

**University of Michigan Hospitals  
Apheresis Service**

**Name:** \_\_\_\_\_ **Location:** \_\_\_\_\_

**CPI#:** \_\_\_\_\_ **Age:** \_\_\_\_\_ (M/F)

**House Officer (Name/pager):** \_\_\_\_\_

**Attending (Name/pager)** \_\_\_\_\_

**Procedure Requested:** \_\_\_\_\_

**Reason/Recent PMH:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Medical History:** BP: \_\_\_\_\_ Pulse: \_\_\_\_\_ Height: \_\_\_\_\_ Weight: \_\_\_\_\_

Allergies: \_\_\_\_\_ Hx Transfusion?/Rxn?: \_\_\_\_\_

Neuro: alert/cooperative \_\_\_\_\_

Cardiac: \_\_\_\_\_

Pulmonary: \_\_\_\_\_

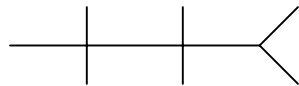
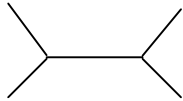
Renal: \_\_\_\_\_

Hematology: Bleeding risk with citrate/plt loss? \_\_\_\_\_

Venous Access (circle/see back):      Peripheral      Dialysis Catheter      A-V fistula (CRF)

**Pertinent Laboratories:** \_\_\_\_\_ ABO/Rh \_\_\_\_\_

CBC: \_\_\_\_\_ Electrolytes: \_\_\_\_\_ PT/PTT \_\_\_\_\_



Total Protein \_\_\_\_\_

Albumin \_\_\_\_\_

Ionized Ca<sup>++</sup> \_\_\_\_\_

Other (ex LDH): \_\_\_\_\_

\_\_\_\_\_

**Medications\*\*:** \_\_\_\_\_

\_\_\_\_\_

**\*\*STOPPED: ACE-Inhibitors** (Lotensin/Benazepril, Capoten/Captopril, Vasotec/ Enalapril, Monopril/ Fosinopril, Zestril/Prinivil/Lisinopril, Accupril/Quinapril, Univasc/Moesipril, Altace/Ramipril, Movik/Trandolopril)

**Diabetic,** patient receiving insulin? eat prior to procedure? (risk for hypoglycemia)

**Other:** *Hold next dose until after procedure*, since these drugs may be removed with TPEX or may aggravate patient's medical condition. For example, try holding antihypertensives since hypotension already risk of TPEX.

**Protein-bound Drugs:** Dilantin, Valproic Acid, Vincristine, Cisplatin, Digitoxin, Warfarin, Diuretics, Synthetic Penicillin, Oral hypoglycemics,

**Immune-based Drugs:** thymoglobulin, ATGAM, IVIgG, etc..

## Pheresis Orders

### Emergent (As Soon As Possible)

Acute TTP/HUS  
 Symptomatic Hyperviscosity  
 Symptomatic Hyperleukocytosis (AML)  
 Thrombocytosis (>750K) with bleeding  
     Or thrombosis or platelets >1.5million  
 Goodpastures with active pulmonary hemorrhage  
 Acute Vascular Rejection Heart (biopsy +)

### Urgent (within 24 hours)

recovering TTP/HUS  
 Acute Guillain-Barre Syndrome  
 Asymptomatic Hyperviscosity  
     plasma viscosity>4 or IgM>3gm  
 Acute Vascular Rejection Kidney  
     Bx + or PRA+ or crossmatch+  
 FSGS post-kidney transplant

## Venous Access

### Peripheral Access:

1. Patient alert, cooperative, adequate  
 bilateral antecubital access (16 gauge needles)  
     \*\*placed by apheresis nurses NOT floor!!
2. A-V fistula in chronic dialysis patient

### Central access Required

Poor venous access, intubated,  
 noncooperative, daily procedures  
 \*\*Require: dialysis double lumen catheter  
 Sorenson or Quintan dialysis catheter

## Therapeutic Apheresis/Cytopheresis

<b>Indication:</b>	<b>Replacement:</b>	<b>Frequency</b>	<b>Laboratories</b>
TTP/HUS	FFP/PPP	q Day	ABO type, pre-CBC, LDH, Bun/Cr
Acute rej. Liver	2 liters FFP	q Day x 3	(Pre-HLA, ABO if indicated)*
Goodpastures with Active hemorrhage	+ albumin 1 plasma vol	q O Day	Pre/post Fibr
TPEX + bleeding*			Pre/post Fibr
Waldenstroms		q O Day x 3-6	Pre/Post Fibr, IgM, viscosity, TP, alb
FSGS		3 q wk x 9-10	Pre/Post Fibr
TPEX, elderly	100% albumin	q O Day	Pre/Post Fibr, TP, alb
TPEXw/↓↓TP	1 plasma vol		Pre/post Fibr, alb
(TPEX w/↓↓Na+)*			Pre/Post Fibr
MG, GBS, CIDP		q O Day	Pre/Post Fibr
Trnsplt Rejection		qDx2, qoDx3	Pre/Post Fibr
Goodpastures	saline/albumin	q O Day (!)	Pre/Post Fibr
Cryoglobulin	1 plasma vol	1-2x*	Pre/Post Fibr, cryocrit
Multiple Myeloma		q O D 1-2x	Pre/Post Fibr, TP, alb, Quant. Ig [G/A/M] & viscosity (if needed)
<u>Sickle Cell*</u>	LP-RBC (Adsol)		
Acute Chest	10-14 days old		Current Type & Cross
Stroke	Sickedex neg	Once only	Pre/Post CBC, ionized Ca++
Priapism	Final Hct=30% FCR=30%		Pre/Post Hgb electrophoresis Post K+
<u>Cytoreduction</u>			Pre/Post CBC (w diff-WBC)
AML/rare ALL*	None	Once	Post WBC&diff -bag (WBC)
Thrombocytosis	2 blood vol		Post Plt cnt-bag (Plt reduct)
Polycythemia			

\*call BB attending