amounted to 75.8%, 56.5% of pts had hypertension and 29.7% were diabetic. Thirty-four percent of pts were diagnosed as obese with additional 44.2% of the pts’ population being overweight. The prevalence of current smokers was 17.5% in total study population and 15.8% in post myocardial infarction pts. Except ACEI (70.6% vs. 69.5%) drugs such as ASA, LBA, statins were more frequently applied in secondary prevention group when compared with primary prevention pts (respectively 54.9% vs. 85.8%, 41.9 vs. 77.0%, 53.8 vs. 79.4%). Underweight pts received fewer recommendations concerning regular physical activity, dietary counseling and weight loss when compared with obese pts (respectively 80.6% vs. 90.8%; 79.3% vs. 95.3%; 68.8% vs. 97.3%). CONCLUSIONS: The POLKARD-SPOK survey confirmed a high prevalence of modifiable risk factors and their inappropriate management, in patients with CVD or at high risk of fatal atherothrombotic events, treated in primary care settings.

### PCV4

META-ANALYSIS OF THE DIAGNOSTIC ACCURACY OF PRESSURE MEASUREMENTS IN CORONARY ARTERY DISEASE

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OBJECTIVES: To summarize the diagnostic accuracy of coronary pressure-based fractional flow reserve (FFR) in patients with suspected coronary artery disease. METHODS: A systematic search in literature databases (MEDLINE, EMBASE, Cochran and HTA-databases) up to 2005 was performed to identify published studies comparing FFR with a functional reference standard and reporting test characteristics. As reference standard SPECT, scintigraphy or combinations of several tests (e.g. stress electrocardiography, stress echocardiography, angiography) were accepted. We constructed diagnostic 2 × 2-tables from diagnostic test characteristics (e.g., sensitivity, specificity) and performed a diagnostic meta-analysis using the inverse variance approach. RESULTS: Thirteen articles were identified matching the inclusion criteria. Four articles were excluded because of multiple reporting of data. From the 9 studies included, data for 717 observational units (i.e., patient or coronary lesion) were extracted. Pooled sensitivity of FFR was 82% (95%-CI: 77-86%), and specificity was 79% (74-83%). Diagnostic odds ratio was 16.5 (11.4-61.7). Excluding single studies did not affect these results. Subgroup analyses showed severity of disease reflected by the number of affected coronary vessels as an influential factor on test sensitivity (single-vessel-disease: 95% [87-99%] vs. 78% [73-83%] in multi-vessel-disease). Choice of reference standard also influenced pooled sensitivity. Studies using SPECT as reference standard showed a lower sensitivity than studies using other reference standards (78% [73-83%] vs. 95% [87-99%]). Subgroups of studies with multi-vessel-disease patients and studies using SPECT as reference standard tended to be of newer publication date. CONCLUSIONS: FFR is a functional test with sufficiently high sensitivity and specificity for the detection of hemodynamic relevant coronary stenoses. Time trends in the data affecting the overall estimate of pooled sensitivity can not be excluded, but are unlikely to relevantly influence the result.

### PCV5

DRUG-ELUTING STENT USE IS ASSOCIATED WITH SIGNIFICANT IMPROVEMENTS IN LONG-TERM CLINICAL OUTCOMES

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OBJECTIVE: Drug-eluting stents (DES) have become the principal coronary artery revascularization modality in the US; yet little is known about their long-term clinical outcomes versus bare-metal stents (BMS). We examined 2-year clinical event rates for BMS vs. DES in a practice-based population and compared results for patients with single- as well as multi-vessel coronary artery disease (CAD). METHODS: The study population includes Duke University Medical Center patients undergoing revascularization with BMS or DES between January 1, 2000 and May 31, 2005, with follow-up through August 17, 2006. Study outcomes examined are death, non-fatal myocardial infarction (MI), and target vessel revascularization (TVR), and their composites. RESULTS: We examined the data of 3678 BMS and 1689 DES patients. DES vs. BMS patients had more multi-vessel CAD (42.6% vs. 36.6%). At two years follow-up, DES vs. BMS patients had lower rates of mortality (7.8% vs. 8.6%), non-fatal MI (3.3% vs. 5.0%), and TVR (6.0% vs. 14.2%). This difference in DES vs. BMS TVR rate was observed in patients with 1- (5.5% vs. 13.0%), 2- (6.7% vs. 15.7%), and 3-vessel CAD (7.0% vs. 18.8%). After adjustment for differences in baseline characteristics using Cox proportional hazards modeling, DES vs. BMS use was associated with no difference in mortality; but with significant reductions in the composites of death or MI (HR = 0.81, 95% CI = 0.67, 0.98) and death, MI, or TVR (HR = 0.55, 95% CI = 0.47, 0.64). Event reduction in the adjusted models was not limited to 1-, 2-, or 3-vessel CAD patients. CONCLUSIONS: The use of drug-eluting vs. bare-metal stents is associated with significant improvements in long-term clinical outcomes for patients with single- and multi-vessel coronary artery disease.

### PCV6

REACHING SIGN CHOLESTEROL TARGETS AND BEYOND: RETROSPECTIVE AUDIT OF TARGETS ACHIEVED THROUGH USE OF ROSUVASTATIN IN A SCOTTISH GENERAL PRACTICE

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OBJECTIVES: Scottish Intercollegiate Guidelines Network (SIGN) guidelines advise that at risk patients should be treated to a total cholesterol (TC) target of <5 mmol/L. Recent Joint British Societies Guidelines (JBS2, 2005) recommend patients be treated to a lower TC target of <4 mmol/L. An audit was conducted to determine the effect of the new guidelines on the proportion of patients achieving target cholesterol levels with rosuvastatin. METHODS: General Practice records were searched to identify patients who had been prescribed rosuvastatin < 10 mg and the following data recorded: previous statin therapy, last cholesterol result on that statin and first cholesterol test on rosuvastatin 10 mg. The majority of patients were statin-naive (n = 253), the others had previously been prescribed another statin. On average patients experienced a 1.6 mmol/L (<5 mmol/L) reduction in TC (32% in statin naïve, 16% where statin another. In previously statin naive patients 82% (208/253) achieved TC <5 mmol/L on rosuvastatin compared to 77% (95/123) in patients who had previously been treated with another statin. On average patients experienced a 1.6 mmol/L (27%) reduction in TC (32% in statin naïve, 16% where statin changed). Improvements were also seen against JBS2 targets; patients with TC <4 mmol/L improved from 3% (11/376) prior to rosuvastatin to 35% (131/376) on rosuvastatin 10 mg (37% in statin naïve, 30% where statin changed). CONCLUSIONS:
Rosuvastatin 10 mg was effective in the reduction of TC in a general practice setting. The majority of patients were able to achieve SGN targets and many patients also achieved the lower JBS2 targets.

**REACHING AWMSG TARGETS AND BEYOND—A RETROSPECTIVE AUDIT OF TARGETS ACHIEVED THROUGH USE OF ROSUVASTATIN IN WELSH GENERAL PRACTICE**

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**OBJECTIVES:** The All Wales Medicines Strategy Group (AWMSG) recommends that at-risk patients should be treated to a total cholesterol (TC) target of <5 mmol/L and low-density lipoprotein-cholesterol (LDL-C) <3 mmol/L. Recent Joint British Societies Guidelines (JBS2, 2005) advise patients be treated to TC <4 mmol/L and LDL-C <2 mmol/L. An audit was conducted to determine the effect of the new guidelines on the proportion of patients achieving target cholesterol levels with rosuvastatin.

**METHODS:** General Practice records were searched to identify patients who had been prescribed rosuvastatin 10 mg and the following data recorded: previous statin therapy, last cholesterol result on that statin and first cholesterol test on rosuvastatin.

**RESULTS:** A total of 337 patients who had been prescribed rosuvastatin were identified. Of these 273 patients prescribed rosuvastatin 10 mg had both a pre- and post-rosuvastatin treatment TC result, 33 had LDL-C results. The majority of patients were statin-naïve (195), others had previously been prescribed atorvastatin mean dose 18 mg (n = 45), simvastatin mean dose 20 mg (n = 29) or pravastatin mean dose 23 mg (n = 4). Prior to treatment with rosuvastatin, 11% (29/273) had a TC <5 mmol/L, increasing to 79% (215/273) after treatment with rosuvastatin 10 mg. On average patients experienced a 1.6 mmol/L (26%) reduction in TC. The proportion of patients with LDL-C <3 mmol/L improved from 12% (4/33) to 94% (31/33) on rosuvastatin. On average patients experienced a 1.6 mmol/L (42%) reduction in LDL-C. Improvements were also seen against JBS2 targets; patients with TC <4 mmol/L improved from 0% prior to rosuvastatin to 32% on rosuvastatin 10 mg and similarly patients with LDL-C <2 mmol/L improved from 0% to 39%.

**CONCLUSIONS:** Rosuvastatin 10 mg was effective in the reduction of TC and LDL-C in a Welsh general practice. The majority of patients were able to achieve AWMSG targets and many patients also achieve the recommended lower JBS2 targets.

**THE EFFECTIVENESS OF ROSUVASTATIN COMPARED WITH OTHER STATINS—RESULTS FROM A ROUTINE CLINICAL PRACTICE SETTING IN THE UK**

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**OBJECTIVES:** To compare the effectiveness of statins in a real world setting as measured by percentage low density lipoprotein cholesterol (LDL-C) reduction and percentage total cholesterol (TC) reduction in patients newly initiated on statin therapy.

**METHODS:** For this retrospective cohort study, patients newly initiated on common start doses of statin therapies (rosuvastatin 10 mg, simvastatin 10/20 mg, pravastatin 20/40 mg and atorvastatin 10/20 mg) between January 1, 2003 and August 31, 2005 were identified from the UK DIN-LINK database. Patients with no dyslipidemic therapy in the 12 months preceding their initial statin prescription and an LDL-C or TC measurement less than 6 months before and at least 1 month after initiating statin therapy were included in the study. Adjusted percent LDL-C reductions and percent TC reductions were compared using linear regression techniques. **RESULTS:** A total of 2151 patients with complete LDL-C data were identified. Rosuvastatin (n = 159), atorvastatin (n = 836), simvastatin (n = 1107) and pravastatin (n = 49) groups were similar with respect to mean age (64.5, 64.4, 65.1 and 65.1 years respectively) and baseline LDL-C levels (4.4, 4.3, 4.3 and 4.0 mmol/L respectively). After adjusting for age, gender, baseline LDL-C, therapy duration and 2003 European guideline risk factors, patients initiated on rosuvastatin achieved a significantly greater percentage LDL-C reduction (44.8%; 95% confidence interval 42.1%–47.4%) than patients initiated on atorvastatin (40.4%; 39.2%–41.5%), simvastatin (36.5%; 35.5%–37.5%) or pravastatin (29.9%; 25.1%–34.5%); all p < 0.01. Similarly, in patients where complete TC data was available (n = 7070), patients initiated on rosuvastatin (n = 475) had a significantly greater adjusted percentage TC reduction (31.3%; 30.1%–32.5%) than patients initiated on atorvastatin (n = 2662; 28.2%; 27.7%–28.7%), simvastatin (n = 3665; 25.3%; 24.9%–25.7%) or pravastatin (n = 268; 20.7%; 19.1%–22.3%); all p < 0.0001. **CONCLUSIONS:** In patients newly initiated on usual start doses of statins in routine practice, rosuvastatin was more effective in lowering both LDL-C and TC than atorvastatin, simvastatin and pravastatin.

**NON-PERSISTENT USE OF ANTHYPERTENSIVE DRUGS LEADS TO INCREASED RISK OF HOSPITALIZATIONS FOR ACUTE MYOCARDIAL INFARCTION OR STROKE**

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**OBJECTIVE:** Low adherence to antihypertensive drug (AHT) treatment may limit patient’s benefits in terms of a reduction of cardiovascular and cerebrovascular disease. This study investigated the relationship between persistence with antihypertensive drugs and risk of myocardial infarction (MI) or stroke in daily practice. **METHODS:** From the PHARMO record linkage system comprising, among other medical information, the medication histories and hospital discharge diagnoses of ≥2 million inhabitants in The Netherlands, new users of AHT were identified between 1993–2002. Persistence with AHT was determined by summing the number of days of continuous treatment (gaps between dispensings ≤60 days). Persistent patients remained on AHT for 24 months. The outcome of interest was the first hospital admission for MI or stroke occurring two or more years after initiation of AHT therapy. Patients were classified at high, intermediate or low cardiovascular risk based on other cardiovascular drug use and hospitalizations during the first two years of follow-up. **RESULTS:** The study included 98,485 patients of whom 16% were at high cardiovascular risk. About 50% (n = 48,548) of all patients were persistent with AHT for two years. Multivariate analyses showed that persistent users of AHT had a statistically significant lower risk for MI/stroke compared to non-persistent users (RRadj = 0.88; 95%CI: 0.82–0.94). The association was stronger in the low/intermediate risk group (RRadj = 0.85; 95%CI: 0.79–0.92) than in the high risk group (RRadj = 0.95; 95%CI: 0.83–1.09). **CONCLUSION:** Non-persistent use of AHT in daily practice leads to increased risk of hospitalizations for MI or stroke.