Гематология

- Анемии – 5 занятий
- Гемостаз – 4-5

Эндокринология

- Диабет – 3-4

Кардиология

- Липидология - 2
- ХСН - 2
- Аритмии – 2-3

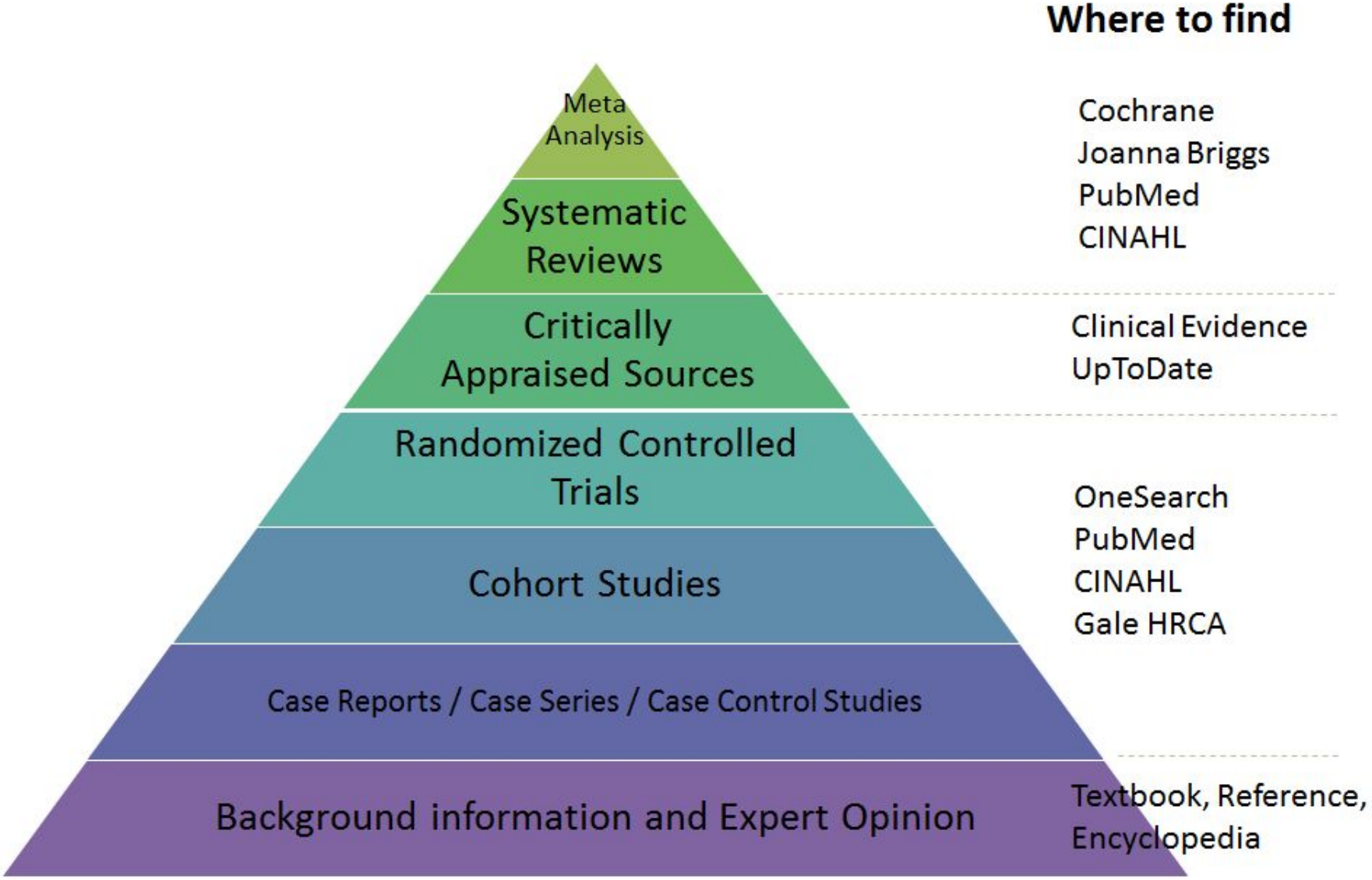
- Натрий и вода – 2
- Калий -1-2
- Кальций – 1
- КОС – 3-4

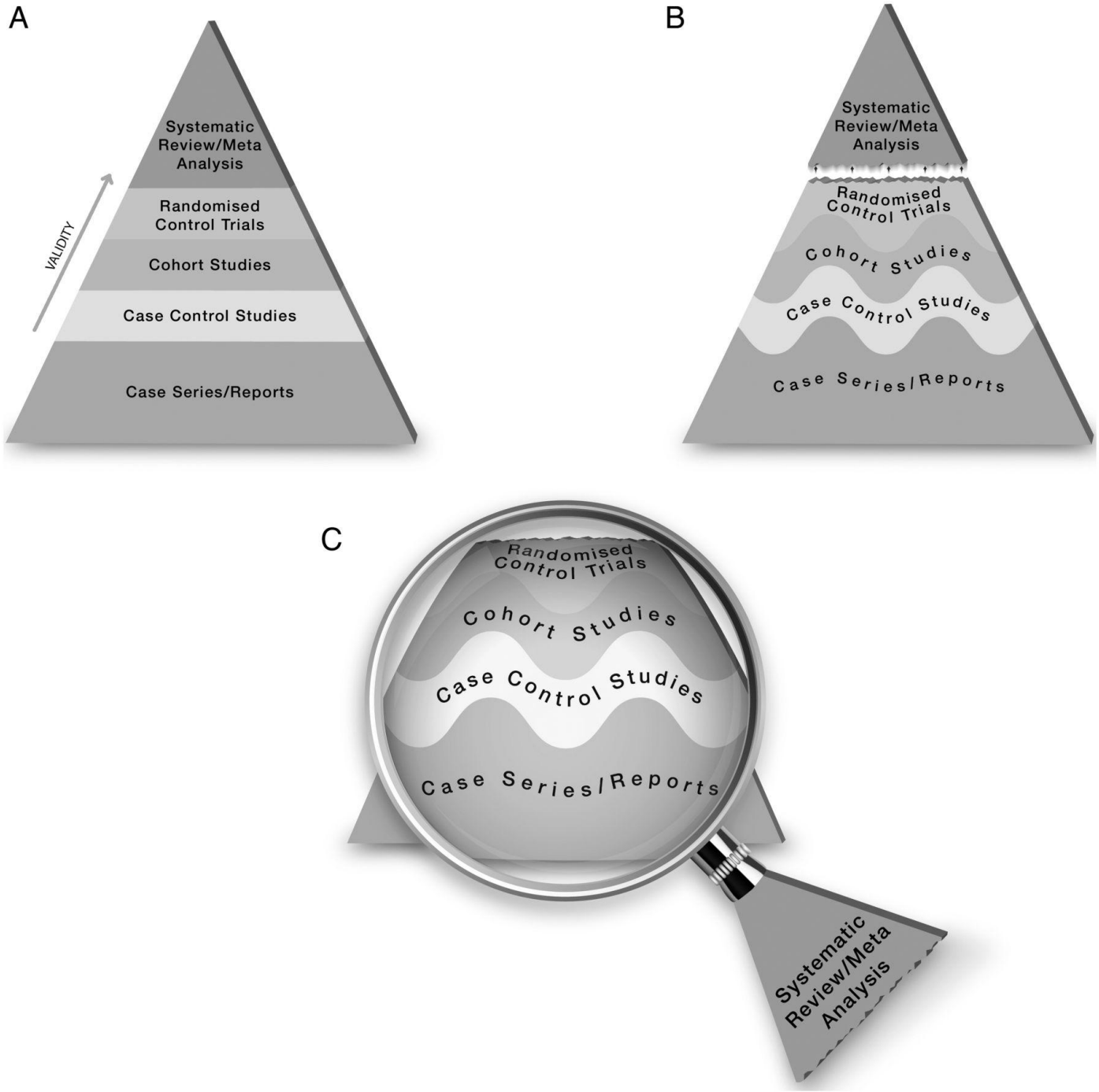
- Почки – 3-4
- Печень – 1

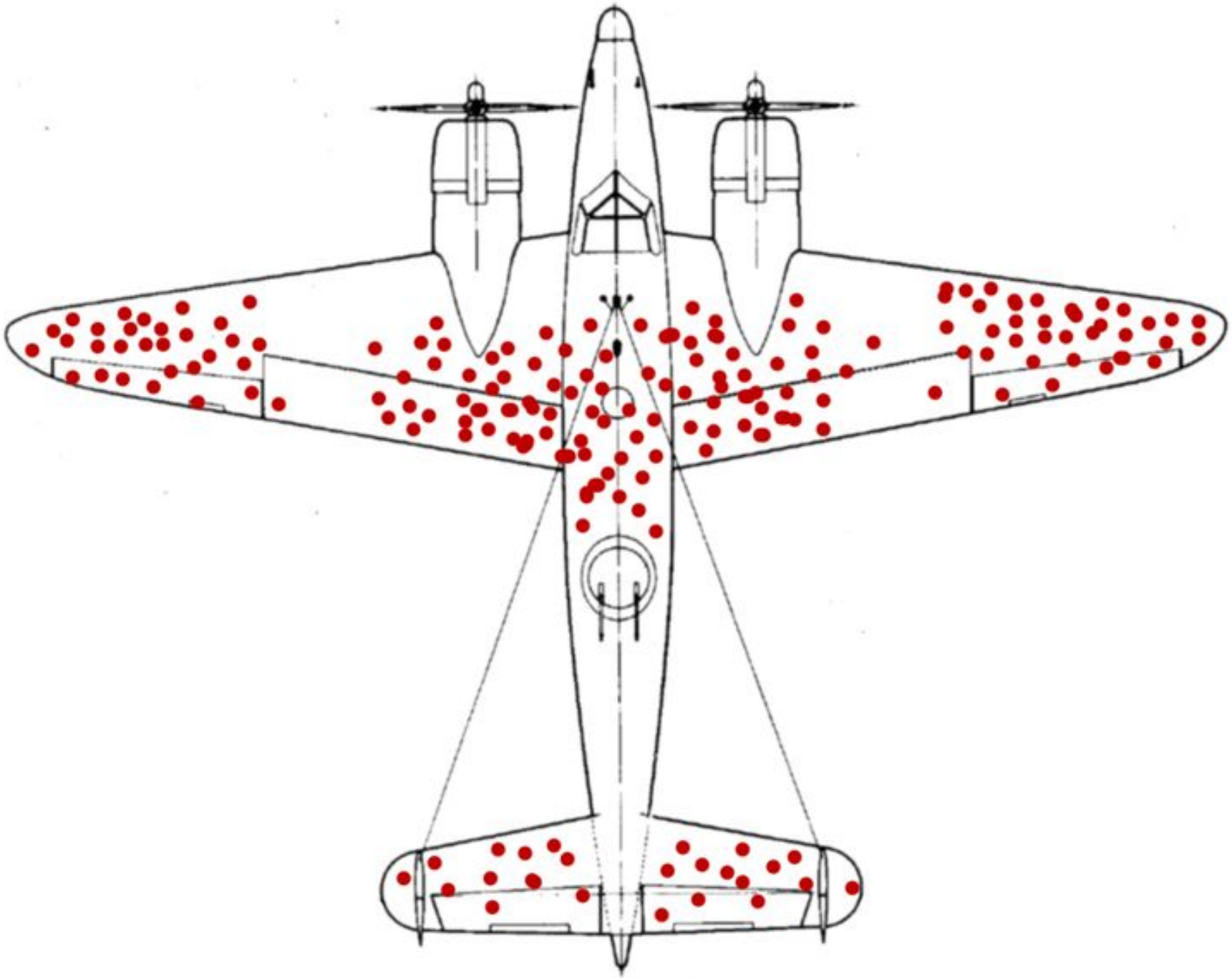
- Фармакокинетика – 3-4

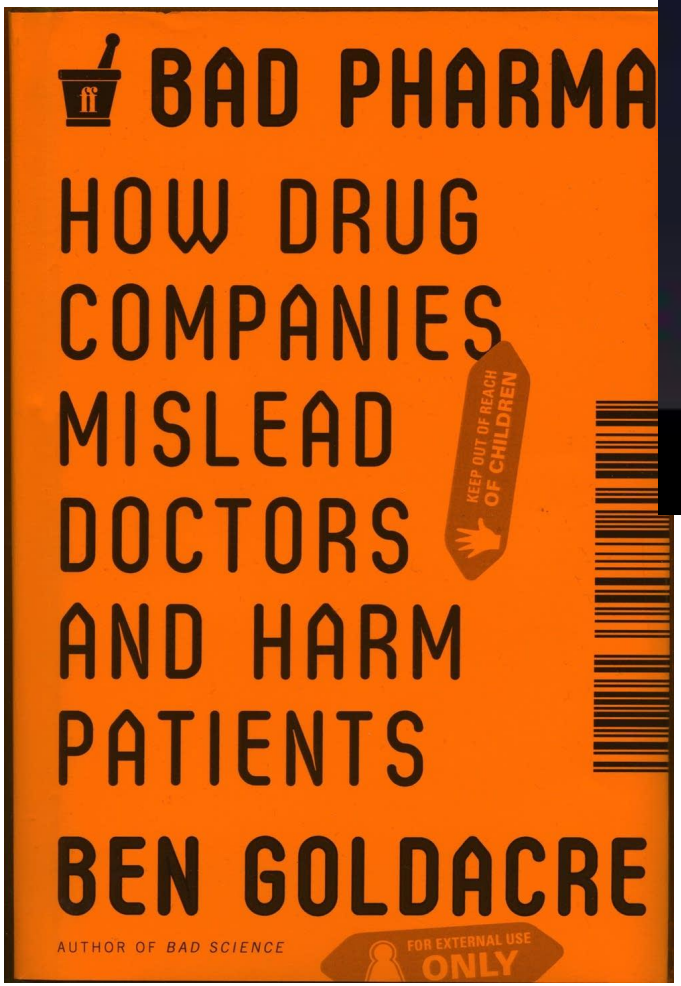
- Радиобиология – 1
- Воспаление, опухоли, радикалы, иммунитет, ЖКТ, микробиом, дыхание и остальные темы 3 курса по одному занятию

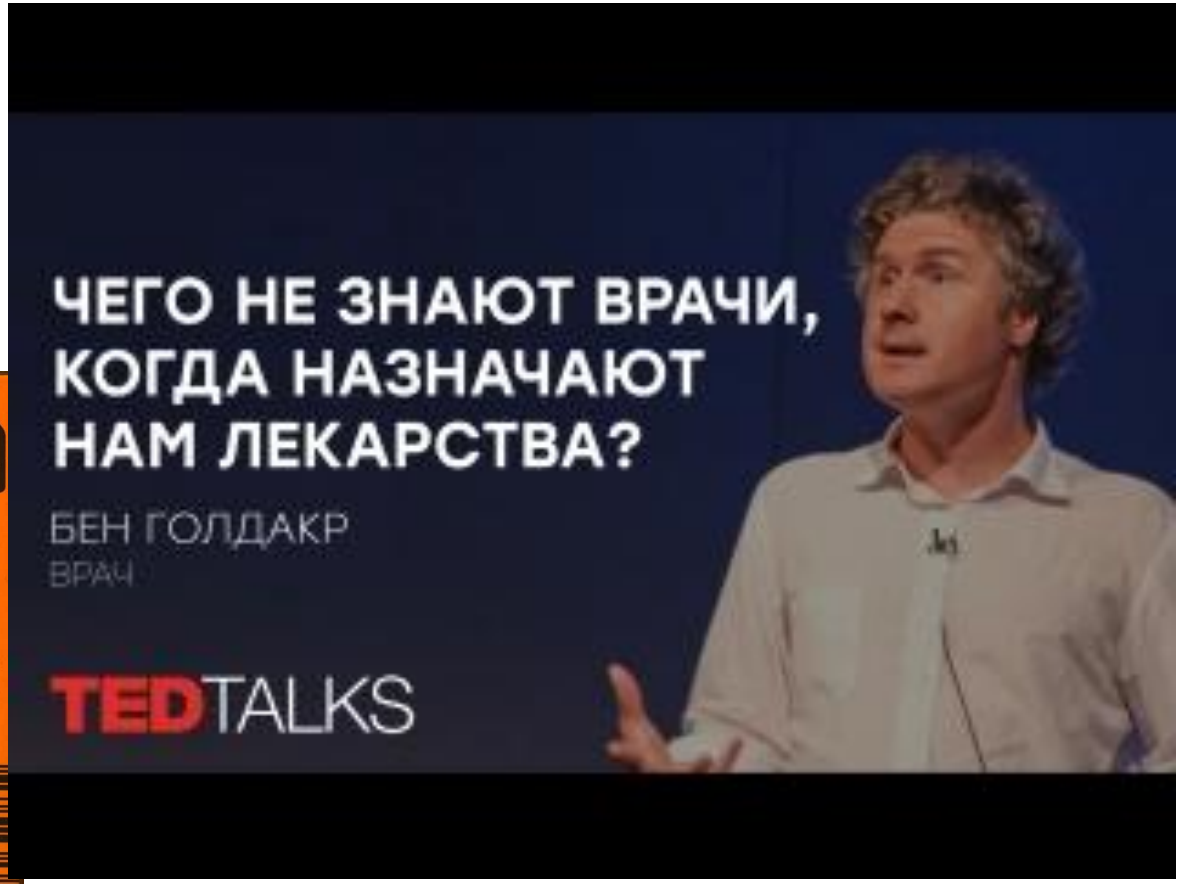

метаанализ
Рандомизированные
контролируемые
исследовани
Когортные исследования
Исследования случай-контроль
Поперечные исследования
Отчеты о конкретных случаях, мнения экспертов


Where to find
Meta Analysis
Systematic Reviews
Critically Appraised Sources
Randomized Controlled Trials
Cohort Studies
Case Reports / Case Series / Case Control Studies
Background information and Expert Opinion
Cochrane
Joanna Briggs
PubMed
CINAHL
Clinical Evidence
UpToDate
OneSearch
PubMed
CINAHL
Gale HRCA
Textbook, Reference, Encyclopedia


A
Systematic Review/Meta Analysis
Randomised Control Trials
Cohort Studies
Case Control Studies
Case Series/Reports
VALIDITY
B
Systematic Review/Meta Analysis
Randomised Control Trials
Cohort Studies
Case Control Studies
Case Series/Reports
C
Randomised Control Trials
Cohort Studies
Case Control Studies
Case Series/Reports
Systematic Review/Meta Analysis

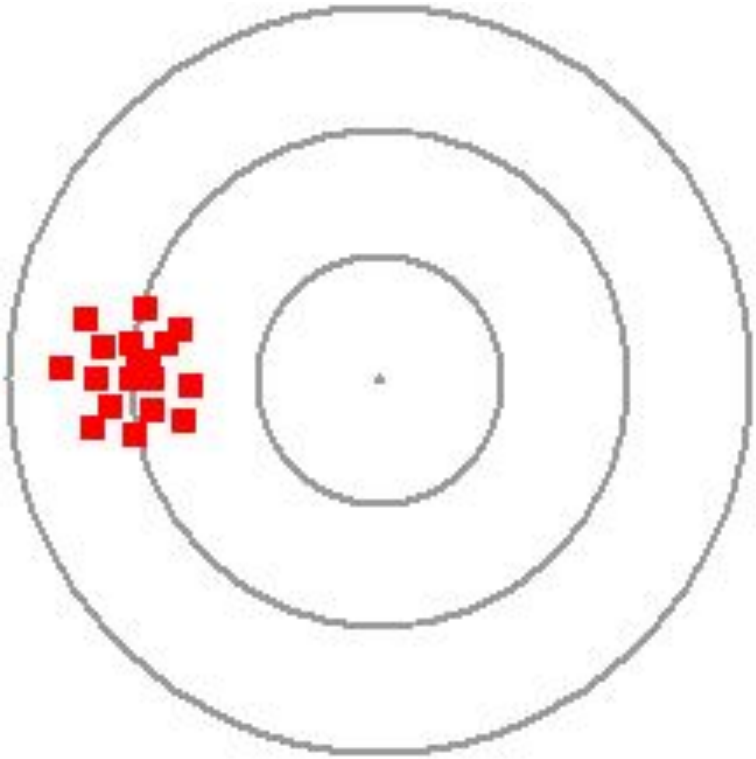



BAD PHARMA
HOW DRUG COMPANIES MISLEAD DOCTORS AND HARM PATIENTS
KEEP OUT OF REACH OF CHILDREN
BEN GOLDACRE
AUTHOR OF BAD SCIENCE
FOR EXTERNAL USE ONLY

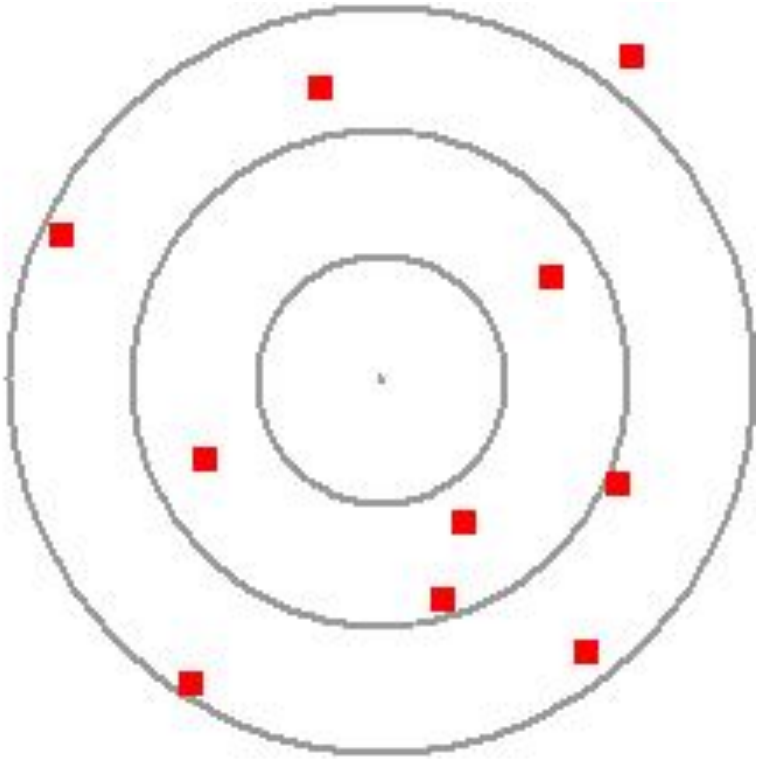

ЧЕГО НЕ ЗНАЮТ ВРАЧИ, КОГДА НАЗНАЧАЮТ НАМ ЛЕКАРСТВА?
БЕН ГОЛДАКР
ВРАЧ
TEDTALKS

Types of Errors

- Systematic Errors
  - These are errors caused by the way in which the experiment was conducted. In other words, they are caused by the design of the system or arise from flaws in equipment or experimental design or observer
  - Sometimes referred to as determinate errors
  - Reproducible with precision
  - Can be discovered and corrected



Systematic Error



Random Error

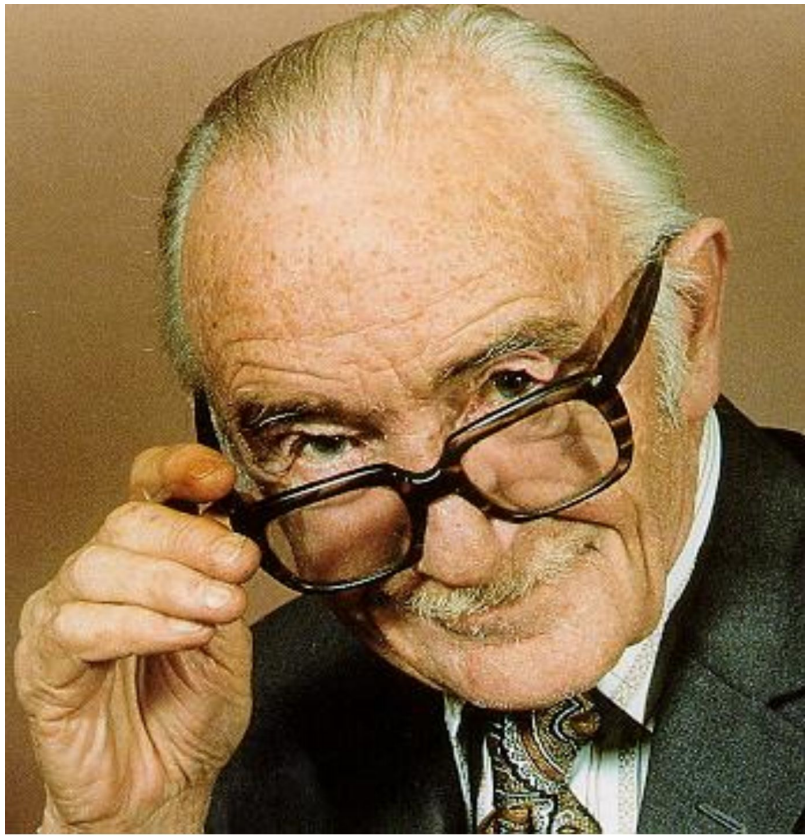
BIAS

№1 В РЕЙТИНГЕ AMAZON.COM

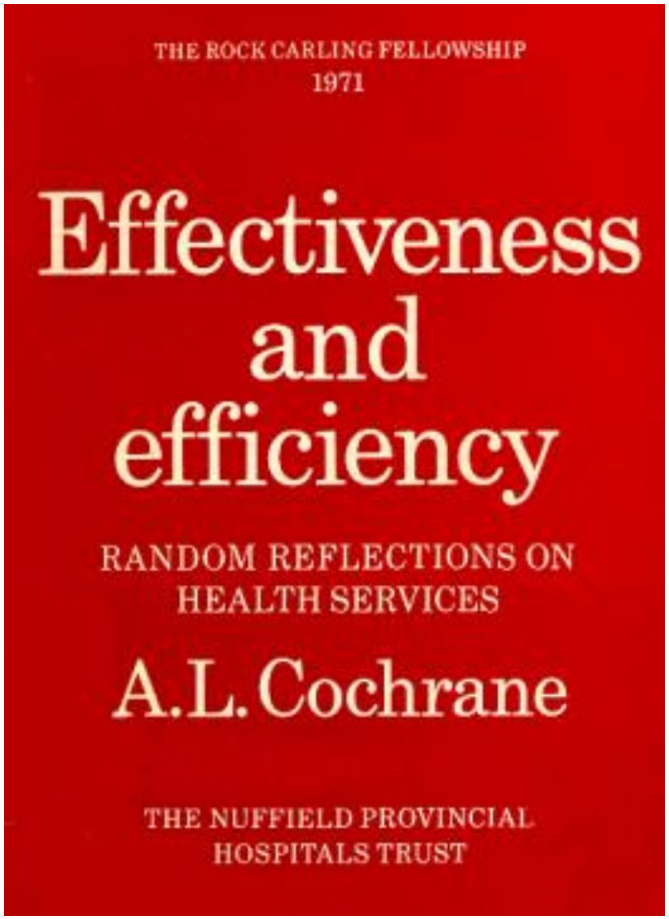
ДУМАЙ МЕДЛЕННО... РЕШАЙ БЫСТРО

ДАНИЭЛЬ КАНЕМАН

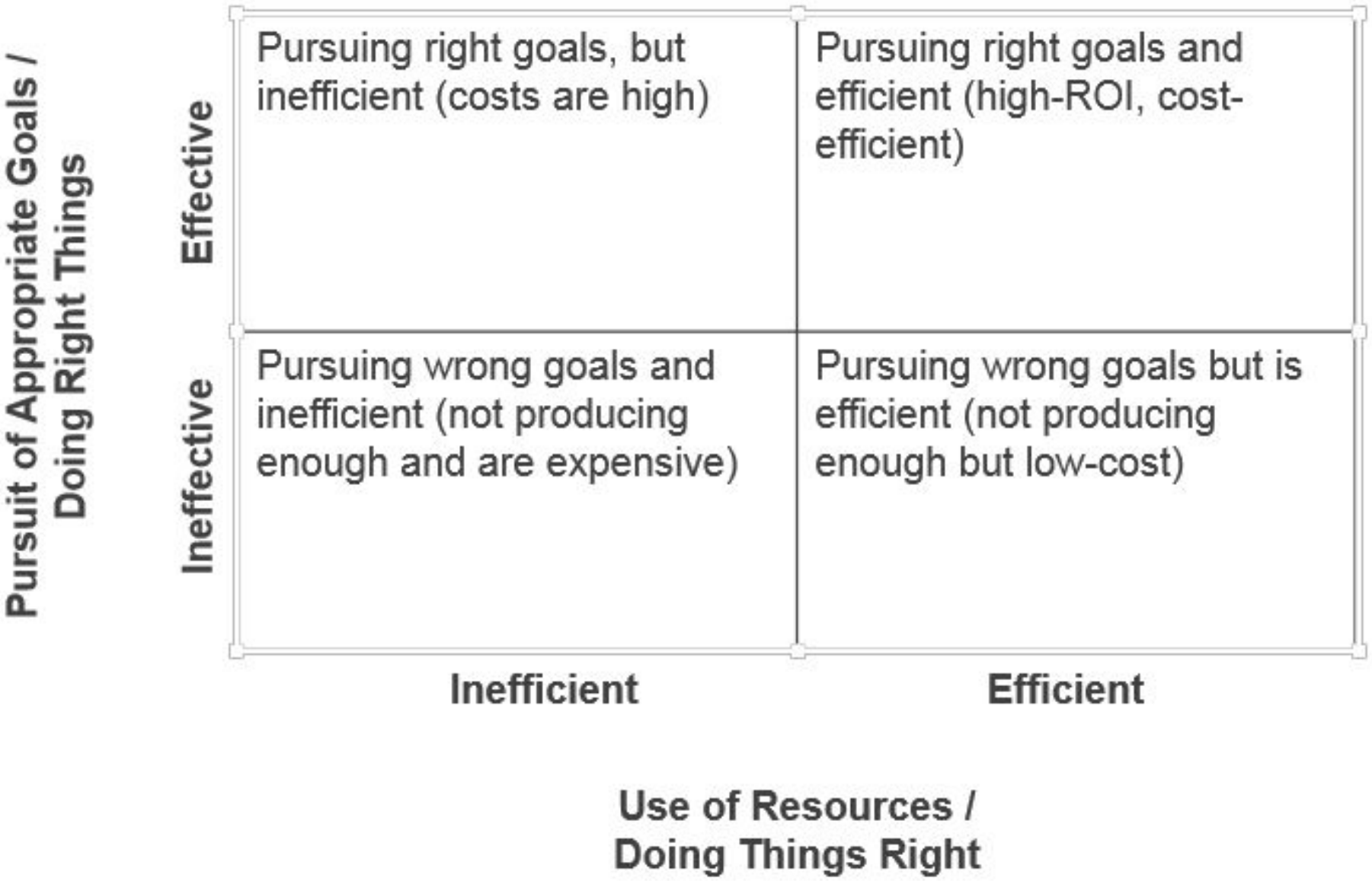
ЛАУРЕАТ НОБЕЛЕВСКОЙ ПРЕМИИ



"Суровой критики заслуживает наша профессия за то, что мы не организовали разработку критических резюме всех соответствующих рандомизированных контролируемых испытаний, по специальностям, или узким специальностям, периодически адаптируемых"



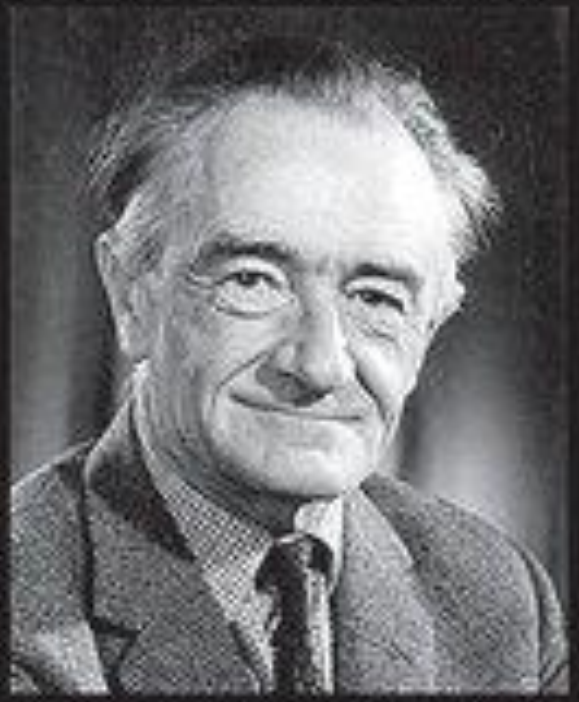
Действенность и эффективность: случайные размышления о медицинской службе


Pursuit of Appropriate Goals / Doing Right Things
Effective
Ineffective
Pursuing right goals, but inefficient (costs are high)
Pursuing right goals and efficient (high-ROI, cost-efficient)
Pursuing wrong goals and inefficient (not producing enough and are expensive)
Pursuing wrong goals but is efficient (not producing enough but low-cost)
Inefficient
Efficient
Use of Resources / Doing Things Right

Cardiff University Cochrane Centenary Edition

ONE MAN'S MEDICINE

An Autobiography of
Professor Archie Cochrane



Archibald L Cochrane with Max Blythe

Cochrane
Community

Trusted evidence.
Informed decisions.
Better health.

Campbell
Collaboration

Mortality

Flecainide was included in the National Heart Lung and Blood Institute's Cardiac Arrhythmia Suppression Trial (CAST), a long-term, multi center, randomized, double-blind study in patients with asymptomatic non-life-threatening ventricular arrhythmias who had a myocardial infarction more than six days, but less than two years previously. An excessive mortality or non-fatal cardiac arrest rate was seen in patients treated with Flecainide compared with that seen in a carefully matched placebo-treated group. This rate was 16/315 (5.1%) for Flecainide and 7/309 (2.3%) for the matched placebo. The average duration of treatment with Flecainide in this study was 10 months.

The applicability of the CAST results to other populations (e.g., those without recent myocardial infarction) is uncertain, but at present it is prudent to consider the risks of Class 1C agents (including Flecainide), coupled with the lack of any evidence of improved survival, generally unacceptable in patients without life-threatening ventricular arrhythmias, even if the patients are experiencing unpleasant, but not life-threatening, symptoms or signs.

N Engl J Med. 1997 Feb 20;336(8):525-33.

The effect of digoxin on mortality and morbidity in patients with heart failure.

Digitalis Investigation Group[1].

Author information

Abstract

BACKGROUND: The role of cardiac glycosides in treating patients with chronic heart failure and normal sinus rhythm remains controversial. We studied the effect of digoxin on mortality and hospitalization in a randomized, double-blind clinical trial.

METHODS: In the main trial, patients with a left ventricular ejection fraction of 0.45 or less were randomly assigned to digoxin (3397 patients) or placebo (3403 patients) in addition to diuretics and angiotensin-converting-enzyme inhibitors (median dose of digoxin, 0.25 mg per day; average follow-up, 37 months). In an ancillary trial of patients with ejection fractions greater than 0.45, 492 patients were randomly assigned to digoxin and 496 to placebo.

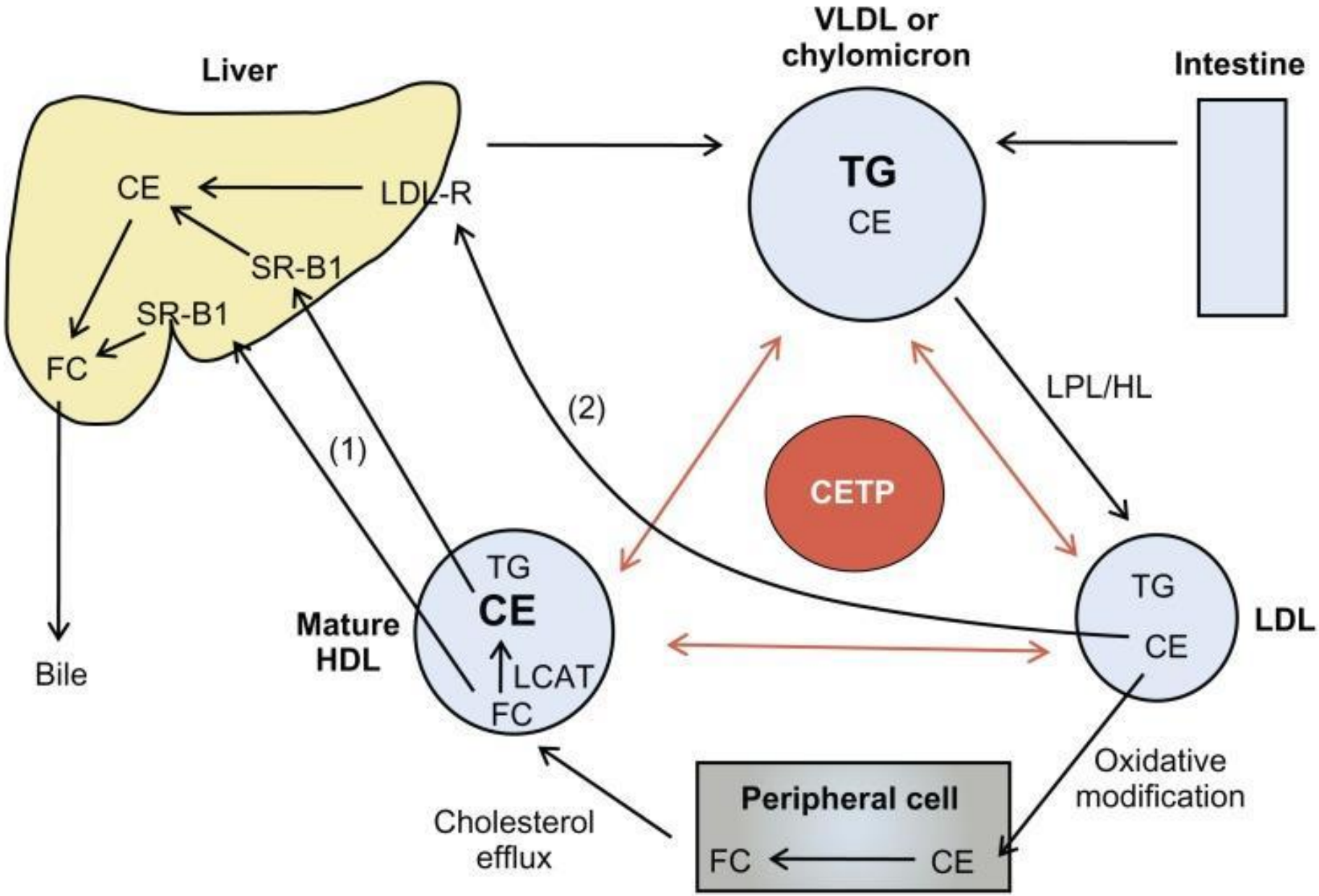
RESULTS: In the main trial, mortality was unaffected. There were 1181 deaths (34.8 percent) with digoxin and 1194 deaths (35.1 percent) with placebo (risk ratio when digoxin was compared with placebo, 0.99; 95 percent confidence interval, 0.91 to 1.07; P=0.80). In the digoxin group, there was a trend toward a decrease in the risk of death attributed to worsening heart failure (risk ratio, 0.88; 95 percent confidence interval, 0.77 to 1.01; P=0.06). There were 6 percent fewer hospitalizations overall in that group than in the placebo group, and fewer patients were hospitalized for worsening heart failure (26.8 percent vs. 34.7 percent; risk ratio, 0.72; 95 percent confidence interval, 0.66 to 0.79; P<0.001). In the ancillary trial, the findings regarding the primary combined outcome of death or hospitalization due to worsening heart failure were consistent with the results of the main trial.

CONCLUSIONS: Digoxin did not reduce overall mortality, but it reduced the rate of hospitalization both overall and for worsening heart failure. These findings define more precisely the role of digoxin in the management of chronic heart failure.

To resolve the 200-year-old controversy, the Digitalis Investigation Group launched the largest randomized, placebo-controlled study ever conducted in patients with heart failure, to evaluate the longterm effects of digoxin on morbidity and mortality. Six years after its inception, and with 7000 patients enrolled in the main trial, this landmark study is reported in this issue of the *Journal*.

Not surprisingly, both advocates and opponents of digitalis are likely to find solace in the results.

Milton Packer, 1997


Liver
CE
LDL-R
SR-B1
SR-B1
FC
Bile
VLDL or
chylomicron
TG
CE
Intestine
LPL/HL
(1)
(2)
CETP
Mature
HDL
TG
CE
LCAT
FC
TG
CE
LDL
Oxidative
modification
Cholesterol
efflux
Peripheral cell
FC
CE

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Evacetrapib and Cardiovascular Outcomes in High-Risk Vascular Disease

A. Michael Lincoff, M.D., Stephen J. Nicholls, M.B., B.S., Ph.D., Jeffrey S. Riesmeyer, M.D., Philip J. Barter, M.B., B.S., Ph.D., H. Bryan Brewer, M.D., Keith A.A. Fox, M.B., Ch.B., F.Med.Sci., C. Michael Gibson, M.D., Christopher Granger, M.D., Venu Menon, M.D., Gilles Montalescot, M.D., Ph.D., Daniel Rader, M.D., Alan R. Tall, M.B., B.S., Ellen McErlean, M.S.N., Kathy Wolski, M.P.H., Giacomo Ruotolo, M.D., Ph.D., Burkhard Vangerow, M.D., Govinda Weerakkody, Ph.D., Shaun G. Goodman, M.D., Diego Conde, M.D., Darren K. McGuire, M.D., M.H.Sc., Jose C. Nicolau, M.D., Jose L. Leiva-Pons, M.D., Yves Pesant, M.D., Weimin Li, M.D., David Kandath, M.D., Simon Kouz, M.D., Naeem Tahirkheli, M.D., Denise Mason, B.S.N., and Steven E. Nissen, M.D. et al., for the ACCELERATE Investigators*

May 18, 2017
N Engl J Med 2017; 376:1933-1942
DOI: 10.1056/NEJMoa1609581

RESULTS

At 3 months, a 31.1% decrease in the mean LDL cholesterol level was observed with evacetrapib versus a 6.0% increase with placebo, and a 133.2% increase in the mean HDL cholesterol level was seen with evacetrapib versus a 1.6% increase with placebo. After 1363 of the planned 1670 primary end-point events had occurred, the data and safety monitoring board recommended that the trial be terminated early because of a lack of efficacy. After a median of 26 months of evacetrapib or placebo, a primary end-point event occurred in 12.9% of the patients in the evacetrapib group and in 12.8% of those in the placebo group (hazard ratio, 1.01; 95% confidence interval, 0.91 to 1.11; P=0.91).

CONCLUSIONS

Although the cholesteryl ester transfer protein inhibitor evacetrapib had favorable effects on established lipid biomarkers, treatment with evacetrapib did not result in a lower rate of cardiovascular events than placebo among patients with high-risk vascular disease. (Funded by Eli Lilly; ACCELERATE ClinicalTrials.gov number, NCT01687998.)

"It’s the most mind-boggling question. How can a drug that lowers something that is associated with benefit not show any benefit?"

Dr. Stephen J. Nicholls 2016

Система как «чёрный ящик»

Включить

Нажать

Повернуть

Чистое бельё

Человек часто не знает, как «внутри» устроена система.

«Открыт новый физический феномен, который получил название „Релиз-активность“. Этот термин отражает появление, высвобождение (release) активности в процессе многократного уменьшения концентрации (разведения). В результате вещество не исчезает окончательно, а переходит в иную физическую форму — релиз-активную форму вещества, свойства которого не зависят от того, присутствуют в разведении молекулы исходного вещества или нет. Данная активность (релиз-активность) ассоциирована с растворителем, а препараты, изготовленные по такой технологии, называются релиз-активными». (indicator.ru/news/2017/12/08/akademiki-ran-gomeopatiya/).

«Релиз-активные препараты» по своим свойствам «не идентичны исходному веществу, а, следовательно, являются отдельным, „самостным“ материальным объектом». Носителем этих свойств «является обособленный (дискретный) супрамолекулярный материальный фактор» (Эпштейн, 2017).

ФЕНОМЕН РЕЛИЗ-АКТИВНОСТИ И ГИПОТЕЗА "ПРОСТРАНСТВЕННОГО" ГОМЕОСТАЗА

ЭПШТЕЙН О.И.[1]

[1] Научно-производственная компания "Материа Медика Холдинг"

Тип: статья в журнале - научная статья Язык: русский

Том: 44 Номер: 3 Год: 2013 Страницы: 54-76 Поступила в редакцию: 20.02.2013

ЖУРНАЛ:

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ISSN: 0301-1798

КЛЮЧЕВЫЕ СЛОВА:

РЕЛИЗ-АКТИВНОСТЬ, ДВОЙСТВЕННАЯ ИНДИВИДУАЛЬНО-ВИДОВАЯ ПРОСТРАНСТВЕННАЯ ОРГАНИЗАЦИЯ БИОЛОГИЧЕСКИХ СИСТЕМ, DUAL INDIVIDUAL AND SPECIFIC SPATIAL STRUCTURE OF BIOLOGICAL SYSTEM, СМЫСЛОВЫЕ МОЛЕКУЛЯРНЫЕ АНСАМБЛИ, SENSE MOLECULAR ASSEMBLIES, ГИПОТЕЗА ПРОСТРАНСТВЕННОГО ГОМЕОСТАЗА, HYPOTHESIS OF HOMEOSTASIS IN SPATIAL STRUCTURES, БИПАТИЧЕСКОЕ (СОЧЕТАННОЕ) ВВЕДЕНИЕ ЛЕКАРСТВЕННОГО СРЕДСТВА, BIPATHY (COMBINED) DRUG ADMINISTRATION, ГОМЕОПАТИЧЕСКИЕ ПРЕПАРАТЫ, HOMEOPATHIC DRUGS, RELEASE ACTIVITY

АННОТАЦИЯ:

При изучении технологии последовательного многократного уменьшения концентрации исходного вещества нами был открыт новый физический феномен. Разведения исходного вещества обладают общей особенностью способностью оказывать непосредственное модифицирующее влияние на исходное вещество, изменять его пространственную структуру и, вследствие этого, -его физико-химические и биологические свойства. Впервые выявленная модифицирующая активность, появляющаяся в процессе многократного уменьшения концентрации и ассоциированная с растворителем, названа нами релиз-активностью, а препараты, обладающие модифицирующей активностью релиз-активными. Анализ эффектов лекарственных средств во всем диапазоне доз токсических, терапевтических, малых, а также релиз-активных форм позволил нам сделать вывод о том, что действие любого вещества в организме направлено на предуготовленную супрамолекулярную пространственную матрицу, структура которой тождественна структуре того или иного вещества, и которая объединяет молекулы организма в смысловые молекулярные ансамбли. Все биологические системы, в отличие от неживой природы, имеют двойственную индивидуально-видовую пространственную организацию. Эволюционно значимой задачей жизнедеятельности любого организма является повышение его пространственной сложности, вследствие чего все как нормальные физиологические, так и патологические процессы подчинены примату сохранения иерархии пространственной структуры организма (гипотеза пространственного гомеостаза).

Med J Aust. 2010 Apr 19;192(8):458-60.

Homeopathy: what does the "best" evidence tell us?

Ernst E[1].

Author information

Abstract

OBJECTIVE: To evaluate the evidence for and against the effectiveness of homeopathy.

DATA SOURCES: The Cochrane Database of Systematic Reviews (generally considered to be the most reliable source of evidence) was searched in January 2010.

STUDY SELECTION: Cochrane reviews with the term "homeopathy" in the title, abstract or keywords were considered. Protocols of reviews were excluded. Six articles met the inclusion criteria.

DATA EXTRACTION: Each of the six reviews was examined for specific subject matter; number of clinical trials reviewed; total number of patients involved; and authors' conclusions. The reviews covered the following conditions: cancer, attention-deficit hyperactivity disorder, asthma, dementia, influenza and induction of labour.

DATA SYNTHESIS: The findings of the reviews were discussed narratively (the reviews' clinical and statistical heterogeneity precluded meta-analysis).

CONCLUSIONS: The findings of currently available Cochrane reviews of studies of homeopathy do not show that homeopathic medicines have effects beyond placebo.

Lancet. 2005 Aug 27-Sep 2;366(9487):726-32.

FULL-TEXT ARTICLE

Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy.

Shang A[1], Huwiler-Müntener K, Nartey L, Jüni P, Dörig S, Sterne JA, Pewsner D, Egger M.

Author information

Abstract

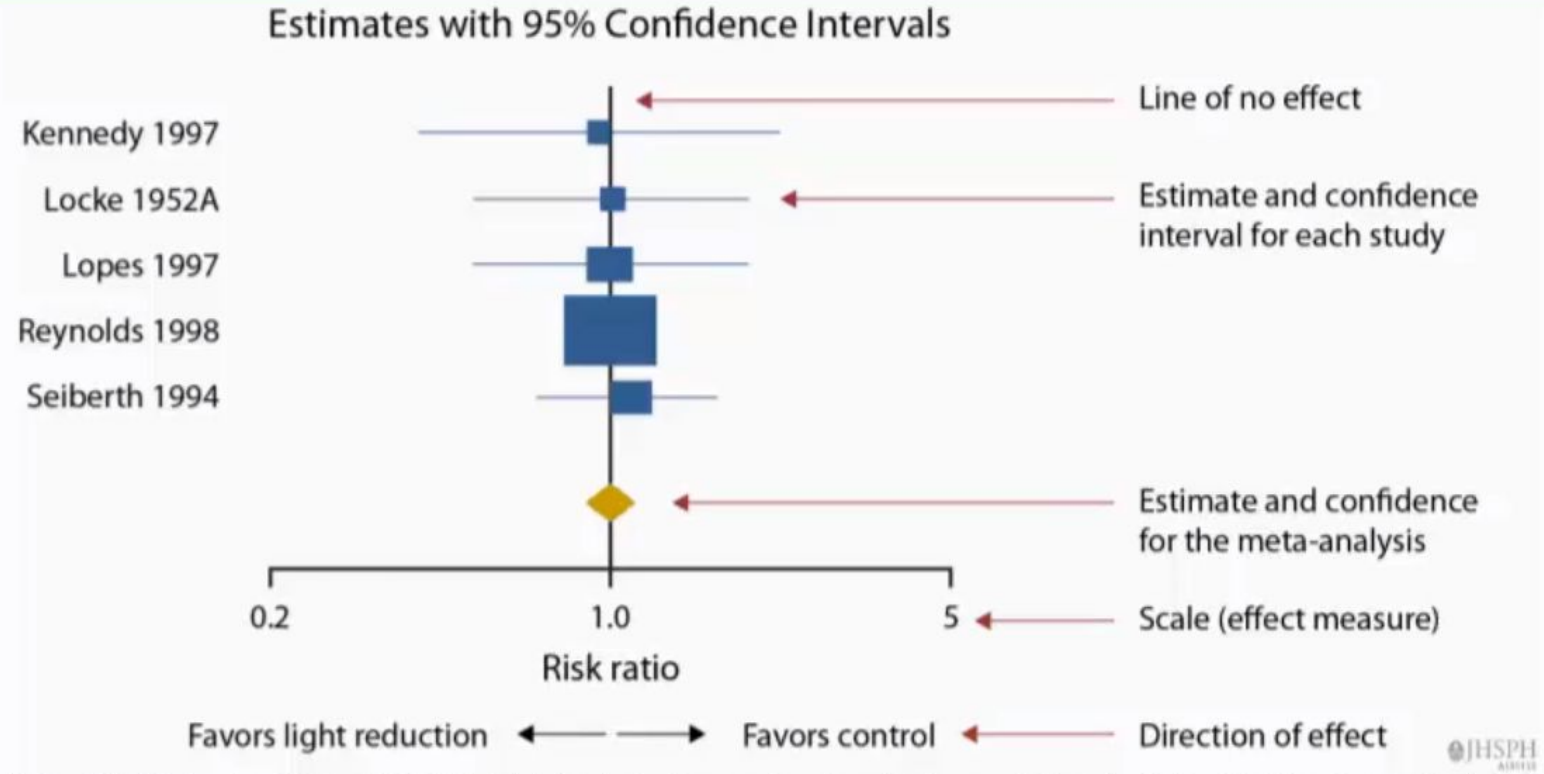
BACKGROUND: Homoeopathy is widely used, but specific effects of homoeopathic remedies seem implausible. Bias in the conduct and reporting of trials is a possible explanation for positive findings of trials of both homoeopathy and conventional medicine. We analysed trials of homoeopathy and conventional medicine and estimated treatment effects in trials least likely to be affected by bias.

METHODS: Placebo-controlled trials of homoeopathy were identified by a comprehensive literature search, which covered 19 electronic databases, reference lists of relevant papers, and contacts with experts. Trials in conventional medicine matched to homoeopathy trials for disorder and type of outcome were randomly selected from the Cochrane Controlled Trials Register (issue 1, 2003). Data were extracted in duplicate and outcomes coded so that odds ratios below 1 indicated benefit. Trials described as double-blind, with adequate randomisation, were assumed to be of higher methodological quality. Bias effects were examined in funnel plots and meta-regression models.

FINDINGS: 110 homoeopathy trials and 110 matched conventional-medicine trials were analysed. The median study size was 65 participants (range ten to 1573). 21 homoeopathy trials (19%) and nine (8%) conventional-medicine trials were of higher quality. In both groups, smaller trials and those of lower quality showed more beneficial treatment effects than larger and higher-quality trials. When the analysis was restricted to large trials of higher quality, the odds ratio was 0.88 (95% CI 0.65-1.19) for homoeopathy (eight trials) and 0.58 (0.39-0.85) for conventional medicine (six trials).

INTERPRETATION: Biases are present in placebo-controlled trials of both homoeopathy and conventional medicine. When account was taken for these biases in the analysis, there was weak evidence for a specific effect of homoeopathic remedies, but strong evidence for specific effects of conventional interventions. This finding is compatible with the notion that the clinical effects of homoeopathy are placebo effects.

Meta-analysis Presentation: The Forest Plot



Adapted from a slide from Julian Higgins. Jorge EC, Jorge EN, El Dib RP. Early light reduction for preventing retinopathy of prematurity in very low birth weight infants. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD000122. DOI: 10.1002/14651858.CD000122.pub2

Syst Rev. 2014; 3: 142.
Published online 2014 Dec 6. doi: 10.1186/2046-4053-3-142
PMCID: PMC4326322
PMID: 25480654

Randomised placebo-controlled trials of individualised homeopathic treatment: systematic review and meta-analysis

Robert T Mathie,[✉] Suzanne M Lloyd, Lynn A Legg, Jürgen Clausen, Sian Moss, Jonathan RT Davidson, and Ian Ford

British Homeopathic Association, Luton, UK
Robertson Centre for Biostatistics, Institute of Health and Wellbeing, University of Glasgow, Glasgow, UK
Department of Biomedical Engineering, University of Strathclyde, Glasgow, UK
Karl und Veronica Carstens-Stiftung, Essen, Germany
Homeopathy Research Institute, London, UK
Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, NC USA
Robert T Mathie, Email: rmathie@britishhomeopathic.org.
Contributor Information.
[✉] Corresponding author.

Received 2014 Jun 26; Accepted 2014 Nov 12.

Abstract

Go to:

Background

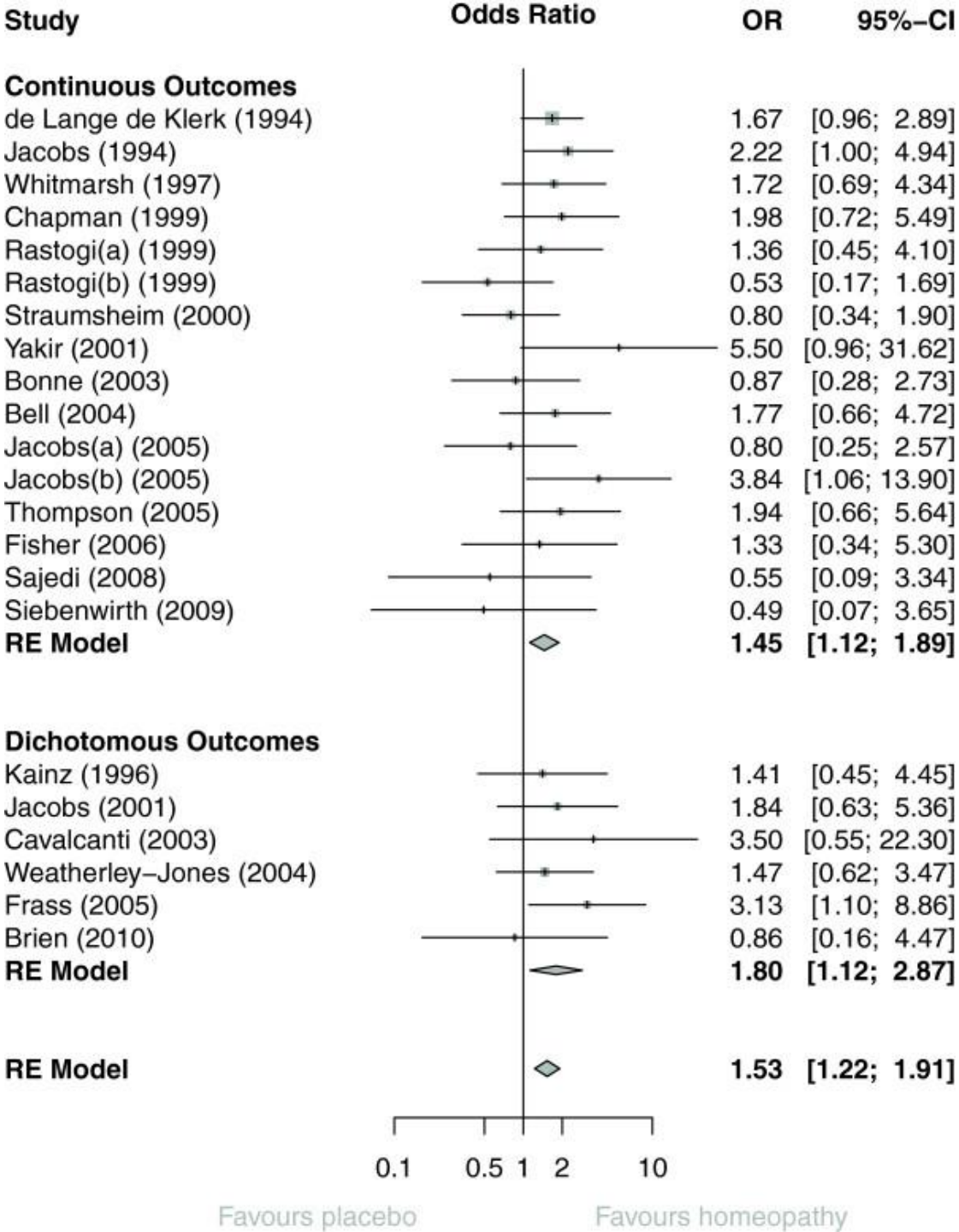
A rigorous and focused systematic review and meta-analysis of randomised controlled trials (RCTs) of individualised homeopathic treatment has not previously been undertaken. We tested the hypothesis that the outcome of an individualised homeopathic treatment approach using homeopathic medicines is distinguishable from that of placebos.

Methods

The review's methods, including literature search strategy, data extraction, assessment of risk of bias and statistical analysis, were strictly protocol-based. Judgment in seven assessment domains enabled a trial's risk of bias to be designated as low, unclear or high. A trial was judged to comprise 'reliable evidence' if its risk of bias was low or was unclear in one specified domain. 'Effect size' was reported as odds ratio (OR), with arithmetic transformation for continuous data carried out as required; OR > 1 signified an effect favouring homeopathy.

Results

Thirty-two eligible RCTs studied 24 different medical conditions in total. Twelve trials were classed 'uncertain risk of bias', three of which displayed relatively minor uncertainty and were designated reliable evidence; 20 trials were classed 'high risk of bias'. Twenty-two trials had extractable data and were subjected to meta-analysis; OR = 1.53 (95% confidence interval (CI) 1.22 to 1.91). For the three trials with reliable evidence, sensitivity analysis revealed OR = 1.98 (95% CI 1.16 to 3.38).


Study
Odds Ratio
OR
95%−CI
Continuous Outcomes
de Lange de Klerk (1994) 1.67 [0.96; 2.89]
Jacobs (1994) 2.22 [1.00; 4.94]
Whitmarsh (1997) 1.72 [0.69; 4.34]
Chapman (1999) 1.98 [0.72; 5.49]
Rastogi(a) (1999) 1.36 [0.45; 4.10]
Rastogi(b) (1999) 0.53 [0.17; 1.69]
Straumsheim (2000) 0.80 [0.34; 1.90]
Yakir (2001) 5.50 [0.96; 31.62]
Bonne (2003) 0.87 [0.28; 2.73]
Bell (2004) 1.77 [0.66; 4.72]
Jacobs(a) (2005) 0.80 [0.25; 2.57]
Jacobs(b) (2005) 3.84 [1.06; 13.90]
Thompson (2005) 1.94 [0.66; 5.64]
Fisher (2006) 1.33 [0.34; 5.30]
Sajedi (2008) 0.55 [0.09; 3.34]
Siebenwirth (2009) 0.49 [0.07; 3.65]
RE Model 1.45 [1.12; 1.89]
Dichotomous Outcomes
Kainz (1996) 1.41 [0.45; 4.45]
Jacobs (2001) 1.84 [0.63; 5.36]
Cavalcanti (2003) 3.50 [0.55; 22.30]
Weatherley−Jones (2004) 1.47 [0.62; 3.47]
Frass (2005) 3.13 [1.10; 8.86]
Brien (2010) 0.86 [0.16; 4.47]
RE Model 1.80 [1.12; 2.87]
RE Model 1.53 [1.22; 1.91]
0.1
0.5
1
2
10
Favours placebo
Favours homeopathy

Cochrane
Community