**Supplemental Digital Content 2.** Alignment of 10 major landmarks – distances between labeled bronchial bifurcations in supine and warped prone EI and EE images were measured. All landmarks were in positions that matched reasonably well between EI and warped EE images, with distance between the corresponding landmarks in each pair that was consistently < 2 pixels. Furthermore, this distance was minimal in all conditions tested (healthy, injured, EI, EE, PEEP).

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