam and SyncTraX was **<200 ms** for each photon beam.

Results**B. Evaluation of time delay using oscilloscope**

The mean \pm SD values of $\Delta t_{\text{gate-on}}$ were **64.2 \pm 11.6 ms**, **70.3 \pm 12.2 ms**, **58.3 \pm 8.6 ms**, and **66.4 \pm 15.4 ms** in the case of 6 MV-FF, 6 MV-FFF, 10 MV-FF, and 10 MV-FFF photon beams, respectively.

For each photon beam, $\Delta t_{\text{beam-on}} + \Delta t_{\text{beam-off}}$ **<200 ms**.

Discussion

In this study, the time delay was measured using an oscilloscope, and the total time delay was **<200 ms** for each photon beam.

TABLE 1 Comparison of delay times of various respiratory gating systems.

Author	modality	$\Delta t_{\text{beam-on}}$ (ms)	$\Delta t_{\text{beam-off}}$ (ms)
Chang et al. ⁽¹⁹⁾	Novalis Tx + ExacTrac	200 \pm 30	
	Novalis Tx + RPM	90 \pm 10	
Smith et al. ⁽²⁰⁾	Trilogy + Calypso	75.0 \pm 12.7	65.1 \pm 12.9
Woods et al. ⁽²¹⁾	TrueBeam + RPM	139 \pm 10	
AAPM TG142 ⁽²²⁾		100	100
This study	TrueBeam + SyncTraX		
	6 MV-FF	109.5 \pm 11.8	71.5 \pm 12.1
	6 MV-FFF	115.9 \pm 12.1	62.7 \pm 14.1
	10 MV-FF	103.5 \pm 8.6	68.1 \pm 7.2
	10 MV-FFF	112.1 \pm 15.3	69.0 \pm 10.7

RPM, real-time positioning management; FF, flattened; FFF = flattening-filter-free.

REFERENCE

- Shiinoki T, Kawamura S, Uehara T, et al. Evaluation of a combined respiratory-gating system comprising the TrueBeam linear accelerator and a new real-time tumor-tracking radiotherapy system: a preliminary study. *J Appl Clin Med Phys*. 2016;17(4):202–213.

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