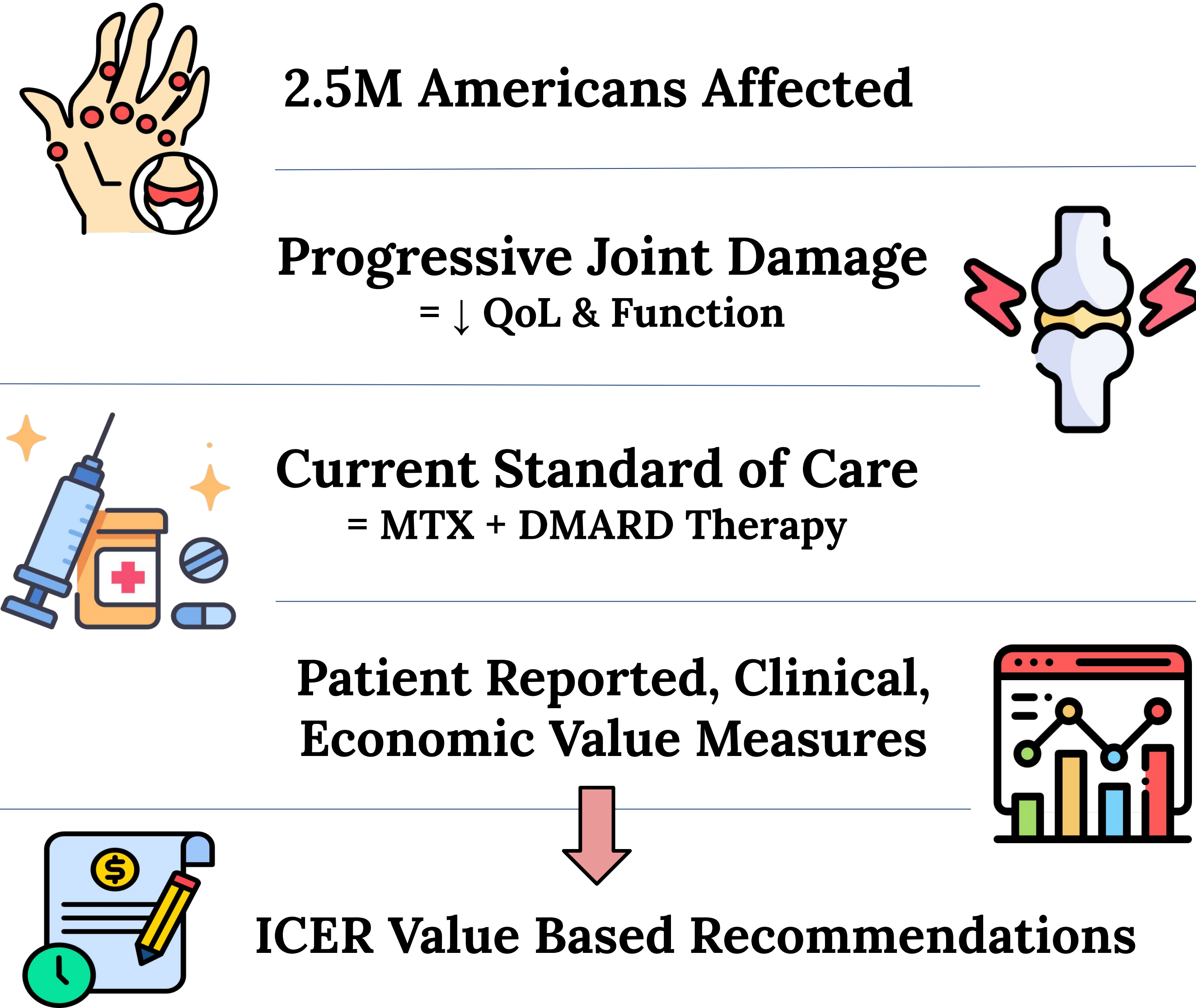


Background



Objective

- This study examines the relationship between the magnitude of improvements in PROs and ICER's incremental cost-effectiveness ratios to assess the extent to which these outcomes influence value-based pricing recommendations in rheumatoid arthritis.

Methods

- Data Source**
 - ICER Reports in RA published in 2017, 2019
 - Drugs Included: TNF α , IL-6, and JAK inhibitors
 - Total identified: n=16
- Exclusion**
 - Incomplete Cost/QALY or PRO data
 - Total excluded: n=3
- Reference Constraint**
 - Limited to therapies utilizing the same reference of csDMARDs to ensure consistency across evaluations.
- Analysis**
 - Univariate regression
 - PRO, ACR impact on Cost/QALY
 - Heatmap concordance of all measures

Results

Figure 1. PRO Inclusion Status in Pivotal Trials and ICER Reports.

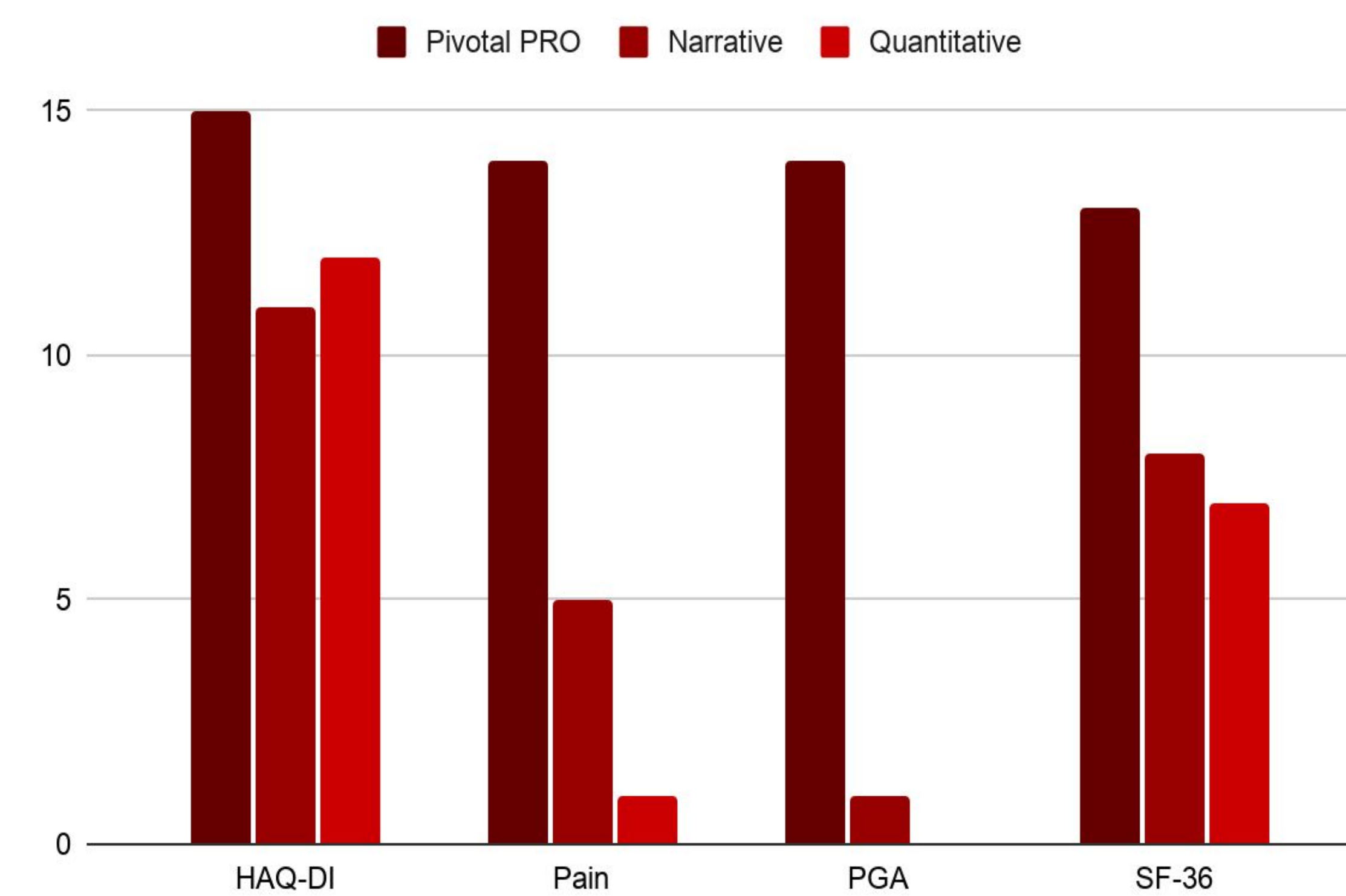


Figure 3. Alignment of PGA Improvement with ICER Cost/QALY

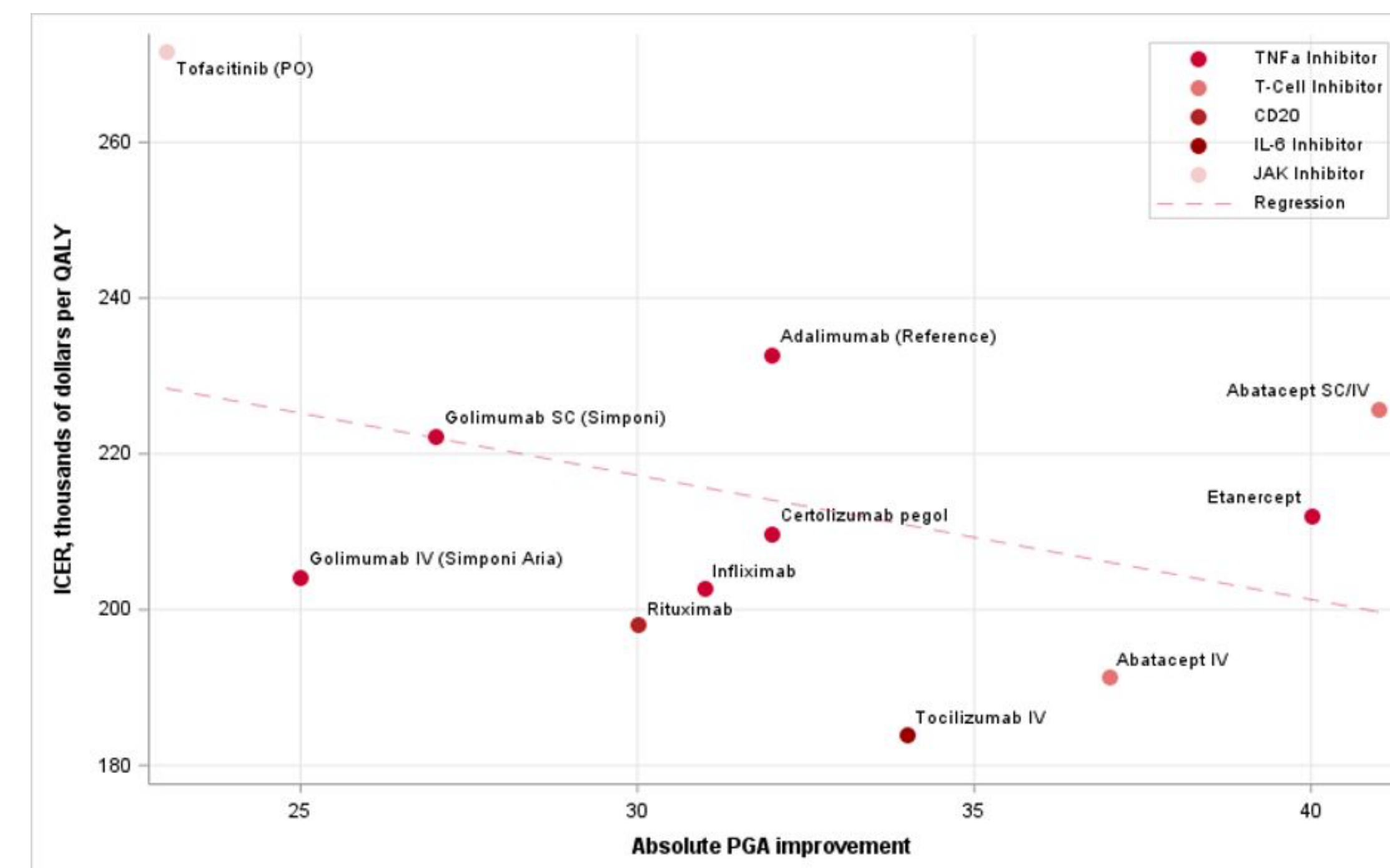


Figure 5. Concordance of PRO, Clinical, and Economic Value Measures.

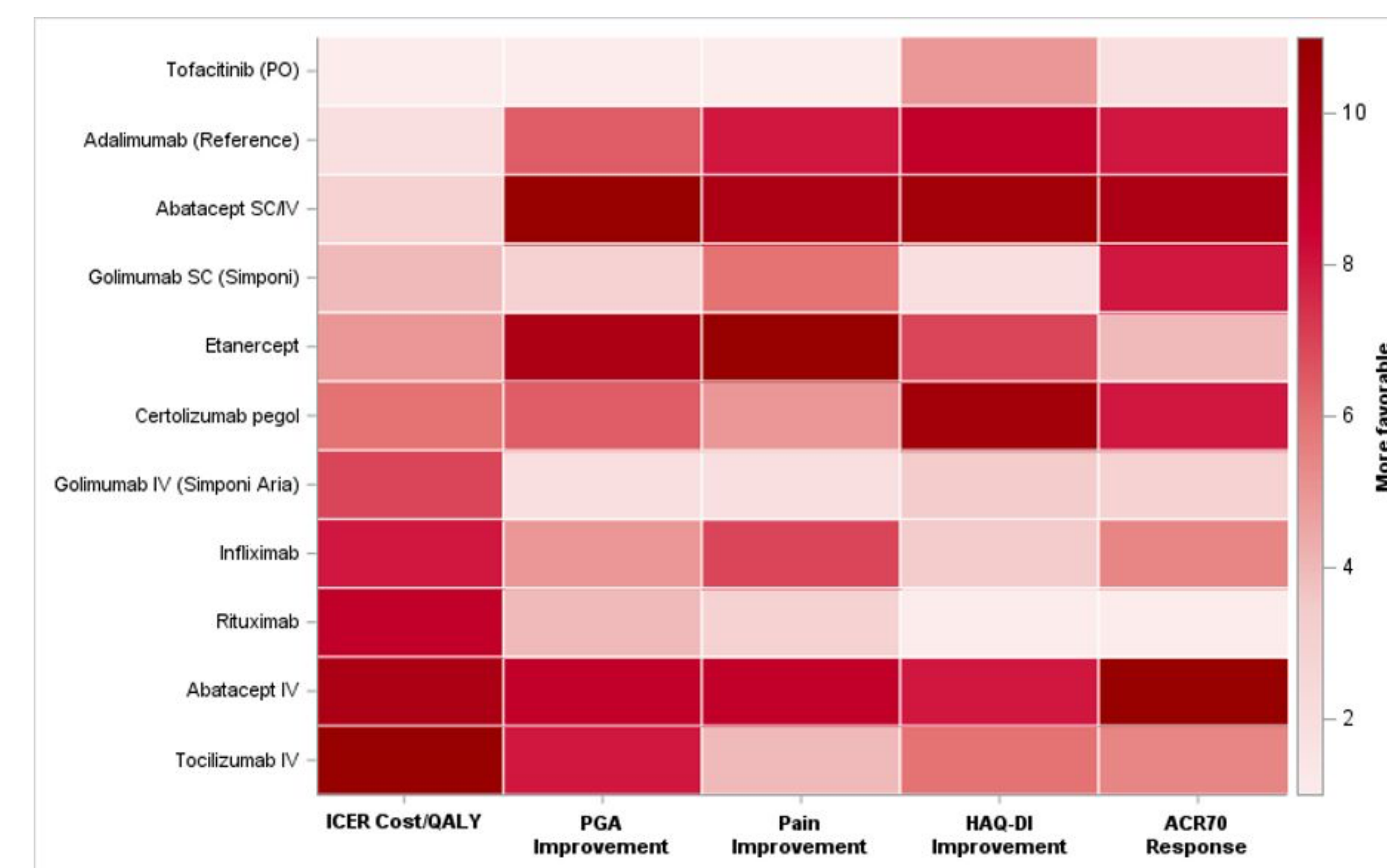


Figure 2. ICER Cost/QALY Among RA Therapies vs. csDMARD.

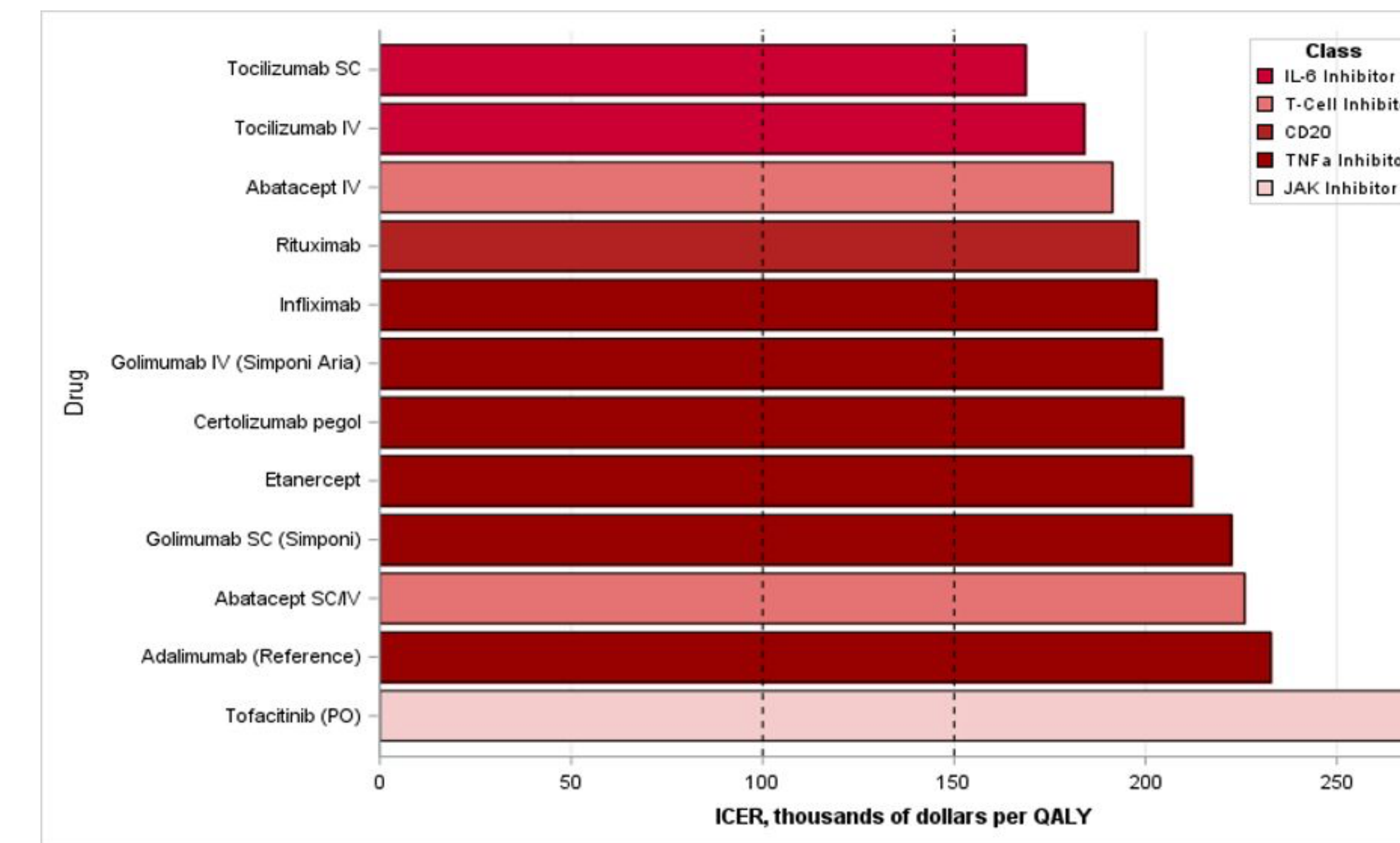
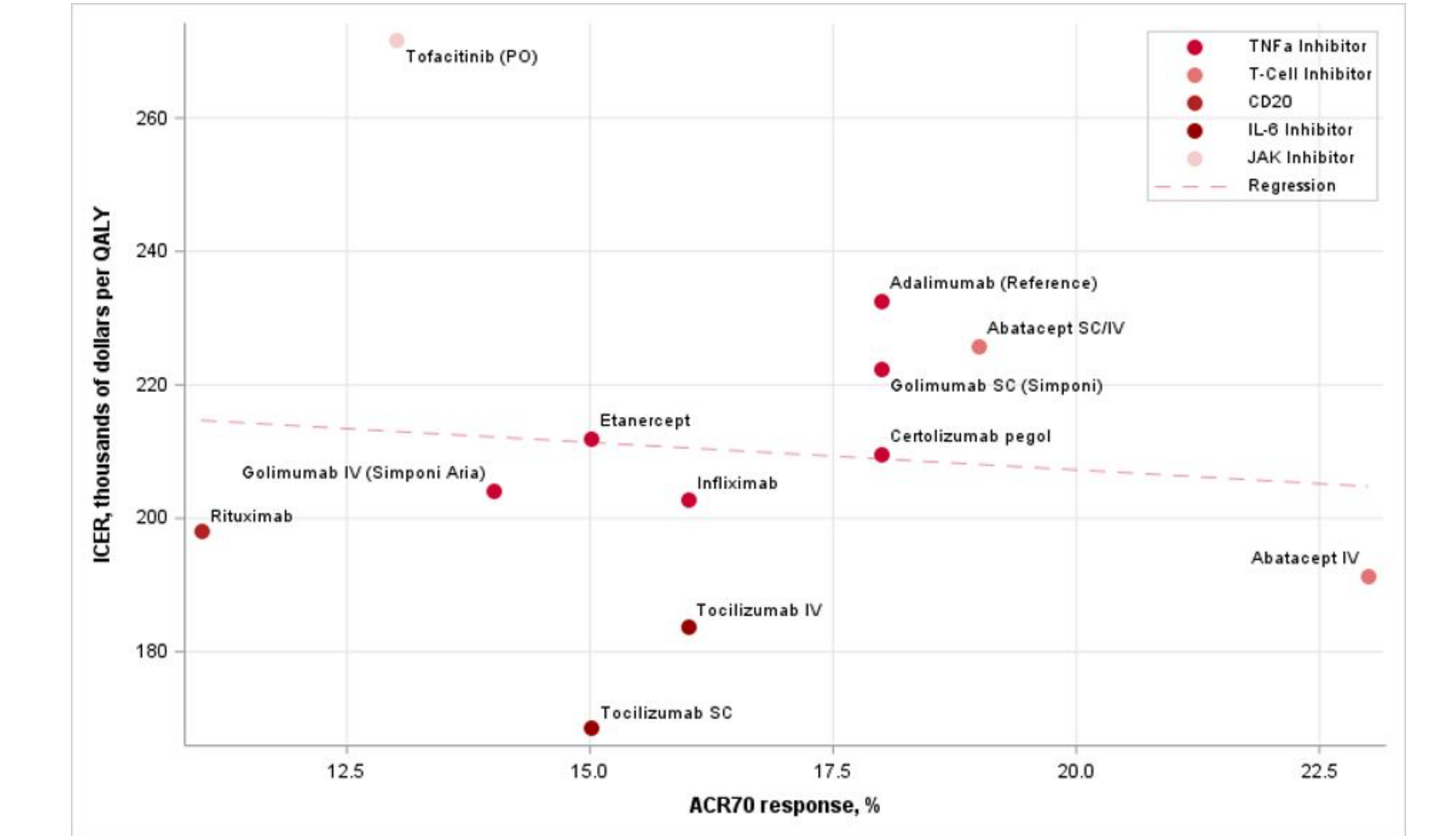


Figure 4. Alignment of ACR70 Response with ICER Cost/QALY



Key Findings:

- Despite pivotal trials measuring several PROs, HAQ-DI remains the only measure consistently incorporated into ICER's quantitative Cost/QALY calculations.
- IL-6 inhibitors were observed to be the key drivers for high-treatment value relative to other drug classes.
- While some overlap, Figure 3 and 4 shows a lack of strong linear correlation between ACR70, PGA, and economic value.
- The misalignment between PROs, clinical efficacy, and economic value suggests a gap, where current value models may overlook critical aspects of patient reported functional improvement status.

Limitations

- Limited number of therapy options available for the disease.
- Exclusion of three drugs due to missing Cost/QALY data.
- Temporal variability in responses due to broad range of clinical trial study periods across different therapies.
- Unlisted data for SF-36 among various trials.

Conclusions

- PROs, clinical response, and ICER capture overlapping but distinct dimensions of RA treatment; clinical efficacy alone does not fully capture patient-perceived value.
- Certain PROs are less likely to be incorporated into quantitative value assessments, creating a gap between the utilization.
- HAQ-DI is the only PRO measure that plays a role in ICER Cost/QALY calculations.
- Patient-reported improvement and cost-effectiveness are related but not interchangeable from one another.
- Properly identifying PRO measures that best reflect patient experience and impact cost-effectiveness can improve regulatory and payer decision-making when evaluating treatment value, especially important in diseases like rheumatoid arthritis, where poor disease control can interfere with daily tasks and functions.

References & Contact Information



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Disclosure: Chintan Dave reports PI funding from NHLBI (R01HL163163), NIDDK (R01DK139163), and Breakthrough T1D (3-SRA-2022-1257-S-B), fellowship training awards to Rutgers University from GSK, Novo Nordisk, and Johnson & Johnson, and consulting fees from US FDA, Takeda, SpineBioPharma, AbyRX, Priovant, and National Evaluation System for Health Technology (NESTcc) unrelated to this presentation