

# Scoping Review on Attitudes and Barriers Towards Therapeutic Drug Monitoring for Biological Treatments for Immune-Mediated Inflammatory Diseases Among Key Stakeholders

HSD103

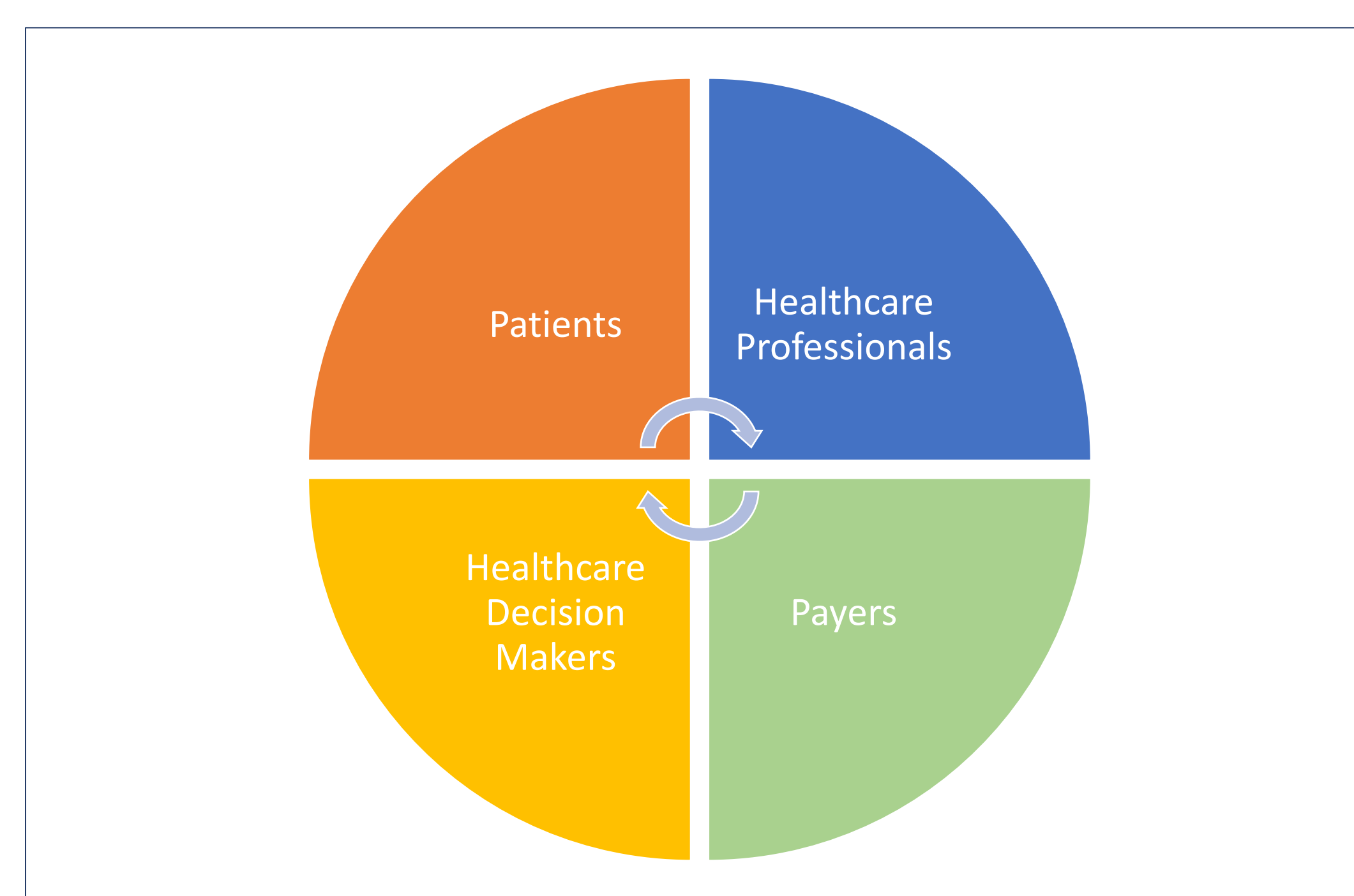
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## BACKGROUND

Therapeutic drug monitoring (TDM) has emerged as a valuable clinical tool in optimizing therapeutic outcomes for patients with immune-mediated inflammatory diseases (IMIDs). These conditions often exhibit significant inter-individual variability in drug response, necessitating personalized treatment approaches. TDM can help address this challenge by providing precise measurements of drug concentrations in patient serum or plasma. By enabling clinicians to tailor drug dosing to individual patient needs, TDM has the potential to improve patient outcomes, including better disease control, fewer disease flares, and enhanced quality of life<sup>1,2</sup>.

## STAKEHOLDERS



## STUDY DESIGN

### Inclusion Criteria

- Full text primary research reports
- 10 years (from 1<sup>st</sup> January 2013)
- Qualitative or quantitative
- Report on attitudes or barriers of real-world adoption of TDM for biologics in IMIDs in human subjects

### Exclusion Criteria

- Secondary research
- Published prior to January 1<sup>st</sup> 2013
- Non-research publications
- Publications for which full-text is not available

## METHODS

A scoping review considered both experimental and quasi-experimental study designs, limited to primary research. A literature search was conducted for journal articles published in the last ten years in the databases PubMed, Medline, EBSCO, and Web of Science. No language limitation was considered for inclusion or exclusion. Abstracts were screened by ten independent reviewers, and a narrative synthesis approach was used to report the evidence.

## OBJECTIVE

To assess the current state of knowledge regarding attitudes and barriers to the real-world adoption of Therapeutic Drug Monitoring (TDM) for biological treatments in immune-mediated inflammatory diseases (IMIDs) among key stakeholders, including patients, healthcare professionals, payers, and healthcare decision-makers.

## CONCLUSION

We have identified a literature gap in the field of real-world adoption of TDM for biologics in immune-mediated inflammatory diseases. Further research is warranted to develop a more concise strategy that will streamline the use of TDM for biological treatments for immune-mediated inflammatory diseases in current clinical practice and reimbursement systems.

## STUDY LIMITATIONS

The primary limitations of this study were the limited availability of relevant literature and the scarcity of studies meeting the inclusion criteria for certain stakeholder groups.

## RESULTS (Preliminary)

Of the 7,062 search hits after the removal of duplicates, 218 articles fit the inclusion criteria and were deemed relevant for data extraction. Most of the retrieved literature revolved around biomarkers in inflammatory conditions and assay methods towards qualitative and quantitative identification.

## REFERENCES

1. Vaughn BP. A Practical Guide to Therapeutic Drug Monitoring of Biologic Medications for Inflammatory Bowel Disease. *J Clin Med.* 2021 Oct 27;10(21):4990. doi: 10.3390/jcm10214990. PMID: 34768509; PMCID: PMC8584740.
2. Patel S, Yarur AJ. A Review of Therapeutic Drug Monitoring in Patients with Inflammatory Bowel Disease Receiving Combination Therapy. *J Clin Med.* 2023 Oct 17;12(20):6577. doi: 10.3390/jcm12206577. PMID: 37892715; PMCID: PMC10607463.

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## Points to report

