Abiraterone and prednisoLONE Therapy (mCRPC)

INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	HSE approved reimbursement status*
Abiraterone is indicated in combination with predniSONE or prednisoLONE for the treatment of metastatic castration resistant prostate cancer (mCRPC) in adult men whose disease has progressed on or after a docetaxel-based chemotherapy regimen.	C61	00103a	CDS
Treatment of metastatic castration resistant prostate cancer in adult men who are asymptomatic or mildly symptomatic after failure of androgen deprivation therapy in whom chemotherapy is not yet clinically indicated	C61	00103b	CDS

*This applies to post 2012 indications

TREATMENT:

The starting dose of the drugs detailed below may be adjusted downward by the prescribing clinician, using their independent medical judgement, to consider each patients individual clinical circumstances.

Abiraterone is administered as a single oral daily dose until disease progression or unacceptable toxicity develops (1 cycle = 28 days).

Androgen ablative therapy (e.g. LHRH agonist, LHRH antagonist) should be maintained.

Drug	Dose	Route	Cycle
Abiraterone	1000mg daily	PO **without food** at the same time each day[1]. Tablets should be swallowed whole with water.	Continuous therapy
predniSONE or prednisoLONE	10mg daily or 5mg BD	PO with food	Continuous therapy
In the event of a missed daily dose of either abiraterone, predniSONE or prednisoLONE, treatment should be resumed the following day with the usual daily dose.			
[1]Abiraterone should be taken at least one hour before or at least two hours after eating. Abiraterone is commonly available as 250mg and 500mg tablets.			

ELIGIBILITY:

- Indications as above
- ECOG status 0-2
- Bilirubin < 1.5 x ULN, AST/ALT < 2.5 x ULN, Alkaline Phosphatase < 6 x ULN
- Creatinine < 1.5 x ULN
- Serum potassium > 3.5mmol/L

EXCLUSIONS:

- Hypersensitivity to abiraterone or any of the excipients
- Severe hepatic impairment

- Active or symptomatic viral hepatitis
- History of adrenal dysfunction
- Patients with visceral metastases
- Abiraterone with predniSONE or prednisoLONE is contraindicated in combination with Ra-223

CAUTIONS:

- Hypertension should be adequately controlled before treatment is commenced
- Clinically significant heart disease (LVEF < 50% at baseline)

PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist

TESTS:

Baseline tests:

- FBC, renal and liver profile
- Blood glucose
- Blood pressure
- ECG if clinically indicated or if history of cardiac problems

Regular tests:

- FBC, renal and liver profile, glucose and blood pressure every 2 weeks for cycles 1-3 and every 4 weeks thereafter
- ECG if clinically indicated or if history of cardiac problems

Disease monitoring:

Disease monitoring should be in line with the patient's treatment plan and any other test/s as directed by the supervising Consultant.

DOSE MODIFICATIONS:

- Any dose modification should be discussed with a Consultant.

Renal and Hepatic Impairment:

Table 1: Dose modification of abiraterone in renal and hepatic impairment

Renal Impairment	Hepatic Impairment	
No dose adjustment is needed	**Impairment level**	**Dose**
	Mild (Child-Pugh A)	No dose adjustment is needed
Haemodialysis: No dose adjustment is needed	Moderate (Child-Pugh B)	25% of the original dose
	Severe (Child Pugh C)	Avoid
Renal and hepatic dose modifications taken from Giraud et al 2023		

Management of adverse events:

Table 2: Dose Modification of Abiraterone for Adverse Events

Adverse reactions	Recommended dose modification
Grade ≥ 3 toxicities including hypertension, oedema and other non-mineralocorticoid toxicities	Withhold treatment and appropriate medical management should be instituted. Treatment with abiraterone should not be reinitiated until symptoms of the toxicity have resolved to Grade 1 or baseline

Hypokalaemia Management:
Hypokalaemia has been observed and should be aggressively managed.
Serum potassium should be monitored closely in patients who develop hypokalaemia.

Table 3: Management of Hypokalemia

Serum K+ (mmol/L)	Grade of Hypokalemia	Action	Further Action or Maintenance
Low K+ or History of hypokalemia		Weekly (or more frequent) laboratory electrolyte evaluations.	Titrate dose to maintain potassium > 3.5 mmol/L and < 5.0 mmol/L (> 4.0 mmol/L recommended).
< 3.5 – 3.0	Grade 1	Initiate oral or IV potassium supplementation. Consider monitoring magnesium and replacement if needed.	
< 3.5 – 3.0 Symptomatic	Grade 2	Withhold abiraterone until potassium corrected. Initiate oral or IV potassium supplementation. Consider monitoring magnesium and replacement if needed.	
< 3.0 – 2.5	Grade 3	Withhold abiraterone until potassium corrected. Initiate oral or IV potassium and consider cardiac monitoring in appropriate patients. Consider monitoring magnesium and replacement if needed.	
< 2.5	Grade 4		

SUPPORTIVE CARE:

EMETOGENIC POTENTIAL

- As outlined in NCCP Classification Document for Systemic Anti Cancer Therapy (SACT) Induced Nausea and Vomiting- Available on the NCCP website

Abiraterone: Minimal (**Refer to local policy).**

Within NCIS regimens, antiemetics have been standardised by Medical Oncologists and Haemato-oncologists and information is available in the following documents:

- NCCP Supportive Care Antiemetic Medicines for **Inclusion in NCIS** (Medical Oncology) - Available on the NCCP website
- NCCP Supportive Care Antiemetic Medicines for **Inclusion in NCIS** (Haemato-oncology) - Available on the NCCP website

PREMEDICATIONS:

Not usually required

OTHER SUPPORTIVE CARE:

Patients who stop abiraterone may require a gradual withdrawal of prednisoLONE.

ADVERSE EFFECTS:

- Please refer to the relevant Summary of Product Characteristics (SmPC) for details.

DRUG INTERACTIONS:

- Current SmPC and drug interaction databases should be consulted for information.

REFERENCES:

1. Ryan CJ, Smith MR, de Bono JS, et al. Abiraterone in metastatic prostate cancer without previous chemotherapy. N Engl J Med 2013;368:138-48.
2. de Bono JS, Logothetis CJ, Molina A et al. Abiraterone and increased survival in metastatic prostate cancer. N Engl J Med. 2011;364(21):1995-2005.
3. Logothetis C, de Bono JS, Molina A et al. Effect of abiraterone acetate on pain control and skeletal-related events in patients with metastatic castration-resistant prostate cancer post docetaxel: Results from the COU-AA-301 phase III study. J Clin Oncol 2011:29; (suppl; abstr 4520).
4. Giraud E L, Lijster B D, et al. Dose recommendations for anticancer drugs in patients with renal or hepatic impairment: an update. Available at: https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(23)00216-4/fulltext
5. NCCP Classification Document for Systemic AntiCancer Therapy (SACT) Induced Nausea and Vomiting. V6 2025. Available at: https://www.hse.ie/eng/services/list/5/cancer/profinfo/chemoprotocols/nccp-classification-document-for-systemic-anti-cancer-therapy-sact-induced-nausea-and-vomiting.pdf
6. Abiraterone (Zytiga®) Summary of Product Characteristics Last updated: 31/01/2025. Accessed February 2025. Available at: https://www.ema.europa.eu/en/documents/product-information/zytiga-epar-product-information_en.pdf

Version	Date	Amendment	Approved By
1	20/12/2014		Dr Ray McDermott
2	03/03/2015	Updated Tests	Dr Maccon Keane
3	26/03/2015	Addition of new indication	Dr Derek Power, Dr Maccon Keane
4	01/10/2015	Updated Adverse Effects and Drug Interactions	Dr Maccon Keane
5	13/04/2016	Updated dosing in hepatic impairment and hepatic dysfunction under Adverse Events	Dr Maccon Keane
6	18/04/2018	Updated with new Regimen Template and updated Adverse Events	Prof Maccon Keane
7	27/03/2019	Updated administration details for abiraterone	Prof Maccon Keane
8	29/04/2020	Reviewed. Updated exclusions, dose modifications, adverse events and drug interactions.	Prof Maccon Keane
9	14/05/2025	Regimen reviewed. Updated title.Updated exclusions section. Addition of cautions section. Updated renal and hepatic dose modifications table to align with Giraud et al 2023. Updated regimen in line with NCCP standardisation.	Prof Maccon Keane

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.