

Formulary Advice: Angiotensin Drugs

Angiotensin converting enzyme inhibitors (ACEIs) are first line agents. Angiotensin II receptor agonists (AIIRAs, or ARBs) should be reserved for patients with persistent ACEI related cough.

Licensed Indications

	Hypertension	Heart Failure	Diabetic Nephropathy	MI Secondary prevention
Ramipril	•	•		•
Lisinopril	•	•	•	•*
Perindopril	•	•		•
Candesartan	•	•		
Irbesartan	•		•	
Valsartan	•	•		•

*Short term use only

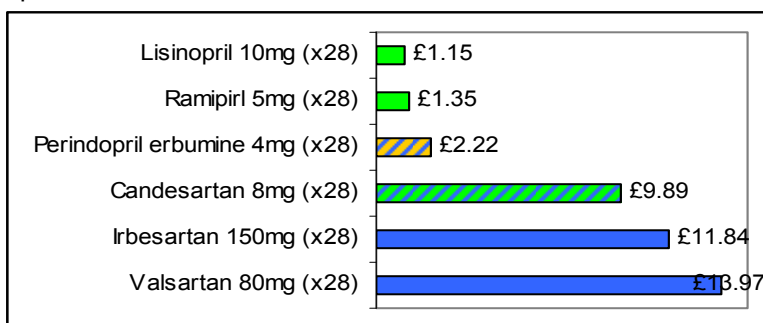
The TRANSCEND study reinforces the importance of only prescribing angiotensin receptor blockers (ARBs) as an alternative to ACE inhibitors where there is clear intolerance to ACE inhibitors (most often due to cough). In the ONTARGET study, only 4.2% of patients in the ACEI group stopped treatment due to cough compared with 1.1% in the ARB group.

The evidence base for ACE inhibitors in primary and secondary prevention of CV disease is well established, whereas that of ARBs is less so.

Ramipril and Lisinopril are the first choice angiotensin drugs in NHS Cornwall & IoS.

About cough... If cough appears in patients prescribed ACEIs, causes other than the ACEI should always be considered. If possible continue the ACE for 2-4 weeks during which time a self-limiting cough may settle. Trying a withdrawal of the ACEI for 2 weeks OR Trying a second ACEI are options. In a number of studies of ACEI cough, it was found that cough did not recur when rechallenged with another ACEI and probably was a coincidental finding.

Price Comparison. Doses given do not imply therapeutic equivalence



	1 st line
	2 nd line
	2 nd line CJF Specialist PAJF
	2 nd line CJF 1 st line PAJF

To view the prescribing formulary visit:
[Joint Formulary Online](http://www.plymouthformulary.nhs.uk)
www.plymouthformulary.nhs.uk

The National Prescribing Centre (NPC) at www.npci.org.uk has a range of national support materials to assist practices in implementing cost effective prescribing, including

- Practice based audit templates
- Practice based audit standard operating procedures (SOPs)
- Comparison of costs, and licensed indications for each drug.

The Bottom Line

ACEIs are first choice renin-angiotensin agents
 Cough can be a problem in a minority of patients
 Evidence based guidelines recommend AIIRAs are reserved for patients unable to tolerate ACEIs due to cough

Combined use of ACEI and AIIRA is not well supported by efficacy or safety data and carries risk. It should only be initiated by a specialist, and these patients need close monitoring.

References

2009 Focused Update Incorporated into the ACC/AHA 2005 Guidelines for the Management of Heart Failure in Adults
 NPC MeReC Bulletin Vol 20 No 2 March 2010
 NICE CG 34 – Hypertension in adults in primary care (June 2006)
 Best practice in rennin-angiotensin prescribing (UKMi August 2007, updated April 2009)
 NPCi National Support Materials at www.npci.org.uk
 NHS Cornwall & IoS Joint Formulary 2010
 Plymouth Area Joint Formulary 2009-10
 Adapted from work undertaken by NHS Dorset

The NHS Institute for Innovation and Improvement has released a Better Care, Better Value indicator relating to renin angiotensin prescribing. One of these is to **increase the proportion of ACEs to all renin angiotensin system drugs**. Where is your practice according to this indicator?