

# GUIDELINES FOR THE ADMINISTRATION OF CHEMOTHERAPY FOR MALIGNANT DISEASE

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Ratified by:	Head of Chemotherapy (HoC) / Lead cancer clinician (LCC) / Lead cancer nurse (LCN)
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Name of originator/author:	Nigel Ballantine (now retired)
Name of responsible committee for updating	Chemotherapy Working Group (CWG)
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Target audience:	Nursing, medical and support staff within the Haematology Oncology Specialty The document may also be used as a Good Practice Guideline for all BCH staff involved in the administration of cytotoxic therapies to children & young people with non-malignant conditions

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## **1 Introduction**

This Policy outlines the staff who are authorised to administer chemotherapy and other anti-cancer treatments, the areas designated for the administration of anti-cancer treatments and training required. Pre-treatment checks and potential reasons for not proceeding with treatment are also covered. The policy covers administration via a variety of routes.

## **2 Purpose**

- To support safe and effective practice with the administration of anti-cancer drugs
- To outline a consistent approach to care.
- To fulfil criteria for Chemotherapy related policies in DH Quality Measures for Children's Cancer Services (2014).

## **3 Duties**

### **3.1 Duties within the Organisation**

The BCH Chemotherapy Working Group Chaired by Dr Martin English is responsible for reviewing this guideline annually in line with the National Cancer Peer Review Programme. Updated versions will be forwarded to the Information and Quality Compliance Manager to present to the Integrated Governance Committee to be ratified.

The BCH ratified document will then be presented to the West Midlands Children's Cancer Expert Advisory Group for dissemination across the West Midlands Paediatric Oncology Managed Care Network.

### **3.2 Identification of Stakeholders**

BCH Chemotherapy Working Group  
BCH Drugs & Therapeutics Committee  
BCH Haematology Oncology Programme Meeting  
BCH Pharmacy Department  
West Midlands Children's Cancer Expert Advisory Group

## **4 Method for development**

### **4.1 Consultation and Communication with Stakeholders**

This policy has been adapted from the Pan Birmingham Cancer Network Policy on the Administration of Anti-cancer Treatment (Adults) by the BCH Chemotherapy Working Group for application to practice in Paediatrics.

Consultation is with the groups identified in 3.2. Any necessary amendments will be identified in the Version log.

#### **4.2 The policy was discussed at the Chemotherapy Group meeting on 21<sup>st</sup> June 2013 and amendments made in response to learning from a clinical incident.**

### **5. Guideline Statements**

#### **5.1 Staff Authorised to Administer Cytotoxic Drugs**

Only specialist Haematology-Oncology nurses who have been assessed as competent by completing the Children's Expert Advisory Group approved training programme (as per DH Quality Measure 14-7A-108 & 14- 7B-119) may administer cytotoxic drugs orally, or by the subcutaneous, intravenous (bolus and infusion) and intramuscular routes.

There are three exceptions to this requirement:

- There is a list of exemptions in the DH Quality Measures for Children's Cancer Services (2014) which cover staff who were trained prior to the publication of the Measures.
- Staff who are not authorised on the list above, as defined in DH quality measure 14-7B-120, may administer chemotherapy but only as part of their training according to the Children's Cancer Network Expert Advisory Group approved training programme, and in the presence of authorised staff.
- Administration of intra-arterial chemotherapy in the treatment of retinoblastoma by an appropriately trained consultant paediatric oncologist.

The names of staff who have completed competency based training are kept on a current register of competent staff by the BCH Lead Chemotherapy Trainer.

Medical staff are not routinely required to administer intravenous chemotherapy (with the exception noted above), but may do so having received the same training and competency assessment as nursing staff, or be covered by the exemptions in the DH Quality Measures (2014). This may be covered by the "Low Risk" Chemotherapy Training for one specific drug group e.g. the administration of intravenous bolus vinca-alkaloids.

Only medical staff assessed as competent to do so according to the relevant Trust policy, and whose names appear in the current register of competent staff, may administer intrathecal chemotherapy (see separate policy).

#### **5.2 Designated areas for administration of chemotherapeutic agents**

**In-patient chemotherapy** is delivered on Ward 15 (incorporating the Haematology Oncology HDU and the Teenage Cancer Trust Unit (TCT)).

In addition chemotherapy may be administered on:

Ward 10 for patients whose neurosurgical care dictates this is their best place of care, or  
PICU for patients requiring ICU care. or  
Operating theatres for patients:

- receiving intrathecal chemotherapy (where the administration cannot be carried out in the out-patient clinic theatre without the need for an additional anaesthetic), or
- patients receiving intravitreal or intra-arterial chemotherapy. For the latter patients the interventional radiology suite may also be used.

If there is a clinical need to administer chemotherapy in any other area due to exceptional circumstances (e.g. surgical needs for care on a surgical specialist ward, unwell emergency admission requiring urgent treatment) there must be a discussion with the appropriate clinical teams which should include the Chemotherapy Lead Clinician or Pharmacist & IV / Chemotherapy Nursing Team or Lead Cancer Nurse.

Consideration should be given to whether the patient could be transferred temporarily to Oncology Day Care for their treatment.

In the case of emergency admissions or urgent clinical need for chemotherapy being initiated out-of-hours in the cancer unit or on an outlying ward the on-call Consultant must be involved in the decision. A record of the discussion and decision rationale must be documented in the patient's case notes.

For treatment that would normally be delivered in Oncology Day Care, e.g. in-patients with febrile neutropenia who are deemed fit for routine vincristine, patients should be temporarily transferred to Oncology Day Care for treatment unless there are exceptional circumstances as set out above.

Intrathecal chemotherapy will only be given in areas specified in the current version of the BCH Intrathecal Chemotherapy Policy.

**Out-Patient Chemotherapy** is administered in the Oncology Clinic in the following specified rooms;

- Treatment Rooms
- Day Care Beds
- Isolation Cubicle
- Consulting Rooms that have been allocated as over-flow isolation rooms due to demand on the day by the nurse in charge
- Clinic Theatre (N.B. Intrathecal Drugs only as per the Intrathecal Chemotherapy Policy)

Out-patient Chemotherapy for patients in Phase I,II or III clinical trials may also be administered in the Wellcome Clinical Research Facility in the following rooms;

- Treatment Rooms
- Isolation / Consulting Rooms designated on the day by the nurse-in-charge
- Day Care Beds

- Ward 15 (for out-patient treatment out-of-hours, e.g. patients due out-patient treatment at the weekend)

Whenever possible, administration should occur during standard working hours, which are defined as 8.00am to 5.30pm, Monday to Friday, excluding Bank and Statutory holidays. Rationale for initiating treatment out-of hours must be recorded in the case notes following discussion with relevant personnel identified in section 5.2 above

Chemotherapy items to be administered in non-designated locations, with the exception of oral chemotherapy, will be delivered and stored on Ward 15 until required. Note: The requirements for the storage of items for intrathecal administration are set out in the relevant policy.

Designated areas will have all relevant policy and protocol documents available

All areas in which chemotherapy drugs are administered must have the following equipment available and routinely checked, where appropriate, to ensure suitability (e.g. within expiry date) and function. Where administration is to take place in a non-designated area any items on the list below that are not routinely available must be provided before administration may proceed:

- Emergency bell/telephone
- Resuscitation equipment
- Drugs for the management of emergencies – cardiac arrest and anaphylaxis
- Extravasation kit
- Cytotoxic spillage kit
- Access to running water
- Disposal equipment e.g. appropriate sharps bins
- Copies of relevant policies and procedures

### **5.3 Staff training in checking and administering of anticancer drugs**

Staff administering anti-cancer treatment must have completed the West Midlands Children's Cancer Network Coordinating Group approved competency based training programme (as per 5.2 above) or be covered by the exceptions for the administration of anti-cancer drugs and work within professional and local guidelines and protocols for the checking and administration of both the prescription and the drugs.

As per the DH Quality Measure for Children's Cancer Services (2014) (11-7B-132) treatment records should be held for each individual patient fulfilling the following minimum criteria including:

- Patients identification
- Weight, height, surface area
- Cancer type
- Regimen and doses (including all cytotoxic chemotherapy drugs to be used and elective essential supportive drugs other than antiemetics); trial name or number if applicable

- Route of administration (oral, IV, IV Infusion, IM, SC)
- Number of cycles intended
- Frequency of cycles and of administration within a cycle
- Investigation necessary prior to starting the whole course
- Investigation to be performed serially during the course (to detect / monitor both toxicity & response) and their intended frequency  
Number of cycles
- Planned attendances managed by agreed non-medical staff, for example, nurse-led attendances
- Site of administration (PTC, POSCU, Community)

N.B. The DH Quality Measures for Children's Cancer Services provides the following definitions of treatment duration:

A course – a complete period of treatment. E.g. UKALL 2011 would be described as a course of treatment.

A cycle – Drugs, either singly or in combination, given as in a repeated pattern. E.g. 12 week maintenance cycles within UKALL 2011

An administration – the separate occasions when drugs are given within a cycle

In paediatric practice the term "Block" may also be used. It denotes a discrete episode of administrations within a course that are not part of a repeated pattern, or which form a section of a cycle, e.g. Delayed Intensification in UKALL 2011.

In paediatric practice this information will be provided by the clinical trial or treatment protocol according to which the patient is being treated (whether or not the patient is formally entered into the trial). For patients with rare or refractory tumours following an individualized regime the information should be provided in the case notes in the form of a flow chart or other appropriate format.

#### **5.4 Patient and treatment identification (DH Quality Measure 14-7B-131)**

Prior to the administration of any dose of chemotherapy, whether on the first day, or any subsequent day, of a treatment cycle the nurse preparing to administer the dose(s) should ensure:

- That the patient's identification is confirmed according to Trust policy and that the details on any and all prescription charts and prepared drug doses are consistent and without ambiguity. If there is any doubt over the patient's identify and/or whether the drugs doses supplied are intended for a particular patient administration should not proceed until all uncertainties or ambiguities have been addressed and removed.
- All critical test results have been documented and the patient is fit for treatment to proceed.
- The treatment course, cycle, including cycle number, and individual administration(s) within the cycle are identified and the individual drug doses provided are consistent with them and the prescription.
- That any supportive drugs, including hyper-hydration, have been prescribed as appropriate for the treatment cycle/administration and given

according to the prescription.

- That the administration route and duration are clearly stated on the prescription
- That any and all diluents and dilution volumes are clearly stated on both the prescription and the individual drug doses supplied, and correspond.

### **Clinical assessment criteria prior to administering chemotherapy**

Before a course of chemotherapy to be given by any route the patient must be clinically assessed to ensure:

- Haematology parameters, particularly neutrophil and platelet counts, are sufficient for treatment to proceed.
- Clinical chemistry parameters, appropriate to the treatment and as set out in the treatment protocol, are sufficient for the treatment to proceed.
- Any other investigations e.g. renal function, audiology or cardiology, that impact on whether the treatment can be given and/or at what dose, have been performed, reported and reviewed.
- Investigations listed on the front of ChemoCare prescriptions or as detailed in the clinical trial protocol or national guideline. These investigations should be listed in the case notes for patients following individualized treatment plans.
- The patient is clinically well.

The administering practitioner must ensure appropriate venous access with regards to:

- site
- position
- patency
- integrity
- visibility

Use of aseptic non-touch technique, observation of universal precautions and product sterility are required in all parenteral administration procedures <sup>1</sup>

### **5.5 Reasons not to start administration of cytotoxic drugs:**

Cytotoxic drugs can be administered via a variety of routes. Regardless of the route of administration DO NOT START administration if:

- The environment in which treatment is being administered is deemed unsafe
- There is any doubt regarding the stability of the drug, route and method of administration, expiry, drug dosage, pre-treatment investigations or the prescription is in any way unclear as to what is required
- There is any doubt regarding the integrity of the venous access device being used

## **5.6 Reasons to stop administration of cytotoxic drugs:**

Cytotoxic drugs can be administered via a variety of routes. Regardless of the route of administration STOP if:

- The patient or their parent/carer requests the treatment to stop. In the case of a child too young to be competent to give consent the nurse must assess the reasons for the child requesting the treatment to stop, e.g. painful cannula. If after thorough assessment there is no obvious reason to stop treatment should be continued with appropriate reassurance to the child and ongoing vigilance for a problem developing.
- The patient demonstrates unexpected side effects or complications which are not routinely managed with planned supportive care, particularly signs of hypersensitivity reaction or anaphylaxis.
- The equipment fails to function effectively or as expected.

## **5.7 Routes of administration for anticancer drugs**

### **5.7.1 Intravenous chemotherapy delivered as a bolus (vesicant and non-vesicant)**

Treatment should be administered according to the sequence set out in the prescription.

However if treatment is to be administered through a cannula consideration should be given to giving the most irritant or vesicant drug first. Vesicant drugs should be given via a newly established cannula wherever possible. The practitioner should sit with the patient and deliver a slow bolus manually using a regular flashback technique.

Consideration should be given to changing the cannula site after 24 hours. However, if the fluid runs freely, there is good blood return and there are no signs of erythema, pain or swelling at the site the existing cannula may be used, with careful monitoring of the treatment site, particularly immediately after treatment is commenced.

Patency of central venous access devices (CVADs) should be confirmed prior to use using blood return. Patency should be re-checked during administration of every few millilitres during the administration of a vesicant using the flashback technique.

Intravenous bolus injections should be given SLOWLY, over approximately 5 minutes

Luer-lock syringes must be used for the bolus administration of all intravenous chemotherapy

Prior to administration the patient should be advised of possible local or systemic adverse events and asked to immediately report any that occur.

Observation of a peripheral administration site should be maintained at regular intervals throughout administration and a Trust extravasation / phlebitis scoring chart used to record observations of the site. Signs of infiltration, extravasation must be addressed immediately according to the Trust extravasation policy, which can be found at:

\\BCH\_san3\Intranet\Trust Policies\Clinical policies

### **5.7.2 Intravenous chemotherapy delivered by infusion**

Chemotherapy drugs should be regarded as high risk infusions. Infusion pumps used should be specifically designed for this purpose.

Giving sets should be primed (and flushed on completion of infusion) with a suitable compatible intravenous solution. Intravenous administration sets should have Luer lock fittings.

Using a non-touch aseptic technique and wearing personal protective equipment, carefully insert the giving set into the cytotoxic infusion at waist height to minimise the risk of personal contamination in the event of a spillage

Patency of the line should be confirmed (see points above).

Prior to administration the patient should be advised of possible local or systemic adverse events and asked to immediately report any that occur.

The infusion site should be checked according to the Trust extravasation policy and the patient monitored for systemic adverse reactions.

### **5.7.3 Oral Chemotherapy**

The prescribing, dispensing and administration of oral chemotherapy should be carried out and monitored to the same standards as those for administration by other routes.

Patients should be reviewed prior to every cycle or block of oral chemotherapy either by an oncologist / haematologist, specialist nurse or pharmacist.

### **5.7.4 Dispensing**

All pharmacy staff involved with dispensing oral chemotherapy should have access to copies of the relevant protocols. Requests for

information and/or clarification should be made to the Lead Cancer Pharmacist in the first instance.

Wherever possible oral chemotherapy will be supplied in blister or foil packed tablets or capsules.

Tablets or capsules should not be handled directly, all staff should use a non touch technique to minimise the risks of exposure.

Liquid medicines should be handled in such a way as to minimise contamination of the outside of the bottle. Any evidence of contamination should be removed using a damp paper towel whilst wearing gloves. The paper towel must be disposed of as for cytotoxic waste.

### **5.7.5 Administration to in- and day-patients**

Tablets or capsules should not be handled directly, all staff should use a non touch technique to minimise the risks of exposure.

On wards or clinics, oral doses of chemotherapy should be dispensed into a disposable medicine pot or cup prior to administration to a patient. Dispose of pots as cytotoxic waste.

All oral chemotherapy should be taken with plenty of water and swallowed whole not chewed to avoid local irritation to the oral mucosa.

Tablets should preferably not be crushed or capsules opened. However, when dealing with children, absence of suitable liquid formulations may make this impossible to avoid. See Patient Information Leaflet

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Liquid medicines should be handled in such a way as to minimise contamination of the outside of the bottle. Any evidence of contamination should be removed using a damp paper towel whilst wearing gloves. The paper towel must be disposed of as for cytotoxic waste.

Tablet crushers and splitters should be rinsed with water after use to remove any residue from the tablet. Avoid splashing that might contaminate surrounding surfaces. Leave to dry.

N.B. TAKE CARE: The tablet splitter contains a sharp blade.

### **5.7.6 Administration at home.**

Responsibility for the administration of oral chemotherapy at home lies with the patient, their parents or carers. It is therefore necessary that they are adequately prepared and have been given appropriate

information, both verbal and written, and telephone numbers should they need help and support out-of-hours.

Tablets should preferably not be crushed or capsules opened. However, when dealing with children, absence of suitable liquid formulations may make this impossible to avoid.

Liquid medicines should be handled in such a way as to minimise contamination of the outside of the bottle. Any evidence of contamination should be removed using a damp paper towel whilst wearing gloves. The paper towel must be disposed of as for cytotoxic waste.

All oral chemotherapy should be taken with a drink of water or squash (avoid fruit juice). Using a drink in this way will not only take the taste away but rinse the oral mucosa to minimise local irritation.

Patients must be adequately counselled about drug storage and handling precautions whilst at home and keeping drugs out of reach of children and animals.

Patients should be advised that medicine spoons, oral syringes or cups should be reserved for chemotherapy treatment only and not used for the administration of other drug doses. They should be washed thoroughly between doses and safely disposed of after the treatment course

Tablet crushers and splitters should be rinsed with water after use to remove any residue from the tablet. Avoid splashing that might contaminate surrounding surfaces. Leave to dry.

N.B. TAKE CARE: The tablet splitter contains a sharp blade.

Dropped medicines should be picked up wearing gloves, put in a plastic bag and disposed of into a sharps bin. The area should be damp dusted with wet towel and dispose of towel as clinical waste. See Spillage Policy.

Patients / Parents / Carers should be informed about:

- How and when to take medicines
- What to do in the event of missing one or more doses
- What to do in the event of vomiting after a dose
- Likely adverse effects and what to do about them
- When and how to obtain further supplies

### **5.7.7 Intrathecal Chemotherapy**

Only staff who have been appropriately trained and accredited, and whose names appear in the appropriate Trust register are permitted to have involvement in the prescribing, dispensing, issue, checking and/or administration of intrathecal chemotherapy appropriate to their role and training.

All staff involved in the administration of intrathecal chemotherapy must comply at all times with the Trust's integrated policy for the prescription, preparation, supply and administration of intrathecal chemotherapy, and thereby with the current National Guidance. The Trust policy can be found at  
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CHEMOTHERAPY\

### **5.7.8 Intramuscular injection**

The most appropriate needle should be selected based on consideration of the length of needle required to access the muscle (but no further) and the bore (which should be as large as possible to minimise the pressure at which the injection is delivered).

The "Z" track technique should be used to avoid leakage into the skin.

Ensure no leakage from the site – cover with a cotton wool ball / plaster if necessary injection sites should be rotated to minimise irritation

### **5.7.9 Subcutaneous Injection**

Care should be taken to ensure the smallest appropriate needle is used and positioned correctly when giving drugs by this route.

Use a pinch technique to administer the injection at 45° to the skin surface

Injection sites should be rotated to minimise irritation. Insufflon needles should be considered if the patient required multiple injections over a short period of time e.g. four day blocks of cytarabine

Ensure no leakage from the site – cover with a cotton wool ball / plaster if necessary

### **5.7.10 Intravesical and Intracavitary chemotherapy**

This is rarely, if ever, administered at the Children's Hospital outside of the Retinoblastoma service; for which there is specific training..

Should the need arise to administer chemotherapy by this route all staff involved must ensure that they are completely satisfied that they understand what is required and have the necessary skills to prescribe and administer chemotherapy for administration by this route.

### **5.7.11 Topical**

Topical cytotoxic drugs may be applied either directly to the skin, or as ear or eye drops. Bleomycin, mitomycin C and 5-fluorouracil solutions are administered topically in the Operating department outside of the cancer service and are not covered in detail in this document.

However, as guidance the principles in this policy around training, safe handling, documentation, assessment, patient information, monitoring etc. may be utilised. Cytotoxic eye or ear drops are rarely, if ever, administered at the Children's Hospital.

Gloves should be worn while handling or applying the product and using cotton buds rather than fingers is also advisable where the site makes this appropriate. It is important to protect the normal skin and avoid the eyes and other mucous membranes during administration.

The affected area should not be washed vigorously during the treatment. Although risks may be small, patients should be counselled regarding the toxicity to normal skin and the risks of contamination via direct contact or clothing to other areas of skin or to the skin of other people.

Patients should receive information and instructions regarding their treatment to ensure they are aware of the potential hazards to their family and environment.

### **5.7.12 Administration into the eye**

Cytotoxic drugs for intraocular, subconjunctival or intravitreal administration (e.g. melphalan, topotecan, carboplatin), will be prepared by the pharmacy department and will be administered by the consultant ophthalmic surgeon.

### **5.8.13. Intra-arterial**

Cytotoxic drugs for intra-arterial administration, (e.g. melphalan, topotecan) will be prepared by the pharmacy department. Intra-arterial chemotherapy will be administered by the retinoblastoma specialist consultant paediatric oncologist. A protocol is available.

### **5.8.14 Miscellaneous Routes of Administration**

Other routes of administration of cytotoxic drugs include:

- Intrahepatic
- Intracranial

- Regional infusion (e.g. isolated limb infusion)

None of these are routinely used at Birmingham Children's Hospital.

Should the need arise appropriate policies and procedures will be created to support the administration of cytotoxic drugs by these routes.

#### **5.8.14 Non-cytotoxic drugs handled as cytotoxics.**

Certain drugs have similar properties to the cytotoxic drugs with respect to the risk of carcinogenicity, mutagenicity and/or teratogenicity. These should be handled in all respects as if they were cytotoxic drugs.

Currently at BCH the following drugs should be treated in this way:

- Ganciclovir (intravenous)
- Cidofovir (intravenous and topical)
- Gemtuzumab ozogamicin (Mylotarg) (intravenous)

### **5.8 Administration Equipment – Peripheral Devices**

Should be placed in the peripheral veins in the arm but may also be placed in the veins of the hand or foot.

The smallest, shortest gauge cannula should be used; it has been shown that the incidence of vascular complications increases as the ratio of cannula external diameter to vessel lumen increases<sup>3</sup>

Metal needles / "butterfly needles" should never be used for administration of chemotherapy

Prior to inserting a peripheral cannula consider the site, condition of the vein, purpose of the infusion (that is the rate of flow required and the solution to be infused) and the duration of therapy.

Veins should feel bouncy and refill when depressed and should be straight and free of valves to ensure easy advancement of the cannula.

Cannulae should ideally not be sited over a joint. However, in paediatrics, particular babies & toddlers the combination of small veins and subcutaneous fat with prolonged treatment and multiple cannulations over time, may mean that less than ideal sites have to be utilised at times. This location should only be considered for vesicant drugs when the practitioner can sit with the patient during the bolus injection or short infusion and the site can be constantly monitored.

Site selection should be initiated in the distal areas of the upper extremities; subsequent cannulation should be made proximal to the previously cannulated site<sup>5</sup>

Shaving of the arm prior to cannulation should not be performed because of potential for causing micro-abrasions which increase risk of infection <sup>1</sup>

If unsuccessful after third attempt at cannulation, then help from another experienced practitioner should be sought. In paediatrics it is common to have children with very poor venous access, but who do not have the option of a CVAD, for whatever reason. In such cases repeated attempts at cannulation – always by an experienced practitioner, and with play specialists and sometimes psychology support – may be appropriate. There should be continual negotiation with the child and carers as to how many attempts are made in one session before the child has a break (this will usually be 3, but may be more if all concerned, particularly the patient, are in agreement to continue).

Current recommendations indicate that peripheral cannula should be re-sited every 48 – 72 hours <sup>3</sup>. Again in paediatrics this has to be balanced against the continuous trauma of re-cannulation in fragile veins and patient psychological factors. The Trust Extravasation policy and IV Therapy Policy contain supporting documentation – standard cannula care plan & extravasation / phlebitis score chart.

Cannula size, position, number of attempts, contraindications, time and date of cannulation and that flashback will be obtained periodically throughout the administration should be documented in the patients' records.

There is a Haematology Oncology Standard Operating Procedure in the Specialty Handbook providing instruction on the correct technique for bolus vinka-alkaloids via peripheral cannula

### **5.9.2 Administration Equipment – Central Venous Access Devices**

Please refer to the Trust IV Therapy guidelines for the use of CVADS

### **5.9.3 Administration Equipment – Giving sets**

Standard solution giving sets should be used for the majority of drugs. Some drugs e.g. dacarbazine require special light protection for the giving set during the infusion.

Proper integrity must be ascertained prior to use of the administration set <sup>3</sup>

### **5.9.4 Administration Equipment – Medical Devices**

Cytotoxic drugs should be infused using pumps designed for high-risk infusions. Positive pressure pumps should be avoided (with the exception of syringe drivers) unless specifically designed for the administration of cytotoxic drugs.

Staff using rate controlling devices will have received training and understand their use and limitations as per Trust Medical Devices Policy.

If elastomeric infusion devices are required, pharmacy should be consulted regarding availability and suitability.

### 5.10 Related policies

This guideline should be read, and its recommendations followed, in conjunction with:

- Policy for the management of spillage of cytotoxic drugs.
- Policy on the handling of chemotherapy by staff who are pregnant or breast-feeding.
- Policy for the management of body waste and clinical samples from patients receiving cytotoxic drugs.
- Policy on nurse re-scheduling of chemotherapy.
- Policy on protective clothing for the handling of chemotherapy.
- Procedure for the prescribing of injectable chemotherapy
- Extravasation policy – BCH
- Medical Devices Policy
- IV Therapy Policy
- Intrathecal Chemotherapy Policy

### 5.11 Related information

- Parent Held record
- Advice for parents caring for children receiving cytotoxic chemotherapy.

## 6. References (from the original Network document)

1. RCN (2005) Standards for Infusion Therapy. Royal College of Nursing, London
2. The Royal Marsden Hospital Manual of Clinical Nursing Procedures. 6<sup>th</sup> Edition (2004) Blackwell Publishing Ltd
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6. Dougherty, L. (1999) Obtaining peripheral vascular access. In: Intravenous Therapy in Nursing Practice (eds L.Dougherty & J.Lamb). Churchill Livingstone, Edinburgh.
7. Weinstein, SM, 2001. Plumer“s principles and practice of infusion therapy. 7<sup>th</sup> ed. Philadelphia: Lippincott Williams and Wilkins
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9. Macrae, K. (1998) Hand held Dopplers in central catheter insertion. *Prof Nurse*, **14(2)**, 99-102

10. Springhouse Corporation (2002) Intravenous Therapy Made Incredibly Easy. Springhouse, Lippincott, Williams & Wilkins, Philadelphia.
11. The Royal Marsden Hospital Manual of Clinical Nursing Procedures. 6<sup>th</sup> Edition (2004) Blackwell Publishing Ltd
12. DH Quality Measures for Children's Cancer Services 2011

## **7 Equality Impact Assessment**

See Appendix F

## **8 Approval, Dissemination and Implementation**

### **8.1 Approval of document**

This document has been approved by the CWG and ratified by the HoC, LCC and LCN.

### **8.2 Dissemination**

Electronic copies will be provided via the Trust Intranet in the Oncology department and Trust policies folders.  
Hard copies will be available for review purposes only.

### **8.3 Implementation**

The policy is currently in use within the Haematology Specialty. This document brings the policy into Trust-approved format.

## **9 Monitoring Compliance With and the Effectiveness of the policy**

### **9.1 Process for Monitoring Compliance and Effectiveness**

### **9.2 Standards/Key Performance Indicators**

## **10 Associated Documentation**

## Appendix D - Checklist for the Review and Approval of Procedural Document

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

	Title of document being reviewed:	Yes/No/Unsure	Comments
<b>1.</b>	<b>Title</b>		Checklist used for 2012 review
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
<b>2.</b>	<b>Rationale</b>		
	Are reasons for development of the document stated?	Yes	
<b>3.</b>	<b>Development Process</b>		
	Is the method described in brief?	Yes	
	Are people involved in the development identified?	Yes	
	Do you feel a reasonable attempt has been made to ensure relevant expertise has been used?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
<b>4.</b>	<b>Content</b>		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
	Are the statements clear and unambiguous?	Yes	
<b>5.</b>	<b>Evidence Base</b>		
	Is the type of evidence to support the document identified explicitly?	Yes	
	Are key references cited?	Yes	
	Are the references cited in full?	Yes	
	Are supporting documents referenced?	Yes	
<b>6.</b>	<b>Approval</b>		
	Does the document identify which committee/group will approve it?	Yes	
	If appropriate have the joint Human Resources/staff side committee (or equivalent) approved the document?	N/A	

	<b>Title of document being reviewed:</b>	<b>Yes/No/Unsure</b>	<b>Comments</b>
<b>7.</b>	<b>Dissemination and Implementation</b>		
	Is there an outline/plan to identify how this will be done?	Yes	
	Does the plan include the necessary training/support to ensure compliance?	N/A	
<b>8.</b>	<b>Document Control</b>		
	Does the document identify where it will be held?	Yes	
	Have archiving arrangements for superseded documents been addressed?	Yes	
<b>9.</b>	<b>Process to Monitor Compliance and Effectiveness</b>		
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	No	
	Is there a plan to review or audit compliance with the document?	Yes	
<b>10.</b>	<b>Review Date</b>		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
<b>11.</b>	<b>Overall Responsibility for the Document</b>		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

#### **Individual Approval**

If you are happy to approve this document, please sign and date.

Name		Date	
Signature			

#### **Committee Approval**

If the committee is happy to approve this document, please sign and date it and forward copies to the person with responsibility for disseminating and implementing the document and the person who is responsible for maintaining the organisation's database of approved documents.

Name	Dr Martin English Representing the Chemotherapy Working Group	Date	July 2012
Signature			

## Appendix F - Equality Impact Assessment

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

### EQUALITY IMPACT ASSESSMENT FORM

#### SECTION 1:

<b>Department: Haematology Oncology</b>		<b>Assessor: Chemotherapy Working Group</b>	
<b>Policy/ Service Title:</b> Guidelines for the administration of chemotherapy for malignant disease		<b>Date of Assessment: 20<sup>th</sup> May 2010</b>	
1. Describe the purpose of this policy or function	<ul style="list-style-type: none"> <li>To support safe and effective practice with the administration of anti-cancer drugs</li> <li>To outline a consistent approach to care.</li> <li>To fulfil criteria for Chemotherapy related policies in DH Quality Measures for Children's Cancer Services (2009).</li> </ul>		
2. Who is affected by this policy?	Patients Admitted to BCH for Anti-Cancer Treatment		
3. What are the outcomes or intended outcomes of this policy/ function?	<p>Safe and efficient practice</p> <p>Minimise risk</p> <p>Compliance with DH Quality Measures for Children's cancer services</p>		
4. What consultation has been undertaken during the development of this policy/function?	<p>BCH Chemotherapy Working Group</p> <p>Haem Onc Programme Meeting – senior nurses , medical staf, pharmacy staff</p> <p>Cancer Locality Group</p>		
5. What information or evidence has been used to assess the potential impact across the equality strands?	<p>Pan Birmingham Cancer Network Policy for the administration of Anti-Cnacer Treatment (Adults)</p> <p>Previous practice &amp; staff experience</p>		

**IMPACT**

1. What is the impact or likely impact, either positive or negative, of the initiative on individuals, staff, or the public at large?

Potential positive impact in the reduction of risks associated with the administration of anti-cancer treatment

2. Please complete the following list and identify if there is, or likely to be, an impact on a group

<p>a) Grounds of race, ethnicity, colour, nationality or national origins.</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details:</p> <p>Positive impact on all groups</p>
<p>b) Grounds of sexuality or marital status</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details:</p> <p>Positive impact on all groups</p>
<p>c) Grounds of gender</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details: Positive impact on all groups</p>
<p>d) Grounds of religion or belief</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details: Positive impact on all groups</p>
<p>e) Grounds of disability</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details: Positive impact on all groups</p>
<p>f) Grounds of age</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>Adverse? <input type="checkbox"/></p> <p>Provide further details: Positive impact on all groups</p>

**If you have stated that there is an adverse impact a Full Impact Assessment is Required. Complete Section 2.**

**SECTION 2: Not Applicable**

**Modifications**

1. If you stated that the policy/ function has or could have an adverse impact on any group, how could you modify it to reduce or eliminate any identified negative impacts?

2. If you make these modifications, would there be an impact on other groups, or on the ability of the policy to achieve its purpose?

### **Consultation**

**Under the Race Relations (Amendment) Act 2000 you are required to consult on the impact of new policies, functions and service change.**

3. How do you plan to consult on these modifications?

Specify who would be involved, timescales and methods.

### **Decision Making**

1. Who will make the decision?

2. What is the decision?

- Reject the policy/ function
- Introduce the policy/ function
- Amend the policy/ function
- Other (Please explain)

### **Monitoring and Review**

1. How will the implementation of the policy/ function and its impact be monitored?

2. What are the overall learning points from this assessment?

3. What actions are recommended from this assessment?

4. When is the review date?

For advice in respect of answering the above questions, please contact the Equality and Diversity Officer on Ext: 8611. A completed form must be returned with your procedural document.



## Appendix H – Plan for Dissemination of Procedural Documents

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

<b>Title of document:</b>	Guideline for the administration of chemotherapy for malignant disease		
<b>Date finalised:</b>	July 2012	<b>Dissemination lead: Print name and contact details:</b> Julia Bottle	BCH email Ext: 9143
<b>Previous document already being used?</b>	<b>Yes / No</b> (Please delete as appropriate)		
<b>If yes, in what format and where?</b>			
<b>Proposed action to retrieve out-of-date copies of the document:</b>			
<b>To be disseminated to:</b>	<b>How will it be disseminated, who will do it and when?</b>	<b>Paper or Electronic</b>	<b>Comments</b>
HaemOnc Policy files	JB	P	
Trust policies „p“ drive	JH	E	

### Dissemination Record – to be used once document is approved.

<b>Date put on register / library of procedural documents</b>		<b>Date due to be reviewed</b>	
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<b>Disseminated to: (either directly or via meetings, etc)</b>	<b>Format (i.e. paper or electronic)</b>	<b>Date Disseminated</b>	<b>No. of Copies Sent</b>	<b>Contact Details / Comments</b>