

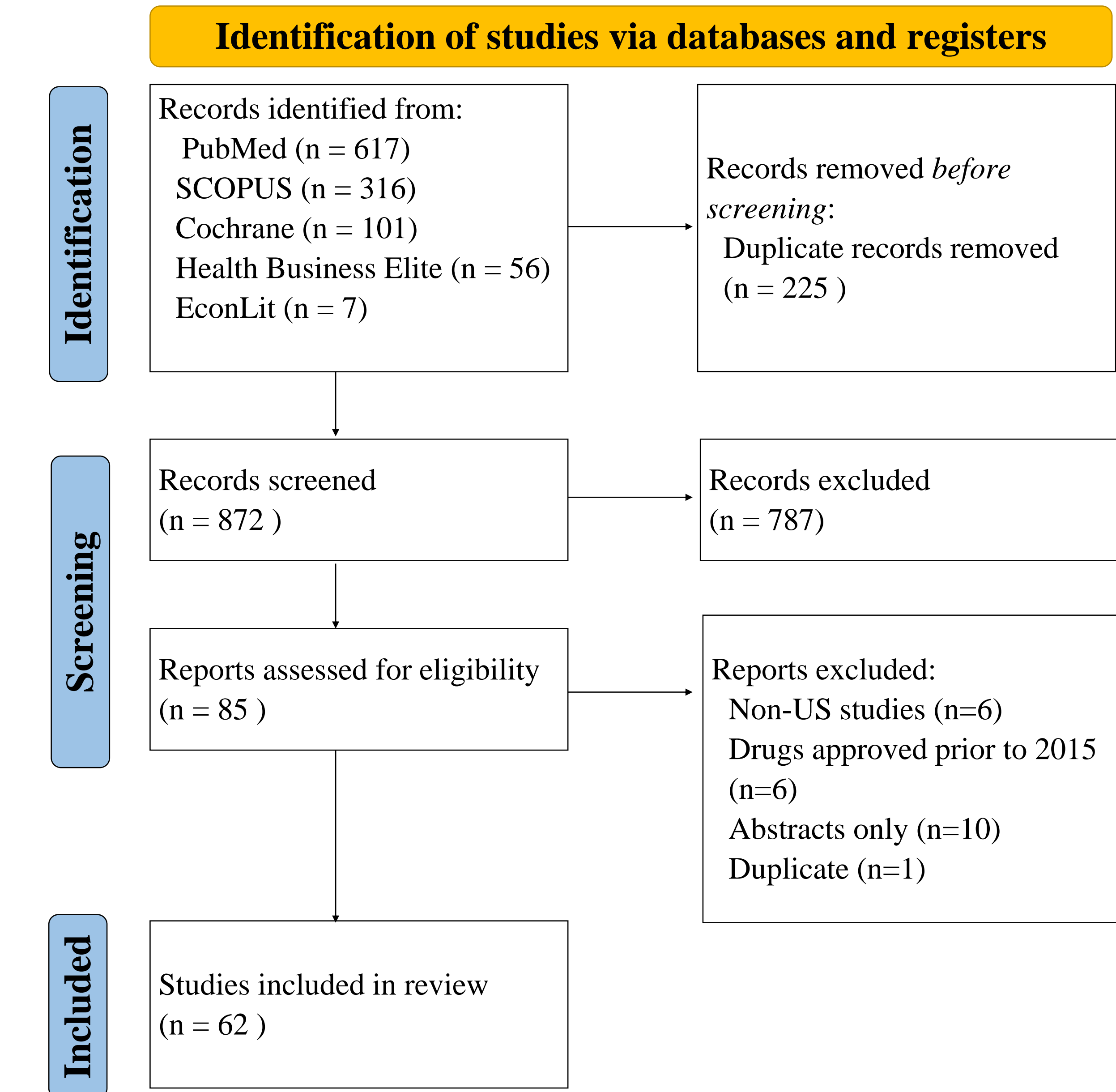
Introduction

- A budget impact analyses (BIA) is an economic tool used to predict the economic changes of introducing new drugs or indications to the market.
- It is conducted by reimbursement authorities, health systems and pharmaceutical companies to assist in the determination of formulary status.

Objective

This research aimed to assess the quality of US published budget impact analyses based on the ISPOR Budget Impact Analyses: Principles of Good Practice Report

Methods



Results

Table 1. Summary of Recommended Approaches

Key Design Element	ISPOR Recommendations ¹	Review Outcome
Model Framework	A simple cost-calculator is the preferred approach, simulation models may be used in certain instances	Few studies did not specify the modeling approach, but majority of the studies used a simple cost-calculator
Discounting	Discounting is not recommended in BIAs	Majority of studies used undiscounted costs, with a few utilizing discounts
Model Validation	Two step verification: face validity through agreement with decision makers and verification of cost calculator, model implementation/formulas	Generally, the BIAs did not report conducting any form of validation
Time Horizon	Time horizons relevant to the budget holder should be used. 1-5 years is common.	All studies reported a time horizon from 1 to 5 years. The time horizon cycle most often used was 3-year
Treatment and Disease Related Costs	Actual acquisition costs, wholesale acquisition, list prices and formulary costs should be used to account for treatment, If credible data is available and there an impact budget, condition related costs should be presented	In addition to the cost of therapy, 31 (50%) studies included administration +/- monitoring as part of the predicted treatment costs. Disease related costs were calculated in 39 (63%) of studies, it included: ED visits, hospitalizations, clinic visits, and non-response treatment.

Figure 1. Model Framework

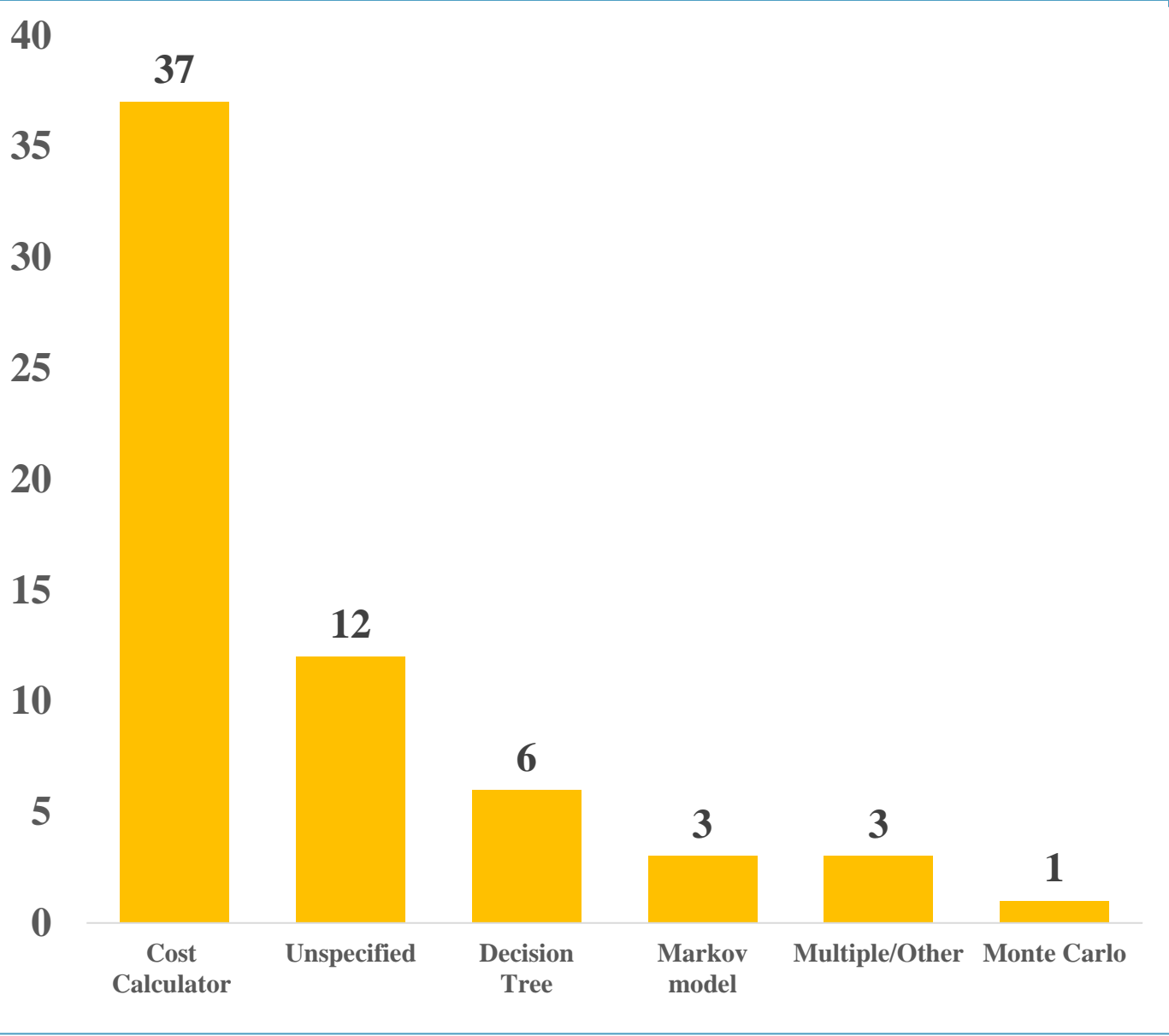


Figure 3. Model Validation

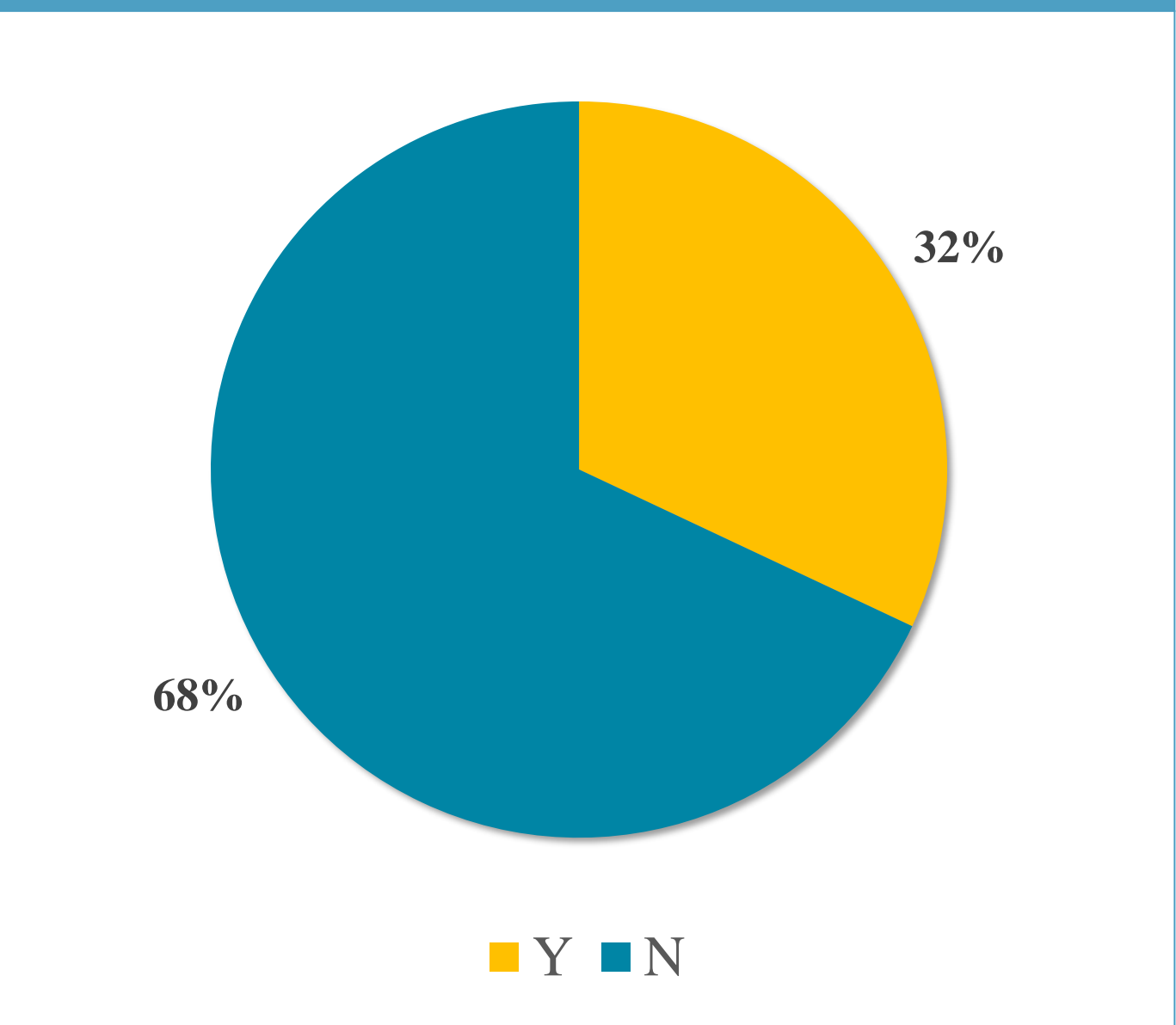


Figure 5. Treatment and Disease-related Costs



Figure 2. Discounting

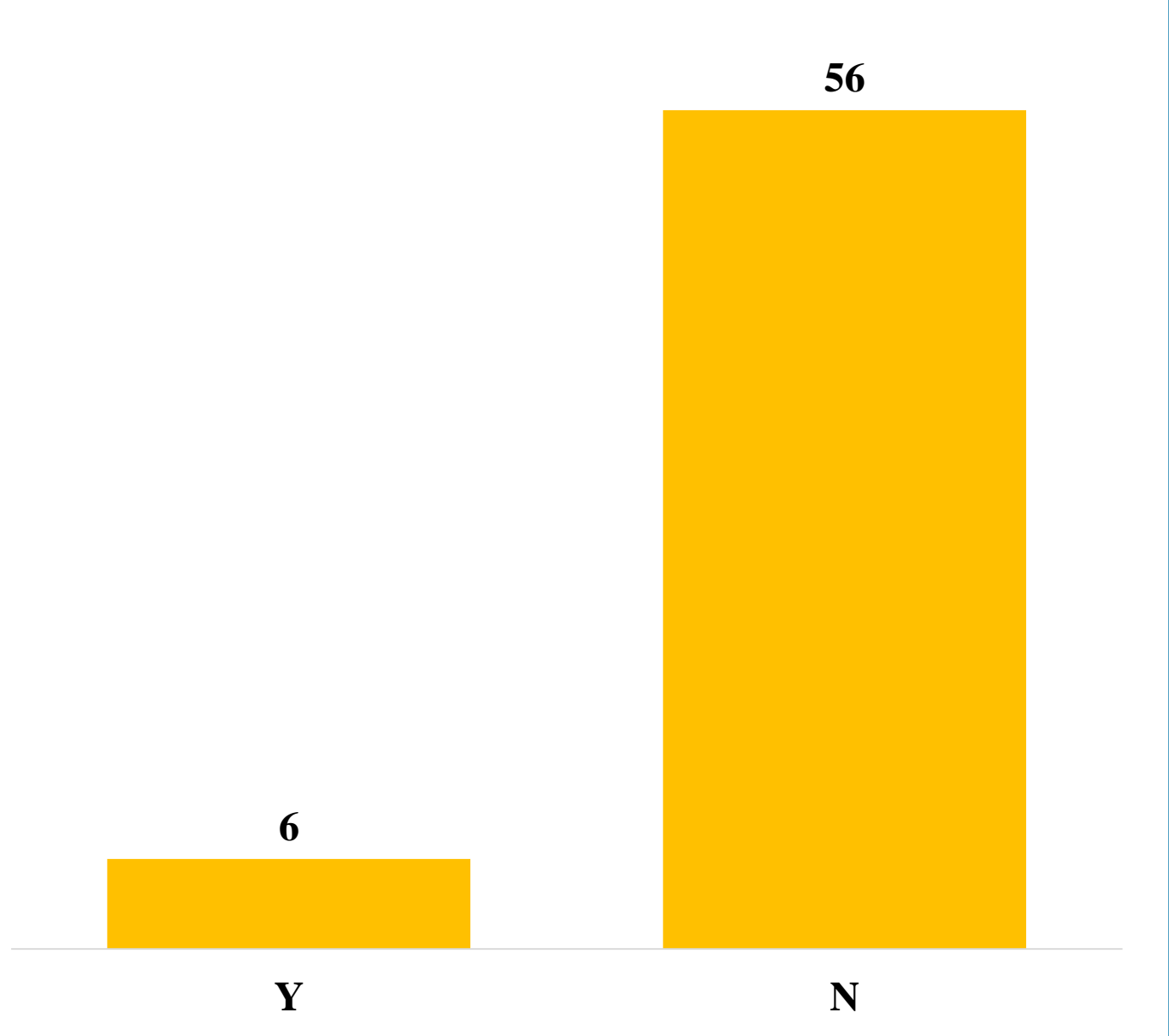
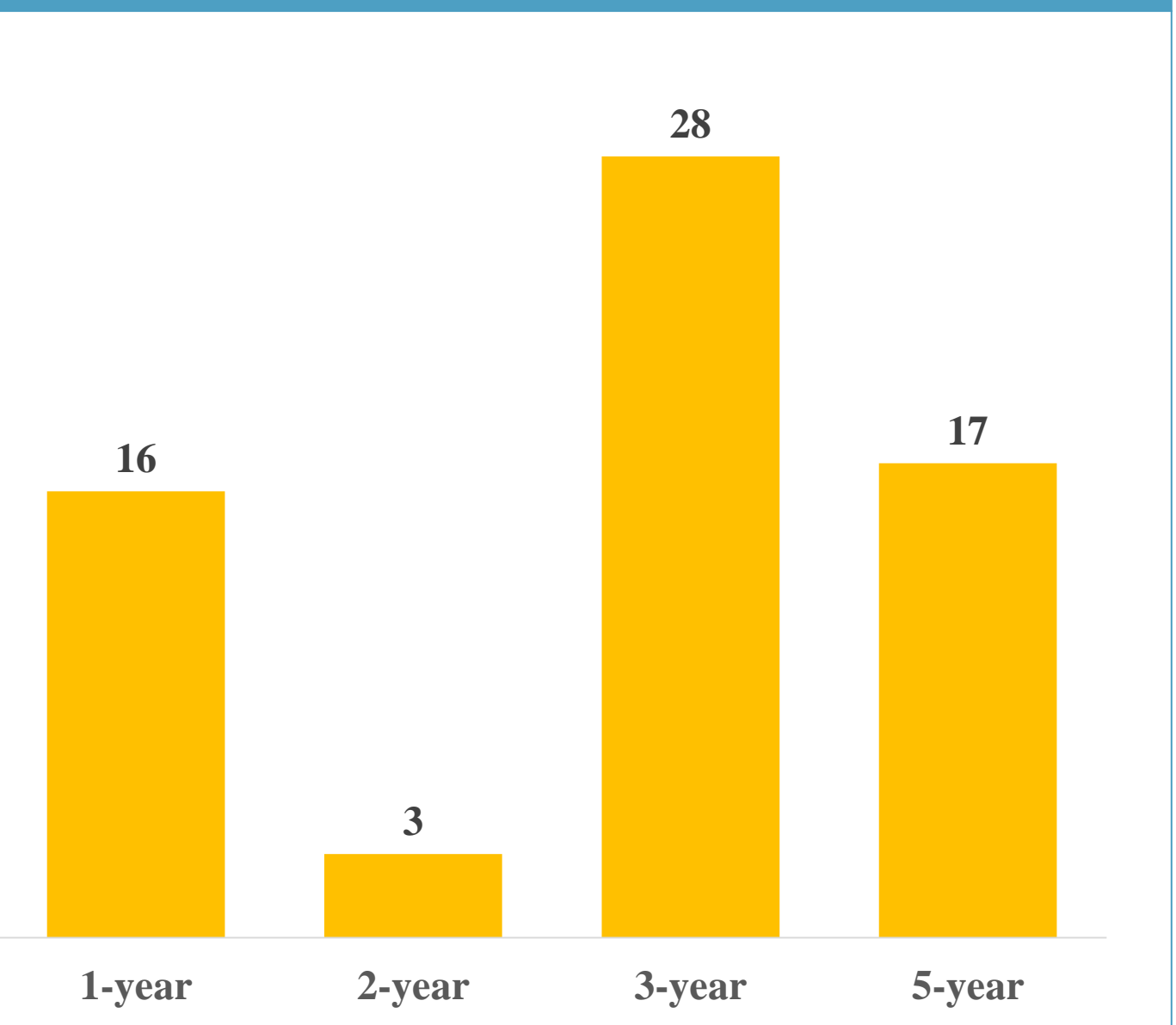


Figure 4. Time Horizon



- After conducting the literature review, 872 records were identified, 85 full-texts screened, and 62 papers were selected for inclusion
- 20 studies (32%) acknowledged using ISPOR guidelines when conducting the BIM
- 58 studies (93%) used a payer perspective, and 4 studies (7%) used a health system perspective

Conclusion

- Overall, the results indicate low adherence to the ISPOR guidelines.
- Very few papers reported any form of model validation, and the choice of computing framework was not stated in many studies.
- To ensure high-quality BIAs and enhance use among decision makers future researchers should include the key methodological elements provided by ISPOR.

References

1. Sullivan SD, Mauskopf JA, Augustovski F, et al. Principles of good practice for budget impact analysis II: report of the ISPOR Task Force on Good Research Practices – Budget Impac

Contact

Adaeze Amaefule, PharmD,
Adaeze.Amaefule@Jefferson.edu
Authors have no relevant conflict of interest to disclose.