**Supplementary figure 1**

(A)Training and preparation sessions of SDX system included (a) the determination of the inspiratory capacity and (b) the selection of the volumetric value. (c) The breath-hold level was defined as 85% of the inspiratory capacity and (d) the breath-hold range was restricted within 0.1 L. (B) During real treatment, patients were instructed by traffic light icon to distinguish (a) non-breath-hold phase (beam off) and (b) breath-hold phase (beam on).

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