

## **SUPPLEMENTAL DIGITAL CONTENT**

for Arslan-Carlon et al,

### **Goal-directed versus standard fluid therapy to decrease ileus after open radical cystectomy: a prospective randomized controlled trial**

#### **SUPPLEMENTAL FIGURES**

**Supplemental Figure 1.** Algorithm for Fluid Therapy **Pre-Induction** in the Goal-Directed Fluid Therapy Arm

**Supplemental Figure 2.** Algorithm for Fluid Therapy in the **Operating Room** in the Goal-Directed Fluid Therapy Arm

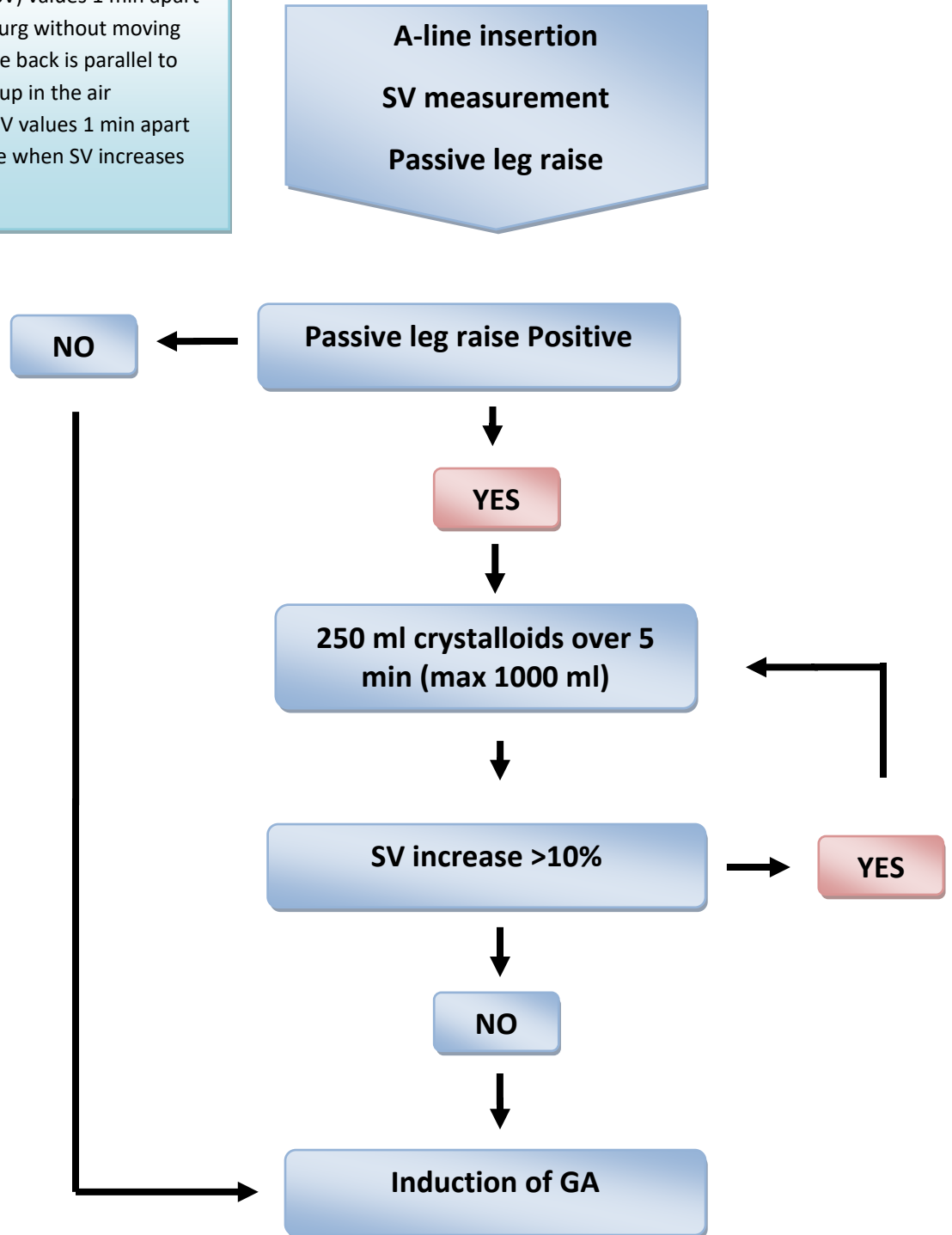
**Supplemental Figure 3.** Algorithm for Fluid Therapy in the **PACU** in the Goal-Directed Fluid Therapy Arm

**Supplemental Figure 4.** Institutional Standardized Postoperative Enhanced Recovery Pathway for Radical Cystectomy Patients

# Supplemental Figure 1. Algorithm for Fluid Therapy Pre-Induction in the Goal-Directed Fluid Therapy Arm

## Passive leg raise:

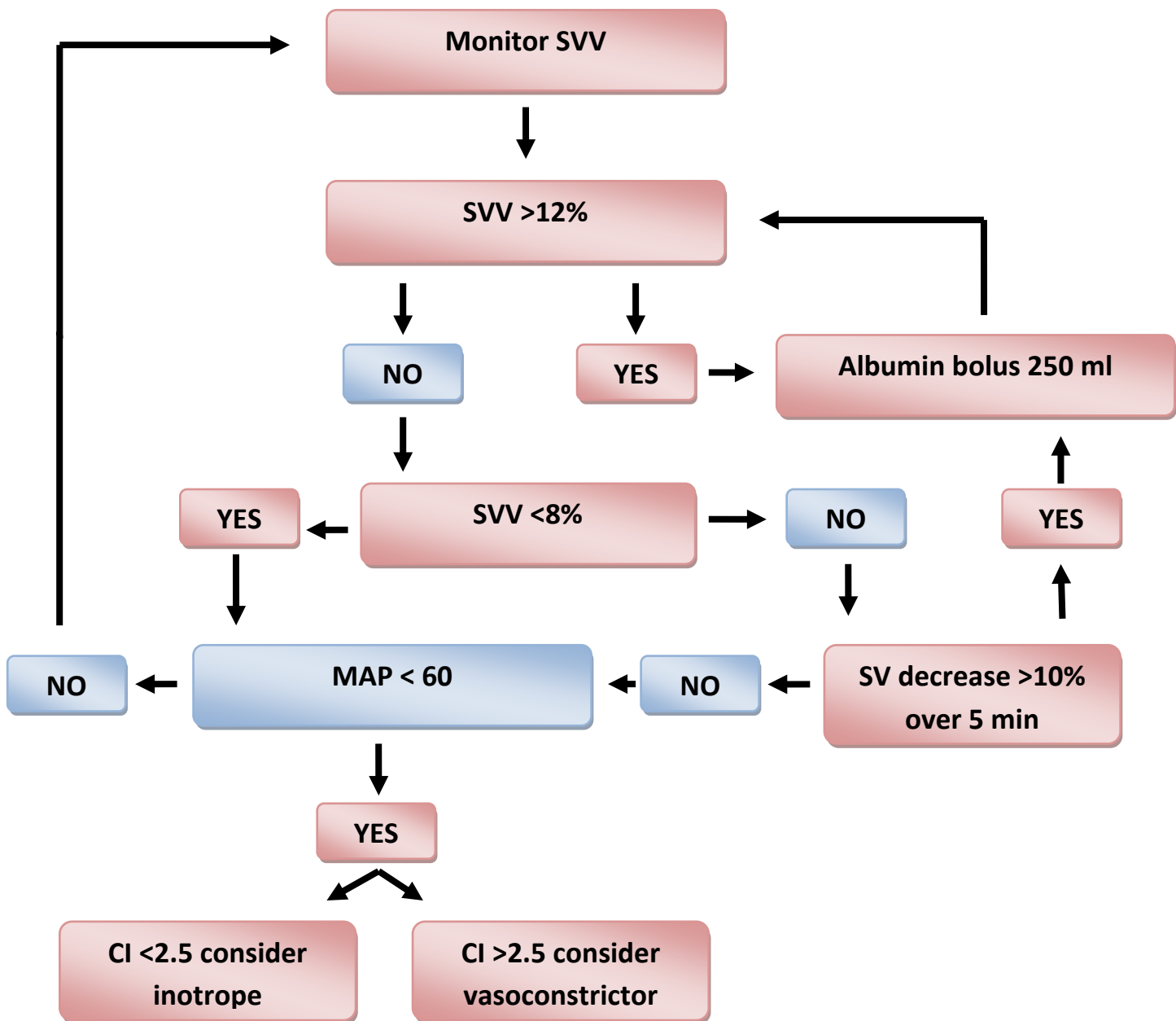
1. Sit patient up 45 degrees while placing A-line
2. Record 3 stroke volume (SV) values 1 min apart
3. Put patient in Trendelenburg without moving the back of the bed, till the back is parallel to the floor and the legs are up in the air
4. Wait 1 min and record 3 SV values 1 min apart
5. Passive leg raise is positive when SV increases >10%



Abbreviations: A-line, arterial line; GA, general anesthesia; SV, stroke volume.

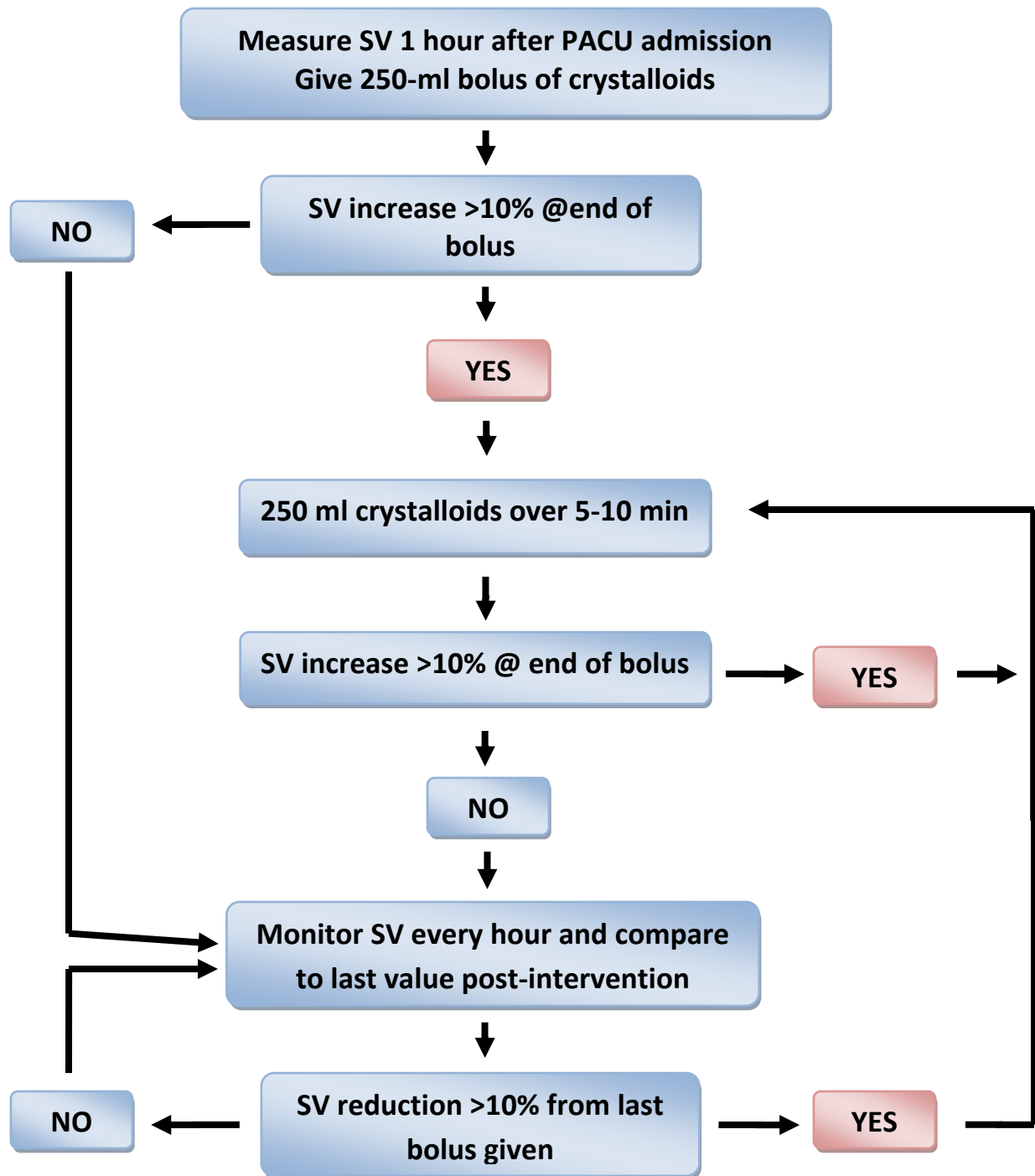
## Supplemental Figure 2. Algorithm for Fluid Therapy in the Operating Room in the Goal-Directed Fluid Therapy Arm

1. Maintenance fluids: **Crystalloids  $3 \text{ ml} \cdot \text{kg}^{-1} \cdot \text{h}^{-1}$**
2. **Positive pressure ventilation at  $8 \text{ ml/kg IBW}$  No PEEP**
3. Monitor for NSR
4. HR  $>50$  and  $<100$
5. Albumin will be administered to a maximum of  $20 \text{ ml/kg}$



Abbreviations: CI, cardiac index; HR, heart rate; IBW, ideal body weight; MAP, mean arterial pressure; NSR, normal sinus rhythm; PEEP, positive end expiratory pressure; SV, stroke volume; SVV, stroke volume variation.

**Supplemental Figure 3.** Algorithm for Fluid Therapy in the PACU  
in the Goal-Directed Fluid Therapy Arm

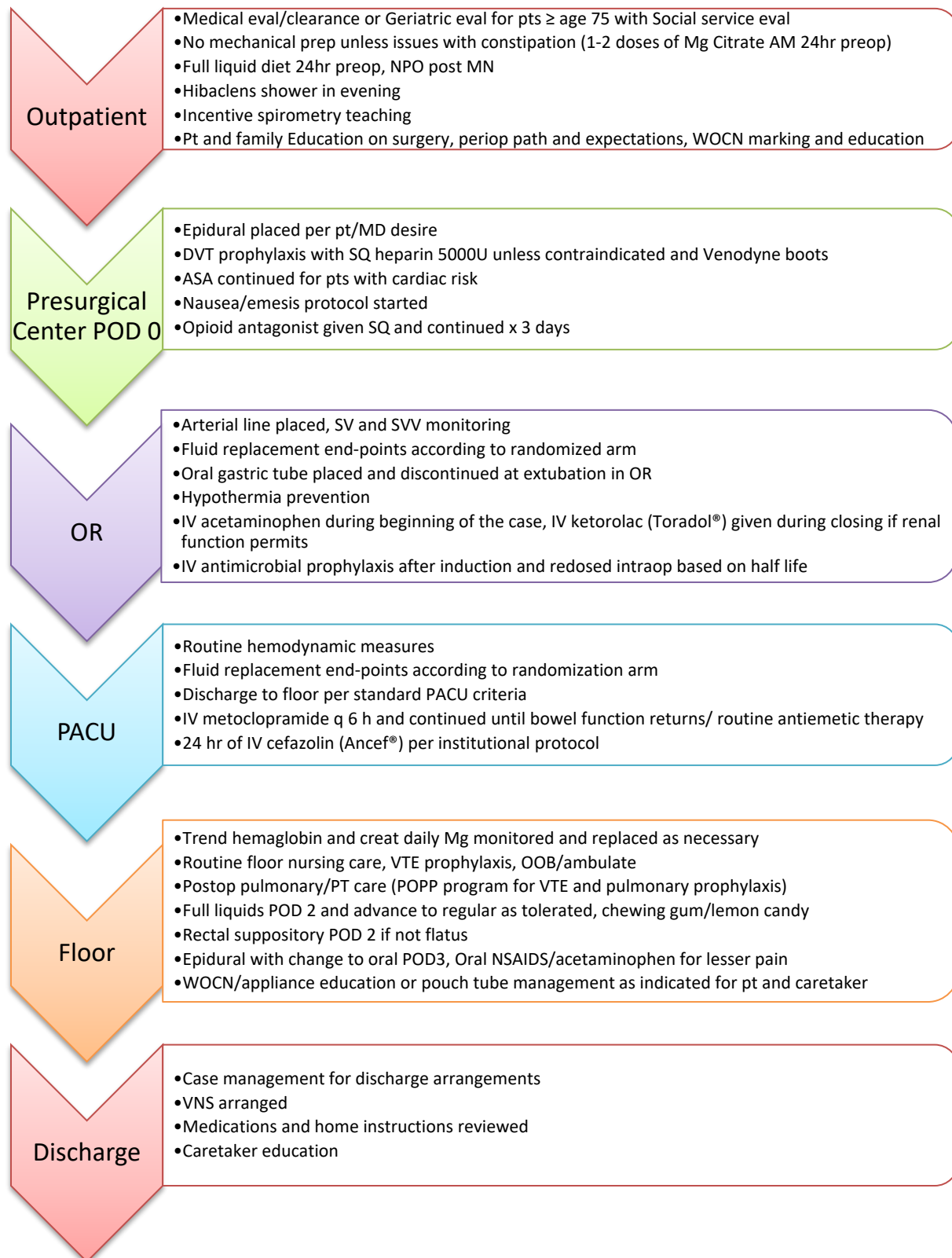


1. Additional boluses of 250 ml albumin
  - a. SBP <90
  - b. U/O < 0.5 ml/hr over 2 hours

2. Make sure to test A-line before assessing SV
3. **Boluses should not exceed 500 ml Lactated Ringers without calling MD**
4. Record all data in attached sheet

Abbreviations: A-line, arterial line; MD, doctor; PACU, postanesthesia care unit; SBP, systolic blood pressure; SV, stroke volume; U/O, urine output.

## Supplemental Figure 4. Institutional Standardized Postoperative Enhanced Recovery Pathway for Radical Cystectomy Patients



Abbreviations: ASA, American Society of Anesthesiologists; DVT, deep vein thrombosis; IV, intravenous; MD, doctor; MN, midnight; NSAIDs, nonsteroidal anti-inflammatory drugs; NPO, nothing by mouth; OOB, out of bed; OR, operating room; PACU, post anesthesia care unit; POD, postoperative day; PT, physical therapy; pt(s), patient(s); SQ, subcutaneous; SV, stroke volume; SVV, stroke volume variation; VNS, visiting nurse service; VTE, venous thromboembolism; WOCN, Wound, Ostomy and Continence Nursing.