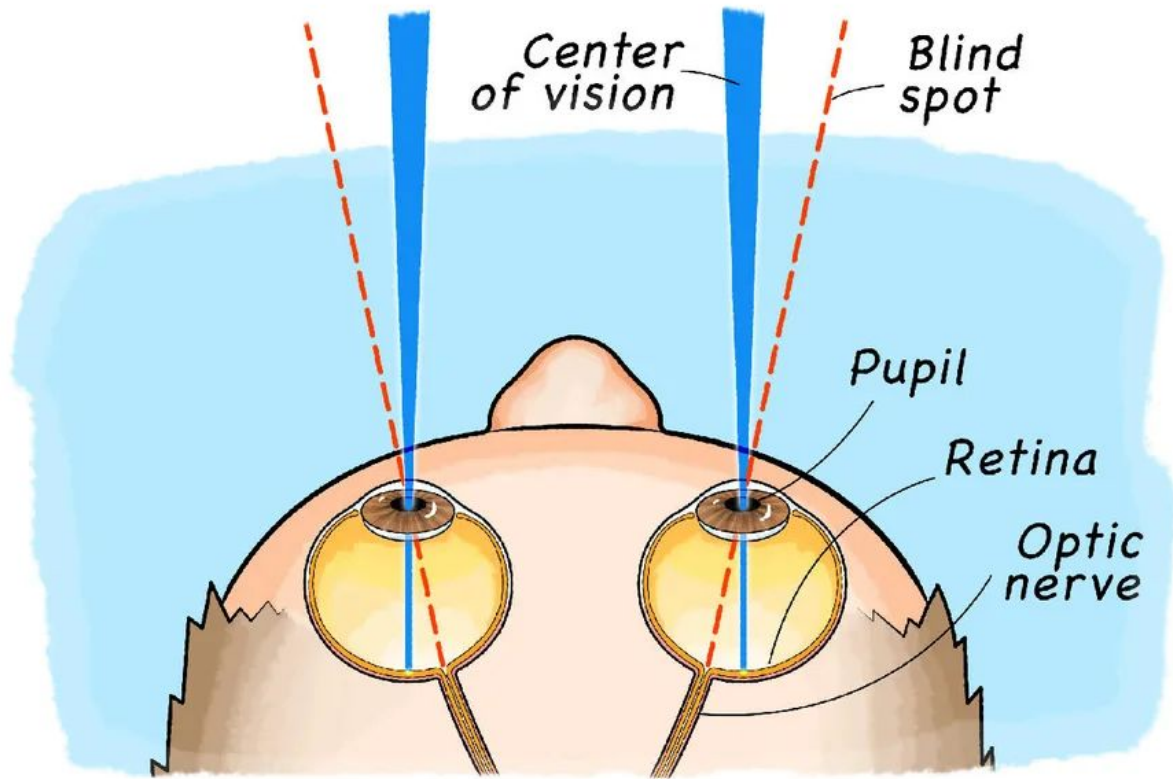


# Quelques points aveugles de la médecine fondée sur les preuves, *evidence-based medicine* (EBM)

*Où vous entendrez parler de parachutes, de Véronique  
Cloutier, et d'Anonymous*



Le point aveugle n'est pas seulement une caractéristique de notre système visuel, mais une métaphore de la façon dont la science elle-même fonctionne, excluant systématiquement certains types de connaissances de son champ de vision.

*The Blind Spot. Why Science Cannot Ignore Human Experience.* Adam Frank, Marcelo Gleiser et Evan Thompson

# L'apparition de la médecine factuelle (EBM)

This Issue

## Article

November 4, 1992

# Evidence-Based Medicine

## A New Approach to Teaching the Practice of Medicine

Gordon Guyatt, MD, MSc; John Cairns, MD; David Churchill, MD, MSc; *et al*

» [Author Affiliations](#)

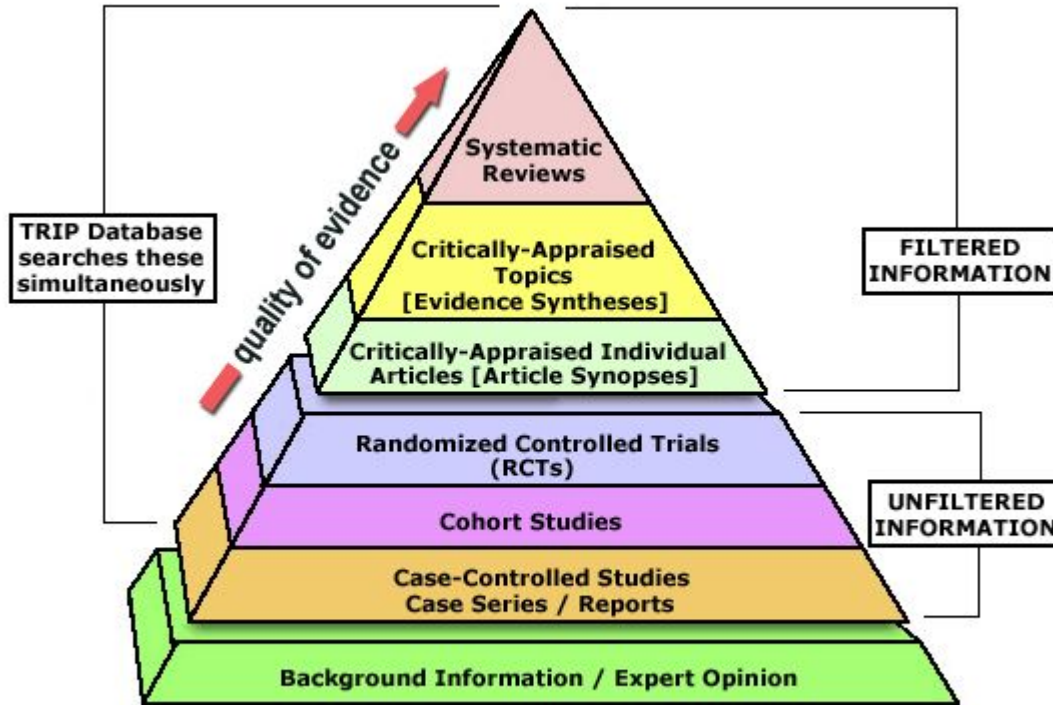
JAMA. 1992;268(17):2420-2425. doi:10.1001/jama.1992.03490170092032

## Abstract

---

A NEW paradigm for medical practice is emerging. Evidence-based medicine de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research. Evidence-based medicine requires new skills of the physician, including efficient literature searching and the application of formal rules of evidence evaluating the clinical literature.

« Un NOUVEAU paradigme pour la pratique médicale émerge. La médecine fondée sur les preuves diminue le rôle de l'intuition, de l'expérience clinique non systématique et du raisonnement physiopathologique comme motifs suffisants pour la prise de décision clinique et met l'accent sur l'examen des preuves issues de la recherche clinique »



EBM Pyramid and EBM Page Generator, © 2006 Trustees of Dartmouth College and Yale University.  
All Rights Reserved. Produced by Jan Glover, David Izzo, Karen Odato and Lei Wang.

“Prior to the 1950s, health care decisions were based primarily on anecdotal information, pathophysiology, and the expert opinions of leaders in the profession.” (PMC3427973)

[Lien vers l'image avec une explication en français](#)

# Les parachutes (partie 1)

# Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials

Gordon C S Smith, Jill P Pell

## Abstract

**Objectives** To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

**Design** Systematic review of randomised controlled trials.

**Data sources:** Medline, Web of Science, Embase, and the Cochrane Library databases; appropriate internet sites and citation lists.

**Study selection:** Studies showing the effects of using a parachute during free fall.

**Main outcome measure** Death or major trauma, defined as an injury severity score  $> 15$ .

**Results** We were unable to identify any randomised controlled trials of parachute intervention.

**Conclusions** As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials. Advocates of evidence based medicine have criticised the adoption of interventions evaluated by using only observational data. We think that everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute.

## Introduction

The parachute is used in recreational, voluntary sector, and military settings to reduce the risk of orthopaedic, head, and soft tissue injury after gravitational challenge, typically in the context of jumping from an aircraft. The perception that parachutes are a successful intervention is based largely on anecdotal evidence. Observational data have shown that their use is associated with morbidity and mortality, due to both failure of the intervention<sup>1,2</sup> and iatrogenic complications.<sup>3</sup> In addition, "natural history" studies of free fall indicate that failure to take or deploy a parachute does not inevitably result in an adverse outcome.<sup>4</sup> We therefore undertook a systematic review of randomised controlled trials of parachutes.

## Methods

### Literature search

We conducted the review in accordance with the QUOROM (quality of reporting of meta-analyses) guidelines.<sup>5</sup> We searched for randomised controlled trials of parachute use on Medline, Web of Science, Embase, the Cochrane Library, appropriate internet sites, and citation lists. Search words employed were "parachute" and "trial." We imposed no language restriction and included any studies that entailed

accepted intervention was a fabric device, secured by strings to a harness worn by the participant and released (either automatically or manually) during free fall with the purpose of limiting the rate of descent. We excluded studies that had no control group.

### Definition of outcomes

The major outcomes studied were death or major trauma, defined as an injury severity score greater than 15.<sup>6</sup>

### Meta-analysis

Our statistical approach was to assess outcomes in parachute and control groups by odds ratios and quantified the precision of estimates by 95% confidence intervals. We chose the Mantel-Haenszel test to assess heterogeneity, and sensitivity and subgroup analyses and fixed effects weighted regression techniques to explore causes of heterogeneity. We selected a funnel plot to assess publication bias visually and Egger's and Begg's tests to test it quantitatively. Stata software, version 7.0, was the tool for all statistical analyses.

## Results

Our search strategy did not find any randomised controlled trials of the parachute.

## Discussion

### Evidence based pride and observational prejudice

It is a truth universally acknowledged that a medical intervention justified by observational data must be in want of verification through a randomised controlled

Department of Obstetrics and Gynaecology, Cambridge University, Cambridge CB2 2QQ

Gordon C S Smith  
*professor*

Department of Public Health, Greater Glasgow NHS Board, Glasgow G3 8YU

Jill P Pell  
*consultant*

Correspondence to: G C S Smith gcs2@cam.ac.uk

BMJ 2003;327:1459-61



Parachutes reduce the risk of injury after gravitational challenge, but their effectiveness has



sations of data dredging, confounding, and bias.<sup>7</sup> For example, observational studies showed lower rates of ischaemic heart disease among women using hormone replacement therapy, and these data were interpreted as advocating hormone replacement for healthy women, women with established ischaemic heart disease, and women with risk factors for ischaemic heart disease.<sup>8</sup> However, randomised controlled trials showed that hormone replacement therapy actually increased the risk of ischaemic heart disease,<sup>9</sup> indicating that the apparent protective effects seen in observational studies were due to bias. Cases such as this one show that medical interventions based solely on observational data should be carefully scrutinised, and the parachute is no exception.

Les défenseurs de la médecine fondée sur les preuves ont critiqué l'adoption d'interventions évaluées uniquement à l'aide de données observationnelles. Nous pensons que tout le monde tirerait un bénéfice si les protagonistes les plus radicaux de la médecine fondée sur les preuves organisaient et participaient à un essai croisé du parachute, en double aveugle, randomisé et contrôlé par placebo.

“Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials”, BMJ, 2003, Gordon C S Smith, Jill P Pell

# Les parachutes (partie 2)



OPEN ACCESS



## Parachute use to prevent death and major trauma when jumping from aircraft: randomized controlled trial

Robert W Yeh,<sup>1</sup> Linda R Valsdottir,<sup>1</sup> Michael W Yeh,<sup>2</sup> Changyu Shen,<sup>1</sup> Daniel B Kramer,<sup>1</sup> Jordan B Strom,<sup>1</sup> Eric A Secemsky,<sup>1</sup> Joanne L Healy,<sup>1</sup> Robert M Domeier,<sup>3</sup> Dhruv S Kazi,<sup>1</sup> Brahmajee K Nallamothu<sup>4</sup> On behalf of the PARACHUTE Investigators

<sup>1</sup>Richard A and Susan F Smith Center for Outcomes Research in Cardiology, Beth Israel Deaconess Medical Center, Harvard Medical School, 375 Longwood Avenue, Boston, MA 02215, USA

<sup>2</sup>David Geffen School of Medicine, University of California, Los Angeles, CA, USA

<sup>3</sup>Department of Emergency Medicine, University of Michigan and Saint Joseph Hospital, Ann Arbor, MI, USA

<sup>4</sup>Michigan Integrated Center for Health Analytics and Medical Prediction, Department of Internal Medicine and Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor, MI, USA

Correspondence to: R W Yeh [ryeh@bidmc.harvard.edu](mailto:ryeh@bidmc.harvard.edu) or [@drweyeh](https://twitter.com/drweyeh) on Twitter

Additional material is published online only. To view please visit the journal online.

Cite this as: *BMJ* 2018;[363:k5094](https://doi.org/10.1136/bmj.k5094) <http://dx.doi.org/10.1136/bmj.k5094>

Accepted: 22 November 2018

### ABSTRACT

#### OBJECTIVE

To determine if using a parachute prevents death or major traumatic injury when jumping from an aircraft.

#### DESIGN

Randomized controlled trial.

#### SETTING

Private or commercial aircraft between September 2017 and August 2018.

#### PARTICIPANTS

92 aircraft passengers aged 18 and over were screened for participation. 23 agreed to be enrolled and were randomized.

#### INTERVENTION

Jumping from an aircraft (airplane or helicopter) with a parachute versus an empty backpack (unblinded).

#### MAIN OUTCOME MEASURES

Composite of death or major traumatic injury (defined by an Injury Severity Score over 15) upon impact with the ground measured immediately after landing.

#### RESULTS

Parachute use did not significantly reduce death or major injury (0% for parachute v 0% for control; *P*0.9). This finding was consistent across multiple subgroups. Compared with individuals screened but not enrolled, participants included in the study were on aircraft at significantly lower altitude (mean of 0.6 m for participants v mean of 9146 m for non-participants; *P*0.001) and lower velocity (mean of 0 km/h v mean of 800 km/h; *P*0.001).

#### CONCLUSIONS

Parachute use did not reduce death or major traumatic injury when jumping from aircraft in the first randomized evaluation of this intervention. However, the trial was only able to enroll participants on small stationary aircraft on the ground, suggesting cautious extrapolation to high altitude jumps. When beliefs

regarding the effectiveness of an intervention exist in the community, randomized trials might selectively enroll individuals with a lower perceived likelihood of benefit, thus diminishing the applicability of the results to clinical practice.

### Introduction

Parachutes are routinely used to prevent death or major traumatic injury among individuals jumping from aircraft. However, evidence supporting the efficacy of parachutes is weak and guideline recommendations for their use are principally based on biological plausibility and expert opinion.<sup>1,2</sup> Despite this widely held yet unsubstantiated belief of efficacy, many studies of parachutes have suggested injuries related to their use in both military and recreational settings,<sup>3,4</sup> and parachutist injuries are formally recognized in the World Health Organization's ICD-10 (international classification of diseases, 10th revision).<sup>5</sup> This could raise concerns for supporters of evidence-based medicine, because numerous medical interventions believed to be useful have ultimately failed to show efficacy when subjected to properly executed randomized clinical trials.<sup>6,7</sup>

Previous attempts to evaluate parachute use in a randomized setting have not been undertaken owing to both ethical and practical concerns. Lack of equipoise could inhibit recruitment of participants in such a trial. However, whether pre-existing beliefs about the efficacy of parachutes would, in fact, impair the enrolment of participants in a clinical trial has not been formally evaluated. To address these important gaps in evidence, we conducted the first randomized clinical trial of the efficacy of parachutes in reducing death and major injury when jumping from an aircraft.

### Methods

#### Study protocol

Between September 2017 and August 2018, individuals were screened for inclusion in the PARACHUTE trial. Prospective participants were approached and screened by study investigators on commercial or private aircraft.

For the commercial aircraft, travel was related to trips the investigators were scheduled to take for business or personal reasons unrelated to the present study. Typically, passengers seated close to the study investigator (typically not known acquaintances) would be approached mid-flight, between the time of initial seating and time of exiting the aircraft. The

### WHAT IS ALREADY KNOWN ON THIS TOPIC

Parachutes are routinely used to prevent death or major traumatic injury among individuals jumping from aircraft, but their efficacy is based primarily on biological plausibility and expert opinion.

No randomized controlled trials of parachute use have yet been attempted, presumably owing to a lack of equipoise.

### WHAT THIS STUDY ADDS

This randomized trial of parachute use found no reduction in death or major injury compared with individuals jumping from aircraft with an empty backpack. Lack of enrolment of individuals at high risk could have influenced the results of the trial.

A minor caveat to our findings is that the rate of the primary outcome was substantially lower in this study than was anticipated at the time of its conception and design, which potentially underpowered our ability to detect clinically meaningful differences, as well as important interactions. Although randomized participants had similar characteristics compared with those who were screened but did not enroll, they could have been at lower risk of death or major trauma because they jumped from an average altitude of 0.6 m (SD 0.1) on aircraft moving at an average of 0 km/h (SD 0). Clinicians will need to consider this information when extrapolating to their own settings of parachute use.











(De l'importance de se poser les bonnes questions pour examiner les bons faits)

# Une pionnière de la médecine au Québec



Loto-Méno

Épisode 1 : Le néant



LOTO  
MÉNO

De nombreuses recherches scientifiques mettent en évidence de façon non équivoque des différences importantes entre l'hormonothérapie non bioïdентique et celle bioïdентique. Il est étonnant que ces différences ne soient presque jamais médiatisées. Cette ignorance est la cause d'une désolante et choquante confusion. » – Dr Demers



[Lien](#)

sations of data dredging, confounding, and bias.<sup>7</sup> For example, observational studies showed lower rates of ischaemic heart disease among women using hormone replacement therapy, and these data were interpreted as advocating hormone replacement for healthy women, women with established ischaemic heart disease, and women with risk factors for ischaemic heart disease.<sup>8</sup> However, randomised controlled trials showed that hormone replacement therapy actually increased the risk of ischaemic heart disease,<sup>9</sup> indicating that the apparent protective effects seen in observational studies were due to bias. Cases such as this one show that medical interventions based solely on observational data should be carefully scrutinised, and the parachute is no exception.

# Le confinement de la science en période COVID

*Comment l'EBM a permis de se poser les mauvaises questions à répétition*



La molécule de la droite

Les deux énormes études sur l'hydroxychloroquine pendant la COVID-19 sont:

1. **L'essai RECOVERY** (Randomised Evaluation of COVID-19 Therapy)

- Mené au Royaume-Uni
- A inclus 4,716 patients hospitalisés pour COVID-19
- Conclusions: "Chez les patients hospitalisés pour COVID-19, l'hydroxychloroquine n'a été associée à aucune réduction de la mortalité à 28 jours, mais à une augmentation de la durée d'hospitalisation et à un risque accru de progression vers la ventilation invasive ou le décès."
- Publication: 8 octobre 2020 dans le New England Journal of Medicine

2. **L'essai SOLIDARITY** de l'OMS

- Étude internationale dans 30 pays
- A inclus 11,330 patients adultes hospitalisés
- Conclusions: "Les régimes de remdesivir, d'hydroxychloroquine, de lopinavir et d'interféron ont eu peu ou pas d'effet sur les patients hospitalisés atteints de Covid-19, comme l'indiquent la mortalité globale, l'initiation de la ventilation et la durée d'hospitalisation."
- Publication: 2 décembre 2020 dans le New England Journal of Medicine

Ces deux études ont conclu que l'hydroxychloroquine n'apportait aucun bénéfice significatif aux patients hospitalisés atteints de COVID-19 et pouvait même être associée à des effets indésirables. Il est important de noter que ces études ont évalué l'hydroxychloroquine chez des patients déjà hospitalisés, donc à un stade avancé de la maladie, et non comme traitement précoce.



"In the WHO Solidarity trial, the median delay between symptom onset and randomization was 9 days, similar to that in the RECOVERY trial. At this stage of the disease, the viral load is decreasing, and the main pathophysiological process is an inflammatory reaction with risk of thrombosis."  
(Source: *European Journal of Internal Medicine*)

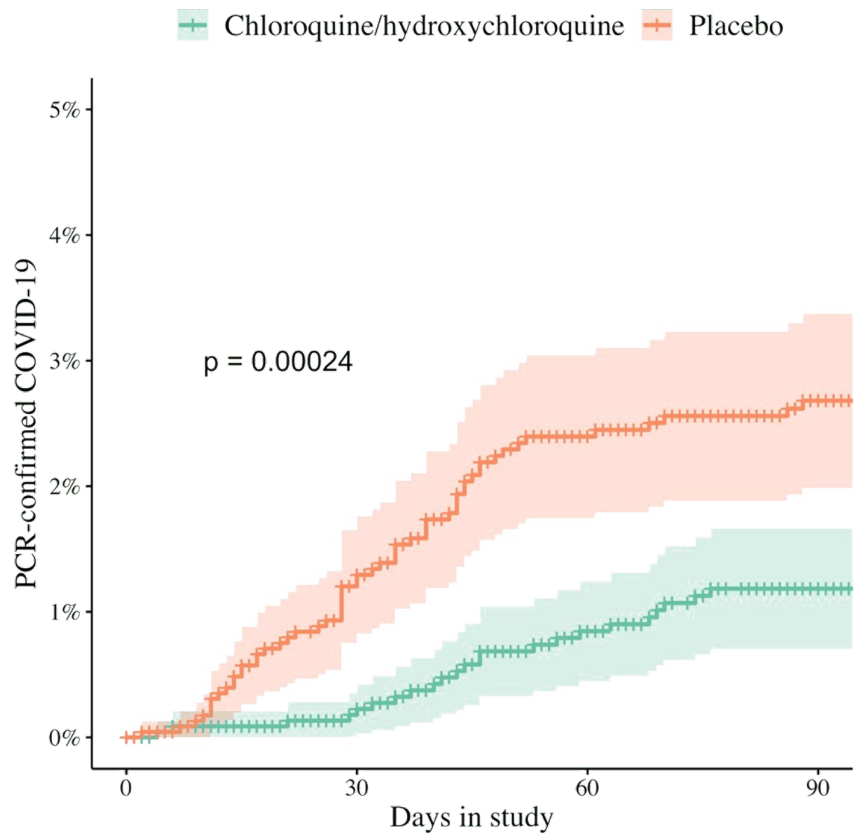
## TLDR

---

With 422 controlled studies, 61 RCTs, and extensive supporting evidence, evaluating the HCQ research is time consuming. However, confirmation of efficacy—when used appropriately—is now simple.

The COPCOV 4,652 patient Oxford/MORU double-blind, randomized, placebo-controlled trial, with the largest number of treated patients of all HCQ/CQ RCTs, shows 57% lower symptomatic PCR+ COVID-19 ( $p = 0.0002$ )<sup>383</sup>. This result was very difficult to publish, taking over 800 days, with publication delayed until late 2024. Authors also include a meta analysis of 8 RCTs confirming significantly lower symptomatic PCR+ cases.

[Lien Archive \(+lien vers ce passage\)](#)



# Conclusion

*Nous sommes Légion*

# COVID-19 early treatment: real-time analysis of 5,502 studies

X Post f Share @CovidAnalysis Feedback

118 COVID-19 TREATMENTS

8,859 POTENTIAL TREATMENTS

163 COUNTRIES WITH APPROVALS

Search

57% lower symptomatic PCR+ cases with HCQ/CQ, p=0.0004, COPCOV 4,652 patient RCT

- Analgesics
- Antiandrogens
- Antihistamines
- Bromhexine
- Budesonide
- Colchicine
- Conv. Plasma
- Curcumin
- Fluvoxamine
- Hydroxychlor...
- Ivermectin
- Lifestyle
- Melatonin
- Metformin
- Minerals
- Monoclonals
- Mpro inhibitors
- Naso/orophar...
- Nigella Sativa
- Nitazoxanide
- PPIs
- Quercetin
- RdRp inhibitors
- Thermotherapy
- Vitamins
- More
- Other
- Feedback
- Home

- Top
- All studies
- Early treatment
- Mortality
- Early mortality
- Prophylaxis
- Prophylaxis mortality
- Long COVID
- Transmission
- Physicians
- Recently added
- Recent studies
- Feedback

## WHAT WORKS

c19early.org

### Naso/oropharyngeal treatment

Direct treatment to the primary source of initial infection reduces progression and transmission. Many low-cost agents are widely available.

### Healthy lifestyles

Exercise, sunlight, a healthy diet, and good sleep all reduce risk.

### Immune support nutrients

Vitamins A, C, D, and zinc show reduced risk, as with other viruses.

### Thermotherapy

Methods for increasing internal body temperature reduce risk, comparable to natural fever, enhancing immune system function.

### Systemic agents

Many systemic agents reduce risk, and may be required when infection progresses beyond the upper respiratory tract.

### High-profit systemic agents

High-profit systemic agents are also effective, but have greater access and cost barriers.

### Monoclonal antibodies

Highly effective for matching variants. Rarely used, with high cost, variant dependence, and intravenous/subcutaneous administration.

### Acetaminophen

Acetaminophen increases risk of severe outcomes and mortality.

### Remdesivir

Antiviral efficacy is offset by serious side effects, resulting in increased mortality with longer followup.

## Efficacy vs. cost for COVID-19 treatments

- Ivermectin
- Thermotherapy
- PVP-I
- Melatonin
- Curcumin
- H. Peroxide
- Metformin
- Quercetin
- N. Sativa
- Vitamin D
- Vitamin A

- pH+
- NaHCO.
- Fluvox.
- H1RAs
- Antiandro

- Lifestyle / free
- No prescription
- Prescription required
- High-cost

● Tixagevimab/c...

● Bamlanivimab/e...

● Rehelvumab

c19early.org  
March 2025

Regdanvimab \$2,100

Ensovibep >\$2,000

Casirivimab/I.. \$2,100

[c19early.org](https://c19early.org)



## Covid Analysis

Abonné

388 posts

431 votes · Résultats inaux



**Covid Analysis** @CovidAnalysis · 22 juin 2023

We are working on an overview of the 2,900+ studies analyzed to date. DM us if you are a scientist working in the area and can help with review.



**Covid Analysis** @CovidAnalysis · 24 déc. 2020

Now 178 HCQ COVID-19 controlled studies, meta analysis version 42:

early treatment - 65% improvement,  $p < 0.0001$

all studies - 34% improvement,  $p < 0.0001$

All early treatment studies show positive effects.

[hcqtw.com](http://hcqtw.com)



La population a un rôle à jouer dans l'avancement des sciences, en établissant des liens avec les scientifiques et les points de vue marginalisés.

Il lui faudra faire face aux accusations de complotisme, et se trouver des alliés dans la sphère de l'opinion.

Les points aveugles de la machine à faits, l'EBM, la médecine factuelle, sont souvent bien plus faciles à voir qu'on le soupçonne.