The Impact of CDA-AMC Sequential Analysis on Decision-Making in Oncology

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INTRODUCTION

- Canada's Drug Agency – L'Agence des medicaments du Canada (CDA-AMC) Procedures for Reimbursement Reviews state that when multiple comparators are included in the pharmacoeconomic analysis, results should be reported using a sequential analysis to show where the drug stands on the cost-effectiveness efficiency frontier.[1]
- The sequential analysis ranks comparators based on their cost and effectiveness. Treatments that are either dominated or exhibit extended dominance are excluded from the analysis. The sequential analysis is then performed with the remaining non-dominated treatments.
- It is essential to understand whether this approach could result in price reductions recommended by CDA-AMC based on the least expensive comparators and treatments not widely used in clinical practice.

OBJECTIVES

- This study aims to assess the appropriateness of the sequential analysis and its impact on the comparator choice used for the economic evaluation, which informs the reimbursement decision-making process.

METHODS

- A review of CDA-AMC reimbursement reports from January 2022 to December 2023 was conducted to identify comparators determined by the sequential analysis and their market shares.
  - The review initially concentrated on the reimbursement reports for oncology products.
  - To expand the scope of the search, reimbursement reports for non-oncology products were also examined.
- Extracted data included:
  - Reimbursement request
  - Use of sequential analysis by CDA-AMC
  - Sponsor, sponsor-corrected and CDA-AMC sequential incremental cost-effectiveness ratio (ICER)
  - Comparators included and excluded in CDA-AMC sequential analysis
  - Price of comparators
  - Market shares of comparators
  - Inclusion of the comparators in pivotal clinical trials
  - Price reduction
  - Consideration of the sequential analysis in both CDA-AMC's conclusions and recommendations

RESULTS

Review of CDA-AMC Reimbursement Reports – Oncology Products

- Of the 62 oncology reimbursement reviews, 13 recommendations were based on a sequential analysis.
- In over half (7/13) of the recommendations, the cost-effectiveness efficiency frontier included one or more comparators not commonly used in clinical practice, with a median market share of 5% (ranging from 0% to 26%).

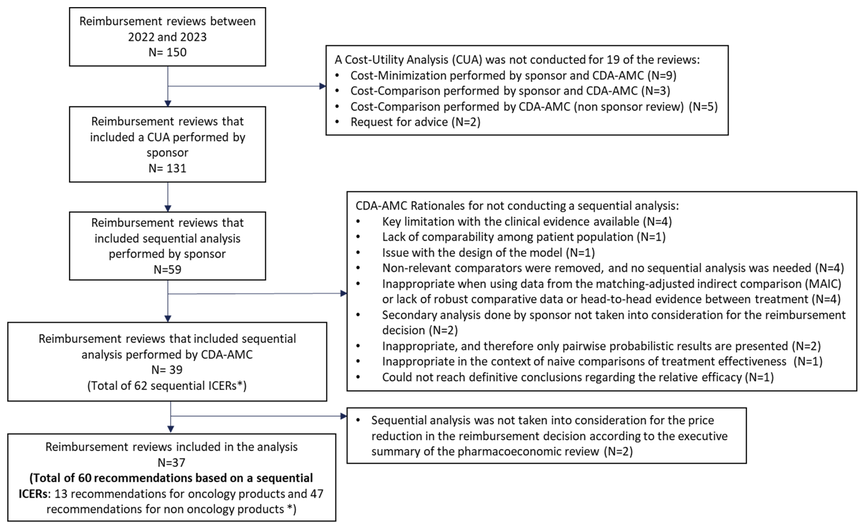
RESULTS

- Nearly half of these recommendations (3/7) used the least expensive comparator and referenced treatments not commonly used in clinical practice, leading to high price reduction recommendations of at least 70%.

Review of CDA-AMC Reimbursement Reports – All Products (Oncology and Non-Oncology)

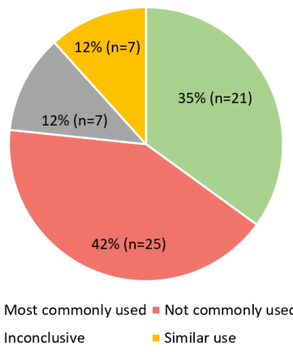
- Of the 150 reimbursement reviews published from January 2022 to December 2023 for oncology and non-oncology products, 60 recommendations were based on sequential analysis.

Figure 1. Flowchart of Included Recommendations



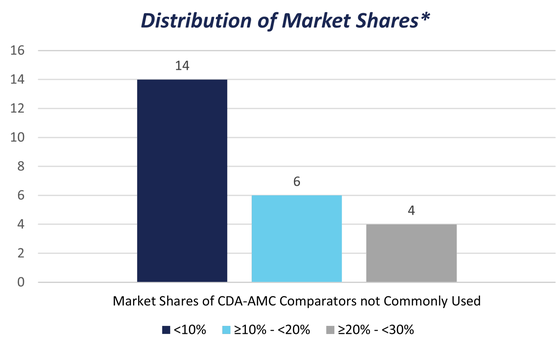
- In more than 40% (25/60) of the recommendations where a conclusion could be drawn, CDA-AMC chose a comparator not commonly used in clinical practice.
  - The use in clinical practice was evaluated based on market share data from reimbursement review reports.
- Among the recommendations based on a comparator not commonly used in clinical practice, the median market shares of CDA-AMC chosen comparator were 8.40%, ranging from 0% to 28.5%.

Figure 2. Distribution of CDA-AMC Chosen Comparator Based on Their Use in Clinical Practice*



* Use in clinical practice is based on market share data from reimbursement review reports.
- Most commonly used: Comparator with the largest market share / Not commonly used: Comparator with a smaller market share / Similar use: Comparators with equal market share / Inconclusive: Market share data redacted; no conclusion possible.

Figure 3. Market Shares of CDA-AMC Chosen Comparators not Commonly Used in Clinical Practice



*Note: One recommendation was excluded from this analysis since the submitted product became the reference, and no conclusion could be drawn.

- More than half of the comparators selected by CDA-AMC were not among the most commonly used in clinical practice (14/25) and were also the least expensive treatment options.
- In most of the included recommendations (77%), the CDA-AMC chosen comparator was not included in the pivotal clinical trials.

DISCUSSION

Study Strengths:

- First study to assess the appropriateness of the sequential analysis and its impact on the comparator choice used for the economic evaluation.
- Thorough and systematic review of CDA-AMC reimbursement reports, ensuring a comprehensive evaluation of decision trends.

Study Limitations:

- This study includes descriptive analyses only. It was conducted to support and facilitate informed discussions with key stakeholders.
- Reimbursement review reports from 2024 were excluded due to revised confidentiality guidelines, effective January 2, 2024, which allow the redaction of market share data.[2]
- Market shares were redacted in 12% of the included reimbursement review reports, which constrained the analysis.
- Variability in the calculation of the drug price and its comparators, as reported in the reimbursement review reports, limited the accuracy of price comparisons.

CONCLUSIONS

CDA-AMC recommendations based on a sequential analysis frequently refer to a comparator that is not widely used. To ensure more transparency, reimbursement reviews should also include treatments that are more commonly used but may have been excluded due to dominance or extended dominance. Using comparators that more accurately reflect real-world clinical practice would help better inform the decision-making process.

REFERENCES

1. Canada's Drug Agency – L'Agence des médicaments du Canada. ***Procedures for Reimbursement Reviews***. February 2025. Available from: https://www.cda-amc.ca/sites/default/files/Drug_Review_Process/Drug_Reimbursement_Review_Procedures.pdf
2. Canada's Drug Agency – L'Agence des médicaments du Canada. ***CADTH Pharmaceutical Reviews Update - Issue 42.*** November 2023. Available from: https://www.cda-amc.ca/cadth-pharmaceutical-reviews-update-issue-42

DISCLOSURES

- Catherine Beauchemin and Jean Lachaine are partners at PeriPharm Inc., a company that has served as a consultant to AbbVie and has received funding from AbbVie to conduct the study.
- Juliette Garneau is an employee of PeriPharm Inc.
- Catherine Beauchemin, Jean Lachaine, and Juliette Garneau participated in the study conduct, data interpretation and the preparation of this abstract. Jean-Eric Tarride provided insights throughout the study conduct.
- Jean-Eric Tarride received honorarium from AbbVie unrelated to this project.
- AbbVie provided financial support for the study, reviewed and approved this publication.
- No honoraria or payments were made for authorship.