

Chemotherapy protocol

Drug regimen

Weekly 5FU + folinic acid

Indications for use

Adjuvant chemotherapy for colorectal cancer

Regimen

Folinic Acid 50mg stat IV bolus
5-Fluorouracil 370mg/m² IV bolus

Regimen to be repeated weekly for 30 weeks

Investigation prior to initiating treatment

FBC
LFT
U&Es
Bone
CEA

Dihydropyrimidine dehydrogenase (DPD) deficiency can result in severe toxicity secondary to reduced fluorouracil metabolism (this can present as severe diarrhoea and/or severe stomatitis early in the first cycle). Patients require DPD testing prior to administration. Dose adjustments should be made in accordance with local DPD policy.

Investigations and consultations prior to each cycle

FBC weekly for first 4 weeks and then every 4 weeks if it is within normal limits

Consultation every 6 weeks

U&E, Calcium, LFT and CEA every 4 weeks. These may be retrospectively looked at (i.e. after the chemotherapy treatment) **unless** they are known to be abnormal then they need to be repeated the day before so that the results are available pre-chemotherapy.

Side Effects

Sore mouth, conjunctivitis, skin rashes, nausea and vomiting, diarrhoea, hand foot syndrome, myelosuppression and thrombocytopenia, cardiotoxicity (including coronary artery spasm, angina and tachycardia), ocular toxicity (excessive lacrimation, visual change, photophobia), transient cerebellar syndrome, confusion, thrombophlebitis.

Dihydropyrimidine dehydrogenase (DPD) deficiency can result in severe toxicity secondary to reduced fluorouracil metabolism- avoid use in patients with known DPD deficiency

Acceptable levels for treatment to proceed

(if outside these delay one week or contact consultant)

Acceptable blood range: Neutrophils $\geq 1.2 \times 10^9/l$ and platelets $\geq 100 \times 10^9/l$

If only Hb is low (below 95g/dl) please contact doctor to arrange for blood transfusion but continue with chemotherapy

Dose Modification Criteria

Renal impairment

Consider dose reduction of fluorouracil if CrCl <10 ml/min (no dose adjustment needed for folinic acid)

Hepatic impairment

Bil/ ALT	Fluorouracil dose	Folinic acid dose
≤ 1.5 x ULN	100%	100%
1.5-3 x ULN	66% *	100%
3-5 x ULN	50% *	100%
>5 x ULN	Contraindicated	

*doses may be increased back to 100% if no toxicity

Dose modifications should be made as per the following table

Toxicity grade	1 st occurrence	2 nd occurrence	3 rd occurrence	4 th occurrence
0-1	100%	100%	100%	100%
2	Delay then 100%	Delay then 75%	Delay then 50%	Discontinue
3	Delay then 75%	Delay then 50%	Discontinue	
4	Delay then 50%	Discontinue		

Any delays should be until the toxicity has resolved to grade 0-1.

Once dose has been reduced it should not be increased at a later time

Patients presenting with diarrhoea must be carefully monitored until the symptoms have disappeared as a rapid deterioration can occur

Specific Information on Administration

If only Hb is low please contact doctor to arrange transfusion but continue with chemotherapy.

Patients should be informed of the need to interrupt treatment immediately if they develop moderate or severe side effects particularly diarrhoea (not controlled by loperamide), palmar plantar erythrodyesthesia, chest pain or infection.

Folinic Acid must be administered prior to 5FU

THIS PROTOCOL HAS BEEN DIRECTED BY DR WILLIAMSON, THE DESIGNATED LEAD FOR COLORECTAL CANCER

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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