Supplement Table 16. Summary of randomized controlled trials evaluating gastric residual volume-based monitoring in critically ill adult patients receiving enteral nutrition (KQ8)

Author (year)	Country	Study design	ICU type	Patients, n (N/G)	Age (yr) (N/G)	Male/female (N/G)	Feeding start (hr)	Feeding route	Measurement of GRV	Outcomes reported
Reignier, 2013 [65]	France	RCT	Mixed	227/222	61.0±15.0/ 62.0±14.0	N: 159/68, G: 156/66	≤36 hr after intubation	Nasogastric	Every 6 hr by aspiration through the nasogastric tube using a 50-mL syringe Aspirated smaller than 250 mL were returned to the patients	VAP, EN-related GI complications, Prokinetic treatment, ICU-acquired infection, duration of MV, length of ICU stay and hospital stay, mortality
Barkhordari, 2021 [85]	Iran	RCT	No mention	34/31	49.4±19.1/ 50.2±15.1	N: 24/10, G: 17/14	≤24–48 hr after intubation	Nasogastric	Pre-gavage by aspirating the stomach contents by a 60-mL syringe If GRV ≤250-mL, aspirated contents was returned to the patients. If GRV >250-mL, half of it was returned to the stomach and the remainder was discarded.	VAP, vomiting

ICU, intensive care unit; N, no gastric residual volume monitoring group; G, gastric residual volume monitoring group; GRV, gastric residual volume; RCT, randomized controlled trial; VAP, ventilator-associated pneumonia; EN, enteral nutrition; GI, gastrointestinal; MV, mechanical ventilation.