

Lancashire & South Cumbria Cancer Network

Systemic Anticancer Treatment Protocol

DRUG REGIMEN

Cabazitaxel and Prednisolone

Indication for use

Hormone refractory metastatic prostate cancer (HRPC) previously treated with docetaxel containing regimen

Eligibility

Disease progression during or after docetaxel containing regimen for HRPC

PS 0-2

Adequate bone marrow, liver and kidney function

Exclusions

Prior radiotherapy to >40% bone marrow

Any radiotherapy within 7 days

Prior radionuclide therapy with samarium-153 or P-32 within 8 weeks or strontium-89 or radium-223 within 12 weeks

Prior surgery or chemotherapy within 4 weeks

Active grade ≥ 2 neuropathy

Active grade ≥ 2 stomatitis

Severe hypersensitivity to docetaxel or Polysorbate 80

Severe illness

Active infection

Prior treatment with potent inhibitors or inducers of P450 3A4 or 3A5

Regimen

Premedication

30 minutes prior to each administration:

Antihistamine Chlorphenamine – 10mg IV

Steroid – Dexamethasone 8mg IV

H₂ Antagonist – Ranitidine – 50mg IV

Cabazitaxel 25mg/m² IV in 250ml 0.9% NaCl over 1 hour

Prednisolone – 10mg orally once daily continuous

Give every 3 weeks until disease progression (maximum 10 cycles)

Primary prophylaxis with GCSF should be considered in patients with high-risk factors for prolonged neutropenia (age >65, poor PS, previous episodes of febrile neutropenia, extensive prior radiation ports, poor nutritional status, other comorbidities)

Prescribe loperamide with first cycle

Investigation prior to initiating treatment

FBC, U&Es, LFTs

Cautions

Bilirubin > 1 ULN

AST/ALT >1.5 ULN

Creatinine Clearance <30ml/min

Investigations and consultations prior to each cycle

Consultation prior to each cycle

FBC, U&Es, LFTs, PSA, LDH

Monitor FBC weekly for the 1st cycle

Acceptable levels for treatment to proceed (if outside these levels defer one week or contact consultant)

Neutrophil count >1.5/mm³, Platelets >100

Side Effects

Hypersensitivity reaction
Neutropenia, anaemia, thrombocytopaenia
Nausea, Vomiting
Diarrhoea, Dehydration
Cardiac arrhythmias
Haematuria
Fatigue
Pyrexia

Dose Modification Criteria

Nausea/vomiting – replace metoclopramide pre-med with ondansetron. If, despite this grade ≥ 3 nausea/vomiting occurs then reduce dose to $20\text{mg}/\text{m}^2$. Withdraw treatment if this recurs

Diarrhoea:

- Grade ≥ 3 – delay treatment until resolved then restart at $20\text{mg}/\text{m}^2$; if diarrhoea recurs at grade ≥ 3 at reduced dose then withdraw treatment

Stomatitis:

- Grade 3 – withhold treatment until grade 1 then restart at $20\text{mg}/\text{m}^2$
- Grade 4 – withdraw treatment

Peripheral neuropathy:

- Grade 1 – no change
- Grade 2 – Reduce dose to $20\text{mg}/\text{m}^2$
- Grade 3 – withdraw treatment

Neutropenia ≥ 7 days or febrile neutropenia:

- 1st episode - withhold treatment until resolved then resume treatment
- 2nd episode – reduce dose to $20\text{mg}/\text{m}^2$
- 3rd episode – withdraw treatment

Thrombocytopenia:

- Grade 3 – delay until resolved
- Grade 4 – delay until resolved and reduce dose to $20\text{mg}/\text{m}^2$; withdraw in case of recurrence

Liver toxicity – if AST/ALT $>1.5\times$ ULN or bilirubin $>ULN$ then delay until resolved and reduce dose to $20\text{mg}/\text{m}^2$

If treatment delayed > 2 weeks for any toxicity then withdraw therapy

Specific Information on Administration

Avoid medicinal products that are strong inducers or inhibitors of CYP3A

Prescribe TTO loperamide with cycle 1. Instruct patient to take at onset of diarrhoea and to contact chemotherapy helpline

Infuse via a $0.2\mu\text{m}$ in-line filter

THIS PROTOCOL HAS BEEN DIRECTED BY DR BIRTLE, CLINICIAN FOR UROLOGICAL CANCER

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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