COST-EFFECTIVENESS OF NIASPAN® VERSUS ZETIA® AS ADD-ON TREATMENT TO STATIN THERAPY IN HIGH-RISK PATIENTS
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OBJECTIVES: Patients at goal low-density lipoprotein cholesterol (LDL-C) levels continue to have cardiovascular disease (CVD) risk, especially those who also have abnormal high-density lipoprotein cholesterol (HDL-C) and/or triglyceride (TG) levels. Despite evidence on the importance of managing LDL-C, HDL-C and TG, controversy resides over whether to continue lowering LDL-C or to target HDL-C and TG. Niaspan® and Zetia® are two commonly prescribed alternatives for add-on therapy to statins, but information is lacking on the economic impact of add-on therapy. As such, an analysis was conducted to estimate the cost-effectiveness of Niaspan versus Zetia as add-on therapy in high-risk statin-treated patients with a history of CVD. METHODS: A model was developed to predict CVD events (myocardial infarction, stroke, angina) and costs in a high-risk US managed care population receiving on-going statin (branded and generic) therapy over five years. Risk for CVD events was predicted using equations from the Framingham Heart Study. CVD event and follow-up costs were from an inpatient administrative claims database and the published literature, respectively. Drug costs were based on wholesale acquisition costs (WAC); daily WAC for Niaspan was weighted to reflect a 12-week dose-titration period. The efficacy of each drug combination was derived based on product labeling and adjusted to reflect mean days on therapy. RESULTS: The additional cost of Niaspan resulted in up to a 20% reduction in CVD events versus Zetia. For incremental cost effectiveness per CVD event avoided when added to pravastatin or Lipitor®, Niaspan dominated Zetia (i.e., less costly and more effective). In lovastatin, simvastatin, or Crestor® patients, the addition of Niaspan relative to Zetia was highly cost-effective with incremental cost-effectiveness ratios of $2,258, $18,041, and $5,463, respectively. CONCLUSIONS: When added to pravastatin or Lipitor, Niaspan dominates Zetia and is highly cost-effective when combined with lovastatin, simvastatin, or Crestor in reducing CVD events.

COST-EFFECTIVENESS OF TARGETING MULTIPLE LIPID PARAMETERS (LDL-C, HDL-C, TG) WITH NIASPAN® VERSUS A SINGLE LIPID PARAMETER (LDL-C) WITH ZETIA® IN PATIENTS RECEIVING ON-GOING STATIN THERAPY
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OBJECTIVES: Statin-treated patients at low-density lipoprotein cholesterol (LDL-C) goal continue to be at risk for cardiovascular disease (CVD) events; treating multiple lipid targets, such as high density lipoprotein cholesterol and triglycerides may result in further CVD risk reduction. The annual cost per patient treated to LDL-C goal (<100 mg/dL) with a statin ranges from $1343–$3025. Niaspan® and Zetia® are two add-on therapies used in statin-treated patients. A cost-effectiveness analysis was conducted to estimate the incremental cost of simultaneously achieving multiple lipid targets with Niaspan versus Zetia. METHODS: A model was used to predict changes in lipid levels (total-C, LDL-C, HDL-C, and TG) and associated costs over 1 year among hypothetical cohort of 1000 statin-treated patients with a history of CVD in a US managed care population. Baseline CVD risk factors and lipid parameters, along with their distributions, were based on NHANES data. Efficacy was based on product labeling, and adjusted to reflect mean days with combination therapy on-hand per published studies. Prices were based on wholesale acquisition costs (WAC); daily WAC for Niaspan was weighted to reflect a 12-week dose-titration period. RESULTS: When combined with simvastatin, Crestor®, Lipitor®, or Pravachol® the percentage of statin patients attaining three lipid targets was higher for Niaspan in comparison to Zetia (range, 98%–100% versus 87%–95%, respectively). Annualized per patient treatment costs for Zetia were lower than Niaspan (difference, range: $3–$77). Niaspan had the lowest annualized cost per patient attaining three lipid targets compared to Zetia (range, $681–$1379 versus $681–$1441, respectively). The incremental cost of one additional patient attaining three lipid targets with Niaspan over Zetia, ranged from $59–$678. CONCLUSIONS: The addition of Niaspan relative to Zetia in patients receiving on-going statin therapy results in more patients attaining three lipid targets and the cost per patient attaining three lipid targets is lower.