

# Outcomes of treatment and psychometric performance of patient reported outcomes in Trigeminal Neuralgia - Two Systematic Reviews

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## Introduction

- There are multiple treatment options in Trigeminal Neuralgia (TN) however consensus is lacking as to **what** the important **outcomes** of treatment should be
- **No clear choice** exists for the **correct measurement instrument** to capture the impact of treatment
- The **objectives** of these Systematic Reviews (SR) were:
  - **SR a) to summarize all the outcome domains, dimensions and patient reported outcomes (PROs) and SR b) their psychometric properties published to date**

## Methods

### a) Systematic review of outcome domains, dimensions and PROs

Database search: EMBASE, MEDLINE, COCHRANE DATABASE, CINAHL, PSYCHINFO + Hand search

Records identified  
n=6894

Studies included, mapped to IMMPACT\* guidelines  
(n=467)

### b) Systematic review of psychometric properties of PROs

Database search: EMBASE, MEDLINE, CINAHL, PsycINFO, Health and Psychosocial Instruments

Records identified  
n=549

Studies included, based on COSMIN\* guidance  
(n=6)

## Results SR a)

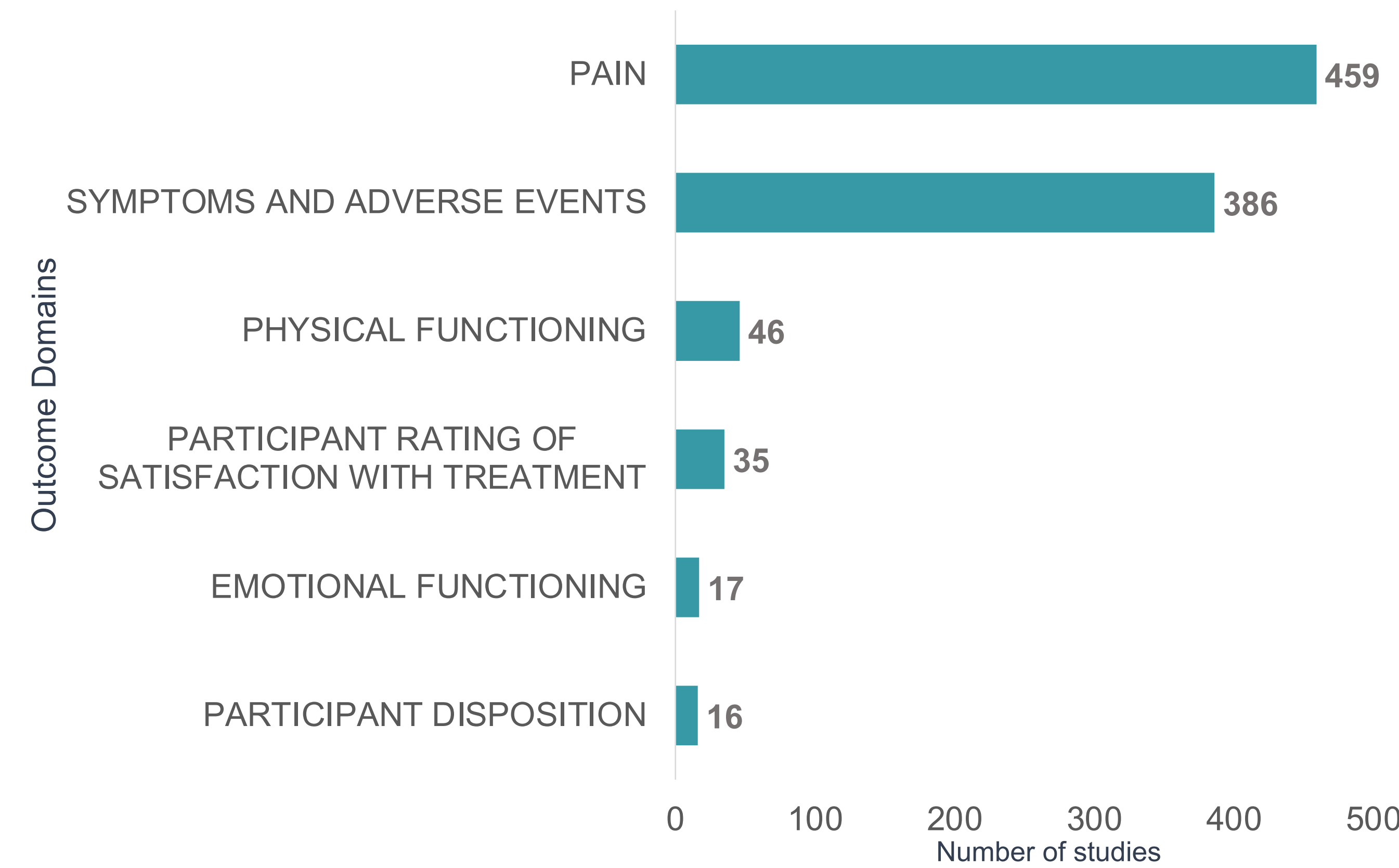


Figure 1: Number of studies mapped to the IMMPACT guidelines domains

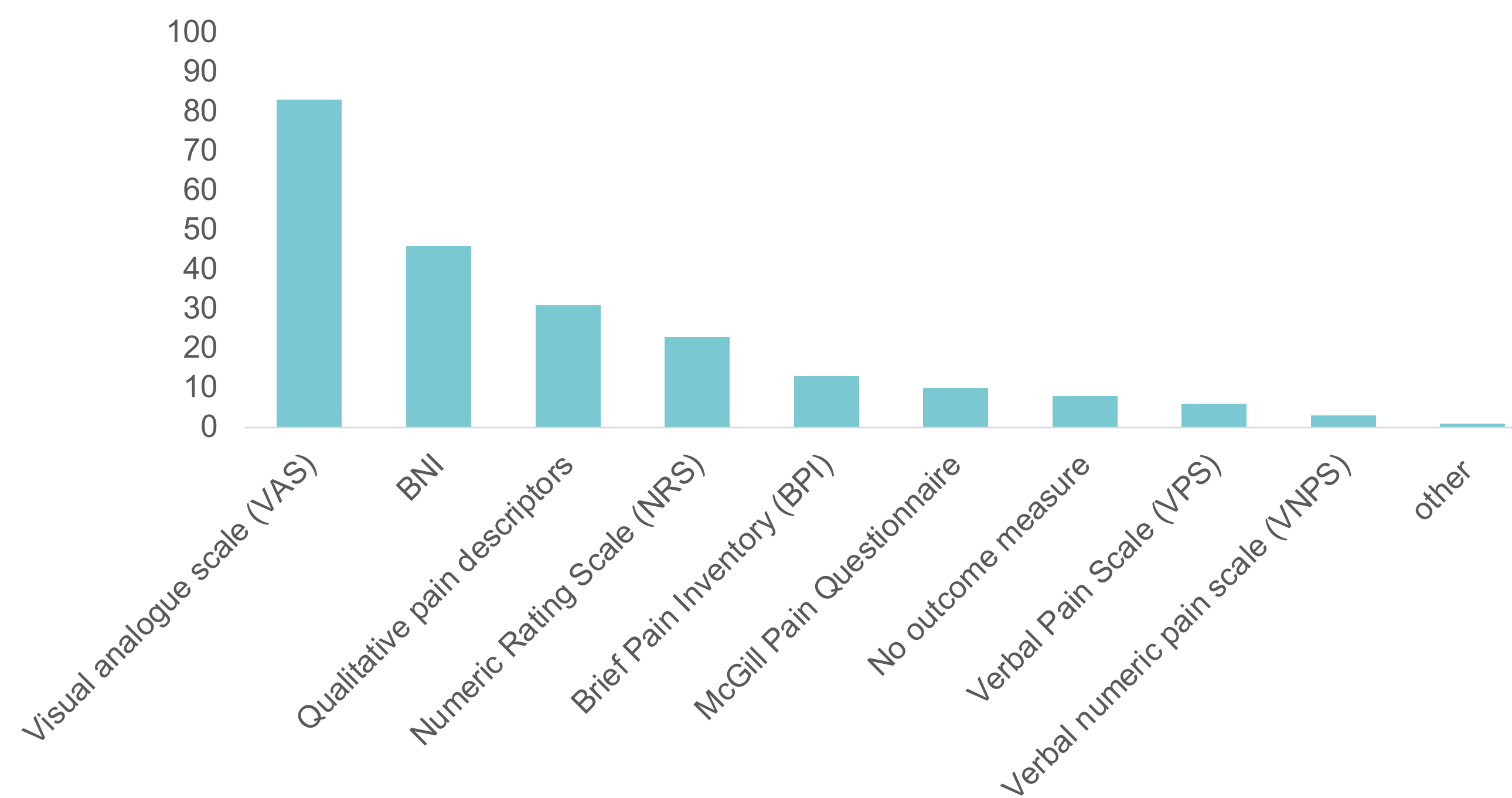


Figure 2: Pain intensity outcome measures for TN: BNI – Barrow Neurology Institute Pain Intensity Scale

## Results SR b)

6 studies included – 5 PROMs identified

Penn Facial Pain Scale Revised	Visual Analogue Scale	Barrow Neurology Institute Pain Scale	Brief Pain Inventory Facial	Trigeminal Neuralgia Quality of Life Score
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PROMs assessed

Penn-FPS-R

BPI

TN-QOL

Moderate quality evidence for sufficient content validity

Moderate evidence for sufficient internal consistency and structural validity  
Low evidence for inconsistent content validity

Very low-quality evidence for insufficient content validity, structure validity and responsiveness

Figure 3: Evidence synthesis of measurement properties according to COSMIN guidance

## Conclusion

- **Heterogeneity** in reporting TN outcomes prevails in the literature – Fig. 1
- Multiple questionnaires used to measure the same outcome - Fig. 2
- The majority of **tools have not been psychometrically tested** – combination and comparison of study results is impaired – Fig. 3
- **Inconsistency between studies** will continue to account for the **difficulties patients and clinicians** have in identifying the **best treatment option**

\*IMMPACT - Initiative on Methods, Measurement and Pain Assessment in Clinical Trials, Turk *et al*, 2003

\*COSMIN - Consensus-based Standards for the selection of Health Measurement Instruments guidance, Prinsen *et al.*, 2018