Irinotecan (single agent 2-weekly)

Indication
Metastatic colorectal cancer

Regimen details
Irinotecan 250mg/m² in 250ml sodium chloride 0.9% over 30 minutes

Cycle frequency
Repeat every 14 days

Number of cycles
Initial 6 cycles continued to progression or unacceptable toxicity

Administration
Atropine 250mcg *must* be prescribed before treatment commences. This is only to be administered in the event of a cholinergic reaction unless the patient has experienced such a reaction in a previous cycle.
Administer Atropine 0.25mg s/c if patient experiences cholinergic reaction with first cycle.

Emetogenicity
Moderate

Additional supportive medication
All patients must have access to loperamide with the advice to take 4mg at the onset of diarrhoea and to continue taking 2mg every 2 hours for at least 12 hours to a maximum of 48 hours (up to a maximum of 24mg/24 hours).

Investigations – pre first cycle

Investigation	Validity period
FBC	14 days
U+E (including creatinine)	14 days
LFT (including AST)	14 days
Bone profile	14 days
CEA	14 days
CT scan	As appropriate
Coagulation profile	14 days

Investigations –pre subsequent cycles
FBC, U+E (including creatinine), LFT (including AST)

Calcium and CEA every 2nd cycle

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 cycle

Standard limits for administration to go ahead

If blood results not within range, authorisation to administer **must** be given by prescriber/ consultant.

Investigation	Limit
Neutrophil count	≥ 1.5 x 10^9/L (if 1.2 – 1.5 x10^9/L contact consultant)
Platelet count	≥ 100 x 10^9/L
Hb	≥ 95 g/l
Creatinine clearance	≥ 50 mL/min
Bilirubin	≤ 1.5 x ULN
Alk Phos	< 5 x ULN

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

Dose modifications

Renal impairment

Creatinine Clearance (ml/min)	Irinotecan dose
>50	100%
30-50	Unclear guidance discuss
<30	Omit

Hepatic impairment

Irinotecan and metabolites are cleared by biliary excretion
Delayed clearance in cholestasis

Bilirubin	ALP	Irinotecan dose
<1.5 x ULN **and**	≤ 5 x ULN	100%
1.5-3 x ULN **or**	>5 x ULN	50%
>3 x ULN	any	Omit

Haematological toxicity

Grade I/II ANC No dose reduction
Grade III/IV Delay until recovered then proceed with 20% Irinotecan reduction
If delay >1 week reduce irinotecan dose by 20%.

Continue at reduced dose for subsequent cycles unless other toxicity occurs
If further delays for bone marrow suppression occur despite a 20% dose reduction consider further 20% dose reduction

Diarrhoea

Immediate (within 24 hours)	Incidence low due to use of atropine pre-med	Further dose of atropine 250 mcg stat
Delayed (>24 hours after irinotecan up to anytime before next cycle)	Initial treatment	Treat early with high dose loperamide (up to a max of 24mg/24 hr)
	Lasts >24 hours	Add ciprofloxacin 500mg bd
	Lasts >48 hours	If >48 hours or symptoms of dehydration admit for rehydration and supportive management
	Grade 3-4	Manage as above, then delay further treatment until recovery then resume at Irintoecan 80% dose
	Unresolved before next cycle	Delay 1 week

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

Other dose modifications should be made as per the following table:

Toxicity grade	**1st occurrence**	**2nd occurrence**	**3rd occurrence**	**4th 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 toxicity has resolved to grade 0-1

Adverse effects –

for full details consult product literature/ reference texts

Tiredness, diarrhoea and abdominal pain, acute cholinergic syndrome, nausea and vomiting, sore mouth/stomatitis, poor appetite, myelosuppression and thrombocytopenia, infusion reactions, veno-occlusive disease, hair loss, ovarian failure/infertility, thrombophlebitis

THIS PROTOCOL HAS BEEN DIRECTED BY DR BEAUMONT, CONSULTANT ONCOLOGIST
RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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