

UNIVERSITY OF VIRGINIA HEALTH SYSTEM



1100000

Heart Center

Clinical Pathway: **Single Lung Transplant**

Diagnosis:

DRG/LOS: 495/14 days

Date Initiated _____ *Initials* _____

Date Discharged _____ *Initials* _____

PLACE LABEL HERE.

IF LABEL NOT AVAILABLE, WRITE IN PT NAME & MR#

Date:	Pre-transplant	ADMIT/DOS	POD 1	POD 2	POD 3	POD 4	POD 5-14	Post discharge
Assessment	Vital signs H&P	Adult Screening tool Height, Weight VS Policy Post-op: Systems assessment Q 1 hour Cardiac monitoring	Systems assessment q 1h Weight Cardiac monitoring Assess need for consults: PT, OT, Nutrition, RT	PO/TIMU Assessment Policy TIMU/4W Assessment Policy TIMU/4W Vital Sign Policy Cardiac monitoring Weight	TIMU/4W Assessment Policy Cardiac monitoring Weight	TIMU/4W Assessment Policy TIMU/4W Vital Sign Policy D/C Cardiac Monitoring Weight	4W Assessment policy 4W Vital Sign Policy Daily Weights	VS, weight with labs and clinic visits
Tests	PFTs Evaluation Labs CXR, EKG, ECHO, Chest CT, V/Q scan Abdominal U/S, DEXA, Cardiac Cath Neuropsych	Labs per lung transplant guideline Port CXR	Labs per lung transplant guideline Port CXR Bronch	Labs per lung transplant guideline Port CXR	Labs per lung transplant guideline Port CXR	Labs per lung transplant guideline Port CXR	Labs per lung transplant guideline Port CXR after chest tube removal Chest PA and Lat q 3 days	Comp chem, Mag, Phos LDH, CBC, plt, Ck, UA, Prograf/CsA q month Basic Chem, Ca, Mg, Phos, CBC, Plt, Prograf/CsA weekly X 6 mo, then bi-weekly Clinic: PFTs, CXR
Activities	Ad Lib	Bed rest Turn q 2H	Raise HOB for Comfort and to facilitate ventilation OOB to chair With assist	Ambulate in room with assistance Assist with ADLs Physical Therapy Exercises	Ambulate in room with assistance Physical Therapy Exercises	Ambulate in hall with assistance Physical Therapy Exercises	Ambulate in hall without assistance Physical Therapy Exercises	Pulmonary rehabilitation

References: Tucker, Susan Martin et al. *Patient Care Standards: Collaborative Practice Planning Guides*, 1996, 6th edition, St. Louis, MO: Mosby-Year Book, Inc. Perry, Anne Griffin & Potter, Patricia A. *Clinical Nursing Skills & Techniques*, 1998, 4th edition, St. Louis, MO: Mosby Year-Book, Inc. Boggs, Rochelle Logston & Wooldridge-King, Maribeth. *AACN Procedure Manual for Critical Care*, 1993, 3rd edition, Philadelphia: W.B. Saunders Co. Finkelmeier, B.A. *Cardiothoracic Surgical Nursing*. 1997, St. Louis, MO: Mosby Year-Book Inc. Fahey, V. *Vascular Nursing*, 1998, 3rd edition, St. Louis, MO: Mosby Year-Book, Inc.

Date:	Pre-transplant	ADMIT/DOS	POD 1	POD 2	POD 3	POD 4	POD 5-14	Post discharge
Medications/ Treatments	Continue all meds until time of transplant call	Chlorhexidine Shower Continue meds except Coumadin NSAIDS, OHA. Insulin does per TCV Service Ancef OC to OR <u>Intra-OP:</u> Imuran 2.5 mg/kg Solumedrol 1 Gm <u>Post-op:</u> Zenapax 1 mg/kg in 50 ml given IV over 15 min (and repeated q 2 weeks for total of 5 doses) Solumedrol 250 mg q 8h x 3 doses Pepcid 20 mg q 12 h Antibiotics Vasoactive infusions per TCV order sets Fluid /electrolyte replacement per TCV orders Glucose Management Order set Pain management: IV narcotics CMV prophylaxis per lung transplant guidelines	Solumedrol 10 mg IVF BID or Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Cyclo drip if unable to take meds po or ng to maintain TDx range 300-350 Imuran 2 mg/kg IV or PO Epidural for pain management Heparin 5000u SQ Q 12 hours	Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Imuran 2 mg/kg IV If taking po, Mycophenolate mofetil 1000mg every 12 H. PCP prophylaxis Candidiasis prophylaxis	Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Imuran 2 mg/kg IV If taking po, Mycophenolate mofetil 1000mg every 12 H. Ascorbic Acid 500 OBR PCP prophylaxis Candidiasis prophylaxis D/C epidural (if chest tubes out) If Hyperglycemic - Endocrine consult	Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Imuran 2 mg/kg IV If taking po, Mycophenolate mofetil 1000mg every 12 H. Ascorbic Acid 500 OBR Candidiasis prophylaxis PCP prophylaxis	Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Imuran 2 mg/kg IV If taking po, Mycophenolate mofetil 1000mg every 12 H. Ascorbic Acid 500 OBR Candidiasis prophylaxis PCP prophylaxis ASA 81 mg CMV prophylaxis per lung transplant guidelines	Prednisone 20 mg q day Prograf 1 mg po / NGT q 12 to maintain level 10-15 Imuran 2 mg/kg IV If taking po, Mycophenolate mofetil 1000mg every 12 H. Ascorbic Acid 500 OBR Candidiasis prophylaxis PCP prophylaxis ASA 81 mg CMV prophylaxis per lung transplant guidelines

References: Tucker, Susan Martin et al. *Patient Care Standards: Collaborative Practice Planning Guides*, 1996, 6th edition, St. Louis, MO: Mosby-Year Book, Inc. Perry, Anne Griffin & Potter, Patricia A. *Clinical Nursing Skills & Techniques*, 1998, 4th edition, St. Louis, MO: Mosby Year-Book, Inc. Boggs, Rochelle Logston & Wooldridge-King, Maribeth. *AACN Procedure Manual for Critical Care*, 1993, 3rd edition, Philadelphia: W.B. Saunders Co. Finkemeier, B.A. *Cardiothoracic Surgical Nursing*. 1997, St. Louis, MO: Mosby Year-Book Inc. Fahey, V. *Vascular Nursing*, 1998, 3rd edition, St. Louis, MO: Mosby Year- Book, Inc.



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Date:	Pre-transplant	ADMIT/DOS	POD 1	POD 2	POD 3	POD 4	POD 5-14	Post discharge
Medications/ Treatments	Pulmonary rehab Follow up appt q 3 months and prn	Invasive lines: • PA • A-line • NGT • Chest tubes • Foley • IV/CVP • ETT Mechanical ventilation DVT prophylaxis	Change PA cath to triple lumen CVP TCVPO Wean Extubation Policy Incentive spirometry q 2H Deep breathe/cough q 2H Knee high TEDs	D/C Art Line O2 per NC to maintain sats> 90% D/C NGT after extubation Incentive spirometry q 2H Deep breathe/cough q 2H Knee high TEDs	Remove CT dressing 48 H after CT d/ced (if no drainage) D/C foley Incentive spirometry q 2H Deep breathe/cough q 2H Knee high TEDs	PICC line if needs home ganciclovir Thoracotomy incision open to air (cover if draining) Wean Oxygen to maintain sat >90% Incentive spirometry q 2H Deep breathe/cough q 2H Knee high TEDs	Incentive spirometry q 2H Deep breathe/cough q 2H Wean oxygen and D/C if sat >90% Staples out	Remove staples if needed
Nutrition	Home diet	NPO until extubated	Clear liquids after extubation	Advance diet as tolerated	Regular	Regular	Regular	Home diet per dietician recs
Discharge Planning / Instruction	Pre-op: NPO after call Incision Pain Meds Post transplant meds Post transplant care TC&DB/IS Financial Needs (medication coverage)	Reinforce teaching: Incision Pain TCDB/IS Activity Procedures Orientation to TCVPO visiting, family waiting	Pulmonary hygiene	Incision care Medications Pulmonary Hygiene	Incision care Medications S/S rejection and infection Nutrition	Incision care Medications S/S rejection and infection Prevention of infection	Labs/vital signs CMV prophylaxis PICC line care Smoking/risk factor reduction Weight Importance of follow up with transplant team Medications/ outpatient Rx Home health referral Pulmonary rehab referral Lab orders/ referral	Medications Health maintenance

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Date:	Pre-transplant	ADMIT/DOS	POD 1	POD 2	POD 3	POD 4	POD 5-14	Post discharge
Outcomes	Ready for Surgery	Recovery from anesthesia Hemodynamic stability Baseline neurologic function Adequate oxygenation	Pain control Extubated Skin integrity	Pain control OOB Taking po meds/ fluids Weight within 3 kg of baseline	Pain control Ambulating in room Bowel movement Foley out Prograf level 10-15	Pain Control CT out Ambulating in hall	Pain Control Off supplemental oxygen ADL independence Pt identifies medications/effects Identifies home routine (labs, rehab, vital signs, home health) Free of infection/ rejection Meets discharge criteria	Increased activity tolerance/ participation in rehab Maintains prognaf level 8-12 Free of infection/ rejection Renal function WNL

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Patient Education Plan	Pre-transplant	ADMIT/DOS	POD 1	POD 2	POD 3	POD 4	POD 5-14	Post discharge	
Diagnosis/reason admission • Pre-op teaching • Transplant manual									
Medications • Anti-rejection • Antibiotics • GI • Drug interactions									
Pain Management • Pain meds • Epidural/PCA									
Nutrition • Diet • Food/drug interactions									
Wound & Tube Care • Incision • Chest tube									
Use Equipment • TED • Incentive Spirometer • Oxygen • Flutter valve									
Safety/Activity • Lifting									
Procedures/tests • Accucheck • Labs									
Learning Barriers N - None * E - emotional * ED - educational * O - cognitive * = Requires explanation in Progress Note		Teaching Method E - Explanation D - Demonstration V - Video * P - physical * C - cultural * L - language			Patient/Family Response H - Handout T - Translator		1 - indicates understanding &/or performs successfully or goals met. 1A. Patient or 1B. Family 2 - needs reinforcement/repetition 3 - needs complete review 4 - unable to complete teaching		

ALTERNATIVE PATHWAY OR PLAN OF CARE INITIATED FOR THIS PATIENT ON DATE _____ INITIALS _____

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