

# A Patient-First Home-Based Immunotherapy Infusion Programme for Leukemia Patients

HAC63 (Clinical Safety and Quality Service III)

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# Background

## Blinatumomab

- ◆ A novel monoclonal antibody for the management of acute lymphoblastic leukemia (ALL)
- ◆ Superior to conventional chemotherapy in treating relapsed/refractory ALL, and efficacious in patients with measurable residual disease (MRD) or as consolidation treatment
- ◆ One cycle of blinatumomab entails 28 days of continuous intravenous infusion



# Objectives

- (1) To identify and source a suitable set-up for home-based infusion
- (2) To design a comprehensive programme comprising staff training and patient education; and
- (3) To prepare infusion protocols and engage suitable patients in home-based infusion service



Queen Mary Hospital  
Division of Haematology and Oncology, Department of Medicine  
Chemotherapy Protocol

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Date: \_\_\_\_\_  
Centre: \_\_\_\_\_  
Dose adjustment: \_\_\_\_\_  
Weight: \_\_\_\_\_ kg  
Height: \_\_\_\_\_ cm  
Drug allergy: ☐ No known drug allergy  
☐ Yes, please specify: \_\_\_\_\_  
Hepatitis Screen: ☐ HBsAg positive ☐ No  
Antibiotic prophylaxis if positive: ☐ Yes ☐ No

Consolidation Rituximab (Rituximab) for B-ALL via ambulatory pump

**7 day bag using ambulatory pump (7.5A label)**

Blinatumomab (Blinatumomab) Day 1-28: 28mcg/day (standard adult dose for all patients with body weight >45kg)

In Bacteriostatic NS with intravenous solution stabilizer  
Fixed Infusion Rate for 24-hour continuous intravenous infusion for 4 weeks in each 6-week cycle  
\*\*\*NO in-line filter\*\*\*

**Use 7 day bag. Each infusion bag contains 0.7ml airless drug solution for primary infusion.**

Date	Route/Drug	Daily Dose	Administration (Exclusion / Duration)	Clinician's Signature	Pharmacist's Signature	(Time) Drug given by
Day 1 _____ to Day 7 _____	IV Blinatumomab	28mcg	Continuous infusion over 168 hours at 0.166mcg/hr (start not to be infused 100.0 ml) ***NO in-line filter***		Blinatumomab 210 mcg make up to 110ml NS	( )
Day 8 _____ to Day 14 _____	IV Blinatumomab	28mcg	Continuous infusion over 168 hours at 0.166mcg/hr (start not to be infused 100.0 ml) ***NO in-line filter***		Blinatumomab 210 mcg make up to 110ml NS	( )
Day 15 _____ to Day 21 _____	IV Blinatumomab	28mcg	Continuous infusion over 168 hours at 0.166mcg/hr (start not to be infused 100.0 ml) ***NO in-line filter***		Blinatumomab 210 mcg make up to 110ml NS	( )
Day 22 _____ to Day 28 _____	IV Blinatumomab	28mcg	Continuous infusion over 168 hours at 0.166mcg/hr (start not to be infused 100.0 ml) ***NO in-line filter***		Blinatumomab 210 mcg make up to 110ml NS	( )

Endorsement by clinician: \_\_\_\_\_

Do not start chemotherapy if the form is not completely filled and signed properly.  
Centralized Cytotoxic Reconstitution Service provided by Department of Pharmacy  
MBAE-126\_Consolidation Blinatumomab ambulatory pump  
Last updated: 19 Nov 2024

# Methodology

1 2 3 4 7

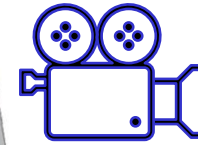
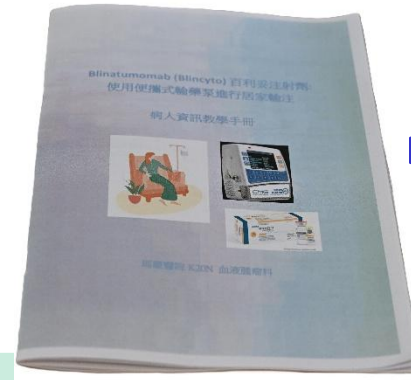
Market enquiry

Regimen?  
Preparation?




Train the trainers

Education materials;  
clinical practice guideline

Staff training;  
quality control of  
the infusion set

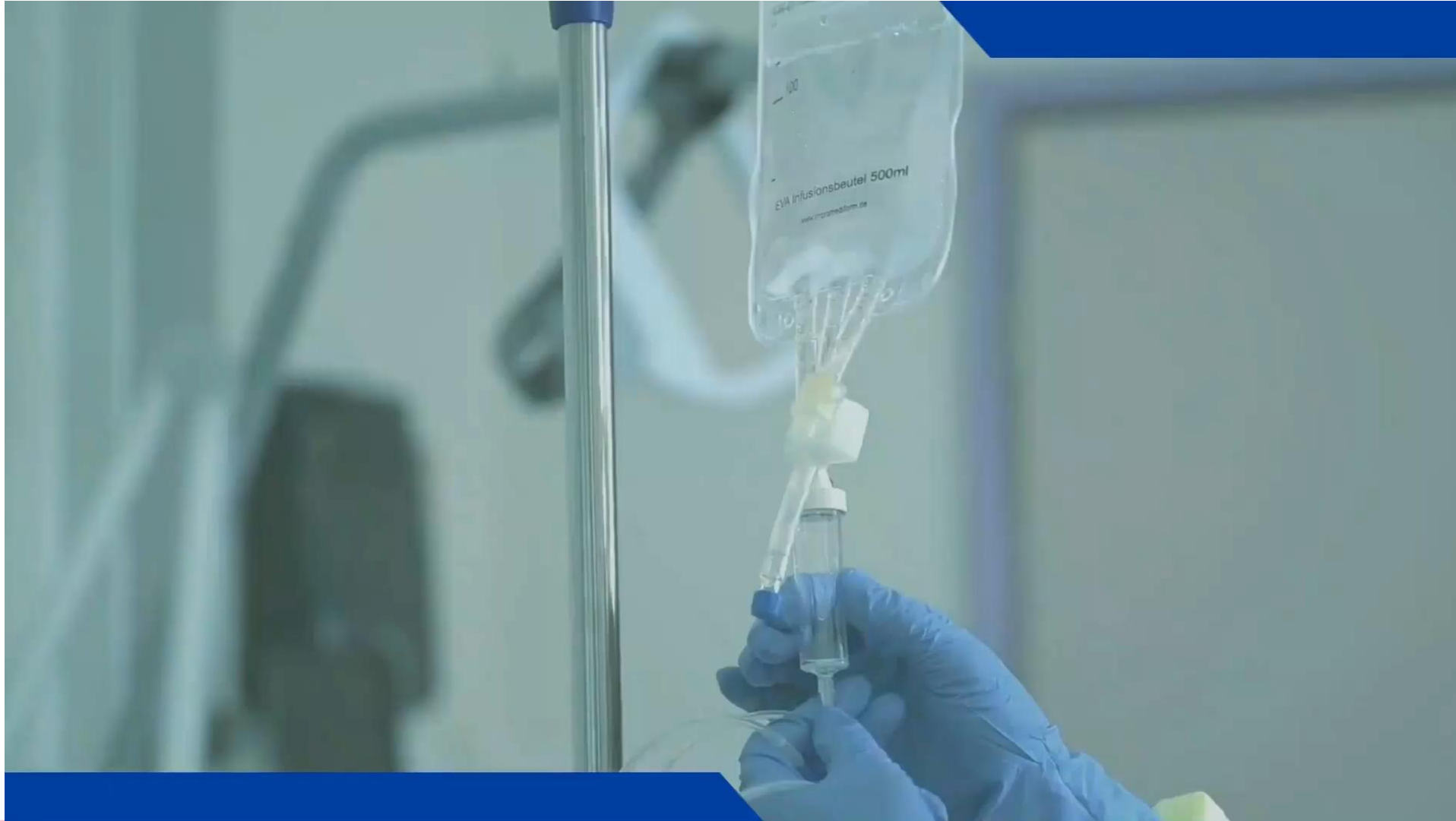


# Result & Outcome

- ◆ **6** leukemia patients benefited from this programme
- ◆ **10+** cycles of blinatumomab administered successfully
- ◆  In-hospital stay from **4** weeks/cycle to **<1** week
- ◆  Patient satisfaction and quality of life
- ◆ Saving in  of HK\$ **30,000** per patient-cycle



# Education video





# Pump set in a specially designed bag



# Conclusion

- ◆ This home-based immunotherapy infusion programme is first-of-its-kind in Hospital Authority
- ◆ Holistic, multidisciplinary and patient-first approach
- ◆ Effective in optimising patient care and resource utilization
- ◆ Provides a prototypic standard of prolonged home-based infusion treatment

PROVIDE  
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# Acknowledgement



- ◆ Prof. YL Kwong, Division Chief, Division of Haematology, Medical Oncology and HSCT, Department of Medicine, Queen Mary Hospital
- ◆ Nurses of the Haematology Team
- ◆ Department of Pharmacy, Queen Mary Hospital



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- ◆ Nurses of the Haematology Team
- ◆ Department of Pharmacy, Queen Mary Hospital
- ◆ Our patients and their carers



# Thank you!

