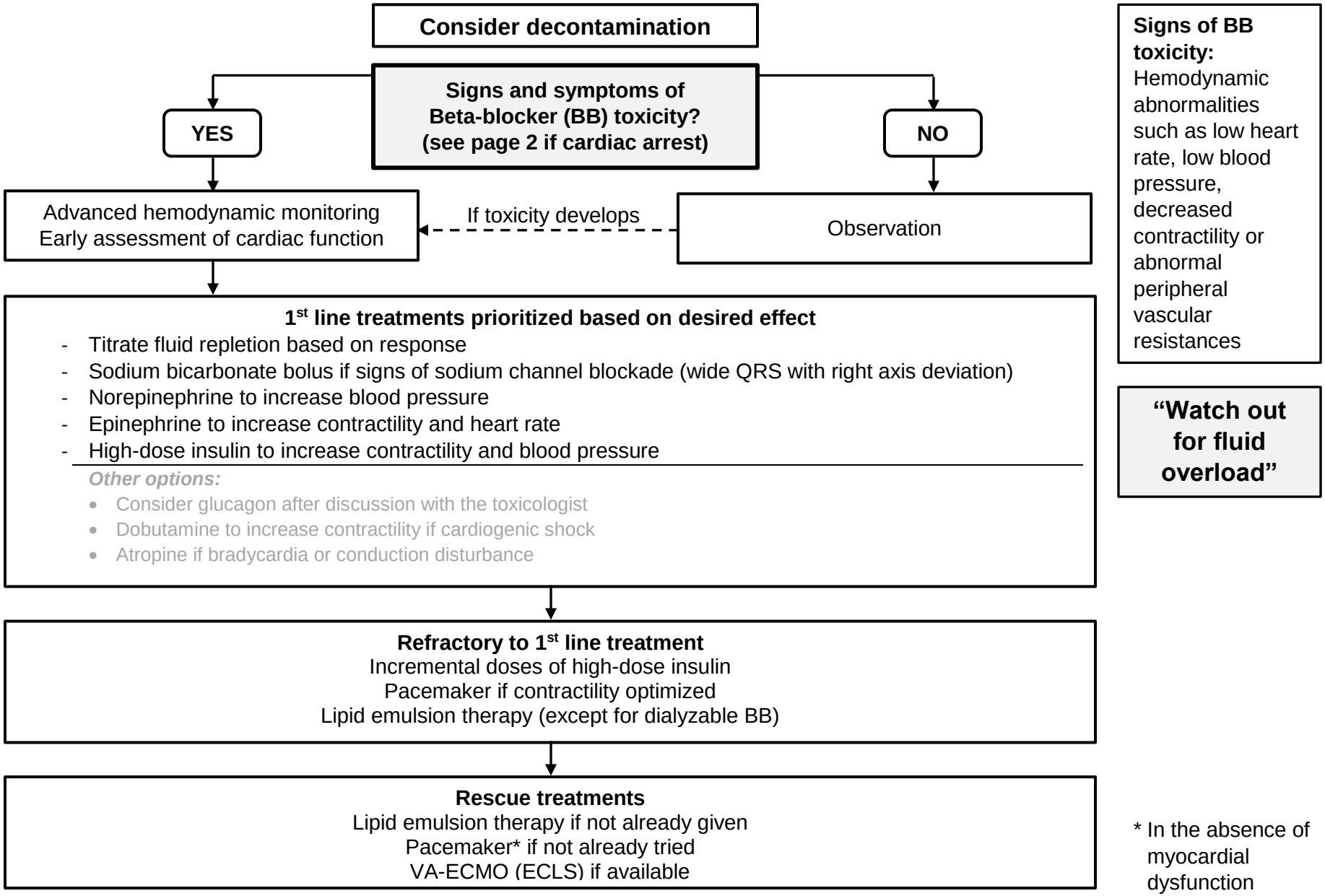

Dialyzable beta-blockers: Sotalol, Atenolol

Moderately dialyzable beta-blockers: Acebutolol, bisoprolol (to discuss with the toxicologist)

Dialyzable beta-blockers with limited clinical date: Nadolol (to discuss with the toxicologist)

Réf : 1) Bailey et al. *Guide des antidotes en toxicologie d'urgence*, 4e édition, 2013
2) DeWitt et al. *Toxicol. Rev*, 2004; 23(4) : 230

Cardiac arrest secondary to BB toxicity
Standard ACLS
Sodium bicarbonates bolus if signs of sodium channel blockade (wide QRS)
Lipid emulsion therapy
VA-ECMO (ECLS) is available

ANTIDOTES:

Please consult: https://www.ciusss-capitalenationale.gouv.qc.ca/antidotes

Doses for first line treatments:

Sodium bicarbonate bolus:

1 – 2 mmol/kg IV direct to be repeated as needed until QRS improvement (blood pH max 7.55)

- Adults and children aged 2 yo and more: Use a 7.5% (0.89 mmol/mL) or a 8.4% (1 mmol/mL) solution
- Children **<** 2 yo: Use a 4.2% (0.5 mmol/mL) solution max 8 mmol/kg/day (do not administer IV direct)

High-dose insulin (expect 30 – 60 min before observing an effect):

- High-dose insulin IV (regular): 1 unit/kg bolus followed by an infusion at 1 unit/kg/h (maintain euglycemia with dextrose)
- For the incremental doses of high-dose insulin IV (regular): Progressive increase of the infusion rate up to 10 units/kg/h (maintain euglycemia with dextrose)
- Plan to administer D50% in adults or D25% in children by a central line to limit IV fluids. As an example, a 70 kg patient could need an initial bolus of 50 mL of D50% followed by an IV infusion of 0.5 – 1 g/kg/h, which could be equivalent to 70 – 140 mL/h of D50%

Information concerning vasopressors and inotropes for centers where protocols are not available: High doses are expected at high concentrations to limit IV fluids.

Vasopressors	Indications	Dose	Receptors			
			α1	ß1	ß2	Dopamine
Norepinephrine	Increases mostly peripheral vascular resistances, but may increase heart rate and contractility. Often used in undifferentiated shock and vasoplegic shock.	0.01 à 3 mcg/kg/min (no max dose)	+++++	+++	++	N/A
Epinephrine	Increases heart rate, contractility, peripheral vascular resistances, decreases bronchospasms. Often used in bradycardia cardiogenic shock or anaphylactic shock.	0.01 à 0.50 mcg/kg/min (no max dose)	+++++	++++	+++	N/A
Dopamine	Increases heart rate and contractility from 3 to 10 mcg/kg/min, but increases more peripheral vascular resistances from 10 to 20 mcg/kg/min. Often used at low dose for bradycardia and at higher dose for vasoplegic shock.	2 à 20 mcg/kg/min (less benefit if more than 20 mcg/kg/min)	+++ (10 to 20 mcg/kg/min	++++ (3 to 10 mcg/kg/min)	++ (3 to 10 mcg/kg/min)	+++++ (0.3 to 3 mcg/kg/min)