COST-EFFECTIVENESS OF NIASPAN® VERSUS ZETIA® AS ADD-ON TREATMENT TO STATIN THERAPY IN HIGH-RISK PATIENTS

Sorensen SV1, Webb SF2, Burge RT2
1United BioSource Corporation, Bethesda, MD, USA, 2Abbott Laboratories, Abbott Park, IL, USA

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 addition 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

Sorensen SV1, Webb SF1, Burge RT2
1United BioSource Corporation, Bethesda, MD, USA, 2Abbott Laboratories, Abbott Park, IL, USA

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.

COST EFFECTIVENESS OF IMPLANTABLE LOOP RECORDER SYSTEM (REVEAL DX®) FROM THE SPANISH NHS PERSPECTIVE

García-Baena I1, Rodríguez-Barrios MP2, García García FJ3
1Universitat Pompeu Fabra, Barcelona, Spain, 2Medtronic Ibérica SA, Madrid, Spain, 3Hospital Insular de Gran Canaria, Las Palmas de Gran Canaria, Spain

OBJECTIVES: To evaluate costs and benefits of diagnosing patients of syncope with unknown aetiology with standard of care or with implanted loop recorders in Spain. METHODS: Syncope is a recurrent and unpredictable symptom. It accounts for 6% of hospitalisations and nearly a third of syncope cases remain of unknown etiology after the initial testing. We have evaluated the direct health care costs and diagnostic yield of a conventional diagnosis pathway and compared them with a strategy that includes a subcutaneous device for the diagnosis of syncope (Reveal DX®) in the Spanish context. An economic model was built to analyze the diagnosis yield of Reveal DX®, and costs of both diagnostic strategies. It was based on a clinical trial approach, the Eastbourne Syncope Assessment Study (Farwell, 2006). We used 2007 updated Spanish Cost data from the literature. RESULTS: Reveal DX with an ICER per additional diagnosis made of 2186€ (95% CI 1761€–35041€) is cost effective in Spain. The ICER Confidence Interval (CI), was calculated with Probabilistic Sensitivity Analysis to account for the variability of medical resources, unit costs and diagnostic yield. CONCLUSIONS: Introducing Reveal DX® in the diagnosis of syncope of unknown etiology in Spain is a cost effective strategy since it increases diagnostic yield at a reasonable incremental cost for the Spanish Health System.

COST-EFFECTIVENESS OF POPULATION-BASED ‘SCREEN-AND-TREAT’ STRATEGIES DIRECTED AT ALBUMINURIA

Boersma C1, Gansevoort RT2, Visser ST1, De Jong-van den Berg L1, de Jong PE1, Postma MJ3
1University of Groningen, Groningen, The Netherlands, 2University Medical Center Groningen, Groningen, Groningen, The Netherlands

OBJECTIVES: Cardiovascular diseases result in an enormous burden to society. Therefore, early identification of and pharmacotherapeutic intervention in subjects at risk for cardiovascular risks.