OBJECTIVES: The IDEAL trial (Incremental Decrease in End Points through Aggressive Lipid Lowering) was an open label, blinded endpoint evaluation of 8888 patients with history of acute myocardial infarction (MI) who were randomized to atorvastatin 80 mg or simvastatin 20–40 mg. The median follow-up was 4.8 years. Major coronary events (coronary death, hospitalization for MI, or resuscitated cardiac arrest) were reduced by 11%, (hazard ratio [HR], 0.89; 95% confidence interval [CI], 0.78, 1.01; P = 0.07). There was a 16% relative risk reduction in all cardiovascular events (HR 0.84, 95% CI: 0.76 to 0.91). The objective of the study was to assess the cost-effectiveness ratio of atorvastatin 80 mg versus simvastatin 20–40 mg among patients with history of coronary heart disease (CHD) in Spain taking into account all CV events. METHODS: A within trial pharmacoeconomic analysis was developed to estimate cost per event avoided. Direct (hospitalization, drugs) and indirect costs (lost production due to work absence) were included in the model. To estimate the cost of these hospitalizations, drug reimbursement group (DRG) was used. Effectiveness was estimated as the number of events in both arms. RESULTS: After 4.8 years, treatment with intensive atorvastatin could avoid 1 in 6 CV events compared with moderate simvastatin therapy among patients with CHD. Despite atorvastatin having a higher drug cost, this was offset by lower costs of reduced hospitalizations and work days lost for patients receiving atorvastatin treatment. Using Spanish costs the incremental cost for atorvastatin to avoid an event was €15,168. CONCLUSIONS: In a cohort of 8888 Spanish patients with CHD one cardiovascular event could be prevented for cost of €1520 euros/patient over 4.8 years. Based on these results, it appears that even in a low cost generic market, high dose atorvastatin is a good option compared to standard therapy with simvastatin.