Contents

[Amyotrophic lateral sclerosis (ALS) 1](#_Toc56982935)

[Autism 2](#_Toc56982936)

[Cancer 3](#_Toc56982937)

[Chronic non-cancer pain 4](#_Toc56982938)

[Crohn’s disease 5](#_Toc56982939)

[Epilepsy 6](#_Toc56982940)

[Glaucoma 7](#_Toc56982941)

[HIV/AIDS 8](#_Toc56982942)

[Multiple sclerosis 9](#_Toc56982943)

[Parkinson’s disease 10](#_Toc56982944)

[PTSD 11](#_Toc56982945)

# Amyotrophic lateral sclerosis (ALS)

**Figure S1: PRISMA Flow Diagram ALS**

Records identified through databases (Web of Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =546)

Included

Screening

Eligibility

Identification

Records screened, abstracts (n = 380)

Full-text articles assessed for eligibility. (n = 55)

Records after pre-screen by title only (n = 380)

**Studies included in qualitative synthesis (n = 9)**

Records after duplicates removed (n=391)

Records excluded (n =325)

Not in English: n=3

Study design: n=52

Condition specific MJ use not investigated: n=123

Preclinical focus: n=145

Other reasons: n=2

Full-text articles excluded (n = 46)

Not in English: n=1

Study design: n=8

Study population irrelevant: n=7

Condition specific MJ use not investigated: n=23

Preclinical focus: n=6

Duplicate: n=1

**Study Design Summary ALS**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 0 |
| Systematic Review without Meta-analysis | 2 |
| Systematic Review with Meta-analysis | 0 |
| Other Types of Reviews | 5 |
| Observational Studies | 2 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 0 |

#  Autism

**Figure S2: PRISMA Flow Diagram autism**

Records after duplicates removed (n=451)

Records excluded (n =402)

Publication date irrelevant: 0

Study population irrelevant: 33

Condition specific MJ use/effect not investigated: 160

Study design irrelevant: 11

Publication type irrelevant: 111

Preclinical focus: 87

Duplicate: 0

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =652)

Studies included in qualitative synthesis (n = 17)

Full-text articles assessed for eligibility. (n = 49)

Records screened (n =451)

Identification

Screening

Eligibility

Included

Full-text articles excluded (n = 32)

Publication date irrelevant: 0

Study population irrelevant: 4

Condition specific MJ use/effect

Study design irrelevant: 9

Publication type irrelevant: 16

Preclinical focus: 3

Other exclusion reasons: 0

**Study Design Summary autism**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 0 |
| Systematic Review without Meta-analysis | 0 |
| Systematic Review with Meta-analysis | 1 |
| Other Types of Reviews | 8 |
| Observational Studies | 8 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 0 |

# Cancer

**Figure S3: PRISMA Flow Diagram cancer**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =2267)

Included

Screening

Eligibility

Identification

Records screened, abstracts (n= 2,155)

Full-text articles assessed for eligibility. (n = 249)

Studies included in qualitative synthesis (n =138)

Records after duplicates removed (n=2,155

Full-text articles excluded (n=111)

Study design irrelevant: 1

Publication date irrelevant: 2

Study population irrelevant: 5

Condition specific MJ use/effect not investigated: 41

Publication type irrelevant:35

Preclinical focus: 21

Duplicate: 5

Other exclusion reasons: 1

\*other exclusion reasons: withdrawn clinical trial, could not find publication, language

**Study Design Summary – Cancer**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of reviewed studies |
| Randomized Controlled Trials (RCTs) | 4 |
| Systematic Review without Meta-analysis | 10 |
| Systematic Review with Meta-analysis | 6 |
| Other Types of Reviews | 87 |
| Observational Studies | 31 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs | 0 |

# Chronic non-cancer pain

**Figure S4: PRISMA Flow Diagram chronic non-cancer pain**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =1741 )

Included

Screening

Eligibility

Identification

Records screened, abstracts (n =1210 )

Full-text articles assessed for eligibility. (n = 222)

Studies included in qualitative synthesis (n =120 )

Records after duplicates removed (n=1210 )

Records excluded (n =988 )

Publication date irrelevant: 23

Study population irrelevant: 95

Condition specific MJ use/effect not investigated: 476

Study design irrelevant: 25

Publication type irrelevant: 135

Preclinical focus: 130

Duplicate: 100

Other exclusion reasons 4

Full-text articles excluded (n=102)

Publication date irrelevant: 1

Study population irrelevant: 5

Condition specific MJ use/effect not investigated: 49

Study design irrelevant: 5

Publication type irrelevant: 27

Preclinical focus: 8

Duplicate: 4

Other exclusion reasons: 3

\*other exclusion reasons: withdrawn clinical trial, unable to access publication, language, reprint

**Study Design Summary chronic non-cancer pain**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 3 |
| Systematic Review without Meta-analysis | 8 |
| Systematic Review with Meta-analysis | 8 |
| Other Types of Reviews | 63 |
| Observational Studies | 36 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 2 |

Other study designs: book section, cost-effectiveness study.

# Crohn’s disease

**Figure S5: PRISMA Flow Diagram crohn´s disease**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n = 553)

Included

Screening

Eligibility

Identification

Records screened, abstracts (n = 431)

Records after pre-screen by title only (n = 431)

Records after duplicates removed (n = 440)

Full-text articles assessed for eligibility. (n = 41)

Studies included in qualitative synthesis (n = 25)

Full-text articles excluded, with reasons (n = 16)

condition specific MJ use/effect not investigated: 3

publication type irrelevant: 6

study population irrelevant: 1

preclinical focus: 6

Records excluded (n = 390)

condition specific MJ use/effect not investigated: 145

publication type irrelevant: 96

publication date irrelevant: 22

duplicate: 26

study population irrelevant: 21

preclinical focus: 80

**Study Design Summary Crohn´s disease**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 1 |
| Systematic Review without Meta-analysis | 2 |
| Systematic Review with Meta-analysis | 0 |
| Other Types of Reviews | 14 |
| Observational Studies | 8 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs | 0 |

# Epilepsy

**Figure S6: PRISMA Flow Diagram epilepsy**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =2006)

Included

Screening

Eligibility

Identification

Records after duplicates removed (n=1436)

Records screened (n =1436)

Records excluded (n =1164)

Full-text articles excluded (200)

Publication date irrelevant: 1

Study population irrelevant: 29

Condition specific MJ use/effect:22

Study design irrelevant: 15

Publication type irrelevant: 85

Preclinical focus: 17

Duplicate: 15

Other exclusion reasons\*: 16

Full-text articles assessed for eligibility. (n = 272) 272

Studies included in qualitative synthesis (n=72)

\*not English or article not accessible

**Study Design Summary epilepsy**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 3 |
| Systematic Review without Meta-analysis |  2 |
| Systematic Review with Meta-analysis | 3 |
| Other Types of Reviews | 47 |
| OS /QE | 17 |
| Other Study Designs\* | 0 |

# Glaucoma

**Figure S7: PRISMA Flow Diagram glaucoma**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =881)

Included

Screening

Eligibility

Identification

Records after duplicates removed (n=850)

Records excluded (n =820) Publication date irrelevant: 0

Study population irrelevant: 77

Condition specific MJ use/effect not investigated: 18

Interested disease not mentioned:427

Publication type irrelevant: 92

Preclinical focus: 196

Duplicate: 10

Other exclusion reasons 0

Records screened (n =850)

Full-text articles assessed for eligibility. (n = 30)

Full-text articles excluded (n=16)

Publication date irrelevant: 1

Study population irrelevant: 3

Condition specific MJ use/effect

Study design irrelevant: 1

Publication type irrelevant: 4

Preclinical focus: 3

Other exclusion reasons: 4

Studies included in qualitative synthesis (n =14 )

**Study Design Summary Glaucoma**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 0 |
| Systematic Review without Meta-analysis | 1 |
| Systematic Review with Meta-analysis | 0 |
| Other Types of Reviews | 12 |
| Observational Studies | 0 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 1 |

[\*Book section]

#  HIV/AIDS

**Figure S8: PRISMA Flow Diagram HIV/AIDS**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =1718 )

Included

Screening

Eligibility

Identification

Records after duplicates removed (n=1306)

Abstracts excluded

(n = 1145)

Abstracts screened

(n = 1306)

Full-text articles excluded, with reasons (n = 136)

Duplicates: 9

Study population irrelevant: 20

Preclinical focus: 7

Condition specific MJ use/effect not investigated: 66

Publication type irrelevant: 23

Study design irrelevant :10

Publication date irrelevant :1

Full-text articles assessed for eligibility. (n = 161)

Studies included in qualitative synthesis (n = 25)

**Study Design Summary HIV/AIDS**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 0 |
| Systematic Review without Meta-analysis |  0 |
| Systematic Review with Meta-analysis | 3 |
| Other Types of Reviews |   3 |
| Observational Studies | 19 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 0 |

# Multiple sclerosis

**Figure S9: PRISMA Flow Diagram multiple sclerosis**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =2152 )

Studies included in qualitative synthesis (n = 25)

Records screened

(n = 304)

Records after pre-… excluded (n = 304)

Identification

Screening

Eligibility

Included

**Study Design Summary Multiple Sclerosis**

Full-text articles excluded (n = 49)

Publication date irrelevant: 0

Study population irrelevant: 9

Condition specific MJ use/effect not investigated: 18

Study design irrelevant: 6

Publication type irrelevant: 5

Preclinical focus: 11

Other exclusion reasons: 0

Records excluded (n =230)

Publication date irrelevant: 0

Study population irrelevant: 21

Condition specific MJ use/effect not investigated: 83

Study design irrelevant: 25

Publication type irrelevant: 34

Preclinical focus: 65

Duplicate: 2

Full-text articles assessed for eligibility. (n = 74)

Records after duplicates removed (n=1748)

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 0 |
| Systematic Review without Meta-analysis | 4 |
| Systematic Review with Meta-analysis | 5 |
| Other Types of Reviews | 16 |
| Observational Studies | 0 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 0 |

# Parkinson’s disease

**Figure S10: PRISMA Flow Diagram Parkinson´s disease**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019 (n =694 )

Included

Screening

Eligibility

Identification

Records after duplicates removed (n=579)

Abstracts excluded

(n = 484)

Abstracts screened

(n = 579)

Full-text articles excluded, with reasons (n = 78)

Duplicates: 6

Study population irrelevant: 28

Preclinical focus: 19

Condition specific MJ use/effect not investigated: 21

Publication type irrelevant: 4

Full-text articles assessed for eligibility. (n = 95)

Studies included in qualitative synthesis (n = 17)

**Study Design Summary Parkinson´s Disease**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 1 |
| Systematic Review without Meta-analysis | 0 |
| Systematic Review with Meta-analysis | 0 |
| Other Types of Reviews | 12 |
| Observational Studies | 3 |
| Quasi-Experimental Studies | 1 |

# PTSD

**Figure S11: PRISMA Flow Diagram PTSD**

Records identified through databases (Web Science, PubMed, Embase, Cochrane Library) searching 2016-2019

(n = 1,748)

Included

Screening

Eligibility

Identification

Records screened

(n = 935)

Full-text articles assessed for eligibility. (n = 166)

Records after duplicates removed (n = 935)

Records excluded (n = 769)

condition specific MJ use/effect not investigated: 282

publication type irrelevant: 160

publication date irrelevant: 18

duplicate: 71

study population irrelevant: 83

preclinical focus: 155

Full-text articles excluded, with reasons (n = 116)

condition specific MJ use/effect not investigated: 90

publication type irrelevant: 6

publication date irrelevant: 2

duplicate: 1

study population irrelevant: 5

preclinical focus: 12

Studies included in qualitative synthesis (n = 50)

**Study Design Summary PTSD**

|  |  |
| --- | --- |
| Design of Reviewed Studies  | Count of Reviewed Studies |
| Randomized Controlled Trials (RCTs) | 5 |
| Systematic Review without Meta-analysis | 10 |
| Systematic Review with Meta-analysis | 0 |
| Other Types of Reviews | 31 |
| Observational Studies  | 3 |
| Quasi-Experimental Studies | 0 |
| Other Study Designs\* | 1 |

\*1 study was an evidence-based clinical guidance article for psychiatrists