Typologie de la fraude en recherche

P.F. Dequin

Réanimation médicale & Thérapeutique,

Université François Rabelais & CHRU de Tours.

dequin@med.univ-tours.fr

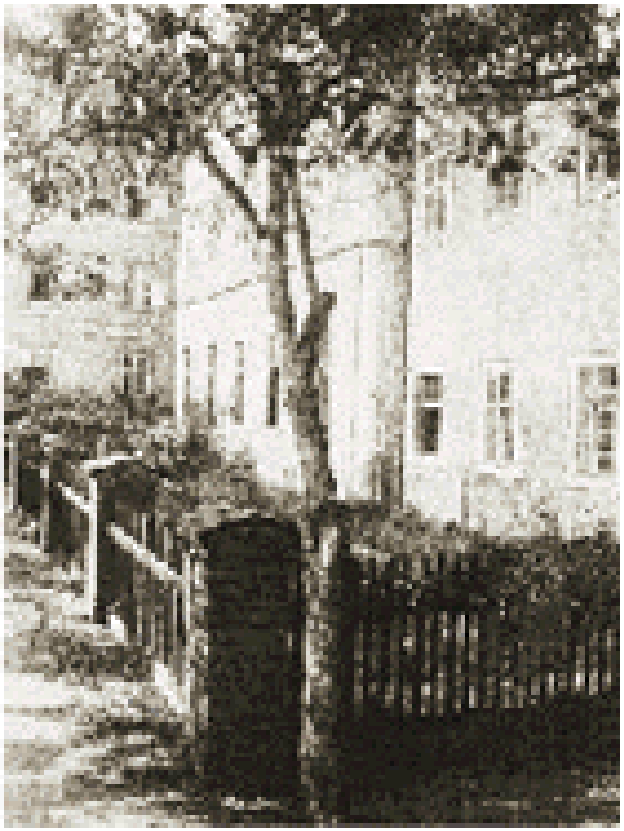
Georges de la Tour, Le tricheur à l'as de carreau, v. 1635.
Musée du Louvre.

Quand les chercheurs trichent…

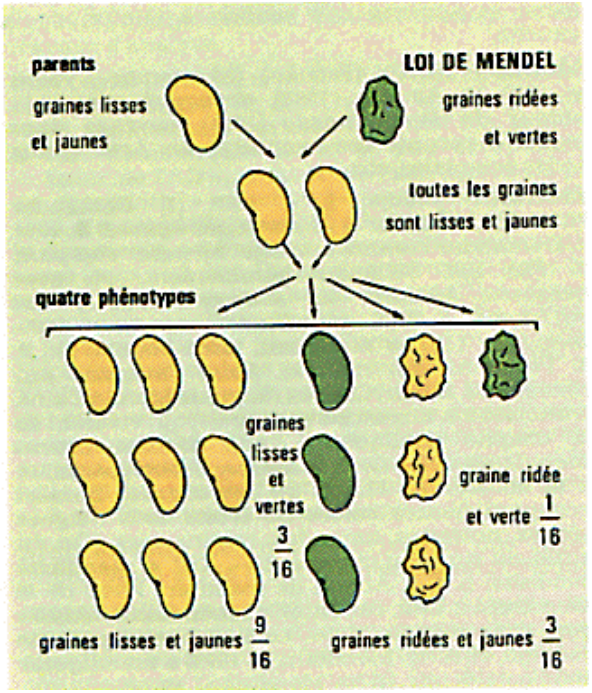
Psychologie
Géologie
Génétique & agronomie
Paléontologie
Ethnologie
Immunologie
Cardiologie
Cancérologie
Géographie
Biologie cellulaire
Génétique
Physique
Nutrition
Anesthésie - Algologie
Réanimation

Les petits pois du moine

Gregor Mendel
1822-1884



Jardin expérimental de Mendel au monastère de Brno



Lois de la génétique
Résultats expérimentaux…
trop parfaits…

Typologie ?

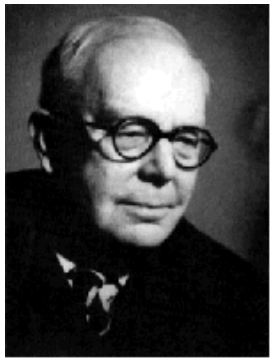
- Types de fraude ?
  - Falsification de données
  - Invention de données
  - Distorsion de données
  - Plagiat
  - Self-plagiat
  - Autorship
- Conséquences de la fraude ?
  - Santé publique
  - Institutions
  - Confiance du public
- Types de fraudeurs ?
  - Fraudeur solitaire vs. fraudeur en équipe
  - Fraudeur occasionnel vs. récidiviste
  - Fraudeur identifié vs. fraudeur suspecté vs. fraudeur au-dessus de tout soupçon
- Motivation ?
  - La gloire ?
  - L'argent ?
  - La conviction ?
  - Publish or perish ?

Typologie ?

& frontière parfois ténue

- Entre fraude et manque de rigueur
- Entre fraude et méconnaissance des règles de base de méthodologie

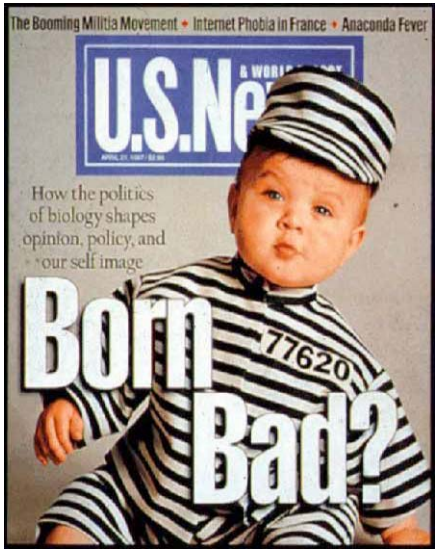
THE POOR LONESOME SEARCHER…



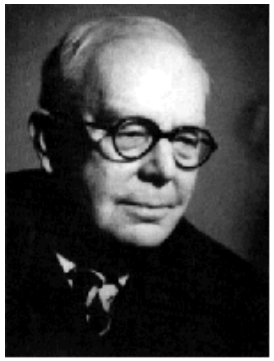
Les faux vrais jumeaux de Cyril Burt

Cyril Burt (1883-1971)

- psychologue anglais
- 300 publications, père de la psychopédagogie en Grande-Bretagne
- Hypothèse: intelligence héréditaire et indépendante du milieu

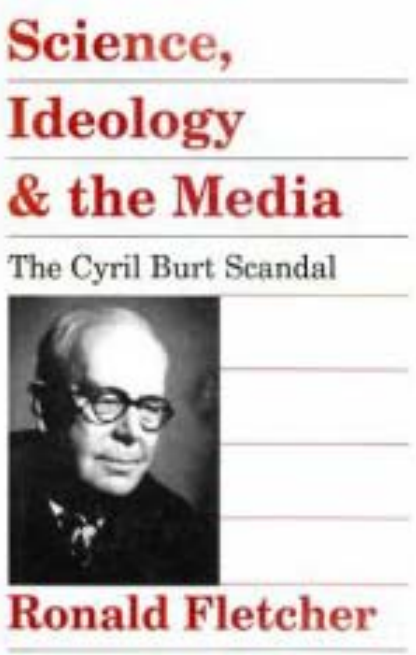


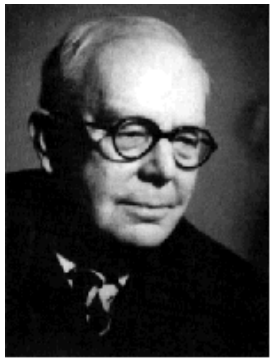
- 1943: 62 paires de jumeaux homozygotes dont 15 élevés séparément
- Corrélations des QI (coefficient kappa):
  - Jumeaux élevés ensemble:
    - Faux jumeaux: 0.540
    - Vrais jumeaux: 0.860
  - Vrais jumeaux élevés séparément: 0.771
  - 1955: 21 paires;1958: 30; 1966: 53.



Les faux vrais jumeaux de Cyril Burt

- Sir Cyril Burt (1946):
  - président British Psychology Society
  - directeur du Brit J Statist Psychol
  - conseiller ministère éducation
  - filière et examen « eleven plus » (ad 1963)
- Décès 1971
- Dénonciation livre (1974)
  puis Sunday Times (1976)
  - Méthodes et populations non définies
  - Renvois à des publications … inexistantes
  - Corrélations 1943 à 1966: identiques à la décimale près…
  - « Collaboratrices » introuvables (M. Howard, J. Cornwall)
  - Lettres à l'éditeur (!) sous noms inventés





Les faux vrais jumeaux de Cyril Burt

- PubMed, Cyril Burt [AU]
  - 1949-1972
  - 22 articles
  - Tous signés de lui seul
- Inventions des jumeaux…
  - Mais peut-être pas les 15 1ères paires ?

Les vitamines du Dr Chandra

APPLIED NUTRITIONAL INVESTIGATION

Effect of Vitamin and Trace-Element Supplementation on Cognitive Function in Elderly Subjects

Ranjit Kumar Chandra, MD, FRCPC, MACP

From the Memorial University of Newfoundland, St. John's, Canada;

Nutrition 2001:17:709–712.

	COGNITIVE FUNCTION TESTS					
	Placebo*		Supplement*		Difference (*P*)	
Test	0 mo	12 mo	0 mo	12 mo	S_0 and S_{12}	$P_0 \Rightarrow P_{12}$ and $S_0 \Rightarrow S_{12}$
Wechsler Memory Test (score)	5.3 ± 0.4	4.9 ± 0.5	5.1 ± 0.4	6.8 ± 0.5	<0.01	<0.001
Halstead–Reitan Categories (*n* errors, %)	76 ± 7	82 ± 6	80 ± 8	64 ± 7	<0.05	<0.01
Buschke Consistent Long-term Retrieval (*n* errors, %)	28 ± 4	34 ± 6	30 ± 7	11 ± 4	<0.001	<0.001
Digit Span Forward (score)	56 ± 4	61 ± 6	59 ± 7	80 ± 6	<0.01	<0.01
Salthouse Listening Span Task (impairment,%)	34 ± 5	31 ± 6	28 ± 5	16 ± 3	<0.01	<0.01
Long-term Memory Recall (score)	78 ± 9	83 ± 6	81 ± 7	88 ± 5	NS	NS
Mini-mental State (score)	21 ± 2	20 ± 3	18 ± 3	28 ± 4	<0.01	<0.01

* Results are presented as mean ± standard error of the mean,

NS, not significant; P_0 and P_{12}, placebo group at 0 and 12 mo; S_0 and S_{12}, supplement group at 0 and 12 mo.

Les vitamines du Dr Chandra

Supplementation and the Elderly: Dramatic Results?

Nutrition 18:364–365, 2002

1. MMS 18±3 ⇨ démence… réputée exclue!
2. Δ MMS +10 = 7 fois l'effet du donezepil…
3. mean±SEM ⇨ 95%IC impossibles…

APPLIED NUTRITIONAL INVESTIGATION

Effect of Vitamin and Trace-Element Supplementation on Cognitive Function in Elderly Subjects

Ranjit Kumar Chandra, MD, FRCPC, MACP
From the Memorial University of Newfoundland, St. John's, Canada;

COGNITIVE FUNCTION TESTS

	Nutrition status*		
	Deficient	Adequate	*P*
Wechsler Memory Test (score)	4.1 ± 0.7	6.1 ± 0.5	<0.01
Halstead-Reitan Categories (*n* errors, %)	86 ± 8	60 ± 7	<0.01
Buschke Consistent Long-term retrieval (*n* errors, %)	41 ± 5	15 ± 3	<0.001
Digit Span Forward (score)	46 ± 5	87 ± 7	<0.001
Salthouse Listening Span Task (impairment, %)	43 ± 4	12 ± 4	<0.001
Long-term Memory Recall (score)	84 ± 8	91 ± 3	NS
Mini-mental State (score)	17 ± 4	28 ± 3	<0.001

* Results are presented as mean ± standard error of the mean.
NS, not significant.

En réalité,
p = 0,000000000001

Do Nutritional Supplements Improve Cognitive Function in the Elderly?

Nutrition 19:976–980, 2003

Les vitamines du Dr Chandra

Réanimation médicale polyvalente

APPLIED NUTRITIONAL INVESTIGATION

Effect of Vitamin and Trace-Element Supplementation on Cognitive Function in Elderly Subjects

Ranjit Kumar Chandra, MD, FRCPC, MACP

From the Memorial University of Newfoundland, St. John's, Canada; and the Privat Hospital, Gurgaon, India

OBJECTIVE: To determine whether supplementation with vitamins and trace elements in modest amounts influences cognitive function in apparently healthy, elderly subjects.

METHODS: The study was designed as a randomized, double-blind, placebo-controlled trial. Ninety-six, apparently healthy, independent men and women older than 65 y of age were recruited and randomized to receive a supplement of trace elements and vitamins or a placebo daily for 12 mo. Blood-nutrient levels were estimated at baseline and at the end of the study. The major outcome measure assessed was cognitive function consisting of immediate and long-term memory, abstract thinking, problem-solving ability, and attention.

RESULTS: Eighty-six subjects completed the 1-y trial. The supplemented group showed a significant improvement in all cognitive tests ($P < 0.001$ to 0.05) except long-term memory recall ($P > 0.1$). Those whose blood-nutrient levels were below the reference standard showed lower responses on cognitive tests. There was no significant correlation between individual nutrient levels and performance on various cognitive function tests.

CONCLUSIONS: Cognitive functions improved after oral supplementation with modest amounts of vitamins and trace elements. This has considerable clinical and public health significance. We recommend that such a supplement be provided to all elderly subjects because it should significantly improve cognition and thus quality of life and the ability to perform activities of daily living. Such a nutritional approach may delay the onset of Alzheimer's disease. *Nutrition* 2001;17:709–712. ©Elsevier Science Inc. 2001

KEY WORDS: elderly, aging, vitamins, trace elements, cognitive function, memory, Alzheimer's disease

RETRACTED

INTRODUCTION

Aging is associated with a gradual impairment in cognitive function[1] and even mild dementia has been linked to an increase in mortality in the aged.[2] Also, the elderly show a high prevalence of undernutrition.[3,4] At least 40% of independently living elderly individuals in affluent industrialized countries of North America and Europe have been estimated to have dietary intakes and blood-nutrient levels comparable with "deficiency."

Many nutrients play a key role in the metabolism of neuronal cells and their appendages. Their actions may be mediated by their catalytic role in numerous enzymes, antioxidant action, and various other processes. In vitro, micronutrients potentiate the ability of immune cells to withstand the toxic effect of inclusion bodies found in brains of patients with Alzheimer's disease (R. K. Chandra, in preparation). Further, micronutrients may reduce the amount of amyloid material in brain biopsies of patients with Alzheimer's disease.

A preliminary cross-sectional one-point study suggested an association between dietary intake and blood levels of vitamin C, B12, B2, or folic acid and cognitive function as judged by the Weschler Memory Test and the Halstead-Reitan Categories Test.[5] However, no intervention was attempted and other vitamins and none of the trace elements were studied.

Therefore, nutritional deficiencies may be a contributing factor, perhaps even a causal factor, in the decline of cognitive function in old age. The hypothesis tested in this study was that an optimum intake of all essential micronutrients in modest physiologic amounts improves cognitive function in the elderly. We conducted a randomized, double-blind, placebo-controlled trial to test this hypothesis.

SUBJECTS AND METHODS

The study population and their nutritional status at baseline and at the end of the 12-mo study period were described previously.[6]

Subjects

Ninety-six, apparently healthy, independently living men and women older than 65 y volunteered to enroll for the double-blind, placebo-controlled trial. They were from the middle socioeconomic class, with an average family income of C$48,000 per annum. None of the subjects had any chronic or serious acute illness. Specifically, none suffered from any form of psychiatric illness or dementia. None had taken any nutritional supplements in

The study was supported by a grant from the Nutrition Research Education Foundation and the University Research Professorship Award of Memorial University of Newfoundland.

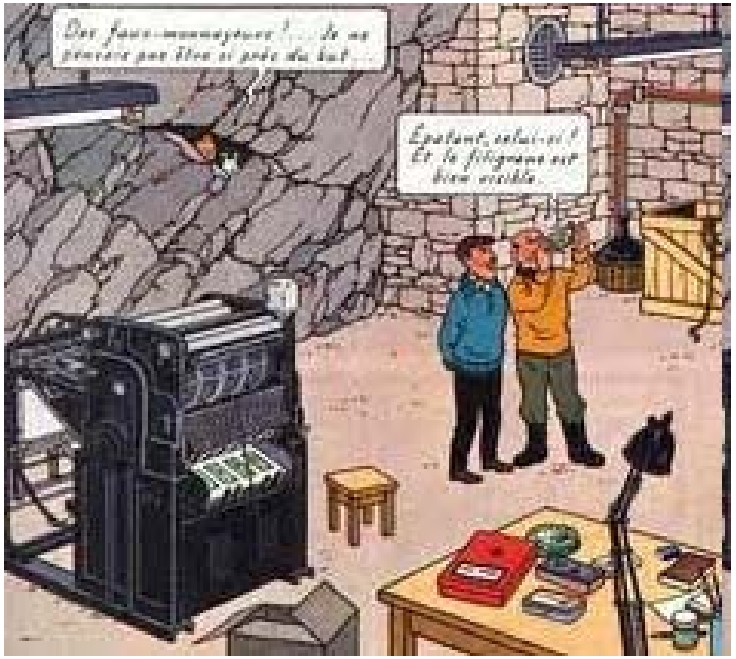
Correspondence to: Ranjit Kumar Chandra, MD, FRCPC, MACP, Janeway Child Health Centre, St. John's, NF, A1A 1R8, Canada. E-mail: rchandra@mun.ca

Date accepted: April 13, 2001

0899-9007/01/$20.00
PII S0899-9007(01)00610-4

On ne trompe pas un statisticien

Retraite université 2003
1 seul retracted paper
Conférence, publie
Vend ses vitamines miracles



FAUX-PAS D'UN JOUR ?
OU VIEILLE HABITUDE ?

Les vitamines du Dr Chandra: des antécédents ?

Investigating the previous studies of a fraudulent author

Richard Smith *BMJ* 2005;331:288–91

Nutrition & allergie chez le nourrisson:
résultats publiés *avant* inclusion de 75% des patients prévus

Follow-up à 5 ans des nouveau-nés publié par une revue qui venait de refuser un papier « douteux » du même auteur

Groupe contrôle: pas de demande de produits…
« No enough money »…

Enquête de l'Université ⇨ scientific misconduct…sans suite

Les vitamines du Dr Chandra: des antécédents ?

Réanimation médicale polyvalente

Effect of vitamin and trace-element supplementation on immune responses and infection in elderly subjects

RANJIT KUMAR CHANDRA

Lancet 1992; **340**: 1124–27.

Cité > 300 fois

*Kenneth J Carpenter, *Seth Roberts, Saul Sternberg*

THE LANCET • Vol 361 • June 28, 2003

The article states that "all individuals approached enrolled in the study". In our experience, this has never happened. Chandra's study required blood sampling and a year of biweekly visits. The article also states that all 96 participants "were middle class". If the participants were randomly sampled from the population this outcome is unlikely even if the fraction of the population that is middle class is very high. If a population is 95% middle class, and sampling is random, the probability that 96 persons sampled will all be middle class is less than 0·01.

Fraude & apartheid: Werner Bezwoda

1 seul papier rétracté sur 188…
dont plusieurs reviews sur le même thème…

☐ Randomized comparison of tamoxifen and two separate doses of toremifene in postmenopausal patients with metastatic breast can

34. Hayes DF, Van Zyl JA, Hacking A, Goedhals L, Bezwoda WR, Mailliard JA, Jones SE, Vogel CL, Berris RF, Shemano I, et al.
J Clin Oncol. 1995 Oct;13(10):2556-66.
PMID: 7595707 [PubMed - indexed for MEDLINE]
Related citations

☐ High-dose chemotherapy with hematopoietic rescue as primary treatment for metastatic breast cancer: a randomized trial.

35. Bezwoda WR, Seymour L, Dansey RD.
J Clin Oncol. 1995 Oct;13(10):2483-9. Retraction in: J Clin Oncol. 2001 Jun 1;19(11):2973.
PMID: 7595697 [PubMed - indexed for MEDLINE]
Related citations

☐ Long-term results of a multicentre randomised, comparative phase III trial of CHOP versus CNOP regimens in patients with intermed

36. Group.
Bezwoda W, Rastogi RB, Erazo Valla A, Diaz-Maqueo JC, Pavlovsky S, Morioka H, Resegotti L, Rueckle H, Somoza N, Moreno-Nogu
Eur J Cancer. 1995 Jun;31A(6):903-11.
PMID: 7646919 [PubMed - indexed for MEDLINE]
Related citations

Le « Dr Madoff » de la pharmacie.

Réanimation médicale polyvalente

A Prospective Randomized Trial on the Role of Perioperative Celecoxib Administration for Total Knee Arthroplasty: Improving Clinical Outcomes

Pfizer

LYRICA PREGABALINE

ANESTHESIA & ANALGESIA

2008;106:1258-64.

Scott S. Reuben, MD*

Asokumar Buvenandran, MD†

Brennan Katz, DO*

Jeffrey S. Kroin, PhD†

Inventeur d'un concept:

L'analgésie multimodale

Le « Dr Madoff » de la pharmacie.

Table 1. Partial List of Retracted Manuscripts

1. Reuben SS, Connelly NR. Postoperative analgesic effects of celecoxib or rofecoxib after spinal fusion surgery. Anesth Analg 2000;91:1221–5
2. Reuben SS, Fingeroth R, Krushell R, Maciolek H. Evaluation of the safety and efficacy of the perioperative administration of rofecoxib for total knee arthroplasty. J Arthroplasty 2002;17:26–31
3. Reuben SS, Gutta SB, Sklar J, Maciolek H. Effect of initiating a multimodal analgesic regimen upon patient outcomes after anterior cruciate ligament reconstruction for same-day surgery: a 1200-patient case series. Acute Pain 2004;6:87–93
4. Reuben SS, Ekman EF, Charron D. Evaluating the analgesic efficacy of administering celecoxib as a component of multimodal analgesia for outpatient anterior cruciate ligament reconstruction surgery. Anesth Analg 2007;105:222–7
5. Reuben SS, Buvenandran A, Katz B, Kroin JS. A prospective randomized trial on the role of perioperative celecoxib administration for total knee arthroplasty: improving clinical outcomes. Anesth Analg 2008;106:1258–64
6. Reuben SS, Ekman EF. The effect of cyclooxygenase-2 inhibition on analgesia and spinal fusion. J Bone Joint Surg Am 2005;87:536–42
7. Reuben SS, Reuben JP. Brachial plexus anesthesia with verapamil and/or morphine. Anesth Analg 2000;91:379–83
8. Reuben SS, Vieira P, Faruqui S, Verghis A, Kilaru P, Maciolek H. Local administration of morphine to bone following spinal fusion surgery. Anesthesiology 2001;95:390–4
9. Reuben SS, Steinberg RB, Maciolek H, Manikantan P. An evaluation of the analgesic efficacy of intravenous regional anesthesia with lidocaine and ketorolac using a forearm versus upper arm tourniquet. Anesth Analg 2002;95:457–60
10. Reuben SS, Rosenthal EA, Steinberg RB, Faruqi S, Kilaru PR. Surgery on the affected upper extremity of patients with a history of complex regional pain syndrome: the use of intravenous regional anesthesia with clonidine. J Clin Anesth 2004;16:517–22
11. Reuben SS, Pristas R, Dixon D, Faruqi S, Madabhushi L, Wenner S. The incidence of complex regional pain syndrome after fasciectomy for Dupuytren's contracture: a prospective observational study of four anesthetic techniques. Anesth Analg 2006;102:499–503
12. Reuben SS, Connelly NR. Postarthroscopic meniscus repair analgesia with intraarticular ketorolac or morphine. Anesth Analg 1996;82:1036–9
13. Reuben SS, Ekman EF. The effect of initiating a preventive multimodal analgesic regimen on long-term patient outcomes for outpatient anterior cruciate ligament reconstruction surgery. Anesth Analg 2007;105:228–32
14. Reuben SS, Ekman EF, Raghunathan K, Steinberg RB, Blinder JL, Adesioye J. The effect of cyclooxygenase-2 inhibition on acute and chronic donor-site pain after spinal-fusion surgery. Reg Anesth Pain Med 2006;31:6–13
15. Reuben SS, Connelly NR, Maciolek H. Postoperative analgesia with controlled-release oxycodone for outpatient anterior cruciate ligament surgery. Anesth Analg 1999;88:1286–91
16. Reuben SS, Makari-Judson G, Lurie SD. Evaluation of efficacy of the perioperative administration of venlafaxine XR in the prevention of postmastectomy pain syndrome. J Pain Symptom Manage 2004;27:133–9
17. Reuben SS, Buvanendran A, Kroin JS, Steinberg RB. Postoperative modulation of central nervous system prostaglandin E2 by cyclooxygenase inhibitors after vascular surgery. Anesthesiology 2006;104:411–16
18. Reuben SS, Buvanendran A, Kroin JS, Raghunathan K. The analgesic efficacy of celecoxib, pregabalin, and their combination for spinal fusion surgery. Anesth Analg 2006;103:1271–7

Séries de patients inventées pour au moins 21 papiers…

Etudes toutes financées par Pfizer
Jamais de résultats négatifs…

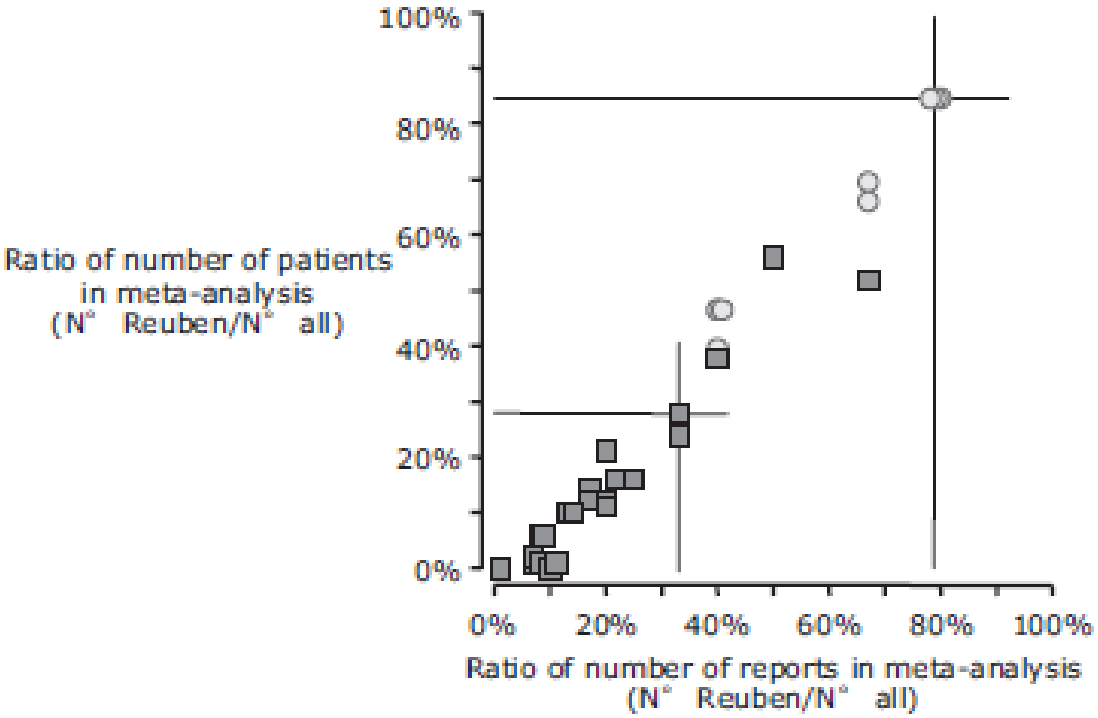
Le « Dr Madoff » de la pharmacie.

Anesthesiology 2009; 111:1279–89

Susceptibility to Fraud in Systematic Reviews

Lessons from the Reuben Case

Emmanuel Marret, M.D., Nadia Elia, M.D., M.Sc.,† Jørgen B. Dahl, M.D., D.MSc., M.B.A.,‡ Henry J. McQuay, M.A., D.M., F.R.C.A., F.R.C.P. (Edin.),§ Steen Møiniche, M.D.,‖ R. Andrew Moore, M.A., D.Phil., C.Chem., F.R.S.C., F.R.C.A., D.Sc.,# Sebastian Straube, B.M., B.Ch., M.A., D.Phil.,** Martin R. Tramèr, M.D., D.Phil.††*



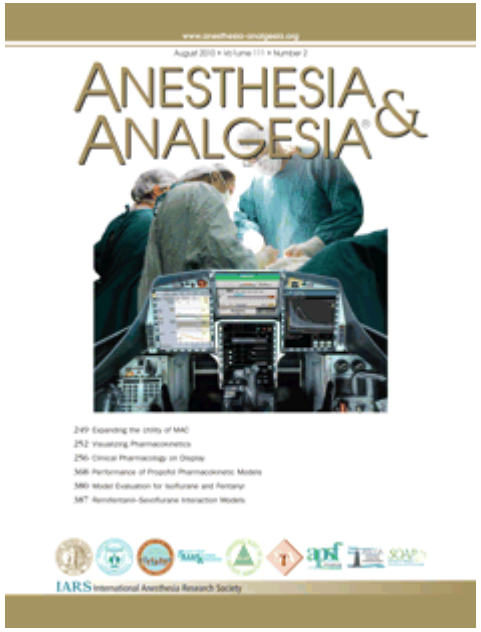
Pas d'impact sur les conclusions des M/A quand ratio patients Reuben/total < 30%

Reuben
Exclu médecine & recherche
364 k$ à rembourser
Prison…

BMJ 2010; 340:c1207

J. Boldt

Réanimation médicale polyvalente



Cardiopulmonary Bypass Priming Using a High Dose of a Balanced Hydroxyethyl Starch Versus an Albumin-Based Priming Strategy

Joachim Boldt, MD

Stephan Suttner, MD

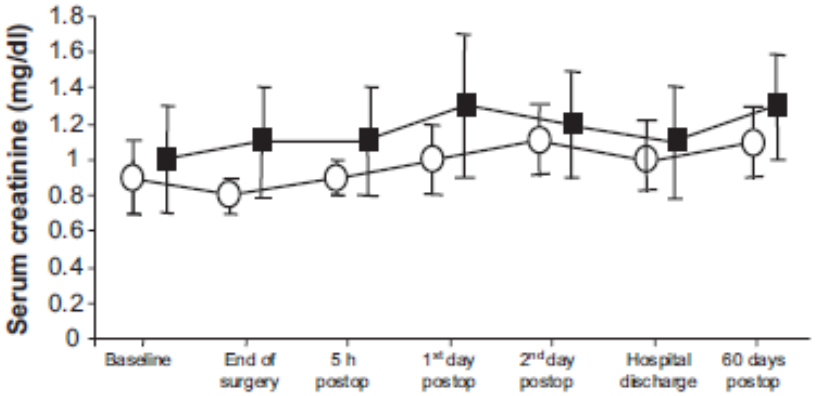
Christian Brosch, MD

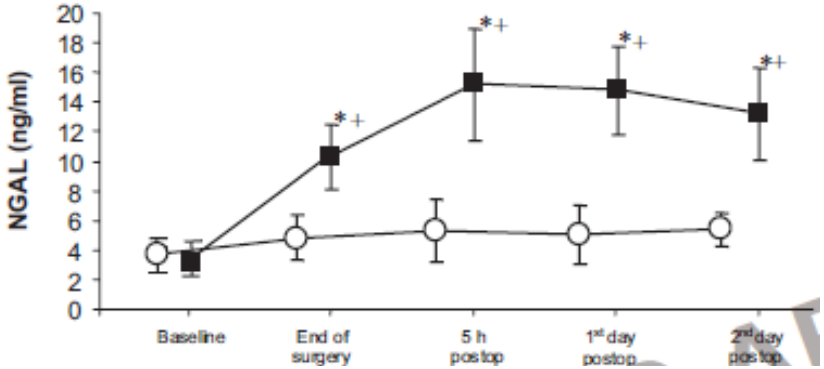
Andreas Lehmann, MD

Kerstin Röhm, MD

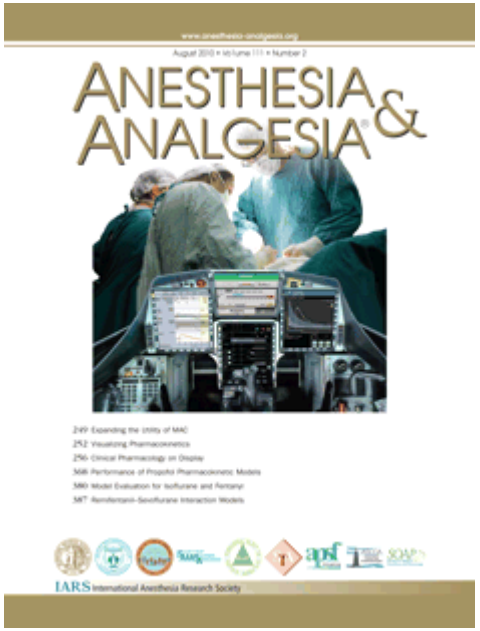
Andinet Mengistu, MD

Vol. 109, No. 6, December 2009





J. Boldt



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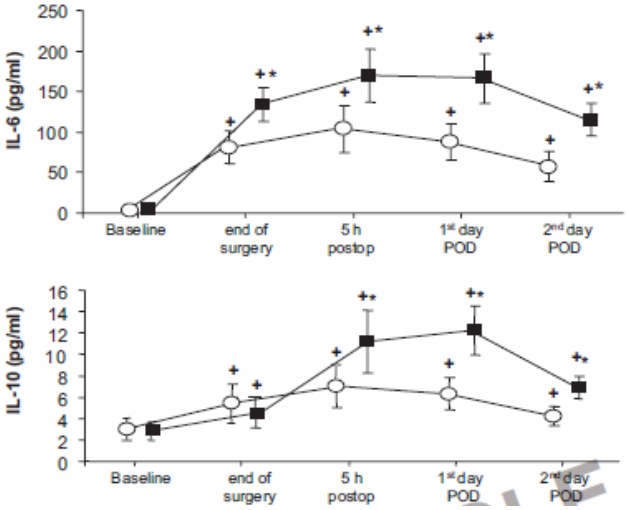
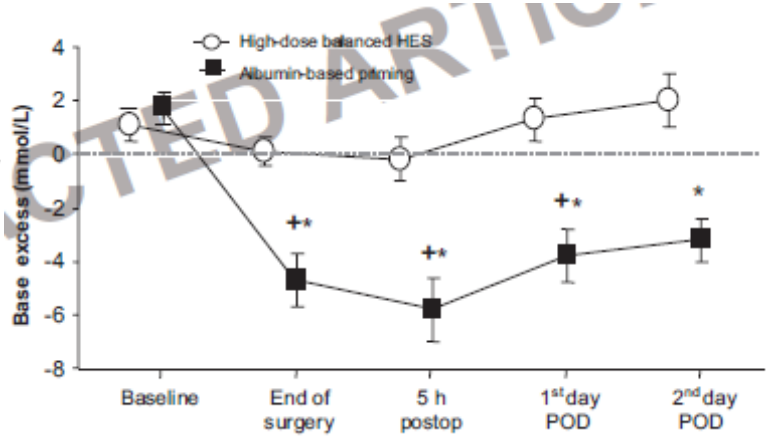




Mai 2010: enquête demandée par l'éditeur de la revue auprès de la chambre des médecins de Rhénanie - Palatinat

J. Boldt

28 octobre 2010

ANESTHESIA & ANALGESIA

Cardiopulmonary Bypass Priming Using a High Dose of a Balanced Hydroxyethyl Starch Versus an Albumin-Based Priming Strategy

Joachim Boldt, MD
Stephan Suttner, MD
Christian Brosch, MD
Andreas Lehmann, MD
Kerstin Röhm, MD
Andinet Mengistu, MD

BACKGROUND: The optimal priming solution for cardiopulmonary bypass (CPB) is unclear. In this study, we evaluated the influence of high-volume priming with a modern balanced hydroxyethyl starch (HES) preparation on coagulation, inflammation, and organ function compared with an albumin-based CPB priming regimen.

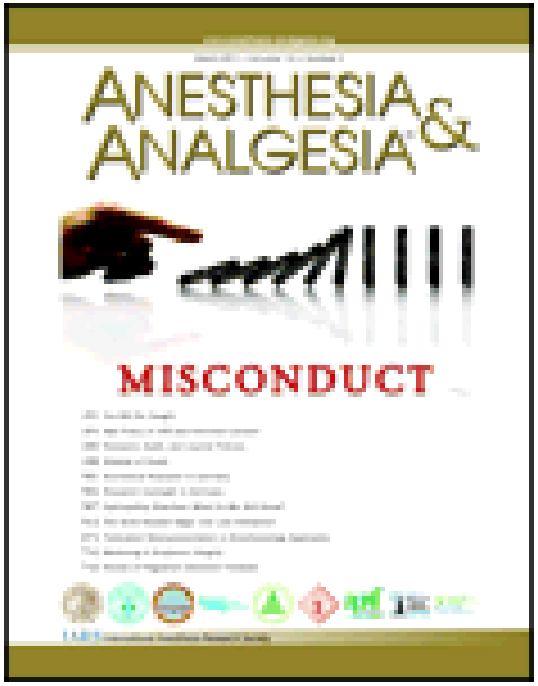
METHODS: In 50 patients undergoing coronary artery bypass grafting, the CPB circuit was prospectively and randomly primed with either 1500 mL of 6% HES 130/0.42 in a balanced electrolyte solution (Na^+ 140 mmol/L, Cl^- 118 mmol/L, K^+ 4 mmol/L, Ca^{2+} 2.5 mmol/L, Mg^{++} 1 mmol/L, $acetate^-$ 24 mmol/L, $malate^-$ 5 mmol/L) (n = 25) or with 500 mL of 5% human albumin plus 1000 mL 0.9% saline solution (n = 25). Inflammation (interleukins [IL]-6, -10), endothelial damage (soluble intercellular adhesion molecule-1), kidney function (kidney-specific proteins α-glutathione *S*-transferase, neutrophil gelatinase-associated lipocalin), coagulation (measured by thrombelastometry [ROTEM®, Pentapharm, Munich, Germany]), and platelet function (measured by whole blood aggregometry [Multiplate® analyzer, Dynabyte Medical, Munich, Germany]) were assessed after induction of anesthesia, immediately after surgery, 5 h after surgery, and on the morning of first and second postoperative days.

RESULTS: Total volume given during and after CPB was 3090 ± 540 mL of balanced HES and 3110 ± 450 mL of albumin. Base excess after surgery was lower in the albumin-based priming group than in the balanced HES priming group (−5.9 ± 1.2 mmol/L vs +0.2 ± 0.2 mmol/L, P = 0.0003). Plasma levels of IL-6, IL-10, and intercellular adhesion molecule-1 were higher after CPB in the albumin-based priming group compared with the HES priming group at all time periods (P = 0.0002). Urinary concentrations of α-glutathione *S*-transferase and neutrophil gelatinase-associated lipocalin were higher after CPB through the end of the study in the albumin group compared with the balanced HES group (P = 0.00004). After surgery through the first postoperative day, thrombelastometry data (clotting time and clot formation time) revealed more impaired coagulation in the albumin-based priming group compared with the HES priming group (P = 0.004). Compared with baseline, platelet function was unchanged in the high-dose balanced HES priming group after CPB and 5 h after surgery, but it was significantly reduced in the albumin-based priming group.

CONCLUSION: High-volume priming of the CPB circuit with a modern balanced HES solution resulted in reduced inflammation, less endothelial damage, and fewer alterations in renal tubular integrity compared with an albumin-based priming. Coagulation including platelet function was better preserved with high-dose balanced HES CPB priming compared with albumin-based CPB priming.

(Anesth Analg 2009;109:1752–62)

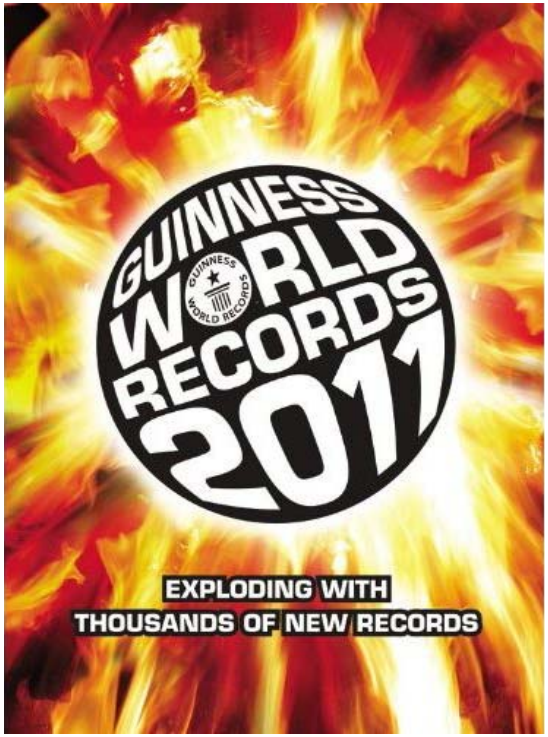
J. Boldt



2 mars 2011:

102 articles expertisés:
- 11 avec avis IRB
- 2 sans nécessité
- … 89 sans avis IRB!

88 articles rétractés…



Réanimation médicale polyvalente

LES AUTEURS ASSOCIES: VICTIMES OU COMPLICES ?

L'affaire Sudbø

454 cancers buccaux
454 témoins appariés

… tous inventés!

Provenaient d'un registre
… non encore ouvert!

250 des patients avaient
la même date de naissance!

Non-steroidal anti-inflammatory drugs and the risk of oral cancer: a nested case-control study

J Sudbø, J J Lee, S M Lippman, J Mork, S Sagen, N Flørenes, A Ristimäki, A Sudbø, L Mao, X Zhou, W K Hong, J F Evensen, A Reith, A J Dannenberg

Summary

Background Non-steroidal anti-inflammatory drugs (NSAIDs) seem to prevent several types of cancer, but could increase the risk of cardiovascular complications. We investigated whether use of NSAIDs was associated with a change in the incidence of oral cancer or overall or cardiovascular mortality.

Methods We undertook a nested case-control study to analyse data from a population-based database (cohort of Norway; CONOR), which consisted of prospectively obtained health data from all regions of Norway. People with oral cancer were identified from the 9241 individuals in CONOR who were at increased risk of oral cancer because of heavy smoking (≥15 pack-years), and matched controls were selected from the remaining heavy smokers who did not have cancer).

Findings We identified and analysed 454 (5%) people with oral cancer (279 men, 175 women; mean [SD] age at diagnosis 63·3 [13·2] years) and 454 matched controls (n=908); 263 (29%) had used NSAIDs, 83 (9%) had used paracetamol (for a minimum of 6 months), and 562 (62%) had used neither drug. NSAID use (but not paracetamol use) was associated with a reduced risk of oral cancer (including in active smokers; hazard ratio 0·47, 95% CI 0·37–0·60, p<0·0001). Smoking cessation also lowered the risk of oral cancer (0·41, 0·32–0·52, p<0·0001). Additionally, long-term use of NSAIDs (but not paracetamol) was associated with an increased risk of cardiovascular-disease-related death (2·06, 1·34–3·18, p=0·001). NSAID use did not significantly reduce overall mortality (p=0·17).

Interpretation Long-term use of NSAIDs is associated with a reduced incidence of oral cancer (including in active smokers), but also with an increased risk of death due to cardiovascular disease. These findings highlight the need for a careful risk-benefit analysis when the long-term use of NSAIDs is considered.

Lancet 2005; 366: 1359–66
Published online October 2005
DOI: 10.1016/S0140-6736(05)67369-0

Department of Medical Oncology and Radiotherapy, The Norwegian Radium Hospital, Montebello, 0310 Oslo, Norway (J Sudbø MD); Department of Biostatistics and Applied Mathematics, University of Texas, MD Anderson Cancer Center, Houston, TX, USA (Prof J J Lee PhD, X Zhou MSc); Department of Thoracic/Head and Neck Medical Oncology (Prof S M Lippman MD, Prof L Mao MD) and Department of Clinical Cancer Prevention (Prof S M Lippman), University of Texas, MDAnderson Cancer Center, Houston, TX, USA; The National Hospital and The Norwegian Cancer Registry, Oslo, Norway (J Mork MD); Research Foundation of The Norwegian Radium Hospital, Montebello, Norway (S Sagen MPH); Division of Cytology, Department of Pathology, The Norwegian Radium Hospital, Montebello, Norway (Prof A Reith MD, N Flørenes DDS); Department of Medical Informatics, The Norwegian Radium Hospital, Montebello, Oslo, Norway (W Kildal MSc); Department of Pathology, Helsinki University Central Hospital, and Molecular and Cancer Biology Research Programme, Biomedicum Helsinki, University of Helsinki, Helsinki, Finland (A Ristimäki MD); Department of Physics, Norwegian University of Science and Technology, Trondheim, Norway (Prof A Sudbø PhD); Department

Introduction

Squamous cell carcinoma of the oral cavity is associated with severe disease-related and treatment-related morbidity and a poor prognosis that has not improved greatly over the past three decades.[1,2] Tobacco smoking is the major cause of this disease.[3] Patients with oral leucoplakia with the genetic instability marker aneuploidy have an 80% risk of developing oral cancer[4] with a high relapse rate and a 70% risk of death in 5 years.[5,6] Complete surgical excision does not reduce the high risk of aggressive, final oral cancer associated with aneuploid oral leucoplakia.[4] Smoking cessation could offer some protection in this group, but is often difficult to achieve or sustain.[7] Therefore, there is an unmet medical need for new treatment strategies, such as chemoprevention with non-steroidal anti-inflammatory drugs (NSAIDs), to reduce the risks of cancer in patients with aneuploid oral leucoplakia.[8–10]

aromatic hydrocarbons in tobacco smoke to reactive metabolites, which form mutagenic DNA adducts.[16,17] Prostaglandin E_2 can stimulate cell proliferation and angiogenesis and inhibit apoptosis and immune surveillance.[18,19] NSAIDs protect against the development of oral cancer in animals.[20,21] Observational data have indicated that NSAIDs are associated with the reduced risk of several types of cancers,[22–25] but we know of only two previously published reports of epidemiological studies of NSAIDs with respect to head and neck cancer.[26,27] These reports only included aspirin and showed conflicting results. Before undertaking a trial to investigate NSAIDs in reducing the risk of oral cancer in the very high-risk group of patients with aneuploid leucoplakia, we did a population-based study to examine the potential association between long-term NSAID use and the risk of oral cancer in current and previously heavy smokers. We also examined the potential associations of

L'affaire Sudbø

Risk Markers of Oral Cancer in Clinically Normal Mucosa
As an Aid in Smoking Cessation Counseling
J Sudbø R Samuelsson B Risberg S Heistein C Nyhus M Samuelsson
R Puntervold E Sigstad B Davidson A Reith Å Berner

The corresponding author's institution, The Norwegian Radium Hospital, is reviewing the data and the Editorial office is awaiting the results of the investigation.

L'affaire Sudbø

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The corresponding author's institution, The Norwegian Radium Hospital, is reviewing the data and the Editorial office is awaiting the results of the investigation.

Additionally, the Editorial office also received information that the following authors did not review the manuscript before publication and should not have been listed as authors of this article

This article was retracted on December 10, 2006.

L'affaire Julio Cruz

Doubts over head injury studies

"During the discussion some Brazilian physicians expressed some surprise with the inclusion of Julio Cruz' paper in the meta-analysis (Cruz 2004; J Neurosurgery, 100:376) … Cruz had no patients at his arrival to Brasil, back from USA where he had developed his research career."

Authors	Patients	Intervention	Outcome	Results		Odds ratio (P value)
				High dose	Low dose	
Cruz J, Minoja G, Okuchi K[7]	178 adults with non-missile, traumatic acute subdural haematomas	High dose mannitol *v* lower dose mannitol	Death at 6 months	13/91	22/87	0.49 (0.06)
			Death or severe disability at 6 months	28/91	47/87	0.38 (0.002)
Cruz J, Minoja G, Okuchi K[7]	141 patients with traumatic, non-missile, acute, intraparenchymal temporal lobe haemorrhages associated with early abnormal pupillary widening	High dose mannitol *v* lower dose mannitol	Death at 6 months	14/72	25/69	0.42 (0.03)
			Death or severe disability at 6 months	28/72	46/69	0.32 (0.001)
Cruz J, Minoja G, Okuchi K, Facco E[8]	44 adults with traumatic, non-missile, acute, severe, diffuse brain swelling with recent clinical signs of impending brain death	Very early and fast high dose mannitol *v* lower dose mannitol	Death at 6 months	9/23	14/21	0.32 (0.07)
			Death or severe disability at 6 months	13/23	19/21	0.14 (0.01)

Trauma crânien ou hémorragie méningée
Mannitol 1.4 g/kg vs. 0.7 g/kg
Amélioration devenir neurologique
Revue Cochrane 2003

BMJ | 24 FEBRUARY 2007 | VOLUME 334

L'affaire Julio Cruz

Dr Minoja wrote on 15 May 2006:

"It was a pleasure for me to be included along the authors of the papers written by Julio Cruz on the use of high doses of mannitol in head trauma emergencies. My Unit and I did not provide to Dr. Cruz a personal series of randomized patients, but my contribution was discussing with him and sharing his assumption, because occasionally, in emergency situations, I have used and I still use with success aggressive high-dose mannitol approach."

Dr Okuchi responded:

"Since I did not conduct any study related to the results of Dr Cruz's high-dose mannitol trials in Japan, I have no data to present you. I did not know any part of the paper before he called me about the acceptance in

Dr Facco wrote:

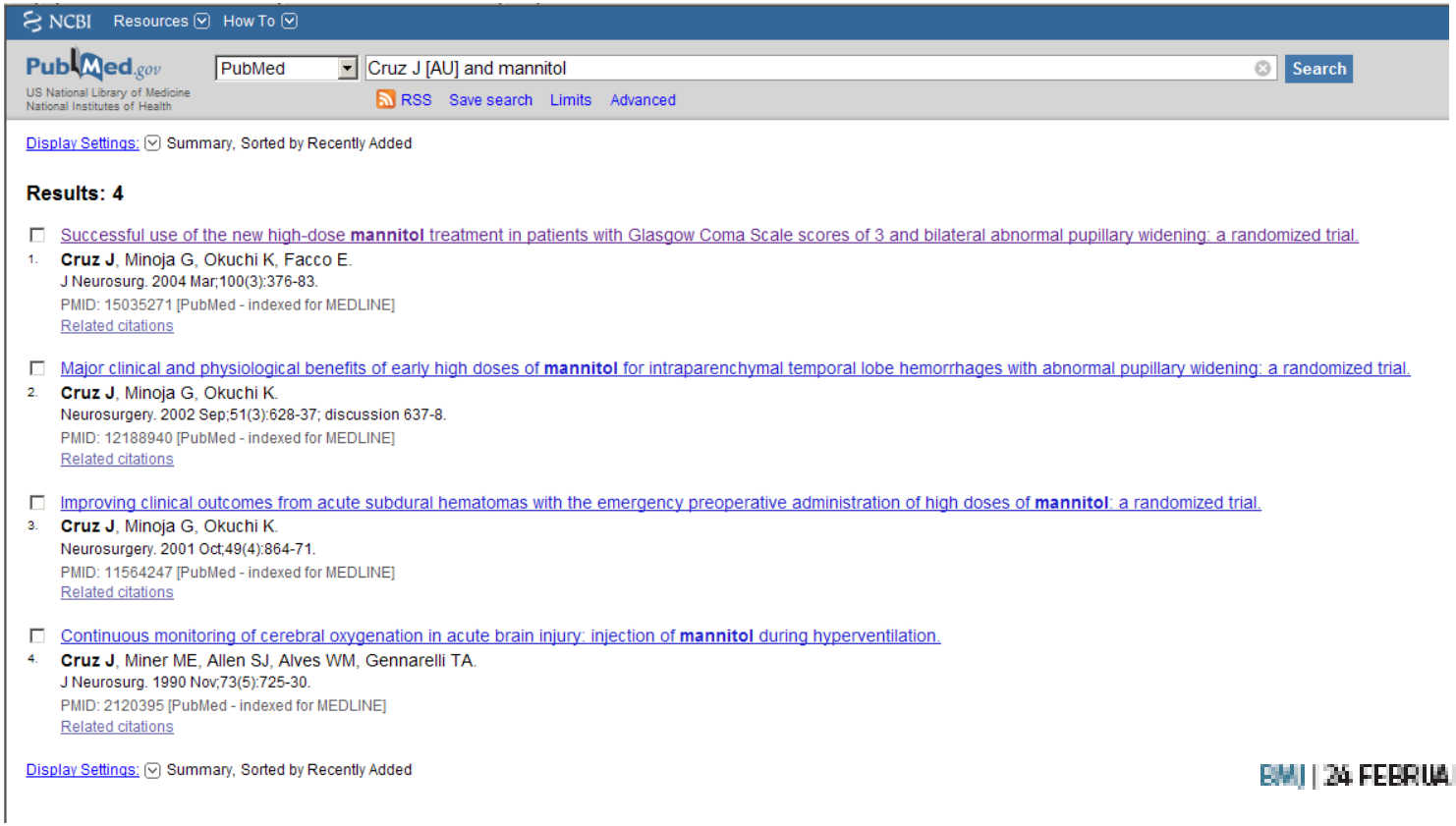
"The paper I am co-author, springs from the clinical experience I shared with Julio Cruz about the potential effectiveness of high doses of mannitol in selected very critical patients. I discussed with him (mainly by phone) about my anecdotal experience I never had the opportunity to check in a prospective study, and he also had the same clinical impression of its effectiveness ... Following our discussion, he decided to test high mannitol doses in the emergency setting and involved me as co-author, but my role was 'philosophical' rather than clinical: to my knowledge, the study was conducted personally by Julio, probably in Brazil, and I only helped him with discussion and text revision" (22 May 2006).

L'affaire Julio Cruz

Réanimation médicale polyvalente

Pas de confirmation de l'affiliation du Dr Cruz
Pas de preuve d'inclusion des patients
Co-auteurs: discussions au téléphone…
Inversion position revue Cochrane 2006
… papiers non rétractés!

Suicide J. Cruz 2005



NCBI Resources How To

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed | Cruz J [AU] and mannitol | Search

RSS Save search Limits Advanced

Display Settings: Summary, Sorted by Recently Added

Results: 4

1. Successful use of the new high-dose **mannitol** treatment in patients with Glasgow Coma Scale scores of 3 and bilateral abnormal pupillary widening: a randomized trial.
Cruz J, Minoja G, Okuchi K, Facco E.
J Neurosurg. 2004 Mar;100(3):376-83.
PMID: 15035271 [PubMed - indexed for MEDLINE]
Related citations

2. Major clinical and physiological benefits of early high doses of **mannitol** for intraparenchymal temporal lobe hemorrhages with abnormal pupillary widening: a randomized trial.
Cruz J, Minoja G, Okuchi K.
Neurosurgery. 2002 Sep;51(3):628-37; discussion 637-8.
PMID: 12188940 [PubMed - indexed for MEDLINE]
Related citations

3. Improving clinical outcomes from acute subdural hematomas with the emergency preoperative administration of high doses of **mannitol**: a randomized trial.
Cruz J, Minoja G, Okuchi K.
Neurosurgery. 2001 Oct;49(4):864-71.
PMID: 11564247 [PubMed - indexed for MEDLINE]
Related citations

4. Continuous monitoring of cerebral oxygenation in acute brain injury: injection of **mannitol** during hyperventilation.
Cruz J, Miner ME, Allen SJ, Alves WM, Gennarelli TA.
J Neurosurg. 1990 Nov;73(5):725-30.
PMID: 2120395 [PubMed - indexed for MEDLINE]
Related citations

Display Settings: Summary, Sorted by Recently Added

BMJ | 24 FEBRUARY 2007 | VOLUME 334

L'affaire John Darsee

Cardiologue - chercheur
dans l'équipe d'Eugene Braunwald (Harvard)

Medline: Darsee J [AU], 1979-81:
20 papiers dont 16 en 1er nom

13 « retracted publication »
Circulation
N Engl J Med
Ann Intern Med
Am J Cardiol
Am J Physiol
J Clin Invest
Circ Res
Proc Natl Acad Sci USA

Science, 1983;220:31-5.

L'affaire John Darsee

221 incohérences / 18 articles

e.g. patient père à 9 et 11 ans

falsifications de séries cliniques:

invention de données manquantes
augmentation du nombre de cas
extension de résultats ponctuels à un ensemble

encadrement ? contrôle de qualité ?

Avait été pris en flagrant délit
d'écriture d'une expérience … non réalisée
→ Braunwald avait passé l'éponge…

Science, 1983;220:31-5.

L'affaire John Darsee: encore aujourd'hui

The American Journal of Medicine (2006) 119, e7

ELSEVIER

THE AMERICAN JOURNAL of MEDICINE®

LETTERS

Referencing Retracted Articles

To the Editor:

The review of hypophosphatemia by Gaasbeek and Meinders[1] includes a discussion of reversible myocardial dysfunction. This undoubtedly occurs, as has been demonstrated in several of their referenced studies. However, one of the "best" reports of this phenomenon, which they also reference, is by Darsee and Nutter[2] (reference no. 42 in the review). This is a rather notorious article, one of several by J. R. Darsee, that was formally retracted during the "Darsee Affair."[3,4] There should be better mechanisms for identifying articles that are suspected or proved to be fraudulent.

Michael Emmett, MD
Chief of Medicine
Baylor University Medical Center
Dallas, Texas

doi:10.1016/j.amjmed.2005.11.023

References

1. Gaasbeek A, Meinders AE. Hypophosphatemia: an update on its etiology and treatment. *Am J Med.* 2005;118:1094-1101.
2. Darsee JR, Nutter DO. Reversible severe congestive cardiomyopathy in three cases of hypophosphatemia. *Ann Intern Med.* 1978;89:867-870.
3. Retraction in: *Ann Intern Med.* 1983;99:275-276.
4. Relman AS. Lessons from the Darsee affair. *N Engl J Med.* 1983;308:1415-1417.

L'affaire John Darsee: encore aujourd'hui

Results.—A total of 235 articles had been retracted. Error was acknowledged in relation to 91 articles; results could not be replicated in 38; misconduct was evident in 86; and no clear reason was given in 20. Of the 235 articles, 190 were retracted by some or all of the authors; 45 were retracted by a person or organization other than the author(s). The 235 retracted articles were cited 2034 times after the retraction notice. Examination of 299 of those citations reveals that in only 19 instances was the retraction noted; the remaining 280 citations treated the retracted article either explicitly (n = 17) or implicitly (n = 263) as though it were valid research.

Conclusion.—Retracted articles continue to be cited as valid work in the biomedical literature after publication of the retraction; these citations signal potential problems for biomedical science.

JAMA. 1998;280:296-297

Phenomena of Retraction

Reasons for Retraction and Citations to the Publications

JAMA®
The Journal of the American Medical Association

John M. Budd, PhD; MaryEllen Sievert, PhD; Tom R. Schultz, MA

Réanimation médicale polyvalente

LES AUTEURS DISTRAITS & LEURS DONNÉES PERDUES

Les données perdues: l'imagination au pouvoir

- Disque dur effacé (Schön)
- Incendie
- Déménagement
- Inondation
- Termites (Chandra)

Réanimation médicale polyvalente

LES PLAGIAIRES
& LES SELF-PLAGIAIRES

L'affaire Elias Alsabti

« Chercheur » né à Bassorah, études en Jordanie
A 24 ans:
45 articles scientifiques
1977-80: 34 articles indexés dans PubMed
dont 26 publiés en 1979
21 en seul auteur

… 1 seul « retracted »

Recopiait les articles des autres!!!

CHEST Postgraduate Education Corner

MEDICAL WRITING TIPS

Plagiarism*

Avoiding the Peril in Scientific Writing

(CHEST 2008; 133:579–581)

Lisa Cicutto, RN, PhD

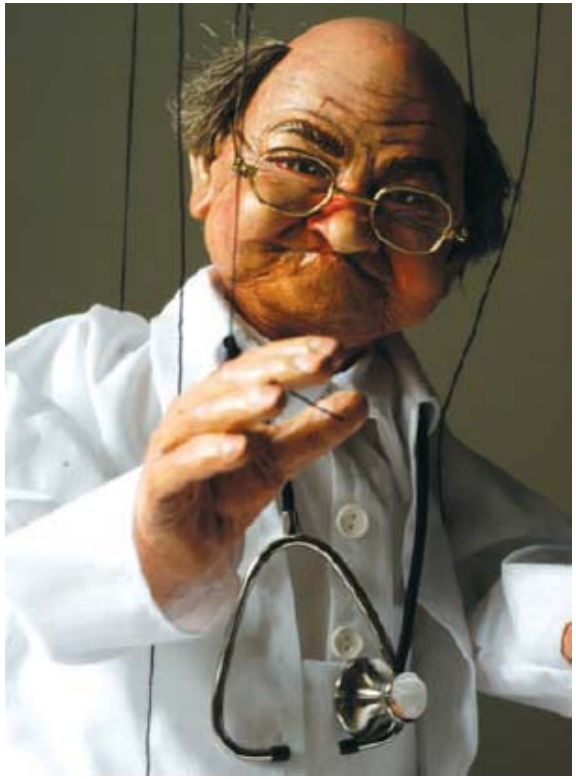
Self-Plagiarism is defined as a type of plagiarism in which the writer republishes a work in its entirety or reuses portions of a previously written text while authoring a new work.

Auto-plagiat

- A. Ochroch et al., VNI après chirurgie bariatrique
- Anesthesiology 2009
- Seconde étude Anesthesia & Analgesia 2010
  - Data différentes
  - Introduction, partie de méthodes, partie de discussion identiques

    ⇨ rétractation

On badine de moins en moins avec les éditeurs



LES FRÉQUENTATIONS DANGEREUSES DES LEADERS D'OPINION

Les blockbusters

Key opinion leaders: independent experts or drug representatives in disguise?

Ray Moynihan

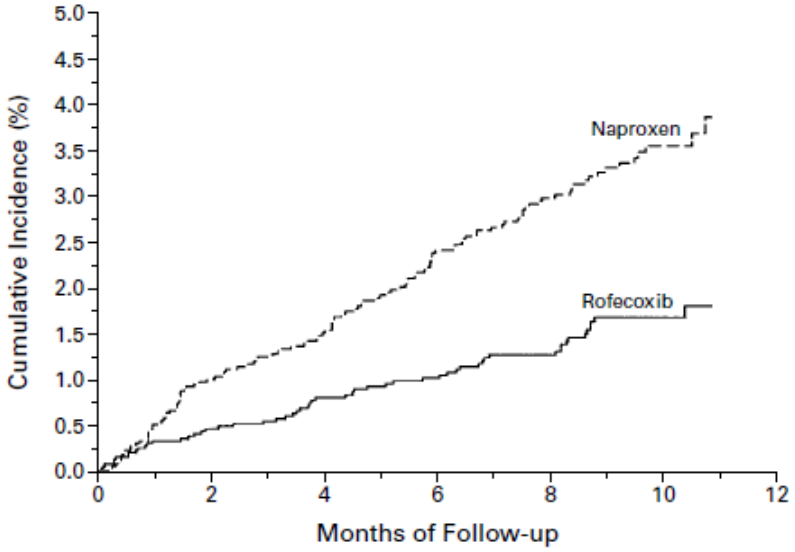
BMJ 2008;336:1402-1403

BMJ

The New England Journal of Medicine

COMPARISON OF UPPER GASTROINTESTINAL TOXICITY OF ROFECOXIB AND NAPROXEN IN PATIENTS WITH RHEUMATOID ARTHRITIS

CLAIRE BOMBARDIER, M.D., LOREN LAINE, M.D., ALISE REICIN, M.D., DEBORAH SHAPIRO, DR.P.H., RUBEN BURGOS-VARGAS, M.D., BARRY DAVIS, M.D., PH.D., RICHARD DAY, M.D., MARCOS BOSI FERRAZ, M.D., PH.D., CHRISTOPHER J. HAWKEY, M.D., MARC C. HOCHBERG, M.D., TORE K. KVIEN, M.D., AND THOMAS J. SCHNITZER, M.D., PH.D., FOR THE VIGOR STUDY GROUP



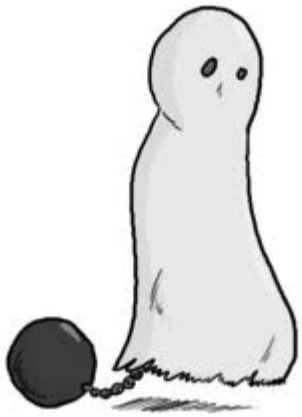
NO. AT RISK

Rofecoxib	4047	3641	3402	3180	2806	1073	533
Naproxen	4029	3644	3389	3163	2796	1071	513

Figure 1. Cumulative Incidence of the Primary End Point of a Confirmed Upper Gastrointestinal Event among All Randomized Patients.

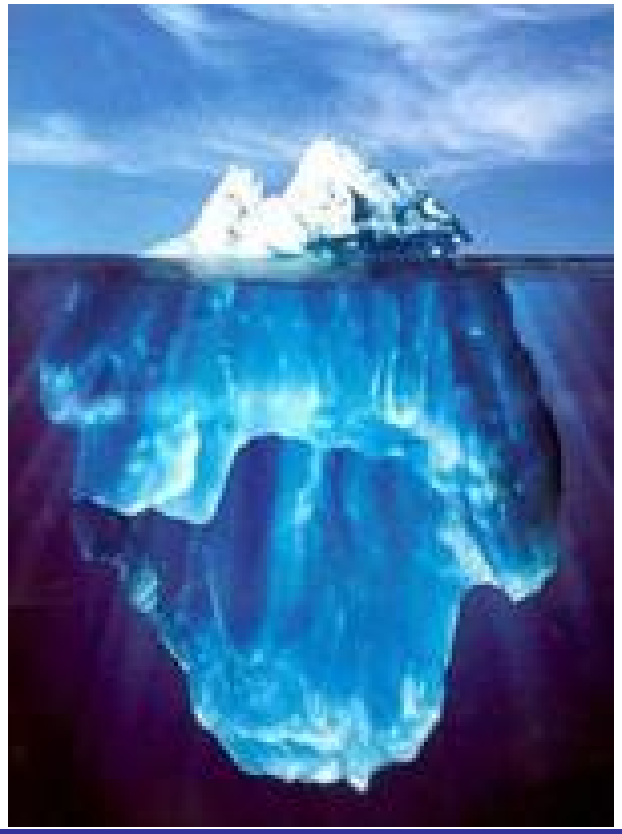
Les mots magiques des gost-writers

The rate of myocardial infarction was significantly lower in the naproxen group than in the rofecoxib group (0.1 percent vs. 0.4 percent). This difference was primarily accounted for by the high rate of myocardial infarction among the 4 percent of the study population with the highest risk of a myocardial infarction, for whom low-dose aspirin is indicated.[22] The difference in the rates of myocardial infarction between the rofecoxib and naproxen groups was not significant among the patients without indications for aspirin therapy as secondary prophylaxis.



10% du chiffre d'affaire de Merck…
Action ↘ de 40% lors du retrait…

> 25 000 décès ou accidents cardiaques aux USA
3 décès… perdus de vue…



& LA PARTIE IMMERGÉE DE L'ICEBERG?

« L'embellissement » des données

Empirical Evidence for Selective Reporting of Outcomes in Randomized Trials

Comparison of Protocols to Published Articles

An-Wen Chan, MD, DPhil
Asbjørn Hróbjartsson, MD, PhD
Mette T. Haahr, BSc
Peter C. Gøtzsche, MD, DrMedSci
Douglas G. Altman, DSc

JAMA. 2004;291:2457-2465

Table 5. Proportion of Trials With Major Discrepancies in the Specification of Primary Outcomes When Comparing Protocols and Published Articles

Discrepancy in Published Articles Relative to Protocols	Trials With Discrepancies for ≥1 Primary Outcome, No. (%)*
Primary outcomes specified in protocols (n = 76 trials)	
Any change to protocol-defined primary outcome	40 (53)
Reported as nonprimary in published articles	26 (34)
Omitted from published articles	20 (26)
Primary outcomes specified in published articles (n = 63 trials)	
Any new primary outcome defined in published articles	21 (33)
Changed from nonprimary in protocol to primary in published articles	12 (19)
Not mentioned in protocol	11 (17)
Any discrepancy in primary outcome (n = 82 trials)†	51 (62)

*Trials often defined >1 primary outcome in protocols and published articles.
†Primary outcomes defined in either protocols or published articles.

« L'embellissement » des données

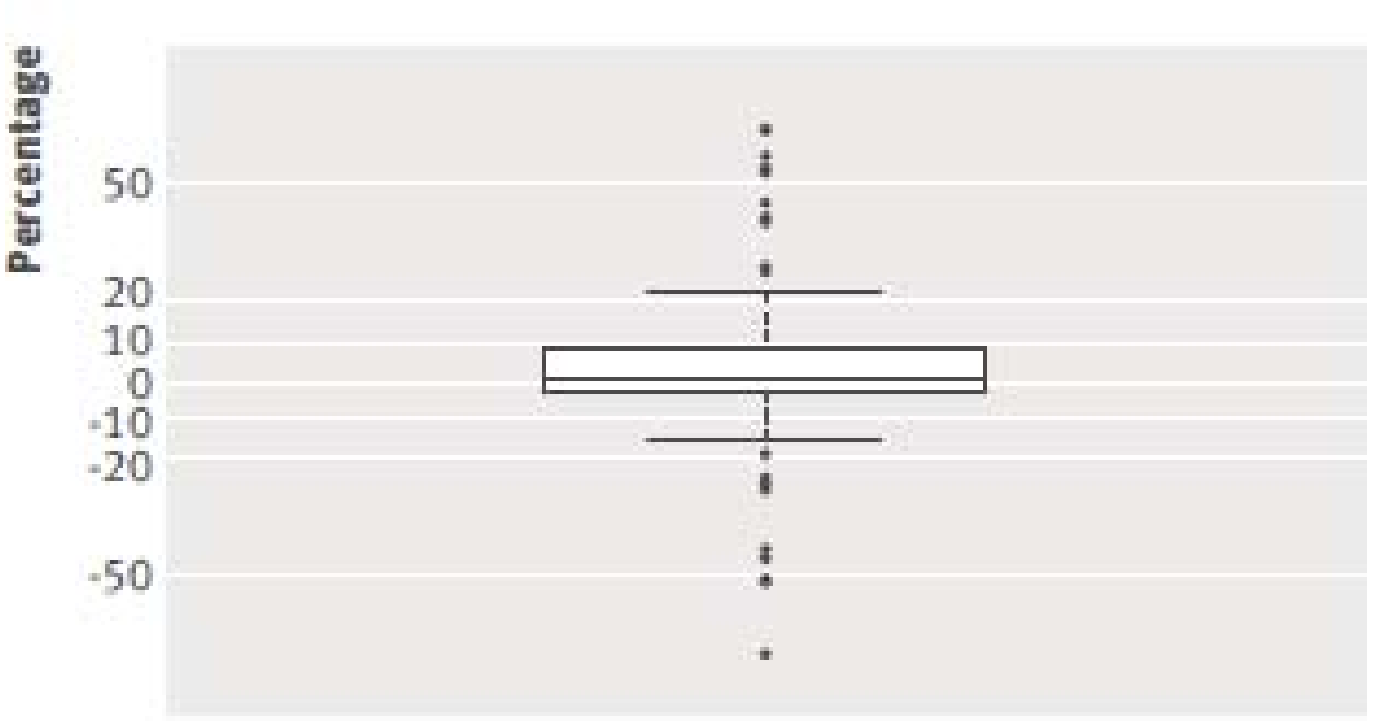
BMJ

BMJ 2009;338:b1732

RESEARCH

Reporting of sample size calculation in randomised controlled trials: review

Pierre Charles, research fellow in epidemiology, specialist registrar in internal medicine,[1,2,3] Bruno Giraudeau, assistant professor of statistics,[1,4,5,6] Agnes Dechartres, research fellow in epidemiology,[1,2,3] Gabriel Baron, statistician,[1,2,3] Philippe Ravaud, professor of epidemiology[1,2,3]



Calcul d'effectif

« L'embellissement » des données

BMJ

BMJ 2009;338:b1732

RESEARCH

Reporting of sample size calculation in randomised controlled trials: review

Pierre Charles, research fellow in epidemiology, specialist registrar in internal medicine,[1,2,3] Bruno Giraudeau, assistant professor of statistics,[1,4,5,6] Agnes Dechartres, research fellow in epidemiology,[1,2,3] Gabriel Baron, statistician,[1,2,3] Philippe Ravaud, professor of epidemiology[1,2,3]

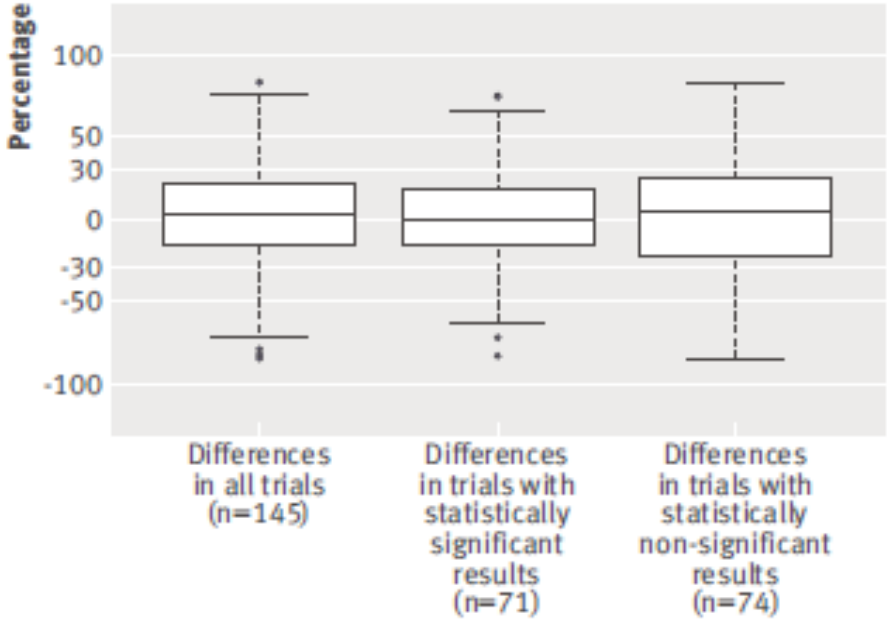


Fig 4 | Relative differences between assumptions and results for control groups

Groupes contrôle: prévu vs. observé

OPEN ACCESS Freely available online

PLoS COMPUTATIONAL BIOLOGY

Editorial

Ten Simple Rules for Building and Maintaining a Scientific Reputation

Philip E. Bourne[1]*, Virginia Barbour[2]

Rule 1: Think Before You Act

Rule 2: Do Not Ignore Criticism

Rule 3: Do Not Ignore People

Rule 4: Diligently Check Everything You Publish and Take Publishing Seriously

Rule 5: Always Declare Conflicts of Interest

Rule 6: Do Your Share for the Community

Rule 7: Do Not Commit to Tasks You Cannot Complete

Rule 8: Do Not Write Poor Reviews of Grants and Papers

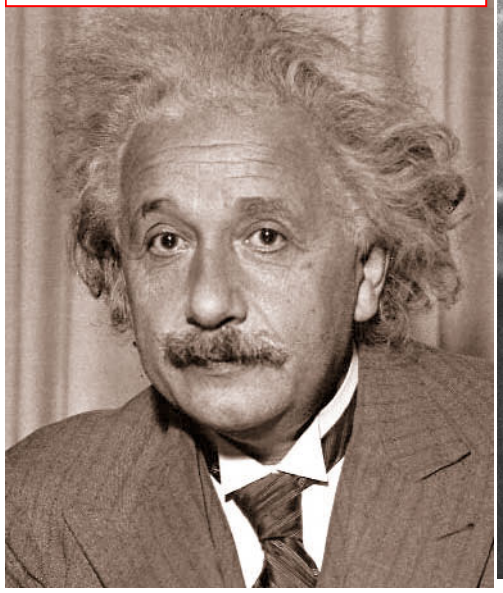
Rule 9: Do Not Write References for People Who Do Not Deserve It

Rule 10: Never Plagiarize or Doctor Your Data

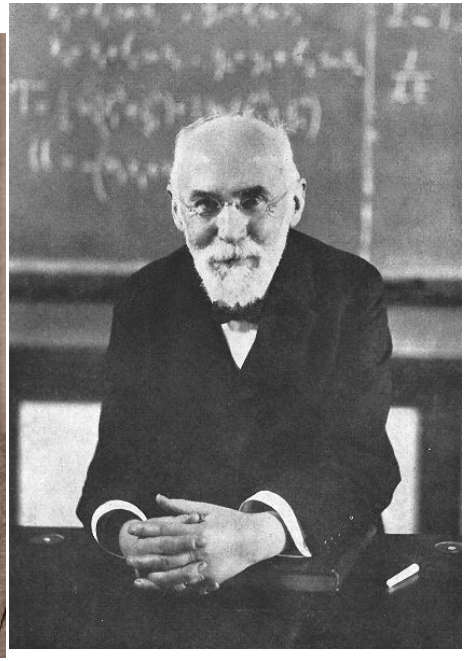
Tout est relatif…

Controverse sur la paternité de la relativité

$E = mc^2$
26 septembre 1905
Pas de références



Albert Einstein
1879-1955
Nobel 1921
Relativité restreinte
Relativité générale



Hendrick Lorentz
1853-1928
Nobel 1902
Relativité restreinte

$m = E/c^2$
5 juin 1905

Henri Poincaré
1854-1912
Relativité restreinte

David Hilbert
1862-1943
Relativité générale

« Ayez le culte de l'esprit critique »

Louis Pasteur