also resulted in a positive short- and long-term health economic benefit in acutely ill medical patients. The health-economic benefit of enoxaparin was positively related with the length of the follow-up period and a higher risk for recurrence of VTE and mortality in asymptomatic patients.

A COST-EFFECTIVENESS ANALYSIS OF THE USE OF CARVEDILOL COMPARED TO BISOPROLOL IN CHRONIC HEART FAILURE

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OBJECTIVE: To estimate the cost-effectiveness of carvedilol relative to bisoprolol as adjunctive beta blocker (BB) therapy in patients with chronic heart failure.

METHODS: Comparison of survival benefits was performed using the CIBIS-II placebo group as a representative cohort not treated with a BB. Using parametric survival analysis, five-year survival estimates were calculated for bisoprolol and carvedilol based on published data for the major mortality studies of the two BBs with similar placebo mortality risks (CIBIS-II (hazard ratio 0.66) and US Carvedilol Trial Program (hazard ratio 0.35)). Limited and extended benefit scenarios were estimated under varying assumptions about the sustainability of BB treatment effect. Under the limited benefits scenario the treatment effect was conservatively assumed to last only until the end of the reported trial periods. The extended benefits scenario was assumed to persist up to five years. Taking the perspective of the UK NHS we estimated differences in treatment costs (medication, outpatient/GP visits, hospitalization), and absolute mortality benefits to form an incremental cost-effectiveness ratio.

RESULTS: The estimated benefit per patient at five years under the extended benefits scenario was 145 days (0.398 yr.) for carvedilol and 301 days (0.823 yr.) for bisoprolol. Over five years the estimated incremental cost-effectiveness ratio of carvedilol compared to bisoprolol is £5,900 per LYG under limited and £1,800 per LYG under extended benefit scenarios respectively.

CONCLUSIONS: Carvedilol represents a cost-effective adjunctive treatment compared to bisoprolol in patients with chronic heart failure. Statistical extrapolation indicates that the relatively greater mortality benefits associated with carvedilol relative to bisoprolol are accrued at a cost, which compares favourably with that of many other common cardiovascular treatments such as statins and ACE inhibitors.
fifteen-year-old adolescents, utilizing pharmacy students as instructors.

METHODS: A cost-effectiveness study is conducted to determine the cost per student who passed the knowledge based exam on tobacco use, after attending the lecture sessions of the tobacco outreach program. The primary outcome of interest is the number of adolescents able to pass the post-test, compared to the number able to pass the pre-test. The following direct costs were collected: supplies; materials; travel; consultant fees; primary investigator salary; coordinator salary; student teacher salary and training; cost of classroom/space, and value of donated goods. Only the incremental costs and outcomes are utilized to calculate the CE ratio. No indirect costs or discounting is included in the analysis.

RESULTS: A total of 132 students participated in the program during a period of one year. The average cost per student is $389.00. Pre-test and post-test are administered to seventy-eight of these students. The cost-effectiveness ratio per student who received a grade greater than seventy on the post-test compared to the pre-test is $689.59. The cost-effectiveness ratio per student who received a grade greater than seventy on the post-test compared to the pre-test is $2,167.28.

CONCLUSIONS: This study evaluates the impact on the post-test scores compared to the pre-test scores only. It does not evaluate the impact of this program either on behavioral changes associated with tobacco use, or on the indirect benefit of being exposed to positive role models, the students from the college of pharmacy. The average per-student program cost of this study population is consistent with published literature. However, very little literature exists to determine if the CE ratios are within the standards of other drug abuse educational programs.

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A HEALTH-ECONOMIC ANALYSIS OF THE USE OF AMLODIPINE IN PATIENTS UNDERGOING PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY IN THE U.K

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OBJECTIVE: To perform a retrospective economic analysis of The Coronary Angioplasty Amlodipine Restenosis Study (CAPARES), in order to evaluate the pharmacoeconomic profile associated with the use of amlodipine in patients undergoing angioplasty from the perspective of the UK National Health Service

METHODS: A decision analysis was undertaken to track the experiences of patients admitted for angioplasty who were prescribed amlodipine versus those administered placebo. The analysis modeled a four-month time period, which included an initial hospitalization for angioplasty, outpatient follow-up care and any re-admissions for cardiovascular events. The CAPARES trial provided the outcome data for the amlodipine and placebo patients. Outcomes tracked in the analysis included MI, repeat PTCA, CABG, and all-cause mortality. Economic data for inpatient stays, procedures, physician services, laboratory tests and pharmaceuticals were obtained from published data, and a physician panel was used to estimate the quantity of outpatient resource consumption.

RESULTS: The total expected cost per patient using and not using amlodipine was £3,833 and £4,035, respectively, resulting in a net cost savings of £202 over the four-month time period. The cost savings is primarily due to savings in inpatient costs due to the reduction in adverse events requiring repeat revascularization and other events requiring inpatient stays.

CONCLUSION: This analysis concludes that in addition to the favourable clinical outcome for angioplasty patients using amlodipine versus placebo demonstrated in the CAPARES trial, a net savings in overall costs may also be realized, resulting in dominance.

PCV22

COST-EFFECTIVENESS OF ENOXAPARIN AS VENOUS THROMBOEMBOLISM PROPHYLAXIS IN ACUTELY ILL MEDICAL PATIENTS

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OBJECTIVES: MEDENOX, a multinational double-blind, placebo-controlled trial (n = 1102) of venous thromboembolism (VTE) prophylaxis among hospitalized, acutely ill. Medical patients revealed a lower incidence of VTE among patients receiving enoxaparin 40 mg once daily for 6-14 days relative to placebo (5.5% versus 14.9% p < .001). Conducted in Europe and Canada, the trial did not include a prospective economic component. The purpose of this study was to model the cost-effectiveness of VTE prophylaxis with enoxaparin in a US health-care environment from the payer perspective.

METHODS: From a national sample of US hospital summary bills, we extracted records (n = 374,855) of discharges matching MEDENOX diagnostic/demographic characteristics (primary diagnoses: acute infectious disease, acute respiratory failure, or heart failure, mean age: 73 years). With these data we estimated a multivariate model of admission cost. Regression parameters were incorporated in a pharmacoeconomic model of hospital admission for patients treated with or without enoxaparin per the MEDENOX protocol. Using Monte Carlo simulation, the model projected cost of admission as a function of diagnosis, length of stay, VTE prophylaxis/no prophylaxis. Outcome measures included cost of admission, cost for VTE prophylaxis, and incremental prophylaxis cost per VTE avoided. Not included were potential downstream costs for inpatient or post-hospital VTE treatment.

RESULTS: In the base case analysis, VTE prophylaxis ac-