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Reply: Randomized Trial of Video Laryngoscopy for Endotracheal Intubation of Critically Ill Adults: More Data, More Questions

David R. Janz, MD, MSc¹, Matthew W. Semler, MD, MSc², and Todd W. Rice, MD, MSc²

¹Section of Pulmonary/Critical Care & Allergy/Immunology, Louisiana State University School of Medicine, New Orleans, LA

²Division of Allergy, Pulmonary, and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN

We appreciate the letter to the editor by Mendelson et al (1) regarding our recent randomized trial of video laryngoscopy (VL) versus direct laryngoscopy (DL) for endotracheal intubation of critically ill adults (2).

Mendelson et al cite a recent study by Silverberg et al comparing VL and DL for intubation of critically ill adults using a Glidescope[®](3) rather than the McGrath[®] MAC VL which was used in 98.6% of the intubations in the FELLOW trial (2). This is an important difference between the Silverberg study and the FELLOW trial suggesting the data on the McGrath[®] MAC may not be generalizable to patient care scenarios where the Glidescope[®] is being used for intubation. Although certainly possible, we would argue that our data remain generalizable to video laryngoscopes as both studies demonstrated improved glottic view with VL, these two devices are not functionally different (both aim a camera at the glottis), and an effect size of 34% seen in the Silverberg study (3) is likely overestimated (4) and not likely to carry over to clinical practice. The large effect size seen in the Silverberg study may be due to a number of factors pointed out by Mendelson et al. In addition, unlike the FELLOW trial, the Silverberg study (3) was not a randomized trial which further biases towards an overestimation of an effect size (5) (device assignment was not random, but uniformly alternated between even and odd numbers of intubations for each operator in which the operator knew which would be the next device assignment).

Mendelson et al also inquire as to the definition of aspiration in the FELLOW trial (2). After completion of the procedure, the operator was asked if peri-procedural aspiration had occurred based on their own subjective definition of aspiration. Given the unreliable nature of self-reported data during airway management (6) and the lack of a uniformly accepted objective definition, we urge caution in comparing the aspiration event rate in our trial to

Corresponding Author: David R. Janz, MD, MSc, 1901 Perdido St, Suite 3205, New Orleans, LA 70112, Phone: (504) 568-2904, Fax: (504) 568-4295, djanz@lsuhsc.edu.

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other trials. Self-reporting of data is a common limitation of intubation studies, which is why the FELLOW trial used independent observers not participating in the procedure or the trial to record the majority of the trial outcomes.

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