

Chemotherapy protocol

Drug regimen

Capecitabine

Indication for use

Adjuvant chemotherapy for colorectal cancer and biliary tract cancer

Regimen

Drug	Dose	Frequency	Route	Duration
Capecitabine	1250mg/m ²	Twice daily	oral	Days 1 to 14

Repeat every 3 weeks for 8 cycles (24 weeks total)

Capecitabine dose calculation by surface area for treatment of Metastatic Breast, Metastatic Colorectal, and Adjuvant colorectal cancer

Dose: 1250mg/m² twice a day, orally, for 14 days every three weeks

Surface Area (m ²)	Total daily dose(mg)	Prescribe as (mg) bd
<1.27	3000	1500 bd
1.27 - 1.38	3300	1650 bd
1.39 - 1.52	3600	1800 bd
1.53 - 1.66	4000	2000 bd
1.67 - 1.78	4300	2150 bd
1.79 -1.92	4600	2300 bd
1.93 - 2.06	5000	2500 bd
2.07 -2.18	5300	2650 bd
>2.18	5600	2800 bd

Investigation prior to initiating treatment

FBC, U&Es, LFT, bone, CEA

Creatinine Clearance (use Cockcroft formula)

NB this is oral treatment. Assess patient for ability to self medicate

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, U&Es
LFT

The liver function tests 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.

Consultation every 2 cycles
Repeat CEA every 2 cycles

Side Effects

Tiredness, diarrhoea and abdominal pain, nausea and vomiting, sore mouth, poor appetite, myelosuppression and thrombocytopenia, hand foot syndrome, cardiotoxicity (including coronary artery spasm, angina and tachycardia), ocular toxicity (excessive lacrimation, visual change, photophobia), transient cerebellar syndrome, confusion

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 levels defer one week or contact consultant)

Creatinine Clearance >50 ml/min
Neutrophils > 1.5 x10⁹/l
Platelets > 100 x10⁹/l
Total bilirubin <3 ULN
ALT, AST < 2.5 ULN
Alk Phos < 2.5 ULN

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

Contact **consultant** if neutrophils are between 1 –1.2 x10⁹/l

Dose Modification Criteria

Age 70 yrs or over – reduce dose to 1000mg/m² (max 2000mg bd)

Renal impairment

CrCl (ml/min)	Capecitabine dose
>50	100%
30-50	75% (closely monitored)
<30	Contraindicated

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

Specific Information on Administration

See table for dose banding – dose must match the tablet strengths available

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.

Any unused tablets to be returned at the next appointment

Cycle must finish 14 days after starting irrespective of how many delays or tablets not taken.

Cockcroft Formula

Estimated GFR Male $\frac{1.25 \times (140 - \text{age}) \times \text{Wt}(\text{kg})}{\text{Serum creatinine (umol/l)}}$

Female $\frac{1.05 \times (140 - \text{age}) \times \text{Wt}(\text{kg})}{\text{Serum creatinine (umol/l)}}$

**THIS PROTOCOL HAS BEEN DIRECTED BY DR WILLIAMSON, DESIGNATED LEAD CLINICIAN FOR COLORECTAL CANCER.
RESPONSIBILITY FOR THIS TEMPLATE LIES WITH THE HEAD OF SERVICE**

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