

Impact of Treatment Response on Quality of Life and Health-Related Utility Values in Hepatitis: A Targeted Literature Review

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Conclusions

- This is a targeted literature review (TLR) examining the association between treatment response and health-related quality of life (HRQoL) or utility values
- Most studies found a positive and statistically significant correlation, such that patients who achieved sustained virologic response (SVR) showed better HRQoL scores compared with those who did not
- These findings underscore the substantial impact of SVR on HRQoL, particularly in the domains of general health and vitality, and highlight the value of effective treatments in enhancing quality of life for patients with chronic viral hepatitis
- Further research is encouraged to explore the quantitative synthesis of studies reporting on the relationship between SVR and HRQoL or utility values

Plain Language Summary

- This literature review identified journal articles and conference abstracts that investigated the relationship between treatment response and health-related quality of life (HRQoL)
- There was a consistent improvement in HRQoL among patients who responded to treatment
- Patients who showed a prolonged decrease in levels of a hepatitis virus generally scored better on HRQoL assessments, including reduced distress and improved overall health

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INTRODUCTION

- Hepatitis is an inflammation of the liver often caused by a variety of infectious viruses, such as hepatitis B virus (HBV), hepatitis C virus (HCV), and hepatitis delta virus (HDV)¹
- HBV, HCV, and HDV infections are chronic liver diseases that significantly impact patient health, often leading to severe outcomes such as cirrhosis and liver cancer²⁻⁵
- Chronic hepatitis impairs HRQoL, including physical, psychological, and emotional functioning⁶
- Treatment responses can improve symptoms and health status; understanding their impact on health-related utility values is crucial for informed clinical decision-making

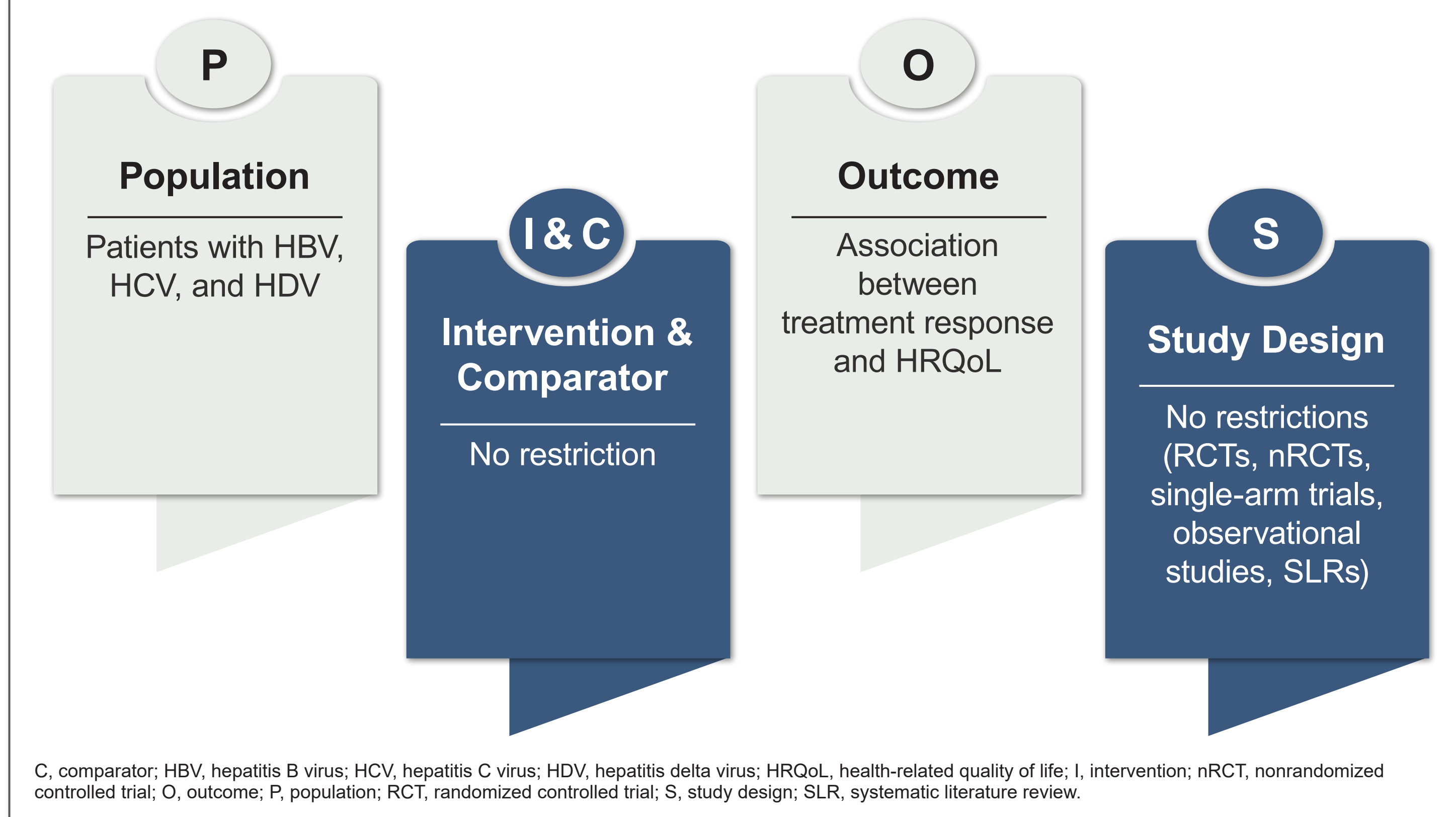
OBJECTIVE

- This TLR examined the association between treatment response and HRQoL or utility values among patients with HBV, HCV, and HDV

METHODS

- The TLR employed a comprehensive search strategy, combining Emtree subject headings, medical subject heading (MeSH) terms, and free-text keywords to identify relevant studies
- Key biomedical databases, including EMBASE and PubMed, were searched from their inception to August 2024 to identify studies on hepatitis
- The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed
- The TLR included all study designs, such as randomized controlled trials, nonrandomized controlled trials, single-arm studies, and observational studies, to ensure comprehensive evidence
- A single review and quality control process was followed for data collection and extraction

Figure 1. Eligibility Criteria



RESULTS

- Of 812 identified citations, 4 systematic literature reviews (SLRs) and 67 studies investigated the relationship between treatment response and HRQoL or utility values
- PRISMA identified 67 studies from 85 publications, including 4 SLRs
- Among the 67 included studies, 38 were published journal articles and 29 were conference abstracts
- The majority of the studies focused on patients with HCV (n = 63), whereas 3 addressed HBV, and 1 included patients with autoimmune hepatitis
- No data were available for HDV
- The sample sizes ranged from 34 to 4,087 patients, with 1 to 100 patients in most studies (n = 30)
- The findings of 4 SLRs consistently demonstrated that patients with chronic HCV who achieved SVR showed significantly higher health-state utility values and improved quality of life

RESULTS

Figure 2. TLR Flow Diagram

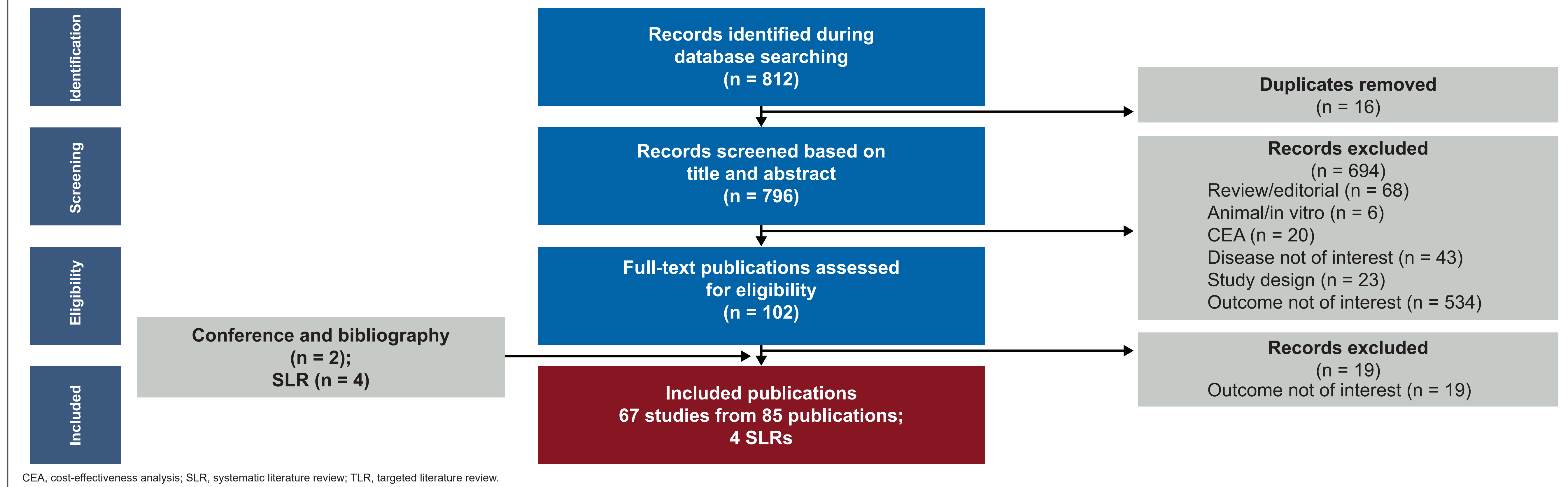
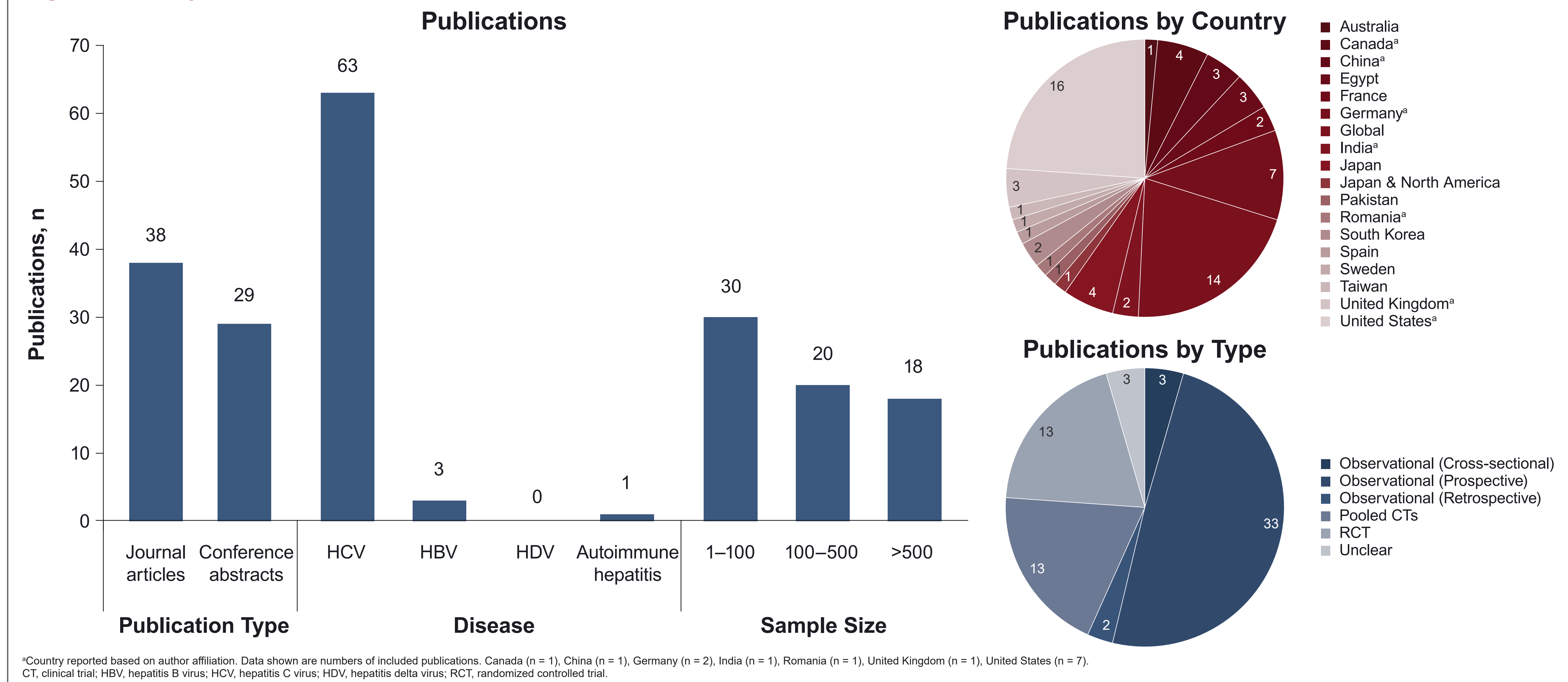


Figure 3. Study Characteristics



- The findings of the 38 included journal articles revealed consistent improvements in HRQoL scores among responders
 - Similar findings were also reported for the conference abstracts
- Among global studies (11 journal articles; 3 conference abstracts), patients who achieved SVR generally showed better HRQoL scores compared with those who did not; this association was positive and statistically significant in most studies (n = 9)
- In the US-specific studies, achieving SVR was associated with statistically significant improvement in HRQoL across 13 studies
- SVR positively impacted psychological distress and overall health status, with benefits maintained over time; patients who did not achieve SVR often experienced worsened HRQoL
- Patients who achieved SVR had health-state utility values ranging from 0.05 to 0.31 greater than those of patients who did not respond to treatment

LIMITATIONS

- This TLR included studies in English only, which may have resulted in some valid results being missed
- The TLR is limited by its targeted nature, focusing solely on a qualitative synthesis and excluding meta-analyses