

RFP Number: S14-199
Subcontract Number: 14X262
Washington University in St. Louis

Systematic Reviews to Inform Research and Treatment for Multi-Morbidities
Task C: Cancer Trials

660 S. Euclid Avenue, Campus Box 8100
St. Louis, Missouri, 63110-8109
314-454-7939

Final Report
May 1, 2017

PI: Graham A. Colditz, MD, DrPH

Report Submitted By: Carolyn Stoll, MPH, MSW
Period covered by report: 3/26/2016- 5/1/2017

Contents

A.	Executive summary	3
B.	Key personnel.....	5
C.	Background	5
D.	Methods.....	6
E.	Results	14
F.	Discussion	29
G.	References	32
	Appendix	35
	1. Search strategy	35
	2. Extraction codebook.....	47
	3. Included studies.....	69
	4. Funding and registration information.....	76

A. Executive summary

Background:

As the population of cancer survivors with multiple chronic conditions (MCC) increases, it is essential that randomized controlled trials (RCTs) include MCC to ensure the appropriateness of applying trial results to the broader population. However, previous reviews of RCTs targeting chronic conditions have found that individuals with MCC are often excluded, and when MCC are reported in participant characteristics, details are sparse. A thorough systematic review of the inclusion of MCC in RCTs of behavioral health interventions is needed to provide important insight into the applicability of results and to identify gaps in the design and implementation of behavioral health interventions in prevention and control of chronic conditions among cancer survivors. This review seeks to assess the frequency with which research participants with MCC are represented in a subset of RCTs of behavioral health interventions targeting cancer survivors published in general medical and specialized journals from 2000 to 2014.

Methods:

This review is based on a subset of studies from a larger systematic review of behavioral health RCTs targeting chronic illness. A certified MLS librarian with expertise in searching for systematic reviews designed to retrieve all reported RCTs in adults regarding chronic illness in PubMed MEDLINE and EMBASE. Database supplied limits were used to limit by three year clusters, 2000-2004, 2005-2009, and 2010-2014. Searches were completed in February 2015. A sampling strategy was used to select 200 articles meeting inclusion criteria per time period. Selection criteria for the original review were primary reports of RCTs of behavioral health interventions targeting adults with at least one specified chronic conditions of interest.

The current review is based on the subset of trials (n=101) from the original review targeting adults with cancer.

Data were extracted independently by two trained readers using a standardized form. Risk of bias was assessed using a modified version of the Cochrane Collaboration tool for assessing risk of bias. After extraction by each reader, records were compared and differences were adjudicated by a third party. Data was managed in REDCap.

Main results:

101 RCTs testing behavioral health interventions in cancer survivors were included. Studies were mostly from specialty journals (91.1%). and about half of studies were from North America (56.4%).

Exclusion criteria related to MCC were categorized as specific (naming specific conditions), general (using general terms for chronic conditions), or vague (criteria without clear definition that is likely to result in exclusion of MCC). Overall, 59.4% of trials included general, specific, or vague exclusion criteria for MCC. A maximum age was used as exclusion criteria in trials (17.8%), and in these trials the median maximum age was 65.0. When exclusions for MCC were reported, only 11.5% of trials identified the number of individuals excluded for these reasons during screening.

The inclusion of MCC could be identified in 26.7% of trials. Of those trials that reported including MCC, the prevalence of MCC was reported in 95.7% of trials. Of trials reporting specific comorbidities of the index

conditions, the mean number of additional conditions reported was 1.75. Comorbidities were considered in analysis in 7.9% of all trials.

Authors' conclusions:

In a representative sample of RCTs testing behavioral health interventions for participants with cancer published over 15 years (2000-2014), trials frequently exclude individuals with MCC due to specific, general, or vague exclusion criteria, and exclusion criteria based on factors correlated with MCC, such as age. When MCC are used as exclusion criteria, information regarding to what extent potential participants were excluded for having MCC is usually not provided. When trials indicated that some participants did have MCC, the prevalence of MCC either by general measure or by individual conditions is often not specified. Although our results suggest that individuals with MCC are not appropriately represented in RCTs of behavioral health interventions, perhaps of bigger concern is that it is often difficult to determine if and to what extent MCC are included due to the poor reporting quality of relevant information in trials. Collectively these factors limit the ability to judge the appropriateness of applying trial results to the broader cancer survivor population. Additionally this review identifies possible areas for further study to address the shortcomings of existing evidence of the representation of individuals with MCC in RCTs targeting cancer survivors.

B. Key personnel

Name	Title	Role
Graham Colditz, MD, DrPH	Niess-Gain Professor of Surgery; Chief, Division of Public Health Sciences, Department of Surgery, Washington University School of Medicine; Associate Director Prevention and Control, Alvin J. Siteman Cancer Center	Principal Investigator
Carolyn Stoll, MPH, MSW	Staff Scientist, Division of Public Health Sciences, Department of Surgery, Washington University School of Medicine	Study Director
Sonya Izadi, BA	Senior Public Health Research Coordinator, Division of Public Health Sciences, Department of Surgery, Washington University School of Medicine	Database Manager

C. Background

Multiple chronic conditions (MCC) affect roughly 75 million people in the United States and 65% of total health care spending in the nation is used for this quarter of the population.¹ In 2013, 17.6% of people age 18-64 and 60.8% of those 65 and older in the United States had more than one chronic condition.² As the United States is experiencing considerable growth in its older population, the proportion of people with MCC will undoubtedly expand.³

In particular, the population of cancer survivors with comorbidities continues to grow. Of the estimated 15.5 million cancer survivors in the United States in 2016, 62% were 65 years or older, increasing their likelihood of having one or more comorbidities.⁴ Comorbidity is common at time of first cancer diagnosis for those 65 years and older, with estimates of 40% having at least one additional condition, and 15% with two or more additional conditions.⁵ Older cancer survivors report higher rates of comorbid health conditions as compared to those without a history of cancer,⁶ and comorbid health conditions may have a bigger effect than cancer on physical, mental, and social function.⁷

A combination of factors including the aging of the US population as well as the improvement of survival after cancer diagnosis will only increase the population of cancer survivors living with multimorbidities, thus consideration of comorbidities is essential for this growing population. To prevent cancer and improve outcomes for those diagnosed with cancer, we must apply insights that will reduce the burden of cancer.^{8,9}

Previous literature has shown that randomized controlled trials (RCTs) frequently exclude participants with MCC.^{1,10-14} Furthermore, when these participants are not excluded, reporting of co-occurring chronic conditions is limited.^{10,11,15} This inconsistency between the characteristics of eligible participants in RCTs and the characteristics of the actual population with the disease reduces confidence in applying trial results to the patient population.^{10,13} Consequently, the knowledge base for multiple chronic conditions is largely

limited by the reliance on clinical trials that strive to maximize internal validity by excluding participants with comorbidities.¹

It is unclear if this trend of exclusion of MCC in RCTs extends to those focused on cancer survivors, however previous literature has assessed the representativeness of older participants in cancer trials and has found that older participants are often excluded from cancer trials, in part due to the exclusion of participants with comorbidities.¹⁶

Several reviews^{10,12,14,17,18} have attempted to assess the inclusion of individuals with MCC in RCTs, however, these reviews either focused on RCTs targeting conditions other than cancer,^{10,17,19} or included RCTs targeting cancer but did not report results for cancer trials separately.^{12,14,18}

We previously reviewed 600 behavioral health RCTs and assessed for inclusion of participants with MCC and found that these participants are often excluded, and that poor reporting particularly of eligibility criteria and participant characteristics limits our ability to make conclusions about the inclusion of this population.²⁰ This review was unique in that it (a) focused solely on behavioral health RCTs; (b) considered a previously defined list of 20 chronic conditions chosen for their chronicity, prevalence, and potential to be modifiable by public health and/or clinical interventions; (c) used a comprehensive search strategy and sampling technique to produce a large representative subset of the literature across 15 years (2000-2014); (d) evaluated a wide range of variables related to trial design, trial quality, eligibility criteria, participant selection, and consideration of comorbidities in analysis; and (e) used best practices for systematic reviews including review of search results and selection of included studies and extraction of data by two independent readers.

In this current review, we limit our scope to the subset of trials from this previous review targeting individuals with cancer. This systematic review assesses the consideration of MCC in a representative sample of behavioral health RCTs targeting cancer survivors published from 2000 to 2014.

D. Methods

This review focuses on a subset of studies (n=101) from a larger review of behavioral health RCTs (n=600). A more detailed description of the methods of the full systematic review can be found in the original report.²⁰

Eligibility criteria

Eligibility criteria were designed with the goal of creating a representative sample of RCTs published in peer-reviewed literature from 2000-2014 designed to develop and/or test the efficacy or effectiveness of behavioral health interventions to modify health behaviors, improve health-related quality of life, psychosocial functioning, and/or health outcomes. Eligibility criteria were designed to be fairly broad to produce a heterogeneous sample of the literature in terms of populations, interventions, and outcomes.

The following eligibility criteria were used for the original review:

1. RCT with original data
2. Primary report (not protocols, posttrial follow-up studies, secondary or subgroup analyses, etc.)
3. Published in English
4. Targeting at least one of the chronic conditions of interest (i.e. all enrolled participants must have at least one of the 20 specified chronic conditions)

5. Had a primary goal to develop and/or test efficacy or effectiveness of a behavioral health intervention
6. Enrolled participants and applied eligibility criteria at the individual level
7. Enrolled only adult subjects (18+)

For the current cancer focused review, the following additional eligibility criteria was applied to the studies included in the original review:

8. Specifically targeting participants with cancer

We did not include trials that targeted either MCC generally or a selection of chronic conditions that included cancer. Although these trials may have included participants with cancer, we included only those trials in which cancer was specifically targeted and every participant had a diagnosis of cancer.

Types of studies

All randomized controlled trials testing the efficacy or effectiveness of behavioral health interventions to modify health behaviors, improve health-related quality of life, psychosocial functioning, and/or health outcomes. If trials included a non-randomized portion alongside an RCT, we considered only the RCT cohort.

Types of participants

Human adults (18+) with a diagnosis of cancer.

Types of conditions

Trials were included if they targeted cancer, including all sites and stages. Diagnosis of cancer may have been current or in the past.

When considering chronic conditions used in eligibility or described among trial participants, chronic illness was defined using general terms for chronic conditions and any of the following 20 conditions: arthritis, asthma, autism spectrum disorder, all cancer except non-melanoma skin, cardiac arrhythmias, chronic kidney disease, chronic obstructive pulmonary disease, congestive heart failure, coronary artery disease, dementia including Alzheimer's and other senile dementias, depression, type 2 diabetes, hepatitis, human immunodeficiency virus, hyperlipidemia, hypertension, osteoporosis, schizophrenia, stroke, and substance abuse disorders. The selected conditions were identified from a list compiled by the MCC working group within the Department of Health and Human Services.²¹ These conditions were chosen as they meet the definition for chronicity, are prevalent and have the potential to be modifiable by public health or clinical intervention.

Types of interventions

For the purpose of this review, "behavioral health intervention" was defined as any intervention that is non-pharmacological and non-surgical and includes at least one behavior change technique.²² Additionally, there must be some aspect of direct communication with an individual (or small group) whether this is in person, by phone, by internet, etc. This ensured that participants were enrolled at the individual level, and interventions are not performed at the level of a community, campus, etc.

Comparison groups could be usual care, pharmacological interventions, surgical interventions, or a lesser dose of the treatment. Interventions could include a behavioral health intervention in addition to a drug or surgery, as long as the comparison group did not receive the same behavioral health intervention.

Types of outcome measures

Eligibility was not limited by outcome measure.

Search methods for identification of studies

For the original review the librarian designed search strategies to retrieve, as thoroughly as possible, all reported randomized controlled trials in adults regarding chronic illness in PubMed Medline and Embase. Database supplied limits were used to limit by three year clusters, 2000-2004, 2005-2009, and 2010-2014. Chronic illness was defined using general terms for chronic conditions and specific conditions specified by the Centers for Disease Control including arthritis, asthma, autism spectrum disorder, all cancer except non-melanoma skin, cardiac arrhythmias, chronic kidney disease, chronic obstructive pulmonary disease, congestive heart failure, coronary artery disease, dementia including Alzheimer's and other senile dementias, depression, all non-gestational diabetes, hepatitis, human immunodeficiency virus, hyperlipidemia, hypertension, osteoporosis, schizophrenia, stroke, and drug and alcohol related substance abuse disorders. Searches were completed in February 2015. Results were sent to EndNote and the software-provided duplicate finder was used and assumed to correctly identify duplicates. Full search strategies are available in Appendix 1.

There was no additional searching performed for the purposes of the current review.

Data collection and analysis

Selection of studies

Sampling strategy

The following sampling strategy was used to identify the 600 studies for the original review.

Three separate literature searches (using identical keywords and in the same databases) were performed within the defined time periods (2000-2004, 2005-2009, 2010-2014). Within each time period, search results were randomly ordered using the RAND function in Microsoft Excel (2013). The study selection process (application of eligibility criteria onto each article) was performed on the randomly ordered results until studies meeting selection criteria were identified for extraction (200 per time period for a total of 600 articles). Selection was stratified by time period to ensure that an adequate number of studies per time period were selected to allow for analysis over time.

Selection process

For the original review, two reviewers performed study selection to reduce the possibility that relevant reports were missed.²³ Titles were examined for eligibility criteria and more obviously irrelevant results were removed. Abstracts of remaining results were then screened for eligibility. Finally, full text of the potentially eligible results were retrieved and examined for eligibility criteria. At each level of screening, excluded articles and one reason for exclusion were documented. Once full texts were selected, results were compared

between the two reviewers, and any disagreement was resolved by discussion. Reviewers assessing study eligibility were not blinded to the names of the authors, journals, and other publication details. Reviewers performed study selection independently on at least 1250 citations before comparing results. The number of search results screened in each time period was kept even (i.e., the first 5000 results from each time period were screened before screening the second 5000 results from each time period) to ensure that any potential drift in application of eligibility criteria by reviewers throughout the selection process would not bias results over time periods.

The subset of trials for the current review were identified through REDCap based on data previously extracted regarding targeted condition of studies. Two reviewers confirmed that articles met the new eligibility criteria of this review using the full text of the original studies.

Data extraction and management

Data management

Study data were collected and managed using REDCap electronic data capture tools hosted in the Biostatistics Division of Washington University School of Medicine. REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies, providing: 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources.²⁴

REDCap was chosen because it is uniquely suited to meet the needs of an effective and efficient data extraction process. It allows form creators to require specific entry formats for individual questions (ensuring reviewers input data in a consistent format), allows for multiple types of response formats (dropdown menus, select all, select only one, open-ended text entry, etc), and performs data validation to improve accuracy of extraction. In addition, REDCap has a built in “Data Comparison Tool” feature, which allows for the differences in two records to be identified automatically.

Development of extraction form

The extraction form was designed to ensure consistency, accuracy, and efficiency of the data extraction process. The extraction form was tested for item clarity, item comprehensiveness, and form usability. Additionally, throughout the data extraction process the form was constantly evaluated to make sure it was performing as planned. The structure of REDCap allowed for easy editing of the form, such as adding variables, adding answer options, combining answer options, changing entry formats, etc.

Reader training

Readers were Master of Public Health students or had equivalent experience. Their previous experience included managing behavioral research projects, delivering behavioral health interventions, and clinical experience treating chronic conditions. Readers went through an extensive training process before they began extracting data. Training focused on relevant background material and important concepts such as background information on MCC, systematic review methods, RCT methods, RCT reporting, and assessment of bias in RCTs, as well as the specific extraction items and process for this review. Readers

were assessed for accuracy and completeness of extraction on multiple test articles before beginning to extract included articles so that any learning curve did not affect the quality of the data.

Extraction of data

Each article was extracted independently by two reviewers. This method was chosen as systematic review best practices recommend that independent data extraction by more than one reader can minimize errors and reduce potential biases being introduced by readers.²⁵⁻²⁷ After both extractions were complete, any differences were identified using the REDCap Data Comparison Tool. Disagreements were resolved by a third party with graduate training in public health and four years of experience and expertise in extraction of data from published reports, the design and implementation of systematic reviews, and the goals and objectives of this review. This continuous comparison reduced error in the database, and allowed the monitoring of any systematic errors by readers, which helped to ensure the high quality of the extraction process and of the data.

Study measures and variables extracted

The variables extracted for the original review were designed to assess inclusion and reporting of MCC in all phases of a trial—eligibility criteria, participant screening, participant selection and reporting of characteristics, and study analysis. A thorough review of relevant peer-reviewed literature, including reviews of a similar nature or those that assessed the inclusion criteria of RCTS, was performed to identify key variables previously used to evaluate inclusion of specific populations in RCTS.^{10,14,17,18,28-32}

For each trial, the items extracted were intended to determine if participants with MCC were represented. This determination for each trial was complex and involved answering several more specific questions (Table 1).

TABLE 1. Key questions to be answered for each trial
Does the RCT explicitly exclude MCC?
Is the RCT likely to have excluded MCC due to exclusion criteria regarding other factors?
To what extent are potential participants excluded for MCC?
Does the RCT select participants with MCC?
What is the prevalence of MCC among participants?
Are MCC considered in analysis?

A final version of the extraction form codebook is in Appendix 2.

Briefly, the items extracted consisted of basic study characteristics (author, title, journal, journal type, year, region, study registration, sample size), intervention details, eligibility information, participant selection details, study outcomes, and risk of bias assessment.

For the current review, additional information was extracted and previously extracted information was reassessed and recoded. This included information on eligibility criteria related to cancer, demographics of participants including age, sex, and race/ethnicity, details of the intervention, and primary outcome information.

Information regarding timing of study implementation was collected when available, including enrollment start date, enrollment end date, or study completion date. The latest date available of enrollment start date,

enrollment end date, or study completion date was considered the study implementation date. This was compared to publication date in order to determine if performing analyses based on publication date accurately reflected the spread of studies over time.

Due to the broad eligibility criteria, the behavioral health interventions captured in this sample of trials varied greatly in type. Articles also provided varying level of detail in regards to the intervention being tested. These factors led to difficulty in describing and comparing the interventions across trials in a meaningful way.

We adapted Cunningham's classification³³ that has been used in previous reviews of behavioral interventions among cancer patients³⁴ to describe the level of participant involvement, from very little personal contribution to the active participation by the individual.

Interventions were categorized in this regard from least to most active involvement as informational/educational (the participant receives education about a topic), social support (involved participants interacting with each other in pairs or groups), skills training (teaching a definitive skill, rehearsal and performance element), and psychotherapeutic (therapy and counseling rooted in psychological theory). Interventions could also have compound involvement if they had main components of differing involvement levels.

Separately, we categorized interventions based on the focus or target of the intervention. These categories were adapted from previous literature examining effectiveness of behavioral interventions.³⁵ Interventions were categorized as having a focus on physical (treatment or disease-related symptoms such as pain or side effects), functional (life skills, physical activity, diet, sleep, occupational), social (communication, relationships), or psychological (mood, fear and anxiety, depression, self-esteem). Interventions could also have a compound focus, meaning the intervention had more than one topic of focus representing several categories.

We attempted to describe the range of primary outcomes seen in the review. In reviewing the included trials we found that oftentimes the primary outcome was not clearly identified, meaning that readers were not able to identify the single outcome, measurement, and time point that was the primary outcome of the trial. For trials in which the primary outcome was not clearly identified, we attempted to select a primary outcome for purposes of analysis. When possible, readers selected the first outcome listed at the latest time point to be the primary outcome of the trial for purposes of this review.

Primary outcomes were categorized by focus using the same categories used for intervention focus (physical, functional, social, or psychological).³³

Assessment of risk of bias in included studies

The risk of bias of each included study was assessed for the purposes of describing and evaluating the body of evidence that conclusions are based on, and assessing if study quality and inclusion of MCC are associated. This risk of bias was assessed using a modified version of the Cochrane Collaboration's Risk of Bias tool.³⁶ The Risk of Bias tool (Table 2) includes six domains: selection bias, performance bias, detection bias, attrition bias, reporting bias, and other bias.²⁵ For each item the reader categorizes the article as low risk of bias, high risk of bias, or unclear risk of bias. The unclear risk of bias option allows the reader to indicate when the article has not provided enough information to make a judgement, which helps to separate out issues of study reporting quality from actual study quality.

The Cochrane Collaboration's Risk of Bias tool was adapted slightly for use in this review. Specifically, the "other bias" domain was removed as this element was unnecessary under the scope of this review. The inclusion of this domain is beneficial when considering more specialized review questions with a more homogenous group of studies, therefore it was not necessary for our generalized approach. For attrition bias, readers made judgements on whether attrition was appropriately reported and explained but they did not assess the actual amount of attrition. As this review encompassed studies on a wide variety of populations, interventions, and outcomes, it was not feasible for readers to have enough domain specific knowledge to adequately assess how the amount of attrition in each study may have affected the outcome.

TABLE 2. Cochrane Collaboration's Risk of Bias tool		
Domain	Support for judgment	Review authors' judgement
<i>Selection bias.</i>		
Random sequence generation.	Describe the method used to generate the allocation sequence in sufficient detail to allow an assessment of whether it should produce comparable groups.	Selection bias (biased allocation to interventions) due to inadequate generation of a randomized sequence.
Allocation concealment.	Describe the method used to conceal the allocation sequence in sufficient detail to determine whether intervention allocations could have been foreseen in advance of, or during, enrollment.	Selection bias (biased allocation to interventions) due to inadequate concealment of allocations prior to assignment.
<i>Performance bias.</i>		
Blinding of participants and personnel	Describe all measures used, if any, to blind study participants and personnel from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective.	Performance bias due to knowledge of the allocated interventions by participants and personnel during the study.
<i>Detection bias.</i>		
Blinding of outcome assessment	Describe all measures used, if any, to blind outcome assessors from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective.	Detection bias due to knowledge of the allocated interventions by outcome assessors.
<i>Attrition bias.</i>		
Incomplete outcome data	Describe the completeness of outcome data for each main outcome, including attrition and exclusions from the analysis. State whether attrition and exclusions were reported, the numbers in each intervention group (compared with total randomized participants), reasons for attrition/exclusions where reported, and any re-inclusions in analyses performed by the review authors.	Attrition bias due to amount, nature or handling of incomplete outcome data.
<i>Reporting bias.</i>		
Selective reporting.	State how the possibility of selective outcome reporting was examined by the review authors, and what was found.	Reporting bias due to selective outcome reporting.
<i>Other bias.</i>		
Other sources of bias.	State any important concerns about bias not addressed in the other domains in the tool.	Bias due to problems not covered elsewhere in the table.

We created a risk of bias score (range -6 to 6) for each article by combining the six risk of bias items (low risk of bias = -1, unclear risk of bias = 0, high risk of bias = 1).

Dealing with missing data and duplicate studies

As a key part of this review was to assess the reporting of information regarding MCC, no attempts were made to contact authors for additional information. For each extraction item there was an option to list it as “not reported.” Duplicate studies were not included, and only one primary report of trials was used.

Data synthesis

Analyses performed were determined by specifics of data extracted (both type and volume) from selected studies. Basic study characteristics were summarized to describe the studies, populations, interventions, and outcomes reported and to verify that a representative sample was created. Exploratory data analysis using summary statistics such as mean, proportion, and frequency was performed to assess inclusion of participants with MCC and based on summarizing the key questions for each trial (Table 1). Statistical tests (ANOVA or t-tests) were performed to assess the impact of time period on key outcomes. No meta-analyses were performed, thus statistical measures of heterogeneity were unnecessary.³⁷

Analysis was performed using SAS 9.4 (SAS Institute, Cary, NC).

E. Results

Description of studies

Results of the search

The search process for the original review identified 343,123 records through database searching (PubMed, Embase). After removing duplicate records we were left with 190,554 records to assess for eligibility. Using the sampling strategy previously described, we screened 41,186 records in order to select 600 studies.

For the current review, we screened the 600 studies included in the original review and identified 101 that met the new eligibility criteria. 499 studies were excluded for not specifically targeting cancer.

The results of the screening process is presented in Figure 1.

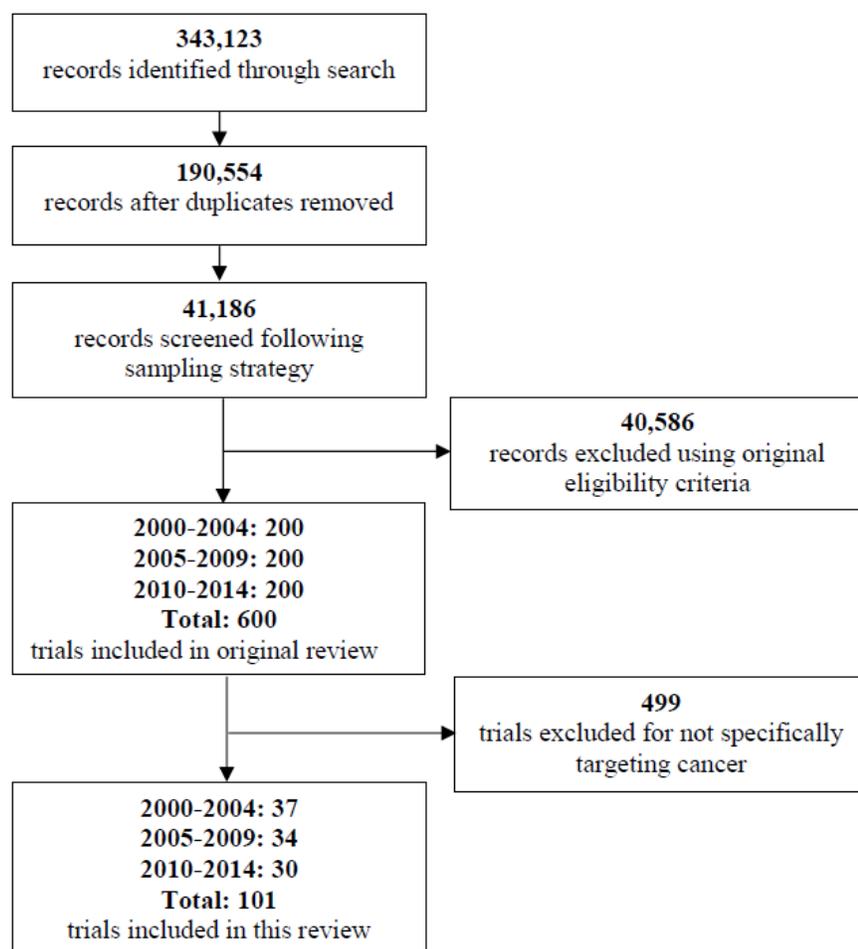


FIGURE 1. **Flow diagram**

Included studies

A list of the 101 included studies can be found in Appendix 3. A summary of the basic study characteristics of 101 included studies is presented in Table 3 with each category stratified by time period. This review included 18,699 participants across 101 trials. Trials were from North America (56.4%) and elsewhere (43.6%). While trial registration generally increased over time, only 16 out of the 101 trials (15.8%) were registered on clinicaltrials.gov or some other registry. Sample size of included trials varied greatly (from 8-3,286) and the median was 109 participants.

We examined study quality using the Cochrane Collaboration Risk of Bias Tool (Table 4). In all time periods a large percentage of trials were categorized as unclear risk of bias in various bias categories, indicating that the trial did not report adequate information to assess the risk of bias. Overall mean risk of bias score (range -6 to 6, with a lower score indicating lower risk of bias) decreased from -1.7 (1.5) in the earliest time period to -2.9 (1.5) in the latest time period, which was a significant decrease in risk of bias over time ($p < 0.001$).

TABLE 3. Study characteristics

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Journal Type				
General Medicine	6 (16.2)	2 (5.9)	1 (3.3)	9 (8.9)
Specialty	31 (83.8)	32 (94.1)	29 (96.7)	92 (91.1)
Funding Source				
Industry	2 (5.4)	1 (2.9)	0 (0.0)	3 (3.0)
Non-Industry	30 (81.1)	31 (91.2)	28 (93.3)	89 (88.1)
Not reported	7 (18.9)	3 (8.8)	2 (6.7)	12 (11.9)
Region				
North America	24 (64.9)	18 (52.9)	15 (50.0)	57 (56.4)
Other	13 (35.1)	16 (47.1)	15 (50.0)	44 (43.6)
Registered^a				
Yes	0 (0.0)	5 (14.7)	11 (36.7)	16 (15.8)
No	37 (100.0)	29 (85.3)	19 (63.3)	85 (84.2)
Total participants	4490	9324	4885	18699
Sample size^b (median (range))	108 (8 – 279)	116 (23 – 3286)	82 (10 – 1461)	109 (8 – 3286)

^aRegistered at clinicaltrials.gov or other registry

^bN=100, sample size unable to be determined for 1 trial

TABLE 4. Risk of bias

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Random sequence generation (selection bias)				
Low risk of bias	15 (40.5)	23 (67.6)	21 (70.0)	59 (58.4)
High risk of bias	0 (0.0)	0 (0.0)	2 (6.7)	2 (2.0)
Unclear risk of bias	22 (59.5)	11 (32.4)	7 (23.3)	40 (39.6)
Allocation sequence concealment (selection bias)				
Low risk of bias	6 (16.2)	12 (35.3)	13 (43.3)	31 (30.7)
High risk of bias	1 (2.7)	1 (2.9)	1 (3.3)	3 (3.0)
Unclear risk of bias	30 (81.1)	21 (61.8)	16 (53.3)	67 (66.3)
Blinding of participants and personnel (performance bias)				
Low risk of bias	4 (10.8)	4 (11.8)	4 (13.3)	12 (11.9)
High risk of bias	5 (13.5)	8 (23.5)	6 (20.0)	19 (18.8)
Unclear risk of bias	28 (75.7)	22 (64.7)	20 (66.7)	70 (69.3)
Blinding of outcome assessment (detection bias)				
Low risk of bias	6 (16.2)	16 (47.1)	11 (36.7)	33 (32.7)
High risk of bias	4 (10.8)	0 (0.0)	2 (6.7)	6 (5.9)
Unclear risk of bias	27 (73.0)	18 (52.9)	17 (56.7)	62 (61.4)
Incomplete outcome data (attrition bias)				
Low risk of bias	23 (62.2)	32 (94.1)	24 (80.0)	79 (78.2)
High risk of bias	8 (21.6)	2 (5.9)	4 (13.3)	14 (13.9)
Unclear risk of bias	6 (16.2)	0 (0.0)	2 (6.7)	8 (7.9)
Selective outcome reporting (reporting bias)				
Low risk of bias	32 (86.5)	34 (100.0)	30 (100.0)	96 (95.0)
High risk of bias	5 (13.5)	0 (0.0)	0 (0.0)	5 (5.0)
Unclear risk of bias	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Risk of bias score (mean (sd))	-1.7 (1.5)	-3.2 (1.2)	-2.9 (1.3)	-2.6 (1.5)

Description of participants

Participant sex was reported in 100 of 101 trials (Table 5). Of the 101 included trials, almost half (47.5%) included women only. Nine trials (8.9%) included men only. Overall, 69.2% of participants were women.

Race/ethnicity information was provided in only 45 (44.6%) trials (Table 6). Information was reported variably, with the most common information given being number of participants in the categories of white and other. Most participants were white (70.0%).

Participant age information was reported in 100 trials (Table 7). Age information was reported as mean (85.1%), median (38.6%), or range (43.6%). Across trials reporting this information, mean age was 57.9 years, with a range of 18.0 to 94.0 years.

TABLE 5. Participant sex

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Trials including single sex				57 (56.4)
Women only	16 (43.2)	19 (55.9)	13 (43.3)	48 (47.5)
Men only	7 (18.9)	0 (0.0)	2 (6.7)	9 (8.9)
Sex*				
Women	2816 (63.3)	7080 (75.9)	2931 (61.5)	12827 (69.2)
Men	1635 (36.7)	2244 (24.1)	1832 (38.5)	5711(30.8)

*participant sex reported in 100 of 101 trials, includes 18538 participants

TABLE 6. Race/ethnicity

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Trials reporting race/ethnicity	15 (40.5)	16 (47.1)	13 (43.3)	45 (44.6)
Participant race (N=43)				
White	1247 (68.9)	2288 (75.8)	893 (59.5)	4428 (70.0)
Other	563 (31.1)	729 (24.2)	607 (40.5)	1899 (30.0)

TABLE 7. Age

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Trials reporting age information (N=100)				
Mean	28 (75.7)	31 (91.2)	27 (90.0)	86 (85.1)
Median	11 (29.7)	14 (41.2)	14 (46.7)	39 (38.6)
Range	16 (43.2)	17 (50.0)	11 (36.7)	44 (43.6)
Participant age				
Mean	56.9	57.6	59.0	57.9
Range	21.0-86.0	18.0-93.0	19.0-94.0	18.0-94.0

Intervention details

Twenty trials were testing an intervention focused on physical activity, diet, or weight (19.8%). Only one trial (1.0%) tested an intervention focused on tobacco habits, and two trials focused on adherence to disease management (2.0%).

Interventions were categorized by level of participant involvement (Table 8) and intervention focus (Table 9). Level of participant involvement varied. Interventions most commonly involved skills training (38.6%) or were informational/educational (31.7%).

Interventions were multidimensional and were more likely to have compound focus (58.4%) rather than a singular focus (41.6%). The most common intervention focus was functional (60.8%). The most common intervention focus combination was physical and functional (8.9%).

TABLE 8. Participant involvement in intervention

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Informational/educational	14 (37.8)	8 (23.5)	10 (33.3)	32 (31.7)
Social support	6 (16.2)	2 (5.9)	3 (10.0)	11 (10.9)
Skills training	10 (27.0)	14 (41.2)	15 (50.0)	39 (38.6)
Psychotherapeutic intervention	8 (21.6)	11 (32.4)	3 (10.0)	22 (21.8)

TABLE 9. Intervention focus

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Physical	22 (59.5)	19 (55.9)	16 (53.3)	57 (56.4)
Functional	19 (51.4)	23 (67.6)	19 (63.3)	61 (60.8)
Social	17 (45.9)	13 (38.2)	8 (26.7)	38 (37.6)
Psychological	24 (64.9)	16 (47.1)	11 (36.7)	51 (50.5)
Compound focus	23 (22.8)	21 (20.8)	15 (50.0)	59 (58.4)

Primary outcome details

Readers attempted to identify the primary outcome of each trial. In 26.7% of trials the primary outcome was clearly stated, meaning that readers were able to identify the single outcome, measurement, and time point that was the primary outcome of the trial. In trials where multiple outcomes were identified in the article as “primary,” readers selected a primary outcome using the process described in the methods. In 36.6% of trials, there was not a primary outcome either clearly stated or able to be selected by the reader.

Of those trials where a primary outcome was clearly stated or could be selected, the most common type of outcome was physical (48.4%) or psychological (42.2%). Primary outcomes also measured multiple components (7.8%). This was a result of outcomes based on scores that encompass factors relating to multiple areas, for example the Functional Assessment of Cancer Therapy overall score which measures physical, social/family, emotional, and functional well-being.³⁸

TABLE 10. Primary outcome details

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Primary outcome clearly stated	4 (10.8)	12 (35.3)	11 (36.7)	27 (26.7)
Primary outcome clearly stated OR selected by reader	19 (51.4)	22 (64.7)	23 (76.7)	64 (63.4)
Primary outcome category				
Physical	7 (36.8)	14 (63.6)	10 (43.5)	31 (48.4)
Functional	8 (42.1)	2 (9.1)	3 (13.0)	13 (20.3)
Social	5 (26.3)	0 (0.0)	2 (8.7)	7 (10.9)
Psychological	10 (52.6)	6 (27.3)	11 (47.8)	27 (42.2)
Multicomponent	4 (21.0)	0 (0.0)	1 (4.3)	5 (7.8)

Eligibility

Inclusion criteria

We explored eligibility criteria related to cancer. Trials targeted different types of cancer (Table 11). Most trials (59.4%) targeted participants with one specific type of cancer. Forty-four trials (43.6%) targeted breast cancer specifically. A quarter of trials (25.7%) targeted cancer broadly, meaning participants could have any time of cancer to meet eligibility criteria. The rest (14.9%) targeted a specific, defined list of several cancer types.

We categorized trials based on timing of enrollment of participants as related to their cancer (Table 12). Trials most commonly enrolled participants after primary treatment (48.5%). Trials also enrolled participants during primary treatment (27.7%) or prior to treatment (16.8%). If trials enrolled participants at multiple time points they were categorized in the latest time point category in which they enrolled participants.

TABLE 11. Specific cancer targeted

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Single cancer site	23 (62.2)	20 (58.8)	17 (56.7)	60 (59.4)
Breast	15 (40.5)	17 (50.0)	12 (4.0)	44 (43.6)
Other	8 (21.6)	3 (8.8)	5 (16.7)	16 (15.8)
Multiple cancer sites	6 (16.2)	5 (14.7)	4 (13.3)	15 (14.9)
Any cancer site	8 (21.6)	9 (26.5)	9 (30.0)	26 (25.7)

TABLE 12. Time of enrollment

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Prior to treatment	4 (10.8)	5 (14.7)	8 (26.7)	17 (16.8)
During primary treatment	14 (37.8)	9 (26.5)	5 (16.7)	28 (27.7)
After primary treatment	17 (45.9)	18 (52.9)	14 (46.7)	49 (48.5)
Unable to determine	2 (5.4)	2 (5.9)	3 (10.0)	7 (6.9)

Study date

Study implementation date was determined for 55 (54.5%) of trials. The remaining 46 trials (45.5%) did not report enrollment start date, enrollment end date, or study completion date. The time from study implementation to publication date ranged from 1 year to 11 years. The median time to publication was 3 years. Only 2 studies reporting implementation date were published more than 5 years after their implementation date, which suggests that using publication date is appropriate for describing the spread of studies over time. The studies published from 2000-2004 were implemented from 1997-2002. The studies published from 2005-2009 were implemented from 1996-2007. The studies published from 2010-2014 were implemented from 2006-2012.

Exclusion criteria

Exploratory analyses were also performed to evaluate exclusion criteria of participants with MCC by specific or general criteria, presence of exclusion justification, specific conditions excluded, and exclusion based on age.

Chronic conditions

We evaluated exclusion criteria related to MCC using the methods we developed in the original review.²⁰ We assessed exclusion criteria and categorized criteria related to chronic conditions as specific (mentioned individual conditions by name or diagnostic criteria), general (used a general term), or vague (criteria that likely resulted in exclusion of specific conditions) (Table 13). Across all time periods, 59.4% of trials used general, specific, or vague exclusion criteria (Table 14). General exclusions for MCC were used rarely (5.0%). Specific conditions were excluded in 23.8% of trials. Half of trials (50.5%) included vague exclusion criteria. Of those trials that mentioned specific, general or vague exclusion criteria, we considered if a justification was provided. We found that over all time periods 35.0% of trials with exclusions for specific, general, or vague exclusions justified these exclusions by citing an individual’s ability to perform the intervention or otherwise mentally or physically participate in the trial (Table 15).

TABLE 13. Definitions and examples of exclusion categories

Type of exclusion	Definition	Examples
<i>Specific</i>	exclusion of individual conditions by name or diagnostic criteria	Type 2 diabetes, HbA1c > 7%
<i>General</i>	exclusion of MCC by general term	chronic disease, additional comorbidities
<i>Vague</i>	exclusion criteria that is likely to result in exclusion of specific conditions, but do not provide enough information to determine which conditions would be excluded	serious medical problems, acute medical complications, unstable medical conditions, mental illness, too ill

TABLE 14. Exclusion of MCC

	2000-2004 (N=37)	2005-2009 (N=34)	2010-2014 (N=30)	Total (N=101)
Specific exclusion	8 (21.6)	11 (32.4)	5 (16.7)	24 (23.8)
General exclusion	2 (5.4)	3 (8.8)	0 (0.0)	5 (5.0)
Vague exclusion	20 (54.1)	19 (55.9)	12 (40.0)	51 (50.5)
Specific OR general exclusion	9 (24.3)	12 (35.3)	5 (16.7)	26 (25.7)
Specific OR general OR vague exclusion	21 (56.8)	25 (73.5)	14 (46.7)	60 (59.4)

TABLE 15. Exclusions justified by ability to perform/participate

	2000-2004	2005-2009	2010-2014	All years
Specific exclusion	2 (25.0)	3 (27.3)	1 (20.0)	6 (25.0)
General exclusion	0 (0.0)	1 (33.3)	0 (0.0)	1 (20.0)
Vague exclusion	6 (30.0)	8 (42.1)	5 (41.7)	19 (37.3)

Specific OR general exclusion	2 (22.2)	3 (25.0)	1 (20.0)	6 (10.0)
Specific OR general OR vague exclusion	6 (28.6)	10 (40.0)	5 (35.7)	21 (35.0)

Additionally, we assessed which conditions were excluded most often when conditions were named specifically (Table 16). We found that substance abuse disorders (5.9%), dementia (5.9%), and depression (5.9%) were the most common specific exclusions named explicitly.

TABLE 16. Specific conditions excluded

	Trials exclude this condition
Substance Abuse Disorders	6 (5.9)
Dementia	6 (5.9)
Depression	6 (5.9)
Congestive Heart Failure	4 (4.0)
Chronic Kidney Disease	4 (4.0)
Stroke	3 (3.0)
Schizophrenia	2 (2.0)
Chronic Obstructive Pulmonary Disease	2 (2.0)
Coronary Artery Disease	2 (2.0)
Diabetes	2 (2.0)
Arthritis	2 (2.0)
Hyperlipidemia	1 (1.0)
Hypertension	1 (1.0)
Cardiac Arrhythmias	0 (0.0)
Asthma	0 (0.0)
Hepatitis	0 (0.0)
Human Immunodeficiency Virus	0 (0.0)
Autism Spectrum Disorder	0 (0.0)
Osteoporosis	0 (0.0)
All conditions	24 (23.8)

Age

We evaluated the use of a maximum age as exclusion criteria in trials. As the prevalence of MCC increases with age,² excluding by age may indirectly exclude MCC. We found that 17.8% of trials had exclusions based on a maximum age and in these trials the median age used for exclusion was 65.0 years (Table 17). In these trials maximum age ranged from 50 to 75 years. Ten trials (10.0%) had a maximum age of 65 or younger. No trials in 2010-2014 excluded participants over a certain age, compared to 21.6% of trials published from 2000-2004 and 29.4% of trials published from 2005-2009 (Table 18).

TABLE 17. Age exclusion

	N (%)
Maximum age	
No	83 (82.2)
Yes	18 (17.8)
Maximum age (years)	
Mean	65.6
Median	65.0
Range	50-75

TABLE 18. Age exclusion over time

	2000-2004 N=37	2005-2009 N=34	2010-2014 N=30
Maximum age			
No	29 (78.4)	24 (70.6)	30 (100.0)
Yes	8 (21.6)	10 (29.4)	0 (0.0)
Mean age limit (years)	65.0	66.0	--

Behavioral risk factors

We also examined behavioral risk factors or conditions used in exclusion criteria that may have resulted in exclusion of MCC (Table 19). Nine trials (8.9%) used any behavioral factor for exclusion criteria, including criteria related to physical activity, tobacco use, weight, other substance abuse, alcohol use, or diet. Exclusions based on these risk factors may have been likely to exclude people at higher risk for MCC (e.g., smoked >10 packs a year) but also in some cases excluded those with lower risk of MCC (e.g., “already performing >150 min of moderate vigorous exercise per week”).

TABLE 19. Behavioral risk factor exclusion

Exclusions for behavioral factors	N (%)
Any behavioral factor	9 (8.9)
Physical activity	4 (4.0)
Smoking or tobacco use	2 (2.0)
Weight	2 (2.0)
Other substance abuse	2 (2.0)
Alcohol use	2 (2.0)
Diet	1 (1.0)

Participant screening

We reviewed if trials including exclusion criteria related to MCC reported the number of potential participants excluded for these reasons. Of 26 trials that excluded participants using either general or specific criteria, 3 (11.5%) actually reported the number of people excluded for this reason (Table 20). This could be because the trial did not report the number of people excluded during screening, or because numbers given were only for combined eligibility criteria (such as number of people meeting exclusion criteria overall). Furthermore, 42 of 101 trials (41.6%) did not present a flow diagram of participants that allows readers to see the flow of participants through the trial (Table 21).

TABLE 20. Participant screening

	N (%)
General exclusions (N=5), # reported	0 (0.0)
Specific exclusions (N=24), # reported	3 (12.5)
General OR specific exclusions (N=26), # reported	3 (11.5)

TABLE 21. Flow diagram

	2000-2004 N=37	2005-2009 N=34	2010-2014 N=30	Total N=101
Flow diagram present in article				
Yes	11 (29.7)	23 (67.6)	25 (83.3)	59 (58.4)
No	26 (70.3)	11 (32.4)	5 (16.7)	42 (41.6)

Participant characteristics

We considered MCC information reported in participant characteristics to determine if trials actually included participants with MCC, and if so, could the prevalence of MCC in the trial be determined. We categorized a trial as reporting the presence of MCC if there was any information given from which it could be determined that conditions additional to the index condition existed. This was further categorized into general description (a measure related to chronic conditions in general, such as mean number of comorbidities, percentage of participants with specific number of comorbidities, etc.) or specific description (a measure related to a specific comorbidity). Overall, 26.7% of trials reported the presence of MCC through a specific (15.8%) or general (14.9%) description (Table 22). This increased over time from 18.9% in 2000-2004 to 36.7% in 2010-2014.

Of those trials that reported including MCC, the prevalence of MCC (by general measure or by prevalence of specific conditions) was reported in 95.7% of trials. Of trials reporting specific comorbidities of the index conditions, the mean number of additional conditions reported was 1.75 (Table 23).

Of the 15 trials that gave a general description of the presence of MCC, 93.3% reported some measure of MCC (Table 25). These measures were most often the mean number of MCC per participant (53.3%) or the number of or percentage of participants with MCC (53.3%). The Charlson Comorbidity Index (CCI), which predicts the ten-year mortality for a patient who may have a range of comorbid conditions,³⁹ provides a standardized way to report a general measure of MCC and may be more useful than reporting individual specific conditions. However, the CCI was reported less often than other general measures of MCC (13.3%).

TABLE 22. Trials reporting presence of MCC (specific conditions or general measure)

	2000-2004 N=37	2005-2009 N=34	2010-2014 N=30	Total N=101
Condition specific description	4 (10.8)	4 (11.8)	8 (26.7)	16 (15.8)
General description	3 (8.1)	6 (17.6)	6 (20.0)	15 (14.9)
Specific OR general description	7 (18.9)	9 (26.5)	11 (36.7)	27 (26.7)

TABLE 23. When MCC are reported, is the prevalence reported?

	Yes
Condition specific description (N=16)	12 (75.0)
General description (N=15)	14 (93.3)
Specific OR general description (N=27)	22 (95.7)

TABLE 24. Additional specific conditions are reported

	N (%)
Number of conditions reported (N=16)	
Mean	1.75
Median	1
Range	0 - 4

TABLE 25. General measures of MCC

General description reported (n=15)	N (%)
Any type of measure used	14 (93.3)
Mean number of MCC per participant	8 (53.3)
Number or percentage of participants	4 (26.7)
Charlson Comorbidity Index	2 (13.3)

Study analysis

We assessed if presence of comorbidities was considered in the analysis of the trial outcomes. Comorbidities were considered in analysis in only 7.9% of all trials (Table 26).

TABLE 26. Considering comorbidities in analysis

Used in analysis	N (%)
All trials (n=101)	
Yes	8 (7.9)
No	93 (92.1)

Stratification by type of cancer targeted and enrollment timing

Forty-four trials (43.6%) focused specifically on breast cancer trials, as compared to trials focused on other specific cancers or multiple types of cancer. Overall, breast cancer trials had slightly fewer specific, general, or vague exclusions (56.8%) than trials targeting other cancers (61.4%). Specific exclusions were less common among breast cancer trials (29.5%) as compared to trials targeting other cancers (19.3%).

However, breast cancer trials were more likely to have a maximum age (25.0%) as compared to other trials (15.9%), and those breast cancer trials had a lower maximum age (63.2 years) than other trials (69.3 years).

Trials targeting cancers other than breast were more likely to report presence of MCC (29.8%) as compared to trials targeting breast cancer (22.7%).

Stratification by enrollment timing showed that trials that enrolled participants during treatment were less likely to have specific, general, or vague exclusions (57.1%) as compared to enrollment after treatment (61.2%) or before treatment (70.6%). Use of a maximum age and specific maximum age used was similar in all categories. Trials that enrolled after treatment were more likely to report presence of MCC (34.7%) as compared to those that enrolled before treatment (17.6%) or during treatment (10.7%).

TABLE 27. Comparison of trials targeting breast cancer and trials targeting other cancers

	Breast cancer N=44	Other cancers or multiple cancers N=57
Eligibility criteria		
Exclusions for MCC		
Specific exclusion	13 (29.5)	11 (19.3)
General exclusion	3 (6.8)	2 (3.5)
Vague exclusion	20 (45.5)	31 (54.4)
Specific OR general exclusion	14 (31.8)	12 (45.0)
Specific OR general OR vague exclusion	25 (56.8)	35 (61.4)
Maximum age	11 (25.0)	7 (15.9)
Mean maximum age (years)	63.2	69.3
Participant characteristics		
Trials reporting presence of MCC		
Condition specific description	7 (15.9)	9 (15.8)
General description	4 (9.1)	11 (19.3)
Specific OR general description	10 (22.7)	17 (29.8)

TABLE 28. Comparison of trials based on enrollment timing

	Prior to treatment N=17	During treatment N=28	After treatment N=49
Eligibility criteria			
Exclusions for MCC			
Specific exclusion	2 (11.8)	8 (28.6)	12 (24.5)
General exclusion	1 (5.9)	1 (3.6)	3 (6.1)
Vague exclusion	11 (64.7)	11 (39.3)	28 (57.1)
Specific OR general exclusion	3 (17.6)	9 (32.1)	12 (24.5)
Specific OR general OR vague exclusion	12 (70.6)	16 (57.1)	30 (61.2)
Maximum age	3 (17.6)	5 (17.9)	8 (16.3)
Mean maximum age (years)	65.0	66.0	65.0
Participant characteristics			
Trials reporting presence of MCC			
Condition specific description	1 (5.9)	1 (3.6)	11 (22.4)
General description	2 (11.8)	2 (7.1)	10 (20.4)
Specific OR general description	3 (17.6)	3 (10.7)	17 (34.7)

Comparison to broader review

We compared the subset of cancer trials to the overall set of trials targeting 20 chronic conditions (Table 29). The cancer trials had fewer specific exclusions (23.8% vs 42.5%), but similar general exclusions (5.0% vs 6.7%) and vague exclusions (50.5% vs 48.0%). Cancer trials were less likely to use a maximum age as exclusion (17.8% vs 27.8%), but when a maximum age was present it was slightly lower than for the overall group (65.6 years vs 66.8 years).

Fewer cancer trials reported the presence of MCC in participant characteristics as compared to the broader set of trials (26.7% vs 35.8%).

TABLE 29. Comparison of cancer trials to overall set of trials

	Cancer trials N=101	Overall trials N=600
Eligibility criteria		
Exclusions for MCC		
Specific exclusion	24 (23.8)	255 (42.5)
General exclusion	5 (5.0)	40 (6.7)
Vague exclusion	51 (50.5)	288 (48.0)
Specific OR general exclusion	26 (25.7)	270 (45.0)
Specific OR general OR vague exclusion	60 (59.4)	410 (68.3)
Maximum age	18 (17.8)	167 (27.8)
Mean maximum age (years)	65.6	66.8
Participant characteristics		
Trials reporting presence of MCC		
Condition specific description	16 (15.8)	172 (28.7)
General description	15 (14.9)	68 (11.3)
Specific OR general description	27 (26.7)	215 (35.8)

F. Discussion

In this review, we found that in a representative sample of RCTs targeting cancer survivors and testing behavioral health interventions published over 15 years (2000-2014), trials frequently exclude individuals with MCC due to specific, general, or vague exclusion criteria, and exclusion criteria based on factors correlated with MCC, such as age. When MCC are excluded, details of participant screening is usually not provided, which limits the understanding of the extent to which potential participants were excluded for MCC. When trials reported that some participants had MCC, the prevalence of MCC either by general measure or by individual conditions is often not specified, which limits the full understanding of the population represented in these trials.

As in our previous review, we categorized MCC information as specific, general, or vague. Vague descriptions were the least informative, as it was impossible to determine how these related to MCC, and more specifically, which chronic conditions were likely to have been excluded by vague exclusion criteria. General and specific descriptions could be more or less informative depending on their context. For example, when general exclusion criteria were used they were rarely defined in regards to which conditions they referred. Given that there is not an agreed upon definition of chronic condition,²¹ unless general descriptions of MCC were clearly defined, assumptions about which conditions would be included in that description were necessary. Specific exclusion criteria may be more informative than general exclusion criteria in that individual conditions are named, but information given by specific conditions only creates difficulty in considering the relationship of conditions to each other. Particularly in participant characteristics, when information was given by individual specific conditions only, it was impossible to gain an overall picture of

the presence and extent of MCC in the trial population when information was given by individual conditions only.

Overall, our ability to describe the inclusion of MCC in these trials was complicated by the limited reporting of information regarding MCC. When information about MCC was reported, either in eligibility criteria or participant characteristics, the level of detail given varied greatly, which limited our ability to make conclusions across the set of trials.

We found that quality of trial reporting is an overall issue not limited to MCC information. In the risk of bias assessment, across categories many trials received an unclear risk of bias rating, indicating that the report did not provide appropriate information to judge the risk. As these categories were assessing the most common areas of bias, we would expect for these basic details to be explicit in a trial report. Similarly, in many trials it was difficult to identify the primary outcome. Improving standards for reporting and increasing trial registration may help to standardize and improve trial performance and reporting.

In comparing the results of this review of cancer trials to our overall review considering trials targeting a range of chronic conditions,²⁰ we find many similarities. Overall, the cancer trials had fewer exclusions for MCC when considering specific, general, or vague exclusions. This seems to be due to a less frequent use of specific exclusions. However, use of vague exclusions is still common, and seen in half of the cancer trials. However, even though exclusions for MCC were not as common, fewer cancer trials reported presence of MCC in their trials as compared to the broader group of trials. However, due to the lack of reporting of MCC information, it is difficult to conclude if this is actually due to the lower representation of MCC in cancer trials or the lower likelihood of reporting this information.

Our review confirms results from previous reviews that comorbidities are often used as exclusion criteria in trials targeting participants with chronic conditions, including but not limited to cancer.^{10,12,14} Maximum age limits are common.^{10,18} General terms rather than specific conditions are used in eligibility often,¹⁴ and vague or ambiguous terms are used as well.¹⁷ Trials often do not describe the presence of comorbidities in the population, and consideration of comorbidities in analysis is rare.¹⁰

The strengths of this review include the large volume of RCTs assessed (n=101) and the representativeness of our sample in regards to behavioral health trials published from 2000-2014. Our sample was created from a comprehensive search performed in multiple databases with extensive search terms performed by a medical librarian with expertise in systematic reviews. By not limiting inclusion to higher impact journals as previous reviews have done, we ensured that our sample was representative of the literature. Our sampling strategy resulted in a broad sample of the literature over the past 15 years that varied in population addressed, intervention component, and study risk of bias, which gave us a wide view of behavioral health interventions. In all aspects of this review we followed established best methods for systematic reviews.²⁵ This included an appropriate and replicable search strategy, screening of results for inclusion by two independent reviewers to ensure no relevant reports were missed, and extraction of data from each article by two independent reviewers to ensure quality of data. We assessed the inclusion of MCC in a new population of trials by focusing on behavioral health interventions targeting cancer survivors specifically. We extracted a large volume of information from each trial and developed a framework for assessing the inclusion and reporting of MCC in eligibility, screening, selection, and analysis.

Although defining and focusing on a specific list of 20 chronic conditions was a strength of our review, it may have resulted in the inability to consider information from trials presented in ways that did not

correspond with our conditions. For example, if trials reported participant characteristics using more broad or vague categories of conditions that we could not link to the 20 conditions or to an overall measure of MCC, we may have missed relevant information. Additionally, we were limited in the analyses that we were able to perform. We were limited to broad sample statistics rather than more sophisticated analyses or meta-analysis due to the variation in the amount and format of relevant information in these trials.

Based on the results of this review, behavioral health trials targeting cancer survivors often exclude MCC, and rarely report sufficient information to fully assess the presence of MCC. Collectively these factors make it difficult to judge the appropriateness of applying trial results to the broader population. We recommend that behavioral health research among cancer survivors that both considers individuals with MCC and reports the involvement of MCC appropriately should emerge as an NCI priority in order to ensure the evidence base of behavioral health interventions for cancer survivors is based on a representative population.

G. References

1. Parekh AK, Barton MB. The challenge of multiple comorbidity for the US health care system. *Jama*. Apr 7 2010;303(13):1303-1304.
2. National Center for Health Statistics. Health, United States, 2014: With Special Feature on Adults Aged 55–64. 2015.
3. Ortman JM, Velkoff VA, Hogan H. An aging nation: the older population in the United States. *Washington, DC: US Census Bureau*. 2014:25-1140.
4. Bluethmann SM, Mariotto AB, Rowland JH. Anticipating the “Silver Tsunami”: prevalence trajectories and comorbidity burden among older cancer survivors in the United States. *AACR*; 2016.
5. Edwards BK, Noone A-M, Mariotto AB, et al. Annual Report to the Nation on the Status of Cancer, 1975-2010, Featuring Prevalence of Comorbidity and Impact on Survival among Persons with Lung, Colorectal, Breast or Prostate Cancer. *Cancer*. 12/16 2014;120(9):1290-1314.
6. Bellizzi KM, Rowland JH. Role of comorbidity, symptoms and age in the health of older survivors following treatment for cancer. *Aging Health*. 2007/10/01 2007;3(5):625-635.
7. Baker F, Haffer SC, Denniston M. Health-related quality of life of cancer and noncancer patients in Medicare managed care. *Cancer*. Feb 01 2003;97(3):674-681.
8. Colditz GA, Wolin KY, Gehlert S. Applying what we know to accelerate cancer prevention. *Sci Transl Med*. Mar 28 2012;4(127):127rv124. 3343638:
9. Gehlert S, Colditz GA. Cancer disparities: unmet challenges in the elimination of disparities. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. Sep 2011;20(9):1809-1814. 3321217:
10. Boyd CM, Vollenweider D, Puhan MA. Informing evidence-based decision-making for patients with comorbidity: availability of necessary information in clinical trials for chronic diseases. *PloS one*. 2012;7(8):e41601. PMC3411714:
11. Fortin M, Dionne J, Pinho G, Gignac J, Almirall J, Lapointe L. Randomized controlled trials: do they have external validity for patients with multiple comorbidities? *Annals of family medicine*. Mar-Apr 2006;4(2):104-108. PMC1467012:
12. Jadad AR, To MJ, Emara M, Jones J. Consideration of multiple chronic diseases in randomized controlled trials. *JAMA: the journal of the American Medical Association*. 2011;306(24):2670-2672.
13. Ritchie CS, Zulman DM. Research priorities in geriatric palliative care: multimorbidity. *Journal of palliative medicine*. Aug 2013;16(8):843-847. PMC3717194:
14. Van Spall HG, Toren A, Kiss A, Fowler RA. Eligibility criteria of randomized controlled trials published in high-impact general medical journals: a systematic sampling review. *Jama*. Mar 21 2007;297(11):1233-1240.
15. Kenning C, Coventry PA, Bower P. Self-management interventions in patients with long-term conditions: a structured review of approaches to reporting inclusion, assessment, and outcomes in multimorbidity. *2014*. 2014-08-28 2014;4(1):9.
16. Townsley CA, Selby R, Siu LL. Systematic review of barriers to the recruitment of older patients with cancer onto clinical trials. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. May 01 2005;23(13):3112-3124.
17. Schmidt AF, Groenwold RH, van Delden JJ, et al. Justification of exclusion criteria was underreported in a review of cardiovascular trials. *Journal of clinical epidemiology*. Jun 2014;67(6):635-644.

18. Zulman DM, Sussman JB, Chen X, Cigolle CT, Blaum CS, Hayward RA. Examining the evidence: a systematic review of the inclusion and analysis of older adults in randomized controlled trials. *Journal of general internal medicine*. 2011;26(7):783-790.
19. du Vaure CB, Dechartres A, Battin C, Ravaud P, Boutron I. Exclusion of patients with concomitant chronic conditions in ongoing randomised controlled trials targeting 10 common chronic conditions and registered at ClinicalTrials. gov: a systematic review of registration details. *BMJ open*. 2016;6(9):e012265.
20. Stoll C, Izadi S, Colditz G. *Systematic Reviews to Inform Research and Treatment for Multi-Morbidities*. Frederick, MD: Prepared by Washington University School of Medicine in St. Louis under Subagreement 14X262 of Contract No. HHSN261200800001E; October 2015.
21. Goodman RA, Posner SF, Huang ES, Parekh AK, Koh HK. Defining and Measuring Chronic Conditions: Imperatives for Research, Policy, Program, and Practice. *Preventing Chronic Disease*. 2013;10:E66.
22. Michie S, Richardson M, Johnston M, et al. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*. Aug 2013;46(1):81-95.
23. Edwards P, Clarke M, DiGuseppi C, Pratap S, Roberts I, Wentz R. Identification of randomized controlled trials in systematic reviews: accuracy and reliability of screening records. *Statistics in medicine*. 2002;21(11):1635-1640.
24. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research Electronic Data Capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of biomedical informatics*. Apr 2009;42(2):377-381. Pmc2700030:
25. Higgins J, Green S. *Cochrane handbook for systematic reviews of interventions version 5.1. 0*. 2008.
26. Buscemi N, Hartling L, Vandermeer B, Tjosvold L, Klassen TP. Single data extraction generated more errors than double data extraction in systematic reviews. *Journal of clinical epidemiology*. 2006;59(7):697-703.
27. Jones AP, Remington T, Williamson PR, Ashby D, Smyth RL. High prevalence but low impact of data extraction and reporting errors were found in Cochrane systematic reviews. *Journal of clinical epidemiology*. Jul 2005;58(7):741-742.
28. Lugtenberg M, Burgers JS, Clancy C, Westert GP, Schneider EC. Current Guidelines Have Limited Applicability to Patients with Comorbid Conditions: A Systematic Analysis of Evidence-Based Guidelines. *PLoS ONE*. 2011;6(10):e25987.
29. To MJ, Jones J, Emara M, Jadad AR. Are reports of randomized controlled trials improving over time? A systematic review of 284 articles published in high-impact general and specialized medical journals. *PLoS One*. 2013;8(12):e84779. Pmc3877340:
30. Mundi S, Chaudhry H, Bhandari M. Systematic review on the inclusion of patients with cognitive impairment in hip fracture trials: a missed opportunity? *Canadian journal of surgery. Journal canadien de chirurgie*. Aug 2014;57(4):E141-145. Pmc4119128:
31. Ronconi JM, Shiner B, Watts BV. Inclusion and exclusion criteria in randomized controlled trials of psychotherapy for PTSD. *Journal of psychiatric practice*. Jan 2014;20(1):25-37.
32. Paeck T, Ferreira ML, Sun C, Lin CW, Tiedemann A, Maher CG. Are older adults missing from low back pain clinical trials? A systematic review and meta-analysis. *Arthritis care & research*. Aug 2014;66(8):1220-1226.

33. Cunningham AJ. Group psychological therapy for cancer patients. *Supportive Care in Cancer*. 1995;3(4):244-247.
34. Rehse B, Pukrop R. Effects of psychosocial interventions on quality of life in adult cancer patients: meta analysis of 37 published controlled outcome studies. *Patient education and counseling*. 2003;50(2):179-186.
35. Meyer TJ, Mark MM. Effects of psychosocial interventions with adult cancer patients: a meta-analysis of randomized experiments. American Psychological Association; 1995.
36. Higgins JP, Altman DG, Gøtzsche PC, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *BMJ: British Medical Journal*. 2011;343.
37. Higgins J, Thompson SG. Quantifying heterogeneity in a meta-analysis. *Statistics in medicine*. 2002;21(11):1539-1558.
38. Cella DF, Tulsky DS, Gray G, et al. The Functional Assessment of Cancer Therapy scale: development and validation of the general measure. *Journal of clinical oncology*. 1993;11(3):570-579.
39. Charlson ME, Pompei P, Ales KL, MacKenzie CR. A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. *Journal of chronic diseases*. 1987;40(5):373-383.

Appendix

1. Search strategy

PubMed

("Young Adult"[Mesh] OR "Adult"[Mesh] OR "Middle Aged"[Mesh] OR "Aged"[Mesh] OR "Aged, 80 and over"[Mesh] OR "Frail Elderly"[Mesh] OR "adult" OR "adults" OR Middle age*[tiab] OR Geriatric* OR Aged OR Elder* OR Nonagenarian* OR Octogenarian* OR Centenarian* OR "senior citizen" OR "senior citizens" OR senium OR "very old" OR "oldest old" OR "older patient" OR "older patients" OR "older people") AND ("Controlled Clinical Trial"[Publication Type] OR "Randomized Controlled Trial"[Publication Type]) AND ("Chronic Disease"[Mesh] OR "Chronic Disease" OR "chronic illness" OR "chronic Diseases" OR "Chronic Illnesses" OR "Chronically Ill" OR "Arthritis"[Mesh] OR "Arthritis" OR "Arthritides" OR "articular tuberculosis" OR "bone joint tuberculosis" OR "joint tuberculosis" OR "osteo-articular tuberculosis" OR "osteoarticular tuberculosis" OR "tuberculosis joint" OR "osteoarticular tuberculosis" OR "Psoriasis Arthropathica" OR "Caplan's Syndrome" OR "Felty Syndrome" OR "Rheumatoid Nodule" OR "Rheumatoid Nodules" OR "Rheumatoid Nodulosis" OR "Rheumatoid Vasculitis" OR "Sjogren Syndrome" OR "Sjogrens Syndrome" OR "Sjogren's Syndrome" OR "Sicca Syndrome" OR "Adult-Onset Still's Disease" OR "Adult Onset Still's Disease" OR "Adult-Onset Stills Disease" OR "Adult-Onset Still Disease" OR "Adult Onset Still Disease" OR "Chondrocalcinosis" OR "Calcium Pyrophosphate Dihydrate Deposition" OR "Pseudogout" OR "Chondrocalcinosis" OR "Gout" OR "Gouts" OR "gouty" OR "Osteoarthritis" OR "Osteoarthritis" OR "Osteoarthrosis" OR "Osteoarthroses" OR "Periarthritis" OR "Periarthritides" OR "Rheumatic Fevers" OR "Inflammatory Rheumatism" OR "Rheumatic Fever" OR "Rheumatic Nodule" OR "Rheumatic Nodules" OR "Aschoff Bodies" OR "Aschoff Bodies" OR "Wissler's Syndrome" OR "Wissler-Fanconi Syndrome" OR "Wissler Fanconi Syndrome" OR "Subsepsis Allergica" OR "Subsepsis Hyperergica" OR "Sacroiliitis" OR "Spondylarthropathies" OR "Spondylarthropathy" OR "Bechterew Disease" OR "Bechterew's Disease" OR "Bechterews Disease" OR "Ankylosing Spondyloarthritis" OR "Rheumatoid Spondylitis" OR "Spondylarthritis Ankylopoietica" OR "Ankylosing Spondylarthritis" OR "Ankylosing Spondylarthritis" OR "Ankylosing Spondylitis" OR "Marie-Struempell Disease" OR "Marie Struempell Disease" OR "Coxarthrosis" OR "Coxarthroses" OR "hip arthrosis" OR "hip joint arthrosis" OR "cox arthrosis" OR "malum coxae senilis" OR "arthrosynovitis" OR "joint inflammation" OR "oligoarthritis" OR "antisynthetase syndrome" OR "Behcet disease" OR "Behcet's syndrome" OR "Behcet syndrome" OR "Behcets disease" OR "Behcets syndrome" OR "Blau syndrome" OR "Blau's syndrome" OR "systemic granulomatosis" OR "Jabs syndrome" OR "inflammatory joint disease" OR "polyarthritis" OR "Asthma"[Mesh] OR Asthma* OR "Child Development Disorders, Pervasive"[Mesh] OR "Pervasive Child Development Disorders" OR "Pervasive Development Disorders" OR "Pervasive Development Disorder" OR "PDD"[tiab] OR "PDDNOS"[tiab] OR Autis* OR Asperger* OR "Kanner syndrome" OR "kanner's syndrome" OR "childhood disintegrative disorder" OR "Rett syndrome" OR "rett disease" OR "Rett's syndrome" OR "Retts syndrome" OR "Neoplasms"[Mesh] OR neoplas* OR tumor OR tumors OR tumour OR tumours OR cancer OR cancers OR cancerous OR leukemia* OR mycosis OR leukaemia* OR Leucocythaemia* OR Leucocythemia* OR Chloroma* OR incidentaloma* OR "Myeloid Sarcoma" OR "Myeloid Sarcomas" OR "Granulocytic Sarcoma" OR "Granulocytic Sarcomas" OR "blast cell crisis" OR "blast crisis" OR "blastic crisis" OR carcinoma OR adenocarcinoma OR carcinomatous OR carcinosis OR choriocarcinoma OR "chorio epithelioma" OR chorioepithelioma OR "chorion epithelioma" OR "chorioncarcinoma" OR "chorionepithelioma" OR trophocarcinoma OR cystadenocarcinoma OR cystosarcoma OR "cysto sarcoma" OR "giant fibroadenoma" OR teratocarcinoma OR lymphoma* OR "Hodgkin disease" OR "hodgkin's disease" OR "hodgkins disease" OR "lymphogranuloma malignum" OR lymphogranulomatosis OR "malignant lymphogranuloma" OR "morbus hodgkin" OR "adenolymphoma" OR "cystadenoma lymphomatosum" OR "lymphoid malignancies" OR

“lymphoid malignancy” OR immunocytoma OR lymphosarcoma OR “granuloma fungoides” OR “Sezary syndrome” OR “Sezary disease” OR “syndrome sezary” OR astrocytoma OR astroglioma OR oligoastrocytoma OR “pleomorphic xanthoastrocytoma” OR cholangiocarcinoma OR “malignant cholangioma” OR carcinogenesis OR neoplasmogenesis OR oncogenesis OR tumorigenesis OR “tumorigenic effect” OR “tumourigenesis” OR “tumourigenic effect” OR osteosarcoma OR glioma OR ependymblastoma OR ependymoma OR glioblastoma OR gliosarcoma OR medulloblastoma OR oligodendroglioma OR subependymoma OR blastoma OR blastomere OR blastomeres OR oligodendrocytosis OR carcinoid* OR microcarcinoma OR “childhood malignancy” OR “paediatric malignancy” OR “pediatric malignancy” OR melanoma* OR “malignant lentigo” OR “dubreuilh melanosis” OR “hutchinson melanotic freckle” OR “hutchinson's melanotic freckle” OR “lentigo maligna” OR “melanosis circumscripta praecancerosa” OR “melanosis circumscripta precancerosa” OR “melanotic freckle” OR nevocarcinoma OR “melano ameloblastoma” OR “melanotic adamantinoma” OR “melanotic ameloblastoma” OR “melanotic progonoma” OR progonoma OR retinoblastoma OR neuroblastoma OR ganglioneuroblastoma OR sympathicoblastoma OR sympathicogonioma OR sympathoblastoma OR neuroepithelioma OR neurocytoma OR retinocytoma OR hepatoma OR hepatoblastoma OR hepatocarcinogenesis OR hepatocarcinoma OR “schneeberg disease” OR “Pancoast syndrome” OR “Pancoast's syndrome” OR macroglobulinemia OR mesothelioma OR celothelioma OR mesotheliomatosis OR myeloma OR myeloplaxoma OR esthesioneuroblastoma OR “nasal glial heterotopia” OR dysgerminoma OR “call exner body” OR gynandroblastoma OR “demons meigs syndrome” OR rhinopharyngioma OR pheochromocytoma OR “medullary paraganglioma” OR phaeochromocytoma OR pinealoblastoma OR pinealocytoma OR pinealoma OR pineocytoma OR “hypophyseal adenoma” OR “pituitary adenoma” OR “pituitary gland adenoma” OR “pituitary microadenoma” OR rhabdomyosarcoma OR thymoma OR leiomyosarcoma OR neuroblastoma OR "Arrhythmias, Cardiac"[Mesh] OR Arrhythmia* OR Arrhythmia* OR “cardiac dysrhythmia” OR proarrhythmia OR “ectopic rhythm” OR “heart dysrhythmia” OR “heart rhythm disorder” OR tachycardia OR bradycardia OR “nodal rhythm” OR “nodal rhythms” OR brachycardia OR bradyarrhythmia OR bradycardia OR “low heart rate” OR “carotid sinus syndrome” OR “sinus reflex” OR “cardiac channelopathy” OR “cardiac channelopathies” OR “Brugada syndrome” OR “Brugada's syndrome” OR “long QT syndrome” OR “Andersen syndrome” OR “Andersen Tawil syndrome” OR “Andersen's syndrome” OR “Jervell and Lange-Nielsen syndrome” OR “Jervell Lange Nielsen syndrome” OR “Jervell Lange Nielson syndrome” OR “Jervell-Lange Nielsen syndrome” OR “Romano-Ward syndrome” OR “progressive cardiac conduction defect” OR “Lenegre disease” OR “Lenegre's disease” OR “short QT syndrome” OR “short QT interval syndrome” OR “cardiopulmonary arrest” OR “sinus node disease” OR “sinus node dysfunction” OR “sick sinus syndrome” OR “sinus arrest” OR “atrial arrest” OR “atrial asystole” OR “atrial standstill” OR “cardiac sinus arrest” OR “sinoatrial arrest” OR “sinus node arrest” OR “sinus node syndrome” OR “heart fibrillation” OR “cardiac fibrillation” OR “atrium fibrillation” OR “atrial fibrillation” OR “auricular fibrillation” OR “auricular fibrillation” OR “conduction defect” OR “conduction defects” OR “conduction disease” OR “conduction diseases” OR “conduction disorder” OR “conduction disorders” OR “conduction disturbance” OR “conduction disturbances” OR cardiopalmus OR palpitation OR proarrhythmia OR parasystole OR “hyperkinetic heart syndrome” OR "Renal Insufficiency, Chronic"[Mesh] OR “chronic kidney disorder” OR “chronic nephropathy” OR “chronic renal disease” OR “chronic kidney failure” OR “End Stage Kidney Disease” OR “End Stage Renal Disease” OR “End Stage Renal Failure” OR “Chronic Renal Failure” OR “ESRD”[tiab] OR “Frasier Syndrome” OR “Chronic Renal Insufficiencies” OR “Chronic Renal Insufficiency” OR “Chronic Kidney Insufficiency” OR “Chronic Kidney Diseases” OR “Chronic Kidney Disease” OR “Chronic Renal Diseases” OR "Pulmonary Disease, Chronic Obstructive"[Mesh] OR “COPD”[tiab] OR “Chronic Obstructive Pulmonary Disease” OR “COAD”[tiab] OR “Chronic Obstructive Airway Disease” OR “Chronic Obstructive Lung Disease” OR

“Chronic Airflow Obstructions” OR “Chronic Airflow Obstruction” OR “chronic obstructive bronchitis” OR “chronic obstructive bronchopulmonary disease” OR “chronic obstructive pulmonary disorder” OR “chronic obstructive respiratory disease” OR “Chronic Bronchitis” OR “Pulmonary Emphysema” OR “pulmonary Emphysemas” OR “Focal Emphysema” OR “Panacinar Emphysema” OR “Panlobular Emphysema” OR “Centriacinar Emphysema” OR “Centrilobular Emphysema” OR “Edema, Cardiac”[Mesh] OR “Heart Failure, Diastolic”[Mesh] OR “Heart Failure, Systolic”[Mesh] OR “cardiac congestive failure” OR “congestive cardiac failure” OR “congestive heart insufficiency” OR “congestive heart failure” OR “cor pulmonale” OR “pulmonary cardiac disease” OR “pulmonary heart disease” OR “diastolic heart failure” OR “heart failure with preserved ejection fraction” OR “heart edema” OR “cardiac edema” OR “cardiac oedema” OR “heart oedema” OR “systolic heart failure” OR “Coronary Artery Disease”[Mesh] OR “Coronary Artery Diseases” OR “Coronary Artery Disease” OR “Coronary Arteriosclerosis” OR “Coronary Atherosclerosis” OR “coronary disease” OR “Dementia”[Mesh] OR Dementia* OR Amentia* OR Alzheimer* OR CADASIL OR “Lewy body” OR “DNTC”[tiab] OR “diffuse neurofibrillary tangles with calcification” OR “frontotemporal lobar degeneration” OR “FTD”[tiab] OR “FTLD”[tiab] OR “Pick's complex”[tiab] OR “Pick complex”[tiab] OR fvFTD[tiab] OR bvFTD[tiab] OR “primary progressive aphasia” OR “Mesulam syndrome” OR “PPA”[tiab] OR tvFTD[tiab] OR “progressive nonfluent aphasia” OR “non-fluent progressive aphasia” OR “nonfluent progressive aphasia” OR “PNFA”[tiab] OR “progressive non-fluent aphasia” OR “AIDS encephalopathy” OR “HIV 1 associated cognitive motor complex” OR “HIV associated cognitive motor complex” OR “HIV associated neurocognitive disorder” OR “HIV encephalopathy” OR “HIV Encephalopathies” OR “Huntington Disease” OR “Huntington chorea” OR “chorea Huntington” OR “chronic progressive chorea” OR “hereditary chorea” OR “Huntington's chorea” OR “Huntington's disease” OR “Kluver Bucy”[tiab] OR “Kluver Bucy”[tiab] OR “Kluver-Bucy”[tiab] OR “mental deterioration” OR “cognitive deterioration” OR “mental regression” OR “neuronal ceroid lipofuscinosis” OR “amaurotic familial idiocy” OR “amaurotic idiocy” OR “Batten disease” OR “batten mayou disease” OR “familial amaurotic idiocy” OR “neuronal ceroid-lipofuscinoses” OR “neuronal ceroid-lipofuscinosis” OR “neuronal ceroidosis” OR “Pick disease” OR “pick syndrome” OR “prion disease” OR “bovine spongiform encephalopathy” OR “chronic wasting disease” OR “Creutzfeldt Jakob disease” OR “fatal familial insomnia” OR “Gerstmann Straussler Scheinker syndrome” OR “kuru” OR “scrapie” OR “transmissible mink encephalopathy” OR “transmissible neurodegenerative disease” OR “subacute spongiform” OR “transmissible spongiform encephalopathy” OR “pseudodementia” OR “Rett syndrome” OR “rett disease” OR “Retts syndrome” OR senility OR “senile confusion” OR “senile psychosis” OR tauopathy OR tauopathies OR “Kohlschutter-Tonz Syndrome” OR “Depressive Disorder”[Mesh] OR “Depression”[Mesh] OR depression* OR “depressive disease” OR “depressive disorder” OR “depressive episode” OR “depressive illness” OR “depressive personality disorder” OR “depressive state” OR “depressive symptom” OR “depressive symptoms” OR “depressive syndrome” OR Melancholia OR “depressive Disorders” OR “Depressive Neuroses” OR “Depressive Neurosis” OR “Depressive Syndrome” OR “Depressive Syndromes” OR “Involutional Psychoses” OR “Involutional Psychosis” OR “Treatment Resistant Depressive” OR “treatment Resistant Depressives” OR “Dysthymic Disorders” OR “Dysthymic Disorder” OR “Premenstrual Dysphoric Disorder” OR “Premenstrual Dysphoric Syndrome” OR “Seasonal Affective Disorder” OR “Seasonal Mood Disorder” OR “Seasonal Mood Disorders” OR “Seasonal Affective Disorders” OR “bipolar disorder” OR “bipolar affective disorder” OR “bipolar illness” OR “bipolar psychosis” OR “manic depressive” OR “bipolar mania” OR cyclothymia OR “cyclothymic depressive” OR “cyclothymic disorder” OR “cyclothymic personality” OR “rapid cycling mood disorder” OR “depressive psychosis” OR dysphoria OR dysthymia OR “depressive reaction” OR “dysthymic disorder” OR “mental anorexia” OR “mental fatigue” OR melancholy OR “unipolar disorder” OR “Perry syndrome” OR “Diabetes Mellitus, Type 1”[Mesh] OR “Diabetes Mellitus, Type 2”[Mesh] OR “insulin-Dependent Diabetes Mellitus”

OR "Juvenile Onset Diabetes" OR "Type 1 Diabetes" OR "Sudden-Onset Diabetes Mellitus" OR "Diabetes Mellitus Type I" OR "IDDM"[tiab] OR "Insulin Dependent Diabetes" OR "Brittle Diabetes" OR "Ketosis-Prone Diabetes Mellitus" OR "Autoimmune Diabetes" OR "DIDMOAD"[tiab] OR "Wolfram Syndrome" OR "NIDDM" OR "Maturity Onset Diabetes" OR "Adult Onset Diabetes" OR "Ketosis Resistant Diabetes Mellitus" OR "Non Insulin Dependent Diabetes Mellitus" OR "Stable Diabetes Mellitus" OR "MODY"[tiab] OR "Type 2 Diabetes" OR "Noninsulin Dependent Diabetes" OR "Lipoatrophic Diabetes" OR diabetic* OR "diabetes mellitus type I" OR "early onset diabetes" OR "iddm"[tiab] OR "juvenile diabetes" OR "ketoacidotic diabetes" OR "labile diabetes mellitus" OR "type I diabetes" OR "diabetes mellitus type 2" OR "diabetes mellitus type ii" OR "diabetes type 2" OR "diabetes type II" OR "insulin independent diabetes" OR "ketosis resistant diabetes" OR "type II diabetes" OR "Hepatitis, Chronic"[Mesh] OR "Chronic Hepatitis" OR "Chronic Active Hepatitis" OR "Chronic Persistent Hepatitis" OR "Chronic Delta Hepatitis" OR "Autoimmune Hepatitides" OR "Chronic Hepatitides" OR "Autoimmune Hepatitis" OR "chronic hepatopathy" OR "HIV"[Mesh] OR "AIDS Virus" OR "AIDS Viruses" OR HTLV-III OR "Human Immunodeficiency Virus" OR "Human Immunodeficiency Viruses" OR "Human T Cell Lymphotropic Virus Type III" OR "Human T Lymphotropic Virus Type III" OR "Human T-Cell Leukemia Virus Type III" OR "Human T Cell Leukemia Virus Type III" OR "Human T-Cell Lymphotropic Virus Type III" OR "Human T-Lymphotropic Virus Type III" OR "LAV-HTLV-III" OR "Lymphadenopathy-Associated Virus" OR "Lymphadenopathy Associated Virus" OR "Acquired Immune Deficiency Syndrome Virus" OR "Acquired Immunodeficiency Syndrome Virus" OR "HIV-1" OR "HIV-2" OR "aids associated retrovirus" OR "aids associated virus" OR "aids related virus" OR "immunodeficiency viruses" OR "lymphadenopathy associated retrovirus" OR "Hyperlipidemias"[Mesh] OR Hyperlipemia OR Hyperlipemias OR Hyperlipidemia OR Lipidemia OR Lipemia OR Hypercholesterolemia OR "Elevated Cholesterol" OR "Hypercholesteremia" OR hyperlipaemia OR hyperlipidaemia OR hyperlipidemias OR hyperlipidemic OR lipaemia OR lipidaemia OR cholesterolemia OR hypercholesterolaemia OR "Burger Grutz syndrome" OR hyperbetalipoproteinaemia OR hyperbetalipoproteinemia OR hypercholesterolemic OR "familial hyperlipoproteinaemia type ii" OR "familial hyperlipoproteinemia type ii" OR "hyper low density lipoproteinaemia" OR "hyper low density lipoproteinemia" OR "hypercholesterolaemic xanthomatosis" OR "hyperlipoproteinaemia type ii" OR "hyperlipoproteinemia type 2" OR "hyperlipoproteinemia type ii" OR "Idl receptor disorder" OR "tendinous xanthomatosis" OR "xanthoma tendinosum" OR "xanthoma tuberosum" OR hypertriglyceridemia OR hypertriglyceridaemia OR "triglyceride storage disease" OR triglyceridemia OR "hypertriglyceridemic waist" OR Hyperlipoproteinemias OR "Hypertension"[Mesh] OR Hypertension* OR Hypertensive OR "High Blood Pressure" OR "High Blood Pressures" OR "Goldblatt Syndrome" OR "apparent mineralocorticoid excess syndrome" OR "Gordon syndrome" OR "Gordon's syndrome" OR "Liddle syndrome" OR "Liddle's syndrome" OR "metabolic syndrome" OR "insulin resistance syndrome" OR "ocular ischaemic syndrome" OR "ocular ischemic syndrome" OR "orthostatic hypertension" OR "posterior encephalopathy" OR "posterior leucoencephalopathy" OR "posterior leucoencephalopathy" OR "posterior leucoencephalopathy" OR "posterior reversible encephalopathy" OR "posterior reversible leucoencephalopathy" OR "posterior reversible leucoencephalopathy" OR "PRES"[tiab] OR "RPLS"[tiab] OR pre-hypertension OR "goldblatt kidney" OR nephrosclerosis OR "renal arteriosclerosis" OR "renal atherosclerosis" OR "Osteoporosis"[Mesh] OR Osteoporosis OR Osteoporoses OR "Age-Related Bone Loss" OR "Age-Related Bone Losses" OR "female athlete triad" OR "Perimenopausal Bone Loss" OR "Postmenopausal Bone Loss" OR "posttraumatic osteopenia" OR "Sudeck atrophy" OR "sudeck dystrophy" OR "Sudeck Leriche syndrome" OR "Sudeck syndrome" OR "Sudeck's atrophy" OR "Schizophrenia"[Mesh] OR Schizophrenia* OR Schizophrenic* OR "Dementia Praecox" OR hebephrenia OR paraphrenia OR "Delusional Disorder" OR "Delusional Disorders" OR "schizoaffective psychosis" OR "schizo affective disorder" OR "schizo affective psychosis" OR "schizoaffective disorder" OR "schizophreniform disorder"

OR "schizophreniform psychosis" OR "Shared Paranoid Disorder" OR "Shared Psychotic Disorder" OR "Shared Psychotic Disorders" OR "Shared Paranoid Disorders" OR "Folie a Deux" OR "Folie a Trois" OR "Brain Ischemia"[Mesh] OR "Chronic stroke" OR "brain ischemia" OR "brain ischaemia" OR "cerebral blood circulation disorder" OR "cerebral circulation disorder" OR "cerebral circulatory disorder" OR "cerebral ischaemia" OR "cerebral ischemia" OR "cerebrovascular ischaemia" OR "cerebrovascular ischemia" OR "ischaemic brain disease" OR "ischaemic encephalopathy" OR "ischaemic stroke" OR "ischemic brain disease" OR "ischemic encephalopathy" OR "ischemic stroke" OR "neural ischaemia" OR "neural ischemia" OR "cerebral vasospasm" OR "intracranial vasospasm" OR "Call-Fleming syndrome" OR "brain hypoxia ischaemia" OR "brain hypoxia ischemia" OR "brain hypoxic ischemic injury" OR "cerebral hypoxia ischaemia" OR "cerebral hypoxia ischemia" OR "cerebral hypoxic ischaemic injury" OR "cerebral hypoxic ischemic damage" OR "cerebral hypoxic ischemic injuries" OR "cerebral hypoxic ischemic injury" OR "cerebral ischaemia hypoxia" OR "cerebral ischemia hypoxia" OR "hypoxic ischaemic brain damage" OR "hypoxic ischaemic brain injury" OR "hypoxic ischaemic cerebral damage" OR "hypoxic ischaemic cerebral injury" OR "hypoxic ischemic brain damage" OR "hypoxic ischemic brain injuries" OR "hypoxic ischemic brain injury" OR "hypoxic ischemic cerebral damage" OR "hypoxic ischemic cerebral injury" OR "ischaemic attack" OR "ischemic attack" OR "ischemic seizure" OR "Brain Infarction" OR "Brain Stem Infarctions" OR "Brain Stem Infarction" OR "Brainstem Infarctions" OR "Brainstem Infarction" OR "Brainstem Stroke" OR "Claude Syndrome" OR "Weber Syndrome" OR "Millard Gublar Syndrome" OR "Top of the Basilar Syndrome" OR "Foville Syndrome" OR "Lateral Medullary Syndrome" OR "Lateral Medullary Syndromes" OR "Posterior Inferior Cerebellar Artery Syndrome" OR "Wallenberg's Syndrome" OR "Wallenberg Syndrome" OR "Dorsolateral Medullary Syndrome" OR "Lateral Bulbar Syndrome" OR "Cerebral Infarction" OR "Cerebral Infarctions" OR "Subcortical Infarction" OR "Subcortical Infarctions" OR "Choroidal Artery Infarction" OR "Cerebral Artery Infarction" OR "Cerebral Artery Infarctions" OR "ACA Infarction" OR "ACA Infarctions" OR "Cerebral Artery Stroke" OR "Cerebral Artery Syndrome" OR "MCA Infarction" OR "Cerebral Artery Thrombosis" OR "PCA Infarction" OR "Substance-Related Disorders"[Mesh] OR alcoholism OR "drug dependence" OR "drug addiction" OR "Drug Habituation" OR "Drug Abuse" OR "Substance Abuse" OR "Substance Abuses" OR "Substance Dependence" OR "Substance Addiction" OR "Substance Use Disorders" OR "Substance Use Disorder" OR "Drug Dependence" OR "Drug Addiction" OR "substance abuser" OR "substance dependence" OR "amphetamine related disorders" OR "drug abuser" OR "drug problem" OR "needle sharing" OR "phencyclidine abuse" OR "alcohol addiction" OR "alcohol dependence" OR "alcohol dependents" OR "alcohol polyneuropathy" OR "alcohol dependent individual" OR "alcohol induced disorders" OR "alcohol related disorders" OR dipsomania* OR "ethanol dependence" OR "problem drinker" OR "problematic drinker" OR "analgesic abuse" OR doping OR "drug misuse" OR "inhalant abuse" OR "intravenous drug abuse" OR "intravenous drug user" OR "prescription drug diversion" OR "drug use disorder" OR "drug use disorders" OR "Alcohol Related Disorders" OR "Alcohol Related Disorder" OR "Alcohol Induced Disorders" OR "Alcohol Induced Disorder" OR "Alcohol Amnestic Syndrome" OR "Alcohol Induced Amnestic Syndrome" OR "Alcohol Induced Korsakoff Syndrome" OR "Alcohol Induced Persisting Amnestic Disorder" OR "Korsakoff Syndrome" OR "Korsakoff Psychosis" OR "Korsakoff Psychoses" OR "Alcoholic Neuropathy" OR "Alcoholic Neuropathies" OR "Alcoholic Polyneuropathies" OR "Alcoholic Polyneuropathy" OR "Alcoholic Polyneuritis" OR "Alcohol Induced Polyneuropathy" OR "Alcohol Related Polyneuropathy" OR "Alcohol Induced Peripheral Neuropathy" OR "Alcoholic Cardiomyopathy" OR "Fetal Alcohol Spectrum Disorders" OR "FASD"[tiab] OR "FASDs"[tiab] OR "Alcohol Related Birth Defects" OR "Alcohol Related Neurodevelopmental Disorder" OR "Fetal Alcohol Effects" OR "Fetal Alcohol Syndrome" OR "Alcoholic Liver Diseases" OR "Alcoholic Liver Disease" OR "Alcoholic Fatty Liver" OR "Alcoholic Steatohepatitis" OR "Chronic Alcoholic Hepatitis" OR "Alcoholic Liver Cirrhosis" OR "Alcoholic Cirrhosis" OR "Alcoholic

Hepatic Cirrhosis” OR “Alcoholic Pancreatitis” OR “Alcoholic Psychoses” OR “Chronic Alcoholic Intoxication” OR “Alcohol Abuse” OR “Amphetamine Related Disorders” OR “Amphetamine Abuse” OR “Amphetamine Addiction” OR “Amphetamine Dependence” OR “Cocaine Related Disorders” OR “Cocaine Related Disorder” OR “Cocaine Abuse” OR “Cocaine Dependence” OR “Cocaine Addiction” OR “Glue Sniffing” OR “Glue Sniffings” OR “Glue Abuse” OR “Marijuana Abuse” OR “Marihuana Abuse” OR “Hashish Abuse” OR “Cannabis Related Disorder” OR “Cannabis Abuse” OR “Cannabis Dependence” OR “Marijuana Dependence” OR “Opioid Related Disorders” OR “Opiate Dependence” OR “Opiate Addiction” OR “Narcotic Abuse” OR “Narcotic Dependence” OR “Narcotic Addiction” OR “Heroin Dependence” OR “Heroin Addiction” OR “Heroin Abuse” OR “Morphine Dependence” OR “Morphine Addiction” OR “Morphine Abuse” OR “PCP Abuse” OR “Angel Dust Abuse” OR “Substance Induced Psychoses” OR “Toxic Psychoses” OR “Drug Psychoses” OR “Intravenous Substance Abuse” OR “Parenteral Drug Abuse” OR “Tobacco Use Disorder” OR “Tobacco Use Disorders” OR “Nicotine Use Disorder” OR “Nicotine Use Disorders” OR “Tobacco Dependence” OR “Tobacco Dependences” OR “Nicotine Dependence” OR “alcoholic individual” OR “alcoholics” OR “alcoholic polyneuropathy” OR “ethanol dependence” OR “narcotic depression” OR “narcotism” OR “heroin addict” OR “heroinism” OR “morphine addict” OR “opiate addict” OR “opioid dependence” OR “opium addict” OR “opium addiction” OR “opium addiction” OR “benzodiazepine dependence” OR “benzodiazepine addiction” OR “cannabis addiction” OR “drug abuse pattern” OR “methamphetamine dependence” OR “toxicomania” OR “drug addict” OR “drug dependence” OR “drug dependency”)

Embase

‘controlled clinical trial’/it OR ‘randomized controlled trial’/it OR ‘controlled clinical trial’/exp OR ‘randomized controlled trial’/exp AND (‘young adult’/exp OR ‘adult’/exp OR ‘middle aged’/exp OR ‘aged’/exp OR ‘aged hospital patient’/exp OR ‘frail elderly’/exp OR ‘very elderly’/exp OR ‘geriatrics’/exp OR adult OR adults OR ‘Middle age’ OR ‘middle aged’ OR ‘middle ages’ OR geriatric* OR Aged OR Elder* OR ‘Oldest Old’ OR Nonagenarian* OR Octogenarian* OR Centenarian* OR ‘senior citizen’ OR ‘senior citizens’ OR senium OR ‘very old’ OR ‘older patients’ OR ‘older patient’ OR ‘older people’) AND (‘chronic disease’/exp OR ‘chronic disease’ OR ‘chronic illness’ OR ‘chronic Diseases’ OR ‘Chronic Illnesses’ OR ‘Chronically Ill’ OR ‘asthma’/exp OR asthma* OR ‘arthritis’/exp OR ‘Arthritis’ OR ‘Arthritides’ OR ‘arthrotuberculosis’ OR ‘articular tuberculosis’ OR ‘bone joint tuberculosis’ OR ‘white joint swelling’ OR ‘joint tuberculosis’ OR ‘osteo-articular tuberculosis’ OR ‘osteoarticular tuberculosis’ OR ‘tuberculosis joint’ OR ‘tuberculosis sacroileitis’ OR ‘osteoarticular tuberculosis’ OR ‘white swelling’ OR ‘Psoriasis Arthropathica’ OR ‘Juvenile-Onset Still Disease’ OR ‘Juvenile Onset Still Disease’ OR ‘Juvenile-Onset Stills Disease’ OR ‘Juvenile-Onset Stills Disease’ OR ‘Juvenile Onset Stills Disease’ OR ‘Caplan Syndromes’ OR ‘Caplans Syndrome’ OR ‘Caplans Syndrome’ OR ‘Felty Syndrome’ OR ‘Feltys Syndrome’ OR ‘Rheumatoid Nodule’ OR ‘Rheumatoid Nodules’ OR ‘Rheumatoid Nodulosis’ OR ‘Rheumatoid Noduloses’ OR ‘Rheumatoid Vasculitis’ OR ‘Rheumatoid Vasculitides’ OR ‘Sjogren Syndrome’ OR ‘Sjogrens Syndrome’ OR ‘Sjogrens Syndrome’ OR ‘Sicca Syndrome’ OR ‘Adult-Onset Stills Disease’ OR ‘Adult Onset Stills Disease’ OR ‘Adult-Onset Stills Disease’ OR ‘Adult-Onset Still Disease’ OR ‘Adult Onset Still Disease’ OR ‘Chondrocalcinosis’ OR ‘Calcium Pyrophosphate Dihydrate Deposition’ OR ‘Pseudogout’ OR ‘Chondrocalcinosis’ OR ‘Gout’ OR ‘Gouts’ OR ‘gouty’ OR ‘Osteoarthritis’ OR ‘Osteoarthritis’ OR ‘Osteoarthrosis’ OR ‘Osteoarthroses’ OR ‘Periarthritis’ OR ‘Periarthritides’ OR ‘Rheumatic Fevers’ OR ‘Inflammatory Rheumatism’ OR ‘Rheumatic Fever’ OR ‘Rheumatic Nodule’ OR ‘Rheumatic Nodules’ OR ‘Aschoff Bodies’ OR ‘Wisslers Syndrome’ OR ‘Wissler Syndrome’ OR ‘Wisslers Syndrome’ OR ‘Wissler-Fanconi Syndrome’ OR ‘Wissler Fanconi Syndrome’ OR ‘Subsepsis Allergica’ OR ‘Subsepsis Hyperergica’ OR ‘Sacroiliitis’ OR ‘Sacroiliitides’ OR ‘Spondylarthropathies’ OR ‘Spondylarthropathy’ OR ‘Bechterew Disease’ OR ‘Bechterews Disease’ OR ‘Bechterews Disease’ OR ‘Ankylosing Spondyloarthritis’ OR

'Ankylosing Spondyloarthritides' OR 'Rheumatoid Spondylitis' OR 'Spondylarthritis Ankylopoietica' OR 'Ankylosing Spondylarthritis' OR 'Ankylosing Spondylarthritis' OR 'Ankylosing Spondylitis' OR 'Marie-Struempell Disease' OR 'Marie Struempell Disease' OR 'Coxarthrosis' OR 'Coxarthroses' OR 'hip arthrosis' OR 'hip joint arthrosis' OR 'cox arthrosis' OR 'coxartherosis' OR 'hip osteo-arthritis' OR 'hip osteo-arthrosis' OR 'malum coxae senilis' OR 'arthrochondritis' OR 'arthrosynovitis' OR 'joint inflammation' OR 'oligoarthritis' OR 'antisynthetase syndrome' OR 'Behcet disease' OR 'Behcets syndrome' OR 'Behcet syndrome' OR 'behcet ulcer' OR 'Behcets disease' OR 'Behcets syndrome' OR 'Blau syndrome' OR 'arthrocutaneous granulomatosis' OR 'Blaus syndrome' OR 'Blau type familial granulomatosis' OR 'Blaus syndrome' OR 'systemic granulomatosis' OR 'Jabs disease' OR 'Jabs syndrome' OR 'inflammatory joint disease' OR 'polyarthritis' OR 'urate inflammation' OR 'arthragra' OR 'autism/exp' OR 'Pervasive Child Development Disorders' OR 'Pervasive Development Disorders' OR 'Pervasive Development Disorder' OR 'PDD' OR 'PDDNOS' OR 'Autism*' OR 'Asperger*' OR 'Kanner syndrome' OR 'kanners syndrome' OR 'childhood disintegrative disorder' OR 'Rett syndrome' OR 'morbus rett' OR 'rett disease' OR 'Retts syndrome' OR 'neoplasm/exp' OR 'neoplas*' OR 'tumor' OR 'tumors' OR 'tumour' OR 'tumours' OR 'cancer' OR 'cancers' OR 'cancerous' OR 'leukemi*' OR 'mycosis' OR 'leukaemi*' OR 'Leucocythaemia*' OR 'Leucocythemia*' OR 'Chloroma*' OR 'incidentaloma*' OR 'Myeloid Sarcoma' OR 'Myeloid Sarcomas' OR 'Granulocytic Sarcoma' OR 'Granulocytic Sarcomas' OR 'blast cell crisis' OR 'blast crisis' OR 'blastic crisis' OR 'carcinoma' OR 'adenocarcinoma' OR 'carcinomatous' OR 'carcinosis' OR 'choriocarcinoma' OR 'chorio epithelioma' OR 'chorioepithelioma' OR 'chorion epithelioma' OR 'chorioncarcinoma' OR 'chorionepithelioma' OR 'trophocarcinoma' OR 'cystadenocarcinoma' OR 'cystosarcoma' OR 'cysto sarcoma' OR 'giant fibroadenoma' OR 'teratocarcinoma' OR 'lymphoma*' OR 'Hodgkin disease' OR 'hodgkins disease' OR 'hodgkins disease' OR 'lymphogranuloma malignum' OR 'lymphogranulomatosis' OR 'malignant lymphogranuloma' OR 'morbus hodgkin' OR 'adenolymphoma' OR 'cystadenoma lymphomatosum' OR 'lymphoid malignancies' OR 'lymphoid malignancy' OR 'immunocytoma' OR 'lymphosarcoma' OR 'granuloma fungoides' OR 'Sezary syndrome' OR 'Sezary disease' OR 'syndrome sezary' OR 'astrocytoma' OR 'astroglioma' OR 'oligoastrocytoma' OR 'pleomorphic xanthoastrocytoma' OR 'cholangiocarcinoma' OR 'malignant cholangioma' OR 'carcinogenesis' OR 'neoplasmodgenesis' OR 'oncogenesis' OR 'tumorigenesis' OR 'tumorigenic effect' OR 'tumourigenesis' OR 'tumourigenic effect' OR 'osteosarcoma' OR 'glioma' OR 'ependymoblastoma' OR 'ependymoma' OR 'glioblastoma' OR 'gliosarcoma' OR 'medulloblastoma' OR 'oligodendroglioma' OR 'subependymoma' OR 'blastoma' OR 'blastomere' OR 'blastomeres' OR 'oligodendrocytosis' OR 'carcinoid*' OR 'microcarcinoma' OR 'childhood malignancy' OR 'paediatric malignancy' OR 'pediatric malignancy' OR 'melanoma*' OR 'malignant lentigo' OR 'dubreuilh melanosis' OR 'hutchinson melanotic freckle' OR 'hutchinsons melanotic freckle' OR 'lentigo maligna' OR 'melanosis circumscripta praecancerosa' OR 'melanosis circumscripta precancerosa' OR 'melanotic freckle' OR 'nevocarcinoma' OR 'melano ameloblastoma' OR 'melanotic adamantinoma' OR 'melanotic ameloblastoma' OR 'melanotic progonoma' OR 'progonoma' OR 'retinoblastoma' OR 'neuroblastoma' OR 'ganglioneuroblastoma' OR 'sympathicoblastoma' OR 'sympathicogonioma' OR 'sympathoblastoma' OR 'neuroepithelioma' OR 'neurocytoma' OR 'retinocytoma' OR 'hepatoma' OR 'hepatoblastoma' OR 'hepatocarcinogenesis' OR 'hepatocarcinoma' OR 'schneeberg disease' OR 'Pancoast syndrome' OR 'Pancoasts syndrome' OR 'macroglobulinemia' OR 'mesothelioma' OR 'celothelioma' OR 'mesotheliomatosis' OR 'myeloma' OR 'myeloplaxoma' OR 'esthesioneuroblastoma' OR 'nasal glial heterotopia' OR 'dysgerminoma' OR 'call exner body' OR 'gynandroblastoma' OR 'demons meigs syndrome' OR 'rhinopharyngioma' OR 'pheochromocytoma' OR 'medullary paraganglioma' OR 'phaeochromocytoma' OR 'pinealoblastoma' OR 'pinealocytoma' OR 'pinealoma' OR 'pineocytoma' OR 'hypophyseal adenoma' OR 'pituitary adenoma' OR 'pituitary gland adenoma' OR 'pituitary microadenoma' OR 'rhabdomyosarcoma' OR 'thymoma' OR 'leiomyosarcoma' OR 'nephroblastoma' OR 'heart arrhythmia/exp' OR 'Arrhythmia*' OR

Arrhythmia* OR 'cardiac dysrhythmia' OR proarrhythmia OR proarrhythmias OR 'ectopic heart rhythm' OR 'ectopic rhythm' OR 'heart aberrant conduction' OR 'heart dysrhythmia' OR 'heart ectopic beat' OR 'heart ectopic ventricle contraction' OR 'heart rhythm disorder' OR tachycardia OR bradycardia OR 'nodal rhythm' OR 'nodal rhythms' OR brachycardia OR bradyarrhythmia OR bradycardy OR bradycardia OR 'low heart rate' OR hypoarrhythmia OR 'carotid sinus syndrome' OR 'carotid cavernous syndrome' OR 'sinus caroticus syndrome' OR 'sinus reflex' OR 'weiss baker syndrome' OR 'cardiac channelopathy' OR 'cardiac channelopathies' OR 'Brugada syndrome' OR 'Brugadas syndrome' OR 'Brugadas syndrome' OR 'long QT syndrome' OR 'Andersen syndrome' OR 'Andersen Tawil syndrome' OR 'Andersen triad' OR 'Andersens syndrome' OR 'Andersens syndrome' OR 'Jervell and Lange-Nielsen syndrome' OR 'Jervell Lange Nielsen syndrome' OR 'Jervell Lange Nielson syndrome' OR 'Jervell Nielsen syndrome' OR 'Jervell-Lange Nielsen syndrome' OR 'Lange Nielson Jervell syndrome' OR 'Romano-Ward syndrome' OR 'Romano Ward ECG' OR 'progressive cardiac conduction defect' OR 'Lenegre disease' OR 'Lenegre syndrome' OR 'Lenegres disease' OR 'Lenegres syndrome' OR 'Lev Lenegre disease' OR 'short QT syndrome' OR 'short QT interval syndrome' OR 'cardiopulmonary arrest' OR 'sinus node disease' OR 'sinus node dysfunction' OR 'sick sinus syndrome' OR 'sinus arrest' OR 'atrial arrest' OR 'atrial asystole' OR 'atrial standstill' OR 'atrium standstill' OR 'cardiac sinus arrest' OR 'heart atrium arrest' OR 'sinoatrial arrest' OR 'sinus node arrest' OR 'sinus node syndrome' OR 'heart fibrillation' OR 'cardiac fibrillation' OR 'atrium fibrillation' OR 'atrial fibrillation' OR 'auricular fibrillation' OR 'auricular fibrillation' OR 'conduction defect' OR 'conduction defects' OR 'conduction disease' OR 'conduction diseases' OR 'conduction disorder' OR 'conduction disorders' OR 'conduction disturbance' OR 'conduction disturbances' OR cardiopalmus OR palpitation OR proarrhythmia OR parasystole OR 'hyperkinetic heart syndrome' OR 'chronic kidney disease/exp OR 'chronic kidney disorder' OR 'chronic nephropathy' OR 'chronic renal disease' OR 'chronic kidney failure' OR 'End Stage Kidney Disease' OR 'End Stage Renal Disease' OR 'End Stage Renal Failure' OR 'Chronic Renal Failure' OR 'ESRD' OR 'Frasier Syndrome' OR 'Chronic Renal Insufficiencies' OR 'Chronic Renal Insufficiency' OR 'Chronic Kidney Insufficiency' OR 'Chronic Kidney Insufficiencies' OR 'Chronic Kidney Diseases' OR 'Chronic Kidney Disease' OR 'Chronic Renal Diseases' OR 'chronic obstructive lung disease/exp OR 'COPD' OR 'Chronic Obstructive Pulmonary Disease' OR 'COAD' OR 'Chronic Obstructive Airway Disease' OR 'Chronic Obstructive Lung Disease' OR 'Chronic Airflow Obstructions' OR 'Chronic Airflow Obstruction' OR 'chronic obstructive bronchitis' OR 'chronic obstructive bronchopulmonary disease' OR 'chronic obstructive lung disorder' OR 'chronic obstructive pulmonary disorder' OR 'chronic obstructive respiratory disease' OR 'Chronic Bronchitis' OR 'Pulmonary Emphysema' OR 'pulmonary Emphysemas' OR 'Focal Emphysema' OR 'Focal Emphysemas' OR 'Panacinar Emphysema' OR 'Panacinar Emphysemas' OR 'Panlobular Emphysema' OR 'Panlobular Emphysemas' OR 'Centriacinar Emphysema' OR 'Centriacinar Emphysemas' OR 'Centrilobular Emphysema' OR 'Centrilobular Emphysemas' OR 'congestive heart failure/exp OR 'cardiac congestive failure' OR 'congestive cardiac failure' OR 'congestive heart insufficiency' OR 'congestive heart failure' OR 'cor pulmonale' OR corpulmonale OR 'pulmonary cardiac disease' OR 'pulmonary heart disease' OR 'diastolic heart failure' OR 'heart failure with preserved ejection fraction' OR 'heart edema' OR 'cardiac edema' OR 'cardiac oedema' OR 'heart oedema' OR 'systolic heart failure' OR 'coronary artery disease/exp OR 'Coronary Artery Diseases' OR 'Coronary Artery Disease' OR 'Coronary Arteriosclerosis' OR 'Coronary Arterioscleroses' OR 'Coronary Atheroscleroses' OR 'Coronary Atherosclerosis' OR 'coronary disease' OR dementia/exp OR Dementia* OR Amentia* OR Alzheimer* OR CADASIL OR 'Lewy body' OR 'DNTC' OR 'diffuse neurofibrillary tangles with calcification' OR 'frontotemporal lobar degeneration' OR 'FTD' OR 'FTLD' OR 'Picks complex' OR 'Pick complex' OR fvFTD OR bvFTD OR 'primary progressive aphasia' OR 'Mesulam syndrome' OR 'PPA' OR tvFTD OR 'progressive nonfluent aphasia' OR 'non-fluent progressive aphasia' OR 'nonfluent progressive aphasia' OR 'PNFA' OR 'progressive non-fluent

aphasia' OR 'AIDS encephalopathy' OR 'HIV 1 associated cognitive motor complex' OR 'HIV associated cognitive motor complex' OR 'HIV associated neurocognitive disorder' OR 'HIV encephalopathy' OR 'HIV Encephalopathies' OR 'Huntington Disease' OR 'Huntington chorea' OR 'chorea Huntington' OR 'chronic progressive chorea' OR 'hereditary chorea' OR 'Huntingtons chorea' OR 'Huntingtons disease' OR 'Kluver Bucy' OR 'Kluver Bucy' OR 'Kluver-Bucy' OR 'mental deterioration' OR 'cognitive deterioration' OR 'mental regression' OR 'neuronal ceroid lipofuscinosis' OR 'amaurotic familial idiocy' OR 'amaurotic idiocy' OR 'Batten disease' OR 'batten mayou disease' OR 'familial amaurotic idiocy' OR 'neuronal ceroid-lipofuscinoses' OR 'neuronal ceroid-lipofuscinosis' OR 'neuronal ceroidosis' OR 'Pick disease' OR 'pick syndrome' OR 'prion disease' OR 'bovine spongiform encephalopathy' OR 'chronic wasting disease' OR 'Creutzfeldt Jakob disease' OR 'fatal familial insomnia' OR 'Gerstmann Straussler Scheinker syndrome' OR 'kuru' OR 'scrapie' OR 'transmissible mink encephalopathy' OR 'transmissible neurodegenerative disease' OR 'subacute spongiform' OR 'transmissible spongiform encephalopathy' OR 'pseudodementia' OR 'Rett syndrome' OR 'rett disease' OR 'Retts syndrome' OR senility OR 'senile confusion' OR 'senile psychosis' OR tauopathy OR tauopathies OR 'Kohlschutter-Tonz Syndrome' OR 'depression'/exp OR depression* OR 'depressive disease' OR 'depressive disorder' OR 'depressive episode' OR 'depressive illness' OR 'depressive personality disorder' OR 'depressive state' OR 'depressive symptom' OR 'depressive symptoms' OR 'depressive syndrome' OR Melancholia OR Melancholias OR 'depressive Disorders' OR 'Depressive Neuroses' OR 'Depressive Neurosis' OR 'Depressive Syndrome' OR 'Depressive Syndromes' OR 'Involutional Psychoses' OR 'Involutional Psychosis' OR 'Involutional paraphrenia' OR 'Therapy Resistant Depressive' OR 'Therapy-Resistant Depressives' OR 'Treatment Resistant Depressive' OR 'treatment Resistant Depressives' OR 'Dysthymic Disorders' OR 'Dysthymic Disorder' OR 'Premenstrual Dysphoric Disorder' OR 'Premenstrual Dysphoric Syndrome' OR 'Seasonal Affective Disorder' OR 'Seasonal Mood Disorder' OR 'Seasonal Mood Disorders' OR 'Seasonal Affective Disorders' OR 'bipolar disorder' OR 'bipolar affective disorder' OR 'bipolar illness' OR 'bipolar psychosis' OR 'manic depressive' OR 'maniodepressive psychosis' OR 'mano depressive syndrome' OR 'bipolar mania' OR cyclothymia OR cyclophrenia OR 'cyclothymic depressive' OR 'cyclothymic disorder' OR 'cyclothymic personality' OR 'rapid cycling mood disorder' OR 'depressive psychosis' OR dysphoria OR dysforia OR dysthymia OR 'depressive reaction' OR 'dysthymic disorder' OR 'mental anorexia' OR 'mental fatigue' OR melancholy OR 'unipolar disorder' OR 'mourning syndrome' OR 'Perry syndrome' OR 'Perrys syndrome' OR 'diabetes mellitus'/exp OR 'insulin dependent diabetes mellitus'/exp OR 'non insulin dependent diabetes mellitus'/exp OR 'lipoatrophic diabetes mellitus'/exp OR 'insulin-Dependent Diabetes Mellitus' OR 'Juvenile Onset Diabetes' OR 'Type 1 Diabetes' OR 'Sudden-Onset Diabetes Mellitus' OR 'Diabetes Mellitus Type I' OR 'IDDM' OR 'Insulin Dependent Diabetes' OR 'Brittle Diabetes' OR 'Ketosis-Prone Diabetes Mellitus' OR 'Autoimmune Diabetes' OR 'DIDMOAD' OR 'DIDMOADUD' OR 'Wolfram Syndrome' OR 'NIDDM' OR 'Maturity Onset Diabetes' OR 'Adult Onset Diabetes' OR 'Ketosis Resistant Diabetes Mellitus' OR 'Non Insulin Dependent Diabetes Mellitus' OR 'Slow Onset Diabetes Mellitus' OR 'Stable Diabetes Mellitus' OR 'MODY' OR 'Type 2 Diabetes' OR 'Noninsulin Dependent Diabetes' OR 'Lipoatrophic Diabetes' OR 'Lipoatrophic Diabete' OR diabetic* OR 'diabetes mellitus type I' OR 'early onset diabetes' OR 'iddm' OR 'juvenile diabetes' OR 'ketoacidotic diabetes' OR 'labile diabetes mellitus' OR 'mckusick 22210' OR 'type I diabetes' OR 'diabetes mellitus type 2' OR 'diabetes mellitus type ii' OR 'diabetes type 2' OR 'diabetes type II' OR 'insulin independent diabetes' OR 'ketosis resistant diabetes' OR 'type II diabetes' OR 'diabetes lipoatrophic' OR 'chronic hepatitis'/exp OR 'Chronic Hepatitis' OR 'Chronic Active Hepatitis' OR 'Chronic Persistent Hepatitides' OR 'Chronic Persistent Hepatitis' OR 'Chronic Delta Hepatitis' OR 'Chronic Delta Hepatitides' OR 'Autoimmune Hepatitides' OR 'Chronic Hepatitides' OR 'Autoimmune Hepatitis' OR 'chronic hepatopathy' OR 'Human immunodeficiency virus'/exp OR 'HIV' OR 'AIDS Virus' OR 'AIDS Viruses' OR HTLV-III OR 'Human Immunodeficiency Virus' OR 'Human

Immunodeficiency Viruses' OR 'Human T Cell Lymphotropic Virus Type III' OR 'Human T Lymphotropic Virus Type III' OR 'Human T-Cell Leukemia Virus Type III' OR 'Human T Cell Leukemia Virus Type III' OR 'Human T-Cell Lymphotropic Virus Type III' OR 'Human T-Lymphotropic Virus Type III' OR 'LAV-HTLV-III' OR 'Lymphadenopathy-Associated Virus' OR 'Lymphadenopathy Associated Virus' OR 'Lymphadenopathy-Associated Viruses' OR 'Acquired Immune Deficiency Syndrome Virus' OR 'Acquired Immunodeficiency Syndrome Virus' OR 'HIV-1' OR 'HIV-2' OR 'aids associated lentivirus' OR 'aids associated retrovirus' OR 'aids associated virus' OR 'aids related virus' OR 'immunodeficiency associated virus' OR 'immunodeficiency viruses' OR 'lymphadenopathy associated retrovirus' OR 'hyperlipidemia'/exp OR Hyperlipemia OR Hyperlipemias OR Hyperlipidemia OR Lipidemia OR Lipidemias OR Lipemia OR Lipemias OR Hypercholesterolemia OR Hypercholesterolemias OR 'Elevated Cholesterol' OR 'Hypercholesteremia' OR Hypercholesteremias OR hyperlipaemia OR hyperlipidaemia OR hyperlipidemias OR hyperlipidemic OR lipaemia OR lipidaemia OR cholesteremia OR cholesterinemia OR cholesterolemia OR hypercholesterinaemia OR hypercholesterinemia OR hypercholesterolaemia OR 'Buerger Gruetz syndrome' OR 'Burger Grutz syndrome' OR hyperbetalipoproteinaemia OR hyperbetalipoproteinemia OR hypercholesterolemic OR 'familial hyperlipoproteinaemia type ii' OR 'familial hyperlipoproteinemia type ii' OR 'harbitz mueller syndrome' OR 'hyper low density lipoproteinaemia' OR 'hyper low density lipoproteinemia' OR 'hypercholesterolaemic xanthomatosis' OR 'hyperlipoproteinaemia type 2' OR 'hyperlipoproteinaemia type ii' OR 'hyperlipoproteinemia type 2' OR 'hyperlipoproteinemia type ii' OR 'Idl receptor disorder' OR 'tendinous xanthogranulomatosis' OR 'tendinous xanthomatosis' OR 'tendon xanthogranulomatosis' OR 'xanthogranulomatosis tendinosum' OR 'xanthogranulomatosis tendinous' OR 'xanthoma tendinosum' OR 'xanthoma tuberosum' OR hypertriglyceridemia OR hypertriglyceridaemia OR 'triglyceride storage disease' OR triglyceridemia OR 'hypertriglyceridemic waist' OR Hyperlipoproteinemias OR 'hypertension'/exp OR Hypertension* OR Hypertensive OR 'High Blood Pressure' OR 'High Blood Pressures' OR 'Goldblatt Syndrome' OR 'apparent mineralocorticoid excess syndrome' OR 'Gordon syndrome' OR 'Gordons syndrome' OR 'Liddle syndrome' OR 'Liddles syndrome' OR 'metabolic syndrome' OR 'insulin resistance syndrome' OR 'ocular ischaemic syndrome' OR 'ocular ischemic syndrome' OR 'orthostatic hypertension' OR 'posterior encephalopathy' OR 'posterior leucoencephalopathy' OR 'posterior leucoencephalopathy' OR 'posterior leucoencephalopathy' OR 'posterior reversible encephalopathy' OR 'posterior reversible leucoencephalopathy' OR 'posterior reversible leucoencephalopathy' OR 'PRES' OR 'RPLS' OR prehypertension OR 'pre-hypertension' OR 'goldblatt kidney' OR nephrosclerosis OR 'renal arteriosclerosis' OR 'renal atherosclerosis' OR renosclerosis OR 'osteoporosis'/exp OR Osteoporosis OR Osteoporoses OR 'Age-Related Bone Loss' OR 'Age-Related Bone Losses' OR 'pathological decalcification' OR 'osteoporotic decalcification' OR 'female athlete triad' OR 'Perimenopausal Bone Loss' OR 'Postmenopausal Bone Loss' OR 'Perimenopausal Bone Losses' OR 'posttraumatic osteopenia' OR 'Sudeck atrophy' OR 'Sudeck disease' OR 'Sudeck dystrophy' OR 'Sudeck Leriche syndrome' OR 'Sudeck syndrome' OR 'Sudecks atrophy' OR 'Sudeck dystrophy' OR 'Sudeck reflex dystrophy' OR 'schizophrenia'/exp OR Schizophrenia* OR Schizophrenic* OR 'Dementia Praecox' OR hebephrenia OR paraphrenia OR 'Delusional Disorder' OR 'Delusional Disorders' OR 'schizoaffective psychosis' OR 'schizo affective disorder' OR 'schizo affective psychosis' OR 'schizoaffective disorder' OR 'schizophreniform disorder' OR 'schizophreniform psychosis' OR 'Shared Paranoid Disorder' OR 'Shared Psychotic Disorder' OR 'Shared Psychotic Disorders' OR 'Shared Paranoid Disorders' OR 'Folie a Deux' OR 'Folie a Trois' OR 'brain ischemia'/exp OR 'Chronic stroke' OR 'brain ischemia' OR 'brain arterial insufficiency' OR 'brain circulation disorder' OR 'brain ischaemia' OR 'cerebral blood circulation disorder' OR 'cerebral blood flow disorder' OR 'cerebral circulation disorder' OR 'cerebral circulatory disorder' OR 'cerebral ischaemia' OR 'cerebral ischemia' OR 'cerebrovascular circulation disorder' OR 'cerebrovascular ischaemia' OR 'cerebrovascular ischemia' OR 'ischaemia cerebri'

OR 'ischaemic brain disease' OR 'ischaemic encephalopathy' OR 'ischaemic stroke' OR 'ischemia cerebri' OR 'ischemic brain disease' OR 'ischemic encephalopathy' OR 'ischemic stroke' OR 'neural ischaemia' OR 'neural ischemia' OR 'brain vasospasm' OR 'cerebral vasospasm' OR 'intracranial vasospasm' OR 'Call-Fleming syndrome' OR 'brain hypoxia ischaemia' OR 'brain hypoxia ischemia' OR 'brain hypoxic ischaemic injuries' OR 'brain hypoxic ischaemic injury' OR 'brain hypoxic ischemic damage' OR 'brain hypoxic ischemic injuries' OR 'brain hypoxic ischemic injury' OR 'cerebral hypoxia ischaemia' OR 'cerebral hypoxia ischemia' OR 'cerebral hypoxic ischaemic damage' OR 'cerebral hypoxic ischaemic injuries' OR 'cerebral hypoxic ischaemic injury' OR 'cerebral hypoxic ischemic damage' OR 'cerebral hypoxic ischemic injuries' OR 'cerebral hypoxic ischemic injury' OR 'cerebral ischaemia hypoxia' OR 'cerebral ischemia hypoxia' OR 'hypoxic ischaemic brain damage' OR 'hypoxic ischaemic brain injuries' OR 'hypoxic ischaemic brain injury' OR 'hypoxic ischaemic cerebral damage' OR 'hypoxic ischaemic cerebral injuries' OR 'hypoxic ischaemic cerebral injury' OR 'hypoxic ischemic brain damage' OR 'hypoxic ischemic brain injuries' OR 'hypoxic ischemic brain injury' OR 'hypoxic ischemic cerebral damage' OR 'hypoxic ischemic cerebral injuries' OR 'hypoxic ischemic cerebral injury' OR 'circulatory epilepsy' OR 'epilepsy circulatory' OR 'ischaemic attack' OR 'ischemic attack' OR 'ischaemic seizure' OR 'ischemic seizure' OR 'Brain Infarction' OR 'Brain Stem Infarctions' OR 'Brain Stem Infarction' OR 'Brainstem Infarctions' OR 'Brainstem Infarction' OR 'Brainstem Stroke' OR 'Claude Syndrome' OR 'Weber Syndrome' OR 'Millard Gublar Syndrome' OR 'Top of the Basilar Syndrome' OR 'Benedict Syndrome' OR 'Foville Syndrome' OR 'Lateral Medullary Syndrome' OR 'Lateral Medullary Syndromes' OR 'Posterior Inferior Cerebellar Artery Syndrome' OR 'Wallenbergs Syndrome' OR 'Wallenbergs Syndrome' OR 'Wallenberg Syndrome' OR 'Dorsolateral Medullary Syndrome' OR 'Lateral Bulbar Syndrome' OR 'Cerebral Infarction' OR 'Cerebral Infarctions' OR 'Subcortical Infarction' OR 'Subcortical Infarctions' OR 'Choroidal Artery Infarction' OR 'Cerebral Artery Infarction' OR 'Cerebral Artery Infarctions' OR 'ACA Infarction' OR 'ACA Infarctions' OR 'Cerebral Artery Stroke' OR 'Heubner Artery Infarction' OR 'Heubners Artery Infarction' OR 'Heubners Artery Infarction' OR 'Cerebral Artery Syndrome' OR 'MCA Infarction' OR 'Cerebral Artery Thrombosis' OR 'Cerebral Artery Thrombotic Infarction' OR 'PCA Infarction' OR 'Cerebral Artery Embolic Infarction' OR 'substance abuse/exp OR 'alcoholism'/exp 'drug abuse'/exp OR 'drug dependence'/exp OR alcoholism OR 'drug dependence' OR 'drug addiction' OR 'Drug Habituation' OR 'Drug Abuse' OR 'Substance Abuse' OR 'Substance Abuses' OR 'Substance Dependence' OR 'Substance Addiction' OR 'Substance Use Disorders' OR 'Substance Use Disorder' OR 'Drug Dependence' OR 'Drug Addiction' OR 'substance abuser' OR 'substance dependence' OR 'amphetamine-related disorders' OR 'chronic drug overuser' OR 'drug abuser' OR 'drug problem' OR 'needle sharing' OR 'phencyclidine abuse' OR 'alcohol addiction' OR 'alcohol dependence' OR 'alcohol dependents' OR 'alcohol polyneuropathy' OR 'alcohol dependent individual' OR 'alcohol induced disorders' OR 'alcohol related disorders' OR dipsomania* OR 'ethanol dependence' OR 'problem drinker' OR 'problematic drinker' OR 'analgesic agent abuse' OR 'analgesic abuse' OR doping OR 'drug misuse' OR 'inhalant abuse' OR 'intravenous drug abuse' OR 'intravenous drug user' OR 'prescription drug diversion' OR 'drug use disorder' OR 'drug use disorders' OR 'Alcohol Related Disorders' OR 'Alcohol Related Disorder' OR 'Alcohol Induced Disorders' OR 'Alcohol Induced Disorder' OR 'Ethanol Induced Nervous System Disorders' OR 'Alcohol Amnestic Disorders' OR 'Alcohol Amnestic Syndrome' OR 'Alcohol Amnestic Syndromes' OR 'Alcohol Induced Amnestic Psychosis' OR 'Alcohol Induced Amnestic Syndrome' OR 'Alcohol Induced Dismnesic Syndrome' OR 'Alcohol Induced Dismnesic Syndromes' OR 'Alcohol Induced Korsakoff Syndrome' OR 'Alcohol Induced Korsakoff Syndromes' OR 'Alcohol Induced Persisting Amnestic Disorder' OR 'Alcoholic Korsakoff Syndrome' OR 'Alcoholic Korsakoff Syndromes' OR 'Alcohol Induced Amnestic Psychoses' OR 'Alcohol Induced Dismnesic Psychosis' OR 'Alcohol Induced Dismnesic Psychoses' OR 'Korsakoff Syndrome' OR 'Korsakoff Psychosis' OR 'Korsakoff Psychoses' OR

'Alcoholic Neuropathy' OR 'Alcoholic Neuropathies' OR 'Alcohol Induced Peripheral Neuropathies' OR 'Alcoholic Polyneuropathies' OR 'Alcoholic Polyneuropathy' OR 'Alcoholic Polyneuritides' OR 'Alcoholic Polyneuritis' OR 'Alcohol Induced Polyneuropathy' OR 'Alcohol Induced Polyneuropathies' OR 'Alcohol Related Autonomic Polyneuropathy' OR 'Alcohol Related Autonomic Polyneuropathies' OR 'Alcohol Related Polyneuropathy' OR 'Alcohol-Related Polyneuropathies' OR 'Alcohol Induced Peripheral Neuropathy' OR 'Alcoholic Axonal Neuropathy' OR 'Alcoholic Axonal Neuropathies' OR 'Alcoholic Cardiomyopathy' OR 'Fetal Alcohol Spectrum Disorders' OR 'FASD' OR 'FASDs' OR 'Alcohol Related Birth Defects' OR 'Alcohol Related Neurodevelopmental Disorder' OR 'Fetal Alcohol Effects' OR 'Fetal Alcohol Syndrome' OR 'Alcoholic Liver Diseases' OR 'Alcoholic Liver Disease' OR 'Alcoholic Fatty Liver' OR 'Alcoholic Steatohepatitis' OR 'Chronic Alcoholic Hepatitis' OR 'Chronic Alcoholic Hepatitides' OR 'Alcoholic Liver Cirrhosis' OR 'Alcoholic Cirrhosis' OR 'Alcoholic Hepatic Cirrhosis' OR 'Alcoholic Pancreatitis' OR 'Alcoholic Psychoses' OR 'Chronic Alcoholic Intoxication' OR 'Alcohol Abuse' OR 'Amphetamine Related Disorders' OR 'Amphetamine Abuse' OR 'Amphetamine Addiction' OR 'Amphetamine Dependence' OR 'Cocaine Related Disorders' OR 'Cocaine Related Disorder' OR 'Cocaine Abuse' OR 'Cocaine Dependence' OR 'Cocaine Addiction' OR 'Inhalant Abuses' OR 'Glue Sniffing' OR 'Glue Sniffings' OR 'Glue Abuse' OR 'Glue Abuses' OR 'Marijuana Abuse' OR 'Marihuana Abuse' OR 'Hashish Abuse' OR 'Cannabis Related Disorder' OR 'Cannabis Abuse' OR 'Cannabis Dependence' OR 'Marijuana Dependence' OR 'Opioid Related Disorders' OR 'Opiate Dependence' OR 'Opiate Addiction' OR 'Narcotic Abuse' OR 'Narcotic Abuses' OR 'Narcotic Dependence' OR 'Narcotic Addiction' OR 'Heroin Dependence' OR 'Heroin Addiction' OR 'Heroin Abuse' OR 'Morphine Dependence' OR 'Morphine Addiction' OR 'Morphine Abuse' OR 'Phencyclidine Abuses' OR 'PCP Abuse' OR 'Angel Dust Abuse' OR 'Phencyclidine Related Disorders' OR 'Phencyclidine Related Disorder' OR 'Substance Induced Psychoses' OR 'Toxic Psychoses' OR 'Drug Psychoses' OR 'Intravenous Substance Abuse' OR 'Parenteral Drug Abuse' OR 'Tobacco Use Disorder' OR 'Tobacco Use Disorders' OR 'Nicotine Use Disorder' OR 'Nicotine Use Disorders' OR 'Tobacco Dependence' OR 'Tobacco Dependences' OR 'Nicotine Dependence' OR 'alcoholic individual' OR 'alcoholics' OR 'alcoholic polyneuropathy' OR 'ethanol dependence' OR 'narcotic depression' OR 'narcotism' OR 'heroin addict' OR heroinism OR 'morphine addict' OR 'opiate addict' OR 'opioid dependence' OR 'opium addict' OR 'opium addiction' OR 'opium alkaloid addiction' OR 'opium addiction' OR 'benzodiazepine dependence' OR 'benzodiazepine addiction' OR 'cannabis addiction' OR 'drug abuse pattern' OR 'methamphetamine dependence' OR toxicomania OR 'drug addict' OR 'drug dependence' OR 'drug dependency')

2. Extraction codebook

Data Dictionary Codebook

Variable / Field Name	Field Label <i>Field Note</i>	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)												
Instrument: Basic														
record_id	Record Number	text												
journal	Section Header: <i>Basic</i> Journal	text												
journal_type	Journal Type	dropdown <table border="1"> <tr> <td>0</td> <td>General Medical</td> </tr> <tr> <td>1</td> <td>Specialty</td> </tr> </table>	0	General Medical	1	Specialty								
0	General Medical													
1	Specialty													
pub_year_category	Publication Year Category	dropdown <table border="1"> <tr> <td>0</td> <td>2000-2004</td> </tr> <tr> <td>1</td> <td>2005-2009</td> </tr> <tr> <td>2</td> <td>2010-2014</td> </tr> </table>	0	2000-2004	1	2005-2009	2	2010-2014						
0	2000-2004													
1	2005-2009													
2	2010-2014													
pub_year	Publication Year	text (integer, Min: 1999, Max: 2014)												
fund_source	Funding Source	checkbox <table border="1"> <tr> <td>0</td> <td>fund_source__0</td> <td>Industry</td> </tr> <tr> <td>1</td> <td>fund_source__1</td> <td>Non-Industry</td> </tr> <tr> <td>2</td> <td>fund_source__2</td> <td>Not Reported</td> </tr> </table>	0	fund_source__0	Industry	1	fund_source__1	Non-Industry	2	fund_source__2	Not Reported			
0	fund_source__0	Industry												
1	fund_source__1	Non-Industry												
2	fund_source__2	Not Reported												
grant_nih	NIH Grant #	text												
fund_source_notes	Funding Source Notes	text												
region	Region	dropdown <table border="1"> <tr> <td>0</td> <td>North America</td> </tr> <tr> <td>1</td> <td>Europe</td> </tr> <tr> <td>2</td> <td>Middle East</td> </tr> <tr> <td>3</td> <td>Asia/Pacific</td> </tr> <tr> <td>4</td> <td>Latin America</td> </tr> <tr> <td>5</td> <td>Africa</td> </tr> </table>	0	North America	1	Europe	2	Middle East	3	Asia/Pacific	4	Latin America	5	Africa
0	North America													
1	Europe													
2	Middle East													
3	Asia/Pacific													
4	Latin America													
5	Africa													
country	Country	text												
registered	Is this study reported to be a registered clinical trial?	checkbox <table border="1"> <tr> <td>0</td> <td>registered__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>registered__1</td> <td>Yes- clinicaltrials.gov</td> </tr> <tr> <td>2</td> <td>registered__2</td> <td>Yes- other registry</td> </tr> </table>	0	registered__0	No	1	registered__1	Yes- clinicaltrials.gov	2	registered__2	Yes- other registry			
0	registered__0	No												
1	registered__1	Yes- clinicaltrials.gov												
2	registered__2	Yes- other registry												
nct_reported	Does this article report the clinicaltrials.gov identifier (NCT)?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes								
0	No													
1	Yes													

nct_number Show the field ONLY if: [nct_reported] = '1'	NCT # e.g.: NCT00000419	text													
protocol_access	Do authors report where to access to the study protocol?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>		0	No	1	Yes								
0	No														
1	Yes														
basic_complete	Section Header: <i>Form Status</i> Complete?	dropdown <table border="1"> <tr> <td>0</td> <td>Incomplete</td> </tr> <tr> <td>1</td> <td>Unverified</td> </tr> <tr> <td>2</td> <td>Complete</td> </tr> </table>		0	Incomplete	1	Unverified	2	Complete						
0	Incomplete														
1	Unverified														
2	Complete														
enrollment_reported	Section Header: Intervention Details **Were enrollment timeframes reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>		0	No	1	Yes								
0	No														
1	Yes														
timeframes_reported Show the field ONLY if: [enrollment_reported] = "1"	**Which of the following timeframes were reported?	checkbox <table border="1"> <tr> <td>0</td> <td>timeframes_reported__0</td> <td>Date of First Enrollment/Study Start Date</td> </tr> <tr> <td>1</td> <td>timeframes_reported__1</td> <td>Date of Last Enrollment</td> </tr> <tr> <td>2</td> <td>timeframes_reported__2</td> <td>Study Completion Date</td> </tr> <tr> <td>3</td> <td>timeframes_reported__3</td> <td>Duration of Intervention</td> </tr> </table>		0	timeframes_reported__0	Date of First Enrollment/Study Start Date	1	timeframes_reported__1	Date of Last Enrollment	2	timeframes_reported__2	Study Completion Date	3	timeframes_reported__3	Duration of Intervention
0	timeframes_reported__0	Date of First Enrollment/Study Start Date													
1	timeframes_reported__1	Date of Last Enrollment													
2	timeframes_reported__2	Study Completion Date													
3	timeframes_reported__3	Duration of Intervention													
first_enroll Show the field ONLY if: [timeframes_reported(0)] = "1"	**First enrollment/study start date	text (date_dmy)													
last_enroll Show the field ONLY if: [timeframes_reported(1)] = "1"	**Date of last enrollment	text (date_dmy)													
completion_date Show the field ONLY if: [timeframes_reported(2)] = "1"	**Study completion date	text (date_dmy)													
Instrument: Intervention															
sample_cc_targeted	Section Header: <i>Form History</i> Is the trial selection targeting individuals with multiple chronic conditions?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes, individuals with a specific set of chronic conditions</td> </tr> <tr> <td>2</td> <td>Yes, individuals with multiple chronic conditions, regardless of conditions</td> </tr> <tr> <td>3</td> <td>Yes, individuals with any combination of chronic conditions within a specific set of conditions</td> </tr> </table>		0	No	1	Yes, individuals with a specific set of chronic conditions	2	Yes, individuals with multiple chronic conditions, regardless of conditions	3	Yes, individuals with any combination of chronic conditions within a specific set of conditions				
0	No														
1	Yes, individuals with a specific set of chronic conditions														
2	Yes, individuals with multiple chronic conditions, regardless of conditions														
3	Yes, individuals with any combination of chronic conditions within a specific set of conditions														

<p>cc_list Show the field ONLY if: [sample_cc_targeted]="0"</p>	<p>Is the trial selection targeting individuals with one condition from a specific set of chronic conditions?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																											
0	No																																																																
1	Yes																																																																
<p>sample_cc Show the field ONLY if: [sample_cc_targeted]="0" " or [sample_cc_targeted]]="1" or [sample_cc_targeted]]="3"</p>	<p>The study sample consists of individuals with which chronic condition(s)?</p>	<p>checkbox</p> <table border="1"> <tr><td>1</td><td>sample_cc__1</td><td>Arthritis</td></tr> <tr><td>2</td><td>sample_cc__2</td><td>Asthma</td></tr> <tr><td>3</td><td>sample_cc__3</td><td>Autism spectrum disorder</td></tr> <tr><td>4</td><td>sample_cc__4</td><td>Cancer</td></tr> <tr><td>5</td><td>sample_cc__5</td><td>Cardiac arrhythmias</td></tr> <tr><td>6</td><td>sample_cc__6</td><td>Chronic kidney disease</td></tr> <tr><td>7</td><td>sample_cc__7</td><td>Chronic obstructive pulmonary disease</td></tr> <tr><td>8</td><td>sample_cc__8</td><td>Congestive heart failure</td></tr> <tr><td>9</td><td>sample_cc__9</td><td>Coronary artery disease</td></tr> <tr><td>10</td><td>sample_cc__10</td><td>Dementia</td></tr> <tr><td>11</td><td>sample_cc__11</td><td>Depression</td></tr> <tr><td>12</td><td>sample_cc__12</td><td>Diabetes</td></tr> <tr><td>13</td><td>sample_cc__13</td><td>Hepatitis</td></tr> <tr><td>14</td><td>sample_cc__14</td><td>Human immunodeficiency virus (HIV)</td></tr> <tr><td>15</td><td>sample_cc__15</td><td>Hyperlipidemia</td></tr> <tr><td>16</td><td>sample_cc__16</td><td>Hypertension</td></tr> <tr><td>17</td><td>sample_cc__17</td><td>Osteoporosis</td></tr> <tr><td>18</td><td>sample_cc__18</td><td>Schizophrenia</td></tr> <tr><td>19</td><td>sample_cc__19</td><td>Stroke</td></tr> <tr><td>20</td><td>sample_cc__20</td><td>Substance abuse disorders</td></tr> <tr><td>21</td><td>sample_cc__21</td><td>Chronic condition (General)</td></tr> </table>	1	sample_cc__1	Arthritis	2	sample_cc__2	Asthma	3	sample_cc__3	Autism spectrum disorder	4	sample_cc__4	Cancer	5	sample_cc__5	Cardiac arrhythmias	6	sample_cc__6	Chronic kidney disease	7	sample_cc__7	Chronic obstructive pulmonary disease	8	sample_cc__8	Congestive heart failure	9	sample_cc__9	Coronary artery disease	10	sample_cc__10	Dementia	11	sample_cc__11	Depression	12	sample_cc__12	Diabetes	13	sample_cc__13	Hepatitis	14	sample_cc__14	Human immunodeficiency virus (HIV)	15	sample_cc__15	Hyperlipidemia	16	sample_cc__16	Hypertension	17	sample_cc__17	Osteoporosis	18	sample_cc__18	Schizophrenia	19	sample_cc__19	Stroke	20	sample_cc__20	Substance abuse disorders	21	sample_cc__21	Chronic condition (General)
1	sample_cc__1	Arthritis																																																															
2	sample_cc__2	Asthma																																																															
3	sample_cc__3	Autism spectrum disorder																																																															
4	sample_cc__4	Cancer																																																															
5	sample_cc__5	Cardiac arrhythmias																																																															
6	sample_cc__6	Chronic kidney disease																																																															
7	sample_cc__7	Chronic obstructive pulmonary disease																																																															
8	sample_cc__8	Congestive heart failure																																																															
9	sample_cc__9	Coronary artery disease																																																															
10	sample_cc__10	Dementia																																																															
11	sample_cc__11	Depression																																																															
12	sample_cc__12	Diabetes																																																															
13	sample_cc__13	Hepatitis																																																															
14	sample_cc__14	Human immunodeficiency virus (HIV)																																																															
15	sample_cc__15	Hyperlipidemia																																																															
16	sample_cc__16	Hypertension																																																															
17	sample_cc__17	Osteoporosis																																																															
18	sample_cc__18	Schizophrenia																																																															
19	sample_cc__19	Stroke																																																															
20	sample_cc__20	Substance abuse disorders																																																															
21	sample_cc__21	Chronic condition (General)																																																															
<p>number_arms</p>	<p>Number of experimental study arms</p>	<p>text (integer, Min: 1, Max: 4)</p>																																																															
<p>sample_cancer Show the field ONLY if : [sample_cc(4)] = "1"</p>	<p>Does the trial target a single cancer, multiple cancer types or all cancer?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>Single Cancer</td> </tr> <tr> <td>1</td> <td>Multiple Specified Cancers</td> </tr> <tr> <td>2</td> <td>All Cancer Types</td> </tr> </table>	0	Single Cancer	1	Multiple Specified Cancers	2	All Cancer Types																																																									
0	Single Cancer																																																																
1	Multiple Specified Cancers																																																																
2	All Cancer Types																																																																
<p>sample_cancer_type Show the field ONLY if : [sample_cancer] = "0"</p>	<p>Does the trial specifically target breast cancer?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																											
0	No																																																																
1	Yes																																																																
<p>sample_cancer_notes Show the field ONLY if : [sample_cc(4)] = "1"</p>	<p>What is the latest point in the care continuum that cancer patients enrolled?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>Pre-tx</td> </tr> </table>	0	Pre-tx																																																													
0	Pre-tx																																																																

		<table border="1"> <tr> <td>1</td> <td>Undergoing primary tx (surgery, chemo or radiation)</td> </tr> <tr> <td>2</td> <td>Post primary tx</td> </tr> <tr> <td>3</td> <td>Not specified/Cannot determine</td> </tr> </table>	1	Undergoing primary tx (surgery, chemo or radiation)	2	Post primary tx	3	Not specified/Cannot determine									
1	Undergoing primary tx (surgery, chemo or radiation)																
2	Post primary tx																
3	Not specified/Cannot determine																
sample_cancer_timepoint Notes on specific cancer or time point Show the field ONLY if : [sample_cc(4)] = "1"		notes															
randomized_1	Section Header: <i>Control Arm</i> Is the number of participants randomized to this group reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
sample_size_1 Show the field ONLY if: [randomized_1]= "1"	Sample Size	text (integer)															
age_measures_1	Sample Age Measures Reported	checkbox <table border="1"> <tr> <td>0</td> <td>age_measures_1__0</td> <td>Mean</td> </tr> <tr> <td>1</td> <td>age_measures_1__1</td> <td>Range</td> </tr> <tr> <td>2</td> <td>age_measures_1__2</td> <td>Standard Deviation</td> </tr> <tr> <td>3</td> <td>age_measures_1__3</td> <td>Median</td> </tr> <tr> <td>4</td> <td>age_measures_1__4</td> <td>Not Reported</td> </tr> </table>	0	age_measures_1__0	Mean	1	age_measures_1__1	Range	2	age_measures_1__2	Standard Deviation	3	age_measures_1__3	Median	4	age_measures_1__4	Not Reported
0	age_measures_1__0	Mean															
1	age_measures_1__1	Range															
2	age_measures_1__2	Standard Deviation															
3	age_measures_1__3	Median															
4	age_measures_1__4	Not Reported															
sex_measures_1	How is the sex of the participants in this sample reported?	checkbox <table border="1"> <tr> <td>0</td> <td>sex_measures_1__0</td> <td>Number</td> </tr> <tr> <td>1</td> <td>sex_measures_1__1</td> <td>Percentage</td> </tr> <tr> <td>2</td> <td>sex_measures_1__2</td> <td>Not Reported</td> </tr> </table>	0	sex_measures_1__0	Number	1	sex_measures_1__1	Percentage	2	sex_measures_1__2	Not Reported						
0	sex_measures_1__0	Number															
1	sex_measures_1__1	Percentage															
2	sex_measures_1__2	Not Reported															
male_number_1 Show the field ONLY if : [sex_measures_1(0)]= "1"	Number male	text (integer)															
male_percent_1 Show the field ONLY if : [sex_measures_1(1)]= "1"	Percentage male	text (number, Min: 0, Max: 100)															
mean_1 Show the field ONLY if: [age_measures_1(0)] = "1"	Mean	text (number)															
range_lower_1 Show the field ONLY if: [age_measures_1(1)] = "1"	Range_Lower	text (number)															
range_upper_1 Show the field ONLY if:	Range_Upper	text (number)															

[age_measures_1(1)] = "1"																	
stand_dev_1 Show the field ONLY if: [age_measures_1(2)] = "1"	Standard Deviation	text (number)															
median_1 Show the field ONLY if: [age_measures_1(3)] = "1"	Median	text (number)															
randomized_2	Section Header: <i>Experimental Arm 1</i> Is the number of participants randomized to this group reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
sample_size_2 Show the field ONLY if: [randomized_2]= "1"	Sample Size	text (integer)															
age_measures_2	Sample Age Measures Reported	checkbox <table border="1"> <tr> <td>0</td> <td>age_measures_2__0</td> <td>Mean</td> </tr> <tr> <td>1</td> <td>age_measures_2__1</td> <td>Range</td> </tr> <tr> <td>2</td> <td>age_measures_2__2</td> <td>Standard Deviation</td> </tr> <tr> <td>3</td> <td>age_measures_2__3</td> <td>Median</td> </tr> <tr> <td>4</td> <td>age_measures_2__4</td> <td>Not Reported</td> </tr> </table>	0	age_measures_2__0	Mean	1	age_measures_2__1	Range	2	age_measures_2__2	Standard Deviation	3	age_measures_2__3	Median	4	age_measures_2__4	Not Reported
0	age_measures_2__0	Mean															
1	age_measures_2__1	Range															
2	age_measures_2__2	Standard Deviation															
3	age_measures_2__3	Median															
4	age_measures_2__4	Not Reported															
mean_2 Show the field ONLY if: [age_measures_2(0)] = "1"	Mean	text (number)															
range_lower_2 Show the field ONLY if: [age_measures_2(1)] = "1"	Range_Lower	text (number)															
range_upper_2 Show the field ONLY if: [age_measures_2(1)] = "1"	Range_Upper	text (number)															
stand_dev_2 Show the field ONLY if: [age_measures_2(2)] = "1"	Standard Deviation	text (number)															
median_2 Show the field ONLY if: [age_measures_2(3)] = "1"	Median	text (number)															
randomized_3 Show the field ONLY if: [number_arms]>1	Section Header: <i>Experimental Arm 2</i> Is the number of participants randomized to this group reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
sample_size_3 Show the field ONLY if:	Sample Size	text (integer)															

[number_arms]>1 and [randomized_3]="1"																	
age_measures_3 Show the field ONLY if: [number_arms]>1	Sample Age Measures Reported	checkbox <table border="1"> <tr> <td>0</td> <td>age_measures_3__0</td> <td>Mean</td> </tr> <tr> <td>1</td> <td>age_measures_3__1</td> <td>Range</td> </tr> <tr> <td>2</td> <td>age_measures_3__2</td> <td>Standard Deviation</td> </tr> <tr> <td>3</td> <td>age_measures_3__3</td> <td>Median</td> </tr> <tr> <td>4</td> <td>age_measures_3__4</td> <td>Not Reported</td> </tr> </table>	0	age_measures_3__0	Mean	1	age_measures_3__1	Range	2	age_measures_3__2	Standard Deviation	3	age_measures_3__3	Median	4	age_measures_3__4	Not Reported
0	age_measures_3__0	Mean															
1	age_measures_3__1	Range															
2	age_measures_3__2	Standard Deviation															
3	age_measures_3__3	Median															
4	age_measures_3__4	Not Reported															
mean_3 Show the field ONLY if: [age_measures_3(0)]="1"	Mean	text (number)															
range_lower_3 Show the field ONLY if: [age_measures_3(1)]="1"	Range_Lower	text (number)															
range_upper_3 Show the field ONLY if: [age_measures_3(1)]="1"	Range_Upper	text (number)															
stand_dev_3 Show the field ONLY if: [age_measures_3(2)]="1"	Standard Deviation	text (number)															
median_3 Show the field ONLY if: [age_measures_3(3)]="1"	Median	text (number)															
randomized_4 Show the field ONLY if: [number_arms]>2	Section Header: <i>Experimental Arm 3</i> Is the number of participants randomized to this group reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
sample_size_4 Show the field ONLY if: [number_arms]>2 and [randomized_4]="1"	Sample Size	text (integer)															
age_measures_4 Show the field ONLY if: [number_arms]>2	Sample Age Measures Reported	checkbox <table border="1"> <tr> <td>0</td> <td>age_measures_4__0</td> <td>Mean</td> </tr> <tr> <td>1</td> <td>age_measures_4__1</td> <td>Range</td> </tr> <tr> <td>2</td> <td>age_measures_4__2</td> <td>Standard Deviation</td> </tr> <tr> <td>3</td> <td>age_measures_4__3</td> <td>Median</td> </tr> <tr> <td>4</td> <td>age_measures_4__4</td> <td>Not Reported</td> </tr> </table>	0	age_measures_4__0	Mean	1	age_measures_4__1	Range	2	age_measures_4__2	Standard Deviation	3	age_measures_4__3	Median	4	age_measures_4__4	Not Reported
0	age_measures_4__0	Mean															
1	age_measures_4__1	Range															
2	age_measures_4__2	Standard Deviation															
3	age_measures_4__3	Median															
4	age_measures_4__4	Not Reported															
mean_4 Show the field ONLY if: [age_measures_4(0)]="1"	Mean	text (number)															
range_lower_4	Range_Lower	text (number)															

Show the field ONLY if: [age_measures_4(1)] = "1"																	
range_upper_4 Show the field ONLY if: [age_measures_4(1)] = "1"	Range_Upper	text (number)															
stand_dev_4 Show the field ONLY if: [age_measures_4(2)] = "1"	Standard Deviation	text (number)															
median_4 Show the field ONLY if: [age_measures_4(3)] = "1"	Median	text (number)															
randomized_5 Show the field ONLY if: [number_arms]>3	Section Header: <i>Experimental Arm 4</i> Is the number of participants randomized to this group reported?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
sample_size_5 Show the field ONLY if: [number_arms]>3 and [randomized_5]= "1"	Sample Size	text (integer)															
age_measures_5 Show the field ONLY if: [number_arms]>3	Sample Age Measures Reported	checkbox <table border="1"> <tr> <td>0</td> <td>age_measures_5__0</td> <td>Mean</td> </tr> <tr> <td>1</td> <td>age_measures_5__1</td> <td>Range</td> </tr> <tr> <td>2</td> <td>age_measures_5__2</td> <td>Standard Deviation</td> </tr> <tr> <td>3</td> <td>age_measures_5__3</td> <td>Median</td> </tr> <tr> <td>4</td> <td>age_measures_5__4</td> <td>Not Reported</td> </tr> </table>	0	age_measures_5__0	Mean	1	age_measures_5__1	Range	2	age_measures_5__2	Standard Deviation	3	age_measures_5__3	Median	4	age_measures_5__4	Not Reported
0	age_measures_5__0	Mean															
1	age_measures_5__1	Range															
2	age_measures_5__2	Standard Deviation															
3	age_measures_5__3	Median															
4	age_measures_5__4	Not Reported															
mean_5 Show the field ONLY if: [age_measures_5(0)] = "1"	Mean	text (number)															
range_lower_5 Show the field ONLY if: [age_measures_5(1)] = "1"	Range_Lower	text (number)															
range_upper_5 Show the field ONLY if: [age_measures_5(1)] = "1"	Range_Upper	text (number)															
stand_dev_5 Show the field ONLY if: [age_measures_5(2)] = "1"	Standard Deviation	text (number)															
median_5 Show the field ONLY if: [age_measures_5(3)] = "1"	Median	text (number)															

randomized_total	Section Header: <i>Overall</i> Is the total number of participants randomized reported?	dropdown 0 No 1 Yes
sample_size_total Show the field ONLY if: [randomized_total]="1"	Studywide Sample Size	text (integer)
age_measures_overall	Sample Age Measures Reported	checkbox 0 age_measures_overall__0 Mean 1 age_measures_overall__1 Range 2 age_measures_overall__2 Standard Deviation 3 age_measures_overall__3 Median 4 age_measures_overall__4 Not Reported
age_mean_total_calc Show the field ONLY if: [age_measures_overall(0)]="0"	Could the mean age studywide be calculated?	dropdown 0 No 1 Yes
age_range_total_calc Show the field ONLY if: [age_measures_overall(1)]="0"	Could the age range studywide be calculated?	dropdown 0 No 1 Yes
sample_size_total_calc	Calculated Studywide Sample Size	calc Calculation: sum([sample_size_1],[sample_size_2],[sample_size_3],[sample_size_4],[sample_size_5])
mean_overall Show the field ONLY if: [age_measures_overall(0)]="1" or [age_mean_total_calc]="1"	Mean	text (number)
range_lower_overall Show the field ONLY if: [age_measures_overall(1)]="1" or [age_range_total_calc]="1"	Range_Lower	text (number)
range_upper_overall Show the field ONLY if: [age_measures_overall(1)]="1" or [age_range_total_calc]="1"	Range_Upper	text (number)
stand_dev_overall Show the field ONLY if: [age_measures_overall(2)]="1"	Standard Deviation	text (number)
median_overall Show the field ONLY if: [age_measures_overall(3)]="1"	Median	text (number)
sex_measures_total	How is the sex of the participants studywide reported?	checkbox

		<table border="1"> <tr> <td>0</td> <td>sex_measures_total__0</td> <td>Number</td> </tr> <tr> <td>1</td> <td>sex_measures_total__1</td> <td>Percentage</td> </tr> <tr> <td>2</td> <td>sex_measures_total__2</td> <td>Not Reported</td> </tr> </table>	0	sex_measures_total__0	Number	1	sex_measures_total__1	Percentage	2	sex_measures_total__2	Not Reported						
0	sex_measures_total__0	Number															
1	sex_measures_total__1	Percentage															
2	sex_measures_total__2	Not Reported															
sex_measures_total_calc Show the field ONLY if: [sex_measures_total(1)]="1" or [sex_measures_total(2)]="1"	Could the number of male participants studywide be calculated?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
male_number_total Show the field ONLY if: [sex_measures_total(0)]="1" or [sex_measures_total_calc]="1"	Number male	text (integer)															
male_percent_total Show the field ONLY if: [sex_measures_total(1)]="1" or [sex_measures_total_calc]="1"	Percentage male	text (number, Min: 0, Max: 100) Field Annotation: %															
female_number_total Show the field ONLY if: [sex_measures_total(0)]="1" or [sex_measures_total_calc]="1"	Number female	text (integer)															
female_percent_total Show the field ONLY if: [sex_measures_total(1)]="1" or [sex_measures_total_calc]="1"	Percentage female	text (number, Min: 0, Max: 100) Field Annotation: %															
intervention_behav	What is the behavioral component of the intervention?	checkbox <table border="1"> <tr> <td>0</td> <td>intervention_behav__0</td> <td>Weight management/diet/physical activity</td> </tr> <tr> <td>1</td> <td>intervention_behav__1</td> <td>Tobacco habits</td> </tr> <tr> <td>2</td> <td>intervention_behav__2</td> <td>Adherence to disease management</td> </tr> <tr> <td>3</td> <td>intervention_behav__3</td> <td>Psychological well-being</td> </tr> <tr> <td>4</td> <td>intervention_behav__4</td> <td>Other</td> </tr> </table>	0	intervention_behav__0	Weight management/diet/physical activity	1	intervention_behav__1	Tobacco habits	2	intervention_behav__2	Adherence to disease management	3	intervention_behav__3	Psychological well-being	4	intervention_behav__4	Other
0	intervention_behav__0	Weight management/diet/physical activity															
1	intervention_behav__1	Tobacco habits															
2	intervention_behav__2	Adherence to disease management															
3	intervention_behav__3	Psychological well-being															
4	intervention_behav__4	Other															
intervention_involvement	What is the level of participant involvement of the intervention?	checkbox <table border="1"> <tr> <td>1</td> <td>intervention_involvement__1</td> <td>Informational/educational</td> </tr> <tr> <td>2</td> <td>intervention_involvement__2</td> <td>Social support</td> </tr> <tr> <td>3</td> <td>intervention_involvement__3</td> <td>Skills training</td> </tr> <tr> <td>4</td> <td>intervention_involvement__4</td> <td>Psychotherapeutic</td> </tr> </table>	1	intervention_involvement__1	Informational/educational	2	intervention_involvement__2	Social support	3	intervention_involvement__3	Skills training	4	intervention_involvement__4	Psychotherapeutic			
1	intervention_involvement__1	Informational/educational															
2	intervention_involvement__2	Social support															
3	intervention_involvement__3	Skills training															
4	intervention_involvement__4	Psychotherapeutic															
intervention_focus	What is the intervention focus?	checkbox <table border="1"> <tr> <td>1</td> <td>intervention_focus__1</td> <td>Physical</td> </tr> <tr> <td>2</td> <td>intervention_focus__2</td> <td>Functional</td> </tr> <tr> <td>3</td> <td>intervention_focus__3</td> <td>Social</td> </tr> </table>	1	intervention_focus__1	Physical	2	intervention_focus__2	Functional	3	intervention_focus__3	Social						
1	intervention_focus__1	Physical															
2	intervention_focus__2	Functional															
3	intervention_focus__3	Social															

		4 intervention_focus__4 Psychological
intervention_complete	Section Header: <i>Form Status</i> Complete?	dropdown 0 Incomplete 1 Unverified 2 Complete
Instrument: Eligibility		
elig_reported	Section Header: <i>Eligibility</i> Is eligibility criteria reported?	dropdown 0 No 1 Yes
elig_criteria_behav	Were any behavioral factors/conditions used as inclusion or exclusion criteria?	dropdown 0 No 1 Yes
elig_behav Show the field ONLY if: [elig_criteria_behav]="1"	Which of the following behavioral factors/conditions were reported as eligibility criteria?	checkbox 0 elig_behav__0 Alcohol use 1 elig_behav__1 Smoking or tobacco use 2 elig_behav__2 Other substance use 3 elig_behav__3 Physical activity 4 elig_behav__4 Diet 5 elig_behav__5 Weight
mcc_exclusion	Did trial explicitly exclude individuals with multiple chronic conditions, regardless of conditions?	dropdown 0 No 1 Yes
mcc_exclusion_report Show the field ONLY if: [mcc_exclusion]="1"	Is the number of individuals excluded for having comorbid chronic conditions reported?	dropdown 0 No 1 Yes
mcc_exclusion_just Show the field ONLY if: [mcc_exclusion]="1"	Is a justification for MCC exclusion provided?	dropdown 0 No 1 Yes
mcc_ability Show the field ONLY if: [mcc_exclusion_just]="1"	Is this justification based on ability to participate in the study?	dropdown 0 No 1 Yes
elig_charlson	Was the Charlson comorbidity index used in eligibility criteria?	dropdown 0 No 1 Yes
elig_vague	Are there any vague exclusions for medical or psychological conditions (not reported above)?	dropdown 0 No

		<table border="1"> <tr> <td>1</td> <td>Yes</td> </tr> </table>	1	Yes																																																										
1	Yes																																																													
<p>vague_ability Show the field ONLY if: [elig_vague]="1"</p>	Is this exclusion based on ability to participate in the study?	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																								
0	No																																																													
1	Yes																																																													
condition_exclusion	Did trial exclude individuals with specific chronic conditions?	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																								
0	No																																																													
1	Yes																																																													
<p>condition_ability Show the field ONLY if: [condition_exclusion]="1"</p>	Is this exclusion based on ability to participate in the study?	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																								
0	No																																																													
1	Yes																																																													
<p>conditions_excluded Show the field ONLY if: [condition_exclusion]="1"</p>	<p>Which chronic conditions were subject to exclusions? <i>Check all that apply</i></p>	<p>checkbox</p> <table border="1"> <tr><td>1</td><td>conditions_excluded__1</td><td>Arthritis</td></tr> <tr><td>2</td><td>conditions_excluded__2</td><td>Asthma</td></tr> <tr><td>3</td><td>conditions_excluded__3</td><td>Autism Spectrum Disorder</td></tr> <tr><td>4</td><td>conditions_excluded__4</td><td>Cancer</td></tr> <tr><td>5</td><td>conditions_excluded__5</td><td>Cardiac Arrhythmias</td></tr> <tr><td>6</td><td>conditions_excluded__6</td><td>Chronic Kidney Disease</td></tr> <tr><td>7</td><td>conditions_excluded__7</td><td>Chronic Obstructive Pulmonary Disease</td></tr> <tr><td>8</td><td>conditions_excluded__8</td><td>Congestive Heart Failure</td></tr> <tr><td>9</td><td>conditions_excluded__9</td><td>Coronary Artery Disease</td></tr> <tr><td>10</td><td>conditions_excluded__10</td><td>Dementia</td></tr> <tr><td>11</td><td>conditions_excluded__11</td><td>Depression</td></tr> <tr><td>12</td><td>conditions_excluded__12</td><td>Diabetes</td></tr> <tr><td>13</td><td>conditions_excluded__13</td><td>Hepatitis</td></tr> <tr><td>14</td><td>conditions_excluded__14</td><td>Human Immunodeficiency Virus (HIV)</td></tr> <tr><td>15</td><td>conditions_excluded__15</td><td>Hyperlipidemia</td></tr> <tr><td>16</td><td>conditions_excluded__16</td><td>Hypertension</td></tr> <tr><td>17</td><td>conditions_excluded__17</td><td>Osteoporosis</td></tr> <tr><td>18</td><td>conditions_excluded__18</td><td>Schizophrenia</td></tr> <tr><td>19</td><td>conditions_excluded__19</td><td>Stroke</td></tr> <tr><td>20</td><td>conditions_excluded__20</td><td>Substance Abuse Disorders</td></tr> </table>	1	conditions_excluded__1	Arthritis	2	conditions_excluded__2	Asthma	3	conditions_excluded__3	Autism Spectrum Disorder	4	conditions_excluded__4	Cancer	5	conditions_excluded__5	Cardiac Arrhythmias	6	conditions_excluded__6	Chronic Kidney Disease	7	conditions_excluded__7	Chronic Obstructive Pulmonary Disease	8	conditions_excluded__8	Congestive Heart Failure	9	conditions_excluded__9	Coronary Artery Disease	10	conditions_excluded__10	Dementia	11	conditions_excluded__11	Depression	12	conditions_excluded__12	Diabetes	13	conditions_excluded__13	Hepatitis	14	conditions_excluded__14	Human Immunodeficiency Virus (HIV)	15	conditions_excluded__15	Hyperlipidemia	16	conditions_excluded__16	Hypertension	17	conditions_excluded__17	Osteoporosis	18	conditions_excluded__18	Schizophrenia	19	conditions_excluded__19	Stroke	20	conditions_excluded__20	Substance Abuse Disorders
1	conditions_excluded__1	Arthritis																																																												
2	conditions_excluded__2	Asthma																																																												
3	conditions_excluded__3	Autism Spectrum Disorder																																																												
4	conditions_excluded__4	Cancer																																																												
5	conditions_excluded__5	Cardiac Arrhythmias																																																												
6	conditions_excluded__6	Chronic Kidney Disease																																																												
7	conditions_excluded__7	Chronic Obstructive Pulmonary Disease																																																												
8	conditions_excluded__8	Congestive Heart Failure																																																												
9	conditions_excluded__9	Coronary Artery Disease																																																												
10	conditions_excluded__10	Dementia																																																												
11	conditions_excluded__11	Depression																																																												
12	conditions_excluded__12	Diabetes																																																												
13	conditions_excluded__13	Hepatitis																																																												
14	conditions_excluded__14	Human Immunodeficiency Virus (HIV)																																																												
15	conditions_excluded__15	Hyperlipidemia																																																												
16	conditions_excluded__16	Hypertension																																																												
17	conditions_excluded__17	Osteoporosis																																																												
18	conditions_excluded__18	Schizophrenia																																																												
19	conditions_excluded__19	Stroke																																																												
20	conditions_excluded__20	Substance Abuse Disorders																																																												
<p>exclusion_n_report_1 Show the field ONLY if: [conditions_excluded(1)]=1"</p>	Is the number of individuals excluded for having Arthritis reported?	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes																																																								
0	No																																																													
1	Yes																																																													

<p>exclusion_1 Show the field ONLY if: [conditions_excluded(1)]="1"</p>	<p>Is exclusion of individuals with Arthritis narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_1__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_1__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_1__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_1__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_1__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_1__0	No	1	exclusion_1__1	Yes- narrowed by type	2	exclusion_1__2	Yes- narrowed by severity	3	exclusion_1__3	Yes- narrowed by onset	4	exclusion_1__4	Yes- narrowed by other specification
0	exclusion_1__0	No															
1	exclusion_1__1	Yes- narrowed by type															
2	exclusion_1__2	Yes- narrowed by severity															
3	exclusion_1__3	Yes- narrowed by onset															
4	exclusion_1__4	Yes- narrowed by other specification															
<p>exclusion_n_report_2 Show the field ONLY if: [conditions_excluded(2)]="1"</p>	<p>Is the number of individuals excluded for having Asthma reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_2 Show the field ONLY if: [conditions_excluded(2)]="1"</p>	<p>Is exclusion of individuals with Asthma narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_2__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_2__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_2__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_2__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_2__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_2__0	No	1	exclusion_2__1	Yes- narrowed by type	2	exclusion_2__2	Yes- narrowed by severity	3	exclusion_2__3	Yes- narrowed by onset	4	exclusion_2__4	Yes- narrowed by other specification
0	exclusion_2__0	No															
1	exclusion_2__1	Yes- narrowed by type															
2	exclusion_2__2	Yes- narrowed by severity															
3	exclusion_2__3	Yes- narrowed by onset															
4	exclusion_2__4	Yes- narrowed by other specification															
<p>exclusion_n_report_3 Show the field ONLY if: [conditions_excluded(3)]="1"</p>	<p>Is the number of individuals excluded for having Autism Spectrum Disorder reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_3 Show the field ONLY if: [conditions_excluded(3)]="1"</p>	<p>Is exclusion of individuals with Autism Spectrum Disorder narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_3__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_3__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_3__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_3__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_3__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_3__0	No	1	exclusion_3__1	Yes- narrowed by type	2	exclusion_3__2	Yes- narrowed by severity	3	exclusion_3__3	Yes- narrowed by onset	4	exclusion_3__4	Yes- narrowed by other specification
0	exclusion_3__0	No															
1	exclusion_3__1	Yes- narrowed by type															
2	exclusion_3__2	Yes- narrowed by severity															
3	exclusion_3__3	Yes- narrowed by onset															
4	exclusion_3__4	Yes- narrowed by other specification															
<p>exclusion_n_report_4 Show the field ONLY if: [conditions_excluded(4)]="1"</p>	<p>Is the number of individuals excluded for having Cancer reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_4 Show the field ONLY if: [conditions_excluded(4)]="1"</p>	<p>Is exclusion of individuals with Cancer narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_4__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_4__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_4__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_4__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_4__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_4__0	No	1	exclusion_4__1	Yes- narrowed by type	2	exclusion_4__2	Yes- narrowed by severity	3	exclusion_4__3	Yes- narrowed by onset	4	exclusion_4__4	Yes- narrowed by other specification
0	exclusion_4__0	No															
1	exclusion_4__1	Yes- narrowed by type															
2	exclusion_4__2	Yes- narrowed by severity															
3	exclusion_4__3	Yes- narrowed by onset															
4	exclusion_4__4	Yes- narrowed by other specification															
<p>exclusion_n_report_5 Show the field ONLY if: [conditions_excluded(5)]="1"</p>	<p>Is the number of individuals excluded for having Cardiac Arrhythmias reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																

<p>exclusion_5 Show the field ONLY if: [conditions_excluded(5)]="1"</p>	<p>Is exclusion of individuals with Cardiac Arrhythmias narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_5__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_5__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_5__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_5__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_5__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_5__0	No	1	exclusion_5__1	Yes- narrowed by type	2	exclusion_5__2	Yes- narrowed by severity	3	exclusion_5__3	Yes- narrowed by onset	4	exclusion_5__4	Yes- narrowed by other specification
0	exclusion_5__0	No															
1	exclusion_5__1	Yes- narrowed by type															
2	exclusion_5__2	Yes- narrowed by severity															
3	exclusion_5__3	Yes- narrowed by onset															
4	exclusion_5__4	Yes- narrowed by other specification															
<p>exclusion_n_report_6 Show the field ONLY if: [conditions_excluded(6)]="1"</p>	<p>Is the number of individuals excluded for having Chronic Kidney Disease reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_6 Show the field ONLY if: [conditions_excluded(6)]="1"</p>	<p>Is exclusion of individuals with Chronic Kidney Disease narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_6__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_6__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_6__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_6__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_6__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_6__0	No	1	exclusion_6__1	Yes- narrowed by type	2	exclusion_6__2	Yes- narrowed by severity	3	exclusion_6__3	Yes- narrowed by onset	4	exclusion_6__4	Yes- narrowed by other specification
0	exclusion_6__0	No															
1	exclusion_6__1	Yes- narrowed by type															
2	exclusion_6__2	Yes- narrowed by severity															
3	exclusion_6__3	Yes- narrowed by onset															
4	exclusion_6__4	Yes- narrowed by other specification															
<p>exclusion_n_report_7 Show the field ONLY if: [conditions_excluded(7)]="1"</p>	<p>Is the number of individuals excluded for having Chronic Obstructive Pulmonary Disease reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_7 Show the field ONLY if: [conditions_excluded(7)]="1"</p>	<p>Is exclusion of individuals with Chronic Obstructive Pulmonary Disease narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_7__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_7__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_7__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_7__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_7__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_7__0	No	1	exclusion_7__1	Yes- narrowed by type	2	exclusion_7__2	Yes- narrowed by severity	3	exclusion_7__3	Yes- narrowed by onset	4	exclusion_7__4	Yes- narrowed by other specification
0	exclusion_7__0	No															
1	exclusion_7__1	Yes- narrowed by type															
2	exclusion_7__2	Yes- narrowed by severity															
3	exclusion_7__3	Yes- narrowed by onset															
4	exclusion_7__4	Yes- narrowed by other specification															
<p>exclusion_n_report_8 Show the field ONLY if: [conditions_excluded(8)]="1"</p>	<p>Is the number of individuals excluded for having Congestive Heart Failure reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_8 Show the field ONLY if: [conditions_excluded(8)]="1"</p>	<p>Is exclusion of individuals with Congestive Heart Failure narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_8__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_8__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_8__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_8__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_8__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_8__0	No	1	exclusion_8__1	Yes- narrowed by type	2	exclusion_8__2	Yes- narrowed by severity	3	exclusion_8__3	Yes- narrowed by onset	4	exclusion_8__4	Yes- narrowed by other specification
0	exclusion_8__0	No															
1	exclusion_8__1	Yes- narrowed by type															
2	exclusion_8__2	Yes- narrowed by severity															
3	exclusion_8__3	Yes- narrowed by onset															
4	exclusion_8__4	Yes- narrowed by other specification															
<p>exclusion_n_report_9 Show the field ONLY if: [conditions_excluded(9)]="1"</p>	<p>Is the number of individuals excluded for having Coronary Artery Disease reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																

<p>exclusion_9 Show the field ONLY if: [conditions_excluded(9)]= "1"</p>	<p>Is exclusion of individuals with Coronary Artery Disease narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_9__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_9__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_9__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_9__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_9__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_9__0	No	1	exclusion_9__1	Yes- narrowed by type	2	exclusion_9__2	Yes- narrowed by severity	3	exclusion_9__3	Yes- narrowed by onset	4	exclusion_9__4	Yes- narrowed by other specification
0	exclusion_9__0	No															
1	exclusion_9__1	Yes- narrowed by type															
2	exclusion_9__2	Yes- narrowed by severity															
3	exclusion_9__3	Yes- narrowed by onset															
4	exclusion_9__4	Yes- narrowed by other specification															
<p>exclusion_n_report_10 Show the field ONLY if: [conditions_excluded(10)]= "1"</p>	<p>Is the number of individuals excluded for having Dementia reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_10 Show the field ONLY if: [conditions_excluded(10)]= "1"</p>	<p>Is exclusion of individuals with Dementia narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_10__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_10__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_10__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_10__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_10__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_10__0	No	1	exclusion_10__1	Yes- narrowed by type	2	exclusion_10__2	Yes- narrowed by severity	3	exclusion_10__3	Yes- narrowed by onset	4	exclusion_10__4	Yes- narrowed by other specification
0	exclusion_10__0	No															
1	exclusion_10__1	Yes- narrowed by type															
2	exclusion_10__2	Yes- narrowed by severity															
3	exclusion_10__3	Yes- narrowed by onset															
4	exclusion_10__4	Yes- narrowed by other specification															
<p>exclusion_n_report_11 Show the field ONLY if: [conditions_excluded(11)]= "1"</p>	<p>Is the number of individuals excluded for having Depression reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_11 Show the field ONLY if: [conditions_excluded(11)]= "1"</p>	<p>Is exclusion of individuals with Depression narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_11__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_11__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_11__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_11__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_11__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_11__0	No	1	exclusion_11__1	Yes- narrowed by type	2	exclusion_11__2	Yes- narrowed by severity	3	exclusion_11__3	Yes- narrowed by onset	4	exclusion_11__4	Yes- narrowed by other specification
0	exclusion_11__0	No															
1	exclusion_11__1	Yes- narrowed by type															
2	exclusion_11__2	Yes- narrowed by severity															
3	exclusion_11__3	Yes- narrowed by onset															
4	exclusion_11__4	Yes- narrowed by other specification															
<p>exclusion_justified_11 Show the field ONLY if: [conditions_excluded(11)]= "1"</p>	<p>Is a justification for Depression exclusion provided?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_n_report_12 Show the field ONLY if: [conditions_excluded(12)]= "1"</p>	<p>Is the number of individuals excluded for having Diabetes reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_12 Show the field ONLY if: [conditions_excluded(12)]= "1"</p>	<p>Is exclusion of individuals with Diabetes narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_12__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_12__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_12__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_12__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_12__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_12__0	No	1	exclusion_12__1	Yes- narrowed by type	2	exclusion_12__2	Yes- narrowed by severity	3	exclusion_12__3	Yes- narrowed by onset	4	exclusion_12__4	Yes- narrowed by other specification
0	exclusion_12__0	No															
1	exclusion_12__1	Yes- narrowed by type															
2	exclusion_12__2	Yes- narrowed by severity															
3	exclusion_12__3	Yes- narrowed by onset															
4	exclusion_12__4	Yes- narrowed by other specification															

<p>exclusion_n_report_13 Show the field ONLY if: [conditions_excluded(13)]= "1" "</p>	<p>Is the number of individuals excluded for having Hepatitis reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_13 Show the field ONLY if: [conditions_excluded(13)]= "1" "</p>	<p>Is exclusion of individuals with Hepatitis narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_13__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_13__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_13__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_13__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_13__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_13__0	No	1	exclusion_13__1	Yes- narrowed by type	2	exclusion_13__2	Yes- narrowed by severity	3	exclusion_13__3	Yes- narrowed by onset	4	exclusion_13__4	Yes- narrowed by other specification
0	exclusion_13__0	No															
1	exclusion_13__1	Yes- narrowed by type															
2	exclusion_13__2	Yes- narrowed by severity															
3	exclusion_13__3	Yes- narrowed by onset															
4	exclusion_13__4	Yes- narrowed by other specification															
<p>exclusion_n_report_14 Show the field ONLY if: [conditions_excluded(14)]= "1" "</p>	<p>Is the number of individuals excluded for having HIV reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_14 Show the field ONLY if: [conditions_excluded(14)]= "1" "</p>	<p>Is exclusion of individuals with HIV narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_14__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_14__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_14__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_14__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_14__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_14__0	No	1	exclusion_14__1	Yes- narrowed by type	2	exclusion_14__2	Yes- narrowed by severity	3	exclusion_14__3	Yes- narrowed by onset	4	exclusion_14__4	Yes- narrowed by other specification
0	exclusion_14__0	No															
1	exclusion_14__1	Yes- narrowed by type															
2	exclusion_14__2	Yes- narrowed by severity															
3	exclusion_14__3	Yes- narrowed by onset															
4	exclusion_14__4	Yes- narrowed by other specification															
<p>exclusion_n_report_15 Show the field ONLY if: [conditions_excluded(15)]= "1" "</p>	<p>Is the number of individuals excluded for having Hyperlipidemia reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_15 Show the field ONLY if: [conditions_excluded(15)]= "1" "</p>	<p>Is exclusion of individuals with Hyperlipidemia narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_15__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_15__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_15__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_15__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_15__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_15__0	No	1	exclusion_15__1	Yes- narrowed by type	2	exclusion_15__2	Yes- narrowed by severity	3	exclusion_15__3	Yes- narrowed by onset	4	exclusion_15__4	Yes- narrowed by other specification
0	exclusion_15__0	No															
1	exclusion_15__1	Yes- narrowed by type															
2	exclusion_15__2	Yes- narrowed by severity															
3	exclusion_15__3	Yes- narrowed by onset															
4	exclusion_15__4	Yes- narrowed by other specification															
<p>exclusion_n_report_16 Show the field ONLY if: [conditions_excluded(16)]= "1" "</p>	<p>Is the number of individuals excluded for having Hypertension reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_16 Show the field ONLY if: [conditions_excluded(16)]= "1" "</p>	<p>Is exclusion of individuals with Hypertension narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_16__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_16__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_16__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_16__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_16__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_16__0	No	1	exclusion_16__1	Yes- narrowed by type	2	exclusion_16__2	Yes- narrowed by severity	3	exclusion_16__3	Yes- narrowed by onset	4	exclusion_16__4	Yes- narrowed by other specification
0	exclusion_16__0	No															
1	exclusion_16__1	Yes- narrowed by type															
2	exclusion_16__2	Yes- narrowed by severity															
3	exclusion_16__3	Yes- narrowed by onset															
4	exclusion_16__4	Yes- narrowed by other specification															

<p>exclusion_n_report_17 Show the field ONLY if: [conditions_excluded(17)]=1 "</p>	<p>Is the number of individuals excluded for having Osteoporosis reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_17 Show the field ONLY if: [conditions_excluded(17)]=1 "</p>	<p>Is exclusion of individuals with Osteoporosis s narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_17__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_17__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_17__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_17__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_17__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_17__0	No	1	exclusion_17__1	Yes- narrowed by type	2	exclusion_17__2	Yes- narrowed by severity	3	exclusion_17__3	Yes- narrowed by onset	4	exclusion_17__4	Yes- narrowed by other specification
0	exclusion_17__0	No															
1	exclusion_17__1	Yes- narrowed by type															
2	exclusion_17__2	Yes- narrowed by severity															
3	exclusion_17__3	Yes- narrowed by onset															
4	exclusion_17__4	Yes- narrowed by other specification															
<p>exclusion_n_report_18 Show the field ONLY if: [conditions_excluded(18)]=1 "</p>	<p>Is the number of individuals excluded for having Schizophrenia reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_18 Show the field ONLY if: [conditions_excluded(18)]=1 "</p>	<p>Is exclusion of individuals with Schizophrenia narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_18__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_18__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_18__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_18__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_18__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_18__0	No	1	exclusion_18__1	Yes- narrowed by type	2	exclusion_18__2	Yes- narrowed by severity	3	exclusion_18__3	Yes- narrowed by onset	4	exclusion_18__4	Yes- narrowed by other specification
0	exclusion_18__0	No															
1	exclusion_18__1	Yes- narrowed by type															
2	exclusion_18__2	Yes- narrowed by severity															
3	exclusion_18__3	Yes- narrowed by onset															
4	exclusion_18__4	Yes- narrowed by other specification															
<p>exclusion_n_report_19 Show the field ONLY if: [conditions_excluded(19)]=1 "</p>	<p>Is the number of individuals excluded for having Stroke reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_19 Show the field ONLY if: [conditions_excluded(19)]=1 "</p>	<p>Is exclusion of individuals with Stroke narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_19__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_19__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_19__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_19__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_19__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_19__0	No	1	exclusion_19__1	Yes- narrowed by type	2	exclusion_19__2	Yes- narrowed by severity	3	exclusion_19__3	Yes- narrowed by onset	4	exclusion_19__4	Yes- narrowed by other specification
0	exclusion_19__0	No															
1	exclusion_19__1	Yes- narrowed by type															
2	exclusion_19__2	Yes- narrowed by severity															
3	exclusion_19__3	Yes- narrowed by onset															
4	exclusion_19__4	Yes- narrowed by other specification															
<p>exclusion_n_report_20 Show the field ONLY if: [conditions_excluded(20)]=1 "</p>	<p>Is the number of individuals excluded for having Substance Abuse Disorders reported?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes											
0	No																
1	Yes																
<p>exclusion_20 Show the field ONLY if: [conditions_excluded(20)]=1 "</p>	<p>Is exclusion of individuals with Substance Abuse Disorders narrowed?</p>	<p>checkbox</p> <table border="1"> <tr> <td>0</td> <td>exclusion_20__0</td> <td>No</td> </tr> <tr> <td>1</td> <td>exclusion_20__1</td> <td>Yes- narrowed by type</td> </tr> <tr> <td>2</td> <td>exclusion_20__2</td> <td>Yes- narrowed by severity</td> </tr> <tr> <td>3</td> <td>exclusion_20__3</td> <td>Yes- narrowed by onset</td> </tr> <tr> <td>4</td> <td>exclusion_20__4</td> <td>Yes- narrowed by other specification</td> </tr> </table>	0	exclusion_20__0	No	1	exclusion_20__1	Yes- narrowed by type	2	exclusion_20__2	Yes- narrowed by severity	3	exclusion_20__3	Yes- narrowed by onset	4	exclusion_20__4	Yes- narrowed by other specification
0	exclusion_20__0	No															
1	exclusion_20__1	Yes- narrowed by type															
2	exclusion_20__2	Yes- narrowed by severity															
3	exclusion_20__3	Yes- narrowed by onset															
4	exclusion_20__4	Yes- narrowed by other specification															

age_restrict	Were there any age restrictions for trial participants (aside from 18 years or older)?	dropdown <table border="1"> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </table>	0	No	1	Yes																							
0	No																												
1	Yes																												
age_restric_type Show the field ONLY if: [age_restrict]="1"	What type of age exclusion?	checkbox <table border="1"> <tr><td>0</td><td>age_restric_type__0</td><td>Minimum Age</td></tr> <tr><td>1</td><td>age_restric_type__1</td><td>Maximum Age</td></tr> </table>	0	age_restric_type__0	Minimum Age	1	age_restric_type__1	Maximum Age																					
0	age_restric_type__0	Minimum Age																											
1	age_restric_type__1	Maximum Age																											
max_age Show the field ONLY if: [age_restric_type(1)]="1"	Excluded those above age:	text (integer)																											
eligibility_complete	Section Header: <i>Form Status</i> Complete?	dropdown <table border="1"> <tr><td>0</td><td>Incomplete</td></tr> <tr><td>1</td><td>Unverified</td></tr> <tr><td>2</td><td>Complete</td></tr> </table>	0	Incomplete	1	Unverified	2	Complete																					
0	Incomplete																												
1	Unverified																												
2	Complete																												
Instrument: Patient Selection																													
flow_diagram	Is a participant flow diagram presented?	dropdown <table border="1"> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </table>	0	No	1	Yes																							
0	No																												
1	Yes																												
mcc_reported	Section Header: <i>Form History</i> Are multiple chronic conditions included in the participant characteristics?	dropdown <table border="1"> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </table>	0	No	1	Yes																							
0	No																												
1	Yes																												
mcc_infer	Could the inclusion of individuals with multiple chronic conditions be inferred?	dropdown <table border="1"> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> <tr><td>2</td><td>Extracted before 8/7/15 (DON'T SELECT)</td></tr> </table>	0	No	1	Yes	2	Extracted before 8/7/15 (DON'T SELECT)																					
0	No																												
1	Yes																												
2	Extracted before 8/7/15 (DON'T SELECT)																												
mcc_reported_spec Show the field ONLY if: [mcc_reported]="1" or [mcc_infer]="1"	Is this description general or condition specific?	checkbox <table border="1"> <tr><td>0</td><td>mcc_reported_spec__0</td><td>General</td></tr> <tr><td>1</td><td>mcc_reported_spec__1</td><td>Condition Specific</td></tr> </table>	0	mcc_reported_spec__0	General	1	mcc_reported_spec__1	Condition Specific																					
0	mcc_reported_spec__0	General																											
1	mcc_reported_spec__1	Condition Specific																											
mcc_reported_cond Show the field ONLY if: [mcc_reported_spec(1)]="1" or [mcc_infer]="1"	Which specific conditions are reported or inferred in the participant characteristics?	checkbox <table border="1"> <tr><td>1</td><td>mcc_reported_cond__1</td><td>Arthritis</td></tr> <tr><td>2</td><td>mcc_reported_cond__2</td><td>Asthma</td></tr> <tr><td>3</td><td>mcc_reported_cond__3</td><td>Autism Spectrum Disorder</td></tr> <tr><td>4</td><td>mcc_reported_cond__4</td><td>Cancer</td></tr> <tr><td>5</td><td>mcc_reported_cond__5</td><td>Cardiac Arrhythmias</td></tr> <tr><td>6</td><td>mcc_reported_cond__6</td><td>Chronic Kidney Disease</td></tr> <tr><td>7</td><td>mcc_reported_cond__7</td><td>Chronic Obstructive Pulmonary Disease</td></tr> <tr><td>8</td><td>mcc_reported_cond__8</td><td>Congestive Heart Failure</td></tr> <tr><td>9</td><td>mcc_reported_cond__9</td><td>Coronary Artery Disease</td></tr> </table>	1	mcc_reported_cond__1	Arthritis	2	mcc_reported_cond__2	Asthma	3	mcc_reported_cond__3	Autism Spectrum Disorder	4	mcc_reported_cond__4	Cancer	5	mcc_reported_cond__5	Cardiac Arrhythmias	6	mcc_reported_cond__6	Chronic Kidney Disease	7	mcc_reported_cond__7	Chronic Obstructive Pulmonary Disease	8	mcc_reported_cond__8	Congestive Heart Failure	9	mcc_reported_cond__9	Coronary Artery Disease
1	mcc_reported_cond__1	Arthritis																											
2	mcc_reported_cond__2	Asthma																											
3	mcc_reported_cond__3	Autism Spectrum Disorder																											
4	mcc_reported_cond__4	Cancer																											
5	mcc_reported_cond__5	Cardiac Arrhythmias																											
6	mcc_reported_cond__6	Chronic Kidney Disease																											
7	mcc_reported_cond__7	Chronic Obstructive Pulmonary Disease																											
8	mcc_reported_cond__8	Congestive Heart Failure																											
9	mcc_reported_cond__9	Coronary Artery Disease																											

		<table border="1"> <tbody> <tr><td>10</td><td>mcc_reported_cond__10</td><td>Dementia</td></tr> <tr><td>11</td><td>mcc_reported_cond__11</td><td>Depression</td></tr> <tr><td>12</td><td>mcc_reported_cond__12</td><td>Diabetes</td></tr> <tr><td>13</td><td>mcc_reported_cond__13</td><td>Hepatitis</td></tr> <tr><td>14</td><td>mcc_reported_cond__14</td><td>Human Immunodeficiency Virus (HIV)</td></tr> <tr><td>15</td><td>mcc_reported_cond__15</td><td>Hyperlipidemia</td></tr> <tr><td>16</td><td>mcc_reported_cond__16</td><td>Hypertension</td></tr> <tr><td>17</td><td>mcc_reported_cond__17</td><td>Osteoporosis</td></tr> <tr><td>18</td><td>mcc_reported_cond__18</td><td>Schizophrenia</td></tr> <tr><td>19</td><td>mcc_reported_cond__19</td><td>Stroke</td></tr> <tr><td>20</td><td>mcc_reported_cond__20</td><td>Substance Abuse Disorders</td></tr> </tbody> </table>	10	mcc_reported_cond__10	Dementia	11	mcc_reported_cond__11	Depression	12	mcc_reported_cond__12	Diabetes	13	mcc_reported_cond__13	Hepatitis	14	mcc_reported_cond__14	Human Immunodeficiency Virus (HIV)	15	mcc_reported_cond__15	Hyperlipidemia	16	mcc_reported_cond__16	Hypertension	17	mcc_reported_cond__17	Osteoporosis	18	mcc_reported_cond__18	Schizophrenia	19	mcc_reported_cond__19	Stroke	20	mcc_reported_cond__20	Substance Abuse Disorders
10	mcc_reported_cond__10	Dementia																																	
11	mcc_reported_cond__11	Depression																																	
12	mcc_reported_cond__12	Diabetes																																	
13	mcc_reported_cond__13	Hepatitis																																	
14	mcc_reported_cond__14	Human Immunodeficiency Virus (HIV)																																	
15	mcc_reported_cond__15	Hyperlipidemia																																	
16	mcc_reported_cond__16	Hypertension																																	
17	mcc_reported_cond__17	Osteoporosis																																	
18	mcc_reported_cond__18	Schizophrenia																																	
19	mcc_reported_cond__19	Stroke																																	
20	mcc_reported_cond__20	Substance Abuse Disorders																																	
mcc_reported_cond_total	How many additional specific chronic conditions were reported or inferred?	text																																	
mcc_infer_1 Show the field ONLY if: [mcc_reported_cond(1)="1"]	Is the total number of participants with Arthritis reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_2 Show the field ONLY if: [mcc_reported_cond(2)="1"]	Is the total number of participants with Asthma reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_3 Show the field ONLY if: [mcc_reported_cond(3)="1"]	Is the total number of participants with Autism Spectrum Disorder reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_4 Show the field ONLY if: [mcc_reported_cond(4)="1"]	Is the total number of participants with Cancer reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_5 Show the field ONLY if: [mcc_reported_cond(5)="1"]	Is the total number of participants with Cardiac Arrhythmias reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_6 Show the field ONLY if: [mcc_reported_cond(6)="1"]	Is the total number of participants with Chronic Kidney Disease reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		
mcc_infer_7 Show the field ONLY if: [mcc_reported_cond(7)="1"]	Is the total number of participants with Chronic Obstructive Pulmonary Disease reported?	dropdown <table border="1"> <tbody> <tr><td>0</td><td>No</td></tr> <tr><td>1</td><td>Yes</td></tr> </tbody> </table>	0	No	1	Yes																													
0	No																																		
1	Yes																																		

mcc_infer_8 Show the field ONLY if: [mcc_reported_cond(8)]= "1"	Is the total number of participants with Congestive Heart Failure reported?	dropdown 0 No 1 Yes
mcc_infer_9 Show the field ONLY if: [mcc_reported_cond(9)]= "1"	Is the total number of participants with Coronary Artery Disease reported?	dropdown 0 No 1 Yes
mcc_infer_10 Show the field ONLY if: [mcc_reported_cond(10)]= "1"	Is the total number of participants with Dementia reported?	dropdown 0 No 1 Yes
mcc_infer_11 Show the field ONLY if: [mcc_reported_cond(11)]= "1"	Is the total number of participants with Depression reported?	dropdown 0 No 1 Yes
mcc_infer_12 Show the field ONLY if: [mcc_reported_cond(12)]= "1"	Is the total number of participants with Diabetes reported?	dropdown 0 No 1 Yes
mcc_infer_13 Show the field ONLY if: [mcc_reported_cond(13)]= "1"	Is the total number of participants with Hepatitis reported?	dropdown 0 No 1 Yes
mcc_infer_14 Show the field ONLY if: [mcc_reported_cond(14)]= "1"	Is the total number of participants with HIV reported?	dropdown 0 No 1 Yes
mcc_infer_15 Show the field ONLY if: [mcc_reported_cond(15)]= "1"	Is the total number of participants with Hyperlipidemia reported?	dropdown 0 No 1 Yes
mcc_infer_16 Show the field ONLY if: [mcc_reported_cond(16)]= "1"	Is the total number of participants with Hypertension reported?	dropdown 0 No 1 Yes
mcc_infer_17 Show the field ONLY if: [mcc_reported_cond(17)]= "1"	Is the total number of participants with Osteoporosis reported?	dropdown 0 No 1 Yes
mcc_infer_18 Show the field ONLY if: [mcc_reported_cond(18)]= "1"	Is the total number of participants with Schizophrenia reported?	dropdown 0 No 1 Yes
mcc_infer_19 Show the field ONLY if: [mcc_reported_cond(19)]= "1"	Is the total number of participants with Stroke reported?	dropdown 0 No 1 Yes

mcc_infer_20 Show the field ONLY if: [mcc_reported_cond(20)]= "1"	Is the total number of participants with Substance Abuse Disorders reported?	dropdown 0 No 1 Yes
mcc_report_cond_total	What is the total number of chronic conditions (aside from index condition) reported in the trial (explicit or inferred)?	text (integer, Min: 0, Max: 20)
mcc_reported_number Show the field ONLY if: [mcc_reported_spec(0)] = 1	Are any of the following statistics regarding participants with MCC reported?	checkbox 0 mcc_reported_number__0 Number 1 mcc_reported_number__1 Percentage 2 mcc_reported_number__2 Mean 3 mcc_reported_number__3 Charlson comorbidity index 4 mcc_reported_number__4 Not reported
patient_selection_complete	Section Header: <i>Form Status</i> Complete?	dropdown 0 Incomplete 1 Unverified 2 Complete
Instrument: Quality Assessment		
bias_rand_seq	Section Header: <i>Form History</i> Random sequence generation (selection bias)	dropdown 0 Low Risk 1 High Risk 2 Unclear Risk
bias_alloc	Allocation concealment (selection bias)	dropdown 0 Low Risk 1 High Risk 2 Unclear Risk
bias_performance	Blinding of participants and personnel (performance bias)	dropdown 0 Low Risk 1 High Risk 2 Unclear Risk
bias_detection	Blinding of outcome assessment (detection bias)	dropdown 0 Low Risk 1 High Risk 2 Unclear Risk
bias_attrition	Incomplete outcome data (attrition bias)	dropdown 0 Low Risk 1 High Risk

		<table border="1"> <tr> <td>2</td> <td>Unclear Risk</td> </tr> </table>	2	Unclear Risk										
2	Unclear Risk													
bias_report	Selective outcome reporting (reporting bias)	dropdown <table border="1"> <tr> <td>0</td> <td>Low Risk</td> </tr> <tr> <td>1</td> <td>High Risk</td> </tr> <tr> <td>2</td> <td>Unclear Risk</td> </tr> </table>	0	Low Risk	1	High Risk	2	Unclear Risk						
0	Low Risk													
1	High Risk													
2	Unclear Risk													
quality_score	Quality Score	calc Calculation: sum((if([bias_rand_seq]>1,0,if([bias_rand_seq]<1,-1,[bias_rand_seq]))),(if([bias_alloc]>1,0,if([bias_alloc]<1,-1,[bias_alloc]))),(if([bias_performance]>1,0,if([bias_performance]<1,-1,[bias_performance]))),(if([bias_detection]>1,0,if([bias_detection]<1,-1,[bias_detection]))),(if([bias_attrition]>1,0,if([bias_attrition]<1,-1,[bias_attrition]))),(if([bias_report]>1,0,if([bias_report]<1,-1,[bias_report]))))												
quality_assessment_complete	Section Header: <i>Form Status</i> Complete?	dropdown <table border="1"> <tr> <td>0</td> <td>Incomplete</td> </tr> <tr> <td>1</td> <td>Unverified</td> </tr> <tr> <td>2</td> <td>Complete</td> </tr> </table>	0	Incomplete	1	Unverified	2	Complete						
0	Incomplete													
1	Unverified													
2	Complete													
Instrument: Outcomes														
sub_analysis_comorbid	Section Header: <i>Form History</i> Is comorbidity information considered in analysis?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes								
0	No													
1	Yes													
prim_outcome	Section Header: <i>Primary Outcomes</i> Is a single primary outcome clearly identified?	dropdown <table border="1"> <tr> <td>0</td> <td>No</td> </tr> <tr> <td>1</td> <td>Yes</td> </tr> </table>	0	No	1	Yes								
0	No													
1	Yes													
prim_outcome_1 Show the field ONLY if: [prim_outcome]="1" or [prim_outcome_mult]="1"	Primary Outcome	text												
internal_primary_outcome	Primary Outcome (Internal Use)	checkbox <table border="1"> <tr> <td>1</td> <td>internal_primary_outcome__1</td> <td>Physical</td> </tr> <tr> <td>2</td> <td>internal_primary_outcome__2</td> <td>Functional</td> </tr> <tr> <td>3</td> <td>internal_primary_outcome__3</td> <td>Social</td> </tr> <tr> <td>4</td> <td>internal_primary_outcome__4</td> <td>Psychological</td> </tr> </table>	1	internal_primary_outcome__1	Physical	2	internal_primary_outcome__2	Functional	3	internal_primary_outcome__3	Social	4	internal_primary_outcome__4	Psychological
1	internal_primary_outcome__1	Physical												
2	internal_primary_outcome__2	Functional												
3	internal_primary_outcome__3	Social												
4	internal_primary_outcome__4	Psychological												
outcome_well_being Show the field ONLY if: [prim_outcome]="1" or [prim_outcome_mult]="1"	Does the primary outcome assess any of the following measures?	checkbox <table border="1"> <tr> <td>0</td> <td>outcome_well_being__0</td> <td>Weight management/diet/physical activity</td> </tr> <tr> <td>1</td> <td>outcome_well_being__1</td> <td>Tobacco habits</td> </tr> </table>	0	outcome_well_being__0	Weight management/diet/physical activity	1	outcome_well_being__1	Tobacco habits						
0	outcome_well_being__0	Weight management/diet/physical activity												
1	outcome_well_being__1	Tobacco habits												

		<table border="1"> <tr> <td>2</td> <td>outcome_well_bein g__2</td> <td>Adherence to disease management</td> </tr> <tr> <td>3</td> <td>outcome_well_bein g__3</td> <td>Psychological well-being</td> </tr> <tr> <td>4</td> <td>outcome_well_bein g__4</td> <td>Pain/Discomfort</td> </tr> <tr> <td>5</td> <td>outcome_well_bein g__5</td> <td>Other</td> </tr> </table>	2	outcome_well_bein g__2	Adherence to disease management	3	outcome_well_bein g__3	Psychological well-being	4	outcome_well_bein g__4	Pain/Discomfort	5	outcome_well_bein g__5	Other
2	outcome_well_bein g__2	Adherence to disease management												
3	outcome_well_bein g__3	Psychological well-being												
4	outcome_well_bein g__4	Pain/Discomfort												
5	outcome_well_bein g__5	Other												
outcomes_complete	Section Header: <i>Form Status</i> Complete?	dropdown <table border="1"> <tr> <td>0</td> <td>Incomplete</td> </tr> <tr> <td>1</td> <td>Unverified</td> </tr> <tr> <td>2</td> <td>Complete</td> </tr> </table>	0	Incomplete	1	Unverified	2	Complete						
0	Incomplete													
1	Unverified													
2	Complete													

3. Included studies

- 1 Adamsen LQ, M.: Andersen, C.: Moller, T.: Herrstedt, J.: Kronborg, D.: Baadsgaard, M. T.: Vistisen, K.: Midtgaard, J.: Christiansen, B.: Stage, M.: Kronborg, M. T.: Rorth, M. Effect of a multimodal high intensity exercise intervention in cancer patients undergoing chemotherapy: randomised controlled trial. *BMJ (Clinical research ed.)*. 2009;339:b3410. Pmc2762035:
- 2 Allen SMS, A. C.: Nezu, A. M.: Nezu, C. M.: Ciambone, D.: Hogan, J.: Mor, V. A problem-solving approach to stress reduction among younger women with breast carcinoma: A randomized controlled trial. *Cancer*. 2002;94(12):3089-3100.
- 3 Anderson KOM, T. R.: Payne, R.: Valero, V.: Palos, G. R.: Nazario, A.: Richman, S. P.: Hurley, J.: Gning, I.: Lynch, G. R.: Kalish, D.: Cleeland, C. S. Pain education for underserved minority cancer patients: a randomized controlled trial. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Dec 15 2004;22(24):4918-4925.
- 4 Angell KKL, M. A.: McCoy, R.: Donnelly, P.: Turner-Cobb, J. M.: Graddy, K.: Kraemer, H. C.: Koopman, C. Psychosocial intervention for rural women with breast cancer: The Sierra Stanford partnership. *Journal of general internal medicine*. 2003;18(7):499-507.
- 5 Antoni MHW, S. R.: Lechner, S. C.: Kazi, A.: Sifre, T.: Urcuyo, K. R.: Phillips, K.: Smith, R. G.: Petronis, V. M.: Guellati, S.: Wells, K. A.: Blomberg, B.: Carver, C. S. Reduction of cancer-specific thought intrusions and anxiety symptoms with a stress management intervention among women undergoing treatment for breast cancer. *The American journal of psychiatry*. Oct 2006;163(10):1791-1797.
- 6 Aranda SS, P.: Weih, L.: Milne, D.: Yates, P.: Faulkner, R. Meeting the support and information needs of women with advanced breast cancer: a randomised controlled trial. *British journal of cancer*. Sep 18 2006;95(6):667-673. Pmc2360523:
- 7 Ashing KR, M. A telephonic-based trial to reduce depressive symptoms among Latina breast cancer survivors. *Psycho-oncology*. May 2014;23(5):507-515.
- 8 Ashing-Giwa KT. Enhancing physical well-being and overall quality of life among underserved Latina-American cervical cancer survivors: feasibility study. *Journal of cancer survivorship : research and practice*. Sep 2008;2(3):215-223.
- 9 Bailey DEM, M. H.: Belyea, M.: Stewart, J. L.: Mohler, J. Uncertainty intervention for watchful waiting in prostate cancer. *Cancer nursing*. Sep-Oct 2004;27(5):339-346.
- 10 Belleau FPH, L.: Masse, B. Effects of an educational intervention on the anxiety of women awaiting mastectomies. *Canadian oncology nursing journal = Revue canadienne de nursing oncologique*. 2001;11(4):172-180.
- 11 Beney JD, E. B.: Chow, V.: Ignoffo, R. J.: Mitsunaga, L.: Shahkarami, M.: McMillan, A.: Bero, L. A. Effect of telephone follow-up on the physical well-being dimension of quality of life in patients with cancer. *Pharmacotherapy*. 2002;22(10):1301-1311.
- 12 Bloom JRS, S. L.: D'Onofrio, C. N.: Luce, J.: Banks, P. J. Addressing the needs of young breast cancer survivors at the 5 year milestone: can a short-term, low intensity intervention produce change? *Journal of cancer survivorship : research and practice*. Sep 2008;2(3):190-204.
- 13 Book KD, A.: Henrich, G.: Stuhr, C.: Peuker, M.: Hartl, K.: Braehler, E.: Herschbach, P. The effect of including a 'psychooncological statement' in the discharge summary on patient-physician communication: a randomized controlled trial. *Psycho-oncology*. Dec 2013;22(12):2789-2796.
- 14 Burns DS. The effect of the bonny method of guided imagery and music on the mood and life quality of cancer patients. *Journal of music therapy*. 2001;38(1):51-65.
- 15 Cartmel B, Bowen D, Ross D, Johnson E, Mayne ST. A randomized trial of an intervention to increase fruit and vegetable intake in curatively treated patients with early-stage head and neck cancer.

- Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology. Dec 2005;14(12):2848-2854.
- 16 Chan YM, Lee PW, Fong DY, et al. Effect of individual psychological intervention in Chinese women with gynecologic malignancy: a randomized controlled trial. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Aug 1 2005;23(22):4913-4924.
 - 17 Chandwani KD, Thornton B, Perkins GH, et al. Yoga improves quality of life and benefit finding in women undergoing radiotherapy for breast cancer. *Journal of the Society for Integrative Oncology*. 2010;8(2):43-55.
 - 18 Cohen L, Warneke C, Fouladi RT, Rodriguez MA, Chaoul-Reich A. Psychological Adjustment and Sleep Quality in a Randomized Trial of the Effects of a Tibetan Yoga Intervention in Patients with Lymphoma. *Cancer*. 2004;100(10):2253-2260.
 - 19 Coleman EA, Coon S, Hall-Barrow J, Richards K, Gaylor D, Stewart B. Feasibility of exercise during treatment for multiple myeloma. *Cancer nursing*. 2003;26(5):410-419.
 - 20 Cornbleet MAC, P.:Murray, S.:Stevenson, M.:Bond, S. Patient-held records in cancer and palliative care: a randomized, prospective trial. *Palliative medicine*. May 2002;16(3):205-212.
 - 21 Courneya KS, Friedenreich CM, Sela RA, Quinney HA, Rhodes RE, Handman M. The group psychotherapy and home-based physical exercise (GROUP-HOPE) trial in cancer survivors: Physical fitness and quality of life outcomes. *Psycho-oncology*. 2003;12(4):357-374.
 - 22 Crane-Okada R, Freeman E, Kiger H, et al. Senior peer counseling by telephone for psychosocial support after breast cancer surgery: effects at six months. *Oncol Nurs Forum*. Jan 2012;39(1):78-89.
 - 23 Danhauer SC, Mihalko SL, Russell GB, et al. Restorative yoga for women with breast cancer: Finding from a randomized pilot study. *Psycho-oncology*. 2009;18(4):360-368.
 - 24 de Wit R, van Dam F. From hospital to home care: a randomized controlled trial of a Pain Education Programme for cancer patients with chronic pain. *Journal of advanced nursing*. 2001;36(6):742-754.
 - 25 Dhruva A, Miaskowski C, Abrams D, et al. Yoga breathing for cancer chemotherapy-associated symptoms and quality of life: results of a pilot randomized controlled trial. *Journal of alternative and complementary medicine (New York, N.Y.)*. May 2012;18(5):473-479. Pmc3353818:
 - 26 Dimeo FC, Thomas F, Raabe-Menssen C, Propper F, Mathias M. Effect of aerobic exercise and relaxation training on fatigue and physical performance of cancer patients after surgery. A randomised controlled trial. *Supportive Care in Cancer*. 2004;12(11):774-779.
 - 27 Donovan HS, Ward SE, Sereika SM, et al. Web-based symptom management for women with recurrent ovarian cancer: A pilot randomized controlled trial of the WRITE symptoms intervention. *Journal of pain and symptom management*. 2014;47(2):218-230.
 - 28 Doorenbos A, Given B, Given C, Verbitsky N, Cimprich B, McCorkle R. Reducing symptom limitations: a cognitive behavioral intervention randomized trial. *Psycho-oncology*. Jul 2005;14(7):574-584. Pmc1904496:
 - 29 Faithfull S, Corner J, Meyer L, Huddart R, Dearnaley D. Evaluation of nurse-led follow up for patients undergoing pelvic radiotherapy. *British journal of cancer*. 2001;85(12):1853-1864.
 - 30 Fillion L, Gagnon P, Leblond F, et al. A brief intervention for fatigue management in breast cancer survivors. *Cancer nursing*. Mar-Apr 2008;31(2):145-159.
 - 31 Fukui SK, A.:Okamura, H.:Kamiya, M.:Koike, M.:Nakanishi, T.:Imoto, S.:Kanagawa, K.:Uchitomi, Y. A psychosocial group intervention for Japanese women with primary breast carcinoma. *Cancer*. Sep 1 2000;89(5):1026-1036.
 - 32 Gielissen MFM, Verhagen S, Witjes F, Bleijenberg G. Effects of cognitive behavior therapy in severely fatigued disease-free cancer patients compared with patients waiting for cognitive behavior therapy: A randomized controlled trial. *Journal of Clinical Oncology*. 2006;24(30):4882-4887.

- 33 Goel V, Sawka CA, Thiel EC, Gort EH, O'Connor AM. Randomized trial of a patient decision aid for choice of surgical treatment for breast cancer. *Medical Decision Making*. 2001;21(1):1-6.
- 34 Gotay CC, Moinpour CM, Unger JM, et al. Impact of a peer-delivered telephone intervention for women experiencing a breast cancer recurrence. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. May 20 2007;25(15):2093-2099.
- 35 Greer JA, Traeger L, Bemis H, et al. A pilot randomized controlled trial of brief cognitive-behavioral therapy for anxiety in patients with terminal cancer. *The oncologist*. 2012;17(10):1337-1345. Pmc3481900:
- 36 Halkett GK, O'Connor M, Aranda S, et al. Pilot randomised controlled trial of a radiation therapist-led educational intervention for breast cancer patients prior to commencing radiotherapy. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*. Jun 2013;21(6):1725-1733.
- 37 Hebert JR, Ebbeling CB, Olendzki BC, et al. Change in women's diet and body mass following intensive intervention for early-stage breast cancer. *Journal of the American Dietetic Association*. 2001;101(4):421-431.
- 38 Heiney SP, McWayne J, Hurley TG, et al. Efficacy of Therapeutic Group by Telephone for Women with Breast Cancer. *Cancer nursing*. 2003;26(6):439-447.
- 39 Heiney SP, Underwood SM, Tavakoli A, Adams SA, Wells LM, Bryant LH. Randomized trial of therapeutic group by teleconference: African American women with breast cancer. *Cancer*. 2012;118(15):3822-3832.
- 40 Kearney N, McCann L, Norrie J, et al. Evaluation of a mobile phone-based, advanced symptom management system (ASyMS) in the management of chemotherapy-related toxicity. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*. Apr 2009;17(4):437-444.
- 41 Kilbreath SL, Refshauge KM, Beith JM, et al. Upper limb progressive resistance training and stretching exercises following surgery for early breast cancer: a randomized controlled trial. *Breast cancer research and treatment*. Jun 2012;133(2):667-676.
- 42 Kim SH, Shin MS, Lee HS, et al. Randomized pilot test of a simultaneous stage-matched exercise and diet intervention for breast cancer survivors. *Oncol Nurs Forum*. Mar 2011;38(2):E97-106.
- 43 Kim YR, J. A.:Morrow, G. R. The effects of information and negative affect on severity of side effects from radiation therapy for prostate cancer. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*. Jul 2002;10(5):416-421.
- 44 Kinnane N, Stuart E, Thompson L, Evans K, Schneider-Kolsky M. Evaluation of the addition of video-based education for patients receiving standard pre-chemotherapy education. *European Journal of Cancer Care*. 2008;17(4):328-339.
- 45 Kinsella J, Acher P, Ashfield A, et al. Demonstration of erectile management techniques to men scheduled for radical prostatectomy reduces long-term regret: A comparative cohort study. *BJU International*. 2012;109(2):254-258.
- 46 Kissane DW, Grabsch B, Clarke DM, et al. Supportive-expressive group therapy for women with metastatic breast cancer: survival and psychosocial outcome from a randomized controlled trial. *Psycho-oncology*. Apr 2007;16(4):277-286.
- 47 Korstjens I, May AM, van Weert E, et al. Quality of life after self-management cancer rehabilitation: a randomized controlled trial comparing physical and cognitive-behavioral training versus physical training. *Psychosomatic medicine*. May 2008;70(4):422-429.
- 48 Kwekkeboom KL, Abbott-Anderson K, Cherwin C, Roiland R, Serlin RC, Ward SE. Pilot randomized controlled trial of a patient-controlled cognitive-behavioral intervention for the pain, fatigue, and

- sleep disturbance symptom cluster in cancer. *Journal of pain and symptom management*. Dec 2012;44(6):810-822. Pmc3484234:
- 49 Lam WW, Chan M, Or A, Kwong A, Suen D, Fielding R. Reducing treatment decision conflict difficulties in breast cancer surgery: a randomized controlled trial. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Aug 10 2013;31(23):2879-2885.
- 50 Larson MRD, P. R.:Talbot, N. L.:Caldwell, C.:Moynihan, J. A. A presurgical psychosocial intervention for breast cancer patients. psychological distress and the immune response. *J Psychosom Res*. Feb 2000;48(2):187-194.
- 51 Ledderer L, la Cour K, Mogensen O, et al. Feasibility of a psychosocial rehabilitation intervention to enhance the involvement of relatives in cancer rehabilitation: pilot study for a randomized controlled trial. *The patient*. 2013;6(3):201-212.
- 52 Leon-Pizarro C, Gich I, Barthe E, et al. A randomized trial of the effect of training in relaxation and guided imagery techniques in improving psychological and quality-of-life indices for gynecologic and breast brachytherapy patients. *Psycho-oncology*. Nov 2007;16(11):971-979.
- 53 Lepore SJ, Eton DT, Helgeson VS, Schulz R. Improving quality of life in men with prostate cancer: A randomized controlled trial of group education interventions. *Health Psychology*. 2003;22(5):443-452.
- 54 Lerman R, Jarski R, Rea H, Gellish R, Vicini F. Improving symptoms and quality of life of female cancer survivors: a randomized controlled study. *Annals of surgical oncology*. Feb 2012;19(2):373-378.
- 55 Lev EL, Owen SV. Counseling women with breast cancer using principles developed by Albert Bandura. *Perspectives in psychiatric care*. 2000;36(4):131-138.
- 56 Loprinzi CE, Prasad K, Schroeder DR, Sood A. Stress Management and Resilience Training (SMART) program to decrease stress and enhance resilience among breast cancer survivors: a pilot randomized clinical trial. *Clinical breast cancer*. Dec 2011;11(6):364-368.
- 57 Mishel MHB, M.:Germino, B. B.:Stewart, J. L.:Bailey, D. E., Jr.:Robertson, C.:Mohler, J. Helping patients with localized prostate carcinoma manage uncertainty and treatment side effects: nurse-delivered psychoeducational intervention over the telephone. *Cancer*. Mar 15 2002;94(6):1854-1866.
- 58 Moller T, Borregaard N, Tvede M, Adamsen L. Patient education - A strategy for prevention of infections caused by permanent central venous catheters in patients with haematological malignancies: A randomized clinical trial. *Journal of Hospital Infection*. 2005;61(4):330-341.
- 59 Montgomery GH, Bovbjerg DH, Schnur JB, et al. A randomized clinical trial of a brief hypnosis intervention to control side effects in breast surgery patients. *Journal of the National Cancer Institute*. Sep 5 2007;99(17):1304-1312.
- 60 Monti DA, Kash KM, Kunkel EJ, et al. Psychosocial benefits of a novel mindfulness intervention versus standard support in distressed women with breast cancer. *Psycho-oncology*. Nov 2013;22(11):2565-2575.
- 61 Morey MC, Snyder DC, Sloane R, et al. Effects of home-based diet and exercise on functional outcomes among older, overweight long-term cancer survivors: RENEW: a randomized controlled trial. *Jama*. May 13 2009;301(18):1883-1891. Pmc2752421:
- 62 Murchie P, Nicolson MC, Hannaford PC, Raja EA, Lee AJ, Campbell NC. Patient satisfaction with GP-led melanoma follow-up: a randomised controlled trial. *British journal of cancer*. May 11 2010;102(10):1447-1455. Pmc2869159:
- 63 Nielsen JD, Palshof T, Mainz J, Jensen AB, Olesen F. Randomised controlled trial of a shared care programme for newly referred cancer patients: Bridging the gap between general practice and hospital. *Quality and Safety in Health Care*. 2003;12(4):263-272.
- 64 Oldenmenger WH, Sillevs Smitt PAE, Van Montfort CAGM, De Raaf PJ, Van Der Rijt CCD. A combined pain consultation and pain education program decreases average and current pain and decreases

- interference in daily life by pain in oncology outpatients: A randomized controlled trial. *Pain*. 2011;152(11):2632-2639.
- 65 Passalacqua R, Caminiti C, Campione F, et al. Prospective, multicenter, randomized trial of a new organizational modality for providing information and support to cancer patients. *Journal of Clinical Oncology*. 2009;27(11):1794-1799.
- 66 Penedo FJD, J. R.:Molton, I.:Gonzalez, J. S.:Kinsinger, D.:Roos, B. A.:Carver, C. S.:Schneiderman, N.:Antoni, M. H. Cognitive-behavioral stress management improves stress-management skills and quality of life in men recovering from treatment of prostate carcinoma. *Cancer*. Jan 1 2004;100(1):192-200.
- 67 Poorkiani M, Abbaszadeh A, Hazrati M, Jafari P, Sadeghi M, Mohammadianpanah M. The effect of rehabilitation on quality of life in female breast cancer survivors in Iran. *Indian Journal of Medical and Paediatric Oncology*. 2010;31(4):105-109.
- 68 Rao R, Cruz V, Peng Y, et al. Bootcamp during neoadjuvant chemotherapy for breast cancer: A randomized pilot trial. *Breast Cancer: Basic and Clinical Research*. 2012;6(1):39-46.
- 69 Rawl SM, Given BA, Given CW, et al. Intervention to improve psychological functioning for newly diagnosed patients with cancer. *Oncology nursing forum*. 2002;29(6):967-975.
- 70 Ream E, Richardson A, Alexander-Dann C. Supportive intervention for fatigue in patients undergoing chemotherapy: a randomized controlled trial. *Journal of pain and symptom management*. Feb 2006;31(2):148-161.
- 71 Reif K, de Vries U, Petermann F, Gorres S. A patient education program is effective in reducing cancer-related fatigue: a multi-centre randomised two-group waiting-list controlled intervention trial. *European journal of oncology nursing : the official journal of European Oncology Nursing Society*. Apr 2013;17(2):204-213.
- 72 Rogers LQ, Hopkins-Price P, Vicari S, et al. A randomized trial to increase physical activity in breast cancer survivors. *Medicine and science in sports and exercise*. Apr 2009;41(4):935-946.
- 73 Sawka AM, Straus S, Rotstein L, et al. Randomized controlled trial of a computerized decision aid on adjuvant radioactive iodine treatment for patients with early-stage papillary thyroid cancer. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Aug 10 2012;30(23):2906-2911.
- 74 Shirai Y, Fujimori M, Ogawa A, et al. Patients' perception of the usefulness of a question prompt sheet for advanced cancer patients when deciding the initial treatment: a randomized, controlled trial. *Psycho-oncology*. Jul 2012;21(7):706-713.
- 75 Sikorskii A, Given CW, Given B, et al. Symptom management for cancer patients: a trial comparing two multimodal interventions. *Journal of pain and symptom management*. Sep 2007;34(3):253-264. Pmc2043403:
- 76 Silvers MA, Savva J, Huggins CE, Truby H, Haines T. Potential benefits of early nutritional intervention in adults with upper gastrointestinal cancer: a pilot randomised trial. *Supportive Care in Cancer*. 2014;22(11):3035-3044.
- 77 Simpson J, Mapel T. An investigation into the health benefits of mindfulness-based stress reduction (MBSR) for people living with a range of chronic physical illnesses in New Zealand. *The New Zealand medical journal*. Jul 8 2011;124(1338):68-75.
- 78 Sloman R. Relaxation and imagery for anxiety and depression control in community patients with advanced cancer. *Cancer nursing*. 2002;25(6):432-435.
- 79 Spiegel D, Butler LD, Giese-Davis J, et al. Effects of supportive-expressive group therapy on survival of patients with metastatic breast cancer: a randomized prospective trial. *Cancer*. Sep 1 2007;110(5):1130-1138.

- 80 Stanton AL, Ganz PA, Kwan L, et al. Outcomes from the Moving Beyond Cancer psychoeducational, randomized, controlled trial with breast cancer patients. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Sep 1 2005;23(25):6009-6018.
- 81 Stiegelis HEH, M.:Sanderman, R.:Bennenbroek, F. T.:Buunk, B. P.:van den Bergh, A. C.:Botke, G.:Ranchor, A. V. The impact of an informational self-management intervention on the association between control and illness uncertainty before and psychological distress after radiotherapy. *Psycho-oncology*. Apr 2004;13(4):248-259.
- 82 Swenson KK, Nissen MJ, Anderson E, Shapiro A, Schousboe J, Leach J. Effects of exercise vs bisphosphonates on bone mineral density in breast cancer patients receiving chemotherapy. *The journal of supportive oncology*. May-Jun 2009;7(3):101-107.
- 83 Taylor KL, Lamdan RM, Siegel JE, Shelby R, Moran-Klimi K, Hrywna M. Psychological adjustment among African American breast cancer patients: One-year follow-up results of a randomized psychoeducational group intervention. *Health Psychology*. 2003;22(3):316-323.
- 84 Templeton HC, V. Evaluation of an evidence-based education package for men with prostate cancer on hormonal manipulation therapy. *Patient education and counseling*. Oct 2004;55(1):55-61.
- 85 Traeger L, Penedo FJ, Benedict C, et al. Identifying how and for whom cognitive-behavioral stress management improves emotional well-being among recent prostate cancer survivors. *Psycho-oncology*. Feb 2013;22(2):250-259.
- 86 Vallance JKH, Courneya KS, Plotnikoff RC, Yasui Y, Mackey JR. Randomized controlled trial of the effects of print materials and step pedometers on physical activity and quality of life in breast cancer survivors. *Journal of Clinical Oncology*. 2007;25(17):2352-2359.
- 87 van der Lee ML, Garssen B. Mindfulness-based cognitive therapy reduces chronic cancer-related fatigue: a treatment study. *Psycho-oncology*. Mar 2012;21(3):264-272.
- 88 van der Peet EH, van den Beuken-van Everdingen MH, Patijn J, Schouten HC, van Kleef M, Courtens AM. Randomized clinical trial of an intensive nursing-based pain education program for cancer outpatients suffering from pain. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*. Aug 2009;17(8):1089-1099. Pmc2707949:
- 89 van der Pompe GA, M. H.:Duivenvoorden, H. J.:de Graeff, A.:Simonis, R. F.:van der Vegt, S. G.:Heijnen, C. J. An exploratory study into the effect of group psychotherapy on cardiovascular and immunoreactivity to acute stress in breast cancer patients. *Psychother Psychosom*. Nov-Dec 2001;70(6):307-318.
- 90 Vos PJ, Visser AP, Garssen B, Duivenvoorden HJ, de Haes HC. Effectiveness of group psychotherapy compared to social support groups in patients with primary, non-metastatic breast cancer. *Journal of psychosocial oncology*. 2007;25(4):37-60.
- 91 Wagner EH, Ludman EJ, Aiello Bowles EJ, et al. Nurse navigators in early cancer care: a randomized, controlled trial. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Jan 1 2014;32(1):12-18. Pmc3867643:
- 92 Wakefield M, Olver I, Whitford H, Rosenfeld E. Motivational interviewing as a smoking cessation intervention for patients with cancer: Randomized controlled trial. *Nursing research*. 2004;53(6):396-405.
- 93 Walker MS, Podbilewicz-Schuller Y. Video preparation for breast cancer treatment planning: results of a randomized clinical trial. *Psycho-oncology*. May 2005;14(5):408-420.
- 94 Ward S, Donovan H, Gunnarsdottir S, Serlin RC, Shapiro GR, Hughes S. A randomized trial of a representational intervention to decrease cancer pain (RIDcancerPain). *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*. Jan 2008;27(1):59-67. Pmc2526464:

- 95 Wengstrom Y, Haggmark C, Forsberg C. Coping with radiation therapy: effects of a nursing intervention on coping ability for women with breast cancer. *International journal of nursing practice*. 2001;7(1):8-15.
- 96 Whelan T, Levine M, Willan A, et al. Effect of a decision aid on knowledge and treatment decision making for breast cancer surgery: A randomized trial. *Journal of the American Medical Association*. 2004;292(4):435-441.
- 97 Wyatt GK, Donze LF, Beckrow KC. Efficacy of an in-home nursing intervention following short-stay breast cancer surgery. *Research in Nursing and Health*. 2004;27(5):322-331.
- 98 Yates P, Aranda S, Hargraves M, et al. Randomized controlled trial of an educational intervention for managing fatigue in women receiving adjuvant chemotherapy for early-stage breast cancer. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. Sep 1 2005;23(25):6027-6036.
- 99 Yates PE, H.:Nash, R.:Aranda, S.:Purdie, D.:Najman, J.:Skerman, H.:Walsh, A. A randomized controlled trial of a nurse-administered educational intervention for improving cancer pain management in ambulatory settings. *Patient education and counseling*. May 2004;53(2):227-237.
- 100 Yildirim YK, Cicek F, Uyar M. Effects of pain education program on pain intensity, pain treatment satisfaction, and barriers in Turkish cancer patients. *Pain management nursing : official journal of the American Society of Pain Management Nurses*. Dec 2009;10(4):220-228.
- 101 Zissiadis Y, Harper E, Kearney E. Impact of more intensive written information in patients having radical radiation therapy: results of a prospective randomized phase III trial. *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*. Aug 2010;96(2):254-258.

4. Funding and registration information

Author	Year	NIH Grant #	Other Funding Source Notes	NCT #	Other Registration #
Penedo	2004	1P50CA84944			
Spiegel	2007	5R01MH047226		NCT00226928	
Montgomery	2007	CA105222; CA81137	American Cancer Society (CRTG 00-312, PF-05-098-01-CPPB); Department of Defense (DAMD17-99-1-9303).		
Morey	2009	CA106919; P30AG028716	grant E3386R, Veterans Affairs Research and Development	NCT00303875	
Allen	2002	CA64703			
Antoni	2006	CA64710; CA11309			
Lepore	2003	CA68354			
Anderson	2004	CA85228	United States Army Medical Research and Materiel Command under DAMD17-94-J-4233 and by Public Health Service grant Nos. CA26582, CA64766, and CA85228 from the National Cancer Institute.		

Taylor	2003	K07CA72645	Nathan Cummings Foundation Grant 7955, American Cancer Society Grant JFRA615, National Cancer Institute Grant K07-CA72645, and the Mary DeWitt Petit Award (Alumni Association of the Medical College of Pennsylvania).		
Ward	2008	NR01326			
Wagner	2014	P20CA137219		NCT00921713	
Bloom	2008	R01CA078951			
Heiney	2012	R01CA107305			
Stanton	2005	R01CA63028			
Doorenbos	2005	R01CA79280; P30AG08808	NCI Grant #R01 CA79280, Family Home Care for Cancer: A Community-Based Model, in Affiliation with the Walther Cancer Institute, Indianapolis, Indiana, National Institute of Aging, Grant #P30 AG08808, USA.		
Courneya	2003	R01CA79460			
Mishel	2002	R01NR/CA03782			
GREER	2012	R03CA128478		NCT00706290	
Chandwani	2010	R21CA102385	Integrative Medicine Program, The University of Texas M. D. Anderson Cancer Center		
Kwekkeboom	2012	R21NR010746		NCT00946803	

Donovan	2014	R21NR07035			
Bailey	2004	R25CA57726-07; 1T32NR07091-01	the Oncology Nursing Society, and the Institute on Aging at the University of North Carolina at Chapel Hill.		
Cartmel	2005	RO1 CA74567			
Sikorskii	2007	RO1CA030724			
Monti	2013	RO1CA111832			
Kim	2002	U10CA37420			
Poorkiani	2010		"Source of Support: Nil"		
Fillion	2008		03-1102-014404-104 from the Fonds de recherche en sante du Quebec (FRSQ) and by an Investigator Award to the first author		
Lerman	2012		2010 Oakland University William Beaumont Hospital Multidisciplinary Research Award		
Kim	2011		a National Cancer Center grant (07104211)		
Walker	2005		American Cancer Society IRG-58-010-43		
Leon-Pizarro	2007		Asociacion Espanola contra el Cancer (Comarcas Barceloninas), and by the Instituto de Salud Carlos III, Red Tematica del Cancer C03/10.		

Crane-Okada	2012		Avon Foundation, Associates for Breast and Prostate Cancer Studies, Margie and Robert E. Petersen Foundation, and Mrs. Lois Rosen		
Cohen	2004		Bruce S. Gelb Foundation		
Ashing-Giwa	2008		California Cancer Research Program (#2110008)		
Faithfull	2001		Cancer Research Campaign, Nursing Clinical Research Fellowship; The Institute of Cancer Research		
Ream	2006		Cancer Research UK Project Grant, number ce1162/0101		
Murchie	2010		Cancer Research UK (Grant No. C10673/A3912)		ISRCTN71577271
Angell	2003		Community-Initiated Research Collaboration (CIRC) award from the Breast Cancer Research Program (BCRP) CIRC Pilot Award #3AB-7307		
Hebert	2001		DAMD17-94-J-4475 US Army Medical Research and Materiel Command		
Nielsen	2003		Danish Cancer Society, grant number 9615006		
Ledderer	2013		Danish Cancer Society, Grant number OKV 08008	NCT01060761	
Ashing	2014		Department of Defense (W81XWH-04-1-0548)		

Gotay	2007		Department of Defense Breast Cancer Research program (DAMD 17-96-1- 6009); and in part by the following Public Health Service Cooperative Agreement grant numbers awarded by NCI: CA38926, CA32102, CA35119, CA35431, CA35090, CA04919, CA35281, CA12644, CA27057, CA45560, CA35178, CA45377, CA63844, CA45807, CA46441, CA67663, CA58348, CA46282, CA12213, CA35192, CA52654, CA68183, CA35261, CA58416, CA95860, CA63848, CA86780, CA35996, CA16385, CA13612, CA42777, CA20319, CA37981, CA45450, CA14028, CA52654, CA58723, CA74647, CA58686, CA22433, CA58882.		
Steigelis	2004		Dutch Cancer Society 97-1621		
Gielissen	2006		Dutch Cancer Society Grant No. KUN 2001-2378		
Vos	2007		Dutch Cancer Society grant number HDI95-893		
Yildirim	2009		Ege University Research Foundation (Project no. 2005-HYO-06)		
Oldenmenger	2011		Erasmus MC Health Care Research and the Erasmus MC Revolving Fund		
Book	2013		German Cancer Aid (Deutsche Krebshilfe e.V.)		
Reif	2013		German Federal Ministry of Education and Research (FKZ: 01GT0605)	NCT00552552	

Rao	2012		grant given by the Commercial Real Estate Women of Dallas	NCT0141178	
Fukui	2000		Grant-in-Aid for Cancer Research (Grant 9-31) and Second-Term Comprehensive 10-Year Strategy for Cancer Control from the Japanese Ministry of Health and Welfare, Japan		
Lam	2013		Health and Health Services Research Fund (Grant No. 07080651), Food and Health Bureau, and Government of Hong Kong, Special Administrative Region, Peoples Republic of China.		
Simpson	2001		Health Services Research and Innovation Fund of the Alberta Heritage Foundation for Medical Research		
Aranda	2006		Inner & Eastern Melbourne Breast Care Consortium, Breast Services Enhancement Program, Victorian Department of Human Services, Australia		
Passalacqua	2009		Italian Ministry of Health, Special Program ex Art. 12, c.2, lett. B, D.l.gs 502/92.		
Korstjens	2008		Maastricht University, the Dutch Cancer Society (UU-2000-2585), and the Comprehensive Cancer Centre North-Netherlands.		

Cornbleet	2002		Macmillan Cancer Relief, Marie Curie Cancer Care, Janssen-Cilag plc, the Elizabeth Clark Charitable Trust and the Beatson Oncology Centre		
Templeton	2004		Mona Grey Research Scholarship, Astra Zeneca Pharmaceuticals and the Prostate Research Campaign, UK		
Dhruva	2012		Mount Zion Health Fund Grant #20070658	NCT00982748	
Yates	2004		National Health and Medical Research Council		
Kissane	2007		National Health and Medical Research Council of Australia, Cancer Council of Victoria, Kathleen Cuninghame Foundation and National Breast Cancer Foundation of Australia.		
Wakefield	2004		National Health and Medical Research Council, grant 9937290		
Swenson	2009		Novartis Pharmaceutical Corporation and the Park Nicollet Foundation		
Kilbreath	2012		NSW Cancer Council		ACTRN01260600005 0550
Halkett	2013		pilot study grant from the National Breast Cancer Foundation		
Yates	2005		Queensland Nursing Council and the National Breast Cancer Foundation, Australia.		
Zissiadis	2010		research grant from the Royal Australian and New Zealand College of Radiologists		

Vallance	2007		research team grant from the National Cancer Institute of Canada (NCIC) with funds from the Canadian Cancer Society (CCS) and the CCS/NCIC Sociobehavioral Cancer Research Network.	NCT00221221	
Larson	2000		RP950515 from the Department of Defense		
Heiney	2003		South Carolina Cancer Center		
Rogers	2009		Southern Illinois University School of Medicine Excellence in Academic Medicine Award (No. E200634), Brooks Medical Research Fund, and Memorial Medical Center Foundation Regional Cancer Center		
Silvers	2014		Southern Melbourne Integrated Cancer Service		
Loprinzi	2011		Sponsorship Research Committee, Mayo Clinic College of Medicine		
Kearney	2009		Stirling University Research Enterprise		ISRCTN 67370244
Whelan	2004		The Canadian Breast Cancer Research Initiative and the Ontario Ministry of Health and Long-Term Care, Health System- Linked Research Programme		
Goel	2001		the Institute for Clinical Evaluative Sciences		

Adamsen	2009		The Lundbeck Foundation, The Novo Nordic Foundation, The Egmont Foundation, The Danish Cancer Society, The Svend Andersen Foundation, The Aase and Ejnar Danielsen Foundation, The Beckett Foundation, The Wedell- Wedellsborg Foundation, The Hede Nielsen Family Foundation, The Gangsted Foundation, Copenhagen University Hospital		ISRCTN05322922
Sawka	2012		the Ontario Ministry of Health and Long-term Care (Alternate Funding Plan Innovation Fund)		
Shirai	2012		the Third- Term Comprehensive 10-Year Strategy for Cancer Control and Research, Japanese Ministry of Health, Labor and Welfare.		UMIN-CTR #000001047
Wyatt	2004		United States Medical Research and Materiel Command, Department of Defense; contract grant number: DAMD17-96-6325		
Moller	2005		University Hospital of Copenhagen Rigshospitalet, the Co-operation of Copenhagen Hospitals HS and Lundbeck Foundation Denmark		
Coleman	2003		University of Arkansas for Medical Sciences Medical Endowment Research Fund, the Oncology Nursing Foundation, and the Earl Knudsen Charitable Foundation.		

Van Der Pompe	2001		VSB Foundation (Utrecht) and by the Netherlands Concerted Research Action Fatigue at Work by the Netherlands Organization of Scientific Research		
Danhauer	2009		Wake Forest University Comprehensive Cancer Center		
van der Lee	2012		Zorg Innovatie Fonds		
Rawl	2002				
Beney	2002				
De Wit	2001				
Lev	2000				
Wengstrom	2001				
Burns	2001				
Belleau	2001				
Dimeo	2004				
Sloman	2002				
Chan	2005				
Kinnane	2008				

van der Peet	2009				
Kinsella	2011				
Traeger	2013				