

## Pre-pheresis:

1. The Consult service (Neurology, Endocrinology, Rheumatology, Nephrology, etc.) requesting plasma exchange (PLEX) is responsible for the following:
  - a. Paging the Pheresis Service attending physician, present the case, and get approval for PLEX. During normal business hours, the Pheresis Service is covered by the Heme/Onc Consult attending physician; after hours, the service is covered by the Oncology Ward Service attending physician.
  - b. Establish the initial PLEX goals (exchange volume and number of days, specifying number of days and frequency, and anticipated duration). When these parameters have not yet been established, the exchange volume should be 1.0 with duration of three days. This information should be communicated to the Pheresis Service attending when presenting the case;
  - c. Get the patient to sign the informed consent for pheresis consent form (which is separate from the line placement consent form);
  - d. Communicate the treatment plan to the IM Team.
2. The IM Team to which the patient is assigned is responsible for:
  - a. Arranging for the placement of the pheresis catheter (a dedicated dialysis line);
  - b. Checking with the nursing unit where the patient is located that pheresis can be performed on that unit;
  - c. Calling the ANO office (ext 7-3170) and requesting a pheresis contractor be contacted to begin service.  
Note: the ANO office will not call the outside vendor until the line is placed and PLEX orders placed in ORCHID.
3. Placing the pheresis orders in ORCHID:
  - a. When pheresis is requested by any Consulting Division within the Dept of Medicine, the pheresis orders will be placed by the requesting Consult division; in all other settings (e.g., Department of Neurology, Surgery, OB/GYN), the pheresis orders will be placed by the Pheresis Service attending physician.

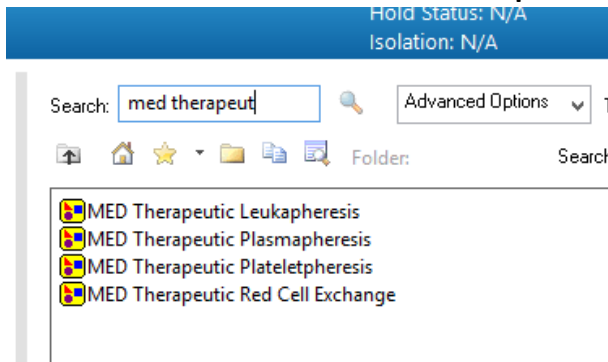
When setting up pheresis, the consulting service and IM team should recognize that owing to the multiple steps involved, and the reliance of an outside pheresis vendor with finite capacity, delays in initiating pheresis may be encountered. The consulting service and IM team should assess the appropriate time frame for commencing pheresis, based on the acuteness and severity of the condition being treated, and communicate expectations for the initiation of the service with the ANO.

## Placing PLEX orders in ORCHID

Prior to placing PLEX orders in ORCHID, calculate the patient's plasma volume, using an online calculator such as <https://www.mdcalc.com/blood-volume-calculatio>. For all non-hematological conditions, the replacement fluid will be **ALBUMIN 5% solution** and not FFP.

For the purposes of the example below, the plasma volume of 3500 mL will be used.

### 1. Place ORDER in ORCHID for **MED Therapeutic Plasmapheresis**:



### 2. When the order is selected, the following screen opens up- only a few items require modification:

The screenshot shows the ORCHID order entry screen for 'MED Therapeutic Plasmapheresis (Planned Pending)'. The screen is divided into several sections: Patient Care, Fluids/Continuous Infusions, Medications, and Central Venous Catheter Access. A red arrow points to the 'albumin human (albumin human 5% intravenous sol...' item in the Fluids/Continuous Infusions section. The table below lists the items and their details.

Component	Status	Dose ...	Details	Order Com...
<b>MED Therapeutic Plasmapheresis (Planned Pending)</b>				
Patient Care				
<input checked="" type="checkbox"/>	Plasmapheresis	T;N, QDAY, 1 Plasma Volume		
<input checked="" type="checkbox"/>	Notify Provider	T;N, Notify MD for BP < 90/50 mmHg or > 180/100 mmHg and for pulse rate < 50 min ...		
Fluids/Continuous Infusions				
<input type="checkbox"/>	Blood Product Transfusion Greater Than 30 kg			
<input type="checkbox"/>	Sodium Chloride 0.9%	2,000 mL, Soln-IV, Unscheduled, N/A   MACHINE PRIMING, Order Duration: 1 doses(tim...		
<input checked="" type="checkbox"/>	albumin human (albumin human 5% intravenous sol...	gm, IVPB, Form: Injection, Unscheduled, hr, machine priming	Use within 4...	
<input type="checkbox"/>	Anticoagulant Citrate Dextrose - A	T;N, Unscheduled, 1, doses(times), 1,000, mL		For machine...
Medications				
Anticoagulants				
<input type="checkbox"/>	heparin	4,000 units, N/A, Form: Injection, Unscheduled, Order Duration: 1 doses(times), Add int...		For 1st bag ...
<input type="checkbox"/>	heparin	4,000 units, N/A, Form: Injection, Unscheduled, Order Duration: 1 doses(times), Add int...		For 2nd bag ...
Pre-Treatment Medications				
<input checked="" type="checkbox"/>	diphenhydramine	25 mg, IV Push, Form: Injection, Unscheduled, Order Duration: 1 doses(times)		
<input checked="" type="checkbox"/>	acetaminophen	650 mg, Oral, Form: Tab, Unscheduled, Order Duration: 1 doses(times)		** Black Box ...
<input type="checkbox"/>	famotidine	20 mg, IV Push, Form: Injection, Unscheduled, Order Duration: 1 doses(times)		
<input type="checkbox"/>	hydrocortisone	100 mg, IV Push, Form: Powder-Inj, Unscheduled, Order Duration: 1 doses(times)		
<input type="checkbox"/>	methylPREDNISolone (methylPREDNISolone 125 mg i...	125 mg, IV Push, Form: Powder-Inj, Unscheduled, Order Duration: 1 doses(times)		
During Treatment				
<input checked="" type="checkbox"/>	calcium gluconate	2 gm, IVPB, Form: Injection, Unscheduled, hr, Order Duration: 1 doses(times), To preven...		
PRN Medications				
<input checked="" type="checkbox"/>	methylPREDNISolone (methylPREDNISolone 125 mg i...	125 mg, IV Push, Form: Powder-Inj, Unscheduled, PRN hypersensitivity, Order Duration:...		
<input checked="" type="checkbox"/>	hydrocortisone	100 mg, IV Push, Form: Powder-Inj, Unscheduled, PRN hypersensitivity, Order Duration:...		
<input checked="" type="checkbox"/>	EPINEPHrine (EPINEPHrine 1 mg/mL injectable soluti...	0.3 mg, Intramuscular, Form: Injection, ONCE, PRN anaphylaxis, STAT		
<input checked="" type="checkbox"/>	calcium gluconate	2 gm, IVPB, Form: Injection, Unscheduled, PRN other (see comment), infuse over 2 hr, ...	as needed f...	
<input type="checkbox"/>	calcium carbonate (calcium carbonate 500 mg (200 m...	500 mg, Chew, Form: Tab-Chew, Q30MIN-INT, PRN other (see comment), STAT, Equiv...		PRN citrate ...
<input checked="" type="checkbox"/>	Sodium Chloride 0.9% (Sodium Chloride 0.9% bolus)	200 mL, IV Bolus, Form: Soln-IV, Unscheduled, PRN other (see comment), Order Duratio...		Bolus as nee...
<input type="checkbox"/>	albumin human (albumin human 5% intravenous sol...	12.5 gm, IVPB, Form: Injection, Unscheduled, PRN other (see comment), hr		As needed f...
Central Venous Catheter Access				
<input type="checkbox"/>	Heparin Catheter Lock: Flush each lumen of catheter with 10 mL NS followed by instillation of heparin and NS to equal internal volume of each lumen			
<input type="checkbox"/>	heparin	5,000 units, Intracatheter, Form: Injection, Unscheduled, Order Duration: 2 doses(times),...		Instill one d...

3. To modify **Albumin human (albumin human 5% intravenous solution)**:

- a. Enter patient's calculated plasma volume (example here uses 3500) and units (mL); all other text box

The screenshot shows the 'Details for albumin human (albumin human 5% intravenous solution)' form. The 'Dose' field is set to 3,500 and the 'Volume dose unit' is set to mL. Red arrows point to these fields. Other fields include 'Route of administration: IVPB', 'Frequency: Unscheduled', and 'Drug Form: Injection'.

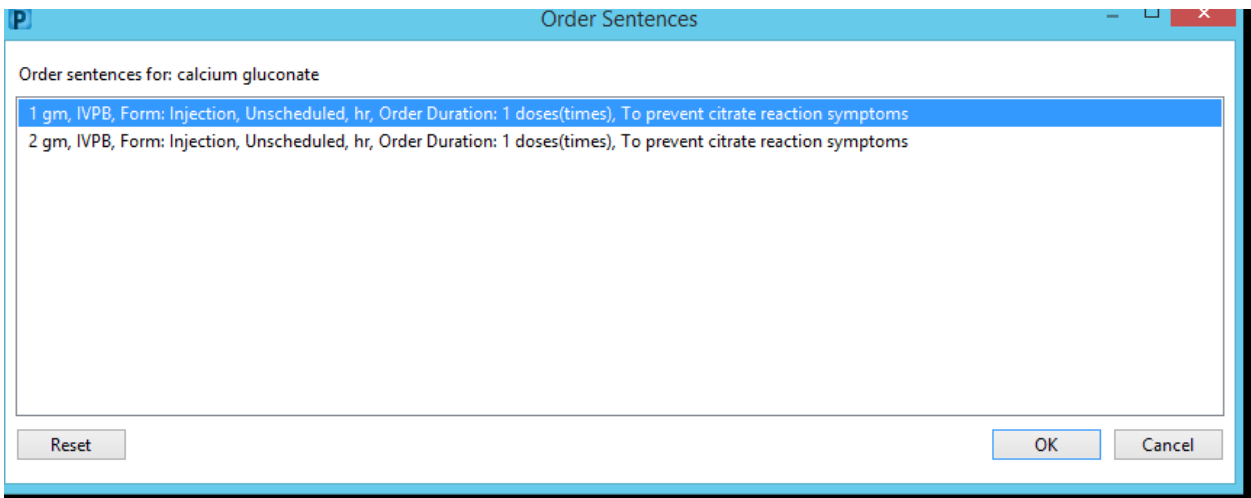
- b. In **Comments** box enter number of plasma exchanges per PLEX session; assume 1.0 unless instructed otherwise by consulting service

The screenshot shows the 'Order Comments' field for the albumin human 5% intravenous solution order. A red arrow points to the comment: "Please PLEX 1 plasma volume per PLEX session Plasma Volume = 3500mL".

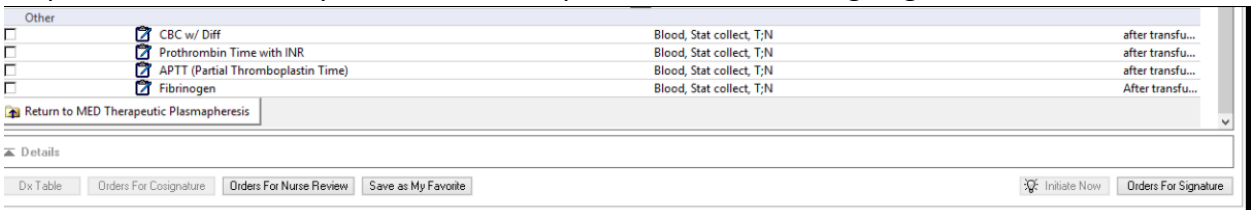
4. Modify **Calcium gluconate** order:

The screenshot shows a list of medications. A context menu is open over the 'calcium gluconate' entry, with the 'Modify' option selected. Other medications listed include calcium gluconate, calcium carbonate, sodium chloride 0.9%, albumin human, and central venous catheter access.

Select the "1 gm IVPB":



5. Request these laboratory studies be done q 12 hrs when PLEX ongoing:



6. Activate:

