

## **Creating a Beacon Treatment Plan Workflow**

- 1. Complete the protocol request form. The template can be found on CHPS website, Research Nursing Core page. under "EPIC/BEACON Info" section: https://www.itmat.upenn.edu/chps/epic-beacon.html
- 2. Email the protocol request form draft to Bonnie Falconer (<u>bonnie.falconer@pennmedicine.upenn.edu</u>) for CHPS review. The CHPS Inservice cannot be scheduled until the CHPS review of the protocol request form is complete.
- 3. Once you receive CHPS approval, submit the protocol request form to the Beacon Team by placing a ticket using the following link: <a href="Beacon Protocol Build Request.">Beacon Protocol Build Request.</a> A ticket will open in the IS Self Service Portal which will be sent directly to the Beacon Team once submitted. Attach the protocol request form to the ticket before clicking the **Submit** button.
- 4. When the Beacon Team has received the ticket, they will notify IDS to advise that a protocol request form was received for the study. This will trigger the pharmacist to submit a medication build request form to the Beacon Team for the Investigational medication(s) required for the study.
- 5. \*\*Please Note: IDS will not submit a medication build request form to the Beacon Team until after the SIV has been completed.
- 6. Once the Beacon Team has received the medication build request form from IDS, they will build the medications. They will then email the study team, PI, and IDS to approve the Beacon build extract and then pass it to the next reviewer while keeping everyone on the email so all are aware of the status.
- 7. When all approvals are received, the Beacon build will be put into production (will be available on Epic). Studies need an active protocol build in Epic in order for patients to receive treatment at CHPS.

## Why does CHPS Use Beacon Treatment Plans?

Beacon treatment plans are used for infusion areas. Because CHPS PCAM 4S is mapped as an infusion area, any orders are required to be in the context of a Beacon build.

## **Acknowledgement**

We appreciate that study teams often use the Beacon treatment plan as a reference for the study protocol. However, these are the official medical orders the CHPS RNs are working within under their nursing licenses. Therefore, we strive to minimize excess content and focus the attention of the Beacon build on the nursing orders for the safety of the patients. Please include provider and study team specific information in the "Provider Information" section of the build.

## **Advice for Conciseness**

Do not replicate information (the same information should not be included in multiple areas of the Beacon build.)

Do not include inclusion/exclusion criteria in the build—patients will not be assigned the Beacon treatment plan until after eligibility is confirmed.



## Help

Please contact Bonnie Falconer for CHPS Beacon build questions. Please email the Beacon Team at <a href="mailto:PennChartBeaconTeam@uphs.upenn.edu">PennChartBeaconTeam@uphs.upenn.edu</a> for Beacon-specific questions.

Please make sure you have the most up-to-date copy of this form by using the following hyperlink:  Beacon Protocol Request Form  If you have any questions, please email the following distribution group:  PennChartBeaconTeam@uphs.upenn.edu	Please provide the information applicable for the type of protocol requested.  Standard of Care (SOC) protocol requests must be discussed with the designated disease lead prior to request form submission.  Please submit an individual form for each arm of the study.
Protocol Title [include UPCC ID #, IRB #, CHPS # for studies] Protocol Description [displays when searching for protocol] Synonyms [aids in searching for protocol]  Dispensing Pharmacy for Investigational Meds [if applicable]	Please include all of the below:  Protocol Title  UPCC # if applicable  IRB#  CHPS#  IDS (and PCAM pharmacy if applicable)
Dispensing Pharmacy for SOC Meds [if applicable]	
Site where patient is likely to receive treatment Anticipated Date of Use / SIV Date	CHPS Outpatient PCAM: PCAM 4S CHPS Outpatient Presby: Presby Mutch CHPS Inpatient: Ravdin 6NE CHPS Scattersite: list unit where patient will be admitted (or unit specialty, ex: inpatient oncology unit)  If patient is also receiving treatment in SOC infusion area, please include as well.  Please include SIV date
Type of Protocol Request [Check all that apply]	SOC Investigational Oncology Non-Oncology Inpatient Outpatient (Mark all that apply)



Total Number of Cycles Cycle Length [specify if different between cycles] Days per Cycle [specify days eg. 1,8,15 and if different between cycles]	Example: 6 cycles 21 day cycle length, Days 1, 8, 15
Journal Article [Required for SOC protocol]	Reference Information: https://www (mark N/A for investigational protocols)
	Principal Investigator:
Required for investigational protocols	Phone number: Please include PI's cell phone number so RNs can directly reach them in case of emergency
	Research Nurse/Coordinator: Please keep this up to date
	Phone number:
Provider Information [information that the provider should know when applying the protocol to a patient]	Include: 1 sentence about patient population and 1 sentence about (each of) the investigational product(s). This helps provide important context to staff so they can provide more informed care to the patient.  If your PI has specific preferences about what they'd like to see, please include here. This should not be repetitive with information located elsewhere in the Beacon treatment plan. Do not copy and paste large sections of the protocol into this section.
Lab Reminders	If patient needs clinical labs, please list those here. Keep this concise.
[labs to be ordered outside of treatment plan and resulted prior to treatment] [indicate differences between cycles/days]	Also include: "Refer to CHPS Nursing Worksheets." If the study may also occur on the SOC Infusion area, please include: "For CHPS visits, refer to CHPS Nursing Worksheets."
	Keep this concise and specific to patients on study. Do not copy and paste inclusion/exclusion criteria from protocol.
Treatment Conditions [conditions in which treatment would be HELD and the provider contacted for approval to treat] [indicate differences between cycles/days]	Include any parameters that must be checked using lab values, not CTCAE grading or pages from the protocol.  For example:  "Hold treatment until resulted and notify prescriber if:  ANC < 1000/mm3  Platelets < 75,000 mm3  AST/ALT > 3 x ULN  Total Bilirubin > 1.5 x ULN  Serum Creatinine > 1.5 x ULN"
	Also include: "Study team to contact CHPS RN once treatment conditions are met to release IP." If this study may also occur on the SOC Infusion area, please include, "For CHPS visits, study team to contact CHPS RN once treatment conditions are met to release IP."



Nursing Instructions [indicate differences between cycles/days]	Please keep concise. Include information that is important for nurses to know, which includes but is not limited to:  - For oral medications, are there food restrictions before/after medication administration?  - Can the drug be infused through a central line?  - Are there any required post-dose monitoring periods?  Include: "Refer to CHPS Nursing Worksheets." If the study may also occur on the SOC Infusion unit, please include, "For CHPS visits, refer to CHPS Nursing Worksheets."
Prohibited Meds	Keep this concise.  Include, "Study team to review prohibited meds."
Take Home Med Reminders [prescriptions ordered outside of treatment plan for patient to take at home]	This is for prescriptions ordered outside of the treatment plan for patient to take at home. Leave blank if N/A.
Triage Documentation [note for triage purposes]	CHPS does not use the triage function, write N/A.
Research Information [for investigational protocols]	May include patient's study ID or leave blank. If there is a dose escalation schema, may include doses for each cohort here. Do not copy and paste tables into the build.  For example:  "Dosing schedule based on cohorts:  Cohort 1: Day 1 dose 0.15mg -> Day 8 dose 0.5mg -> Day 15 dose 1.5mg  Cohort 2: Day 1 dose 0.5mg -> Day 8 dose 1.5mg -> Day 15 dose 5mg  Cohort 3: Day 1 dose 1.5 mg -> Day 8 dose 5 mg -> Day 15 dose 15 mg"

## Medication administration and scheduling information:

## Pre-medications & Anti-emetics [include cycle and day med is given eg: Cycles:1-3 Days:1 & 8]

Medication [volume/diluent/ duration if IV	Dose	Route	Administration Instructions	Notes to Pharmacy	Outpatient Cycles: Days:	Inpatient Frequency/ Duration
mixture] If no premeds, write N/A.	Specific dose, not a range	Specify, for example: PO, IV	Include timeframe (example: Administer over 1 hour 30-60 minutes prior to investigational product infusion.)  This information will appear on the MAR.	Include any specific notes to pharmacist.	Specify, example: All Cycles, Days 1, 8, 15	Specify if inpatient, otherwise leave blank or mark N/A



	Pre-hydration [include cycle and day med is given eg: Cycles:1-3 Days:1 & 8]													
Medication [volume/diluent/ duration if IV mixture]	Dose	Route	Administration Instructions	Notes to Pharmacy	Outpatient Cycles: Days:	Inpatient Frequency/ Duration								
Mark as N/A if not applicable.			Specify rate of infusion and any other relevant timing. For example: "Administer over 1 hour, completing approximately 1 hour prior to starting IP."											



Medication [volume/diluent/ duration if IV mixture]	Dose	Route	Administration Instructions	Notes to Pharmacy [tubing]	Outpatient Cycles: Days:	Inpatient Frequency/ Duration
If the IP is placebo- controlled, specify, "AB-123 or placebo" in one row instead of putting "AB-123" in one row and "placebo" in another.	Include specific amount. If dose varies, include details in above "research information" section	Specify	<ul> <li>If there are multiple drugs given, specify the order of administration and any amount of wait time in between.</li> <li>Specify length of administration.</li> <li>Include any information about expiration time and/or if a filter is needed.</li> <li>Please reference the CHPS Flushing SOP before including information about a flush.</li> <li>This information will appear on the MAR.</li> </ul>		Example: Cycle 1 Day 1, 8, 15	Only use this column if this is an inpatient study



0.9% Normal Saline D5W Lactated Ringers	30 mL	IV	Include for investigational products given intravenously. Do not need to include administration instructions, as this is a placeholder for Beacon team to add a post-medication flush.	Should be same days as IV IP is given	

#### Supportive Care & Post Hydration [include cycle and day med is given eg: Cycles:1-3 Days:1 & 8] Medication Outpatient Inpatient Administration **Notes to Pharmacy Cycles:** Frequency/ [volume/diluent/ Dose Route duration if IV Instructions Days: Duration mixture] **Example:** 8mg IV Example: PRN once for All cycles, ondansetron days "ABnausea 123 or placebo" is Please include an indication (for example, nausea, a given pain score of 1-4). This is a regulatory requirement for all PRN medications. This needs to be more specific than "for infusion reaction." Please do not repeat medications that are already included in the emergency medication order set group



	210 (see last page of this document).		

Eı	Emergency Medications [include cycle and day med is given eg: Cycles:1-3 Days:1 & 8]											
Yes X Cycles												
If no, then specify desi	red medic	cations, be	elow if needed									
Medication	Dose	Route	Administration Instructions	Notes to Pharmacy	Outpatient Cycles: Days:	Inpatient Frequency/ Duration						



Please include any study-specific emergency meds (such as Ativan for seizure study.)					
All studies will include "Order Group #210 – Hypersensitivity/Anaph ylaxis Algorithm." This order group follows HUP's hypersensitivity algorithm and is required for all patients in the interest of patient safety. If there are concerns about using this order group, please notify Bonnie Falconer who will escalate to CHPS and IDS leadership.					



## Order Group #210 - Hypersensitivity/Anaphylaxis Algorithm

## → PRN Emergency Medications

### Nursing Instructions

EPINEPHrine is FIRST LINE therapy if criteria for anaphylaxis met Supplemental oxygen 4-8 L/min via nasal cannula Serum tryptase to be obtained within 90 minutes of symptom onset IV epinephrine should be started if unresponsive to IM EPINEPHrine after 3 doses

### EPINEPHrine 0.3 mg/0.3 mL injection 0.3 mg

0.3 mg, intraMUSCULAR, Every 5 minutes PRN, 3 doses, Starting when released, Sequential allergic algorithm management. Administer first if criteria met for anaphylaxis

0.3 mg intraMUSCULAR into the anterior-lateral thigh every 5 minutes up to 3 doses IF patient symptoms persist HIGH ALERT MEDICATION

### diphenhydramine 50 mg/mL injection 25 mg

25 mg, intraVENOUS, Every 4 hours PRN, 2 doses, Starting when released, Sequential allergic algorithm management. Administer following EPINEPHrine (if anaphylaxis) or administer first if isolated hives/angioedema.

25 mg intraVENOUS over 2 minutes every 4 hours for up to 2 doses if patient > 65 years old and/or if already pre-medicated Intravenous administration of up to 100 mg undiluted should be given at a rate of 25 mg/min.

### diphenhydramine 50 mg/mL injection 50 mg

50 mg, intraVENOUS, Every 4 hours PRN, 2 doses, Starting when released, Sequential allergic algorithm management. Administer following EPINEPHrine (if anaphylaxis) or administer first if isolated hives/angioedema.

50 mg intraVENOUS over 2 minutes every 4 hours for up to 2 doses. Intravenous administration of up to 100 mg undiluted should be given at a rate of 25 mg/min.

### methylPREDNISolone sodium succinate injection 125 mg

125 mg, intraVENOUS, Once PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management. Administer following diphenhydramine.

125 mg intraVENOUS over 2 minutes.

125 mg powder vials (Non Act-O-Vial) must be diluted with 2 mL of Sterile Water for Injection to yield a concentration of 125 mg/2 mL

### famotidine PF 20 MG/2ML injection 20 mg

20 mg, intraVENOUS, Once PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management. Administer following methylprednisolone.

Dilute famotidine 20 mg/2 mL with 3 mLs of NSS to a final volume of 5mLs.

Intravenous administration should be given over 2 mins. May administer undiluted or dilute famotidine 20 mg/2 mL with 3 mLs of NSS to a final volume of 5mLs.

#### sodium chloride 0.9 % infusion

500 mL/hr, intraVENOUS, Once PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management.

Sodium chloride 0.9% infusion intraVENOUS at 500 mL/hr and titrated based on vital signs. Indicated for the treatment of decreased blood pressure, increase in heart rate, symptoms of cardiovascular collapse (lightheaded, dizziness, hypotension) as defined by the anaphylaxis criteria

#### albuterol (2.5 mg/3 mL) 0.083% nebulizer solution 2.5 mg

2.5 mg, nebulizer, Every 20 minutes PRN, 3 doses, Starting when released, Sequential allergic algorithm management.

Indication: Evidence of bronchospasm / Acute exacerbation

Nebulizer every 20 minutes for up to 3 doses as needed if wheezing is present and no response to EPINEPHRINE is observed within 5 minutes of administration

Nebulizer preferred over inhaler for patients in respiratory distress

#### albuterol (2.5 mg/3 mL) 0.083% nebulizer solution 2.5 mg

2.5 mg, nebulizer, Every 1 hour PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management.

Indication: Evidence of bronchospasm / Acute exacerbation

AFTER administration of the every 20 minutes x 3 doses, continue every 1 hour as needed if wheezing is present and no response to EPINEPHRINE is observed within 5 minutes of administration

Nebulizer preferred over inhaler for patients in respiratory distress

#### albuterol inhaler 4 puff

4 puff, inhalation, Every 20 minutes PRN, 12 doses, Starting when released, Sequential allergic algorithm management.

Indication: Evidence of bronchospasm / Acute exacerbation

4 puffs inhaled via inhaler every 20 minutes for up to 12 doses if wheezing is present and no response to EPINEPHRINE is observed within 5 minutes of administration

Nebulizer preferred over inhaler for patients in respiratory distress

#### albuterol inhaler 4 puff

4 puff, inhalation, Every 4 hours PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management

Indication: Evidence of bronchospasm / Acute exacerbation

AFTER administration of 4 puffs inhaled via inhaler every 20 minutes for up to 12 doses, continue 2 puffs every 4 hours as needed if wheezing is present and no response to EPINEPHRINE is observed within 5 minutes of administration

Nebulizer preferred over inhaler for patients in respiratory distress

#### glucagon injection 1 mg

1 mg, intraVENOUS, Once PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management.

For patients on beta-blocker therapy and refractory to EPINEPHrine.

1 mg intraVENOUS over 5 minutes once then followed by infusion.

### glucagon 25 mg in D5W 250 mL infusion

3 mg/hr (30 mL/hr), intraVENOUS, Once PRN, Starting when released, Until Discontinued, Sequential allergic algorithm management.

Starting Infusion: 3 mg/hr Max titration: 5 mg/hr