

BMJ Open Relationship between intersectionality and cancer inequalities: a scoping review protocol

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To cite: Estupiñán Fdez de Mesa M, Marcu A, Ream E, *et al.* Relationship between intersectionality and cancer inequalities: a scoping review protocol. *BMJ Open* 2023;**13**:e066637. doi:10.1136/bmjopen-2022-066637

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2022-066637>).

Received 26 July 2022
Accepted 19 January 2023



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ABSTRACT

Introduction Persistent inequalities in cancer care and cancer outcomes exist within and between countries. However, the evidence pertaining to the root causes driving cancer inequalities is mixed. This may be explained by the inadequate attention paid to experiences of patients with cancer living at the intersection of multiple social categories (eg, social class, ethnicity). This is supported by the intersectionality framework. This framework offers an alternative lens through which to analyse and understand how these interlocking systems of oppression uniquely shape the experiences of patients with cancer and drive inequalities. In this protocol, we outline a scoping review that will systematically map what is known about the relationship between intersectionality and inequalities in care experience and cancer outcomes of patients with cancer; and to determine how the intersectionality framework has been applied in studies across the cancer care pathway and across countries.

Methods and analysis This study will be guided by Arksey and O'Malley's, and Levac *et al*'s frameworks for scoping reviews. We will identify and map the evidence on cancer inequalities and intersectionality from 1989 to present date. Electronic databases (EMBASE, PsychINFO, CINAHL, Medline, Web of Science, ProQuest) and a systematic search strategy using a combination of keywords and Boolean operators AND/OR will be used to identify relevant studies. Screening of eligible papers and data extraction will be conducted by two independent reviewers, and disagreements resolved by discussion with the research team. We will use an iterative process to data charting using a piloted form. Findings will be collated into a narrative report.

Ethics and dissemination Ethical approval is not required since data used are from publicly available secondary sources. Findings will be disseminated through peer-reviewed journals, conferences and stakeholder meetings. Further, findings will inform the next phases of a multistage research project aimed at understanding inequalities among patients with breast cancer.

STUDY RATIONALE

Cancer is a growing global issue and a health priority that imposes an unequal burden on historically marginalised populations.¹ The unprecedented COVID-19 pandemic has exposed entrenched inequalities among these populations, including in cancer care

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ First scoping review to identify the relationship between intersectionality and cancer inequalities and to map out how the intersectionality framework has been applied in cancer research across countries.
- ⇒ Scoping review design guided by a structured framework and systematic reporting system, which will provide rigour and transparency.
- ⇒ A quality assessment of papers included in this review will not be performed as this is not applicable to scoping reviews.
- ⇒ Only studies published in English will be eligible for inclusion.

and cancer outcomes.²⁻⁴ The pandemic severely disrupted cancer care services (eg, screening programmes, treatments) affecting populations worldwide.⁴⁻⁶ In the same period, the reduced access to healthcare resulted in excess of 'non-COVID-19' deaths, including excess deaths from cancer.^{7 8} The ongoing pandemic continues to impact cancer services and people living with cancer.^{9 10} In response, international organisations and governments are reinforcing their strategies to recover cancer services and to reduce inequalities.^{8 11 12} Likewise, researchers have been called to concentrate their efforts on finding implementable solutions that address the root causes of inequalities in cancer, particularly those affecting historically marginalised populations.^{11 13}

Cancer inequalities

A global public health priority, cancer remains the leading cause of death worldwide.¹ Despite progress in cancer survival and quality of life due to screening, early diagnosis and enhanced access to treatment,¹⁴ persistent inequalities in cancer outcomes exist within and between countries.^{15 16} These inequalities have been documented in countries with both universal and private health-care systems.^{15 17-19} This suggests inequalities are not necessarily alleviated by the provision

of free treatment at the point of access, rather, socioeconomic and contextual factors play a key role in driving these inequalities.

Inequalities in cancer outcomes extend across the cancer pathway from prevention to survivorship,¹² and are largely driven by the social determinants of health (SDH).¹⁵ These are the factors where people are born, grow, live and age, and the broader socioeconomic and political factors that shape the conditions of daily lives and impact opportunities for health.²⁰ It is widely recognised that the SDH lead to avoidable, unfair, and systematic cancer inequalities and therefore there is a social responsibility and moral duty to act on them.^{15 21} Addressing these inequalities requires action at all levels of society and beyond the health sector, for example, tackling the root causes of unequal distribution of power and unequal access to resources between communities.¹⁵

Socioeconomic inequalities in cancer outcomes are complex. They operate at the intersection of multiple pathways reflecting the exposure to a range of risk factors from social factors (eg, class, resources or support), living conditions (eg, overcrowding), behavioural factors (eg, smoking), different access to and through health services, and macro factors such as structural racism, social geography, or poverty.¹⁵ Socioeconomic inequalities in cancer affect everyone; however, their impact is greatest on the most disadvantaged populations. Lack of knowledge to recognise symptoms among people from lower socioeconomic position leads to delayed healthcare seeking.^{19 22 23} Unemployment influences behaviours towards cancer care (eg, people may not find time to take up cancer screening; or patients might prioritise work over treatment if absenteeism implies loss of income).²⁴ Mistrust of healthcare professionals by people from minority ethnic populations and sexual minority groups,^{25–27} and perceptions and experiences of discrimination and racism^{28 29} impact uptake of health services.

However, this evidence is mixed. This might be explained by the inadequate attention paid to experiences of patients with cancer living at the intersection of systems of oppression and discrimination. This is supported by the intersectionality theory. Rooted in the Black Feminism movement,^{30–32} which challenged the inequalities experienced by Black women, intersectionality provides a theoretical framework to reframe the critical analysis of health inequalities in terms of power relations. Further, intersectionality allows researchers to unpack how some groups are privileged over others.³³ Intersectionality posits that socially constructed identities (eg, gender, ethnicity), social categories (social class) and social processes (racism) exist together, are additive and mutually reinforcing, and lead to complex experiences of social and health inequality.^{33 34} In the cancer field, intersectionality offers a new critical lens from which to understand and examine how the interconnectedness of these multiple identities and social processes shapes and influences cancer outcomes and experiences of patients with cancer.^{35 36} Different concepts have been used to refer

to intersectionality (eg, theory, perspective, paradigm). Following Bowleg's views,³⁷ in this scoping review, we will use 'intersectionality framework' 'to denote intersectionality as more of an analytical framework or paradigm than a traditional testable theory'.

Research into socioeconomic inequalities in cancer outcomes has largely focused on the analysis of one dimension of oppression (eg, social class or ethnicity). This approach has been criticised for failing to capture the complexity of multiple social locations and systems of social power influencing the true lived experiences of inequality among patients with cancer, particularly those from historically marginalised groups.³⁷ To this end, concerns have been raised that conventional research approaches lead to repeatedly measuring and documenting inequalities in a way that does not yield the evidence required to identify factors amenable to change.³⁵ In a similar vein, the SDH framework for the study of health inequalities has been criticised for conceptualising determinants of health as single categories or markers for difference which arguably leads to analyses that are less policy relevant.³⁸

In response, scholars and healthcare stakeholders are advocating for a shift in research. This would imply challenging dominant approaches and shifting from solely describing inequalities towards using multidimensional intersectional analyses that help to identify the processes and root causes of cancer inequalities.^{12 35 37 39 40} Moving away from solely documenting inequalities will arguably minimise existing notions of the intractability of injustice and inequity.³⁵ To this end, researchers are recommended going beyond demographic intersectional positions to focusing on modifiable social processes (eg, racism, classism, heterosexism, ableism), and on identifying implementable solutions that will contribute towards advancing the social and health equity agendas.⁴⁰

Applications of the intersectionality framework in research and policy

Research

The intersectionality framework provides a critical unifying interpretive and analytical lens from which reframing how social and health inequalities are conceptualised, examined, analysed and addressed.³⁷ The framework affords opportunities to improve population health research by providing more precise identification of both the heterogeneity of effects and causal processes producing health inequalities, and to test and generate new theories.³⁵ It also helps to examine more effectively interlocking systems of oppression and privilege, to enhance the analysis of existing maps of social inequalities within populations, and to better investigate intersectional research questions.^{35 37 41}

Intersectionality has been largely applied to the study of identity and marginalisation in social sciences^{42 43}; however, it is a theoretical framework that is now being adopted by scholars from different disciplines (eg, in the field of HIV,⁴⁴ mental health,⁴⁵ or health and well-being^{46 47}). The

wider application of intersectionality has raised concerns among intersectional scholars who fear that researchers might be distancing from the tenets of intersectionality and, with this, the risk of detaching from the original foundations in Black Feminist theory and its original aim of addressing issues of social power and advancing social justice.^{40 48} Further concerns have been raised pertaining to intersectionality becoming a theoretical buzzword that does not add value to research.^{40 49} These concerns are particularly relevant to the application of intersectionality in quantitative research.^{40 48} By exploring and documenting how researchers are engaging and using the intersectionality framework to investigate inequalities in cancer, we would address these concerns and inform the global debate.

Policy

Policies and services that focus on adapting healthcare services to suit the needs of the majority (eg, white ethnic groups, heterosexuals or able-bodied individuals) create structural barriers and shape opportunity of cancer risk and care.^{24 50} This situation presents challenges to individuals belonging to minority groups and those living at the intersection of multiple social locations. For instance, women from ethnic minority groups might delay seeking care due to mistrust of services largely led by white male healthcare professionals, or a black transgender wheelchair user might fear being stigmatised by fellow patients and healthcare staff. This situation is compounded by inadequate recording of routine data and lack of in-depth intersectional analysis.⁵¹ If this were to be addressed, highly insightful evidence could be generated that could bring about a step-change in our understanding of cancer risk and cancer care among historically marginalised groups.

To this end, emerging evidence suggests that applying intersectionality-based policy analysis frameworks can help to advance research, policy development and action in a variety of health-related areas and on inequalities.^{39 49} This perspective would afford an opportunity for policymakers to embrace social responsibility, to shift towards a critical praxis and to act as transformative actors that affect transformative change.³⁹ Examples of this approach have been documented by Hankivsky *et al*³⁹ including maternity healthcare, substance misuse, HIV testing and prevention, and palliative care.

Additionally, the intersectionality framework has been identified as being of primary importance to inform the identification of strategies for intervening on the processes that generate health and social inequalities between intersectional social groups.⁵² It has been acknowledged, however, that not all countries are embracing the intersectionality framework at the same pace, and challenges exist to realise its full potential (eg, lack of robust datasets for research purposes, complex analytical methods required for analysis or key prerequisite of openness to social justice, and willingness to move away from prioritising a priori singular axes of inequality).^{39 49} Therefore,

exploring and documenting how the intersectionality framework has been applied to inform equity-orientated cancer policy and practice will be valuable to gauge the appetite for its adoption in cancer-related research.

We will conduct a scoping review to map out the application of the intersectionality lens in research on inequalities in the cancer care pathway. This scoping review is different, and builds on, a recent review of intersectionality in cancer inequalities¹² by expanding upon specific analytical methods used across countries, and by identifying global systems of injustice affecting patients with cancer. Kelly-Brown *et al* established an important foundation with their review by mapping and summarising the evidence in the USA.¹² However, the increasing interest on understanding how the intersectionality framework is being applied to the study of health inequalities^{40 48 53} justifies the need for a scoping review that includes evidence beyond the USA.

By including the evidence from other countries, we will cover a gap in the literature and will help to create a global picture of how interlocking systems of oppression and discrimination influence cancer inequalities. Particularly, our review will contribute to improving our understanding of the effect of the ‘global determinants of health’⁵⁴ (eg, racism) on inequalities in cancer, as well as the place-specific socioeconomic factors, and how these are experienced by patients with cancer. Population health research is being increasingly critiqued for lacking underpinning theoretical frameworks and theory, and for excluding the context of people’s lives through identifying single sets of health determinants for entire populations.^{35 55 56} This review will look in depth at the critical social theories, statistical analyses and intersectional methodologies applied to the study of cancer inequalities across countries. This will help to identify how well researchers are attending to and interpreting the intersectionality framework worldwide, to produce a global heat map of cancer research and intersectionality, to identify gaps in the literature, and to provide recommendations to researchers, policymakers, cancer commissioners and providers.

Study aims

The aims of this scoping review are twofold: (1) to examine and map the breadth and nature of research pertaining to the relationship between intersectionality and inequalities in cancer care and outcomes, and experiences of patients with cancer across the care pathway, and to identify gaps in the current evidence; (2) to identify and document how the intersectionality framework is being applied and interpreted across countries for the analysis of inequalities in cancer.

Study definitions

Social category (or categorisation) is a socially constructed term that refers to a group of individuals who share common characteristics, such as ethnicity and class.⁵⁷ Marginalisation refers to both a process and experience



by which some groups (dominant) are privileged within society over other groups as a result of an unequal distribution of power and power relations.⁵⁸

Social inequality across the cancer care pathway 'refers to systematic differences between social groups that affect people's risk of developing cancer, the likelihood that they receive effective and timely (or any) treatment for the cancer, whether they survive, and whether they have access to palliative care'. (IARC p.15)¹⁵ The cancer care pathway framework is considered to provide 'an opportunity to appraise progress in tackling the root causes of cancer inequalities by measuring socioeconomic inequalities, and as part of cancer control policies'. (IARC p.13)¹⁵ This review will be conducted in the context of the cancer care pathway defined as multiple stages, including primary prevention (pre-diagnosis and detection), diagnosis, treatment, post-treatment survivorship and end of life.

METHODS AND ANALYSIS

Protocol design

The study design will be conducted based on Arksey and O'Malley's⁵⁹ and Levac *et al's*⁶⁰ recommendations for scoping reviews which are based on a six-stage methodological framework: (1) identifying the research question; (2) searching for relevant studies; (3) selecting studies; (4) charting the data; (5) collating, summarising and reporting the results; (6) consulting with stakeholders to inform or validate study findings. This framework is preferred because it provides clarity and transparency, and allows an iterative process with the aim of strengthening the results⁶¹. For transparency, the Preferred Reporting Items for Systematic Reviews and Meta-Analysis⁶² will be used to report the search results (online supplemental table 1).

Stage 1: identifying the research question

The 'Population, Concept and Context' framework⁶³ has been used to formulate the review questions as shown in table 1.

The research questions are:

1. What is known from the existing literature about the relationship between intersectionality and cancer inequalities across the care pathway?
2. In what countries has the intersectionality framework been applied to examine inequalities in cancer outcomes?

3. What intersectional methods and statistical analysis have been used to examine and understand inequalities in cancer outcomes?

Stage 2: identifying relevant studies

This stage will encompass a three-step iterative process: reviewing the literature, refining the search strategy and including further sources of evidence identified in papers' reference lists.⁶¹ Title and abstract review will precede the full-text review of the selected studies. The search strategy and inclusion and exclusion criteria have been developed and agreed by the research team. This study will be conducted between July 2022 and January 2023.

The identification of relevant studies will involve a structured search in the following electronic databases: EMBASE, PsychINFO, CINAHL, Medline and Web of Science. ProQuest will be used to retrieve grey literature (ie, thesis). The search strategy will be based on a systematic combination of keywords and Boolean operators AND/OR. An expert librarian has been consulted to help refine the search strategy. The search will be limited to articles published in the English language between 1989 (when the term was academically coined by Kimberlé Crenshaw³²) to present date to capture the growth, breadth and use of intersectionality. A pilot sample search is shown in online supplemental table 2. Quality assessment of reviewed papers is beyond the remit of scoping reviews. However, to assess for potential bias, reported conflict of interest and funding will be summarised.¹²

Stage 3: study selection

EndNote reference software will be used to store and manage papers. An Excel form will be developed and piloted for the screening and extraction of data. Papers will be first screened by two reviewers and subsequently the research team will meet to discuss and resolve discrepancies. Only when 75% or more agreement has been achieved will the team proceed to full screening.⁶¹ Application of inclusion and exclusion criteria will ensure the relevance of studies included in this review.

Inclusion criteria

Studies will be included if they meet the following criteria:

- Refer to: intersectionality, power, marginalisation, discrimination, oppression and/or disadvantage in the text (eg, title, abstract, keywords, introduction, methods, results).

Table 1 Population, Concept and Context framework to guide the research question

Population	Patients with cancer Individuals where cancer control measures are relevant (eg, screening, vaccination)
Concept	Inequalities Intersectionality
Context	Cancer care pathway (pre-diagnosis, diagnosis, treatment, post-treatment survivorship and end of life)

- ▶ Examine and discuss cancer inequalities among individuals living at the intersection of two or more social categories.
- ▶ List and/or describe intersecting dimensions used in analysis.
- ▶ Empirical research (ie, reviews, reports, commentaries, etc will be excluded).
- ▶ Grey literature, defined as academic literature that it is not controlled by commercial publishers (ie, thesis).
- ▶ Published in the English language between 1989 and to present date.

Exclusion criteria

Studies will be excluded if they meet the following criteria:

- ▶ Studies that examine and assess cancer inequalities from unitary category lens.
- ▶ Studies focused on cancer control relative to lifestyle behaviours (eg, smoking).
- ▶ Studies not focused on cancer.
- ▶ Published in languages other than English due to limited resources for translation.
- ▶ Published before 1989.

Stage 4: charting the data

Key information will be extracted and summarised in a charting table developed and piloted by the research team. The team will follow an iterative process whereby the data charting will be reviewed, refined and continually updated. Relevant variables will be captured, including author(s), year of publication, aim of study, study setting, study population, cancer type, phase of cancer care, study design, theoretical framework, dimensions of interest, data analysis, outcomes/findings, and conflict(s) of interest and funding.

Stage 5: synthesising and reporting results

According to recommendations for scoping reviews,⁶⁴ the aim of the review is to map out and aggregate the evidence available as opposite to critically analysing the quality of individual studies. As such, data extracted will be summarised in a narrative report which will encompass the following themes: phases of the care pathway (including main outcomes and study findings); and study characteristics and methodologies (including region of study, theoretical engagement, study designs, qualitative and quantitative statistical analysis, number of social positions observed).

Stage 6: consultation and patient and public involvement

This scoping review is part of a multistage research project that has engagement and involvement of stakeholders and communities at its core. For the scoping review phase, stakeholders will help to interpret findings and make recommendations. National Health Service healthcare professionals, representatives from cancer charities and patients' representatives will be invited to provide their insights via email or virtual meetings.

DISCUSSION

Cancer is a global health priority that imposes an unequal burden on historically marginalised populations.⁶⁵ This burden has been exacerbated by the COVID-19 pandemic.²⁻⁴ Increasing pressure from social justice movements (eg, Black Live Matters) which advocate for action to address the disproportionate and deep-rooted inequalities experienced by some groups in the population, including in cancer care and cancer outcomes, has generated a great deal of interest to better understand and address the structural processes through which inequalities emerge. This situation has led international organisations and governments to review and reinforce their cancer strategies posing central attention on reducing inequalities, particularly among historically marginalised populations.^{8 11 12} Similarly, scholars have been called to shift their research focus from solely describing inequalities towards analysing processes that are amenable to change and identifying implementable solutions that help advance social and equity agendas.^{10 11}

The intersectionality framework is being considered a tool that could open new avenues to understand the complex and interlocking processes of oppression and discrimination influencing cancer inequalities.^{37 66 67} Emerging evidence is starting to illustrate the potential of the intersectionality framework in identifying and explaining the root causes of inequalities.^{47 68} However, as this framework is being rapidly embraced by scholars across disciplines, concerns about the risk of detaching from the core tenets of intersectionality (ie, addressing issues of social power and advancing social justice) have been raised.^{40 48} This situation has drawn scholars' attention to the application of the intersectionality framework outside of social sciences, particularly in quantitative research. For instance, Bauer *et al*⁴⁸ and Guan *et al*⁴⁰ have reviewed the application of intersectionality in quantitative health research in an endeavour to document what methodologies have been used and to assess the level of engagement with the framework. Key findings included the necessity for researchers to clearly justify the mathematical rationale guiding their study designs and interpretation of findings, and the need to familiarise with the core tenets of intersectionality.

Despite making inroads into some areas of health inequalities, intersectionality remains largely uninvestigated in the cancer arena. Further, to date, there has been little exploration of how intersectionality is travelling within cancer inequalities work beyond the USA.⁴⁰ Therefore, our scoping review will contribute to filling this gap in the literature by examining and mapping the breadth and nature of the evidence pertaining to the relationship between intersectionality, including the methodologies and inequalities among patients with cancer across the care pathway and across countries.

Findings from the scoping review will serve to contribute to the international debate relative to quantitative intersectional analyses, to formulate recommendations to improve methodologies and to identify future

research opportunities. Further, findings will serve to identify the potential the intersectionality framework affords to inform policy and practice, and to formulate recommendations for policymakers and providers interested in planning, improving, and developing evidence-based, culturally sensitive, and tailored policies in cancer services.

Ethics and dissemination

Ethical approval is not required since data are from publicly available secondary sources. Findings from this scoping review will be disseminated through stakeholders' meetings and academic channels, including but not limited to peer-reviewed journals and conferences. Furthermore, findings from this scoping review will guide the next phase of a multistage research project aimed at examining and understanding inequalities among patients with breast cancer living at the intersection of systems of oppression and discrimination.

Contributors MEFdM conceived the idea and was responsible for designing the scoping review protocol, including developing the research questions and study methods, and drafting and editing the protocol. K LW, AM and ER aided in developing the research questions and study methods, and contributed meaningfully to the drafting and editing, and approved the final manuscript.

Funding This work is being supported by the University of Surrey, Doctoral Studentship Award (TV8330).

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

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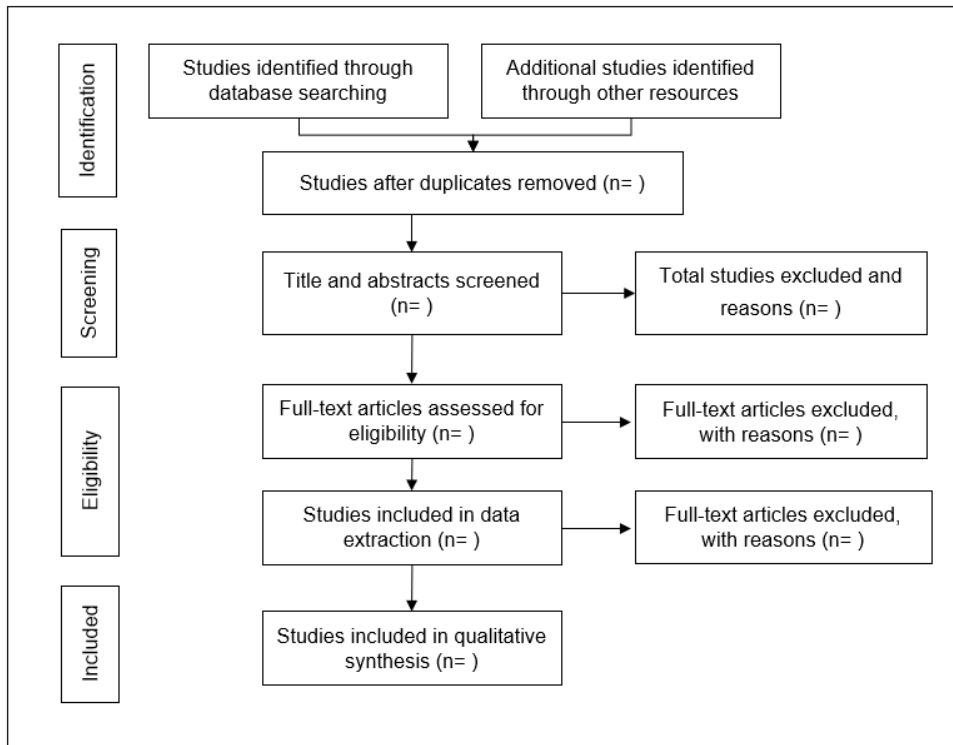
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Supplemental Table 1. PRISMA flowchart



Supplemental Table 2. Example of Search strategy

Search ID#	Key Term	Medline search string
S1	Cancer	[TI:AB] (cancer* OR carcinoma* OR neoplas* OR tumor* OR tumour* OR malignan* OR hodgkin* OR nonhodgkin* OR adenocarcinoma* OR leukemia* OR metasta* OR lymphoma* OR sarcoma* OR melanoma* OR myeloma* OR oncolog*)
S2	Intersectionality	[TX] Intersect* OR Power OR Marginali* OR Oppress* OR Discrim*
S3	Inequalities	[TI:AB] (disparit* OR inequit* OR inequalit* OR disadvantag*)
S4		#1 AND #2 AND #3