FOCUS ON CRITICALLY ILL PEDIATRIC PATIENTS

Pediatric Patients in the ICU are at Risk for Malnutrition Regardless of Underlying Critical Illness[1]

Malnutrition in Hospitalized Patients Results in Poorer Outcomes and Higher Treatment Costs[2]

Almost 50% of all patients are malnourished at the time of hospital admission[3]

4 to 6 days longer hospital length of stay[4,5]

54% higher likelihood of hospital 30-day readmissions[6]

Up to 300% increase in hospital costs[5]

Clinical Value of RELiZORB[7,8]

- The only FDA-cleared digestive enzyme product to hydrolyze fats in enteral nutrition
- Clinical evidence in enterally fed patients
- Designed for continuous feeding
- Allows use of low-cost enteral formulas

RELiZORB® (IMMOBILIZED LIPASE) CARTRIDGE

RELiZORB is a first-of-its-kind digestive enzyme cartridge designed to mimic the function of pancreatic lipase. RELiZORB is indicated for use in pediatric patients (ages 5 years and above) and adult patients to hydrolyze fats in enteral formula.

Characterized by a deficiency in pancreatic enzymes—(including lipase, the enzyme responsible for fat digestion)—exocrine pancreatic insufficiency (EPI) can lead to significant malnutrition and fat malabsorption[9]

Conditions commonly associated with fat malabsorption[10]:

- Cystic fibrosis
- Acute or chronic pancreatitis
- Pancreatic cancer or other cancers
- Pancreatectomy
- Short bowel syndrome

More than 50% of critically ill patients without pre-existing pancreatic diseases have EPI [9,11] – including those with:

- Abdominal surgery
- Chronic liver disease
- Trauma/critical care
- Crohn's disease
- Celiac disease

Fat malabsorption is associated with poor outcomes that can impact digestive symptoms, nutritional status, physical functioning, treatment burden, body image, and pain[12-14]

PATIENT PROFILE: CRITICALLY ILL PEDIATRIC PATIENTS

Consider RELiZORB in Your Pediatric ICU Patients Ages 5 and Older Who Require Nutritional Support

Meet Carter*

A 6-year-old boy admitted to the pediatric ICU after presenting with tachycardia, fever, and seizures.

*Fictional patient based on actual patient experience. The information presented is for illustrative purposes only, and not intended, nor implied, to be a substitute for professional medical advice. Individual patient profiles may vary.

Clinical Presentation

- Heart rate 124 bpm
- Respiration rate 32 breaths/min
- Temperature 103.2°F
- Blood pressure 95/60 mmHg
- Significant lethargy

Relevant History

- Spina bifida
- Tracheostomy and gastric tube dependent
- Gastroesophageal reflux disease
- Neurogenic bowel
- Vocal cord paralysis
- Milk protein enteropathy

Diagnosis

- Sepsis
- Hypoxic ischemic brain injury

Treatment

- Total parenteral nutrition was initiated upon admission due to the patient's inability to tolerate enteral nutrition
- The patient was transitioned to full enteral feedings 2 weeks into admission, but developed frequent large loose stools, which continued despite the addition of fiber supplementation
- RELiZORB was initiated after 3 days of fiber supplementation
- Within 2 days, stool frequency reduced from more than 10 per day to 2-4 per day; RELiZORB was discontinued
- The patient experienced another dramatic increase in stool output within 16 hours; RELiZORB was reinitiated and stool output decreased 48 hours later to 2-4 per day
- RELiZORB was continued upon discharge

RELiZORB is for use with enteral feeding only; do not connect to intravenous or other medical tubing. Medications should not be administered through RELiZORB. Please see Instructions For Use for full safety information at www.relizorb.com.

ALCRESTA® THERAPEUTICS

References: 1. Mehta NM, Skillman HE, Irving SY, et al. *Pediatr Crit Care Med.* 2017;18:675-715.; **2.** McCarthy A, Delvin E, Marcil V, et al. *Nutrients.* 2019;11:236; **3.** Kirkland LL, Kashiwagi DT, Brantley S, Scheurer D, Varkey P. *J Hosp Med.* 2013;8:52-58; **4.** Barker LA, Gout BS, Crowe TC. *Int J Environ Res Public Health.* 2011;8:514-527; **5.** Correia MI, Waitzberg DL. *Clin Nutr.* 2003;22:235-239; **6.** Fingar KR, Weiss AJ, Barrett ML, et al. Agency for Healthcare Research and Quality, Rockville, MD; **7.** RELiZORB Instructions for Use; **8.** RELiZORB Compatible Formulas & Pumps; **9.** Wang S, Ma L, Zhuang Y, Jiang B, Zhang X. *Crit Care.* 2013;17:R171; **10.** Singh VK, Haupt ME, Geller DE, Hall JA, Diez PMQ. *World J Gastroenterol.* 2017;23:7059-7076. **11.** MedLinePlus Website. https://medlineplus.gov/ency/article/000299.htm; **12.** Turck D, Braegger CP, Colombo C, et al. *Clin Nutr.* 2016;35:557- 577; **13.** Bodnar R, Kadar L, Holics K, et al. *Ital J Pediatr.* 2014;40:50; **14.** Sawicki GS, Rasouliyan L, McMullen AH, et al. *Pediatr Pulmonol.* 2011;46:36-44.