Axitinib Monotherapy

INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	HSE approved reimbursement status*
Treatment of adult patients with advanced renal cell carcinoma (RCC) after failure on a previous line of therapy, i.e. treatment with SUNItinib, or a cytokine	C64	00104a	CDS 01/03/2013

* 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.

The recommended dose of axitinib is 5mg orally twice daily. Treatment should continue as long as clinical benefit is observed or until unacceptable toxicity occurs that cannot be managed by concomitant medicinal products or dose adjustments.

Drug	Dose	Route	Cycle
Axitinib	5 mg BD	PO (approximately 12 hours apart) with or without food swallow whole	Continuous

ELIGIBILITY:

- Indication as above
- Adult patients with advanced renal cell carcinoma (RCC) of clear cell subtype after failure of prior treatment with sunitinib or a cytokine
- Two weeks or more since end of systemic treatment, four weeks for bevacizumab plus interferon-alfa
- ECOG performance status 0-2
- Adequate renal, hepatic and haematological organ function

CAUTIONS:

- At risk of arterial and venous thrombotic events
- At risk of gastrointestinal perforation or fistula
- With significant recent myocardial infarction, uncontrolled angina or heart failure
- With CNS metastases
- With impaired hepatic function – see dose modification/exclusions
- Taking co-administered CYP3A4/5 inhibitors/inducers – see dose modification

EXCLUSIONS:

- Hypersensitivity to axitinib or any of the excipients
- Pregnancy

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- Breastfeeding
- Uncontrolled hypertension
- Recent active gastrointestinal bleeding.
- Severe hepatic impairment (Child-Pugh class C)

PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist

TESTS:

Baseline tests:

- FBC, renal and liver profile
- Urinalysis for proteinuria
- TFTs

Regular tests:

- FBC, renal and liver profile
- TFTs every 4 weeks
- Blood pressure weekly for 1st cycle then every 4 weeks
- Urinalysis for proteinuria should be repeated every 3 months

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
- Dose adjustment is not required on the basis of patient age, race, gender, or body weight

- **Dose increase:**
  - Patients who tolerate the axitinib starting dose of 5 mg twice daily with no adverse reactions > Grade 2 for two consecutive weeks may have their dose increased to 7 mg twice daily unless the patient's blood pressure is > 150/90 mmHg or the patient is receiving antihypertensive treatment
  - Subsequently, using the same criteria, patients who tolerate an axitinib dose of 7 mg twice daily may have their dose increased to a maximum of 10 mg twice daily
- **Dose reduction:**
  - When dose reduction is necessary, the axitinib dose may be reduced to 3 mg twice daily and further to 2 mg twice daily
  - In the case of patients at higher doses (7 -10mg), reduce to the prior dose level

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Haematological:

Table 1: Dose modification of axitinib in haematological toxicity

ANC ($x10^9$/L)		Platelets ($x10^9$/L)	Dose
≥ 1	and	≥ 75	100%
< 1	Or	<75	Delay

Table 2: Dose modification of axitinib in Non-Haematological toxicity

CTC-Grade	Dose
1-2	100%
3-4	Delay until ≤ Grade 1 Dose reduce by 1 dose level
In the case of patients at a dose of 5mg twice daily, one dose level reduction (dose level -1) is to a dose of 3mg twice daily. A further dose reduction, i.e. dose level -2, is to a dose of 2mg twice daily. In the case of patients at a higher dose (7-10mg twice daily) reduction is to the prior dose level.	

Renal and Hepatic Impairment:

Table 3: Dose modification in renal and hepatic impairment

Renal Impairment	Hepatic Impairment	
Renal impairment: no dose adjustment is needed	**Child Pugh Class**	**Dose**
Haemodialysis: no need for dose adjustment is expected	**A**	No dose adjustment is needed
	B	50% of the original dose
	C	Not recommended
Recommendations as per Giraud et al 2023		

Management of adverse events:

Table 4: Dose Modification of axitinib for Adverse Events

Adverse reactions	Discontinuation	Recommended dose modification
Proteinuria		Reduce the dose or temporarily interrupt axitinib treatment
PRES	Temporarily interrupt or permanent discontinuation of treatment	
Co-administration of axitinib with strong CYP3A4/5 inhibitors (avoid where possible)	May require temporary or permanent discontinuation of therapy.	Reduce dose to approximately half the dose (e.g. the starting dose should be reduced from 5 mg twice daily to 2 mg twice daily). If co-administration of the strong inhibitor is discontinued, a return to the axitinib dose used prior to initiation of the strong CYP3A4/5 inhibitor should be considered.
Co-administration of axitinib with strong CYP3A4/5 inducers(avoid where possible)	May require temporary or permanent discontinuation of therapy.	A gradual dose increase of axitinib is recommended. Maximal induction with high-dose strong CYP3A4/5 inducers has been reported to occur within one week of treatment with the inducer. If the dose of axitinib is increased, the patient should be monitored

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		carefully for toxicity. If co- administration of the strong inducer is discontinued, the axitinib dose should be immediately returned to the dose used prior to initiation of the strong CYP3A4/5 inducer.

SUPPORTIVE CARE:

EMETOGENIC POTENTIAL:

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

  Axitinib: Minimal to Low (**Refer to local policy).**

- **For information:**
  Within NCIS regimens, antiemetics have been standardised by Medical Oncologists and Haemato-oncologists. Information is available in the following documents:
  - NCCP Supportive Care Antiemetic Medicines for Inclusion in NCIS (Medical Oncology) - Available on NCCP website
  - NCCP Supportive Care Antiemetic Medicines for Inclusion in NCIS (Haemato-oncology) - Available on NCCP website

PREMEDICATIONS:

None Required

OTHER SUPPORTIVE CARE:

Diarrhoea is common, so provide a prescription for loperamide for new patients.

ADVERSE EFFECTS:

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

REGIMEN SPECIFIC COMPLICATIONS:

- **Cardiac failure**: Signs or symptoms of cardiac failure should periodically be monitored throughout treatment with axitinib. Management of cardiac failure events may require temporary interruption or permanent discontinuation and/or dose reduction of axitinib therapy.
- **Hypertension:** Blood pressure should be well-controlled prior to initiating axitinib. Patients should be monitored for hypertension and treated as needed with standard anti-hypertensive therapy. In the case of persistent hypertension, despite use of anti-hypertensive medicinal products, the axitinib dose should be reduced. For patients who develop severe hypertension, temporarily interrupt axitinib and restart at a lower dose once the patient is normotensive. If axitinib is interrupted, patients receiving antihypertensive medicinal products should be monitored for hypotension. In case of severe or persistent arterial hypertension and symptoms suggestive of posterior reversible encephalopathy syndrome (see below), a diagnostic brain magnetic resonance image (MRI) should be considered.
- **Thyroid dysfunction:** Thyroid function should be monitored before initiation of, and periodically throughout, treatment with axitinib. Hypothyroidism or hyperthyroidism should be treated according to standard medical practice to maintain euthyroid state.
- **Arterial or venous embolic and thrombotic events:** Axitinib should be used with caution in patients who are at risk for, or who have a history of, these events. Axitinib has not been studied in patients who had an arterial or venous embolic or thrombotic event within the previous 12 months.

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- **Elevation of haemoglobin or haematocrit:** Increases in haemoglobin or haematocrit, may occur during treatment with axitinib Haemoglobin or haematocrit should be monitored before initiation of, and periodically throughout, treatment with axitinib. If haemoglobin or haematocrit becomes elevated above the normal level, patients should be treated according to standard medical practice to decrease haemoglobin or haematocrit to an acceptable level.
- **Haemorrhage**: Axitinib has not been studied in patients who have evidence of untreated brain metastasis or recent active gastrointestinal bleeding, and should not be used in those patients. If any bleeding requires medical intervention, temporarily interrupt the axitinib dose.
- **Aneurysms and artery dissections**: The use of VEGF pathway inhibitors in patients with or without hypertension may promote the formation of aneurysms and/or artery dissections. Before initiating axitinib, this risk should be carefully considered in patients with risk factors such as hypertension or history of aneurysm
- **Gastrointestinal perforation and fistula formation**: Symptoms of gastrointestinal perforation or fistula should be periodically monitored for throughout treatment with axitinib.
- **Wound healing complications:** Treatment with axitinib should be stopped at least 24 hours prior to scheduled surgery. The decision to resume axitinib therapy after surgery should be based on clinical judgment of adequate wound healing.
- **PRES** In patients with signs or symptoms of PRES, temporarily interrupt or permanently discontinue axitinib treatment. The safety of reinitiating axitinib therapy in patients previously experiencing PRES is not known.
- **Proteinuria** Monitoring for proteinuria before initiation of, and periodically throughout, treatment with axitinib is recommended. For patients who develop moderate to severe proteinuria, reduce the dose or temporarily interrupt axitinib treatment

DRUG INTERACTIONS:

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

REFERENCES:

1. Rini BI, Escudier B, Tomczak P, et al. Comparative effectiveness of axitinib versus sorafenib in advanced renal cell carcinoma (AXIS): a randomised phase 3 trial. Lancet 2011; 378(9807): 1931-9.
2. 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://pubmed.ncbi.nlm.nih.gov/37269847/
3. NCCP Classification Document for Systemic Anti-Cancer 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
4. Axitinib Summary of Product Characteristics Accessed Oct 2025, Last updated Sep 2024. Available at https://www.ema.europa.eu/en/documents/product-information/axitinib-accord-epar-product-information_en.pdf

Version	Date	Amendment	Approved By
1	20/03/2013		Dr Derek Power
2	17/10/2014	Reformatted	Dr Derek Power
3	21/10/2016	Updated Adverse Reactions/Regimen Specific	Prof Maccon Keane

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		Complications to include information on Cardiac Failure and Haemorrhage as per SmPC	
4	26/11/2018	Updated to new NCCP template.	Prof Maccon Keane
5	09/12/2020	Reviewed. Updated emetogenic potential and adverse events section.	Prof Maccon Keane
6	23/02/2026	Reviewed. Updated renal and Hepatic impairment in line with Giraud et al 2023. Updated in line with NCCP standardisation.	Prof Maccon Keane

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.

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