and presence of diabetes or hypertension are all associated with increased 30-day mortality after CABG.
CONCLUSION: The incidence of major adverse events in CABG patients varies widely across different studies and patient populations. This heterogeneity must be controlled when using the literature to benchmark safety.

PCV3

A RETROSPECTIVE, OBSERVATIONAL COHORT STUDY OF THE EFFECTS OF STATIN THERAPY ON LIPID LEVELS IN A NATURALISTIC SETTING

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Current data are limited regarding the effects of statins in the naturalistic setting of clinical practice.
OBJECTIVES: This study sought to determine the effects of statins on the lipid profile and target LDL-cholesterol (LDL-C) attainment in this setting.
METHODS: Patients newly initiated on atorvastatin, fluvastatin, pravastatin, or simvastatin from 1/99 to 6/99 were retrospectively identified from a southeastern U.S. health plan database. A parallel design incorporated four study arms based on the statin prescribed. Exclusion criteria included statin therapy in the prior 6 months, less than 90 days of statin therapy, switching of statin, use of combination dyslipidemia therapy, or non-continuous enrollment in the health plan. Changes in lipid subfractions and attainment of LDL-C goal based on NCEP ATP II guidelines were evaluated with OLS and logistic regression techniques utilizing clinically relevant covariates.
RESULTS: A total of 2,429 patients (age = 62 ± 13 years, 47.8% male) were identified. Comorbidities included 73% hypertension, 24% diabetes, and 34% atherosclerotic vascular disease. Median duration of statin therapy was 19.4 months. Patients receiving atorvastatin had significantly greater mean absolute (and percentage) reductions in LDL-C and triglycerides compared to the other statins in both the unadjusted and adjusted results (all $p < 0.05$ vs. atorvastatin). Differences in HDL-cholesterol (HDL-C) were small, however, a statistically significant increase was observed with simvastatin compared to atorvastatin ($p < 0.05$). Also, a significantly greater percentage (unadjusted, adjusted) of patients reached their NCEP LDL-C goal on atorvastatin (74.0%, 73.0%) compared with fluvastatin (52.0%, 51.0%), pravastatin (58.3%, 56.4%) and simvastatin (69.0%, 69.4%), and atorvastatin patients reached goal faster than the other statins (median: 184 days vs. 215–357 days, all $p < 0.05$ vs. atorvastatin).
CONCLUSION: Patients prescribed atorvastatin had statistically significant improvements in LDL-C and triglycerides, though not in HDL-C, compared to those prescribed other statins. In addition, atorvastatin patients attained LDL-C goal more often and in a shorter timeframe.

PCV4

TRENDS IN THE ATTAINMENT OF CHOLESTEROL TREATMENT GOALS: EVIDENCE FROM MANAGED CARE

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OBJECTIVES: The benefits of aggressive lipid-lowering (L-L) therapy among patients with an elevated risk of coronary heart disease (CHD) are well established, but longitudinal data from clinical practice are limited. Our objective was to assess trends in the rate of cholesterol goal attainment (based on NCEP criteria) among moderate- and high-risk patients in a managed care setting.
METHODS: A retrospective cohort design was employed using linked pharmacy claims, medical claims, and clinical laboratory data from members of a Northeastern US group model HMO. The study cohort included patients 55+ years of age who were newly treated with L-L drug therapy between 1995 and 1998, had an LDL-C value over 160 mg/dL within 90 days prior to treatment, and had no history of CHD but at least one CHD risk factor other than age. The duration of follow-up was 1 year.
RESULTS: A total of 1044 patients were identified. The average age was 68 years and 41% were male. The mean baseline LDL-C level was 197 mg/dL. Most patients (86%) began treatment with a statin, and adherence (evaluated by "covered days") averaged 61%. The mean decline in LDL-C was 25%. Target LDL-C levels were reached by 34% of this population. The rate of LDL-C goal attainment increased from 18% in the 1995 cohort to 46% in the 1998 cohort. The likelihood of reaching goal was positively associated with cohort year ($P < 0.01$), male gender ($P = 0.05$), and beginning treatment with a statin ($P = 0.04$) and negatively associated with initial LDL-C level ($P < 0.01$). Age and the number of risk factors were not associated with goal attainment.
CONCLUSIONS: In this primary prevention population, cholesterol management improved substantially over time. Nonetheless, most patients still did not achieve their target LDL-C levels, indicating that further research is required to identify steps for increasing the effectiveness of cholesterol treatment.

PCV5

ESTIMATING THE IMPACT OF ANTICOAGULATION QUALITY ON EVENT RATES

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OBJECTIVES: Warfarin anticoagulation has been shown to effectively decrease the rate of thromboembolism (TE), with an associated increased rate of bleeding. Maximizing the benefit and minimizing the risk depends on maintaining patients in a narrow therapeutic range for prothrombin time (measured as INR); increased percent-