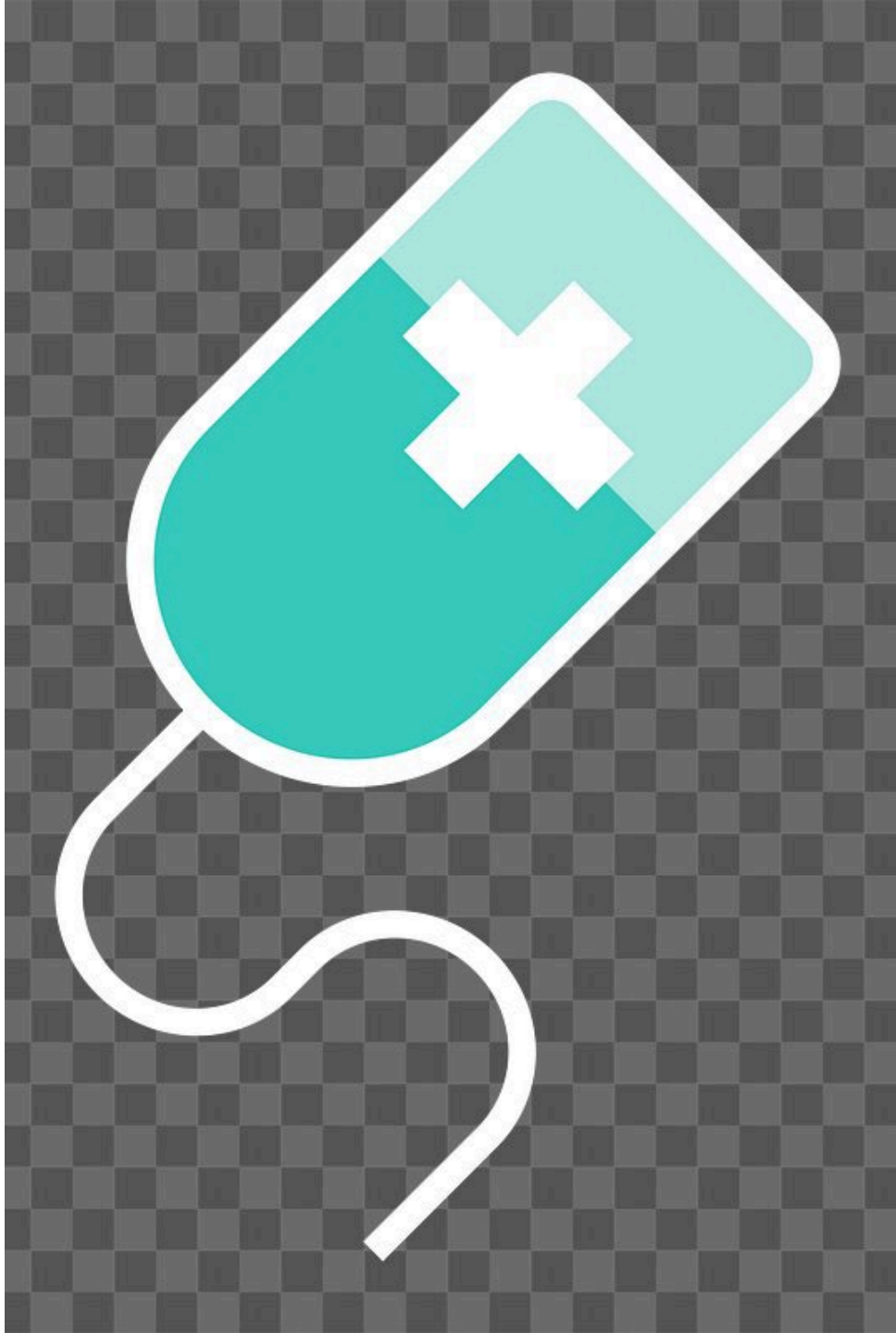
BLINATUMOMAB ADMINISTRATION

CHRISTA MCGUIRK RN, CPHON, CNEPH©
CLINICAL LEADER DEVELOPMENT – HEMATOLOGY
ONCOLOGY AND NEPHROLOGY
IWK HEALTH



ADMINISTRATION

- Administered IV continuously for 28 days via a central line using a CADD pump
- PAC, PICC line or external central line ie hickman
- Standard rate of 5mLs per hour
- Bag/tubing changes on Tuesdays and Fridays of each week
- PVC non DEHP lines with a 0.2 μm in-line filter
- All air must be removed from the bag prior to initiation of infusion
- Avoid flushing the line in the first 72 hrs of initiation of block1 or 48hrs of initiation of block 2
- Do not infuse any other medication via the same line

INFUSION INTERRUPTIONS

Every attempt should be made to avoid infusion interruptions

All interruptions of 60 min or more must be documented on interruption record

Patients and caregivers are provided with an interruption record

If the interruption is longer than 4 hours, the infusion will be restarted in hospital

Cumulative interruptions exceeding a total of 24hrs **may** be made up at the end of the 28-day block

Secure connections with tape!!

MANAGEMENT OF CENTRAL LINE

- Avoid flushing the line in the first 72 hrs of initiation of block1 or 48 hrs of initiation of block 2
- Flush the line only when necessary ie occlusions, bag changes, end of infusion
- If blood work is required, including blood cultures use the opposite if lumen if available.
- If unable to draw bloodwork from opposite lumen or single lumen in place, the blinatumomab line may be flushed and bloodwork drawn from this line as per CVAD policy then resume infusion.
- PAC needle changes will occur every 7 days,
- If available use Ametop® or Pain Ease® spray as a topical anesthetic to decrease interruption time.

CENTRAL LINE COMPLICATIONS

Bacteremia

- Draw blood cultures from all lumens minimizing the interruption time
- If antibiotics are required discuss a plan with the hem/onc team
- PIV may be required for if antibiotics are required
- If cultures are positive, they may require antibiotics via central line

Line Occlusion

- Unable to flush or infuse via central line
- Unable to obtain blood return
- Follow guidelines for central line occlusion
- Instill TPA as ordered
- Record interruption time
- Once patency is established resume Blinatumomab as soon as possible

ADVERSE EFFECTS OF BLINATUMOMAB

- Most common adverse events noted in patients treated with blinatumomab are disorders of the nervous system and cytokine release syndrome (CRS)
- Adverse reactions are less likely to occur in patients with lower burden of disease at the time of administration
- Both categories of events are more likely occur early in the infusion of blinatumomab and are usually reversible and manageable with supportive care.

AEs related to blinatumomab may require treatment interruption, rate reduction or permanent discontinuation.

CYTOKINE RELEASE SYNDROME

- Typically occurs within the first cycle and within the first 12-72 hrs.
- CRS is associated with T-cell proliferation resulting in cytokine release causing inflammatory symptoms
  - Mild- flu-like symptoms, fever myalagia
  - Severe- vascular leak, hypotension, pulmonary edema, coagulopathy
  - Life threatening- multi-system organ failure

The risk of CRS has been shown to depend heavily on disease burden at the time of administration.

CYTOKINE RELEASE SYNDROME- TREATMENT

- Supportive care- anti- pyretics
- IV fluids
- Blood pressure support
- O2
- tocilizumab for severe CRS

MONITORING FOR NEUROTOXICITY

Daily handwriting sample could predict future nervous system toxicity and may result in earlier treatment of symptoms

Daily finger-nose-finger test is recommended as it has also been found to be predictive of future neurotoxicity

BLINATUMOMAB RESOURCES

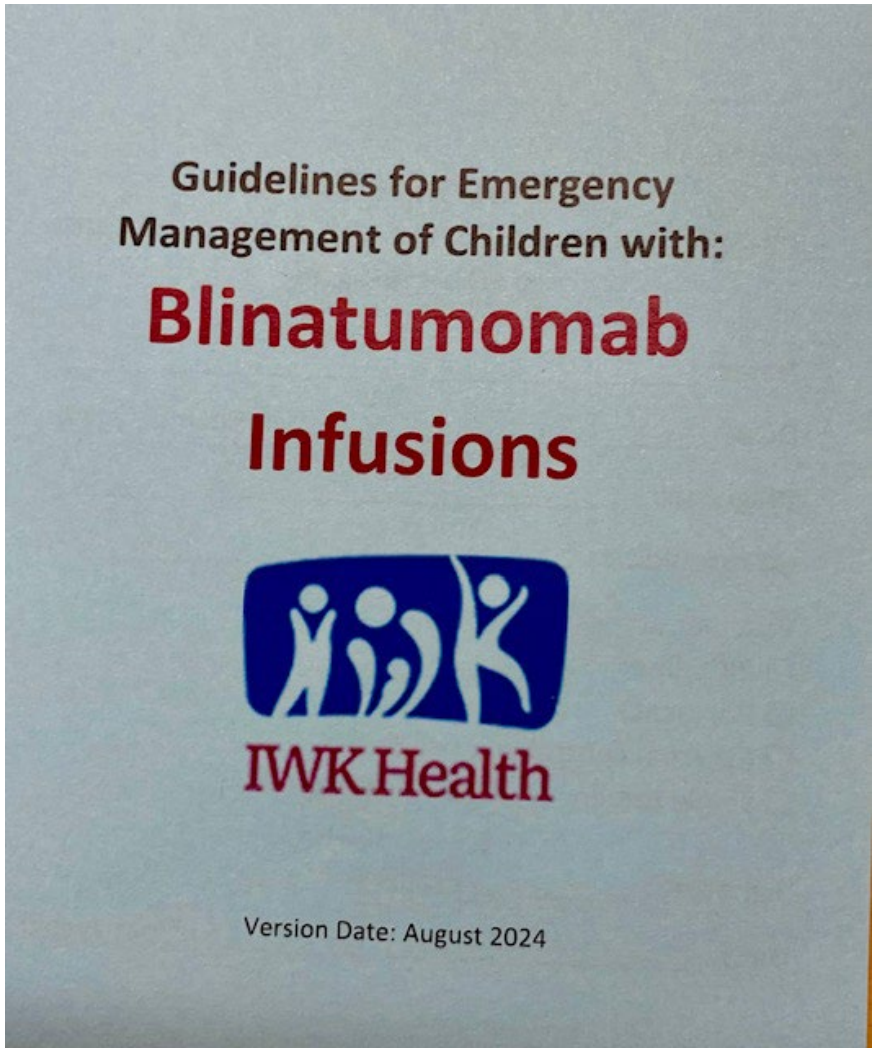
- Initiation checklist
- Interruption record
- Resource for nurses
- Resource for Families

PATIENT AND FAMILY EDUCATION

- Educational handout will be provided to the patient and family regarding:
  - Drug and side effect information
  - Documentation of interruptions
  - When to notify health care provider and who to call
  - When to present to ED
  - Troubleshooting alarms on the pump ie occlusion, battery etc
  - Central line care at home

BLINATUMOMAB INFUSION CARD

- Family will be given a Blinatumomab card to use when presenting to an ED



BLINATUMOMAB INFUSION CARD

Patient Information

Please Fax assessment and treatment documents to **902-470-7208**

Name: _____

DOB: _____ (dd/mm/yyyy)

Diagnosis: _____

Co-morbidities: _____

Vascular access:

☐ PICC line
☐ Portacath
☐ External central line (Hickman)
☐ single lumen ☐ double lumen

Signature: _____

Date: _____ (dd/mm/yyyy)

This patient is receiving a continuous infusion of Blinatumomab via a CADD pump infusing into a central line.

Blinatumomab is a non-hazardous biotherapy used in the treatment of Leukemia.

Call the Pediatric Hematologist Oncologist on-call **before stopping this infusion.**

902-470-8888 or 1-888-470-8888

If an **EMERGENT** situation warrants stopping the infusion without sufficient time to notify the oncologist, you must document the time the infusion is stopped and place a sterile cap on the end of the infusion line.

To assist in management of the infusion or CADD pump please call:

Monday- Friday 0800-1700
Hematology/Oncology Clinic: **902-470-6664**

After hours/Weekends/Holidays
6 Link inpatient unit: **902-470-8394**

SCAN THE QR CODE FOR SURVEY LINK