

Cost-Effectiveness of Epigenetic Drugs in Oncology: A Systematic Review of Economic Evaluations

Lou-Anne Peretti¹, Isabelle Borget¹, Sophie Postel-Vinay², Christophe Willekens³, Julia Bonastre¹, Arnaud Pagès¹

¹Gustave Roussy, Office of biostatistics and Epidemiology, Paris-Saclay University, UMR1018/CESP, Villejuif, France; ²Gustave Roussy, DITEP, Paris-Saclay University, UMR981, Villejuif, France; ³Gustave Roussy, Office of haematology, Villejuif, France

INTRODUCTION

- Epigenetic therapies are emerging as a novel approach in oncology, particularly in hematologic malignancies.
- Several agents are already approved, and others are under investigation across multiple cancer sites.
- However, their **cost-effectiveness** remains underexplored.

OBJECTIVES

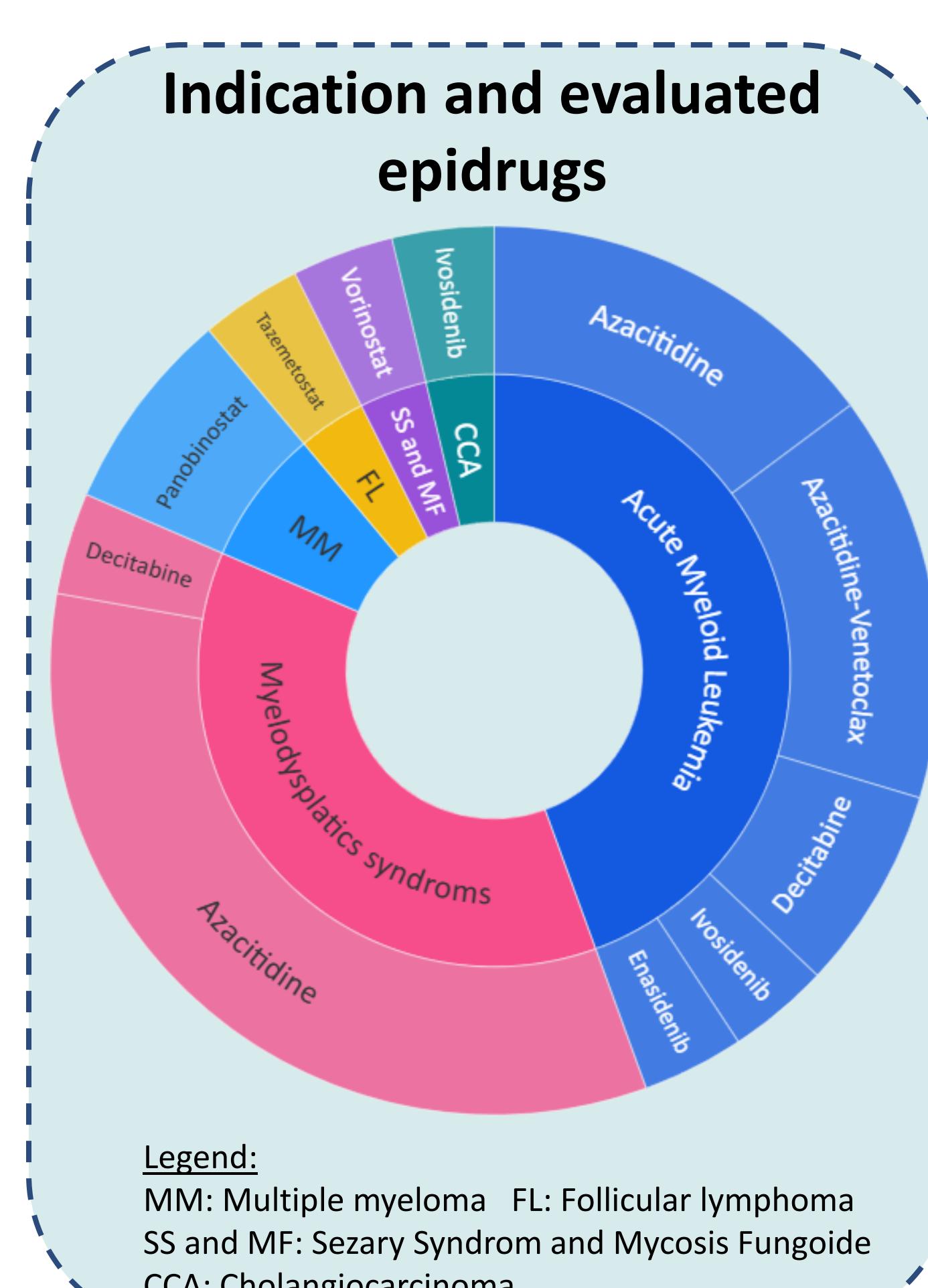
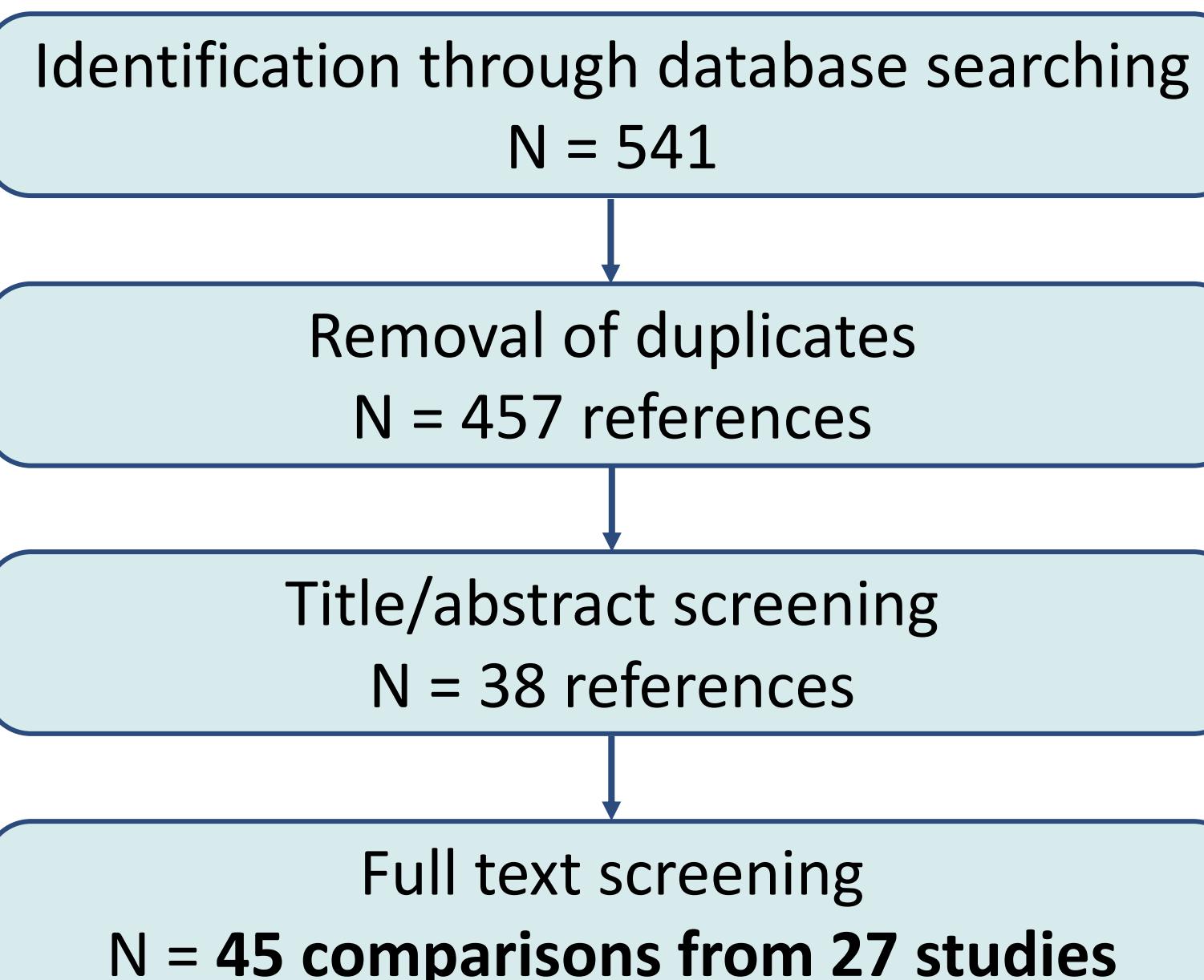
- Review and summarize published **economic evaluations** of epigenetic drugs in oncology.
- Characterize the study settings, model assumptions, and key cost-effectiveness drivers.
- Assess the **reporting quality** of the studies.

METHODS

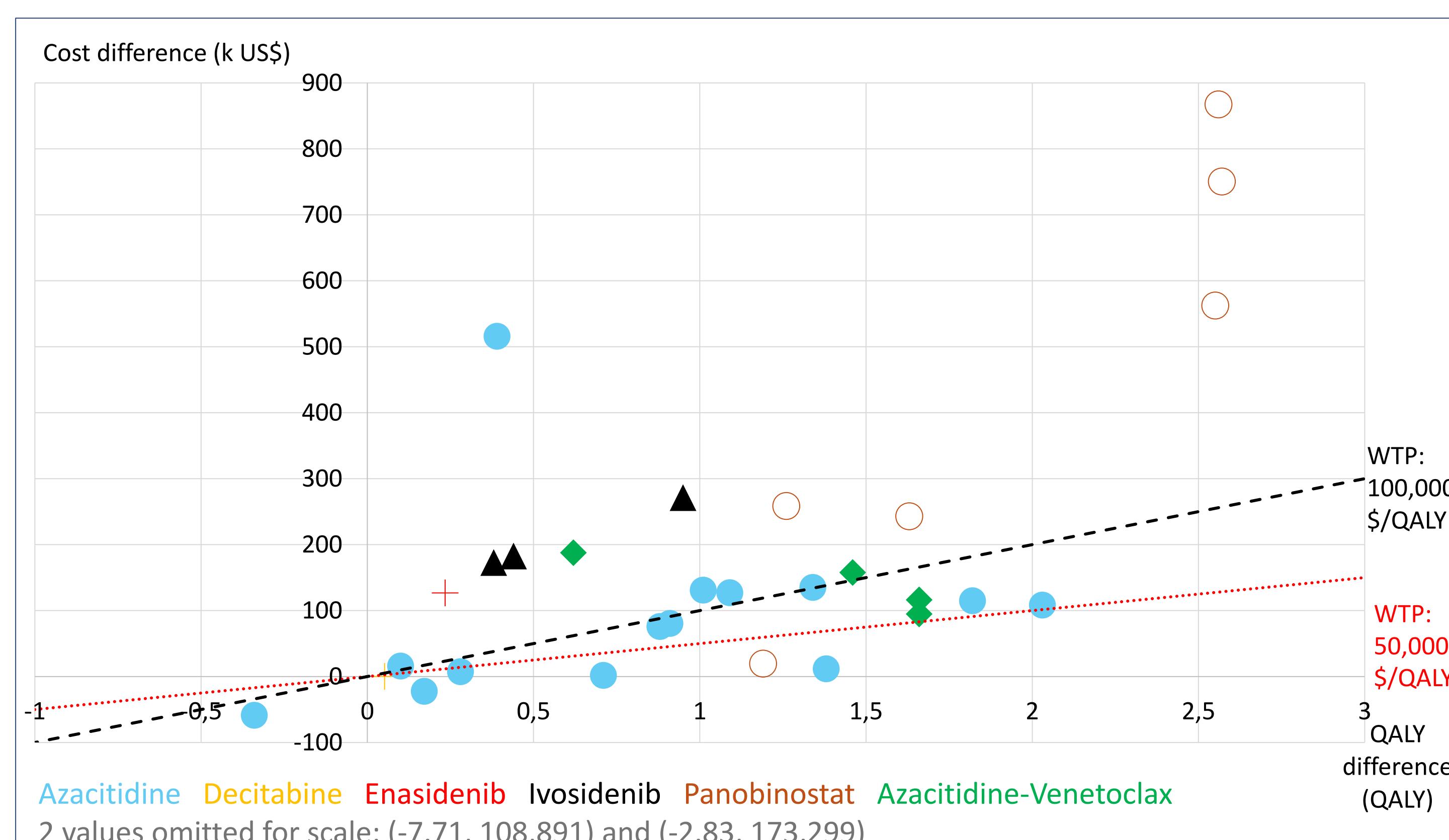
Publication type / databases	Articles, abstracts, posters and letters / Medline, Embase and Scopus
Language	English or French
Publication date	Between January 2000 and November 2024
Economic evaluation type	Cost-Utility Analysis or Cost-Effectiveness Analysis
Interventions	Epidrugs: AZACITIDINE, DECITABINE, VORINOSTAT, ROMIDEPSIN, BELINOSTAT, PANOBINOSTAT, TAZEMETOSTAT, VALEMETOSTAT, ENASIDENIB, OLUTASIDENIB, IVOSIDENIB and VORASIDENIB
Reporting quality	Assessed with the CHEERS checklist 2022 ¹
Costs	Converted to 2023 US dollars using purchasing power parity ²⁻³

RESULTS

Flow-chart of article selection



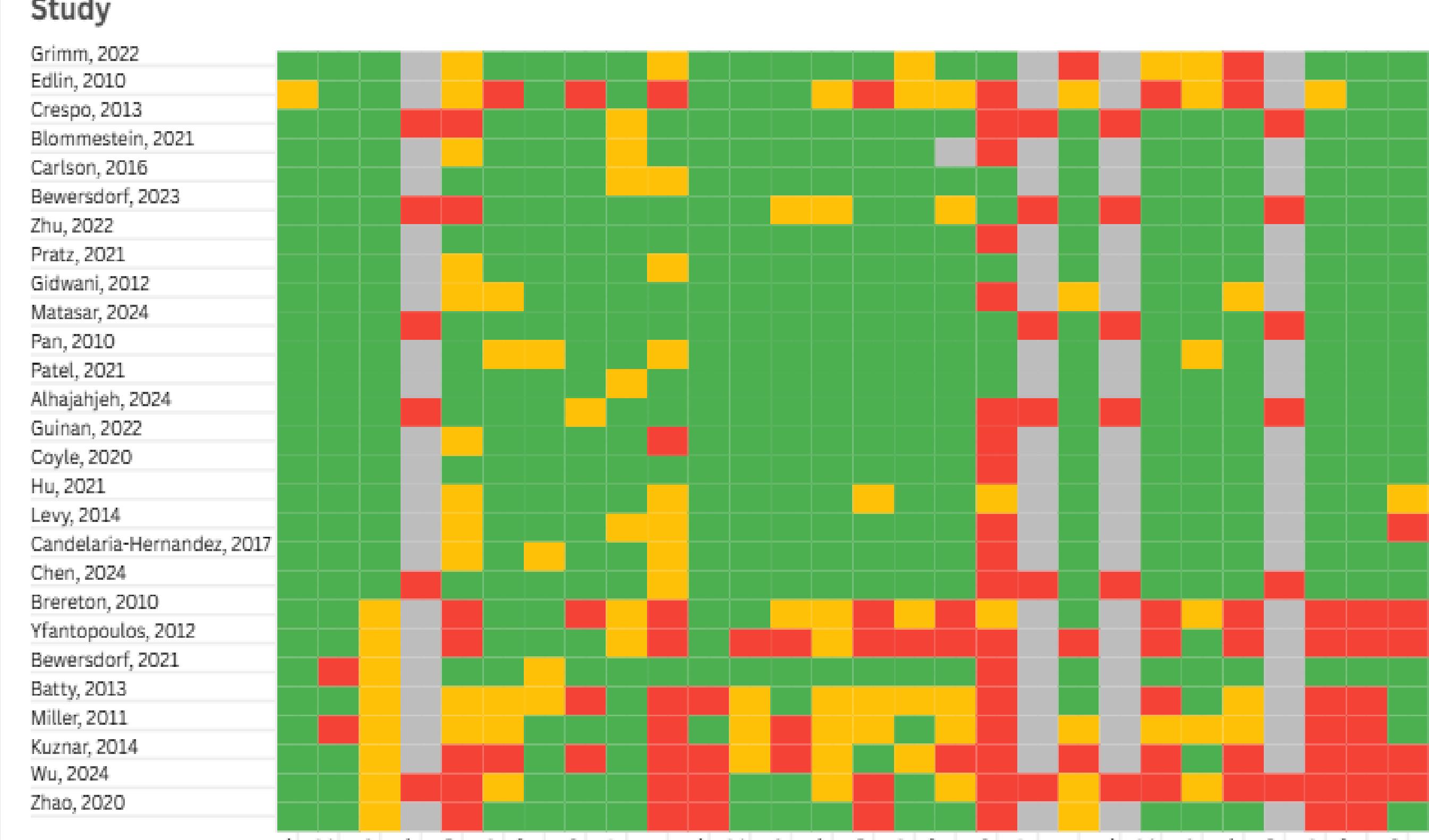
Cost-effectiveness scatterplot



CHEERS : reporting quality

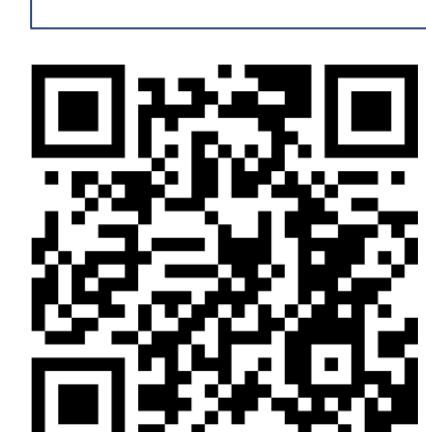
Rating █ fulfilled █ not applicable █ partially fulfilled █ absent

Study



CONCLUSION

- Heterogeneity** in the type of epidrugs assessed, indications and methodological parameters.
- Epidrugs may represent a cost-effective option, but **uncertainty** remains on their **long-term efficiency**.
- Robust and standardized evaluations are needed to clarify their **economic value** and inform future **value assessment** and **reimbursement decisions**.



CONTACT INFORMATION REFERENCES

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