

Supplemental Appendix 1. MEDLINE, CENTRAL, EMBASE, and PsycINFO search strategy.

MEDLINE search strategy

- 1 chronic pain.mp. or Chronic Pain/ (39861)
- 2 chronic cancer pain.mp. (329)
- 3 persistent pain.mp. (4830)
- 4 exp Neoplasms/ (3190577)
- 5 exp Pain/ (377243)
- 6 peripheral neuropathy.mp. or exp Peripheral Nervous System Diseases/ (150266)
- 7 neuropathic pain.mp. (18901)
- 8 Fibromyalgia/ (8025)
- 9 myofascial pain syndromes/ or temporomandibular joint dysfunction syndrome/ (6376)
- 10 rheumatic polymyalgia.mp. (71)
- 11 (chronic adj4 pain).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (63556)
- 12 ((pain* or discomfort*) adj10 (central or complex or rheumat* or muscl* or muscul* or myofasci* or nerv* or neuralg* or neuropath*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (98785)
- 13 exp Somatosensory Disorders/ (20973)
- 14 (fibromyalgi* or fibroستي* or FM or FMS).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (32465)
- 15 ((neur* or nerv*) adj6 (compress* or damag*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (67259)
- 16 exp Migraine Disorders/ (26025)
- 17 or/1-16 (3779702)
- 18 mindfulness based stress reduction*.mp. (837)
- 19 mbsr*.mp. (637)
- 20 mindfulness-based cognitive therapy.mp. (508)
- 21 mbct*.mp. (407)
- 22 mindfulness-based intervention*.mp. (735)
- 23 mbi*.mp. (3155)
- 24 brief mindfulness-based intervention*.mp. (14)
- 25 bmbi*.mp. (12)
- 26 mindfulness.mp. or Mindfulness/ (6594)
- 27 or/18-26 (9628)
- 28 17 and 27 (1037)
- 29 limit 28 to (clinical trial, all or controlled clinical trial or meta analysis or randomized

- controlled trial) (293)
- 30 limit 28 to randomized controlled trial (215)
- 31 randomised controlled trial.mp. (20915)
- 32 28 and 31 (16)
- 33 30 or 32 (221)

CENTRAL search strategy

- 1 chronic pain.mp. or Chronic Pain/ (7868)
- 2 chronic cancer pain.mp. (123)
- 3 persistent pain.mp. (656)
- 4 exp Neoplasms/ (69716)
- 5 exp Pain/ (45754)
- 6 peripheral neuropathy.mp. or exp Peripheral Nervous System Diseases/ (8101)
- 7 neuropathic pain.mp. (2976)
- 8 Fibromyalgia/ (1125)
- 9 myofascial pain syndromes/ or temporomandibular joint dysfunction syndrome/ (922)
- 10 rheumatic polymyalgia.mp. (86)
- 11 (chronic adj4 pain).mp. [mp=title, original title, abstract, mesh headings, heading words, keyword] (15108)
- 12 ((pain* or discomfort*) adj10 (central or complex or rheumat* or muscl* or muscul* or myofasci* or nerv* or neuralg* or neuropath*)).mp. [mp=title, original title, abstract, mesh headings, heading words, keyword] (28493)
- 13 exp Somatosensory Disorders/ (1027)
- 14 (fibromyalgi* or fibrosti* or FM or FMS).mp. [mp=title, original title, abstract, mesh headings, heading words, keyword] (4252)
- 15 ((neur* or nerv*) adj6 (compress* or damag*)).mp. [mp=title, original title, abstract, mesh headings, heading words, keyword] (2413)
- 16 exp Migraine Disorders/ (2324)
- 17 or/1-16 (150501)
- 18 mindfulness based stress reduction*.mp. (750)
- 19 mbsr*.mp. (621)
- 20 mindfulness-based cognitive therapy.mp. (459)
- 21 mbct*.mp. (378)
- 22 mindfulness-based intervention*.mp. (401)
- 23 mbi*.mp. (526)
- 24 brief mindfulness-based intervention*.mp. (22)
- 25 bmbi*.mp. (3)
- 26 mindfulness.mp. or Mindfulness/ (3914)
- 27 or/18-26 (4353)
- 28 17 and 27 (560)
- 29 limit 28 to (clinical trial, all or controlled clinical trial or meta analysis or randomized controlled trial) [Limit not valid; records were retained] (216)
- 30 limit 28 to randomized controlled trial (211)
- 31 randomised controlled trial.mp. (38441)

- 32 28 and 31 (27)
- 33 30 or 32 (227)

EMBASE search strategy

- 1 chronic pain.mp. or chronic pain/ (74673)
- 2 chronic cancer pain.mp. (510)
- 3 persistent pain.mp. (7032)
- 4 exp neoplasm/ (4614336)
- 5 exp pain/ (1303813)
- 6 exp peripheral neuropathy/ (70276)
- 7 peripheral neuropathy.mp. (55863)
- 8 neuropathic pain.mp. or neuropathic pain/ (38959)
- 9 fibromyalgia/ (19233)
- 10 myofascial pain/ (7787)
- 11 temporomandibular joint disorder/ (13318)
- 12 rheumatic polymyalgia/ (5436)
- 13 (chronic adj4 pain).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (106839)
- 14 ((pain* or discomfort*) adj10 (central or complex or rheumat* or muscl* or muscul* or myofasci* or nerv* or neuralg* or neuropath*)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (182569)
- 15 exp somatosensory disorder/ (97193)
- 16 (fibromyalgi* or fibrosti* or FM or FMS).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (46817)
- 17 ((neur* or nerv*) adj6 (compress* or damag*)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (97427)
- 18 exp migraine/ (62377)
- 19 or/1-18 (5893140)
- 20 mindfulness based stress reduction*.mp. (1356)
- 21 mbsr*.mp. (1029)
- 22 mindfulness-based cognitive therapy.mp. (766)
- 23 mbct*.mp. (585)
- 24 mindfulness-based intervention*.mp. (919)
- 25 mbi*.mp. (4616)
- 26 brief mindfulness-based intervention*.mp. (15)
- 27 bmbi*.mp. (22)
- 28 mindfulness.mp. or mindfulness/ (9942)
- 29 or/20-28 (14452)
- 30 19 and 29 (2599)
- 31 limit 30 to randomized controlled trial (390)
- 32 randomised controlled trial.mp. (29007)

- 33 30 and 32 (32)
- 34 31 or 33 (396)

PsycINFO search strategy

- 1 chronic pain.mp. or Chronic Pain/ (18862)
- 2 chronic cancer pain.mp. (76)
- 3 persistent pain.mp. (1118)
- 4 exp neoplasms/ (49019)
- 5 exp pain/ (54751)
- 6 peripheral neuropathy.mp. or exp Peripheral Neuropathy/ (4023)
- 7 neuropathic pain.mp. or Neuropathic Pain/ (5328)
- 8 fibromyalgia/ (1878)
- 9 myofascial pain/ (334)
- 10 exp Bruxism/ (268)
- 11 rheumatic polymyalgia.mp. (0)
- 12 (chronic adj4 pain).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh] (21165)
- 13 ((pain* or discomfort*) adj10 (central or complex or rheumat* or muscul* or muscul* or myofasci* or nerv* or neuralg* or neuropath*)).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh] (19683)
- 14 somatosensory disorders/ (1327)
- 15 (fibromyalgi* or fibrosci* or FM or FMS).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh] (5165)
- 16 ((neur* or nerv*) adj6 (compress* or damag*)).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh] (10190)
- 17 migraine headache/ (8945)
- 18 or/1-17 (127487)
- 19 mindfulness based stress reduction*.mp. (939)
- 20 mbsr*.mp. (820)
- 21 mindfulness-based cognitive therapy.mp. (825)
- 22 mbct*.mp. (633)
- 23 mindfulness-based intervention*.mp. (1224)
- 24 mbi*.mp. (1533)
- 25 brief mindfulness-based intervention*.mp. (25)
- 26 bmbi*.mp. (7)
- 27 mindfulness-based interventions/ (459)
- 28 Mindfulness/ or mindfulness.mp. (12716)
- 29 or/19-28 (14043)
- 30 18 and 29 (761)
- 31 randomised controlled trial.mp. (3316)
- 32 30 and 31 (4)

Supplemental Appendix 2. Characteristic of excluded studies.

First, author year	Reason for exclusion
Astin ⁴ , 2003	Mindfulness only component of intervention
Cherkin ¹⁵ , 2017	Follow-up assessment of an already included study
Davis ²¹ , 2015	Not chronic pain condition of interest
Day ²² , 2017	Follow-up assessment of an already included study
Feuille ²⁸ , 2015	Chronic pain not 3 months in duration
Garland ³² , 2014	Secondary analysis of an already included study
Garland ²⁹ , 2017	Secondary analysis of an already included study
Grossman ³⁸ , 2007	Not RCT
Grossman ³⁷ , 2017	Secondary analysis of an already included study
Heffner ⁴² , 2011	Conference abstract
Jay ⁴⁵ , 2016	Mindfulness only component of intervention
Johannsen ⁴⁶ , 2016	Chronic pain not 3 months in duration
Steurer ⁷⁴ , 2016	Not in English
Westenberg ⁸³ , 2018	Not all participants had chronic pain of 3 months or longer
Wetherell ⁸⁴ , 2016	Intervention not mindfulness
Zgierska ⁸⁹ , 2016	Secondary analysis of an already included study
Zgierska ⁹¹ , 2017	Secondary analysis of an already included study