OXALIPLATIN CAPECITABINE (CapOx)

INDICATION (ICD10) C18, C20, C25, D37

1. Advanced colorectal cancer PS 0, 1, 2
2. Adjuvant stage 3 or high risk stage 2 colorectal cancer
3. Neoadjuvant locally advanced colorectal cancer
4. Adjuvant gastric cancer (unlicensed)
5. Adjuvant duodenum
6. Metastatic duodenum
7. Second line advanced pancreatic cancer PS 0,1 (unlicensed) – local funding required
8. Unknown primary if appropriate (unlicensed)

REGIMEN

Day 1	**OXALIPLATIN**	130mg/m^2	IV infusion	#ml glucose 5% over 2 hours
Days 1 to 14	**CAPECITABINE**	1000mg/m^2 (2000mg/m^2/day)	oral	twice daily

diluent and diluent volume for dose prescribed as per national standardised product specification

CYCLE FREQUENCY AND NUMBER OF CYCLES

Pancreatic - every 21 days 6 to 8 cycles
Colorectal – every 21 days adjuvant usually 4 cycles, metastatic 4 to 8 cycles

ANTI-EMETICS

Moderately emetogenic day 1
Low emetogenic risk days 2 to 14

CONCURRENT MEDICATION REQUIRED

Capecitabine	Mouth and bowel support eg loperamide, benzydamine mouthwash
Oxaliplatin	Flush with glucose 5% after infusion

ADMINISTRATION

Capecitabine	should be taken 12 hours apart. Swallowed with water within 30 minutes after a meal, or dissolve in 200ml luke warm water, stir thoroughly (squash may be added if unpalatable).

EXTRAVASATION AND TYPE OF LINE / FILTERS

Oxaliplatin - exfoliant

Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration

FBC, U&E and LFTs Neutrophils ≥1.5x10^9/L (colorectal 1.0-1.5 retest and if on an upward trend then can go ahead, if no access to retest then contact Dr) Platelets ≥100x10^9/L (colorectal ≥75)	baseline and every cycle
EDTA GFR or calculated CrCl at consultant's discretion.	baseline and every cycle
Serum creatinine	baseline and every cycle
DPYD (dihydropyrimidine dehydrogenase) test	baseline
Weight	baseline and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Capecitabine	Palmar plantar (handfoot syndrome) causing red palms and soles – treat with pyridoxine 50mg tds Diarrhoea – treat with loperamide or codeine Cardiotoxicity – monitor cardiac function. To minimise risk of anthracycline induced cardiac failure signs of cardiotoxicity e.g. cardiac arrhythmias, pericardial effusion, tachycardia with fatigue. All patients should be told to report any cardiac symptoms immediately and should be told to stop the medication immediately if any suspicion of cardiac problems. Stomatitis
Oxaliplatin	Peripheral sensory neuropathy and laryngeal spasm – avoid cold drinks and touching cold items

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS
(not exhaustive list check SPC/BNF/Stockleys)

Capecitabine	Brivudine and analogues should be avoided Warfarin and caution with all oral anticoagulants Phenytoin Allopurinol

DOSE MODIFICATIONS
DPYD variant identified follow national or local DPD dose modification guidelines.

Non-haematological
Capecitabine
Dose limiting toxicities include diarrhoea, abdominal pain, nausea, stomatitis and handfoot syndrome.
Toxicity can be managed by symptomatic treatment and/or modification of the dose (treatment interruption or dose reduction).
Once the dose has been reduced it should not be increased at a later time.
When capecitabine is stopped for toxicity, the doses are omitted and not delayed.

Toxicity Grades	Dose changes within a treatment cycle	Dose adjustment for next cycle/dose (% of starting dose)
Grade 2 - 1st appearance	Interrupt until resolved to grade 0-1	100%
Grade 2 - 2nd appearance	Interrupt until resolved to grade 0-1	75%
Grade 2 - 3rd appearance	Interrupt until resolved to grade 0-1	50%
Grade 2 - 4th appearance	Discontinue treatment permanently	Not applicable
Grade 3 - 1st appearance	Interrupt until resolved to grade 0-1	75%
Grade 3 - 2nd appearance	Interrupt until resolved to grade 0-1	50%
Grade 3 - 3rd appearance	Discontinue treatment permanently	Not applicable
Grade 4 - 1st appearance	Discontinue permanently OR if physician deems it to be in the patient's best interest to continue, interrupt until resolved to grade 0-1	50%
Grade 4 - 2nd appearance	Discontinue treatment permanently	Not applicable

Oxaliplatin
If patients develop acute laryngopharyngeal dysaesthesia infuse the next cycle over 4 hours.
If symptoms persist give 80% dose.
If persistent sensory symptoms occur, withdraw treatment

Hepatic impairment

Capecitabine

Treatment related bilirubin of >3xULN or ALT/AST >2.5xULN	Defer capecitabine oxaliplatin (colorectal). (Colorectal - if ALT/AST 2.5-5xULN and more than doubled since baseline contact Dr.) Treatment may be resumed when bilirubin decreases to <3xULN or hepatic aminotransferases decrease to <2.5xULN.

Oxaliplatin

No dose adjustment is needed.

Renal impairment

Capecitabine

CrCl >50ml/min	give 100% dose
CrCl 30-50ml/min	give 75% dose
CrCl <30ml/min	contraindicated

Oxaliplatin

CrCl >30ml/min	give 100% dose
CrCl <30ml/min	Dose reduce (consider 50% of original dose)

REFERENCES

1. Twelves C Oncology 2002; 16:23-26
2. Capecitabine SPC 03/2005. www.medicines.org.uk
3. Oxaliplatin SPC 09/2004 www.medicines.org.uk

Assessments

	Pre	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Ongoing
Clinical assessment	X		Pre cycle		Pre cycle	Pre-C2, then every 6 weeks (every 2 cycles), or team discretion
SACT assessment (PS and toxicities)	X	X	X	X	X	Every cycle
FBC	X	X	X	X	X	Every cycle
U&E, calcium, & LFT	X	X	X	X	X	Every cycle
CrCl	X	X	X	X	X	Every cycle
Dihydropyrimidine dehydrogenase (DPYD) deficiency test	X					This test is normally only required if a patient has not had capecitabine or fluorouracil in the past. However a consultant may still request this test if capecitabine or fluorouracil was not tolerated previously. The result MUST be available before administration of chemotherapy unless clear documentation from the consultant is available to the contrary.
CT scan	X					At clinician's discretion, Inform consultant team if not booked
Informed consent	X					Verbal each cycle
Height	X					
Weight recorded	X	X	X	X	X	Every cycle