# **Supplemental Online Content**

Ehsan AN, Wu CA, Minasian A, et al. Financial toxicity among patients with breast cancer worldwide: a systematic review and meta-analysis. *JAMA Netw Open*. 2023;6(2):e2255388. doi:10.1001/jamanetworkopen.2022.55388

eAppendix. Search Strategy

eFigure 1. Forest Plot for Financial Toxicity Rate, Subgrouped by Study Quality Ratings Among High-Income Countries (HICs)
eFigure 2. Funnel Plot of Standard Error by Logit Event Rate for Studies Reporting High-Income Countries (HICs)

This supplemental material has been provided by the authors to give readers additional information about their work.

#### eAppendix. Search Strategy

Wu Out of Pocket Finances Breast Cancer Search Strategy Last Updated: February 9, 2021

What is the out-of-pocket financial burden of breast cancer care in high-, middle-, and low-income countries, and what interventions have been implemented to address this burden?

Citation Pull: February 9, 2021

PubMed: 2240 Embase (Elsevier): 8231 Global Index Medicus: 61 Global Health (EBSCO): 554

Direct import into Covidence Embase – 8176 (55 duplicates) PubMed – 547 (1693 duplicates) Global Index Medicus – 46 (15 duplicates) Global Health – 239 (315 duplicates)

Total number of articles to review in Title/Abstract Screening: 9008

Concept 1: Breast Cancer Synonyms breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast

Concept 2: Out of Pocket Financial Burden

Synonyms

Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* OR health care cost\* OR healthcare cost\* OR medical care cost\* OR health cost\* OR treatment cost\*

PubMed

Concept 1: Breast Cancer Controlled Vocabulary "Breast Neoplasms"[Mesh]

Concept 2: Out-of-Pocket Expenses Controlled Vocabulary "Health Care Costs"[Mesh] OR "Financial Stress"[Mesh] OR "Health Expenditures"[Mesh]

Concept 1 AND Concept 2

(("Breast Neoplasms"[Mesh]) OR (breast cancer\*[Title/Abstract] OR breast neoplasm\*[Title/Abstract] OR breast tumour\*[Title/Abstract] OR breast tumor\*[Title/Abstract] OR breast carcinoma\*[Title/Abstract] OR carcinoma of the breast[Title/Abstract] OR carcinoma in situ[Title/Abstract] OR mammary cancer\*[Title/Abstract] OR cancer of breast[Title/Abstract] OR cancer of the breast[Title/Abstract])) AND (("Health Care Costs"[Mesh] OR "Financial Stress"[Mesh] OR "Health Expenditures"[Mesh]) OR (Financial Stress\*[Title/Abstract] OR Financial Pressure\*[Title/Abstract] OR Financial Hardship\*[Title/Abstract] OR Financial Challenges\*[Title/Abstract] OR Financial burden\*[Title/Abstract] OR health expenditure\*[Title/Abstract] OR direct expenditure\*[Title/Abstract] OR out-of-pocket expenditure\*[Title/Abstract] OR out-of pocket expenditure\*[Title/Abstract] OR out of pocket expenditure\*[Title/Abstract] OR out-of-pocket expense\*[Title/Abstract] OR out-of pocket expense\*[Title/Abstract] OR out of pocket expense\*[Title/Abstract] OR out-of-pocket cost\*[Title/Abstract] OR out-of pocket cost\*[Title/Abstract] OR out of pocket cost\*[Title/Abstract] OR out-of-pocket payment\*[Title/Abstract] OR out-of pocket payment\*[Title/Abstract] OR out of pocket payment\*[Title/Abstract] OR out-of-pocket spending[Title/Abstract] OR out-of pocket spending[Title/Abstract] OR out of pocket spending[Title/Abstract] OR indirect expenditure\*[Title/Abstract] OR expenditure\*[Title/Abstract] OR indirect cost\*[Title/Abstract] OR fear of cost\*[Title/Abstract] OR cost of treatment[Title/Abstract] OR capital expenditure\*[Title/Abstract] OR direct service cost\*[Title/Abstract] OR health expenditure\*[Title/Abstract] OR healthcare expenditure\*[Title/Abstract] OR health care expenditure\*[Title/Abstract] OR health care cost\*[Title/Abstract] OR healthcare cost\*[Title/Abstract] OR medical care cost\*[Title/Abstract] OR health cost\*[Title/Abstract] OR treatment cost\*[Title/Abstract]))

Results: 2240

EMBASE (Elsevier) Concept 1: Breast Cancer Controlled Vocabulary 'breast cancer'/exp

Concept 2: Out-of-pocket expenses Controlled Vocabulary 'financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost'/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp OR 'health care cost'/exp

### Concept 1 AND Concept 2

('breast cancer'/exp OR ((breast\* NEAR/3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR 'in situ')):ti,ab,kw) OR 'breast cancer\*':ti,ab,kw OR 'breast neoplasm\*':ti,ab,kw OR 'breast tumour\*':ti,ab,kw OR 'breast tumor\*':ti,ab,kw OR 'breast carcinoma\*':ti,ab,kw OR 'carcinoma of the breast':ti,ab,kw OR 'carcinoma in situ':ti,ab,kw OR 'mammary cancer\*':ti,ab,kw OR 'cancer of breast':ti,ab,kw OR 'cancer of the breast':ti,ab,kw ) AND ('financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost'/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp OR 'health care cost'/exp OR 'financial stress\*':ti,ab,kw OR 'financial pressure\*':ti,ab,kw OR 'financial hardship\*':ti,ab,kw OR 'financial challenges\*':ti,ab,kw OR 'financial burden\*':ti,ab,kw OR 'direct expenditure\*':ti,ab,kw OR 'out-of-pocket expenditure\*':ti,ab,kw OR 'out-of pocket expenditure\*':ti,ab,kw OR 'out of pocket expenditure\*':ti,ab,kw OR 'out-of-pocket expense\*':ti,ab,kw OR 'out-of pocket expense\*':ti,ab,kw OR 'out of pocket expense\*':ti,ab,kw OR 'out-of-pocket cost\*':ti,ab,kw OR 'out-of pocket cost\*':ti,ab,kw OR 'out of pocket cost\*':ti,ab,kw OR 'out-of-pocket payment\*':ti,ab,kw OR 'out-of pocket payment\*':ti,ab,kw OR 'out of pocket payment\*':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket spending':ti,ab,kw OR 'out of pocket spending':ti,ab,kw OR 'indirect expenditure\*':ti,ab,kw OR expenditure\*:ti,ab,kw OR 'indirect cost\*':ti,ab,kw OR 'fear of cost\*':ti,ab,kw OR 'cost of treatment':ti,ab,kw OR 'capital expenditure\*':ti,ab,kw OR 'direct service cost\*':ti,ab,kw OR 'health expenditure\*':ti,ab,kw OR 'healthcare expenditure\*':ti,ab,kw OR 'health care expenditure\*':ti,ab,kw OR 'health care cost\*':ti,ab,kw OR 'healthcare cost\*':ti,ab,kw OR 'medical care cost\*':ti,ab,kw OR 'health cost\*':ti,ab,kw OR 'treatment cost\*':ti,ab,kw)

Results 8231

Global Health (EBSCO)

Concept 1: Breast Cancer Controlled Vocabulary DE "breast cancer"

Concept 2: Out-of-pocket expenses Controlled Vocabulary DE "health care costs"

Concept 1 AND Concept 2

(DE "breast cancer" OR AB ( breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast ) OR TI ( breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the

breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast )) AND (DE "health care costs" OR AB (Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-ofpocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* OR health care cost\* OR healthcare cost\* OR medical care cost\* OR health cost\* OR treatment cost\* ) OR TI ( Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* OR health care cost\* OR healthcare cost\* OR medical care cost\* OR health cost\* OR treatment cost\* )) Results 554

**Global Index Medicus** 

#### Concept 1 AND Concept 2

(tw:("breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast")) AND (tw:("Financial Stress\*" OR "Financial Pressure\*" OR "Financial Hardship\*" OR "Financial Challenges\*" OR "Financial burden\*" OR "health expenditure\*" OR "direct expenditure\*" OR "out-of-pocket expenditure\*" OR "out-of pocket expenditure\*" OR "out of pocket expenditure\*" OR "out-of-pocket expense\*" OR "out-of pocket expense\*" OR "out of pocket expense\*" OR "out-of-pocket cost\*" OR "outof pocket cost\*" OR "out of pocket cost\*" OR "out-of-pocket cost\*" OR "outof pocket cost\*" OR "out of pocket cost\*" OR "out-of-pocket spending" OR "out-of pocket spending" OR "out of pocket spending" OR "indirect expenditure\*" OR "expenditure\*" OR "indirect cost\*" OR "fear of cost\*" OR "cost of treatment" OR "capital expenditure\*" OR "direct service cost\*" OR "health expenditure\*" OR "health care expenditure\*" OR "health care expenditure\*" OR "health care cost\*" OR "healthcare cost\*" OR "medical care cost\*" OR "health cost\*" OR "treatment cost\*") Results 61 PubMed

Concept 1: Breast Cancer Controlled Vocabulary "Breast Neoplasms"[Mesh]

### Synonyms

breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast

#### Syntax

("Breast Neoplasms"[Mesh]) OR (breast cancer\*[Title/Abstract] OR breast neoplasm\*[Title/Abstract] OR breast tumour\*[Title/Abstract] OR breast tumor\*[Title/Abstract] OR breast carcinoma\*[Title/Abstract] OR carcinoma of the breast[Title/Abstract] OR carcinoma in situ[Title/Abstract] OR mammary cancer\*[Title/Abstract] OR cancer of breast[Title/Abstract] OR cancer of the breast[Title/Abstract])

Concept 2: Out-of-Pocket Financial Burden

Controlled Vocabulary

"Financial Stress" [Mesh] OR "Health Expenditures" [Mesh]

### Synonyms

Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment

### Syntax

("Financial Stress"[Mesh] OR "Health Expenditures"[Mesh]) OR (Financial Stress\*[Title/Abstract] OR Financial Pressure\*[Title/Abstract] OR Financial Hardship\*[Title/Abstract] OR Financial Challenges\*[Title/Abstract] OR Financial burden\*[Title/Abstract] OR health expenditure\*[Title/Abstract] OR direct expenditure\*[Title/Abstract] OR out-of-pocket expenditure\*[Title/Abstract] OR out-of pocket expenditure\*[Title/Abstract] OR out of pocket expenditure\*[Title/Abstract] OR out-of-pocket expense\*[Title/Abstract] OR out-of pocket expense\*[Title/Abstract] OR out of pocket expense\*[Title/Abstract] OR out-of-pocket cost\*[Title/Abstract] OR out-of pocket expense\*[Title/Abstract] OR out-of-pocket cost\*[Title/Abstract] OR out-of pocket cost\*[Title/Abstract] OR out of pocket cost\*[Title/Abstract] OR out-of-pocket payment\*[Title/Abstract] OR out-of pocket payment\*[Title/Abstract] OR out of pocket payment\*[Title/Abstract] OR out-of-pocket spending[Title/Abstract] OR out-of pocket spending[Title/Abstract] OR out of pocket spending[Title/Abstract] OR indirect expenditure\*[Title/Abstract] OR expenditure\*[Title/Abstract] OR indirect cost\*[Title/Abstract] OR fear of cost\*[Title/Abstract] OR cost of treatment[Title/Abstract])

Concept 1 AND Concept 2

(("Breast Neoplasms"[Mesh]) OR (breast cancer\*[Title/Abstract] OR breast neoplasm\*[Title/Abstract] OR breast tumour\*[Title/Abstract] OR breast tumor\*[Title/Abstract] OR breast carcinoma\*[Title/Abstract] OR carcinoma of the breast[Title/Abstract] OR carcinoma in situ[Title/Abstract] OR mammary cancer\*[Title/Abstract] OR cancer of breast[Title/Abstract] OR cancer of the breast[Title/Abstract])) AND (("Financial Stress"[Mesh] OR "Health Expenditures" [Mesh]) OR (Financial Stress\* [Title/Abstract] OR Financial Pressure\*[Title/Abstract] OR Financial Hardship\*[Title/Abstract] OR Financial Challenges\*[Title/Abstract] OR Financial burden\*[Title/Abstract] OR health expenditure\*[Title/Abstract] OR direct expenditure\*[Title/Abstract] OR out-of-pocket expenditure\*[Title/Abstract] OR out-of pocket expenditure\*[Title/Abstract] OR out of pocket expenditure\*[Title/Abstract] OR out-of-pocket expense\*[Title/Abstract] OR out-of pocket expense\*[Title/Abstract] OR out of pocket expense\*[Title/Abstract] OR out-of-pocket cost\*[Title/Abstract] OR out-of pocket cost\*[Title/Abstract] OR out of pocket cost\*[Title/Abstract] OR out-of-pocket payment\*[Title/Abstract] OR out-of pocket payment\*[Title/Abstract] OR out of pocket payment\*[Title/Abstract] OR out-of-pocket spending[Title/Abstract] OR out-of pocket spending[Title/Abstract] OR out of pocket spending[Title/Abstract] OR indirect expenditure\*[Title/Abstract] OR expenditure\*[Title/Abstract] OR indirect cost\*[Title/Abstract] OR fear of cost\*[Title/Abstract] OR cost of treatment[Title/Abstract]))

980 results

EMBASE

Concept 1 Breast Cancer Controlled Vocabulary 'breast cancer'/exp

Synonyms/Keywords

breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast

Adjacency Searching (breast\* NEAR/3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR 'in situ')):ti,ab,kw

Syntax

('breast cancer'/exp OR (breast\* NEAR/3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR 'in situ')):ti,ab,kw) OR 'breast cancer\*':ti,ab,kw OR 'breast neoplasm\*':ti,ab,kw OR 'breast tumour\*':ti,ab,kw OR 'breast tumor\*':ti,ab,kw OR 'breast carcinoma\*':ti,ab,kw OR 'carcinoma of the breast':ti,ab,kw OR 'cancer of breast':ti,ab,kw OR 'cancer of breast':ti,ab,kw OR 'cancer of the breast':ti,ab,kw OR 'cancer of the breast':ti,ab,kw

### Concept 2

### Controlled Vocabulary

'financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost'/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp OR 'health care cost'/exp

### Synonyms/Keywords

Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\*

# Syntax

('financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp OR 'health care cost'/exp) OR 'financial stress\*':ti,ab,kw OR 'financial pressure\*':ti,ab,kw OR 'financial hardship\*':ti,ab,kw OR 'financial challenges\*':ti,ab,kw OR 'financial burden\*':ti,ab,kw OR 'direct expenditure\*':ti,ab,kw OR 'outof-pocket expenditure\*':ti,ab,kw OR 'out-of pocket expenditure\*':ti,ab,kw OR 'out of pocket expenditure\*':ti,ab,kw OR 'out-of-pocket expense\*':ti,ab,kw OR 'out-of pocket expense\*':ti,ab,kw OR 'out of pocket expense\*':ti,ab,kw OR 'out-of-pocket expense\*':ti,ab,kw OR 'out of pocket cost\*':ti,ab,kw OR 'out-of-pocket cost\* or out-of pocket cost\*':ti,ab,kw OR 'out of pocket cost\*':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket payment\*':ti,ab,kw OR 'out of pocket spending':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket spending':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket spending':ti,ab,kw OR 'out of pocket spending':ti,ab,kw OR 'fear of cost\*':ti,ab,kw OR 'cost of treatment':ti,ab,kw OR 'capital expenditure\*':ti,ab,kw OR 'direct service cost\*':ti,ab,kw OR 'health expenditure\*':ti,ab,kw OR 'healthcare expenditure\*':ti,ab,kw OR 'health care expenditure\*':ti,ab,kw

# Concept 1 AND Concept 2

(('breast cancer'/exp OR (breast\* NEAR/3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR 'in situ')):ti,ab,kw) OR 'breast

cancer\*':ti,ab,kw OR 'breast neoplasm\*':ti,ab,kw OR 'breast tumour\*':ti,ab,kw OR 'breast tumor\*':ti,ab,kw OR 'breast carcinoma\*':ti,ab,kw OR 'carcinoma of the breast':ti,ab,kw OR 'carcinoma in situ':ti,ab,kw OR 'mammary cancer\*':ti,ab,kw OR 'cancer of breast':ti,ab,kw OR 'cancer of the breast':ti,ab,kw) AND (('financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost'/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp OR 'health care cost'/exp) OR 'financial stress\*':ti,ab,kw OR 'financial pressure\*':ti,ab,kw OR 'financial hardship\*':ti,ab,kw OR 'financial challenges\*':ti,ab,kw OR 'financial burden\*':ti,ab,kw OR 'direct expenditure\*':ti,ab,kw OR 'out-of-pocket expenditure\*':ti,ab,kw OR 'out-of pocket expenditure\*':ti,ab,kw OR 'out of pocket expenditure\*':ti,ab,kw OR 'out-of-pocket expense\*':ti,ab,kw OR 'out-of pocket expense\*':ti,ab,kw OR 'out of pocket expense\*':ti,ab,kw OR 'out-of-pocket cost\* or out-of pocket cost\*':ti,ab,kw OR 'out of pocket cost\*':ti,ab,kw OR 'out-of-pocket payment\*':ti,ab,kw OR 'out-of pocket payment\*':ti,ab,kw OR 'out of pocket payment\*':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket spending':ti,ab,kw OR 'out of pocket spending':ti,ab,kw OR 'indirect expenditure\*':ti,ab,kw OR expenditure\*:ti,ab,kw OR 'indirect cost\*':ti,ab,kw OR 'fear of cost\*':ti,ab,kw OR 'cost of treatment':ti,ab,kw OR 'capital expenditure\*':ti,ab,kw OR 'direct service cost\*':ti,ab,kw OR 'health expenditure\*':ti,ab,kw OR 'healthcare expenditure\*':ti,ab,kw OR 'health care expenditure\*':ti,ab,kw)

### Results 7721

Concept 1 AND Concept 2 WITHOUT health care cost controlled vocabulary term

(('breast cancer'/exp OR (breast\* NEAR/3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR 'in situ')):ti,ab,kw) OR 'breast cancer\*':ti,ab,kw OR 'breast neoplasm\*':ti,ab,kw OR 'breast tumour\*':ti,ab,kw OR 'breast tumor\*':ti,ab,kw OR 'breast carcinoma\*':ti,ab,kw OR 'carcinoma of the breast':ti,ab,kw OR 'carcinoma in situ':ti,ab,kw OR 'mammary cancer\*':ti,ab,kw OR 'cancer of breast':ti,ab,kw OR 'cancer of the breast':ti,ab,kw) AND (('financial stress'/exp OR 'financial burden'/exp OR 'out of pocket cost'/exp OR 'out of pocket expenditure'/exp OR 'out of pocket payment'/exp OR 'out of pocket spending'/exp OR 'treatment cost'/exp OR 'financial hardship'/exp) OR 'financial stress\*':ti,ab,kw OR 'financial pressure\*':ti,ab,kw OR 'financial hardship\*':ti,ab,kw OR 'financial challenges\*':ti,ab,kw OR 'financial burden\*':ti,ab,kw OR 'direct expenditure\*':ti,ab,kw OR 'outof-pocket expenditure\*':ti,ab,kw OR 'out-of pocket expenditure\*':ti,ab,kw OR 'out of pocket expenditure\*':ti,ab,kw OR 'out-of-pocket expense\*':ti,ab,kw OR 'out-of pocket expense\*':ti,ab,kw OR 'out of pocket expense\*':ti,ab,kw OR 'out-of-pocket cost\* or out-of pocket cost\*':ti,ab,kw OR 'out of pocket cost\*':ti,ab,kw OR 'out-of-pocket payment\*':ti,ab,kw OR 'out-of pocket payment\*':ti,ab,kw OR 'out of pocket payment\*':ti,ab,kw OR 'out-of-pocket spending':ti,ab,kw OR 'out-of pocket spending':ti,ab,kw OR 'out of pocket spending':ti,ab,kw OR 'indirect expenditure\*':ti,ab,kw OR expenditure\*:ti,ab,kw OR 'indirect cost\*':ti,ab,kw OR 'fear of cost\*':ti,ab,kw OR 'cost of treatment':ti,ab,kw OR 'capital expenditure\*':ti,ab,kw OR 'direct service cost\*':ti,ab,kw OR 'health expenditure\*':ti,ab,kw OR 'healthcare expenditure\*':ti,ab,kw OR 'health care expenditure\*':ti,ab,kw)

Results 1936

#### Global Health (EBSCO)

Concept 1 Controlled Vocabulary DE "breast cancer"

Synonyms/Keywords

### Syntax

DE "breast cancer" OR AB ( breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast ) OR TI ( breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast )

(DE ("breast cancer") OR TI (breast\* N3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR "in situ")) OR AB (breast\* N3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR "in situ"))) OR AB (breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast ) OR TI (breast cancer\* OR breast neoplasm\* OR breast neoplasm\* OR breast cancer\* OR breast neoplasm\* OR breast cancer\* OR breast cancer of the breast ) OR TI (breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast cancer of the breast OR cancer of the breast oR cancer of breast CAR cancer of the breast oR cancer of breast CAR cancer of the breast oR cancer of breast CAR cancer of the breast oR cancer of breast CAR cancer of the breast oR cancer of breast CAR cancer of the breast OR cancer of breast CAR cancer of the breast OR cancer of breast OR cancer of the breast OR cancer of breast OR cancer of the breast OR cancer of breast OR cancer of the breast OR cancer of breast OR cancer of the breast OR cancer of breast OR cancer of the breast) Concept 2

Controlled Vocabulary

### Synonyms/Keywords

### Syntax

AB (Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-ofpocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-ofpocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* ) OR TI (Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expense\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket payment\* OR out-of pocket cost\* OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* )

#### Concept 1 AND Concept 2

(DE ("breast cancer") OR TI (breast\* N3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR "in situ")) OR AB (breast\* N3 (cancer\* OR tumor\* OR tumour\* OR neoplasm\* OR adenocarcinoma\* OR carcinoma\* OR malignan\* OR "in situ")) OR AB (breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast ) OR TI ( breast cancer\* OR breast neoplasm\* OR breast tumour\* OR breast tumor\* OR breast carcinoma\* OR carcinoma of the breast OR carcinoma in situ OR mammary cancer\* OR cancer of breast OR cancer of the breast)) AND (AB (Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-ofpocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* ) OR TI (Financial Stress\* OR Financial Pressure\* OR Financial Hardship\* OR Financial Challenges\* OR Financial burden\* OR health expenditure\* OR direct expenditure\* OR out-of-pocket expenditure\* OR out-of pocket expenditure\* OR out of pocket expenditure\* OR out-of-pocket expense\* OR out-of pocket expense\* OR out of pocket expense\* OR out-of-pocket cost\* OR out-of pocket cost\* OR out of pocket cost\* OR out-of-pocket payment\* OR out-of pocket payment\* OR out of pocket payment\* OR out-of-pocket spending OR out-of pocket spending OR out of pocket spending OR indirect expenditure\* OR expenditure\* OR indirect cost\* OR fear of cost\* OR cost of treatment OR capital expenditure\* OR direct service cost\* OR health expenditure\* OR healthcare expenditure\* OR health care expenditure\* ))

287 results

**Global Index Medicus** 

Concept 1

"breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast"

Concept 2

"Financial Stress\*" OR "Financial Pressure\*" OR "Financial Hardship\*" OR "Financial Challenges\*" OR "Financial burden\*" OR "health expenditure\*" OR "direct expenditure\*" OR "out-of-pocket expenditure\*" OR "out-of pocket expenditure\*" OR "out of pocket expenditure\*" OR "out-of-pocket expense\*" OR "out-of pocket expense\*" OR "out of pocket expense\*" OR "out-of-pocket cost\*" OR "out-of pocket cost\*" OR "out of pocket cost\*" OR payment\*" OR "out-of pocket payment\*" OR "out of pocket payment\*" OR "out-of-pocket spending" OR "out-of pocket spending" OR "out of pocket spending" OR "indirect expenditure\*" OR "expenditure\*" OR "indirect cost\*" OR "fear of cost\*" OR "cost of treatment"

("breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast") AND ("Financial Stress\*" OR "Financial Pressure\*" OR "Financial Hardship\*" OR "Financial Challenges\*" OR "Financial burden\*" OR "health expenditure\*" OR "direct expenditure\*" OR "out-of-pocket expenditure\*" OR "out-of pocket expense\*" OR "out of pocket expense\*" OR "out of pocket expense\*" OR "out-of-pocket cost\*" OR "out-of pocket cost\*" OR "out of pocket expense\*" OR "out-of-pocket cost\*" OR "out-of pocket cost\*" OR "out-of pocket cost\*" OR "out-of pocket cost\*" OR "out-of pocket payment\*" OR "out-of-pocket spending" OR "out-of pocket spending" OR "indirect cost\*" OR "out-of pocket spending" OR "out-of pocket spending" OR "indirect cost\*" OR "out-of pocket spending" OR "out-of pocket spending" OR "out-of pocket spending" OR "out-of pocket spending" OR "indirect cost\*" OR "out-of pocket spending" OR "indirect cost\*" OR "indirect

7950 results (3080 in English)

("breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast") AND ("out-of-pocket expenditure\*" OR "out-of pocket expenditure\*" OR "out of pocket expenditure\*" OR "out-of-pocket expense\*" OR "out-of pocket expense\*" OR "out of pocket expense\*" OR "out-of-pocket cost\*" OR "out-of pocket cost\*" OR "out-of pocket cost\*" OR "out-of-pocket payment\*" OR "out-of pocket paymen

("breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast") AND ("out-of-pocket") 8 results

("breast cancer\*" OR "breast neoplasm\*" OR "breast tumour\*" OR "breast tumor\*" OR "breast carcinoma\*" OR "carcinoma of the breast" OR "carcinoma in situ" OR "mammary cancer\*" OR "cancer of breast " OR "cancer of the breast") AND ("out-of-pocket" OR "financial stress" OR "health expenditure" )

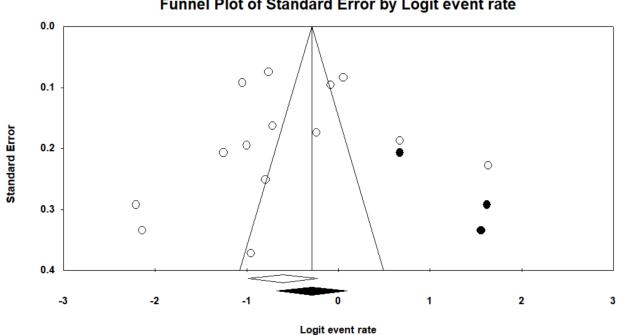
#### 11

Group by	Study name				Event rate and 95% CI
Study quality		Event rate	Lower limit	Upper limit	
Fair	Longo CJ, 2011	0.31	0.22	0.42	+
Fair	Jones SMW, 2018	0.66	0.57	0.74	+
Fair	Palmer JD, 2018	0.28	0.16	0.44	
Fair	Goldberg SL, 2019	0.33	0.26	0.40	+
Fair	Han S, 2019	0.84	0.77	0.89	+
Fair		0.50	0.35	0.65	
Good	Housser E, 2013	0.10	0.06	0.16	+
Good	Irwin BB, 2014	0.44	0.36	0.53	+
Good	Nekhlyudov L, 2016	0.22	0.16	0.30	<b>+</b>
Good	Knight TG, 2018	0.26	0.23	0.30	
Good	Hastart TA, 2019	0.48	0.43	0.53	
Good	Perry LM, 2019	0.27	0.20	0.35	+
Good	Subramanian S, 2020	0.32	0.29	0.35	
Good	Wan C, 2021	0.11	0.06	0.18	+
Good	Offodile AC, 2021	0.51	0.47	0.55	
Good		0.29	0.20	0.39	
Overall		0.35	0.27	0.44	
					-2.00 -1.00 0.00 1.00 2.00

**eFigure 1.** Forest Plot for Financial Toxicity Rate, Subgrouped by Study Quality Ratings Among High-Income Countries (HICs)

Solid squares represent the rate of financial toxicity reported by each study; horizontal lines denote 95% confidence intervals (CIs). The center of the diamonds represents the pooled rate for financial toxicity for each subgroup and the width represents the respective 95% CI. The size of the solid squares is proportional to the weight of the study. P-value comparing both groups: <0.001.

eFigure 2. Funnel Plot of Standard Error by Logit Event Rate for Studies Reporting High-Income Countries (HICs)



Funnel Plot of Standard Error by Logit event rate

The vertical solid line is drawn at the pooled logit of the financial toxicity (FT) rate, and the other two lines represent the expected 95% confidence interval for a given standard error. The funnel plot visually showed a slight asymmetry towards the right of the pooled point estimate for studies conducted in HICs; however, both Begg's rank correlation test (p=0.62) and Egger's linear regression test (p=0.68) indicated no small study bias.