

INTRODUCTION

- Cancer patients often experience symptoms related to their disease and to the treatment they receive.
- The extent to which a treatment alleviates cancer-related symptoms and the extent to which it causes additional symptomatic adverse effects will impact the way that a patient feels about taking that medication. This will in turn impact on their treatment adherence, and their cancer outcomes [1]. It has thus become common to measure 'treatment satisfaction' in oncology clinical trials.
- Reports of treatment satisfaction must come directly from the patient, and can be considered reliable and systematic if collected through a 'fit-for-purpose' patient-reported outcome (PRO) questionnaire [2] [3] [4].
- The Cancer Therapy Satisfaction Questionnaire (CTSQ) is a 16-item, cancer-specific PRO questionnaire that was developed for use in adults across a wide range of cancer types and stages [5] [6].
 - It can be used for both intravenous (IV) and/or oral chemotherapy, or biological and hormonal therapies.
 - It contains three domains: Expectations of Therapy (ET), Feelings about Side Effects (FSE) and Satisfaction with Therapy (SWT). Each domain is scored from 0 to 100, with higher scores associated with the best outcome on each domain.
- The objective of this study was to explore CTSQ use in oncology drug development clinical research and academic settings

MATERIAL & METHODS

- A search for scientific papers and trial entries was conducted from January 2006 until June 2023 using the Ovid platform (to simultaneously search Cochrane, Embase and Medline and Medline in Process databases) and the ClinicalTrials.gov platform. The search aimed to retrieve scientific publications and details about oncology trials where CTSQ was used to assess any type of outcome (Figure 1a, b).

CONCLUSIONS

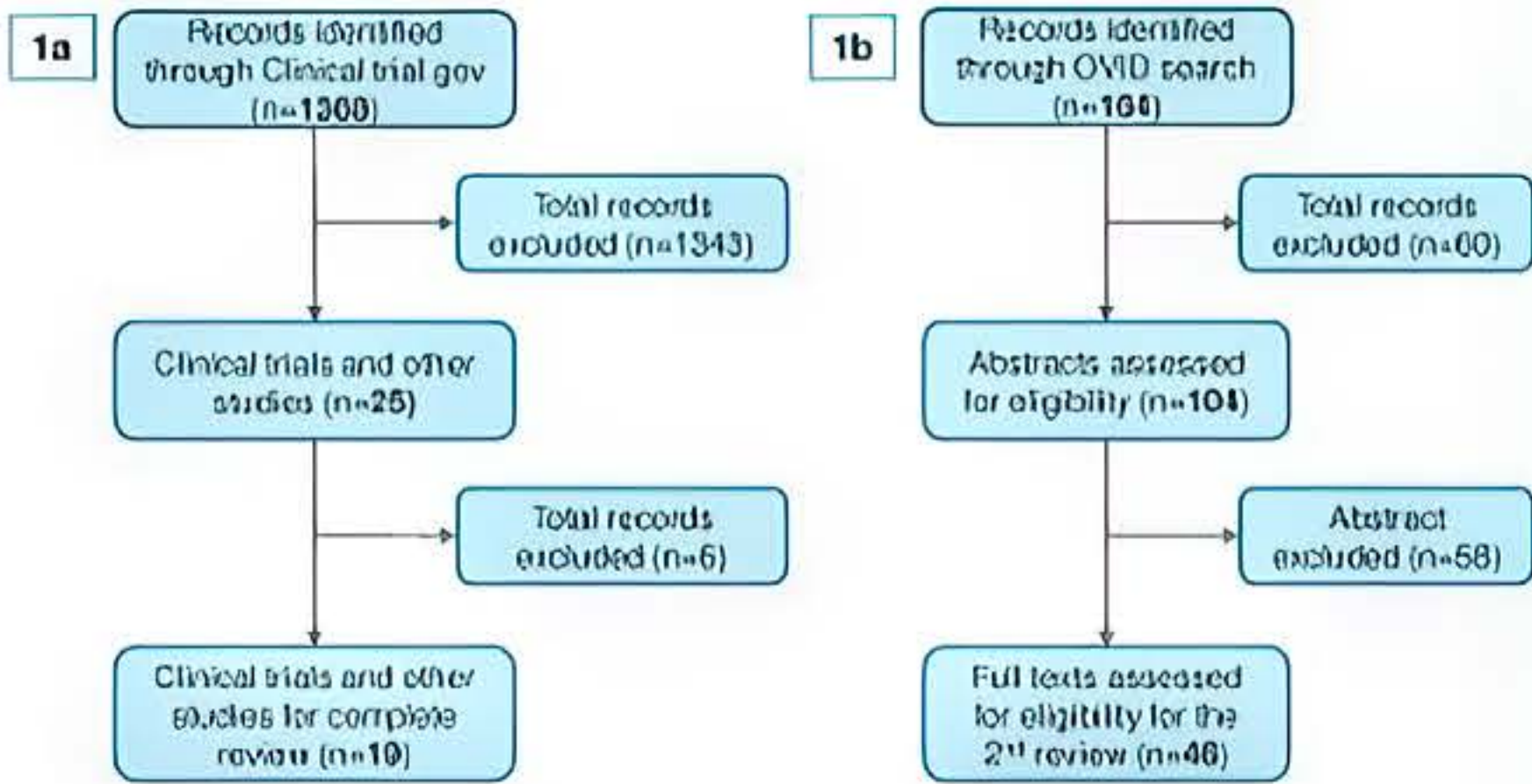
Treatment satisfaction is an important concept in oncology that is frequently measured using the CTSQ in multinational studies across cancer indications and treatment administrations. However, it is still an underutilized PRO which could be used to better understand the experience of patients with different types of tumors or treatment regimens, compare cancer treatments, and inform regulatory and clinical decision-making in future research.

References:
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RESULTS

- A total of 46 research studies which used the CTSQ as an outcome measure were identified from OVID. An additional 19 clinical trials and other studies were identified from clinicaltrials.gov (Figure 1a, b). The 19 studies from clinicaltrials.gov represent 0.023% of the total oncology studies during the period 2006-2023.
 - N=29 studies/trials were interventional (1 Pilot, 2 Phase 1 studies, 3 Phase 2 studies, 19 Phase 3 studies, 3 Phase 4 studies, 1 not specified)
 - N=32 studies/trials were observational
 - N=4 studies/trials were not determined (psychometric validation studies, surveys, etc.) and removed from further analyses
- Most of the interventional and observational studies were multinational, with more than 3 countries involved (interventional studies 55.2% and observational 25.0%). In total, the CTSQ was used in 52 countries. United States (US) was the country where most studies were performed (Figure 2).
- The first study using the CTSQ as an outcome measure of treatment satisfaction was published in 2007. There has been an overall increase in the number of studies published 2007 to 2021 (Figure 3).
- The CTSQ has been used to assess treatment satisfaction across 18 tumor types; most commonly in solid tumors (N=43 studies).
 - The most common cancer types were breast cancer (N=14, including 3 interventional studies and 11 observational studies), diffused large B-cell lymphoma (N=9, all interventional), lung cancer (N=7; 2 interventional & 5 observational) and renal cell carcinoma (N=7; 3 interventional & 4 observational) (Figure 4a).
- The CTSQ was mostly used to evaluate treatment satisfaction with intravenous treatments (N=22 studies, including 9 interventional studies and 13 observational) and oral treatments (N=21; 8 interventional & 13 observational) (Figure 4b).
- The CTSQ was principally used to support secondary endpoints (N=33 studies), followed by primary endpoints (N=7) or both (N=1), although many studies did not define the positioning of the CTSQ-related endpoint (N=20 studies).
- A modified version of CTSQ has been included in regulatory label language based on 1 trial identified in this review; NCT03277105 (COLUMBA).
 - Results demonstrated that adult patients who received daratumumab subcutaneously had a more positive perception of their cancer therapy and were more satisfied with their therapy than those who received intravenous daratumumab for relapsed or refractory multiple myeloma [7].

Figure 1: PRISMA flow diagram of literature search and review process of (1a) clinical trials and other studies through clinicaltrials.gov and (1b) trials and studies through OVID



The search for clinical trials and non-trial studies was conducted from January 2006 until June 2023. The search term for the clinicaltrials.gov search was "CTSQ" and for the OVID search it was CTSQ or "Cancer Treatment Satisfaction Questionnaire" or "Cancer Therapy Satisfaction Questionnaire".

Figure 2: Distribution of (2a) interventional and (2b) observational studies that have used the CTSQ by country

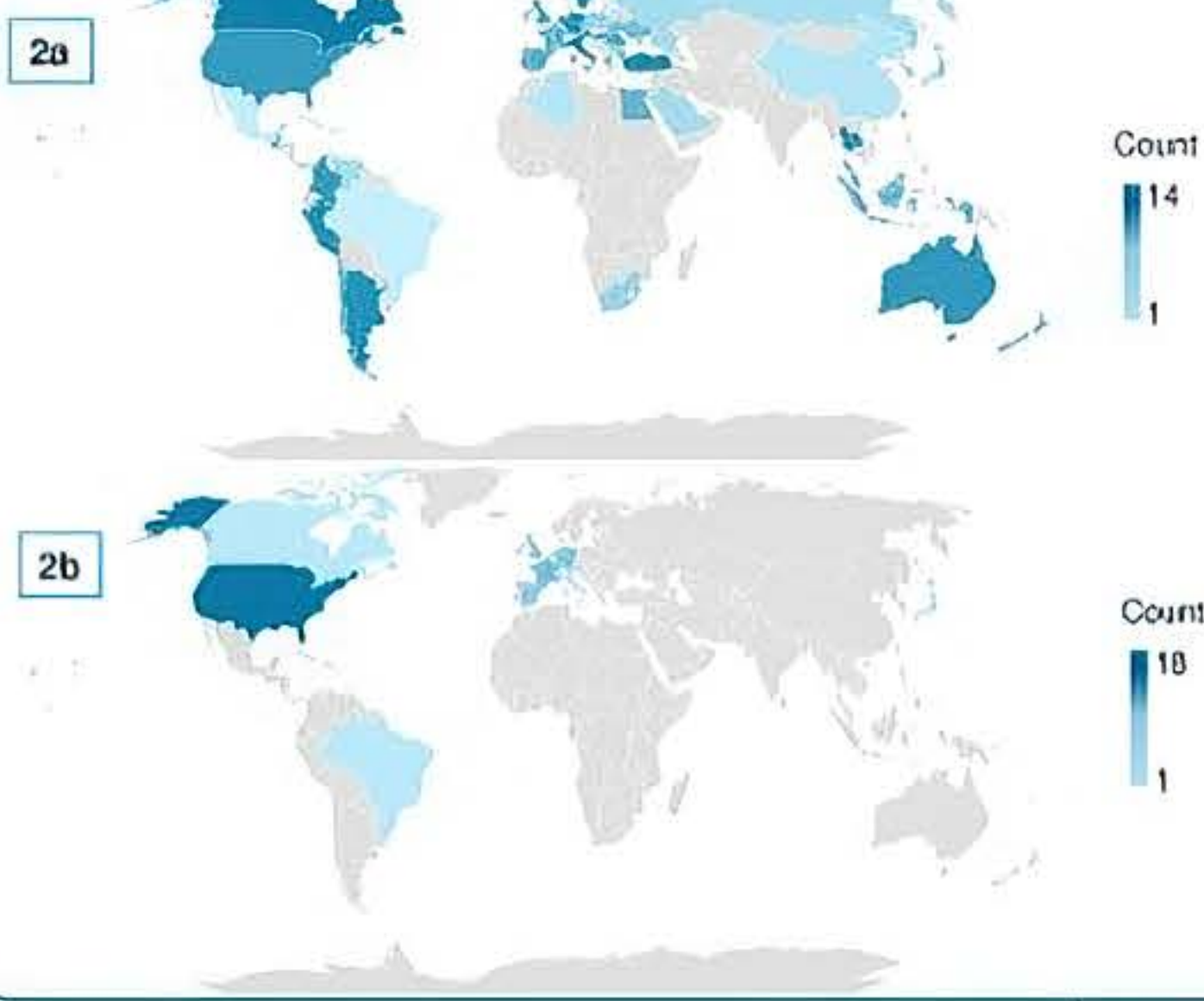


Figure 3: Number of interventional and observational studies that have used the CTSQ according to year of publication

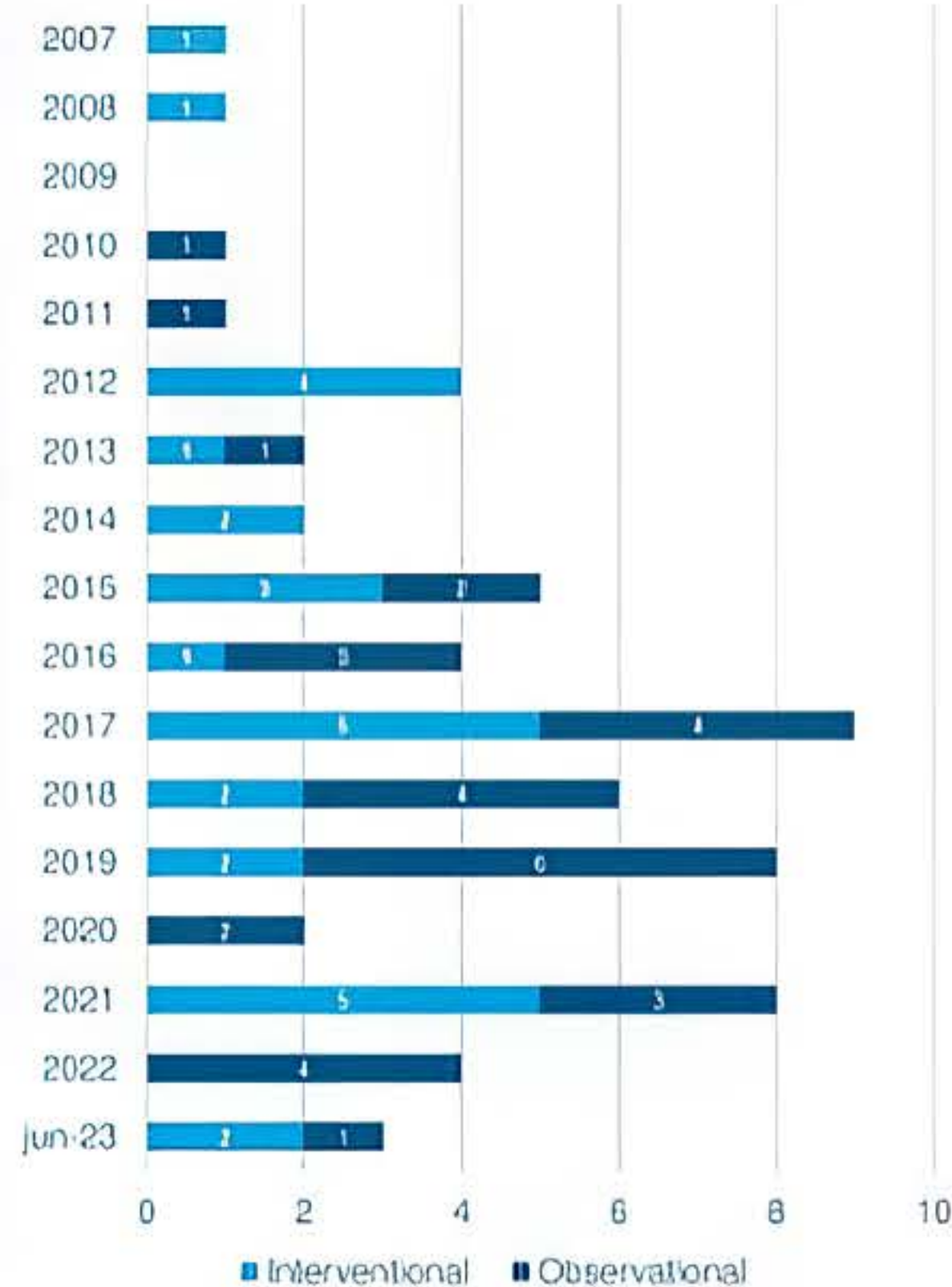


Figure 4: Number of interventional and observational studies that have used the CTSQ as an outcome measure by (4a) cancer type and (4b) administration route

