



**UNIVERSITÄTS
KLINIKUM** **FREIBURG**

Plain Language Summaries von Cochrane Reviews

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Interessenskonflikte

Angestellte der

- Cochrane Deutschland Stiftung (CDS) und
- Instituts für Evidenz in der Medizin (IfEM)

Gliederung

- Einleitung
- Cochrane International, Deutschland und die Cochrane Library
- Plain Language Summaries
- Berichtleitlinien und Bewertung von Reviews
- Biasbewertung
- GRADE und Summary of Findings Tabellen
- Publikationsschwemme
- Cochrane und die deutsche klinische Psychologie

Beispiel: Antiarrythmika nach Herzinfarkt

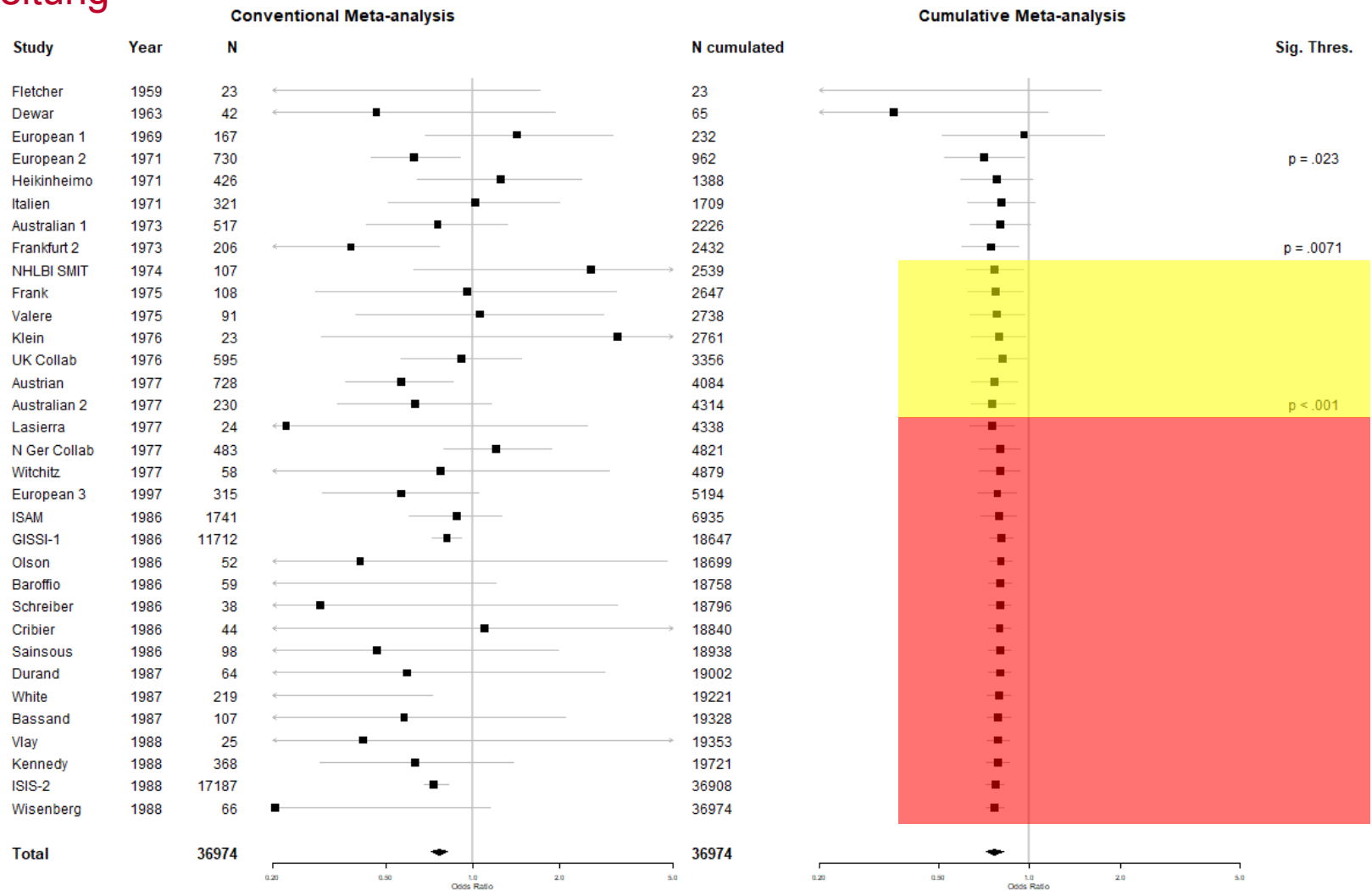
Einleitung

- 70er Jahre: Einführung, vielfache Anwendung
 - erste Studien 1980 Studie abgebrochen (kommerzielle Gründe)
 - nach 9 : 1 Todesfälle in Behandlungs- : Kontrollgruppe
 - Nicht berichtet
 - 1983 Systematischer Review (14 Studien)
 - Kein Nachweis des Effekts
 - 1993 Systematischer Review (51 Studien)
 - Mehr Todesfälle in der Behandlungsgruppe
- 80er Jahre: pro Jahr 20.000 - 70.000 unnötige Tode durch falsche Behandlung von Herzinfarkten

Moore (1993) Deadly Medicine: Why Tens of Thousands of Heart Patients Died in America's Worst Drug Disaster
Cowley et al. (1993). The effect of lorcinide on arrhythmias and survival in patients with acute myocardial infarction. *International Journal of Cardiology* 40:161-166.

Ethische Implikationen

Einleitung



Lau et al. (1992). Cumulative Meta-Analysis of Therapeutic Trials for Myocardial Infarction. *The New England Journal of Medicine*.

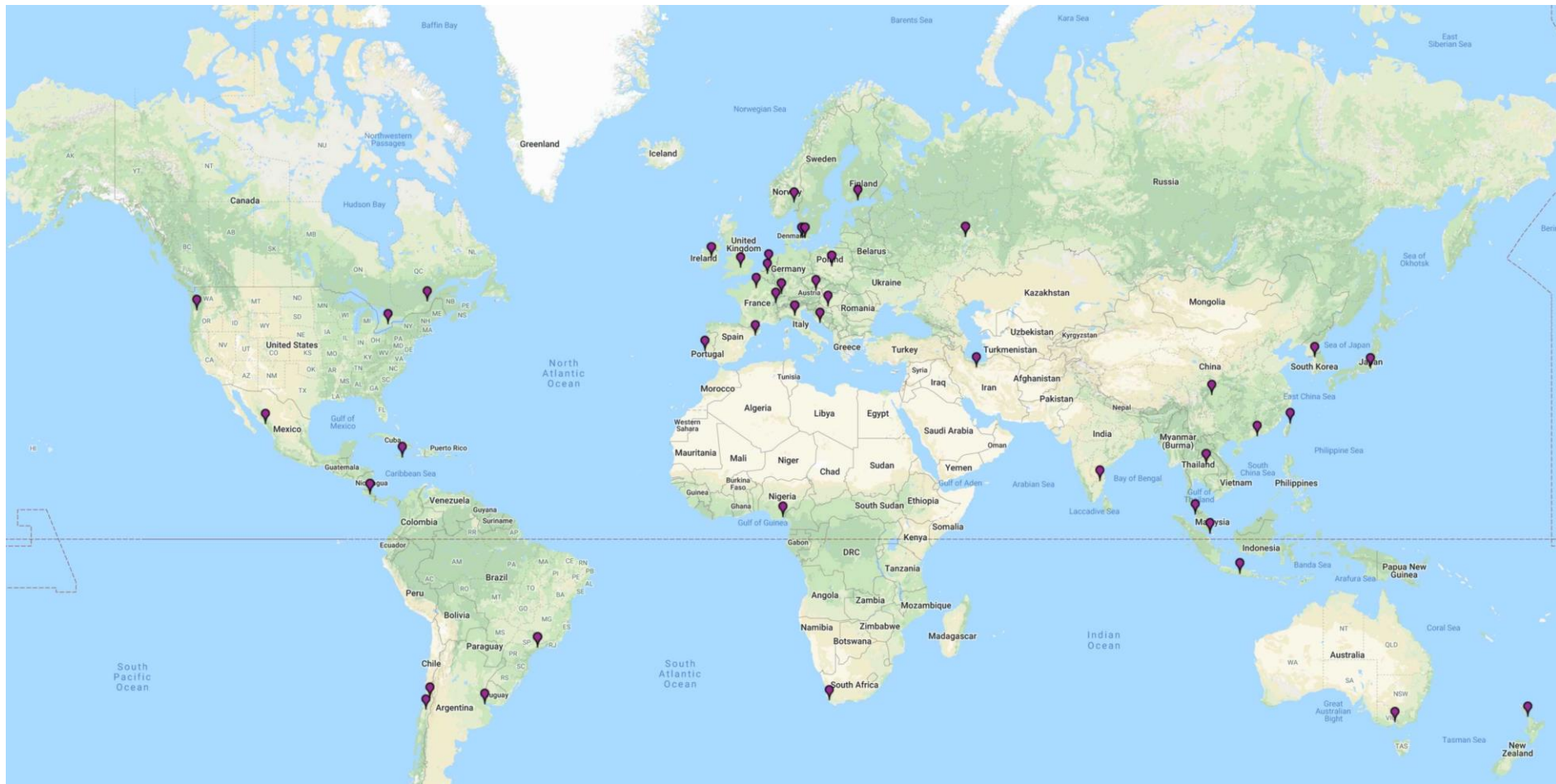
Cochrane International

Cochrane International, Deutschland und die Cochrane Library

- weltweite not-for-profit, industrieunabhängige Organisation
- gegründet 1993
- keine zentrale Finanzierung
- Central Exekutive Unit in London, UK
- 78% aller WHO-Richtlinien berufen sich auf Cochrane Reviews
- über 37.000 Menschen aus über 130 Ländern arbeiten mit
- > 7700 systematische Übersichtsarbeiten, > 1500 ins deutsche übersetzt
- Sitz in der World Health Assembly

Cochrane Zentren weltweit

Cochrane International, Deutschland und die Cochrane Library



<https://www.cochrane.org/about-us/our-global-community>

Cochrane Deutschland

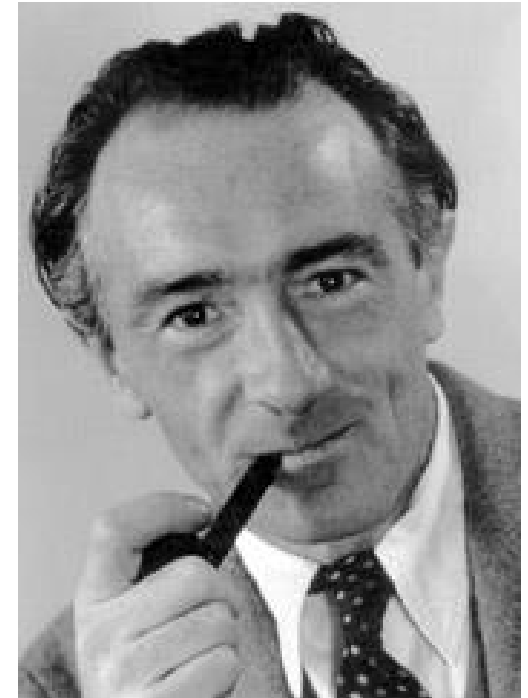
Cochrane International, Deutschland und die Cochrane Library

- www.cochrane.de
- Gegründet 1997 in Freiburg
- Seit Oktober 2017 Cochrane Deutschland Stiftung (CDS)
- Gefördert durch Bundesministerium für Gesundheit (BMG)
- Wiss. Kooperationspartner: Institut für Evidenz in der Medizin (Universitätsklinikum Freiburg)

Archibald Leman Cochrane (1909 - 1988)

Cochrane International, Deutschland und die Cochrane Library

- schottischer Arzt und Epidemiologe
- Wirken und Denken beeinflusste wesentlich das Entstehen der evidenzbasierten Medizin
- 1941 als Kriegsgefangener wies er die Wirksamkeit von Vitamin-B-Gabe (Hefe) gegen eine Gelbsuchtepidemie im Lager nach



Archie Cochrane Archive der
Universität von Cardiff, Wales

Die Cochrane Library

Cochrane International, Deutschland und die Cochrane Library



- Elektronische Zeitschrift
- Enthält Cochrane Reviews www.cochranelibrary.com
- 12 Ausgaben im Jahr
- Impact Factor 2017: 6,75
- Verlag: Wiley
- Suchen generell kostenfrei möglich
- Volltextzugriff auf Cochrane Reviews: einige Unibibliotheken, Fachverbände, Journalisten, Nationallizenzen (Schweiz, Dänemark, Norwegen,...), kostenpflichtige Abos möglich
- Alle Cochrane Reviews seit Feb 2013 sind 12 Monate nach ihrem Erscheinen frei verfügbar

Datenbanken der Cochrane Library

Cochrane International, Deutschland und die Cochrane Library



Datenbank	Anzahl Zitate
Cochrane Database of Systematic Reviews (CDSR) Kontinuierliche Aktualisierung	7784 Reviews 2449 Protokolle
Cochrane Central Register of Controlled Trials (CENTRAL) Monatliche Aktualisierung	1285036
Cochrane Clinical Answers (CCA)	1815
Editorials	123
Special Collections	24

Stand: Oktober 2018

Einfache Suche

Browse

Advanced search

Cochrane Reviews

Trials

Clinical Answers

About

Help

Browse-Funktion

Ausführliche Suche



Highlighted Reviews

Editorials

Special Collections

Biocompatible dialysis fluids for peritoneal dialysis

Htay Htay, David W Johnson, Kathryn J Wiggins, Sunil V Badve, Jonathan C Craig, Giovanni FM Strippoli, Yeoungjee Cho
26 October 2018

Extended-field radiotherapy for locally advanced cervical cancer

Komsan Thamronganantasakul, Narudom Supakalin, Chumnan Kietpeerakool, Porjai Pattanittum, Pisake Lumbiganon
26 October 2018

Early enteral nutrition within 24 hours of lower gastrointestinal surgery versus later commencement for length of hospital stay and postoperative complications

Georgia Herbert, Rachel Perry, Henning Keinke Andersen, Charlotte Atkinson, Christopher Penfold, Stephen J Lewis, Andrew R Ness, Steven Thomas
24 October 2018

Ergonomic interventions for preventing work-related musculoskeletal disorders of the upper extremities of office workers

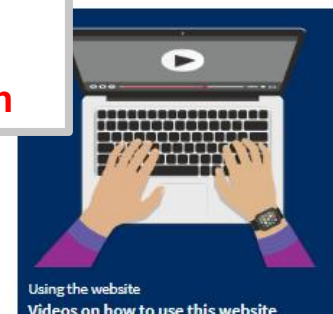
Victor CW Hoe, Donna M Urquhart, Helen L Kelsall, Eva N Zamri, Malcolm R Sim
23 October 2018

Very early versus delayed mobilisation after stroke

Peter Langhorne, Janice M Collier, Patricia J Bate, Matthew NT Thuy, Julie Bernhardt
16 October 2018

Cochrane Reviews chronologisch

View Current Issue



Browse-Funktion

Cochrane International, Deutschland und die Cochrane Library

Nach Themengebiet

a

Allergy & intolerance

b

Blood disorders

c

Cancer

Child health

Complementary & alternative medicine

Consumer & communication strategies

d

Dentistry & oral health

Developmental, psychosocial & learning problems

Diagnosis

e

Ear, nose & throat

Effective practice & health systems

Endocrine & metabolic

Eyes & vision

g

Gastroenterology & hepatology

Genetic disorders

Gynaecology

h

Health & safety at work

Health professional education

Heart & circulation

i

Infectious disease

k

Kidney disease

l

Lungs & airways

m

Mental health

Methodology

n

Neonatal care

Neurology

o

Orthopaedics & trauma

p

Pain & anaesthesia

Pregnancy & childbirth

Public health

r

Rheumatology

s

Skin disorders

t

Tobacco, drugs & alcohol

u

Urology

w

Wounds

Browse-Funktion

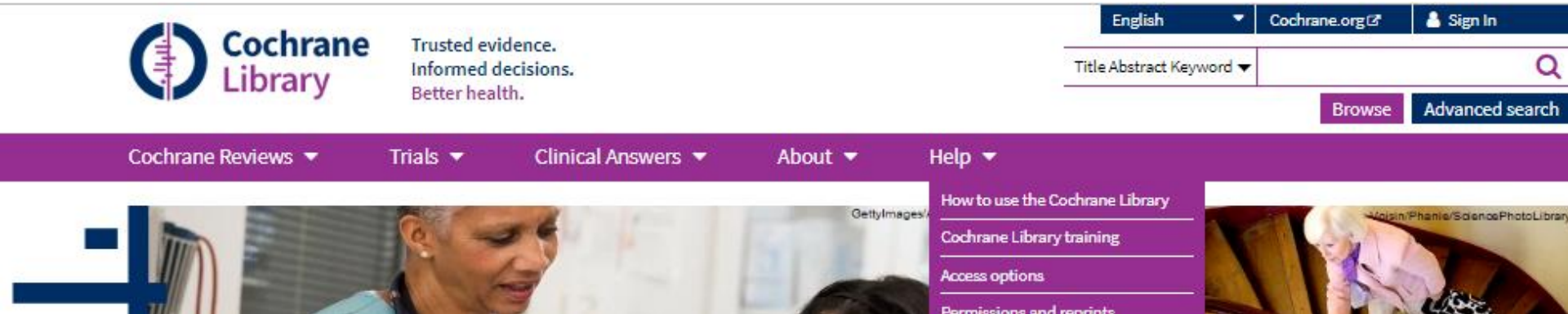
Cochrane International, Deutschland und die Cochrane Library

nach Cochrane Review Gruppe

a Acute Respiratory Infections Airways Anaesthesia, Critical, and Emergency Care	f Fertility Regulation	n Neonatal Neuromuscular
b Back and Neck Bone, Joint and Muscle Trauma Breast Cancer	g Gynaecological, Neuro-oncology and Orphan Cancer Gynaecology and Fertility	o Oral Health
c Childhood Cancer Colorectal Cancer Common Mental Disorders Consumers and Communication Cystic Fibrosis and Genetic Disorders	h Haematological Malignancies Heart Hepato-Biliary HIV/AIDS Hypertension	p Pain, Palliative and Supportive Care Pregnancy and Childbirth Public Health
d Dementia and Cognitive Improvement Developmental, Psychosocial and Learning Problems Drugs and Alcohol	i Incontinence Infectious Diseases Inflammatory Bowel Disease Injuries	s Schizophrenia Sexually Transmitted Infections Skin Stroke
e Effective Practice and Organisation of Care ENT Epilepsy Eyes and Vision	k Kidney and Transplant	t Tobacco Addiction
	l Lung Cancer	u Upper GI and Pancreatic Diseases Urology
	m Metabolic and Endocrine Disorders Methodology Movement Disorders Multiple Sclerosis and Rare Diseases of the CNS Musculoskeletal	v Vascular
		w Work Wounds

Hilfen für die Suche

Cochrane International, Deutschland und die Cochrane Library



- Cochrane Library Reference Guide
- Training Videos

Außerdem: Search Help in der Suchmaske

Plain language summaries in Cochrane Reviews

Plain Language Summaries

Plain language summary available in [English](#) | [Español](#) | [Bahasa Malaysia](#) | [繁體中文](#)

Acupuncture for depression

Why is this review important?

Depression is widely experienced in our communities. People with clinical depression report lack of interest in life and activities that they otherwise normally enjoy. Some people who are depressed use complementary therapies, and some prefer these therapies over medication. Acupuncture treatment involves insertion of fine needles into different parts of the body to correct the imbalance of energy within the body.




Who will be interested in this review?

Adolescents and adults; healthcare practitioners, including general practitioners working with or involved in the treatment of individuals with depression; and providers and commissioners of healthcare services will be interested in this review.

What questions does this review aim to answer?

This review, which is an update of a previous Cochrane review (published in 2010), aims to answer the following questions.

- Is acupuncture better than no treatment or usual care?
- Is acupuncture better than control acupuncture (a treatment that looks similar to acupuncture)?
- Is acupuncture better than pharmacological therapies such as antidepressant medication?

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[Plain language summary](#)

[Authors' conclusions](#)

[Summary of findings](#)

[Background](#)

[Objectives](#)

[Methods](#)

[Results](#)

[Discussion](#)

[Appendices](#)

[Information](#)

Plain Language Summaries in Cochrane Reviews

Plain Language Summaries

- Laienverständliche Zusammenfassung
- Teil jedes Cochrane Reviews
- Immer kostenfrei zugänglich
- Cochrane Strategy to 2020:
 - **Goal 2: Making our evidence accessible**
 - Vereinfachte und standardisierte Sprache

<https://community.cochrane.org/organizational-info/resources/strategy-2020>

Standards für die Erstellung von PLS

Plain Language Summaries

- **PLEACS** (Standards for the reporting of Plain Language Summaries in new Cochrane Intervention Reviews), 2013
- Teil von **MECIR** (Methodological Expectations of Cochrane Intervention Reviews)
<https://methods.cochrane.org/mecir>
- **Plain language summary template**, 2018
<https://www.cochrane.no/plain-language-summary-format>

Standards für die Erstellung von PLS

Plain Language Summaries

Jelicic Kadic et al. *BMC Medical Research Methodology* (2016) 16:61
DOI 10.1186/s12874-016-0162-y

BMC Medical Research
Methodology

RESEARCH ARTICLE

Open Access



Cochrane plain language summaries are highly heterogeneous with low adherence to the standards

Antonia Jelicic Kadic¹, Mahir Fidahic², Milan Vujcic¹, Frano Saric¹, Ivana Propadalo¹, Ivana Marelja¹,
Svjetlana Dosenovic¹ and Livia Puljak^{1*}

- Qualität der PLS variierte
- Von 1738 untersuchten PLS hielt sich keiner vollständig an PLEACS
- Durchschnittlicher „adherence score“: 57%
- V.a. Vertrauenswürdigkeit der Evidenz (GRADE) zu wenig kommuniziert

Standards für die Erstellung von PLS

Plain Language Summaries

Grundprinzipien

- Länge: 400-700 Wörter
- Zwischentitel benutzen
- Konsistenz bei der Berichterstattung der Ergebnisse
- Plain English: Vermeidung oder Erklären von Fachbegriffen und Fachjargon
- Sätze auf eine Kernaussage beschränken
- Kurze Absätze
- Wörter mit Doppeldeutigkeit vermeiden
- Akronyme bei häufigen Wörtern
- Aktiv statt Passiv benutzen
- Keine Empfehlungen

A

In-service training for health professionals to improve care of seriously ill newborns and children in low-income countries

B

What is the aim of this review?

The aim of this Cochrane review was to find out whether additional emergency care training programmes can improve the ability of health workers in poor countries to care for seriously ill newborns and children admitted to hospitals. Researchers in the Cochrane Collaboration collected and analysed all relevant studies to answer this question and found two relevant studies.

<https://www.cochrane.no/plain-language-summary-format>

C

Key messages

Giving health professionals in poor countries additional ability to care for seriously ill newborns. But we still need health professionals trained to care for seriously ill newborns.

D

What was studied in the review?

In poor countries, many babies and children with serious illnesses die in hospitals. One reason for this may be that health workers do not offer the care that these children need.

In poor countries, children may often become seriously ill with meningitis and diarrhoea, and may need emergency care. Emergency care is when the baby gets too little oxygen and the person delivering the baby has to help the baby breathe back to normal. This is called neonatal resuscitation.

Neonatal resuscitation is a skilled task and the health worker who resuscitates quickly, the health worker also needs to know how to prepare for it. For instance, he or she needs to know how to prepare the room in poor countries often do not have these skills, and if the health worker does not resuscitate the baby, the baby may die.

There are a number of training programmes that teach health workers how to care for seriously ill babies and children. But these have not been evaluated, so we don't know if these would work in poor countries.

E

What are the main results of the review?

The review authors found two relevant studies. In the first study, health professionals who had been given extra training in the care of newborns with the practices of neonatal resuscitation were more likely to resuscitate newborn babies correctly than health professionals who did not get extra training.

F

In the first study, nurses at a maternity hospital in Kenya got a one-day training course in how to resuscitate newborn babies. This course was adapted from the UK Resuscitation Council, and included lectures and practical training. The study suggests that after these training courses:

- Health professionals are probably more likely to resuscitate newborn babies correctly (moderate certainty evidence)
- Newborn babies may be less likely to die while being resuscitated (low certainty evidence)

In the second study, doctors, nurses and midwives in five Sri Lankan hospitals were given a four-day training course in how to prepare for and provide care for newborns. This course was adapted from the WHO Training Modules on Essential Newborn Care and Breastfeeding, and included lectures, demonstrations, hands-on training and small group discussions. This study suggests that after these training courses:

- Health professionals are probably more likely to be well-prepared to resuscitate newborn babies (moderate certainty evidence)

Unfortunately, the two studies only followed up the health professionals for two to three months after they have received training. We therefore don't know if the benefits of the training courses lasted over time.

The review authors did not find any studies that looked at the effect of training programmes for the care of older children.

How up-to-date is this review?

The review authors searched for studies that had been published up to February 2015.

Standards für die Erstellung von PLS

Plain Language Summaries

A. Titel: in laienverständlicher Sprache

B. Reviewfrage:

- PICO
- Systematic Review, keine einzelne Studie!

C. Key message:

- Kurze Zusammenfassung der Ergebnisse
- Vertrauenswürdigkeit der Evidenz
- Evidenzlücken

D. Hintergrund:

- Einführung
- Bedeutung der Fragestellung

Standards für die Erstellung von PLS

Plain Language Summaries

E. Ergebnisse

- Beschreibung der Studien: Anzahl, Setting, PICO, Finanzierung
- Wichtigste Endpunkte
- Auch Endpunkte ohne Daten berichten
- Vertrauenswürdigkeit der Evidenz
- Vertrauenswürdigkeit der Evidenz < high: „probably“ oder „may“ benutzen
- Standardsätze nutzen
- Wenn Konfidenzintervall Nutzen und keinen Effekt oder Nutzen und Schaden einschließt, auf Unsicherheit eingehen
- Absolute Zahlen bevorzugen

F. Aktualität des Reviews: Datum der letzten Suche

	Important benefit/harm	Less important benefit/harm	No important benefit/harm
High-certainty ¹ evidence	<i>[Intervention]</i> improves/reduces <i>[outcome]</i> (high-certainty evidence)	<i>[Intervention]</i> slightly improves/reduces <i>[outcome]</i> (high-certainty evidence)	<i>[Intervention]</i> makes little or no difference to <i>[outcome]</i> (high certainty evidence)
Moderate-certainty ¹ evidence	<i>[Intervention]</i> probably improves/reduces <i>[outcome]</i> (moderate-certainty evidence)	<i>[Intervention]</i> probably slightly improves/reduces /probably leads to slightly better/worse/less/more <i>[outcome]</i> (moderate certainty evidence)	<i>[Intervention]</i> probably makes little or no difference to <i>[outcome]</i> (moderate-certainty evidence)
Low-certainty ¹ evidence	<i>[Intervention]</i> may improve/reduce <i>[outcome]</i> (low-certainty evidence)	<i>[Intervention]</i> may slightly improve/reduce <i>[outcome]</i> (low-certainty evidence)	<i>[Intervention]</i> may make little or no difference to <i>[outcome]</i> (low-certainty evidence)
The point estimate indicates an important benefit or harm, and the confidence interval also includes an important benefit / harm / no effect*	<p><i>[Intervention]</i> may lead to <i>[better outcome]</i>. However, the range where the actual effect may be (the "margin of error") indicates that <i>[intervention]</i> may make little or no difference / might worsen / increase <i>[outcome]</i>.</p> <p>Or</p> <p><i>[Intervention]</i> may lead to <i>[better / worse outcome / little or no difference]</i>. However, the effects of <i>[intervention]</i> vary and it is possible that <i>[intervention]</i> makes little or no difference / worsens / increases <i>[outcome]</i>.</p>		
Very low-certainty ¹ evidence	We are uncertain whether <i>[intervention]</i> improves/reduces <i>[outcome]</i> as the certainty of the evidence is very low		
No data or no studies	None of the studies looked at <i>[outcome]</i>		

<https://www.cochrane.no/plain-language-summary-format>

Cochrane Kompakt

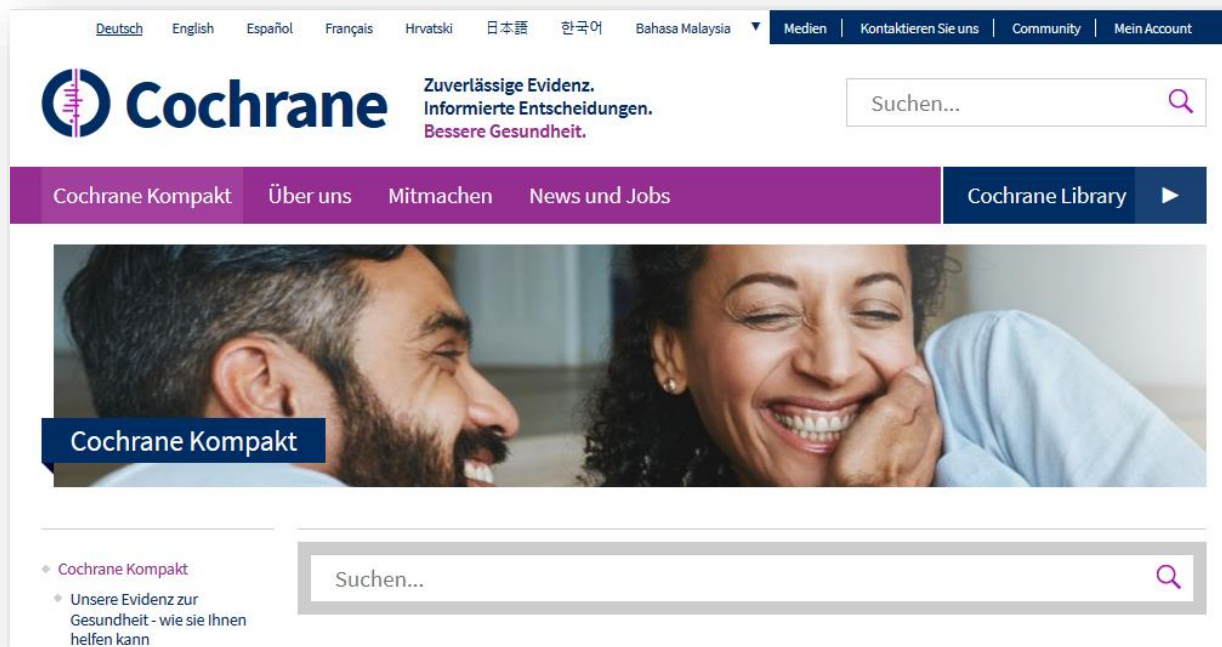
Plain Language Summaries

- Cochrane strategy to 2020: Goal 2: Making our evidence accessible
 - **Multilingual translations**
- Übersetzung von PLS und/oder Abstracts von Cochrane Reviews in 14 Sprachen
- Publikation in der Cochrane Library
- Für deutschsprachige Übersetzungen auch auf **Cochrane Kompakt**: <https://www.cochrane.org/de/evidence>

Cochrane Kompakt

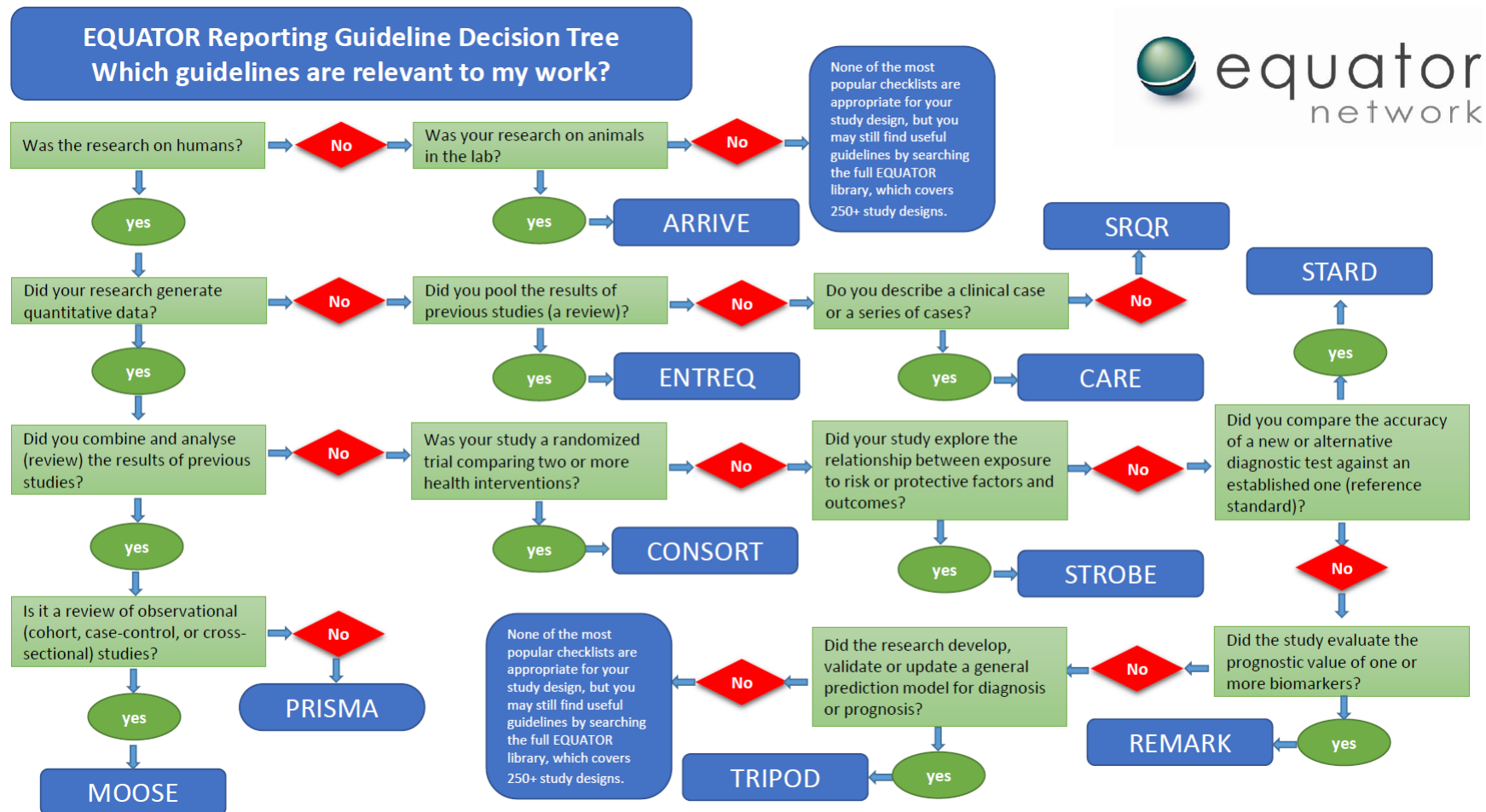
Plain Language Summaries

- > 1500 PLS und > 70 Abstracts in deutscher Sprache
- Zusammenarbeit mit 11 deutschsprachigen Fachzeitschriften
- Unterstützung durch viele freiwillige Übersetzer



EQUATOR - Leitlinien zum Bericht von Studien

Berichtleitlinien und Bewertung von Reviews



<http://www.equator-network.org/wp-content/uploads/2013/11/20160226-RG-decision-tree-for-Wizard-CC-BY-26-February-2016.pdf>

PRISMA

Berichtleitlinien und Bewertung von Reviews

Table 1. Checklist of items to include when reporting a systematic review or meta-analysis.

Section/Topic	#	Checklist Item	Reported on Page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	

Moher et al. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Journal of Clinical Epidemiology*.

Research article

Open Access

Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews

Beverley J Shea^{*1,5}, Jeremy M Grimshaw^{†2}, George A Wells³, Maarten Boers^{†4}, Neil Andersson⁵, Candyce Hamel^{†5}, Ashley C Porter⁵, Peter Tugwell², David Moher⁶ and Lex M Bouter^{†1}

AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both

Beverley J Shea,^{1,2,3} Barnaby C Reeves,⁴ George Wells,^{3,5} Micere Thuku^{1,2}, Candyce Hamel,¹ Julian Moran,⁶ David Moher,^{1,3} Peter Tugwell^{1,2,3,7}, Vivian Welch,^{2,3} Elizabeth Kristjansson,⁸ David A Henry^{9,10,11}

Eigenschaften von bzw. Hinweise auf niedrig-qualitative Reviews

Berichtleitlinien und Bewertung von Reviews

- ungenügende Planung/Strukturiertheit
 - kein PICO(S)-Schema
 - keine Vorabplanung (PROSPERO; Protokolle)
- ungenügende Literatursuche
 - ungenügend Datenbanken eingeschlossen (z.B.: MEDLINE, CENTRAL, EMBASE, PsycINFO, CINAHL, AMED)
 - ungenügend Synonyme in der Suche / Selection-Bias verwendet
 - ist die Anzahl gefundener Studien plausibel?
- Autoren
 - kleine Anzahl von Autoren
 - sind Spezialisten aus allen nötigen Feldern beteiligt (Inhaltlich & methodisch)
 - erstes Review aller Autoren
- keine Bias-, Heterogenitäts-, Small-Study-Effects-Bewertung
- geringe Transparenz
 - z.B. Suchstrategien nicht direkt gelistet für jede Quelle
 - Entscheidungsfindungen
- kurze Länge (Appendix beachten)

Methodische Probleme von Studien

Biasbewertung

- Selektions-Bias **Randomisierung**
systematische Unterschiede in der Zusammensetzung der Gruppen
- Performance-Bias **Verblindung**
*systematische Unterschiede in den sonstigen
Behandlungsbedingungen*
- Detection-Bias **Verblindung**
systematische Unterschiede in der Bewertung des Zielkriteriums
- Attrition-Bias **Intention-to-Treat**
systematische Unterschiede bzgl. Follow-Up/Abbrechern
- Reporting-Bias **Studienregistrierung**
*systematische Unterschiede bzgl. der berichteten
Endpunkte/Outcomes/abhängigen Variablen*

Biaseinschätzung einzelner Studien

Biasbewertung

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Allen 1999	●	●	●	●	●	●	●
Allen 2006	●	●	●	●	●	●	●
Andrescu 2011	●	●	●	●	●	●	●
Bosch 2015	●	●	●	●	●	●	●
Cheng 2007	●	●	●	●	●	●	●
Chung 2015	●	●	●	●	●	●	●
Ding 2003	●	●	●	●	●	●	●
Dong 2007	●	●	●	●	●	●	●
Du 2005	●	●	●	●	●	●	●
Duan 2009	●	●	●	●	●	●	●
Duan 2011	●	●	●	●	●	●	●
Eich 2000	●	●	●	●	●	●	●
Fan 2005	●	●	●	●	●	●	●
Fan 2013	●	●	●	●	●	●	●
Feng 2011	●	●	●	●	●	●	●
Fu 2006	●	●	●	●	●	●	●
Fu 2008	●	●	●	●	●	●	●
Han 2002	●	●	●	●	●	●	●
He 2005	●	●	●	●	●	●	●
He 2007	●	●	●	●	●	●	●
He 2012	●	●	●	●	●	●	●
Huang 2013	●	●	●	●	●	●	●
Li 2004	●	●	●	●	●	●	●
Li 2007	●	●	●	●	●	●	●
Li 2009	●	●	●	●	●	●	●
Li 2010	●	●	●	●	●	●	●
Lin 2012	●	●	●	●	●	●	●
Liu 2006	●	●	●	●	●	●	●
Liu 2013	●	●	●	●	●	●	●
Liu 2015	●	●	●	●	●	●	●
Luo 1995	●	●	●	●	●	●	●
Luo 1998	●	●	●	●	●	●	●
Luo 1999	●	●	●	●	●	●	●
Lu 2015	●	●	●	●	●	●	●
Ma 2011	●	●	●	●	●	●	●
Ma 2012	●	●	●	●	●	●	●
MacPherson 2013	●	●	●	●	●	●	●
Pei 2006	●	●	●	●	●	●	●
Qiao 2007	●	●	●	●	●	●	●
Qiu 2013	●	●	●	●	●	●	●
Quah-Smith 2005	●	●	●	●	●	●	●
Quah-Smith 2013	●	●	●	●	●	●	●
Roschke 2000	●	●	●	●	●	●	●
Shen 2005	●	●	●	●	●	●	●
Sun 2010	●	●	●	●	●	●	●
Sun 2013	●	●	●	●	●	●	●
Sun 2015	●	●	●	●	●	●	●
Tang 2003	●	●	●	●	●	●	●
Wang 2014	●	●	●	●	●	●	●
Wang 2015	●	●	●	●	●	●	●
Wenbin 2002	●	●	●	●	●	●	●
Whiting 2008	●	●	●	●	●	●	●
Xiao 2014	●	●	●	●	●	●	●

Smith et al. (2018). Acupuncture for depression. *Cochrane Database of Systematic Reviews*.

Biaseinschätzung einzelner Studien

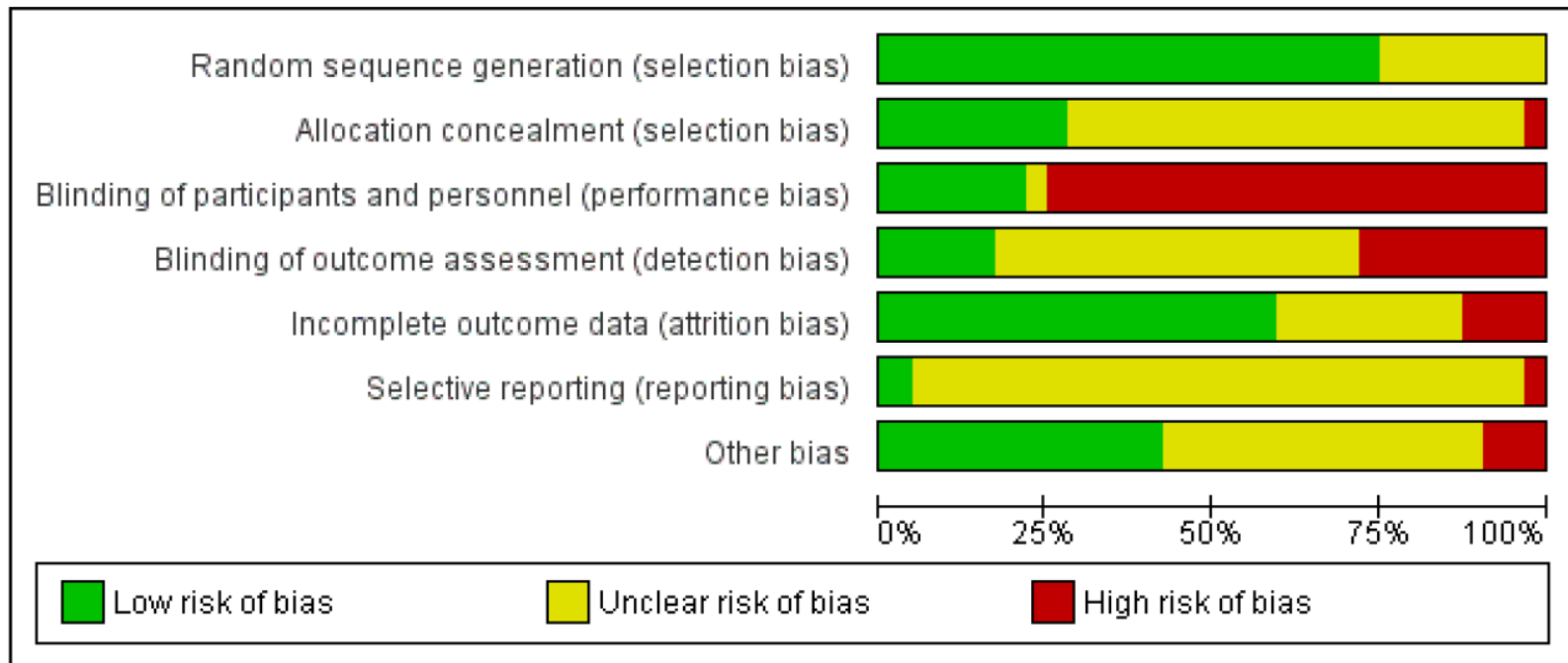
Biasbewertung

	Allen 1998	Allen 2006	Andrescu 2011	Bosch 2015	Cheng 2007	Chung 2015	Ding 2003	Dong 2007	Du 2005	Quack 2000
Random sequence generation (selection bias)	+	?	+	+	?	+	+	?	+	+
Allocation concealment (selection bias)	+	+	+	?	?	+	?	?	?	?
Blinding of participants and personnel (performance bias)	+	+	+	-	-	+	-	-	-	-
Blinding of outcome assessment (detection bias)	?	+	+	?	?	+	?	?	-	?
Incomplete outcome data (attrition bias)	+	-	+	-	+	+	+	?	-	+
Selective reporting (reporting bias)	?	?	?	?	?	?	?	?	?	?
Other bias	?	+	+	?	+	+	?	+	-	+

Smith et al. (2018). Acupuncture for depression. *Cochrane Database of Systematic Reviews*.

Biaseinschätzung insgesamt

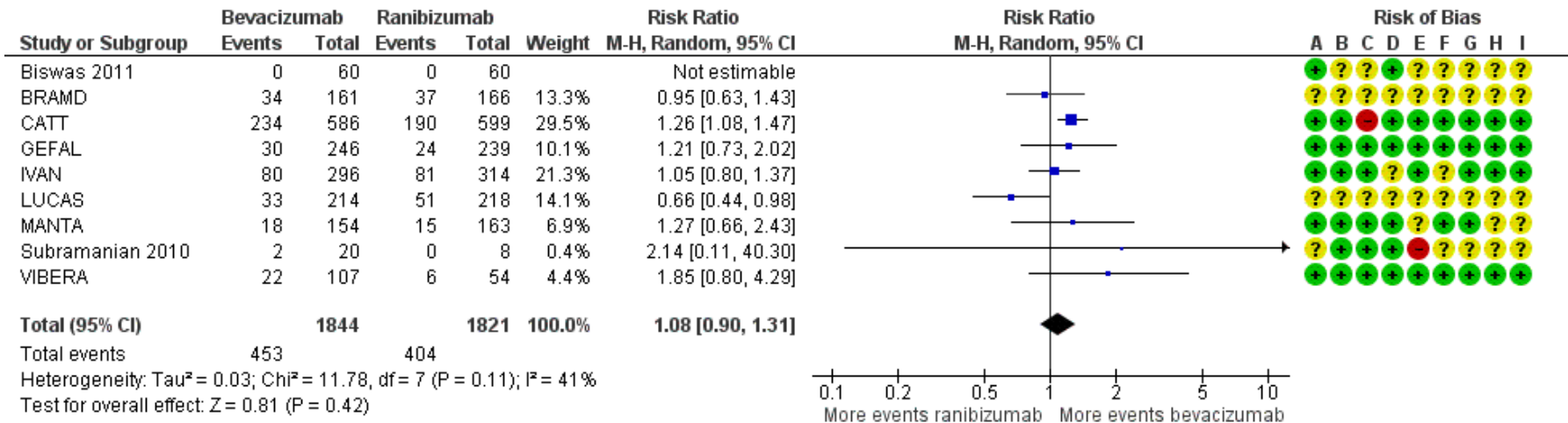
Biasbewertung



Smith et al. (2018). Acupuncture for depression. *Cochrane Database of Systematic Reviews*.

Forestplot mit Biasbewertung

Biasbewertung



Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias
- (H) Adverse event definition
- (I) Method of adverse event assessment

Moja et al. (2014). Systemic safety of bevacizumab versus ranibizumab for neovascular age-related macular degeneration. Cochrane Database of Systematic Reviews

GRADE - Grading of Recommendations Assessment, Development and Evaluation

GRADE und Summary of Findings Tabellen

From evidence to recommendations - transparent and sensible

- Leitlinie für eine einheitliche und transparente Beurteilung des Evidenzkörpers
- Einteilung jedes einzelnen Endpunkts in:
 - *very low, low, moderate, high certainty*
- GRADE working group
 - mehr als 400 Wissenschaftler, Kliniker, Methodiker
 - mehr als 50 Organisationen



<https://gradepro.org/>

GRADEpro GDT

GRADE und Summary of Findings Tabellen

GRADEproGDT

▼ smoking_test

⚙️ ⓘ ? nitschke@cochrane.de ▼

▼ Should nursing intervention vs. standard management be used for Smokers?

Bottom panel Explanations

Nursing intervention compared to standard management for Smokers

Certainty assessment							Summary of findings					
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect		Certainty	Importance
							Nursing intervention	Standard management	Relative (95% CI)	Absolute (95% CI)		
abstinence (follow up: mean 6 months)												
44	randomised trials	serious ^a	not serious	not serious	not serious	none	1607/11319 (14.2%)	1165/9562 (12.2%)	RR 1.29 (1.21 to 1.38)	35 more per 1.000 (from 26 more to 46 more)	⊕⊕⊕○ MODERATE	CRITICAL

Add outcome

Import outcome(s)

Summary of Findings table mit GRADE

GRADE und Summary of Findings Tabellen

ADDITIONAL SUMMARY OF FINDINGS [\[Explanation\]](#)

Acupuncture compared with control acupuncture for depression					
Patient or population: clinical diagnosis of depression Setting: community/outpatient/inpatient Intervention: acupuncture Comparison: control acupuncture					
Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	No. of participants (studies)	Quality of the evidence (GRADE) Comments
	Risk with control	Risk with acupuncture			
Severity of depression at the end of the intervention as measured by the Hamilton Depression Rating Scale (HAMD) scored from 0 to 54 (lower score indicates less severe depression)	In the study population, average severity of depression at the end of treatment was 11.4 in clinician-rated HAMD scores	MD 1.69 lower (3.33 lower to 0.05 lower)	-	841 (14 RCTs)	⊕⊕○○ LOW ^{a,b}
Adverse events	Study population		RR 1.63 (0.93 to 2.86)	300 (5 RCTs)	⊕⊕⊕○ MODERATE ^c
	162 per 1000	264 per 1000 (151 to 463)			
Quality of life (physical) at the end of treatment (higher scores indicate greater quality of life)	Mean quality of life (physical) at the end of treatment was 37	MD 5.12 lower (10.38 lower to 0.13 higher)	-	150 (1 RCT)	⊕⊕⊕○ MODERATE ^d

Smith et al. (2018). Acupuncture for depression. *Cochrane Database of Systematic Reviews*.

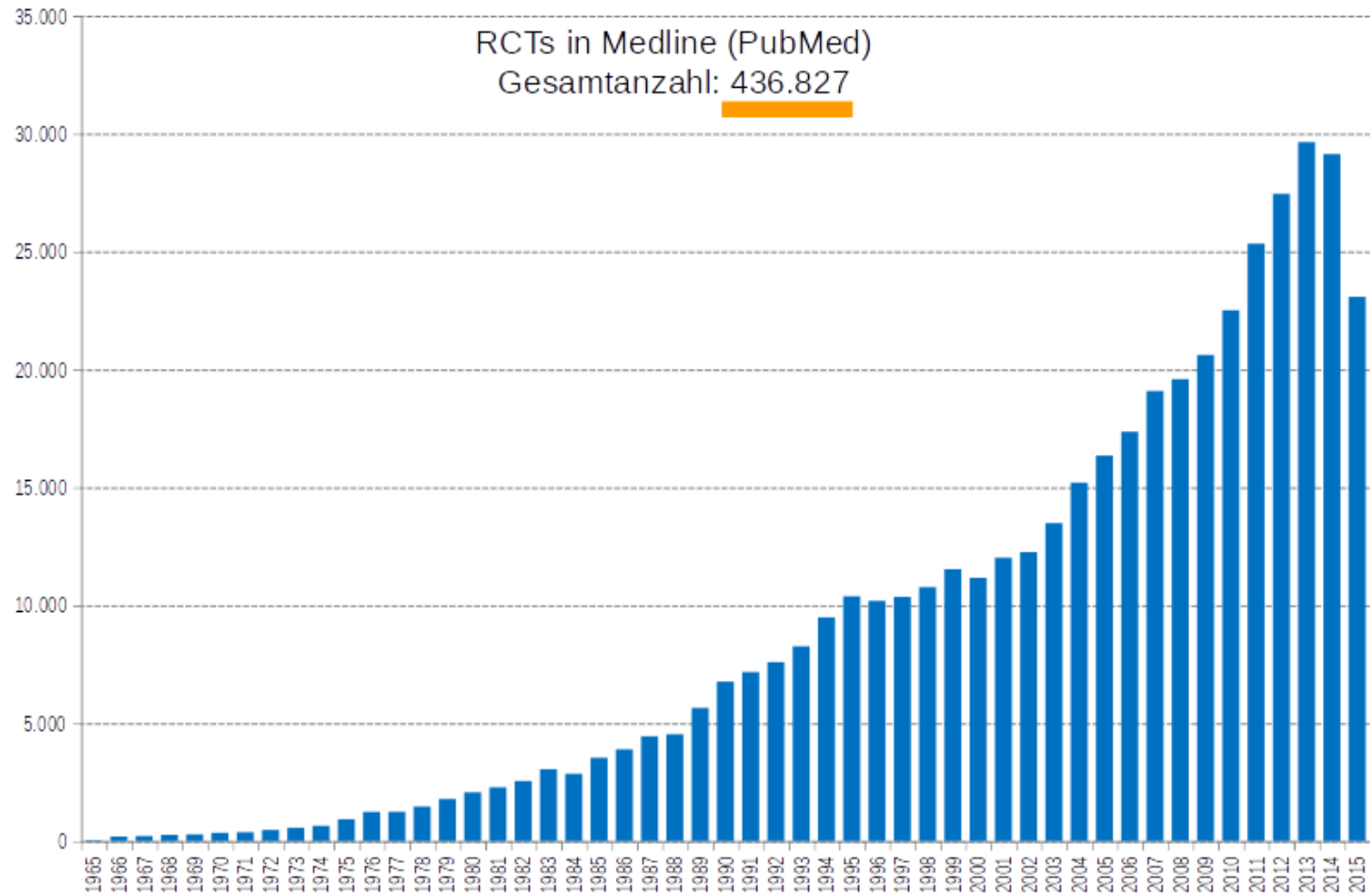
Signifikanz vs. Relevanz

GRADE und Summary of Findings Tabellen

- Kleinster **relevanter** Unterschied (minimal important difference)
- Der geringste Unterschied, den Patienten als Verbesserung empfinden und der, unter Nicht-Vorhandensein von schweren Nebenwirkungen, zu einer Änderung der Therapie führen würde.
Jaeschke et al., 1989
- Ist ein Effekt, der mit 95%-Wahrscheinlichkeit zwischen 3.33 und 0.05 auf einer Skala von 0 bis 54 (HAMD) liegt relevant?

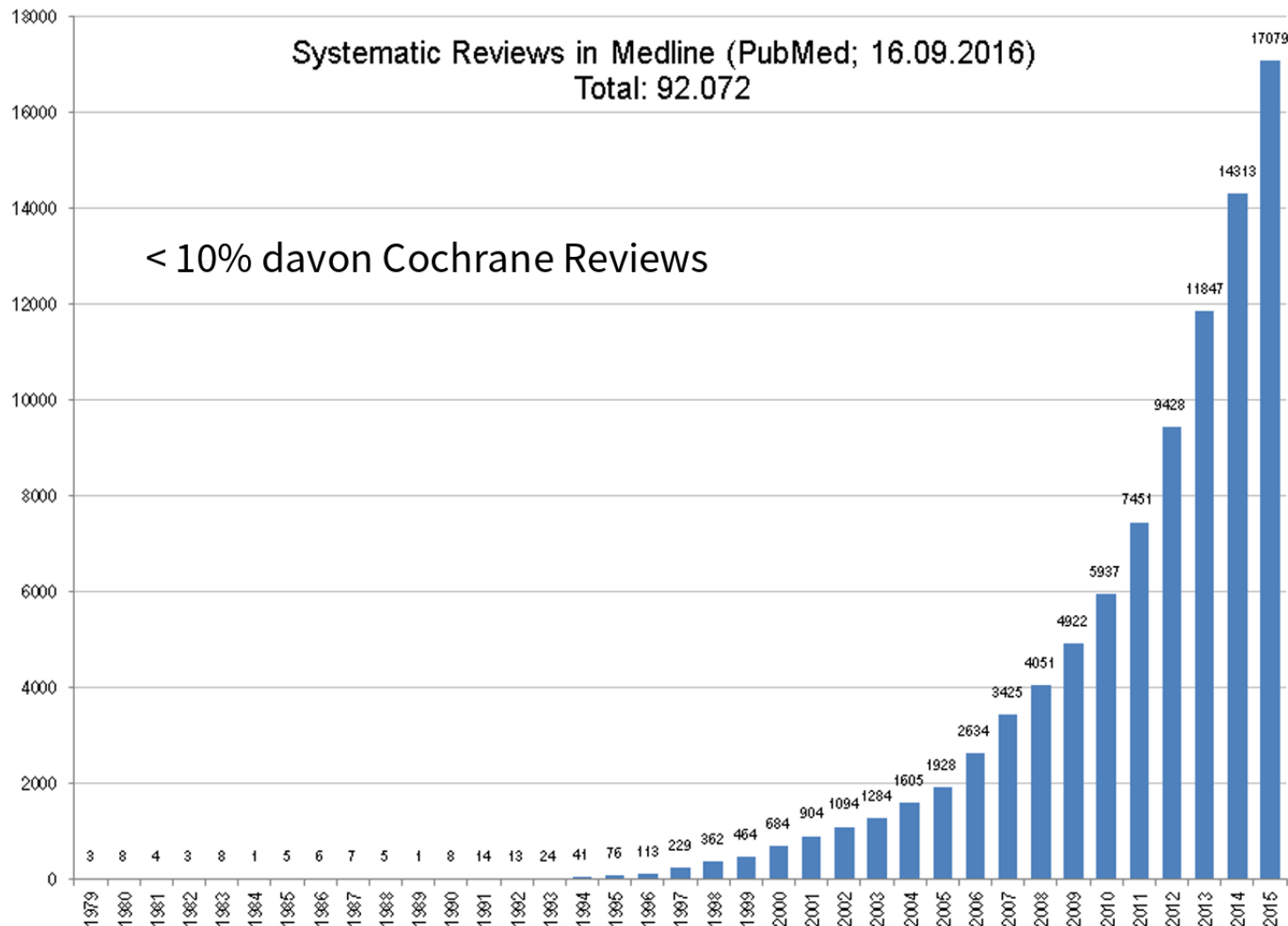
Publikationen neuer RCTs

Publikationsschwemme



Publikationen neuer Systematischer Reviews

Publikationsschwemme



Redundant, misleading, and conflicted reviews

Publikationsschwemme

Original Investigation

The Mass Production of Redundant, Misleading, and Conflicted Systematic Reviews and Meta-analyses

JOHN P.A. IOANNIDIS

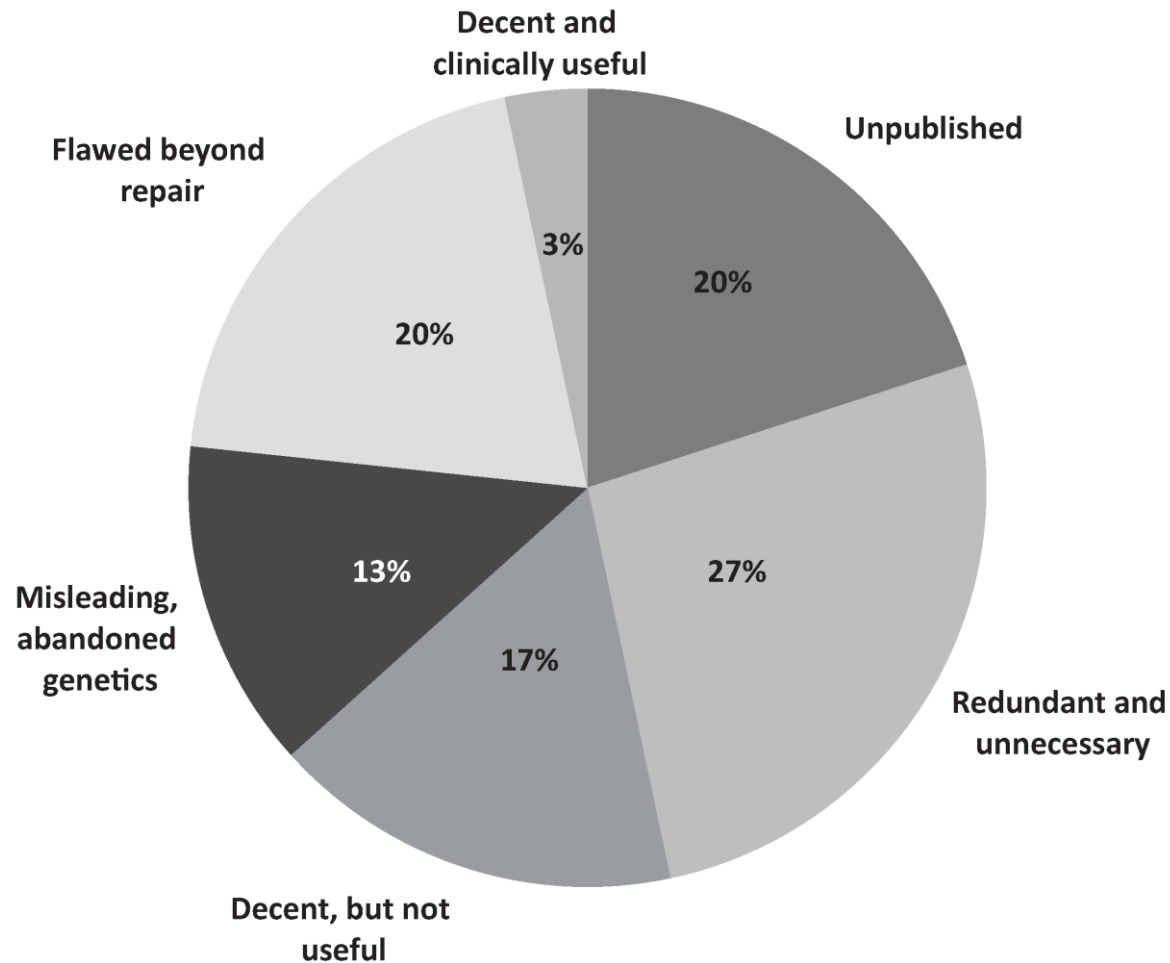
*Stanford University School of Medicine; Stanford University School of
Humanities and Sciences; Meta-Research Innovation Center at Stanford
(METRICS), Stanford University*

Policy Points:

- Currently, there is massive production of unnecessary, misleading, and conflicted systematic reviews and meta-analyses. Instead of promoting evidence-based medicine and health care, these instruments often serve mostly as easily produced publishable units or marketing tools.
- Suboptimal systematic reviews and meta-analyses can be harmful given the major prestige and influence these types of studies have acquired.
- The publication of systematic reviews and meta-analyses should be realigned to remove biases and vested interests and to integrate them better with the primary production of evidence.

Redundant, misleading, and conflicted reviews

Publikationsschwemme



Ioannidis (2016). The Mass Production of Redundant, Misleading, and Conflicted Systematic Reviews and Meta-analyses. *The Milbank Quarterly*, 94.

Publikationen neuer Systematischer Reviews

Publikationsschwemme

Die **Anzahl** der Systematischen Reviews **steigt** weiterhin exponentiell

- Die mittlere **Qualität** der Reviews **sinkt** stetig, trotz sich weiterentwickelnder und verbesserter Methoden
- Gründe für die weiterhin sinkende Qualität
 - Attraktivität für Wissenschaftler
 - kein Ethikvotum nötig
 - geringe Kosten
 - zeitliche Flexibilität
 - hohe Wahrnehmung und Reputation
 - Attraktivität für Journals
 - mehr Zitierungen und höhere Wahrnehmung
 - Gebühren für Veröffentlichung (gerade bei Open-Access)
 - Pharma-Industrie
 - Marketing

Registrierung von Reviews

Publikationsschwemme

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International prospective register of systematic reviews



National Institute for
Health Research

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<https://www.crd.york.ac.uk/prospero/>



Kostenlose Software und Ressourcen

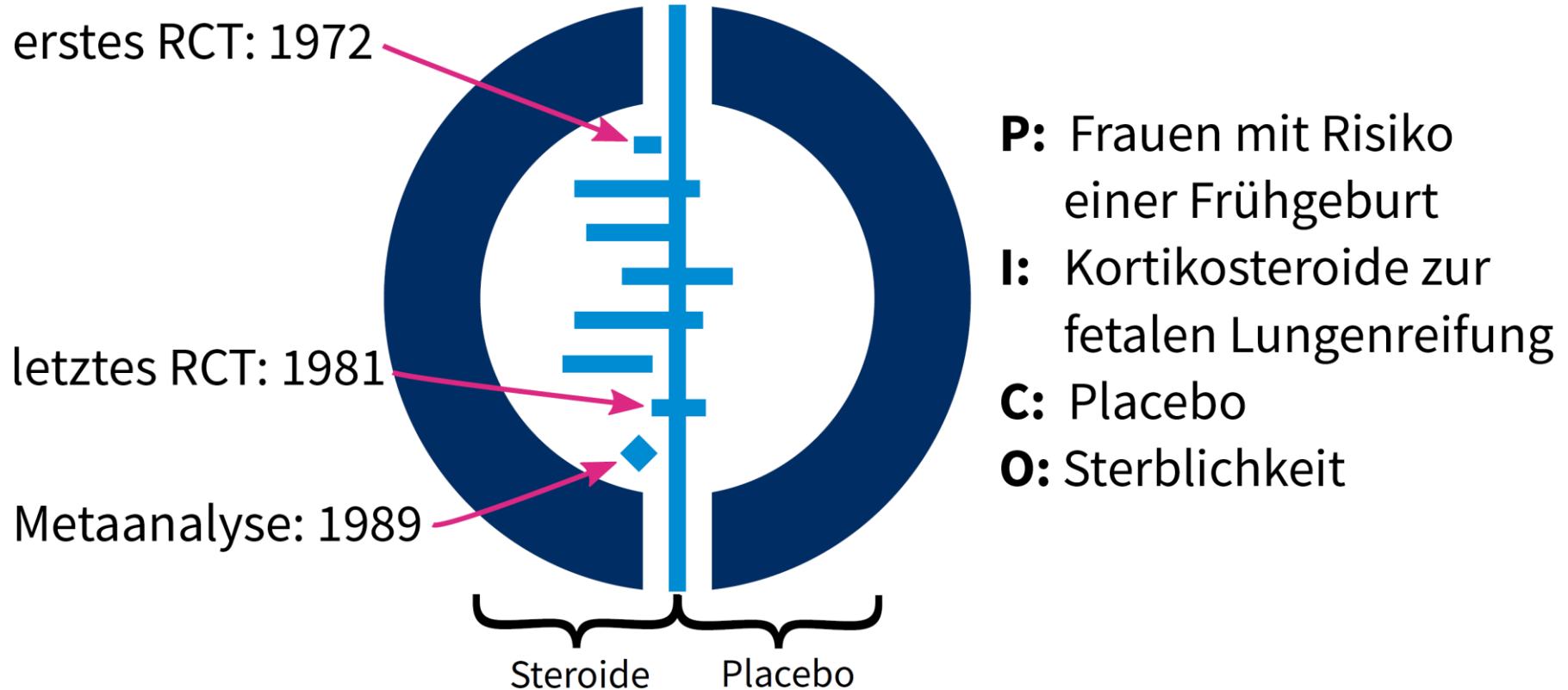
- Theoretische Erstellung eines Reviews: **Cochrane Handbook**
- Praktische Erstellung des Reviews: **RevMan**
 - Erstellung des Cochrane-Protokolls
 - Vollwertige Unterstützung bei der Erstellung des Reviews, inkl. Bias-Tabellen, Meta-Analyse, Erstellung des Cochrane-Manuskripts, Summary-of-Findings-Table
 - zugeordnete Kapitel des Cochrane Handbuchs
- Risk of Bias: **RoB 2.0 tool**, **ROBINS-I tool**, usw.
- GRADE: **GRADEPro GDT**

Schwierigkeiten von Reviews in der Psychologie

- ProfessorInnen für klinische Psychologie oftmals Leiter der Ausbildungsinstitute / Ambulanzen → Interessenskonflikte
 - Aktuell keinerlei Bewusstsein dafür
- Replikationskrise
 - Sequentielles Testen
 - Betrifft genauso systematische Übersichtsarbeiten

Das Cochrane Logo

Deutsche Version





**UNIVERSITÄTS
KLINIKUM** FREIBURG

Vielen Dank für die Aufmerksamkeit

Plain Language Summaries von Cochrane Reviews

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