

# The Newcastle upon Tyne Hospitals NHS Foundation Trust

## Policy and Procedure for Essential Out-of Hours Cancer Chemotherapy

Effective: July 2011

Review: July 2013

### 1. Introduction

This policy relates to the provision of cancer chemotherapy outside of normal working hours and relates to patients treated by one of the following services adult oncology, adult haematology and paediatric oncology.

### 2. Requirement for chemotherapy

Whenever possible, all cancer chemotherapy should be initiated, and as much as is feasible, administered within normal working hours. The risk of accidents is increased when complex cytotoxic regimens are given outside normal working hours, particularly errors of incorrect drug and patient identification and using the incorrect route of administration of cytotoxic drugs.

Wherever possible, patients should be given other supportive therapies to permit the use of parenteral chemotherapy to take place during normal working hours e.g.

- Newly diagnosed acute leukaemia – Hydroxycarbamide to reduce the white cell count, alongside hydration and allopurinol (300mg PO od) to protect against tumour lysis syndrome
- Newly diagnosed aggressive lymphoma - High dose steroids (e.g.1g methylprednisolone IV), alongside hydration and allopurinol (300mg PO od) to protect against tumour lysis syndrome.

Pharmacy will provide an out-of-hours service at weekends and bank holidays only for emergencies and wasted doses e.g. punctured bags or expired doses for those patients who have already commenced chemotherapy and whose regimen is listed in the essential out of hours chemotherapy list (see tables below). Patients who have been admitted for second or subsequent courses of chemotherapy but have not had chemotherapy prescribed and confirmed by 15.30hrs on Friday afternoon will NOT be treated as emergency cases.

If, in the opinion of the consultant on-call, the patient cannot wait until the next working day to commence parenteral chemotherapy, it can only be dispensed from the Pharmacy Production Unit (RVI) on Saturday mornings (9:00-12:00) or via the on-call service.

The following situations have been agreed where the supply of out-of-hours chemotherapy would be deemed essential.

<b>Adult Haematology</b>	
<b>Disease type/stage</b>	<b>Drugs/Regimen involved</b>
Acute Myeloid Leukaemia (AML) unanticipated admission of a newly diagnosed patient with a high white cell count or clinically unwell	Daunorubicin 50mg/m <sup>2</sup> IV bolus days 1, 3 and 5. Cytarabine 100mg/m <sup>2</sup> BD days 1-10 IV bolus  AML 17 protocol version 5.0 May 2010 page 36 section 9.2
Acute Promyelocytic Leukaemia (APML)	ATRA (all trans retinoic acid) 45mg/m <sup>2</sup> /day orally in two divided doses. (on pharmacy JAC as tretinoin 10mg caps) +/- Idarubicin 12mg/m <sup>2</sup> IVI (over 20 minutes)
Acute Lymphocytic Leukaemia (ALL)	Start prednisolone usually at 60mg/m <sup>2</sup> (PO) Chemotherapy can be delayed until next working day.
Non-Hodgkin's Lymphoma (if tumour threatening function of vital organ e.g. tracheal, ureteric obstruction)	CHOP – all on day 1 Cyclophosphamide 750mg/m <sup>2</sup> IV bolus Doxorubicin 50mg/m <sup>2</sup> IV bolus Vincristine 1.4mg/m <sup>2</sup> (max 2mg) IVI in 50mls NaCl 0.9% over 5-10mins
Anthracycline extravasation in a patient with normal renal & hepatic function	Dexrazoxane (Savene®) if within 6 hours of the extravasation  See <a href="#">extravasation policy</a> on Trust intranet

<b>Adult Oncology</b>	
<b>Disease type/stage</b>	<b>Drugs/Regimen involved</b>
Germ Cell	BEP (1-5)      Bleomycin 30,000 units Etoposide 100mg/m <sup>2</sup> Cisplatin 20mg/m <sup>2</sup>  Alternative regimes may be required very occasionally but above are the main drugs supplied
Small Cell Lung Cancer with superior vena cava (SVC) obstruction	IV Carboplatin/etoposide
Ewing's / Desmoplastic Small Round Blue Cell	VIDE
Anthracycline extravasation in a patient with normal renal & hepatic function	Dexrazoxane (Savene®) if within 6 hours of the extravasation  See <a href="#">extravasation policy</a> on Trust intranet

<b>Paediatric Oncology / Haematology</b>	
<b>Disease type/stage</b>	<b>Drugs/Regimen involved</b>
Acute Leukaemia - unanticipated admission of a newly diagnosed patient with a high white cell count	<p><b>Haematological malignancy</b> Interim Guidelines for treatment of children and young persons with acute lymphoblastic leukaemia and lymphoblastic lymphoma (July 2011) Reg B Induction</p> <p>ADE 3+5+10 (off study)</p> <p>AML 17 protocol version 5.0 May 2010 page 36 section 9.2 &amp; section 14.1</p> <p>R3 Induction</p> <p>AML relapse guidelines</p> <p>COP cytoreduction (NHL protocol)</p>
Acute Leukaemia - unanticipated admission of newly diagnosed relapsed patient with a high white cell count.	
Haematological malignancy patient with CNS involvement.	
Superior vena cava (SVC) obstruction - in a patient with a germ cell tumour or a haematological malignancy.	
Spinal cord compression – in a patient with germ cell tumours, Ewing’s sarcoma, neuroblastoma or a haematological malignancy.	<p><b>Ewing’s</b> VIDE</p> <p><b>Neuroblastoma</b> Carbo/etoposide neuroblastoma – Day 0 High risk protocol – unresectable protocol</p> <p><b>Germ cell</b> JEB</p>
Anthracycline extravasation in a patient <b>over the age of 18</b> with normal renal & hepatic function	<p>Dexrazoxane (Savene®) if within 6 hours of the extravasation</p> <p>See <a href="#">extravasation policy</a> on Trust intranet</p>

### 3. Procedure for Commencing Chemotherapy Out-of-Hours

For intrathecal chemotherapy required out-of-hours refer to [Trust Intrathecal Policy](#)

In order to commence intravenous chemotherapy, the following procedure must be followed:

### 3.1 Medical Responsibilities

- 1) The patient must be reviewed by the appropriate on-call consultant oncologist, haematologist or paediatric oncologist. They should endorse the decision to start chemotherapy in writing in the patient's case notes.
- 2) A consultant or SpR must contact the aseptic pharmacist in the Pharmacy Production Unit (Dect 29175) (Saturday 9-12 only) or the on-call pharmacist, to discuss the need for chemotherapy out-of-hours. The production unit or on-call pharmacist may wish to refer the call to a more senior colleague or an oncology/haematology pharmacist.
- 3) The consultant must complete all sections of the 'Request for Essential Out-of Hours Chemotherapy' form (See Appendix 1) and return it to the on-call pharmacist.
- 4) The consultant must:
  - a) Ensure that there is sufficient medical support available to safely manage the patient over the weekend.
  - b) Ensure that there are appropriately trained nursing staff on **all** shifts over the weekend during which the patient will receive chemotherapy
- 5) The consultant or specialist registrar (SpR) must prescribe the full course of chemotherapy using one of the approved pro-forma/ pre-printed prescriptions relevant to their area. For those regimens available on ChemoCare<sup>®</sup> the on-call consultant/SpR must prescribe electronically and print off the prescription for the on-call pharmacist to screen.
  - Haematology: AML and CHOP regimens are available on ChemoCare<sup>®</sup>. APLM is on pre-printed sheets located on the haematology ward (33) at Freeman Hospital.
  - Adult solid tumour: Prescriptions and administration sheets are available on the Trust intranet at <http://intranet/NCCT/DrugForms/A-z%20index.asp?area=12>
  - Paediatric Oncology - PDF versions of the proforma prescriptions are available on the Ward 4 (RVI) server which paediatric oncology medical staff have access to.
- 6) Once the chemotherapy is supplied, the original 'Request for Essential Out-of Hours Chemotherapy' form will be filed in the patient's notes. Two copies will be retained in pharmacy, one in the pharmacy production unit and one with the appropriate lead oncology/haematology pharmacist for audit purposes.

### **3.2 Pharmacy Responsibilities**

- 1) A pharmacist will discuss the need for chemotherapy with the requesting consultant.
- 2) Once the pharmacist has agreed that chemotherapy will be provided they will make arrangements for it to be prepared.
- 3) The pharmacist will check that the consultant or specialist registrar has completed the 'Request for Essential Out-of Hours Chemotherapy' form.
- 4) The pharmacist will check the prescription and that the doses have been calculated correctly. Any issues will be resolved with the prescriber before preparation of the chemotherapy.
- 5) Once the chemotherapy has been prepared it will be sent to the appropriate ward. If chemotherapy has been ordered in anticipation of a patient deteriorating further the chemotherapy will be retained in pharmacy until the patient is ready to receive treatment.

### **4. Provision of Chemotherapy to Replace Wasted Doses e.g. Punctured Bags or Expired Doses**

- 1) A request for a replacement dose of chemotherapy may only be made by a consultant or Specialist Registrar.
- 2) The consultant must complete all sections of the 'Request for Essential Out-of Hours Chemotherapy' form (See Appendix 1) and return it to the on-call pharmacist.
- 3) The request form must be accompanied by a copy of the original prescription which is clearly endorsed requesting the number of further doses to be supplied.

### **5. Consultation and Ratification Process/Monitoring and Review**

This policy has been developed in consultation with staff from the three key directorates responsible for the management of cancer patients within the organisation and approved via the Trust Chemotherapy Committee. Comments on content/ implementation should be directed to D Blake, Senior Lead Clinical Pharmacist, Paediatric Oncology, RVI. The document will be reviewed in 2 years or as determined by available evidence / modifications in practice. The effectiveness of this policy will be monitored via the oncology/haematology pharmacists and the Trust Chemotherapy Committee.

## Request for Essential Out-of Hours Chemotherapy

To be completed by the prescribing consultant or specialist registrar.

The consultant or specialist registrar will be taking full responsibility for the clinical assessment of the patient.

Patient Name:	Hospital Number:
Date of Birth:	<i>Or attach addressograph label</i>
Ward:	Consultant:

Chemotherapy Details	
Regimen requested	
Disease state / reason for request	
Full cycle of chemotherapy required	Y/N
Day 1 only required	Y/N
Chemotherapy prescribed by (consultant or SpR only)	

Required Tests Performed and Within Accepted Parameters *	<i>If the answer to any of the questions below is No the consultant should document reasons why chemotherapy is still to go ahead.</i>
FBC	Y/N
U&Es	Y/N
Renal Function	Y/N
LFTs	Y/N
Consent	Y/N

\*Nb AML/APML patients are unlikely to have FBC within range due the nature of the disease.

Signature of consultant		Print name	
Designation		Date	
Signature of Pharmacist		Print name	
Designation		Date	

Completed copies of the form should be filed in the following areas  
Patient's notes, Pharmacy production unit and sent to the appropriate lead oncology/haematology pharmacist.

**THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST**  
**IMPACT ASSESSMENT – SCREENING FORM A**

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

Policy Title:	Essential Out-of Hours Cancer Chemotherapy	Policy Author:	Denise Blake
		Yes/No?	You must provide evidence to support your response:
1.	Does the policy/guidance affect one group less or more favourably than another on the basis of:		The policy contains no mention of any such group
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability – learning difficulties, physical disability, sensory impairment and mental health problems.	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4(a).	Is the impact of the policy/guidance likely to be negative? <i>(If “yes”, please answer sections 4(b) to 4(d)).</i>	No	
4(b).	If so can the impact be avoided?		
4(c).	What alternatives are there to achieving the policy/guidance without the impact?		
4(d)	Can we reduce the impact by taking different action?		

<b>Comments:</b> Updated policy – only modifications is the addition of Savene to document	<b>Action Plan due (or Not Applicable):</b>
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Name and Designation of Person responsible for completion of this form: .....Denise Blake..... Date:.....15/8/11.....

Names & Designations of those involved in the impact assessment screening process:.....Chemotherapy Committee 22/7/11.....

(If any reader of this procedural document identifies a potential discriminatory impact that has not been identified on this form, please refer to the Policy Author identified above, together with any suggestions for the actions required to avoid/reduce this impact.)

*For advice on answering the above questions please contact Helen Lamont, Director of Nursing, or, Christine Holland, Senior HR Manager. On completion this form must be forwarded electronically to Steven Stoker, Clinical Effectiveness Manager, (Ext. 24963) [steven.stoker@nuth.nhs.uk](mailto:steven.stoker@nuth.nhs.uk) together with the procedural document. If you have identified a potential discriminatory impact of this procedural document, please ensure that you arrange for a full consultation, with relevant stakeholders, to complete a Full Impact Assessment (Form B) and to develop an Action Plan to avoid/reduce this impact; both Form B and the Action Plan should also be sent electronically to Steven Stoker within six weeks of the completion of this form.*