

Raising the Standard in HEOR

Analysis Group Posters and Presentations

ISPOR EUROPE 2025 | NOVEMBER 9–12 | GLASGOW, SCOTLAND

Analysis Group's health economics and outcomes research (HEOR) professionals have extensive experience helping clients quantify product value in a dynamic and rapidly changing marketplace.

This year, we are pleased to present an educational symposium and 11 research posters. Please find details below.

All posters will be on display in the Exhibit Hall during their allotted poster session.

| Poster Code | Title | Poster Session |
|-------------------------------|---|--|
| <u>CO23</u> | Association Between Objective Response and Overall Survival in BRAF V600E-Mutant Metastatic Colorectal Cancer: An Analysis of the BEACON CRC Trial | Poster Session 1 Monday, 10 November 10:30–13:30 |
| <u>CO35</u> | Burden of Illness Among Patients With Transfusion Dependent Beta-Thalassemia in Spain: A Registry-Based Study | Poster Session 1 Monday, 10 November 10:30–13:30 |
| <u>CO81</u> | Economic and Clinical Burden of Diagnosed Congenital Cytomegalovirus Disease in France During the First 2 Years of Life | Poster Session 2 Monday, 10 November 16:00–19:00 |
| <u>EE186</u> | Cost Per Responder Of TAR-200 Versus Other FDA-Approved Novel And Generic Treatments Among Bacillus Calmette-Guérin-Unresponsive High-Risk Non-Muscle-Invasive Bladder Cancer With Carcinoma In Situ In The United States | Poster Session 2 Monday, 10 November 16:00–19:00 |
| <u>CO86</u> | Effectiveness of Pneumococcal Vaccines in Preventing Otitis Media in Children: A Targeted Literature Review | Poster Session 2 Monday, 10 November 16:00–19:00 |
| <u>EE362</u> | Economic Burden of Pneumococcal Disease—Impact of Age and Underlying Medical Conditions | Poster Session 3 Tuesday, 11 November 10:30–13:30 |
| <u>CO169</u> | Network Meta-Analysis NMA of Clinical Effectiveness of Second-Line (2L+) Treatments in Extensive-Stage Small Cell Lung Cancer (ES-SCLC) | Poster Session 4 Tuesday, 11 November 16:00–19:00 |
| <u>EE511</u> | Healthcare Resource Utilization and Costs Among Bacillus Calmette-Guérin (BCG)-Experienced or Unresponsive Patients with Papillary-Only High-Risk Non-Muscle-Invasive Bladder Cancer | Poster Session 4 Tuesday, 11 November 16:00–19:00 |
| <u>EE580</u> | Microsimulation Model to Estimate the Clinical and Cost Burden of Adverse Events Related to Long-Term Oral Corticosteroid Usage in Autoimmune Diseases in the United States | Poster Session 4 Tuesday, 11 November 16:00–19:00 |
| <u>MSR138</u> | Linking Specialty Pharmacy Data With Healthcare Claims Data in a Rare Disease: Comprehensively Characterizing Patients With Hereditary Angioedema Treated With Berotralstat | Poster Session 4 Tuesday, 11 November 16:00–19:00 |
| <u>EE551</u> | Indirect Costs Associated With Pneumococcal Disease: A Global Targeted Literature Review | Poster Session 4 Tuesday, 11 November 16:00–19:00 |

ISPOR Europe 2025 Analysis Group Presentation

EDUCATIONAL SYMPOSIUM

Monday, 10 November | 11:45–12:45 | Scottish Event Campus, Boisdale 1 & 2

Generative AI: Driving the Next Era of Evidence-Based Medicine

Generative AI (GenAI) is transforming health economics and outcomes research (HEOR) and real-world evidence (RWE) by enabling new ways to analyze large datasets, model complex phenomena, and support evidence-based decision making. Powered by large language models (LLMs), GenAI enables richer analysis of diseases and treatment outcomes and more efficient insight extraction from diverse data sources such as electronic health records, claims data, and scientific literature. These capabilities are unlocking new opportunities to advance health care innovation and improve patient outcomes. This symposium will explore the frontiers of GenAI, highlight key developments and challenges, and showcase its applications in HEOR and RWE. Case studies in disease areas such as oncology, obesity, and cardiometabolic diseases will illustrate how GenAI can advance research with real-world data (RWD). Presenters will demonstrate how data from electronic medical records, disease registries, and population-based cohorts can be curated, linked, and enriched to generate insights that are both context-specific and globally relevant. The session will also introduce a new RWE research initiative jointly launched by Harvard T.H. Chan School of Public Health and Analysis Group to advance precision health and apply AI to deepen our understanding of disease and treatment outcomes. Presenters will discuss how GenAI can streamline the automated screening of published research by translating and summarizing scientific literature across multiple languages. They will demonstrate how these advances expand access to comprehensive evidence, enabling more accurate and timely decision making. Finally, the symposium will present an example of combining GenAI with digital twin methodologies to model the long-term progression of obesity and chronic cardiometabolic conditions. Together, these innovations promise to simplify complex analyses, enhance research precision, and deepen understanding of disease pathways. Ultimately, GenAI offers powerful tools to strengthen evidence-based decision making and shape more effective health care solutions and policies.

Presenters: [Eric Q. Wu](#), Ph.D.; *Managing Principal, Analysis Group*
[Jimmy Royer](#), Ph.D.; *Principal, Analysis Group*
[Rajeev Ayyagari](#), Ph.D.; *Vice President, Analysis Group*
Frank Hu, M.D., M.P.H., Ph.D.; *Fredrick J. Stare Professor of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health*

ISPOR Europe 2025 Analysis Group Research Posters

POSTER SESSION 1

Monday, 10 November | 10:30–13:30

Association Between Objective Response and Overall Survival in BRAF V600E-Mutant Metastatic Colorectal Cancer: An Analysis of the BEACON CRC Trial

Objectives: To quantify the association between objective tumor response and overall survival (OS) in patients with BRAF V600E-mutant metastatic colorectal cancer (mCRC) receiving encorafenib + cetuximab (EC)-based therapy. Clarifying this association may inform the relevance of tumor response in clinical, regulatory, and reimbursement decision-making for this high-risk population.

Conclusions: Achieving a tumor response was associated with reduced mortality risk in patients with BRAF V600E-mutant mCRC receiving EC-based therapy. This association was robust across time points and treatment arms, underscoring the potential relevance of tumor response in this population, particularly when OS data are limited, requiring much longer time for follow-up.

Authors: Managing Principal [James Signorovitch](#), Vice President [Kalé Kponee-Shovein](#), Manager [Mu Cheng](#), Associate Jingyi Liu, and researchers from Massachusetts General Hospital and Pfizer

Funding for this study was provided by Pfizer.

Burden of Illness Among Patients With Transfusion Dependent Beta-Thalassemia in Spain: A Registry-Based Study

Objectives: Patients with transfusion-dependent β -thalassemia (TDT) require lifelong care, including frequent red blood cell transfusions (RBCTs) that lead to excess tissue iron, end organ damage, and the need for regular iron chelation therapy (ICT) for survival. A registry-based study was conducted to assess the burden of illness among patients with TDT in Spain.

Conclusions: Patients with TDT in Spain experience substantial burden from serious chronic complications on standard of care with frequent RBCTs and ICT for TDT management, highlighting the need for novel therapies for these patients.

Authors: Managing Principal [Hongbo Yang](#), Manager [Qing Liu](#), and researchers from Vertex Pharmaceuticals and Hospital General Universitario Gregorio Marañón

Funding for this study was provided by Vertex Pharmaceuticals.

POSTER SESSION 2

Monday, 10 November | 16:00–19:00

Economic and Clinical Burden of Diagnosed Congenital Cytomegalovirus Disease in France During the First 2 Years of Life

Objectives: Congenital cytomegalovirus (cCMV) is the leading infectious cause of birth defects. This study assessed healthcare resource utilization (HRU), direct costs, and cCMV-related clinical outcomes among infants diagnosed with cCMV in France.

Conclusions: In France, infants with diagnosed cCMV have higher HRU and costs, and experienced worse clinical outcomes during the first 2 years post-diagnosis compared with non-CMV controls.

Authors: Managing Principal [Noam Kirson](#), Vice President [Urvi Desai](#), and researchers from Moderna

Funding for this study was provided by Moderna.

Cost Per Responder Of TAR-200 Versus Other FDA-Approved Novel And Generic Treatments Among Bacillus Calmette-Guérin-Unresponsive High-Risk Non-Muscle-Invasive Bladder Cancer With Carcinoma In Situ In The United States

Objectives: Despite recent therapeutic progress, available treatment options for patients with Bacillus Calmette-Guérin (BCG)-unresponsive high-risk non-muscle-invasive bladder cancer (BCG-UR HR-NMIBC) with carcinoma in situ (CIS) are sub-optimal. TAR-200, a novel intravesical drug releasing system, was granted United States (US) Food and Drug Administration (FDA) approval on September 9, 2025, for this population. An economic model compared the cost-per-responder for US patients with BCG-UR HR-NMIBC with CIS treated with TAR-200 versus other FDA-approved treatments.

Conclusions: TAR-200 demonstrated the highest proportion of patients achieving and sustaining complete response for ≥ 12 months, translating to substantial cost savings per responder compared to other FDA-approved treatments for BCG-UR HR-NMIBC with CIS.

Authors: Vice Presidents [Urvi Desai](#) and [Dominic Pilon](#), Manager [Laura Morrison](#), Senior Research Professionals Beatrice Libchaber and Gordon Wong, Research Professional Francesca Lee, and researchers from The University of Texas Medical Branch and Johnson & Johnson

Funding for this study was provided by Johnson & Johnson.

Effectiveness of Pneumococcal Vaccines in Preventing Otitis Media in Children: A Targeted Literature Review

Objectives: This study aimed to synthesize evidence on vaccine effectiveness (VE) of pneumococcal conjugate vaccines (PCVs) against otitis media (OM) in children <5 years.

Conclusions: This review supports the effectiveness of PCVs in reducing OM/AOM, particularly pneumococcal OM/AOM. However, evidence from RCTs is limited. VE estimates from observational studies vary substantially, likely due to heterogeneity in methodologies. Future research should standardize the methodology to improve the comparability across studies.

Authors: Vice President [Weiguang Xue](#), Manager [Yanwen Xie](#), and researchers from Merck, XL Source, Emory University, and Arkansas Children's Hospital

Funding for this study was provided by Merck.

POSTER SESSION 3

Tuesday, 11 November | 10:30–13:30

Economic Burden of Pneumococcal Disease—Impact of Age and Underlying Medical Conditions

Objectives: Pneumococcal disease is a leading cause of morbidity and mortality worldwide. The risk of pneumococcal disease varies based on the presence of underlying medical conditions, which defines three groups: “high-risk” (individuals with immunocompromising conditions), “at-risk” (immunocompetent individuals with chronic cardiovascular or pulmonary conditions), and “low-risk” (healthy individuals). This study summarizes the economic burden of pneumococcal disease across these risk groups.

Conclusions: IPD and inpatient pneumonia impose significant economic burdens on healthcare systems. Risk conditions for pneumococcal disease are associated with higher costs for pneumonia. Targeted interventions for at-risk and high-risk populations may effectively reduce the overall economic burden of pneumococcal disease.

Authors: Vice President [Yan Song](#), Manager [Hela Romdhani](#), and researchers from Merck, XL Source, Emory University, Arkansas Children's Hospital

Funding for this study was provided by Merck.

POSTER SESSION 4

Tuesday, 11 November | 16:00–19:00

Network Meta-Analysis (NMA) of Clinical Effectiveness of Second-Line (2L+) Treatments in Extensive-Stage Small Cell Lung Cancer (ES-SCLC)

Objectives: Treatment options after recurrence of ES-SCLC typically depend on patients' platinum-sensitivity status but are generally associated with poor outcomes. DeLLphi-304, an ongoing phase III randomized controlled trial (RCT), showed that tarlatamab offers considerable clinical benefit in head-to-head comparisons versus chemotherapies (topotecan, amrubicin, or lurbinectedin). An NMA was conducted to indirectly compare tarlatamab with existing 2L treatments, including those not evaluated in DeLLphi-304.

Conclusions: Tarlatamab demonstrated significantly improved OS compared to existing treatments in patients with previously treated ES-SCLC, irrespective of platinum-sensitivity status, supporting its potential to be the new standard of care.

Authors: Managing Principal [Hongbo Yang](#), Vice President [Xinglei Chai](#), Associate Yuehan Zhang, and researchers from The Christie NHS Foundation Trust and Amgen

Funding for this study was provided by Amgen.

Healthcare Resource Utilization and Costs Among Bacillus Calmette-Guérin (BCG)-Experienced or Unresponsive Patients with Papillary-Only High-Risk Non-Muscle-Invasive Bladder Cancer

Objectives: To characterize healthcare resource utilization (HRU) and costs among Bacillus Calmette-Guérin (BCG)-experienced patients with recurrent, papillary-only high-risk non-muscle-invasive bladder cancer (HR-NMIBC) in a United States Medicare population.

Conclusions: BCG-experienced patients with recurrent, papillary-only HR-NMIBC incurred substantial HRU and costs, with a large proportion being BC-related, highlighting the need for more effective bladder-sparing therapies with durable response after BCG.

Authors: Vice Presidents [Dominic Pilon](#) and [Bruno Émond](#), Manager [Carmine Rossi](#), Associate Rebecca Bungay, Senior Analyst Steven Liu, Analyst Priscilla Jiang, and researchers from Stanford University School of Medicine, Johnson & Johnson, and Urology of Virginia

Funding for this study was provided by Johnson & Johnson.

Microsimulation Model to Estimate the Clinical and Cost Burden of Adverse Events Related to Long-Term Oral Corticosteroid Usage in Autoimmune Diseases in the United States

Objectives: Oral corticosteroids (OCS) are often used for prolonged durations to manage autoimmune conditions but are associated with important adverse events (AEs). This study aimed to quantify lifetime clinical and economic costs of AEs related to prolonged OCS use, relative to a hypothetical steroid-sparing treatment that reduces need for OCS. The model base-case focused on myasthenia gravis (MG). Chronic inflammatory demyelinating polyneuropathy, immune thrombocytopenic purpura, and lupus nephritis were also investigated.

Conclusions: A reduction in OCS exposure could substantially improve quality of life and reduce economic burden. Age at disease onset and cumulative dose of OCS are major determinants of burden.

Authors: Managing Principal [Noam Kirson](#), Manager [David Proudman](#), Associates Arshya Feizi and Rachel Meade, Senior Analysts Adrienne Kwok and Sydney Ng, and researchers from Massachusetts General Hospital, Tufts Medical Center, Beth Israel Deaconess Medical Center, Harvard Medical School, and Argenx

Funding for this study was provided by Argenx.

Linking Specialty Pharmacy Data With Healthcare Claims Data in a Rare Disease: Comprehensively Characterizing Patients With Hereditary Angioedema Treated With Berotralstat

Objectives: To link Optime Care Specialty Pharmacy Data with Komodo Healthcare Map data to characterize patients treated with berotralstat for long-term prophylaxis of hereditary angioedema (HAE) in the United States.

Conclusions: The innovative linking of Optime Care Specialty Pharmacy and Komodo Healthcare Map data allows for comprehensive characterization of patients with HAE treated with berotralstat. The linked database enables future research on a rare disease to address knowledge gaps and support decision-making by healthcare practitioners and payers.

Authors : Principal [François Laliberté](#), Manager [Sean MacKnight](#), and researchers from BioCryst Pharmaceuticals

Funding for this study was provided by BioCryst Pharmaceuticals.

Indirect Costs Associated With Pneumococcal Disease: A Global Targeted Literature Review

Objectives: We sought to synthesize existing evidence on indirect costs associated with acute episodes of pneumococcal disease (PD).

Conclusions: Productivity loss represents a substantial economic burden among children with AOM and adults with pneumonia. However, existing evidence for IPD and pneumonia in children is limited. The substantial variability across studies highlights heterogeneity in methodologies. Future studies should address these gaps and capture all relevant productivity loss.

Authors: Vice President [Yan Song](#), Manager [Hela Romdhani](#), and researchers from Merck, XL Source, Emory University, Arkansas Children's Hospital

Funding for this study was provided by Merck.