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Introduction

Background
The Clinical Chemotherapy Service (CCS) serves the population of Doncaster and Bassetlaw and surrounding areas, with a total population of 410,000. We are part of the Yorkshire and Humber Strategic Clinical Network.

The chemotherapy is given in a purpose Built Unit on the Doncaster Royal Infirmary Site. The Chatsfield Suite Haematology/Oncology Day Unit is currently open on a Monday to Friday basis (excluding Bank Holidays). The opening hours are from 08.00 to 17.00 hours. The Unit has 29 treatment chairs and 2 treatment beds/chairs. Day case chemotherapy is given to haematology cancer patients and to solid tumour patients (in accordance with outreach chemotherapy agreements). The facility also takes referrals for non-cancer haematological treatments and procedures.

A wide range of chemotherapeutic agents are administered with patients receiving intravenous and/or oral chemotherapy/other anticancer therapies. All regimens used are in accordance with NTCN policies and guidelines.

Many patients with malignant disease will receive cytotoxic chemotherapy as palliative or potentially curative therapy. This type of therapy is inherently dangerous as it is designed to cause cell death. Many of the drugs used have other toxic effects apart from their direct effect on cancerous cells. The use of cytotoxic drugs thus needs to be given in a controlled environment by staff experienced in their use, and management of side effects.


**Definitions:**

**Chemotherapy Trained Nurse** – A registered nurse who has successfully completed the NTCN Anticancer Therapies Education Package
Normal Working Hours – Monday – Friday 9am-5pm.

Out of Hours – Monday – Friday 5pm-9am and all day Saturday and Sunday.

Lead Roles and Responsibilities

Lead Clinician 11-3S-101

The Lead Clinician for the service is Dr S Kaul and the agreed list of responsibilities is:

• To ensure that designated specialists work effectively together in teams such that decisions regarding all aspects of diagnosis, treatment and care of individual patients and decisions regarding the team’s operational policies are multidisciplinary decisions;
• To ensure that care is given according to recognised guidelines (including guidelines for onward referrals) with appropriate information being collected to inform clinical decision making and to support clinical governance/audit;
• To ensure mechanisms are in place to support entry of eligible patients into clinical trials, subject to patients giving fully informed consent;
• Overall responsibility for ensuring that the team meet peer review quality measures;
• Provide link to NSSG either by attendance at meetings or by nominating another member to attend,
• Lead on or nominate lead for service improvement;

• Organise and chair annual meeting examining functioning of team and reviewing operational policies and collate any activities that are
required to ensure optimal functioning of the team (e.g. training for team members);

- Ensure that appropriate data collection is supported;

These responsibilities have been agreed with the head of services line manager and the Lead Clinician for the Trust

**Lead Chemotherapy Nurse 11-3S-102.**

- The Lead Chemotherapy nurse is Sue Tonge and the agreed list of responsibilities is:
- Timetable - Monday to Friday basis (allowing for annual/study leave) securing time for the administration of chemotherapy and to fulfil role of Lead Nurse Haematology/Oncology Day Unit
- The day to day organisation of the Chatsfield Suite Haematology/Oncology Day Unit
- Ensure adequate nurse and reception staff are planned to cover the Chatsfield Suite Monday to Friday 08.00 – 17.00 hours
- Ensure Trust nursing practice in relation to clinical chemotherapy is in line with Local and Network policy and guideline
- Liaise with and support the Senior Sister and nursing team on the Haematology Ward 18 in relation to chemotherapy services
- Undertake regular clinical activity to include the administration of chemotherapy
- Provide chemotherapy education, training and competency assessment to medical and nursing staff
- Maintain own chemotherapy skills and knowledge in accordance with local, Network and National chemotherapy practice

- Undertake performance and development appraisals with nursing and clerical staff in the Chatsfield Suite, ensuring adequate time and
provision is allocated for individuals to develop and refresh chemotherapy competency and theoretical knowledge base.

- Lead on the annual chemotherapy patient experience survey. Formulate an action plan according to user feedback.
- Alongside the Trust Lead Chemotherapy Clinician, take an active role in the Chemotherapy Multi Professional Team bi-monthly meetings. Ensure circulation of minutes to all group members.
- As core member of various Network and Cancer Centre groups related to chemotherapy services, attend meetings, provide locality data, updates and assist in the development of policy as required. Ensure locality feedback of relevant chemotherapy services information.

These responsibilities have been agreed with the head of services and the lead nurse’s line manager and the Trust Lead Cancer Clinician.

**Chemotherapy Facilities**

**Named Wards 11-3S-103**

Intravenous chemotherapy, both for planned and unplanned haematology patient admissions, is to be administered on the Haematology Ward Doncaster Royal Infirmary. Some patients who are clinically stable, of reasonable mobility and not of infective risk may attend the Chatsfield Suite if there is a clinical need. An example of such an occasion would be if there were no chemotherapy trained nurse available to administer chemotherapy due to ward sickness levels. In exceptional circumstances, chemotherapy may be given in other clinical areas e.g. Department of Critical Care providing it is administered directly by a chemotherapy-trained nurse. Chemotherapy given on such occasions must be noted and the circumstances discussed at the next planned Chemotherapy Multi Professional Team meeting.
All chemotherapy is to be prescribed by a doctor whose name is on the list of authorised chemotherapy prescribers – see list of authorised prescribers on Page 24. All chemotherapy prescriptions must be reviewed and signed by an appropriately trained pharmacist who will work in accordance with pharmacy procedures.

Cycles of chemotherapy are to be initiated within normal working hours (Monday – Friday between 09.00-17.00 hours) to ensure appropriate medical and pharmacy support is available.

No untrained staff are allowed to administer intravenous or subcutaneous chemotherapy except where they are undertaking supervised practice as part of the Anticancer Therapies Training Programme.

All medicines issued must be handled according to the Trust’s main medicines policy (PAT/MM1A Version 4 and PAT/MM5 Version 3).

**Neutropaenic Patients**

Patients suspected of being neutropenic must be admitted to a specific area that has been identified as being suitable to admit neutropenic patients. Areas where neutropaenic patients are admitted should have Patient Group Directions (PGD) in place for the care of neutropaenic patients.

- **Haematology Patients** – are to go directly to the Haematology Ward under the care of their known haematology consultant. This includes patients who present to Accident and Emergency departments in Mexborough, Bassetlaw and Doncaster and to The Chatsfield Suite.

- **Oncology Patients** –
Patients presenting to Chatsfield Suite will be assessed urgently by the staff grade doctor in Haemato-Oncology or the Oncologist/registrar on site. Immediate contact should be made with Weston Park Hospital (WPH) to arrange transfer. Pending transfer, appropriate investigations including blood cultures should be taken urgently and patient commenced on intravenous antibiotics immediately as per Trust policy PAT/EC 5 v.3 However, if there is no bed available at WPH (document so in the notes) the patient should be clerked, contact made with the SHO on call Acute Medical Team and arrange subsequent transfer to the Haematology Ward under the care of the admitting Consultant Physician. The patient will remain under the care of the Acute Physician for the episode of neutropenic sepsis with advice from the patient’s Oncologist.

Patients presenting to any other departments within the Trust – for example A&E departments at Doncaster or Bassetlaw. Immediate contact should be made with WPH to arrange transfer. Pending transfer, appropriate investigations including blood cultures should be done urgently and patient commenced on intravenous antibiotics immediately as per Trust policy. However, if there is no bed available at WPH (ensure that it is documented in the notes that contact has been made), the on-call medical team should be contacted for transfer to the Medical Assessment Unit at Doncaster. Following priority medical review, the patient is to be transferred to the Haematology Ward under the care of the on call medical team, with advice from WPH. Within normal working hours, the patients’ own oncologist must be informed of the admission. Out of these hours, contact the on call oncologist – available via WPH switchboard. Further guidance is available on the hospital intranet external link: WPH and NTCN Cancer Services; Anti Cancer Drug Therapy Handbook; Section 1. Follow hyperlink:
Specified Room Policy 11-3S-104

All day case chemotherapy is to be administered in the Chatsfield Suite at Doncaster Royal Infirmary. No untrained staff are allowed to give intravenous chemotherapy except where they are undertaking supervised practice as part of the Anticancer Therapies Training Programme.

The normal working hours for the Chatsfield Suite is Monday-Friday 08.00 – 17.00 hours and this allows up to 25 chemotherapy patients to safely receive their treatment – in accordance with current nursing and pharmacy staffing levels. If activity is planned or has the potential to exceed this level, this must be reported by the Lead Chemotherapy Nurse (or deputy in their absence) and to the Lead Clinician for chemotherapy, promptly so that the appropriate action can be taken.

Chemotherapy for Haematology and Solid Tumour indications can be administered on any working day of the week. However, in line with Haematologist and Oncologist availability on site and Out Patient Clinic activity, the Chatsfield Suite clinical chemotherapy activity is currently planned as per table below.
Chatsfield Suite clinical chemotherapy activity plan:

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**Out Patient/Day Case Oral Chemotherapy**

Oral chemotherapy can be prescribed in a number of settings - Out patient clinics at Doncaster and at Bassetlaw and the Chatsfield Suite. Out patients seen in the main clinic areas in Doncaster Royal Infirmary and Bassetlaw Hospital will have their prescriptions completed and signed by a doctor/independent prescriber who is a member of the appropriate Oncology or Haematology MDT and whose name appears on the approved list of prescribers –see page 24 for this list. All prescriptions should be seen and verified by an appropriately trained pharmacist in accordance with pharmacy policy and procedure.

Oral chemotherapy for both Haematology and Solid Tumour indications is administered in the Chatsfield Suite by a trained chemotherapy nurse.

All prescriptions are to be signed by both an authorised chemotherapy prescriber and an appropriately trained pharmacist.
Provision of Protocols and Equipment 11 3S 105

Treatment protocols state the required supportive therapy for solid tumour regimens and haemat-oncology regimes though in many cases these are common to both. Specific chemotherapy regimes for individual patients are agreed upon after discussion at the site specific multi-disciplinary meeting, (MDM) from the list of Network approved regimes. A copy of the MDM outcome is to be filed in the patient’s Doncaster and Bassetlaw Hospitals case notes along with a copy of the chemotherapy prescription.

There are exceptional circumstances where the use of a non-network approved regime can occur. For example, if a patient is transferred from another cancer centre and is prescribed a regime on their approved list but is not approved locally – see Anticancer Therapies Handbook Section 4.1.4 or when co-morbidities exclude the use of a standard protocol. In these circumstances, the Consultant must submit a completed ‘request for the use of a regimen not on the Network agreed list proforma – follow hyperlink: [http://nww.sth.nhs.uk/STHContDocs/STH_CGP/CancerServices/AntiCancerTherapyHandbook/Index.doc](http://nww.sth.nhs.uk/STHContDocs/STH_CGP/CancerServices/AntiCancerTherapyHandbook/Index.doc) to access the WPH anti-cancer handbook.

All Areas/wards/rooms identified in measures 11-3S-103 and 11-3S-104 have available in them:

- The regimen details as per the CCS list of treatment protocols for the regimens in use – follow above hyperlink to access clinical guidelines.
- Protocol documents and equipment for the management of at least the following emergencies:
  1. anaphylactic shock
  2. extravasation of cytotoxics
  3. cardiac arrest
  4. spillage of cytotoxics

- In the case of an exceptional circumstance, as detailed in section for Named Wards above. Intravenous chemotherapy may only be given by a chemotherapy trained nurse who is familiar with and can access the protocol documents as above.

**Temporary Storage and Preparation Area 11-3S-106**

All areas/wards rooms identified in measures 11-3S-103 and 11-3S-104 have within them, or adjacent to them, a separate and identified area for the temporary storage of chemotherapy agents which have been dispensed from pharmacy and for the tasks involved in the preparation and delivery of treatment. On the Haematology Ward Doncaster Royal Infirmary, intravenous chemotherapy may be stored in the designated locked fridge or in the designated locked cupboard, prior to administration. Tasks involved in the preparation and delivery of treatment are to be undertaken in the ward preparation room. Oral chemotherapy is to be stored in the lockable cupboard or fridge, according to manufacturers’ guidelines.

The Chatsfield Suite Doncaster Royal Infirmary - Intravenous drugs are taken from the cytotoxic pharmacy unit within the department to the patient for administration. Short term storage of intravenous chemotherapy in the Chatsfield Suite pharmacy preparation area is acceptable and will be in a locked cupboard or fridge. There is no facility for the storage of oral chemotherapy in the Chatsfield Suite. Tasks involved in the preparation and delivery of treatment are to be undertaken in the pharmacy and nurses preparation rooms.

In the case of exceptional circumstances as detailed in section for “Named Wards” above, Intravenous chemotherapy dispensed from pharmacy will be taken directly to the patient by the chemotherapy trained nurse who is to administer the chemotherapy.
The chemotherapy Multi-Professional Team (MPT)

The chemotherapy MPT 11-3S-107 group membership

There is a single multi-professional team for the Clinical Chemotherapy Service. Membership of the team is as follows:

Core members

- Dr S Kaul (Chair) - Consultant Haematologist
- Dr Y Sorour - Consultant Haematologist
  - Representative on the Network & Trust Drug & Therapeutics Committee(s)
- Dr S Pledge - Consultant Oncologist
- Sue Tonge (Deputy Chair) - Lead Chemotherapy Nurse
  - Representative on the Network Chemotherapy Group
- Ben East - Oncology Pharmacist
- Stacey Nutt - Haematology CNS
- Marie Purdue - General Manager Medical Specialites Federation

Non core members

- Dr J Joseph - Consultant Haematologist
- Dr R Cutting - Consultant Haematologist
- Lesley Barnett - Lead Cancer Nurse
- Ash Khaliq - IT Representative
- Annette Blenkiron - Senior Sister Ward 27

The Head of Service has agreed the terms of reference for the group:
Terms of Reference agreed by the Head of Service

- Peer review - Implement chemotherapy peer review measures
- Protocols - Implement approved chemotherapy regimes and monitor off protocol chemotherapy regimens.
- Audit - Responsible for audit in relation to Chemotherapy Services. Audit related neutropenic sepsis management and SACT to be standing items.
- Clinical governance - Quality assurance & quality control & documentation and investigation of chemotherapy related incidents including feedback from Haematology Clinical Governance Group.
- Risk management - Identify and discuss areas of risk in relation to chemotherapy services and management of the risks identified. Report, as per Trust and Network policy.
- Change management - Identify, discuss and manage identified or potential changes to the chemotherapy services including introduction of new protocols, techniques and technologies.
- Training & Competency - Maintenance of training and competency & matching staff functions to competency.

Multi-Professional Team Meetings 11-3S-108

The Local Chemotherapy Group meets on a bi monthly basis. Meeting dates for 2013, as agreed by the head of service, are as follows:

- 13th March 2013
- 8th May 2013
- 13th July 2013
- 11th September 2013
- 13th November 2013

Minutes of the meetings are distributed to all team members, the chair of the Medical Specialties Federation CSU Clinical Governance Group, The chair of
the Trust Cancer Management Team, the chair of the NTCN Drugs and Therapeutics Group (currently Dr Y Sorour), and the chair of the Network Chemotherapy Strategy Group (currently Dr L. Evans). See Annual Report for an example of the Local Chemotherapy Group meeting minutes.

Minutes are received by the Chemotherapy MPT from both the Network and the Trust Drugs and Therapeutics meeting, the Haematology Clinical Governance meeting and the Network drugs and Therapeutics Group meeting.

The Head of Service is responsible for organising and chairing the annual meeting examining the functionality of the CCS, reviewing operational policies and collating any activities that are required to ensure optimal functioning of the CCS (e.g. training for team members). An annual report is produced with support from the MPT and a copy of this report is forwarded to the Trust Clinical Governance Group.

**Representation on the Drugs and Therapeutic (D and T) Committee 11-3S-109**

At least one member of the MPT is a member on the Trust and NTCN D and T Committee. This is currently Dr Y Sorour Haematology Consultant (and Ben East Chemotherapy Pharmacist as deputy)

**Representation on the Network Chemotherapy Group 11-3S-110**

There is representation on the Network Chemotherapy Group, known as the Network Chemotherapy Strategy Group (NCSG). In line with the terms of reference for the Local Chemotherapy MPT, representation should be for at least 60% of the meetings. This is currently Sue Tonge Lead Chemotherapy Nurse. Head of Service (or Deputy) and chemotherapy pharmacist also to attend when possible. See Annual Report Appendix 5
Error Recording and Reporting 11-3S-111

In line with the Terms of reference for the Local Chemotherapy MPT, the CCS records and reports all errors/incidents relating to the CCS following Trust policy CORP/RISK 13 v.2 “Policy for the reporting and management of incidents and near misses”. This is in line with NPSA classification. All chemotherapy related adverse incidents and related action plans are discussed by the Local Chemotherapy MPT to minimise future risk. All such errors/incidents are reported to Medical Specialties Federation CSU/Centre Clinical Governance Group. Lead Chemotherapy Nurse to copy report all chemotherapy related incidents relevant to Chair of WPH morbidity mortality meeting – currently Dr L Evans. Lead Chemotherapy Nurse to attend the WPH morbidity mortality meeting to discuss reported incidents/errors and report back to Local Chemotherapy MPT.

Further Pre-Treatment Consultation

Pre Treatment Consultation 11-3S-112

Each patient is offered an individual consultation with a registered health care professional prior to starting a new course of chemotherapy. This consultation takes place whether it is the patient’s first course or whether they have previously undergone a course or courses of chemotherapy. This consultation is for the patient individually or, if needed, their carers and is not undertaken as part of a group. This takes place separately after any consultation where the treatment plan has been agreed.

There are bookable slots in the chemotherapy out patient clinics and in the chemotherapy day unit for such consultations. The health care professionals have time in their job plans to take responsibility for the consultation. See hard copy evidence Haematology CNS and Oncologist timetable/clinic slots and Annual Report Appendix 2 patient pathway.
Chemotherapy Checking Measures

Patient Identification Procedure 11-3S-113

All administrations of intravenous medications used by the CCS follow the principles outlines in the Trust Medicines Management Policy PAT/MM5 v.2. The patient verification procedure takes place at the patient chair/bed side. The patient must be able to give an active rather than passive response. Before each physical administration of chemotherapy two chemotherapy trained nurses must ensure the following is adhered to in order to guarantee accurate patient verification:

- The patient is asked to state their full name
- The patient is asked to state their date of birth

In the case of an identified error, the chemotherapy trained nurse must halt the patient identification check immediately and inform the patient that rectification of the error must be achieved before continuing the procedure. The chemotherapy trained nurse identifying the error must inform the nurse in charge in the first instance. If the identified error is not resolved at this point, the chemotherapy trained nurse must involve the chemotherapy pharmacist and the prescriber. The administration must not take place unless the error has been resolved. All chemotherapy trained staff are aware of the procedure to follow if errors/issues are identified.

Checks Prior to the prescribing the First Cycle of Treatment 11-3S-114

Prior to the prescribing of the first cycle of chemotherapy, all authorised chemotherapy prescribers, detailed on the list, undertake the following checks as a minimal standard:
1. History of specific diseases or conditions affecting fitness for chemotherapy. This history must include checks that the minimal physical and investigational requirements have been met.
2. Holistic needs assessment
3. Performance Status
4. Prior history of Chemotherapy
5. Drugs affecting chemotherapy
6. Informed consent obtained
7. Regimen against department protocols.

Checks are prevented from being omitted by completing relevant documentation. All patients must give an active not a passive response to the above checks.

**Checks prior to administering the first cycle of treatment 11-3S-115**

Prior to any administration of chemotherapy, all chemotherapy trained nurses complete the following checks:

- Patient’s identification on prescription and on all labelled drugs.
- Critical test results.
- Regimen and individual drug identification.
- Diluents and dilution volumes and any hydration.
- That supportive drugs have been given as per prescription.
- Administration route and duration.
- Cycle number.
- The administration is as per schedule within the cycle.
- History of toxicities and complications from previous cycle
- Minimum physical and investigational requirements are being met
- Dose modifications or delays consequent on the above toxicities
- Response assessment according to the relevant regimen and treatment intention.
The above verification procedure is undertaken by at least one chemotherapy trained nurse and the majority by two chemotherapy trained nurses. The checks are in line with regimen specific protocols for haematology and oncology as detailed on Chemocare.

The chemotherapy trained nurses achieve the checks by undertaking an active and not passive involvement from the patient and each other. All chemotherapy trained nurses know to report any errors noted in the above checking procedure to the nurse in charge in the first instance and then to the chemotherapy pharmacist and relevant prescriber. No administration of chemotherapy takes place until any identified error is resolved.

**Training**

**Training and Assessment Policy 11-3S-116, Assessors of competence 11-3S-117, Named Areas of competence 11-3S-118 and Training records 11-3S-119**

The CCS covers professional groups (oncology doctors, pharmacist nurses) covering competencies as in measure 11-3S-118. A member of one of those groups has their competency assessed before they are considered capable of delivering their professionals input into the process and representing that professional group. Responsibility for certain professional activities are restricted to that professional group.

- Prescribing, verification, checking and administration should be restricted to statutorily registered health care professionals in medicine, nursing and pharmacy.

- Clinical assessments and the decision to initiate the first cycle of a course of chemotherapy should be restricted to consultant medical staff and ST 3 and above medical trainee staff and NCCG medical staff who are assessed as competent for this by the training programme.

The following disciplines of staff involved in the delivery of the CCS undergo specified training and competency assessment:
• Nurses – to be a chemotherapy trained nurse, all nurses must be a Registered Nurse and must undertake training in the NTCN Anticancer Therapies Education Programme. This involves the attendance at WPH chemotherapy theory day and the completion of the education package. The Lead Chemotherapy Nurse completes the assessment of chemotherapy competence by ensuring nurses attend the theory day and by completing the final sign off of the education pack. The Lead Chemotherapy Nurse completes the above for the Senior Sister on the Haematology Ward and this authorises her to complete final sign off of competency of the Haematology Ward nurses. The Lead Chemotherapy Nurse and the Haematology Ward Senior Sister re-assess competence on an annual basis and evidence this by completing the annual review of competency record sheet - See hard copy evidence. Attendance on the chemotherapy theory day is required only once if the nurse is in continuous chemotherapy administration practice thereafter. However, should there be break in practice e.g. maternity leave, career break or an issue around competence, the nurse should attend the theory day again and also complete refresher training, in a supervised capacity, in the safe handling and management of anticancer therapies and be re-assessed by either of the two competency assessors as above.

• Pharmacists - all Centre and locality oncology pharmacists follow the Network education and training policy for pharmacists participating in systemic anti cancer treatment services. See Appendix 1. Competency is demonstrated through their existing qualifications as a pharmacist, through continuous practice in the specialist field and by abiding by the roles and responsibilities outlines in the policy. Pharmacists on both Trust sites undergo training to a minimum standard for assessment of chemotherapy prescriptions and sign a training record accordingly. Separate training and assessment documents are available for pharmacists and pharmacy technicians involved in preparation of
injectable chemotherapy at Chatsfield Suite. See hard copy of evidence of list of pharmacy staff trained. Training is delivered by the Oncology Pharmacist and this is currently Ben East.

- Medical staff and independent prescribers – oncology medical staff undertake WPH training programme for chemotherapy prescribers.

Competency is currently signed off by WPH Lead Chemotherapy Consultant, presently Dr L Evans. A training programme for haematology medical staff is currently in development. Locally, the Head of Service, currently Dr S Kaul, agrees competency for haematology medical staff involved in the CCS. All independent prescribers on the list of authorised prescribers on page 24 complete the National Non-Medical Prescribing (NMP) course and have their area of specific practice assigned by following the Trust NMP policy. Control of prescribing chemotherapy is achieved by the e-prescribing system administrator, currently Mrs J Derx, Senior Pharmacy Technician, allocating the level of access for each prescriber on the Chemocare system

**Authorised Administrators**

The following is a current list of competent chemotherapy trained nurses:

Chatsfield Suite:

Lead Nurse S Tonge (Lead Chemotherapy Nurse)

CN I Young

SN K Clarke

SN A Partington

SN G Espie

S A Cairns

SN M Griffiths

SN L Cunnane

SN K Carlile

SN G Coates

SN Kirsty Whitworth
Haematology Ward
Senior SR. A Blenkiron
SR T Brookes
SN T Coy (infusional only)
SN H Keene (infusional only)
SN D Sears (infusional only)
SN V Gee (infusional only)
SN K Sutton (infusional only)
SN R McCombe (infusional only)
SN J Hardisty (infusional only)
SN S Bleything (infusional only)
SN C Griffiths (infusional only)

Individual nursing staff records are held by the Lead Chemotherapy Nurse and Senior Sister on the Haematology Ward. See hard copy evidence

**Prescriptions**
In haematology and oncology cytotoxic drugs are largely electronically prescribed and printed by Chemocare software. Each prescription chart includes height in cms and weight in kg, for body surface area calculation, dose by body weight/body surface area and total dose to be administered. It must also include route and speed of administration. The prescription must be signed by an authorised prescriber.
The results of regimen specific current investigations as per the protocols assigned on Chemocare are recorded on the prescription. This applies to first and subsequent cycles. Locally, all Healthcare Professionals (HCPs) who have completed the above stated training and competency assessment follow the training package produced locally for HCPs involved in haematology oncology. See hard copy evidence. There are currently no HCPs involved in the formal assessment and prescribing of oncology chemotherapy. Careful follow up is also required after the last cycle to detect any late effects that require treatment.
Authorised Prescribers
The following are currently agreed chemotherapy prescribers within the locality:

Medical Staff
Dr J Joseph
Dr S Kaul
Dr Y Soruor
Dr R Cutting
Dr S Ramakrishnan
Dr K Dunn
Dr S Pledge
Dr M Hatton
Dr J Wadsley
Dr C Ferguson
Dr B Foran
Dr R Catipay Buyan – Haematology/Oncology Staff Grade
Dr I Weeks – Hospital Practitioner

Independent Prescribers (Unable to prescribe first doses/cycles but can prescribe subsequent cycles/doses)
Stacey Nutt – Macmillan Haematology Clinical Nurse Specialist
Rachel Cloke – Haematology CNS
Ben East – Chemotherapy Pharmacist

Chemocare System Manager

Mrs Jo Derx – Senior Pharmacy Technician

The first cycle of chemotherapy (all routes) may **only** be prescribed by a consultant oncologist or haematologist. For subsequent cycles, if not prescribed by an authorised prescriber they should seek advice from one of the above for changes of dose or cessation of therapy.
The Head of Service agrees the list of chemotherapy trained nurses and chemotherapy prescribers as detailed in this policy

**Treatment algorithms and treatment protocols**

**Agreed list of algorithms 11-3S-120**

The MPT of the CCS agrees the list of treatments compatible with the Network treatment algorithms. These are updated annually.

This is agreed with the Chair of the NCG and Head of Service. Follow hyperlink: [STH Cancer Services](http://nww.sth.nhs.uk/STHContDocs/STH_CGP/CancerServices/AntiCancerTherapyHandbook/Index.doc)

**Policy for Preventing Regular Deviation from the NSSG Agreed Treatment Algorithms 11-3S-121**

The MPT agree the Network policy for preventing regular deviations from the Network algorithms follow hyperlink: [http://nww.sth.nhs.uk/STHContDocs/STH_CGP/CancerServices/AntiCancerTherapyHandbook/Index.doc](http://nww.sth.nhs.uk/STHContDocs/STH_CGP/CancerServices/AntiCancerTherapyHandbook/Index.doc) This is agreed with the Chair of the NCG and Head of Service.

All deviations are discussed and recorded at the Local Chemotherapy MPT meeting. This includes the regime change and indication for deviation.

**Clinical Chemotherapy Service Treatment Protocols 11-3S-122**

The MPT of the clinical chemotherapy service agrees a set of treatment protocols which are associated with the CCS treatment algorithms to govern the delivery of chemotherapy by the service. These should be updated bi-annually. Each treatment protocol should specify the following information:

- cancer type;
- name of regimen and the therapeutic drugs used;
- therapeutic intent-palliative/adjuvant/neoadjuvant /radical, as applicable;
• doses of therapeutic drugs;
• routes of administration;
• number of cycles or whether this is indeterminate;
• length of cycle and number and timing of administrations within a cycle;
• tests required before starting a course and prior to an individual cycle;
• supportive drugs with each cycle;
• therapeutic drug dose modifications and their indications.

See link www.sth.nhs.uk/NHS/CancerServices

Guidelines and Protocols

Guidelines and Protocols 11-3S-123 and Guideline, Protocols for Systemic Therapy Acute Oncology Presentations 11-3S-124 and Hospital Guidelines and Protocols 11-3S-125

Trust and Network guidelines and protocols relevant to oncology and/or haematology are available covering the following:

• Cytotoxic administration techniques.
• The use of drug delivery devices
• Care of venous access devices (eg CVADS, PICCS and Ports). Including treatments and complications
• The use of devices used to prevent alopecia – Scalp cooling.
• Recognition and treatment of neutropenic sepsis.
• Use of haemopoietic growth factors and patient support using blood products.
• Prevention and treatment of cytotoxic-induced emesis.
• Recognition and treatment of cytotoxic extravasation.
• Prevention and treatment of stomatitis other mucositis and diarrhoea.
• Recognition and treatment of anaphylaxis.

A copy of each of the above is available in each area (either by the intranet or as a hard copy) involved in the prescribing and administration of chemotherapy and in pharmacy. See hard copy evidence and
24 hour Telephone Advice Service 11-3S-126

All in patient and day case haematology and oncology chemotherapy patients are given verbal and written instruction telling them to contact the Chatsfield Suite for advice from an appropriately trained nurse if they are unwell. See hard copy evidence.

There is a 24/7 on call oncology service available and this is agreed with the Network. See hard copy evidence

All haematology chemotherapy patients receive a direct admission letter to use out of hours. See hard copy evidence

Information for Patients

Information for Patients and Carers 11-3S-127/128

Patients and carers should be given written and verbal information about their chemotherapy and likely side effects. The ethnic minority population of our area is <1%, so most patients will be able to understand local and national publications about their diseases, investigations and management. Interpreters are available and should be arranged using the appropriate Trust policy PAT/PA34 Version 1.

Patients are given information on:

- Regimen specific information
- Who to contact for advice in and out of hours 24/7
- What actions to take if has elevated temperature/unwell
- Symptoms to be aware of
- Complications of chemotherapy
- Support services
- Information on financial advice
- A chemotherapy alert card
See hard copy evidence

**Consent Form 11-3S-129**

Patients receiving chemotherapy are required to sign the Trust'/Centre approved consent form. The form should state:

- The name of the proposed treatment regimen
- The intended benefits
- Side effects including toxicities
- Information given – generic disease specific and drug specific

The patient keeps the white copy of the consent form, and the gold copy goes in the case notes.

Prior to the administration of intravenous chemotherapy the administering nurse must gain verbal consent.

**Patient Experience Exercise 11-3S-130**

On behalf of the CCS, the Lead Chemotherapy Nurse undertakes an annual chemotherapy patient experience survey that is registered with the Trust Clinical Audit Department. Due consideration is given to whether patients may have participated in the National Chemotherapy Patient Survey (2013) and timing of the local annual chemotherapy survey is adjusted accordingly.

**Treatment Plan Copy to GP 11-3S-131**

A copy of the patient’s treatment plan will be sent to the GP including treatment regime, start date, duration and treatment intent.

A copy of this is offered to the patient and sent to the GP and any other relevant Health Care Professional (HCP). See hard copy evidence

**Treatment Record Prior to Commencing a Course 11-3S-132**

Prior to each course of treatment, the following is recorded
• The results of any essential serial investigations
• Any dose modifications and whether they are permanent
• Any cycle delays
• Any introduced support drugs not recorded as per 10-3S-129
• Performance status
• Any toxicities from the previous cycle

See hard copy evidence

**Treatment Records Prior to Commencing a Cycle 11-3S-133**

Good record keeping is of paramount importance as this allows for effective communication between team members and enhances patient safety. For inpatients, the daily clinical record written by medical and nursing staff is used to document results and the need for continuation of cytotoxic and supportive chemotherapy.

In the day case setting, treatment plans are used by medical staff and HCPs authorised to prescribe chemotherapy for haematology and oncology. See hard copy evidence. Chemotherapy trained nurses complete the Trust’s local Chemotherapy Integrated Pathway of Care (IPOC) - see hard copy evidence. The treatment plans and the chemotherapy IPOC contain the following information:

• Patient identification
• Weight, height and body surface area
• Cancer type
• Regimen and doses of all cytotoxic and support drugs
• Route of administration
• Number of cycles intended
• Frequency of cycles and number of administrations within a cycle
• Investigations necessary prior to starting the whole course
• Investigations to be performed serially during the treatment course to detect /monitor toxicities experienced and severity, frequency and response
• For palliative, curative and neo adjuvant treatments the maximum number of cycles after which the response is to be reviewed. Prior to continuing
• Attendances managed by agreed non-medical staff.

Treatment summary 11-3S-134

After the last cycle of a course of chemotherapy is given, a treatment summary record is completed for both haematology and oncology patients and includes the following:
• Whether the course was completed or not.
• If not completed, the reasons for cessation:
  o Toxicity
  o Sub-optimal response (for non-adjuvant treatment)
  o Disease recurrence during adjuvant treatment
  o Any other reason
• For completed courses of non-adjuvant treatment a reference to the response should be included.

This is filed in the patient’s medical notes and a copy sent to the patient’s GP. At the present time, compliance with this measure is achieved for the haematology service. An electronic version of a patient’s treatment summary is in development at WPH for the solid tumour service and as such, compliance with this measure is not currently demonstrated. See hard copy evidence.
The Chemotherapy data set 11-3S-135

There is an agreement in place that information required to be submitted to the National systemic anticancer therapies mandatory dataset, will be provided by the Trust Information Department. This will be internally validated by the oncology pharmacy service and the Medical Federation Clinical Service Unit in which the CCS sits.

Workload arrangements 11-3S-136

There is an agreement where the Head of Service in conjunction with the Chemotherapy Pharmacist and Lead Chemotherapy Nurse are able to limit the number of chemotherapy patients being treated if they judge the workload has reached unsafe levels. This is currently set at 25 patients per day for day case chemotherapy.

Chemotherapy Capacity and Planning 11-3S-137

The CPORT system is used in the Chatsfield Suite. The Lead Chemotherapy Nurse currently holds responsibility for the development of its use. However, due to time constraints and the lack of agreed support, the use of C-PORT by the CCS has been limited. See Annual Report.

Out of Hours chemotherapy 11-3S-138

There is agreement for the CCS that in exceptional circumstances, chemotherapy may be allowed outside working hours. This currently applies to the Haematology Ward only. Such exceptional circumstances should be discussed and agreed with the Lead Chemotherapy Nurse, Chemotherapy Pharmacist and Head of Service where possible. The Local Chemotherapy MPT discuss and document the reason for this and the arrangements that apply in these circumstances.
Electronic Prescribing

Computer Generated Prescriptions 11-3S-139

Chemocare electronic prescribing system is in use for both solid tumour and haematology patients, though these two groups at present use separate systems. Chemocare enables electronic prescribing using approved protocols and provides an electronic auditable record of chemotherapy prescribed. The electronic prescribing system is not currently used to record chemotherapy administered. It provides an auditable record of chemotherapy encompassing the majority of requirements appropriate for submission to the National mandatory chemotherapy dataset. It enables data extraction using Business Objects/Data Warehousing

Standard Operating Procedures (SOP) for Electronic Chemotherapy Prescribing System

Local Configuration of the electronic Prescribing System 11-3S-140

There is electronic interface of patient demographics and blood results between the haematology Chemocare system and the Doncaster and Bassetlaw Hospitals (DBH) PAS system. This system does not yet exist between the WPH Chemocare system and DBH PAS, although the WPH system can do this job using the STH PAS system. However, work is almost complete to enable the automatic population of demographics and blood results from DBH to the solid tumour oncology chemocare system. The procedure for entry and verification of patient parameters and blood results is incorporated into the Chemocare procedure. The SOP includes specification of the following:

- configuration of the drug database
- configuration of the worksheet database;
- configuration of the protocol database;
• those categories of personnel with their minimum qualifications and/or competencies which should mandatorily be responsible for the procedure;
• the requirement that the resulting configuration should be checked by a person(s) acting independently of the one(s) carrying out the original

See hard copy evidence for this SOP

Consideration of suggested variation to the use of e-prescribing 11-3S-141 and Validation of the Incorporation of Individual Regimens onto the Electronic Prescribing System 11-3S-142

Procedures for approval of variations to the use of Chemocare and for the approval of new chemotherapy regimens are included in the Chemocare procedure. The SOP should includes:
• validation of the drug database;
• validation of the worksheet database;
• validation of the protocol database;
• the categories of personnel with their minimum qualifications and/or competencies which should be mandatorily involved in the process;
• the requirement that the validation process should be checked by a person(s) acting independently of the one(s) carrying out the original procedure.

See hard copy SOP evidence

The Oncology Pharmacy Service

Lead Pharmacist 11-3S-201

The lead pharmacist agrees a list of responsibilities with the lead cancer clinician and the lead pharmacist’s line manager. The Lead pharmacist is currently Ben East. See hard copy evidence for list of responsibilities as per job description
**Designated Pharmacist 11-3S-202**

The CCS has one named pharmacist for the service whose role is defined by the duties stated above. The CCS has no other designated pharmacists for oncology and haematology. Pharmacists are trained to handle chemotherapy prescriptions by the Lead Chemotherapy Pharmacist.

**Designated Pharmacist Duties 11-3S-203**

The designated pharmacist, named above, duties include a list of responsibilities agreed by the lead pharmacist his /her relevant line manager for the CCS. See hard copy evidence. The agreed duties include:

- Overall responsibility for oncology services to named wards /areas/out patient used exclusively or preferentially for chemotherapy services and aseptic procedures as per measures 10-3S-103-104
- Overall responsibility for oncology services to the outpatient procedures as per measures 10-3S-104 on the days they are used for chemotherapy.
- Overall responsibility for cytotoxic chemotherapy
- Overall responsibility for clinical trials

**Responsibility for Aseptic Chemotherapy Preparation 11-3S-204**

The Lead Chemotherapy Pharmacist, named above, has overall responsibility for the aseptic service for the CCS: See hard copy evidence for list of responsibilities as per job description. The list of responsibilities for this single designated pharmacist include:

- Overall responsibility for the aseptic chemotherapy preparation facilities of the pharmacy service.
**Aseptic chemotherapy preparation Audit 11-3S-205**

The oncology pharmacy service must be independently audited for at least the aseptic preparation of compounds, and the preparation of chemotherapy, and should have agreed to abide by its findings. The audit should be conducted as follows:

- **Licensed Units** - Medicines and Healthcare Products Regulatory Agency inspection within two years prior to the self assessment/peer review visit.
- **Unlicensed Units** - an external audit by the Regional Quality Assurance Pharmacist within eighteen months prior to the self assessment/peer review visit.

The aseptic facilities at Doncaster & Bassetlaw are classed as an Unlicensed Unit and was last visited and audited by the Quality Control Network QA Manager (Ruth Barnes from Royal Preston Hospitals) on 25th and 27th July 2012. See hard copy evidence for the audit report and the response and action plan formulated by the Lead Chemotherapy Pharmacist.

**Vinca Alkaloids**


**Vinca Alkaloid Policy 11-3S-206**

The CCS only treat adults with chemotherapy at Doncaster. Vinca Alkaloids are supplied in 50ml 0.9% saline bags and are distinguished by a red label in addition to the normal dispensing label. See hard copy evidence for Vinca Alkaloid policy.
There is no Intrathecal Chemotherapy Service as part of the current CCS.

**Waiver to the National guidance on Vinca Alkaloid Dilution in Syringes 11-3S-207**

Not applicable to the current CCS.
Appendices

1. North Trent Cancer Network

**Education and Training Policy for Pharmacy Staff participating in the Systemic Anti Cancer Treatment service**

**Background**
The National Chemotherapy Advisory Group (NCAG) report includes the following required action by all chemotherapy service providers:

“All chemotherapy prescriptions should be checked by an oncology pharmacist, who has undergone specialist training, demonstrated their appropriate competence and is locally authorised/accredited for the task. This applies to oral as well as parenteral treatments. A list of designated pharmacists should be kept in each hospital where chemotherapy is to be prescribed/delivered.”

This document sets out the NTCN training policy for pharmacists in order to comply with above requirement.

This document also describes recommended education, training and awareness-raising for other pharmacy staff that is required to handle or otherwise work with cytotoxic drugs.

The BOPA verification standards are the gold standards for pharmacy staff and remain the aspiration of all SACT services. (ref. BOPA Standards for Clinical Pharmacy Verification of SACT FINAL 29.1.10).

**1. Lead Cancer Pharmacists**

Each chemotherapy service must have a lead pharmacist who has agreed a list of responsibilities for the role with the lead cancer clinician and the lead pharmacist’s line manager.

- One of the key responsibilities is the education and training of pharmacy staff whose duties include handling systemic anti-cancer drugs – “handling” covers all activities ranging from receiving goods into stores to clinically checking, dispensing and counselling patients on their use.

- They will keep a list of pharmacists assessed as competent to check, dispense and counsel patients receiving systemic anti cancer treatment.

- They will be the lead assessor of competence of other pharmacists participating in the chemotherapy service. They may appoint other pharmacists as assessors.

- They are responsible for keeping training records of staff involved.
2. Pharmacists who are SACT competent

Each chemotherapy service may have (in addition to the lead cancer pharmacist) one or more other pharmacists who have acquired competency to clinically check, dispense and counsel patients on the use of systemic anti-cancer treatment.

- To acquire competency, the pharmacist will work under the supervision of a more experienced cancer pharmacist. Training will be designated locally and may consist of:
  a. Working alongside a more experienced cancer pharmacist
  b. Attending training courses
  c. Reading (to include the North Trent Chemotherapy Education Programme and other North Trent Guidelines)
  d. Completing CPD records on relevant topics

- Competency may be measured by completion of a chemotherapy “test” and confirmed by recommendation by the pharmacist assessor.

- Once deemed competent by the assessor, they will be able to clinically check and issue all systemic anti-cancer treatments, both oral and parenteral. According to local practice, further training and competence assessments may be required for service developments.

3. Dispensary-based pharmacists

Many oral anti-cancer medicines are issued through general dispensaries where most (if not all) pharmacists are NOT specialist cancer pharmacists.

- All dispensary based pharmacists required to be involved in the supply (including clinical checking) of anti-cancer medicines must undergo training designated by the lead cancer pharmacist. Competencies in dispensing will be determined locally – these will include competence to dispense medicines other than SACT.

- Training will include reading the NPSA Rapid Response Report (NPSA/2008/RRR001 January 2008) “Risks of incorrect dosing of oral anti-cancer medicines”.

- Dispensary-based pharmacists must be trained in the requirements of the Rapid Response Report in relation to:
  a. Location of policies, protocols and treatment plans within the department for reference
  b. Ability to confirm that the prescribed dose is appropriate for the patient on that day, including checking previous prescriptions on ChemoCare or other pharmacy-held records.
  c. Information which must be given to or checked with the patient when issuing medicines
  d. The name and contact details of the specialist cancer pharmacist(s) to whom they can refer for advice
• Training records must be kept by the lead cancer pharmacist.

• Final accuracy checking may be carried out by suitably trained pharmacy technicians working within their levels of competency

4. Aseptic unit staff

Preparation of parenteral anti-cancer medicines must take place in either a manufacturing unit with an MHRA licence or an unlicensed unit under supervision of a pharmacist (Section 10 exemption). The pharmacist in charge may or may not be a specialist cancer pharmacist.

• The facilities must be suitable for the preparation of medicines which are potentially harmful ie include the use of negative-pressure isolators.

• Aseptic unit staff must be trained in the SOPs applicable to the unit in which they are working.

• Clinical checking by a specialist cancer pharmacist can take place before or after the treatment is prepared, but must be before it is issued.

• If there is no specialist cancer pharmacist based in the aseptic unit, aseptic unit staff must be trained to contact a specialist cancer pharmacist for advice if there are queries on prescriptions.

• When oral anti-cancer medicines are issued by the aseptic unit, the requirements under section 3 above also apply.

5. Support staff

• Staff required to unpack deliveries or transport cancer medicines must be trained in procedures concerning damaged/broken containers and spillages.

• Domestic and support staff involved in cleaning areas where cytotoxic drugs are handled must be trained in procedures designed to minimise risk of exposure.

6. Clinical Trials

Clinical trials form a significant part of the activity of cancer pharmacy, especially in Cancer Centres. All pharmacy staff must undergo local training if they are involved in administering trials.

7. Assessors

All Lead Oncology Pharmacists are assessors of competence for pharmacy staff clinically checking prescriptions and dispensing chemotherapy in their locality.

Barnsley Hospital                        Kate Walker
Doncaster and Bassetlaw Hospital          Ben East
Rotherham Hospital                        Khuram Amini

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Within Sheffield Teaching Hospitals, other experienced oncology pharmacists (with a minimum of 3 years oncology/haematology experience) assess junior pharmacists. These pharmacists are Neil Masters, Jane Lawry, Jayne Davis and Rebecca Mills.

Further assessors may be appointed by the Lead Oncology Pharmacist. They must have a minimum of 3 years oncology/haematology experience.

Any staff member who leaves the service for more than 6 months would need to demonstrate their competency before resuming independent practice and resuming their role as an assessor.

Jennie Martin
Feb 13