



Medicinal products in ATC group C09, ACE inhibitors, angiotensin II antagonists and renin-inhibitors

Reading instructions for the table below

Approved indication: The specified indication(s) of an active substance and pharmaceutical form, if stated, relate(s) to the medicinal product that has been licensed for the longest period of time.

Reimbursement status: The current reimbursement status of the medicinal product.

Treatment price per day: The listed prices per day are based on the medicinal products' reimbursement prices calculated in accordance with the Danish Medicines Agency's guidelines for evaluation and comparison of medicinal products in reassessments of reimbursement status dated 4 July 2006, cf. Appendices C5 and D.

Consumption: The number of persons in treatment is based on the Danish Medicines Agency's Register of Medicinal Product Statistics, cf. www.medstat.dk.

ACE inhibitors, plain – C09A

C09AA01	Captopril
Pharmaceutical forms	Tablets
Traded names	Capoten, Captol, Captopril "Alpharma", Captopril "Copyfarm", Captopril "Merck NM", Captopril "Stada"
Approved indication	"Capoten is indicated for the treatment of hypertension. Capoten is indicated for the treatment of chronic heart failure with reduction of the systolic ventricular function in combination with diuretics and, if required, digitalis and beta blockers. Myocardial infarction: - Short-term treatment (four weeks): Capoten is indicated in any clinically stable patient within the first 24 hours of an infarction. - Long-term treatment to prevent symptomatic heart failure: Capoten is indicated for clinically stable patients with asymptomatic left ventricular dysfunction (ejection fraction $\leq 40\%$). Nephropathy in type I diabetes: Capoten is indicated for the treatment of nephropathy with macroproteinuria in patients with type 1 diabetes."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	50 mg tablets: DKK 0.80
Consumption	5,683 persons in treatment in 2006 4,880 persons in treatment in the first 10 months of 2007
Discussion	The Committee has no specific comments.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA01

C09AA02	Enalapril
Pharmaceutical forms	Tablets
Traded names	Corodil,, Enacodan, Enalapril "1A Farma", Enalapril "Actavis", Enalapril

	"KRKA", Enalapril "Merck NM", Enalapril "Sandoz"
Approved indication	"Treatment of hypertension. Treatment of symptomatic heart insufficiency. Prevention of symptomatic heart insufficiency in patients with asymptomatic reduced left ventricular function (ejection fraction from left ventricle \leq 35%)."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 - 40 mg tablets: DKK 1.57 – 3.14
Consumption	133,932 persons in treatment in 2006 138,187 persons in treatment in the first 10 months of 2007
Discussion	Enalapril is used by the majority of the patients treated with an ACE inhibitor, and, when considering the price, the use is rational in the opinion of the Committee.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA02

C09AA03	Lisinopril
Pharmaceutical forms	Tablets
Traded names	Lisinopril "Actavis", Lisinopril "Arrow", Lisinopril "Merck NM", Lisinopril "Sandoz", Lisinopril "Stada", Zestril
Approved indication	"Hypertension: Treatment of hypertension. Heart insufficiency: Treatment of symptomatic heart insufficiency. Acute myocardial infarction: Short-time treatment (six weeks) of haemodynamically stable patients within 24 hours of an acute myocardial infarction. Renal complications caused by diabetes mellitus: Treatment of kidney disease in hypertensive patients with type 2 diabetes mellitus and incipient nephropathy."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 mg tablets: DKK 0.76
Consumption	11,520 persons in treatment in 2006 11,588 persons in treatment in the first 10 months of 2007
Discussion	The Committee has no specific comments.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA03

C09AA04	Perindopril tableter
Pharmaceutical forms	Tablets
Traded names	Coversyl, Coversyl Novum, Coverex
Approved indication	"Hypertension: Treatment of hypertension. Heart insufficiency: Treatment of symptomatic heart insufficiency. Stable coronary artery disease: Reduction of the risk of heart attack in patients with a history of myocardial infarction and/or revascularisation."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	4 - 8 mg tablets: DKK 549 - 7.24
Consumption	31,748 persons in treatment in 2006

	31,721 persons in treatment in the first 10 months of 2007
Discussion	Perindopril is used by a relatively large group of patients. As the price is considerably higher than for the cheaper ACE inhibitors, the Committee finds – when taking the class effect into consideration – that treatment with one of the cheaper ACE inhibitors would be a more rational choice. Perindopril offers no therapeutic advantages when compared to the cheaper ACE inhibitors.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA04 such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

C09AA05	Ramipril
Pharmaceutical forms	Tablets, capsules
Traded names	Ramipril ”IA Farma”, Ramipril ”Actavis”, Ramipril ”Copyfarm”, Ramipril ”HEXAL”, Ramipril ”Nycomed”, Ramipril ”ratiopharm”, Ramipril ”Sandoz”, Ramipril ”Stada”, Triatec
Approved indication	“Arterial hypertension. Prophylaxis following acute myocardial infarction when there are clinical signs of heart insufficiency. Heart insufficiency. Triatec can be used alone or in combination with other products registered for heart insufficiency. Treatment/prevention of manifest nephropathy in diabetics and non-diabetics. The occurrence of microalbuminuria, not least an increasing degree of albumin secretion, is a sign that the treatment must be intensified. Reduction of the risk of myocardial infarction, stroke or cardiovascular death and the need for revascularisation procedures in patients above 55 years with clinical signs of cardiovascular disease (previous myocardial infarction, unstable angina, previous CABG and/or PTCA), stroke or peripheral vascular disease. Reduction of the risk of myocardial infarction, stroke or cardiovascular death and the need for revascularisation procedures in diabetics above 55 years who, in addition to their diabetes, have at least one of the following risk factors: hypertension (systolic blood pressure > 160 mmHg or diastolic blood pressure > 90 mmHg); high total cholesterol (> 5.2 mmol/l); low HDL (< 0.9 mmol/l); current smoker; microalbuminuria present; clinical signs of peripheral vascular disease. Incipient nephropathy in diabetics and non-diabetics. Ramipril reduces the secretion of protein, whereas ramipril has not been demonstrated to have any effect on the development of terminal renal insufficiency. Manifest nephropathy in diabetics and non-diabetics. Ramipril reduces the progression rate of renal insufficiency and delays the development of terminal renal failure (need for dialysis or kidney transplantation). Incipient nephropathy in diabetics and non-diabetics. Ramipril reduces the secretion of protein, whereas ramipril has not been demonstrated to have any effect on the development of terminal renal insufficiency. Manifest nephropathy in diabetics and non-diabetics. Ramipril reduces the progression rate of renal insufficiency and delays the development of terminal renal failure (need for dialysis or kidney transplantation).”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	5 - 10 mg tablets: DKK 0.56 – 0.75
Consumption	56,126 persons in treatment in 2006 58,962 persons in treatment in the first 10 months of 2007

Discussion	Ramipril is used by a large group of the patients treated with an ACE inhibitor, and, when considering the price, the use is rational in the opinion of the Committee.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA05.

C09AA06	Quinapril
Pharmaceutical forms	Tablets
Traded names	Accupro, Quinapril "Actavis", Quinapril "Alternova"
Approved indication	"Arterial hypertension. Left-sided heart insufficiency where treatment with digoxin and diuretics is insufficient."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 - 40 mg tablets: DKK 4.46 – 8.92
Consumption	1,306 persons in treatment in 2006 1,144 persons in treatment in the first 10 months of 2007
Discussion	The consumption is modest, but the price of treatment with quinapril is considerably higher than with the cheaper ACE inhibitors. The Committee thus finds – when taking the class effect into consideration – that treatment with one of the cheaper ACE inhibitors would be a more rational choice. Quinapril offers no therapeutic advantages when compared to the cheaper ACE inhibitors.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA06 such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

C09AA07	Benazepril
Pharmaceutical forms	Tablets
Traded names	Cibacen
Approved indication	"Arterial hypertension. Heart insufficiency."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 - 40 mg tablets: DKK 11.51 - 23.02
Consumption	343 persons in treatment in 2006 299 persons in treatment in the first 10 months of 2007
Discussion	The consumption is very modest, but the price of treatment with benazepril is considerably higher than with the cheaper ACE inhibitors. The Committee thus finds – when taking the class effect into consideration – that treatment with one of the cheaper ACE inhibitors would be a more rational choice. Benazepril offers no therapeutic advantages when compared to the cheaper ACE inhibitors.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA07 such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

C09AA09	Fosinopril
Pharmaceutical forms	Tablets
Traded names	Fosinoprilnatrium ”Teva”
Approved indication	“ <u>Hypertension:</u> Treatment of hypertension. <u>Heart insufficiency:</u> Treatment of symptomatic heart insufficiency.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	40 mg tablets: DKK 12.96
Consumption	382 persons in treatment in 2006 280 persons in treatment in the first 10 months of 2007
Discussion	The consumption is very modest, but the price of treatment with fosinopril is considerably higher than with the cheaper ACE inhibitors. The Committee thus finds – when taking the class effect into consideration – that treatment with one of the cheaper ACE inhibitors would be a more rational choice. Fosinopril offers no therapeutic advantages when compared to the cheaper ACE inhibitors.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA09 such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

C09AA10	Trandolapril
Pharmaceutical forms	Capsules
Traded names	Odrík, Trandolapril ”Orifarm”
Approved indication	“Arterial hypertension: Left-sided ventricular dysfunction following acute myocardial infarction.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	4 mg tablets: DKK 9.22
Consumption	22,071 persons in treatment in 2006 20,109 persons in treatment in the first 10 months of 2007
Discussion	Trandolapril is used by a relatively large group of patients. As the price is considerably higher than for the cheaper ACE inhibitors, the Committee finds – when taking the class effect into consideration – that treatment with one of the cheaper ACE inhibitors would be a more rational choice. Trandolapril offers no therapeutic advantages when compared to the cheaper ACE inhibitors.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09AA such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

ACE inhibitors, combinations - C09B

C09BA01	Captopril + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Capozid, Capozide
Approved indication	“Treatment of essential hypertension. The fixed-dose combination is indicated in patients whose blood pressure is not adequately treated with captopril alone or hydrochlorothiazide alone.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	50 mg captopril + 25 mg hydrochlorothiazid tablets: DKK 5.91
Consumption	267 persons in treatment in 2006 251 persons in treatment in the first 10 months of 2007
Discussion	The combination is considerably more expensive than captopril alone, but the use of the medicinal product is very limited.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09BA01, but recommends that the price and consumption be monitored.

C09BA02	Enalapril + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Corodil Comp, Enacecor, Enalapril/Hydrochlorothiazid ”Actavis”, Enalapril/hydrochlorothiazid ”Alternova”, Enalapril/hydrochlorothiazid ”ratiopharm”, Enalapril/hydrochlorothiazid ”1A Farma”, Enalapril-Hydrochlorothiazid ”Krka”, Enalapril/Hydrochlorothiazid ”Teva”, Synerpril
Approved indication	“Essential hypertension. The fixed-dose combination in enalapril maleate/hydrochlorothiazide 20 mg/12.5 mg is not suitable for initial treatment. It should replace the combination of 20 mg of enalapril maleate and 12.5 mg of hydrochlorothiazide for patients who are stable with the active substances when these are given in the same proportion in the form of single-substance products.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 enalapril + 12,5 mg hydrochlorothiazid - 40 mg enalapril + 25 mg hydrochlorothiazid tablets: DKK 1.54 - 3.08
Consumption	33,429 persons in treatment in 2006 39,409 persons in treatment in the first 10 months of 2007
Discussion	The combination is not more expensive than the individual substance enalapril and is used by a large group of patients. In the opinion of the Committee, the use of the medicinal product is rational.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09BA02

C09BA03	Lisinopril + hydrochlorothiazide
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Pharmaceutical forms	Tablets
Traded names	Lisinopius, Lisinopril-hydrochlorthiazid "Actavis", lisinopril/Hydrochlorthiazid "Alternova", Lisinopril/Hydroklortiazid "Copyfarm", Lisinopril/hydrochlorthiazid "ratiopharm", Lisinopril/Hydrochlorthiazid "Sandoz", Zestoretic, Zestoretic Mite
Approved indication	"Arterial hypertension which cannot be treated sufficiently using monotherapy."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 mg lisinopril + 12,5 mg hydrochlorthiazid tablets: DKK 0.53
Consumption	6,188 persons in treatment in 2006 6,469 persons in treatment in the first 10 months of 2007
Discussion	The combination is not more expensive than the individual substance lisinopril. In the opinion of the Committee, the use of the medicinal product is rational.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09BA03

C09BA04	Perindopril + indapamide
Pharmaceutical forms	Tablets
Traded names	Coversyl Comp., Coversyl Comp Novum
Approved indication	"In the treatment of essential hypertension, Coversyl Comp. is indicated in patients whose blood pressure cannot be sufficiently controlled by perindopril alone."
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	4 perindopril + 1,25 mg indapamil - 8 mg perindopril + 2,5 mg indapamid tablets: DKK 8.74 - 17.48
Consumption	7,097 persons in treatment in 2006. 7,562 persons in treatment in the first 10 months of 2007
Discussion	The combination is compared to the individual substance ramipril, but the Committee emphasises the need for combination treatment. The Committee recommends that the consumption and the price be monitored.
Assessment	The Committee assesses that <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09BA04 such that the medicinal products no longer be eligible for general reimbursement or general limited reimbursement.

C09BA05	Ramipril + hydrochlorthiazid
Pharmaceutical forms	Tablets
Traded names	Ramipril/hydrochlorthiazid "1A Farma", Ramipril/hydrochlorthiazid "ratiopharm", Ramipril-hydrochlorthiazid "Actavis", Ranid, Triatec Comp.
Approved indication	"Arterial hypertension which cannot be treated sufficiently using monotherapy."

Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	5 ramipril + 25 mg hydrochlorthiazid – 10 mg ramipril + 50 mg hydrochlorthiazid tablets: DKK 2.74 - 5.48
Consumption	6,908 persons in treatment in 2006. 9,018 persons in treatment in the first 10 months of 2007
Discussion	The combination is expensive compared to the individual substance ramipril, but the Committee emphasises the need for combination treatment. The Committee recommends that the consumption and the price be monitored.
Assessment	The Committee assesses that there are <u>no</u> grounds to open a case to change the reimbursement status for oral medicinal products in ATC group C09BA05

Angiotensin II antagonists – C09C

C09CA01	Losartan
Pharmaceutical forms	Tablets
Traded names	Cozaar, Lorzaar, Losaprex
Approved indication	<p>“Hypertension: Cozaar is indicated for the treatment of hypertension. Risk reduction of cardiovascular morbidity and mortality in hypertensive patients with left ventricular hypertrophy: Cozaar is indicated for the reduction of cardiovascular morbidity and mortality measured as the combined incidence of cardiovascular death, stroke and myocardial infarction in hypertensive patients with left ventricular hypertrophy (see item 5.1 of the LIFE study, race). The advantage of treatment with Cozaar on the primary combined effect targets can mainly be ascribed to the risk reduction for stroke.</p> <p>Renal protection in type 2 diabetics with proteinuria: Cozaar is indicated for delaying the progression of kidney disease as measured by a reduction in the combined incidence of the doubling of serum creatinine, chronic renal failure (need for dialysis or kidney transplantation) or death as well as a reduction of proteinuria.</p> <p>Heart insufficiency: Treatment of heart insufficiency when treatment with ACE inhibitor is no longer suitable. It is not recommended to let patients with heart insufficiency who are stable when treated with ACE inhibitor change to Cozaar.”</p>
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	50 - 100 mg tablets: DKK 8.02 - 12.40
Consumption	48,366 persons in treatment in 2006 48,729 persons in treatment in the first 10 months of 2007
Discussion	Losartan is used by a relatively large group of patients. There are no therapeutic advantages of treatment with losartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA01 so that the general reimbursement be limited to

	<p>“Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”</p>
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C09CA02	Eprosartan
Pharmaceutical forms	Tablets
Traded names	Teveten, Tevetenz
Approved indication	“Eprosartan is indicated for the treatment of essential hypertension.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	600 mg tablett: DKK 6.32
Consumption	3,428 persons in treatment in 2006 3,332 persons in treatment in the first 10 months of 2007
Discussion	There are no therapeutic advantages of treatment with eprosartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	<p>In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA02 so that the general reimbursement be limited to</p> <p>“Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”</p>

C09CA03	Valsartan
Pharmaceutical forms	Tablets
Traded names	Diovan, Diovane
Approved indication	“Hypertension: Treatment of arterial hypertension (only applies to the strengths 80 mg and 160 mg). Recent myocardial infarction: Treatment of clinically stable patients with symptomatic heart failure or asymptomatic left ventricular systolic dysfunction following a recent (12 hours to ten days) myocardial infarction. Heart failure: Treatment of symptomatic heart failure when ACE inhibitors cannot be used or as a supplementary treatment to ACE inhibitors when beta blockers cannot be used.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	80 - 160 mg tablett: DKK 7.93 - 11.26
Consumption	11,116 persons in treatment in 2006 12,083 persons in treatment in the first 10 months of 2007

Discussion	There are no therapeutic advantages of treatment with valsartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA03 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09CA04	Irbesartan
Pharmaceutical forms	Tablets
Traded names	Aprovel, Karvea
Approved indication	“Treatment of essential hypertension. Treatment of kidney disease in patients with hypertension and type 2 diabetes mellitus as an element in an antihypertensive drug regimen.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	150 - 300 mg tablets: DKK 6.83 - 9.21
Consumption	14,650 persons in treatment in 2006 14,871 persons in treatment in the first 10 months of 2007
Discussion	There are no therapeutic advantages of treatment with irbesartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA04 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09CA06	Candesartan
Pharmaceutical forms	Tablets
Traded names	Atacand, Amias, Ratacand
Approved indication	“Essential hypertension. Treatment of patients with heart insufficiency and reduced left ventricular function (LVEF ≤ 40%) as a supplementary treatment

	to ACE inhibitors when ACE inhibitors are not tolerated.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	8 - 16 mg tablets: DKK 5.19 - 6.82
Consumption	36,372 persons in treatment in 2006 39,942 persons in treatment in the first 10 months of 2007
Discussion	Candesartan is used by a relatively large group of patients. There are no therapeutic advantages of treatment with candesartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA06 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09CA07	Telmisartan
Pharmaceutical forms	Tablets
Traded names	Micardis, Kinzalmono
Approved indication	“Treatment of essential hypertension.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	40 - 80 mg tablets: DKK 7.27 - 8.84
Consumption	9,649 persons in treatment in 2006 10,084 persons in treatment in the first 10 months of 2007
Discussion	There are no therapeutic advantages of treatment with telmisartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA07 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09CA08	Olmesartan
Pharmaceutical forms	Tablets
Traded names	Olmotec, Benetor
Approved indication	“Treatment of essential hypertension.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 - 40 mg tablets: DKK 6.31 - 7.60
Consumption	2,311 persons in treatment in 2006 2,883 persons in treatment in the first 10 months of 2007
Discussion	There are no therapeutic advantages of treatment with olmesartan compared to treatment with the cheaper ACE inhibitors with general reimbursement, and as the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of the cheaper ACE inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09CA08 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

Angiotensin II antagonists, combinations - C09D

C09DA01	Losartan og hydrochlorotiazide
Pharmaceutical forms	Tablets
Traded names	Cozaar Comp., Cozaar Comp. 100mg/12,5 mg, Cozaar Comp Forte, Cosaar Plus, Fortzaar, Losazid.
Approved indication	“Hypertension: Cozaar Comp. is indicated for the treatment of hypertension in patients where combination treatment is suitable. Risk reduction of cardiovascular morbidity and mortality in hypertensive patients with left ventricular hypertrophy: Cozaar Comp. is a combination of losartan (Cozaar) and hydrochlorothiazide. In patients with hypertension and left ventricular hypertrophy, losartan, in combination with hydrochlorothiazide, often reduces the risk of cardiovascular morbidity and mortality measured as the combined incidence of cardiovascular death, stroke and myocardial infarction in hypertensive patients with left ventricular hypertrophy (see item 5.1 of the LIFE study, Race).”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	50 mg losartan + 12,5 mg hydrochlorthiazid - 100 mg losartan + 25 mg hydrochlorthiazid tablets: DKK 7.95 - 12.15
Consumption	39,374 persons in treatment in 2006. 40,915 persons in treatment in the first 10 months of 2007
Discussion	The combination is not more expensive than the individual substance losartan

	and is used by a large group of patients. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA01 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DA02	Eprosartan + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Teveten Comp.
Approved indication	“Essential hypertension. Teveten Comp 600 mg/12.5 mg is intended for patients whose blood pressure is not adequately controlled with eprosartan monotherapy.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	600 mg eprosartan + 12,5 mg hydrochlorthiazid tablets: DKK 6.63
Consumption	1,452 persons in treatment in 2006. 1,782 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance eprosartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA02 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DA03	Valsartan + hydrochlorothiazide
Pharmaceutical forms	Tablets

Traded names	Co-Diovan 160mg/12,5mg, Co-Diovan Forte 160 mg/25 mg, Corixil, Cotareg, Cotareg 80mg/12,5 mg, Cotareg 160mg/12,5mg, Co-Vals Forte, Diovan Comp., Diovan Comp. 80mg/12,5mg, Diovan Comp. 160mg/12,5mg, Diovan Comp. 160mg/25mg, Kalpress Plus Forte
Approved indication	“Treatment of essential hypertension. The fixed-dose combination of Diovan Comp 160 mg/12.5 mg (160 mg of valsartan/12.5 mg of hydrochlorothiazide) is indicated for the treatment of patients whose blood pressure is not adequately controlled with valsartan monotherapy.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	80 – 160 mg valsartan + 12,5 mg hydrochlorthiazid tablets: DKK 7.85 - 9.01
Consumption	14,400 persons in treatment in 2006 16,003 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance valsartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA03 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DA04	Irbesartan + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	CoAprovel, Karvezide
Approved indication	“Treatment of essential hypertension. The fixed-dose combination is indicated in patients whose blood pressure is not adequately controlled with irbesartan or hydrochlorothiazide alone.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	150 - 300 mg irbesartan + 12,5 mg hydrochlorthiazid tablets: DKK 6.85 - 9.09
Consumption	10,677 persons in treatment in 2006 11,210 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance irbesartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change

	<p>the reimbursement status for oral medicinal products in ATC group C09DA04 so that the general reimbursement be limited to</p> <p>“Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”</p>
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C09DA06	Candesartan + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Atacand Plus, Atacand Zid Atazid, Hytacand, Ratacand Plus, Ratacand Zid
Approved indication	“Essential hypertension where monotherapy with candesartan cilexetil or hydrochlorothiazide is not adequate.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	8 - 16 mg candesartan + 12,5 mg hydrochlorothiazid tablets: DKK 7.28 - 7.26.
Consumption	15,502 persons in treatment in 2006 16,592 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance candesartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA06 so that the general reimbursement be limited to
	“Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DA07	Telmisartan + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Kinzalkomb., MicardisPlus, PritorPlus
Approved indication	“Treatment of essential hypertension. In the fixed-dose combination, MicardisPlus (40 mg of telmisartan/12.5 mg of hydrochlorothiazide) is indicated for patients whose blood pressure cannot be controlled satisfactorily with telmisartan alone.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	40 - 80 mg telmisartan + 12,5 mg hydrochlorothiazid tablets: DKK 7.54 - 8.32

Consumption	5,767 persons in treatment in 2006 6,950 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance telmisartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA07 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DA08	Olmesartan + hydrochlorothiazide
Pharmaceutical forms	Tablets
Traded names	Olmetec Plus, Benetor Comp.
Approved indication	“Treatment of essential hypertension. The fixed-dose combination is indicated for patients whose blood pressure is not adequately controlled with olmesartan medoxomil alone.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	20 - 40 olmesartan + 25-50 mg hydrochlorothiazid tablets: DKK 6.31 - 12.62
Consumption	526 persons in treatment in 2006 1,350 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the high end compared to the individual substance olmesartan. Treatment with this medicinal product offers no therapeutic advantages compared to treatment with the cheaper ACE inhibitors in combination with hydrochlorothiazide which is recommended for continued general reimbursement. As the price is considerably higher than for these inhibitors, it is the opinion of the Committee that treatment with one of these combinations would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DA08 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

C09DB01	Valsartan + amlodipine
Pharmaceutical forms	Tablets
Traded names	Exforge
Approved indication	“Treatment of essential hypertension. Exforge is indicated for patients whose blood pressure is not adequately controlled with amlodipine or valsartan monotherapy.”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	80 + 5 mg: DKK 7.93 160 + 5 mg: DKK 11.68 160 + 10 mg: DKK 11.84
Consumption	0 persons in treatment in 2006. 2,370 persons in treatment in the first 10 months of 2007
Discussion	In terms of price, the combination is at the same level as the individual substance valsartan which is recommended for general limited reimbursement. In the opinion of the Committee, the compliance advantage does not compensate for the considerable price difference in relation to an ACE inhibitor and amlodipine eligible for general reimbursement.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09DB01 so that the general reimbursement be limited to “Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”

Renin-inhibitors – C09X

C09XA02	Aliskiren
Pharmaceutical forms	Tablets
Traded names	Rasilez
Approved indication	“Treatment of essential hypertension”
Dispensing terms	B
Reimbursement status	General reimbursement
Price per day	150 - 300 mg: DKK 11.33
Consumption	-
Discussion	The price of treatment with aliskiren is considerably higher than that of the cheaper ACE inhibitors. It is the opinion of the Committee that aliskiren offers no therapeutic advantages compared to the cheaper ACE inhibitors eligible for general reimbursement, and the Committee thus finds that treatment with one of these inhibitors would be a more rational choice.
Assessment	In the opinion of the Committee, <u>there are grounds</u> to open a case to change the reimbursement status for oral medicinal products in ATC group C09XA02

	<p>so that the general reimbursement be limited to</p> <p>“Patients with hypertension or any other type of cardiovascular disease requiring treatment, where treatment with cheaper medicinal products eligible for general reimbursement with an effect on the renin-angiotensin system has shown to be insufficient, or patients who cannot tolerate these medicinal products.”</p>
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Price survey of C09 - ACE inhibitors, angiotensin II antagonists and renin inhibitors

Appendix C5
29 January 2008

Average lowest unit price for 6 price periods (period start from 22 october to 31 december 2007)

1. ATC	2. Medicinal product	3. Reimbursement status/dispensing terms	4. DDD (mg)	5. Daily Dose (mg) ¹	6. Pharmaceutical form	7. Strength (mg)	8. Average lowest unit price (DKK)	9. Price per day (DKK)	
C09AA	ACE inhibitors, plain								
C09AA01	Captopril	•	B	50	50 ²³⁷	Tablets	25	0.40	0.80
C09AA02	Enalapril	•	B	10	20 - 40 ⁴⁵	Tablets	20	1.57	1.57 - 3.14
C09AA03	Lisinopril	•	B	10	20 ⁴⁵	Tablets	20	0.76	0.76
C09AA04	Perindopril	•	B	4	4 - 8 ⁴⁵	Tablets	4 / 8	5.49 / 7.24	5.49 - 7.24
C09AA05	Ramipril	•	B	2.5	5 - 10 ⁴⁵	Tab./capsules	5 / 10	0.56 / 0.75	0.56 - 0.75
C09AA06	Quinapril	•	B	15	20 - 40 ⁴⁵	Tablets	20	4.46	4.46 - 8.92
C09AA07	Benazepril	•	B	7.5	20 - 40 ⁴⁵	Film coated tab.	20	11.51	11.51 - 23.02
C09AA09	Fosinopril	•	B	15	40 ⁴⁵	Tablets	20	6.48	12.96
C09AA10	Trandolapril	•	B	2	4 ⁴⁵	Capsules/cap., hard	2	4.61	9.22
C09BA	ACE inhibitors and diuretics								
C09BA01	Captopril and diuretics ⁸	•	B		50 ³⁶	Tablets	50	5.91	5.91
C09BA02	Enalapril and diuretics ⁹	•	B		20 - 40 ⁴⁵	Tablets	20	1.54	1.54 - 3.08
C09BA03	Lisinopril and diuretics ⁹	•	B		20 ⁴⁵	Tablets	20	0.53	0.53
C09BA04	Perindopril and diuretics ¹⁰	•	B		4 - 8 ⁴	Tablets	4	8.74	8.74 - 17.48
C09BA05	Ramipril and diuretics ⁸	•	B		5 - 10 ⁴⁵	Tablets	5	2.74	2.74 - 5.48
C09CA	Angiotensin II antagonists, plain								
C09CA01	Losartan	•	B	50	50 - 100 ⁴⁵	Film-coated tab.	50 / 100	8.02 / 12.40	8.02 - 12.40
C09CA02	Eprosartan	•	B	600	600 ⁴⁵	Film-coated tab.	600	6.32	6.32
C09CA03	Valsartan	•	B	80	80 - 160 ⁴⁵	Film-coated tab.	80 / 160	7.93 / 11.26	7.93 - 11.26
C09CA04	Irbesartan	•	B	150	150 - 300 ⁴⁵	Tablets	150 / 300	6.83 / 9.21	6.83 - 9.21
C09CA06	Candesartan	•	B	8	8 - 16 ⁴⁵	Tablets	8 / 16	5.19 / 6.82	5.19 - 6.82
C09CA07	Telmisartan	•	B	40	40 - 80 ⁴⁵	Tablets	40 / 80	7.27 / 8.84	7.27 - 8.84
C09CA08	Olmesartan	•	B	20	20 - 40 ⁴⁵	Film-coated tab.	20 / 40	6.31 / 7.60	6.31 - 7.60

1. ATC	2. Medicinal product	3. Reimbursement status/dispensing terms		4. DDD (mg)	5. Daily Dose (mg) ¹	6. Pharmaceutical form	7. Strength (mg)	8. Average lowest unit price (DKK)	9. Price per day (DKK)
C09DA	Angiotensin II antagonists and diuretics								
C09DA01	Losartan and diuretics ¹¹	•	B		50 - 100 ^{4 5}	Film-coated tab.	50 / 100	7.95 / 12.15	7.95 - 12.15
C09DA02	Eprosartan and diuretics ⁹	•	B		600 ^{4 5}	Film-coated tab.	600	6.63	6.63
C09DA03	Valsartan and diuretics ⁹	•	B		80 - 160 ^{4 5}	Film-coated tab.	80 / 160	7.85 / 9.01	7.85 - 9.01
C09DA04	Irbesartan and diuretics ⁹	•	B		150 - 300 ^{4 5}	Film-coated tab.	150 / 300	6.85 / 9.09	6.85 - 9.09
C09DA06	Candesartan and diuretics ⁹	•	B		8 - 16 ^{4 5}	Tablets	8 / 16	7.28 / 7.26	7.28 - 7.26
C09DA07	Telmisartan and diuretics ⁹	•	B		40 - 80 ^{4 5}	Tablets	40 80	7.54 / 8.32	7.54 - 8.32
C09DA08	Olmesartan and diuretics ⁸	•	B		20 - 40	Film-coated tab.	20	6.31	6.31 - 12.62
C09DB	Angiotensin II antagonists and calcium channel blockers								
C09DB01	Valsartan and amlodipine	•	B		80+5 - 160+10	Film-coated tab.	80+5 / 160+10 160+5	7.93 / 11.84 11.68	7.93 11.84
C09XA	Renin inhibitors								
C09XA02	Aliskiren	•	B	150	150 ³	Film-coated tab.	150 / 300	11.33 / 11.33	11.33

Notes and explanations:

1	Can be given once a day unless otherwise noted
2	Divided into 2 daily doses
3	DDD (Defined Daily Dose) by the WHO
4	Equieffective dose by the Institute for Rational Pharmacotherapy
5	Recommended by the Institute for Rational Pharmacotherapy
6	Recommended with certain limitations or in special cases by the Institute for Rational Pharmacotherapy
7	Not recommended by the Institute for Rational Pharmacotherapy
8	+ 25 mg hydrochlorothiazide
9	+ 12,5 mg hydrochlorothiazide
10	+ 1,25 mg indapamide
11	+ 12,5 mg hydrochlorothiazide in the tablet containing 50 mg losartan and 25 mg hydrochlorothiazide in the tablet containing 100 mg losartan

Symbols and abbreviations

Reimbursement status	
-	Not eligible for general reimbursement
●	General reimbursement for prescription-only medicinal products
■	Limited general reimbursement for over-the-counter medicinal products.
⊗	Limited general reimbursement for prescription-only medicinal products

Dispensing terms	
A	Only to be dispensed once on the same prescription, unless dispensed in smaller doses at a time.
AP4	Subject to the provisions of section 4 of the Executive Order on prescriptions.
AP4BG	Only to be dispensed to hospitals. Subject to the provisions of section 4 of the Executive Order on prescriptions.
AP4NB	Only to be dispensed to hospitals or following prescription by specific medical specialists. Subject to the provisions of section 4 of the Executive Order on prescriptions.
B	Only to be dispensed once on the same prescription, unless stated otherwise.
BEGR	Only to be dispensed to hospitals. Same terms apply as for dispensing group A.
HA	Over-the-counter drugs. Pharmacy-restricted medicinal product.
HF	Over-the-counter drugs. Non-pharmacy-restricted human medicinal product.
HX	Over-the-counter drugs. Non-pharmacy-restricted human medicinal product. Maximum 1 package/customer/day.
NBS	Only to be dispensed to hospitals or following prescription by specific medical specialists. Same terms apply as for dispensing group A.