

Form Title      **ERAS Pancreas Surgery, Adult – Inpatient Post-Op Order Set**

Form Number   **21063**

© 2018, Alberta Health Services, CKCM



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. The license does not apply to content for which the Alberta Health Services is not the copyright owner.

To view a copy of this license, visit

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

***Disclaimer:*** This material is intended for use by clinicians only and is provided on an "as is", "where is" basis. Although reasonable efforts were made to confirm the accuracy of the information, Alberta Health Services does not make any representation or warranty, express, implied or statutory, as to the accuracy, reliability, completeness, applicability or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional. Alberta Health Services expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Select orders by placing a (✓) in the associated box

 For more information, see Clinical Knowledge Topic **ERAS Pancreas Surgery, Adult – Inpatient**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

<b>Admit, Transfer, Discharge</b>		
<input type="checkbox"/> Anticipated Date of Discharge (dd-Mon-yyyy): _____		
<b>Patient Care</b>		
<i>Discuss Goals of Care with patient/Alternate Decision-Maker and update Goals of Care Designation, if applicable (#103547).</i>		
<input checked="" type="checkbox"/> Sequential compression device (SCD): discontinue when ambulating well		
<b>Monitoring</b>		
<input checked="" type="checkbox"/> Vital Signs: assess as per local institutional practices <input checked="" type="checkbox"/> Opioid Monitoring: monitor as per local institutional practices <input checked="" type="checkbox"/> Pain Score and Nausea Score: assess at least every 4 hours x 3 days <b>and then</b> every 8 hours <input checked="" type="checkbox"/> Blood Glucose Monitoring Point of Care Testing (POCT): QID x 48 hours. Notify most responsible health practitioner if blood glucose is less than 4 mmol/L or greater than 12 mmol/L <input type="checkbox"/> Other Monitoring: _____		
<b>Activity</b>		
<input checked="" type="checkbox"/> Activity as tolerated <ul style="list-style-type: none"> <li>• POD 0: stand at bedside, up in chair, walk to doorway and back; activity goal is 2 hours</li> <li>• POD 1: up in chair each meal, ambulate at least 3 times daily; activity goal is 4 hours</li> <li>• POD 2 until discharge: up in chair each meal, ambulate at least 3 times daily; activity goal is 6 hours</li> </ul> <input checked="" type="checkbox"/> Notify physiotherapist if pre-operative mobility concerns or if patient requires more than one-person assist		
<b>Intake and Output</b>		
<input checked="" type="checkbox"/> Intake and Output: assess every 8 hours x 4 days, include strict oral intake <input checked="" type="checkbox"/> Indwelling Urinary Catheter: remove on POD 1 in AM <input checked="" type="checkbox"/> In and Out Urinary Catheter: insert PRN for urinary retention once indwelling urinary catheter removed <input checked="" type="checkbox"/> Weight: assess daily x 3 days, start on POD 1 <input type="checkbox"/> Nasogastric Drainage Tube: connect to low intermittent suction <input type="checkbox"/> Active Suction Drain(s): reprime every 8 hours and PRN, record output <input type="checkbox"/> Other Intake and Output: _____		
Prescriber Signature	Date (dd-Mon-yyyy)	Time (hh mm)

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

Diet/Nutrition		
<i>For Distal Pancreatectomy procedure:</i>		
Choose ALL:	{	<input type="checkbox"/> Post-Surgical Transition Diet: start on POD 0 <input type="checkbox"/> Clinical Communication: offer patient oral fluids; intake goal 500 mL on POD 0 <b>Protein/Calorie Dense Oral Nutritional Supplements</b> <i>Appropriate when patient is on any type of oral diet including Gluten-free and Diabetic - Adult. Suitable for lactose intolerance but NOT appropriate for dairy allergy. Achieve a supplement intake of 300 kcal/day on POD 0 and 600 kcal/day on POD 1 until discharge.</i> <input type="checkbox"/> Ensure Protein Max: 90 mL PO 3 times daily, start on POD 0 <b>and then</b> 90 mL PO 5 times daily, start on POD 1 until discharge
		<b>AND Choose ONE:</b> <input type="checkbox"/> Regular Diet: start after tolerating Post-Surgical Transition Diet for 48 hours <input type="checkbox"/> Regular Diabetic – Adult Diet: start after tolerating Post-Surgical Transition Diet for 48 hours
<i>For Total Pancreatectomy procedure:</i>		
Choose ALL:	{	<input type="checkbox"/> Clear Fluids: start on POD 0 <input type="checkbox"/> Clinical Communication: offer patient oral fluids; intake goal 500 mL on POD 0 <input type="checkbox"/> Post-Surgical Transition Diet: start on POD 1 <input type="checkbox"/> Regular Diabetic – Adult Diet: start after tolerating Post-Surgical Transition Diet for 48 hours <b>Protein/Calorie Dense Oral Nutritional Supplements</b> <i>Appropriate when patient is on any type of oral diet including Gluten-free and Diabetic - Adult. Suitable for lactose intolerance but NOT appropriate for dairy allergy. Achieve a supplement intake of 300 kcal/day on POD 0 and 600 kcal/day on POD 1 until discharge.</i> <input type="checkbox"/> Ensure Protein Max: 90 mL PO 3 times daily, start on POD 0 <b>and then</b> 90 mL PO 5 times daily, start on POD 1 until discharge
		<b>AND Choose ONE:</b> <input type="checkbox"/> Regular Diet: start after tolerating Post-Surgical Transition Diet for 48 hours <input type="checkbox"/> Regular Diabetic – Adult Diet: start after tolerating Post-Surgical Transition Diet for 48 hours
<i>For Whipple procedure with Pancreaticojejunostomy:</i>		
Choose ALL:	{	<input type="checkbox"/> NPO: start on POD 0 <input type="checkbox"/> Clear Fluids: start on POD 1 <input type="checkbox"/> Clinical Communication: offer patient oral fluids; intake goal 500 mL on POD 1 <input type="checkbox"/> Post-Surgical Transition Diet: start on POD 2 <b>Protein/Calorie Dense Oral Nutritional Supplements</b> <i>Appropriate when patient is on any type of oral diet including Gluten-free and Diabetic - Adult. Suitable for lactose intolerance but NOT appropriate for dairy allergy. Achieve a supplement intake of 600 kcal/day on POD 1 until discharge.</i> <input type="checkbox"/> Ensure Protein Max: 90 mL PO 5 times daily, start on POD 1 until discharge
		<b>AND Choose ONE:</b> <input type="checkbox"/> Regular Diet: start after tolerating Post-Surgical Transition Diet for 48 hours <input type="checkbox"/> Regular Diabetic – Adult Diet: start after tolerating Post-Surgical Transition Diet for 48 hours
Prescriber Signature	Date (dd-Mon-yyyy)	Time (hh mm)

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

*For Whipple procedure with Pancreaticogastrostomy:*

- Choose ALL:
- NPO: start on POD 0
  - Clear Fluids: start on POD 2
  - Clinical Communication: offer patient oral fluids; intake goal 500 mL on POD 2
  - Post-Surgical Transition Diet: start on POD 3
  - Protein/Calorie Dense Oral Nutritional Supplements**  
*Appropriate when patient is on any type of oral diet including Gluten-free and Diabetic - Adult. Suitable for lactose intolerance but NOT appropriate for dairy allergy. Achieve a supplement intake of 600 kcal/day on POD 2 until discharge.*
    - Ensure Protein Max: 90 mL PO 5 times daily, start on POD 2 until discharge
- AND Choose ONE:**
- Regular Diet: start after tolerating Post-Surgical Transition Diet for 48 hours
  - Regular Diabetic – Adult Diet: start after tolerating Post-Surgical Transition Diet for 48 hours
- Other Diet/Nutrition: \_\_\_\_\_

**Wound Care**

- Surgical Incisions: assess every 8 hours and PRN
- Wound Dressing Instructions: \_\_\_\_\_
- Active Surgical Drain(s) Care: assess and change dressing daily and PRN

**Respiratory Care**

- Incentive Spirometry: perform every 1 hour while awake
- Oxygen Therapy: titrate to saturation, maintain SpO<sub>2</sub> greater than 92%
- Head of Bed: elevate to at least 30 degrees while patient on opioids or epidural
- Other Respiratory Care: \_\_\_\_\_

**Laboratory Investigations**

- Complete Blood Count (CBC) with differential, start on POD 1 in AM and repeat daily x 5 days  
*If patient is receiving VTE prophylaxis choose repeat CBC with differential:*
- Complete Blood Count (CBC) with differential, start on POD 1 in AM and repeat every 3 days x 5 times
- PT INR, start on POD 1 in AM and repeat daily x 5 days
- PTT, start on POD 1 in AM and repeat daily x 5 days
- ALP, start on POD 1 in AM and repeat daily x 5 days
- ALT, start on POD 1 in AM and repeat daily x 5 days
- AST, start on POD 1 in AM and repeat daily x 5 days
- Bilirubin Total, start on POD 1 in AM and repeat daily x 5 days
- Calcium (Ca), start on POD 1 in AM and repeat daily x 5 days
- Creatinine, start on POD 1 in AM and repeat daily x 5 days
- Electrolytes (Na, K, Cl, CO<sub>2</sub>), start on POD 1 in AM and repeat daily x 5 days
- Glucose Random, start on POD 1 in AM and repeat daily x 5 days
- Lipase, start on POD 1 in AM and repeat daily x 5 days
- Magnesium (Mg), start on POD 1 in AM and repeat daily x 5 days
- Phosphate, start on POD 1 in AM and repeat daily x 5 days

Prescriber Signature	Date (dd-Mon-yyyy)	Time (hh mm)
----------------------	--------------------	--------------

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

<b>Intravenous Therapy</b>		
<input checked="" type="checkbox"/> sodium chloride 0.9% lock when patient tolerating oral fluid intake <input checked="" type="checkbox"/> lactated ringer's infusion IV at 75 mL/hour if patient <b>not</b> tolerating oral fluid intake, lock when patient tolerating oral fluid intake <input type="checkbox"/> potassium chloride 20 mmol in dextrose 5% (D5W) – sodium chloride 0.45% infusion IV at 75 mL/hour if patient <b>not</b> tolerating oral fluid intake, lock when patient tolerating oral fluid intake <input type="checkbox"/> Other Intravenous Therapy: _____		
<b>Medications</b>		
<b>VTE Prophylaxis</b>		
<i>Refer to AHS Provincial Clinical Knowledge Topic: VTE Prophylaxis, Adult – Inpatient. Refer to AHS VTE Weight-Band Table if patient has reduced renal function or is less than 40 kg or greater than 100 kg.</i> <i>If patient has undergone abdominopelvic cancer surgery or is at increased risk of VTE (refer to AHS Venous Thromboembolism Prophylaxis Guideline) consider extended prophylaxis (up to 4 weeks post-discharge) with low molecular weight heparin (LMWH).</i>		
Choose ONE:		
<input type="checkbox"/> tinzaparin 4500 units SUBCUTANEOUSLY once daily at _____ hours (hh mm), start on POD ____ until discharge <input type="checkbox"/> tinzaparin 4500 units SUBCUTANEOUSLY once daily at _____ hours (hh mm), start on POD ____ and extend therapy for 28 days <input checked="" type="checkbox"/> Teach LMWH self-injection in preparation for discharge <input type="checkbox"/> Other VTE Prophylaxis: _____		
<b>Antilucer Agents and Acid Suppressants</b>		
Choose BOTH:		
<input type="checkbox"/> pantoprazole 40 mg IV daily x 48 hours <b>AND THEN</b> <input type="checkbox"/> pantoprazole EC tab 40 mg PO daily before breakfast until discharge, start after 48 hours of IV pantoprazole		
<b>Bowel Stimulation</b>		
<input checked="" type="checkbox"/> Chew gum 3 times daily (minimum 30 minutes each time), as tolerated <input type="checkbox"/> Other Bowel Stimulation: _____		
Prescriber Signature	Date (dd-Mon-yyyy)	Time (hh mm)

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

**Medications, continued**
**Analgesics**

Consider non-opioid analgesia or appropriate opioid-sparing multimodal analgesia. If needed, short acting opioids are recommended. Long acting opioids should be avoided.

- Follow Anesthesia/Acute Pain Service orders for continuous regional epidural, nerve block therapy and/or patient controlled analgesia (PCA)
- Follow Surgery orders for patient controlled analgesia (PCA)

**Prophylaxis Analgesics**

Consider dose reduction if patient is elderly.

- acetaminophen 975 to 1000 mg PO every 6 hours x 48 hours **and then** acetaminophen 975 to 1000 mg PO every 6 hours PRN for pain. Maximum of 4000 mg acetaminophen in 24 hours from all sources

Use caution if patient has renal impairment or is at high risk of acute kidney injury.

- ibuprofen 400 mg PO every 6 hours x 48 hours **and then** ibuprofen 400 mg PO every 6 hours PRN for pain

**OR**

If patient is NPO choose **BOTH**:

Use caution if patient has renal impairment or is at high risk of acute kidney injury.

- ketorolac 30 mg IV every 8 hours x 48 hours

**AND THEN**

Use caution if patient has renal impairment or is at high risk of acute kidney injury.

- ibuprofen 400 mg PO every 6 hours PRN for pain, start after 48 hours of ketorolac

**PRN Oral Opioids** (for pain not controlled by non-opioid analgesia)

Consider dose reduction if patient is elderly or opiate-naïve.

- oxyCODONE 5 to 10 mg PO every 4 hours PRN for pain not controlled by non-opioid analgesia

**PRN Parenteral Opioids** (for pain not controlled by oral opioids, or oral analgesia is contraindicated)

Consider dose reduction if patient is elderly or opiate-naïve.

Choose **ONE**:

- morphine 1 to 10 mg IV/SUBCUTANEOUSLY every 4 hours PRN for pain not controlled by oral opioids
- HYDROMORPHONE 0.5 to 2 mg IV/SUBCUTANEOUSLY every 4 hours PRN for pain not controlled by oral opioids
- Other Analgesics: \_\_\_\_\_

Prescriber Signature

Date (dd-Mon-yyyy)

Time (hh mm)

**ERAS Pancreas Surgery, Adult – Inpatient  
Post-Op Order Set**

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

**Medications, continued**
**Antiemetics**
**Prophylaxis Antiemetics**

*Consider dose reduction if patient is elderly or has reduced renal function.*

Choose **BOTH**:

- ondansetron 8 mg PO/NG (or ODT if difficulty swallowing or active vomiting with no IV access) every 8 hours x 48 hours **and then** ondansetron 4 mg PO/NG every 8 hours PRN
- ondansetron 4 mg IV every 8 hours x 48 hours **and then** ondansetron 4 mg IV every 8 hours PRN if oral dose is **not** tolerated

**PRN Antiemetics**

*Consider dose reduction if patient is elderly or has reduced renal function.*

- metoclopramide 10 mg PO/NG/IV/IM every 6 hours PRN
- dimenhydrinate 25 to 50 mg PO/IV/IM every 4 hours PRN
- Other Antiemetics: \_\_\_\_\_

**Glycemic Management Medications**

*Refer to AHS Perioperative Management of Patients with Diabetes Mellitus, Adult – Inpatient Clinical Knowledge Topic.*

- Intravenous insulin infusion for NPO adult diabetic patient as per local institutional practices
- AHS Basal Bolus Insulin Therapy (BBIT)

**Other Medications**

*If patient has neuroendocrine tumour consider octreotide:*

- octreotide 100 mcg SUBCUTANEOUSLY TID until discharge
- Provide prescription/letter to patient for Hemophilus influenza, Pneumococcus, Meningococcus vaccinations, if applicable

**Patient Teaching**

- Other Patient Teaching: \_\_\_\_\_

**Consults and Referrals**

- Diabetes Inpatient Educator
- Physiotherapy
- Registered Dietitian
- Social Work
- Transition Services
- Other Consults and Referrals: \_\_\_\_\_

**Other Orders**

- \_\_\_\_\_
- \_\_\_\_\_

Prescriber Signature

Date (dd-Mon-yyyy)

Time (hh mm)