Chemotherapy Protocol

SARCOMA

Gastro-Intestinal Stromal Tumour (GIST)

Imatinib

Regimen

- GIST-Imatinib

Indication

- Imatinib is recommended as a possible adjuvant treatment, for a maximum period of 3 years, for people who had gastrointestinal stromal tumours that were completely removed by surgery, when there is a high risk that the tumour may relapse based on risk criteria or mutation analysis.

- Imatinib treatment at 400mg once a day is recommended as a first line treatment of people with KIT (CD117) positive unresectable and / or KIT (cd117) positive metastatic gastro-intestinal stromal tumours (GISTS). Continuation with imatinib therapy is recommended only if a response to initial treatment is achieved within twelve weeks. Responders should be assessed at intervals of approximately twelve weeks thereafter. Continuation of treatment is recommended at 400mg once a day until the tumour ceases to respond. Imatinib is not recommended at doses above 400mg once a day for people with unresectable and / or metastatic GISTs whose disease has got worse after treatment with imatinib at a dose of 400mg once a day.

- WHO Performance status 0, 1, 2

Toxicity

Drug	Adverse Effect
Imatinib	Fluid retention, rash, diarrhoea, cardiotoxicity, haemorrhage, muscle cramps

The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.

Monitoring

Drugs

- FBC every week for 4 weeks after initiation of therapy or following a dose increase. If no toxicity, monitor fortnightly for 8 weeks, then every 4 weeks for next 12 weeks and then every 12 weeks thereafter, if stable.

- LFTs should be monitored weekly for 4 weeks after initiation of therapy or following a dose increase. If no toxicity, monitor fortnightly for 8 weeks, then every 4 weeks for next 12 weeks and then every 12 weeks thereafter, if stable

- U&Es and electrolytes should be monitored every four weeks
- Baseline evaluation of left ventricular ejection fraction in patients with known underlying heart disease or in elderly patients.

Dose Modifications

The dose modifications listed are for haematological, liver and renal function and drug specific toxicities only. Dose adjustments may be necessary for other toxicities as well.

Please discuss all dose reductions / delays with the relevant consultant before prescribing, if appropriate. The approach may be different depending on the clinical circumstances.

Haematological

Dose modifications for haematological toxicity in the table below are for general guidance only. Always refer to the responsible consultant as any dose reductions or delays will be dependent on clinical circumstances and treatment intent.

Haematological toxicity usually presents within eight weeks of starting therapy with imatinib.

Consider blood transfusion or the use of erythropoietin according to NICE TA323 if patient symptomatic of anaemia or has a haemoglobin of less than 8g/dL.

Neutrophils ($x10^9$/L)	**Dose Modifications**
Less than or equal to 1	1st occurrence Stop treatment until neutrophils greater than or equal to $1.5x10^9$/L and resume treatment at 400mg dose. 2nd occurrence Stop treatment until neutrophils greater than or equal to $1.5x10^9$/L and resume treatment at a reduced 300mg dose.
Platelets ($x10^9$/L)	**Dose Modifications**
Greater than or equal to 50	1st occurrence Stop treatment until platelets greater than or equal to $75x10^9$/L and resume treatment at 400mg dose. 2nd occurrence Stop treatment until platelets greater than or equal to $75x10^9$/L and resume treatment at a reduced 300mg dose.

Hepatic Impairment

Drug	**Bilirubin µmol/L**		**AST/ALT units**	**Dose (% of original dose)**
Imatinib	Greater than 3xULN	or	Greater than 5xULN	Withhold treatment until bilirubin less than 1.5 x ULN or ALT/AST less than 2.5 x ULN, then resume treatment at a reduced dose of 300mg.

Renal Impairment

No dosage adjustment necessary

Regimen

28 day cycle until disease progression or intolerance (12 cycles will be set in Aria)

Drug	Dose	Days	Administration
Imatinib	400mg once a day	1-28 (inclusive)	Oral

Dose Information

- Imatinib is available as 400mg or 100mg tablets.

Administration Information

- Imatinib should be given once daily with plenty of water and with or after food.

Additional Information

- The National Patient Safety Alert on oral chemotherapy (NPSA/2008/RRR001) must be followed in relation to imatinib.
- It must be made clear to all staff, including those in the community, that imatinib should only be prescribed under the supervision of an oncologist/haematologist.
- Imatinib interacts with many other agents. Always check for drug interactions.

Coding

- Procurement – X71.5
- Delivery – X73.1

References
1. National Institute of Health and Care Excellence. Technology Appraisal 326. Imatinib for the adjuvant treatment of gastro-intestinal stromal tumours (review of NICE technology appraisal guidance 196). London:DOH.
2. National Institute of Health and Care Excellence. Technology Appraisal 204. Imatinib for the treatment of unresectable and / or metastatic gastro-intestinal stromal tumours. London:DOH.

REGIMEN SUMMARY

Imatinib

Cycle 1 Day 1-28

1. Imatinib 400mg once a day oral
   Administration Information
   Take with or just after food, or a meal. Take with a full glass of water

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1	September 2015	None	Dr Deborah Wright Pharmacist	Dr Nicola Keay Consultant Medical Oncologist

This chemotherapy protocol has been developed as part of the chemotherapy electronic prescribing project. This was and remains a collaborative project that originated from the former CSCCN. These documents have been approved on behalf of the following Trusts;

Hampshire Hospitals NHS Foundation Trust
NHS Isle of Wight
Portsmouth Hospitals NHS Trust
Salisbury NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust
Western Sussex Hospitals NHS Foundation Trust

All actions have been taken to ensure these protocols are correct. However, no responsibility can be taken for errors which occur as a result of following these guidelines.