

cRitical cAre opTimizatiON of ALbumin ordEring (RATIONALE) in Alberta: A provincial initiative

Albumin use in Alberta ICUs was identified as a quality improvement opportunity.

As high as 35% of patients admitted to Alberta ICUs in 2019 received 1 or more units of albumin for reasons not supported by strong scientific evidence.

➤ When *SHOULD* we be using albumin?

Conditions for which albumin has **EVIDENCE of BENEFIT**:

- ❖ Large volume therapeutic paracentesis
- ❖ Spontaneous bacterial peritonitis
- ❖ Plasmapheresis

Conditions for which albumin has **EVIDENCE of NO BENEFIT**:

- ❖ Hypovolemia
- ❖ Sepsis
- ❖ Traumatic brain injury
- ❖ Acute ischemic stroke

Conditions where **EVIDENCE is LESS CLEAR**:

- ❖ Hepatorenal syndrome
- ❖ Post-operative liver transplantation
- ❖ Burn resuscitation
- ❖ Post-operative cardiac surgery
- ❖ ARDS

A NEW ALBUMIN ORDER SET has been developed for critical care across Alberta, to help guide albumin ordering decisions. References for the evidence and cost summary are included. Take a look for more information!

Fluid Resuscitation Costs (AHS 2019)

Albumin		Crystalloid	
Concentration, volume	Cost per bottle	Type	Cost per bag
25%, 100 mL (25 grams)	\$59.91	0.9% Saline (500 mL)	\$1.21
25%, 50 mL (12.5 grams)	\$29.96	0.9% Saline (1000 mL)	\$1.30
5%, 500 mL (25 grams)	\$59.91	Ringer's lactate (1000 mL)	\$1.66
5%, 250 mL (12.5 grams)	\$29.96	Plasmalyte A (1000 mL)	\$1.87



*Let's start a conversation about the **RATIONALE** behind albumin use in Alberta ICUs*

