formulary listing recommendations to publicly funded drug plans. This study aims to determine the implications of implementing CDR recommendations. METHODS: CDR reviews from December 2010 to December 2012, for which an economic evaluation was submitted by the manufacturer, were assessed. A framework was developed where templates were created in Microsoft Excel for each drug submission to consider two scenarios: an uptake scenario (ndR recommendation implemented) and a counterfactual scenario (CDR recommendation not implemented). Drug costs and quality-adjusted life years (if applicable) for both scenarios were determined at the population level using numbers reported in the manufacturer’s budget impact analyses. The incremental net benefit was calculated, based on a willingness-to-pay of $50,000. In addition, sensitivity analyses were conducted to consider variation around the counterfactual scenario. RESULTS: Based on the results for the 55 drugs for which cost-utility or a cost-minimization analysis was submitted, the total incremental net benefit of implementing a CDR recommendation was calculated to be over 1 billion dollars over a 1-year time frame for participating provincial drug plans. Decisions were categorized as favorable, unfavorable, mixed (ie, both favorable and unfavorable), and neutral (ie, deferral). RESULTS: 67 oncology-related HTAs were published in the study timeframe. Across studied nations, 38 (57%) decisions were considered as favorable or unfavorable, 1 (2%) neutral. Decision-making processes are critical and vary widely across regions. In addition to patient preferences and drug efficacy, HTA decisions are influenced by broader level factors such as disease complexity, treatment economic consequences, data limitations, and economic rationale. CONCLUSIONS: The current study examined the implications of implementing CDR recommendations and the impact it has on overall drug approval in Canada.

HEALTH TECHNOLOGY ASSESSMENT STUDIES

**HT1** RECENT HEALTH TECHNOLOGY ASSESSMENT DECISIONS AROUND THE GLOBE: A FOCUS ON ONCOLOGY

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**OBJECTIVES:** To document the impact that oncology technology assessment (TA) decision-making processes are critical and vary widely across regions. In addition to patient preferences and drug efficacy, HTA decisions are influenced by broader level factors such as disease complexity, treatment economic consequences, data limitations, and economic rationale. CONCLUSIONS: The current study examined the implications of implementing CDR recommendations and the impact it has on overall drug approval in Canada.

**HT2** ASSESSING THE VALUE OF TREATMENTS FOR RARE DISEASES USING AN MCDA-BASED APPROACH: METHODOLOGICAL AND ETHICAL FOUNDATIONS OF CRITERIA SELECTION AND FRAMEWORK DEVELOPMENT

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**BACKGROUND:** Appraising rare disease treatments involves multiple issues and represents a significant challenge for HTA agencies. Multicriteria-approaches are recommended to handle the multifaceted nature of rare diseases and to capture individual perspectives and judgments. This study aims to determine the implications of implementing CDR recommendations. METHODS: A framework was developed where templates were created in Microsoft Excel for each drug submission to consider two scenarios: an uptake scenario (ndR recommendation implemented) and a counterfactual scenario (CDR recommendation not implemented). Drug costs and quality-adjusted life years (if applicable) for both scenarios were determined at the population level using numbers reported in the manufacturer’s budget impact analyses. The incremental net benefit was calculated, based on a willingness-to-pay of $50,000. In addition, sensitivity analyses were conducted to consider variation around the counterfactual scenario. RESULTS: Based on the results for the 55 drugs for which cost-utility or a cost-minimization analysis was submitted, the total incremental net benefit of implementing a CDR recommendation was calculated to be over 1 billion dollars over a 1-year time frame for participating provincial drug plans. Decisions were categorized as favorable, unfavorable, mixed (ie, both favorable and unfavorable), and neutral (ie, deferral). RESULTS: 67 oncology-related HTAs were published in the study timeframe. Across studied nations, 38 (57%) decisions were considered as favorable or unfavorable, 1 (2%) neutral. Decision-making processes are critical and vary widely across regions. In addition to patient preferences and drug efficacy, HTA decisions are influenced by broader level factors such as disease complexity, treatment economic consequences, data limitations, and economic rationale. CONCLUSIONS: The current study examined the implications of implementing CDR recommendations and the impact it has on overall drug approval in Canada.

**HT3** IDENTIFYING RECENT TRENDS IN HEALTH TECHNOLOGY ASSESSMENTS FOR CROHN’S DISEASE

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**OBJECTIVES:** To identify the types of coverage recommendations made by key ex-US health technology assessment (HTA) organizations for biologic treatments in Crohn’s disease (CD) and to understand how these organizations interpret evidence to support these recommendations. METHODS: Publicly available HTAs of CD from January 2009 to June 2013 for the following organizations were reviewed: CADTH (Canada), CONITEC (Brazil), HAS (France), IQWIG (Germany), NICE (UK), PBAC (Australia). Papers were identified using an HTA search engine and were supplemented with separate manual searches for CD-related reports on each HTA organization’s website. When additional context was needed to evaluate the HTA with the most recent recommendations, older HTAs were identified and used to verify the most recent HTA decision rationales. Results: In total, nine HTAs were reviewed across five organizations; no HTAs on CD from IQWIG or ISGCI were identified. All HTAs endorsed the use of infliximab and adalimumab for CD from a clinical perspective. Recommendations for subpopulations including fistulizing disease, pediatric, and prior/concurrent corticosteroid use varied. Recommendations were consistent with the host country’s approved labeled indications when appropriate cost thresholds were met, with the exception of PBAC, where adalimumab was additionally deemed appropriate for fistulizing disease, and CONITEC, where certolizumab was not endorsed due to safety concerns. Research gaps identified include the need for head-to-head trials for adalimumab vs. infliximab and the paucity of long-term clinical and economic evidence. CONCLUSIONS: Infliximab and adalimumab generally received positive endorsements in CD, despite being frequently scrutinized by HTA organizations for their high costs. The expiration of patents and the introduction of biosimilars will likely shift how HTA entities evaluate clinical, economic, and humanistic evidence for biologic treatments for CD in the future.

**HT4** COST-EFFECTIVENESS REVIEWS BY HTA AGENCIES: A COMPARISON OF FACTORS LEADING TO UNFAVOURABLE REVIEWS FOR ONCOLOGY AGENTS

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**OBJECTIVES:** The purpose of this study was to identify factors leading to unfavourable reviews of cost-effectiveness analyses (CEAs) for oncology products by communicating oncology HTAs in selected countries. METHODS: HTA surveillance was conducted for Australia, Canada, France, Germany, and the United Kingdom (UK) from January 1, 2012 to August 31, 2013 (19 months). Oncology-based HTAs were evaluated by therapeutic area, decision, and rationale for the decision. Decisions were categorized as favorable, unfavorable, mixed (ie, both favorable and unfavorable), and neutral (ie, deferral). RESULTS: 67 oncology-related HTAs were published in the study timeframe. Across studied nations, 38 (57%) decisions were considered as favorable or unfavorable, 1 (2%) neutral. Common reasons for unfavorable decisions, 13 were rejected for insufficient justification to the high cost (ie, improperly high cost-effectiveness ratio [ICER]), 9 for insufficient or unproven clinical benefit vs the most appropriate comparator, and 3 for incomplete or improper submission. Excluding mixed and neutral decisions, France was associated with the highest percentage of favorable decisions (14 of 19, 93%), followed by Germany (9 of 14, 64%), Australia (11 of 20, 55%), and the UK (4 of 14, 29%). RESULTS: The following factors were examined and sensitivity analyses (especially regarding extrapolation methods and input sources) were performed on the last 19 months of oncology-based HTAs, over 50% of decisions were favorable. The most significant factor leading to rejection for oncology products is the inability to prove cost-effectiveness vs the most appropriate comparator. For this reason, the United States was more successful in proving clinical benefit than manufacturers would have more success with HTA decisions, particularly in the UK, if more robust health economic and clinical data are generated.

**MEDICATION ADHERENCE STUDIES**

**MA1** NON-ADHERENCE IS ASSOCIATED WITH POORER HEALTH OUTCOMES AMONG WOMEN CURRENTLY TREATED FOR BREAST CANCER WITH ORAL ENDOCRINE THERAPY

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**OBJECTIVES:** -Non-adherence rates with oral endocrine therapy (ET) in women with breast cancer (BC) are 25%-50% and lead to inferior survival. Understanding the determinants of non-adherence is critical to improving treatment outcomes and developing effective interventions. This study examined real-world non-adherence and health outcomes among women using ET. METHODS: Female respondents from the 2010-2012 U.S. National Health and Wellness Survey were included if reporting a diagnosis of breast cancer and treatment with hormone inhibitors (n=243), selective estrogen receptor modulators (n=113), or their combination (n=7). The Morisky Medication Adherence Scale (MMAS-4 or MMAS-8, modified for use in oncology) was used to assess adherence, standardized using t-scores. Descriptive analyses examined adherence, sociodemographics, and health behaviors. Bivariate analyses com-