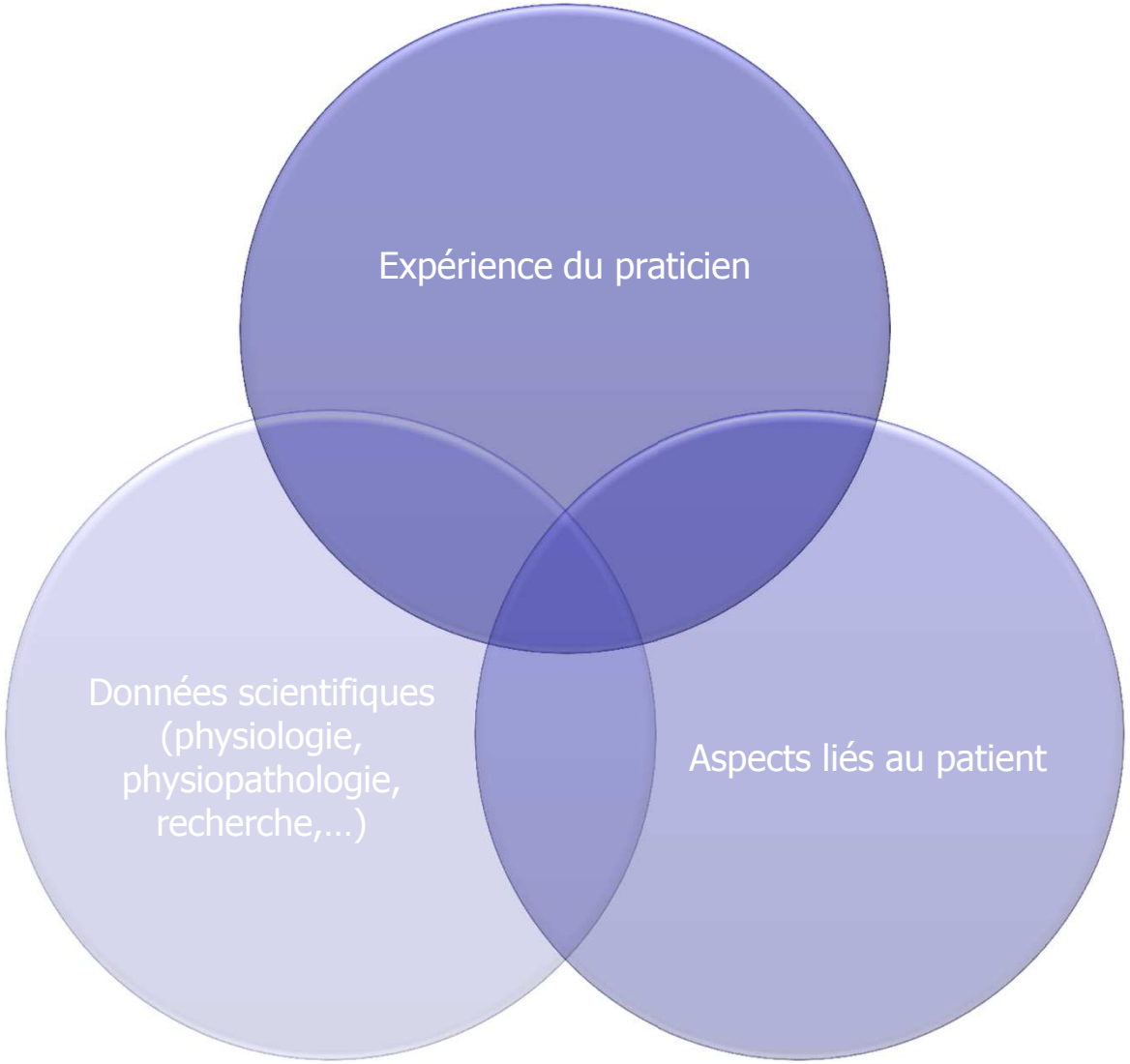

# Quelles sont les conditions nécessaires à la mise en œuvre d'un travail scientifique de bonne qualité?

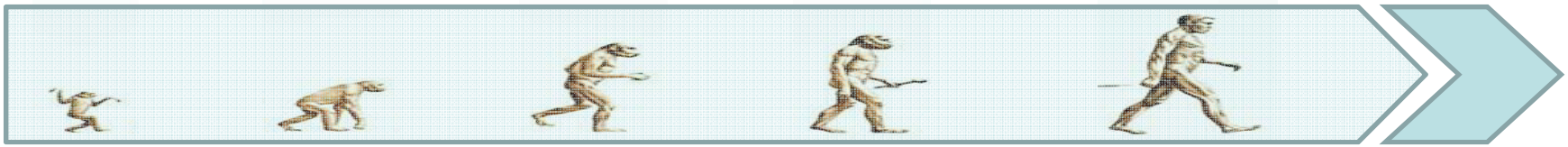
*Gregory Reychler*

*Cliniques universitaires Saint-Luc*

# Evidence-based physiotherapy



# Evolution …



# … et kinésithérapie

Ann Surg. 1982 Apr;195(4):451-5.

**Chest physiotherapy fails to prevent postoperative atelectasis in children after cardiac surgery.**

Reines HD, Sade RM, Bradford BF, Marshall J.

**Abstract**

In a prospective, randomized study, the effectiveness of chest physiotherapy (CPT) was evaluated in preventing postoperative atelectasis in children after heart surgery. Postoperative clinical variables and chest x-ray findings of atelectasis were compared in two groups: 19 patients receiving CPT and 25 patients not receiving CPT (NCPT). Chest physiotherapy was associated with significantly more frequent (p less than 0.01) and more severe (p less than 0.01) atelectasis than NCPT. Atelectasis was not significantly associated with temperature elevation, age, or presence of preoperative left-to-right shunt.

Sports Biomech. 2012 Jun;11(2):262-72.

**Repeatability of three-dimensional thorax and pelvis kinematics in the golf swing measured using a field-based motion capture system.**

Evans K, Horan SA, Neal RJ, Barrett RS, Mills PM.

School of Physiotherapy and Exercise Science, Griffith University, Gold Coast, Australia. Kerrie.Evans@griffith.edu.au

**Abstract**

Field-based methods of evaluating three-dimensional (3D) swing kinematics offer coaches and researchers the opportunity to assess golfers in context-specific environments. The purpose of this study was to establish the inter-trial, between-tester, between-location, and between-day repeatability of thorax and pelvis kinematics during the downswing using an electromagnetic motion capture system. Two experienced testers measured swing kinematics in 20 golfers (handicap < or =14 strokes) on consecutive days in an indoor and outdoor location. Participants performed five swings with each of two clubs (five-iron and driver) at each test condition. Repeatability of 3D kinematic data was evaluated by computing the coefficient of multiple determination (CMD) and the systematic error (SE). With the exception of pelvis forward bend for between-day and between-tester conditions, CMDs exceeded 0.854 for all variables, indicating high levels of overall waveform repeatability across conditions. When repeatability was compared across conditions using MANOVA, the lowest CMDs and highest SEs were found for the between-tester and between-day conditions. The highest CMDs were for the inter-trial and between-location conditions. The absence of significant differences in CMDs between these two conditions supports this method of analysing pelvis and thorax kinematics in different environmental settings without unduly affecting repeatability.

NCBI Resources How To My NCBI Sign In

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

PubMed | chest physiotherapy | Search

RSS Save search Advanced Help

Show additional filters

**Text availability**
Abstract available
Free full text available
Full text available

**Publication dates**
5 years
10 years
Custom range...

**Species**
Humans
Other Animals

**Article types**
Clinical Trial
Meta-Analysis
Practice Guideline
Randomized Controlled Trial
Review
Systematic Reviews
more ...

**Languages**
English
more ...

Clear all

Show additional filters

Display Settings: Summary, 20 per page, Sorted by Recently Added Send to:

**Results: 1 to 20 of 2398**

<< First < Prev Page 1 of 120 Next > Last >>

1. Repeatability of three-dimensional **thorax** and pelvis kinematics in the golf swing measured using a field-based motion capture system.
Evans K, Horan SA, Neal RJ, Barrett RS, Mills PM.
Sports Biomech. 2012 Jun;11(2):262-72.
PMID: 22900406 [PubMed - in process]
Related citations

2. The control of upper body segment speed and velocity during the golf swing.
Horan SA, Kavanagh JJ.
Sports Biomech. 2012 Jun;11(2):165-74.
PMID: 22900398 [PubMed - in process]
Related citations

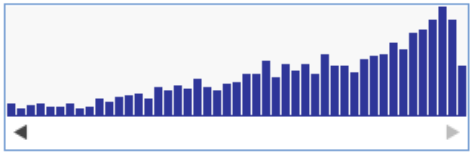
3. Computerised lung sound monitoring to assess effectiveness of **chest physiotherapy** and secretion removal: a feasibility study.
Ntoumenopoulos G, Glickman Y.
**Physiotherapy**. 2012 Sep;98(3):250-5. Epub 2012 Mar 30.
PMID: 22898583 [PubMed - in process]
Related citations

4. Noninvasive positive-pressure ventilation in clinical practice at a large university-affiliated Brazilian hospital.
Yamauchi LY, Travaglia TC, Bernardes SR, Figueiroa MC, Tanaka C, Fu C.
Clinics (Sao Paulo). 2012 Jul;67(7):767-72.
PMID: 22892921 [PubMed - in process] Free PMC Article
Related citations

5. Brief Illness Perception Questionnaire (Brief IPQ).
Ng TS.
J Physiother. 2012;58(3):202.

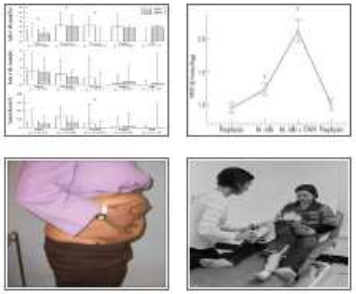
Filters: Manage Filters

**Results by year**



**Related searches**
**chest physiotherapy** children
**chest physiotherapy** cystic fibrosis
**chest physiotherapy** pediatric
**chest physiotherapy** bronchiolitis
**chest physiotherapy** copd

**PMC Images search for** *chest physiotherapy*



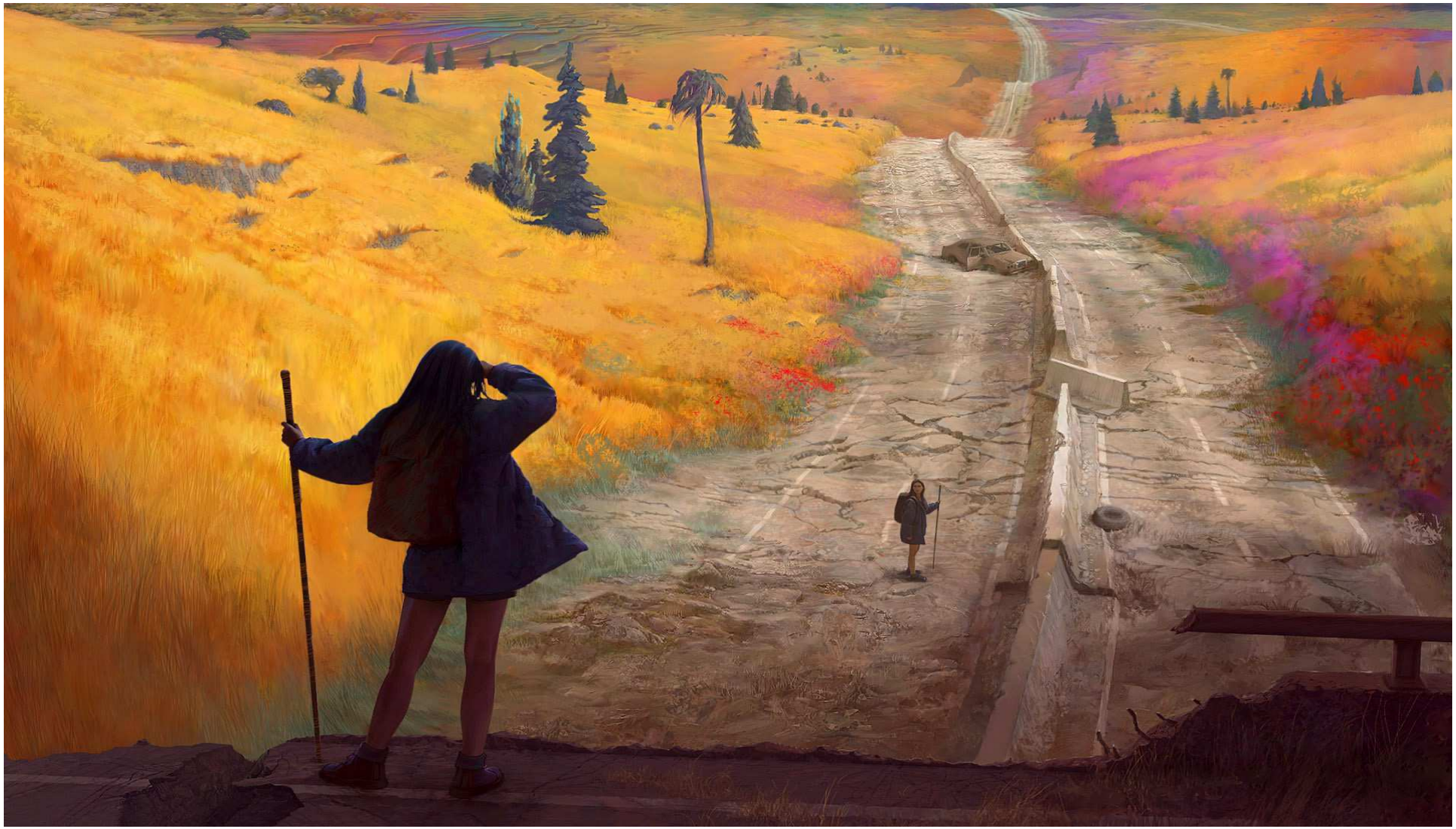
See more (14)...

**Quelles sont les conditions nécessaires à la mise en œuvre d'un travail scientifique de bonne qualité?**

# … Une réponse en 4 points

1. *Prendre un temps préalable de réflexion*
2. *Elaborer rigoureusement un protocole réalisable*
3. *Mettre en œuvre*
4. *Diffuser le résultat*

Idée → Protocole → Démarches administratives → Mise en œuvre → Communication des résultats



**Idée** → **Protocole** → **Démarches administratives** → **Mise en œuvre** → **Communication des résultats**

*A partir d'une situation/idée clinique…*

*… Se poser une question*

*<u>ET</u> avoir envie d'y donner une réponse*

*Sous-entendu : la réponse n'est pas connue*

# La question vaut-elle la peine?

Potts M, *BMJ* 2006;333:701–3

Idée | **Protocole** | Démarches administratives | Mise en œuvre | Communication des résultats

*Sur base d'une revue <u>exhaustive</u> de ce qui est connu*

Question de départ (clinique ⟹ scientifique)

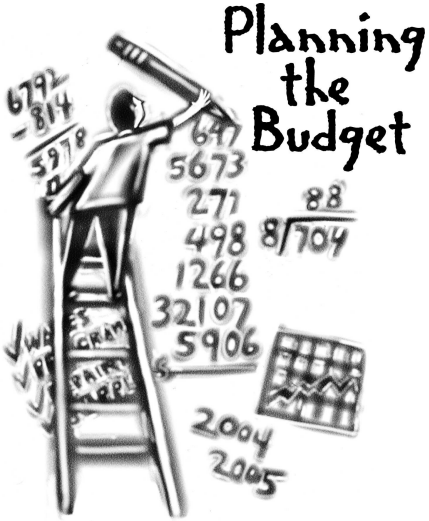
Choix des outcomes!!! (fct de la question) (APPEL A L'EQUIPE)

Choix des méthodes/outils d'évaluation

*Description précise des différentes étapes de l'étude (écrire!)*

*Démarches administratives*

*Estimation du temps et du coût*



# Hypothèse

$$\begin{cases} H0 : \sigma_1^2 = \sigma_2^2 \\ H1 : \sigma_1^2 \neq \sigma_2^2 \end{cases}$$

# Objectifs de l’étude

## *Deux types*

### Objectif principal

Il sera identifié sans ambiguïté

Le nombre de sujets nécessaires sera calculé pour répondre à l’objectif principal

La définition de l’objectif doit donner des précisions sur la forme clinique de la maladie évaluée et sur le critère utilisé pour mesurer l’objectif (critère de jugement).

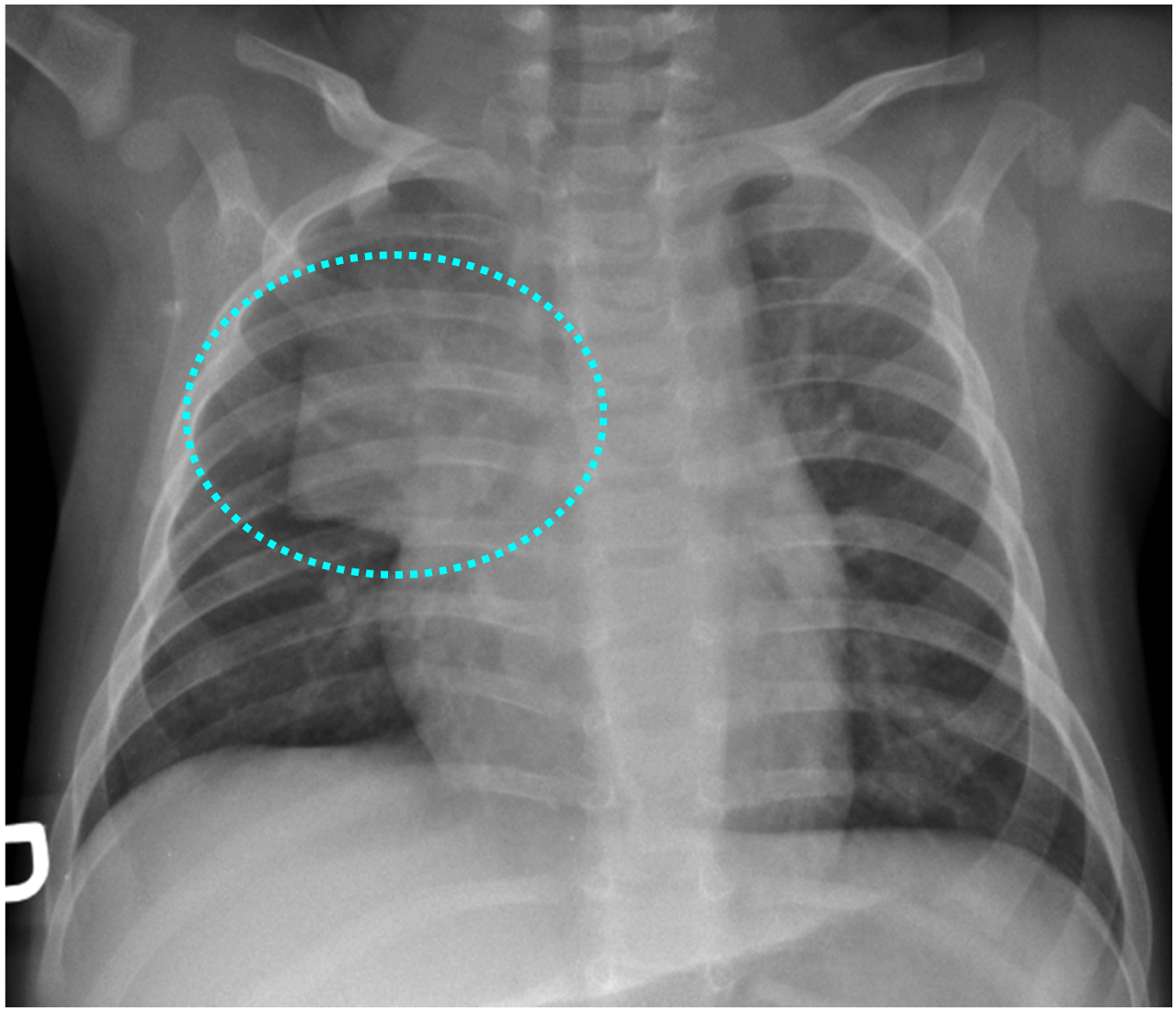
### Objectifs secondaires

Facultatifs

Clairement identifiés en tant que tels.

« …We see only what we look for, and we recognize only what we know… »

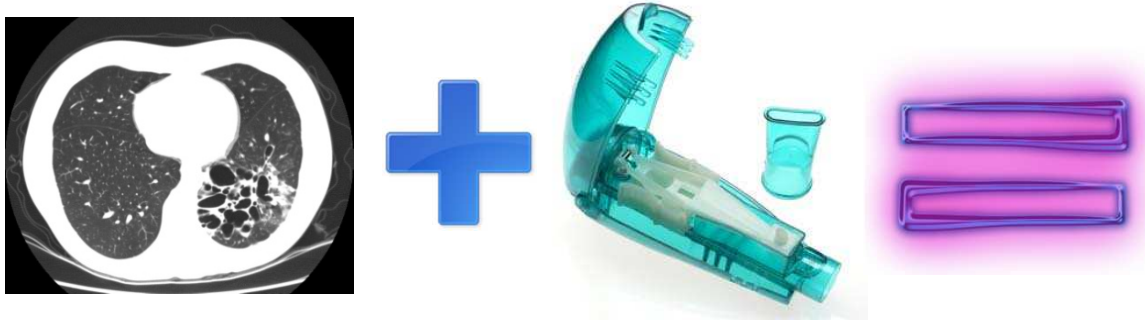
*Dr M. Sosman, 1957*



Eur Respir J 2009; 34: 1086–1092
DOI: 10.1183/09031936.00055509

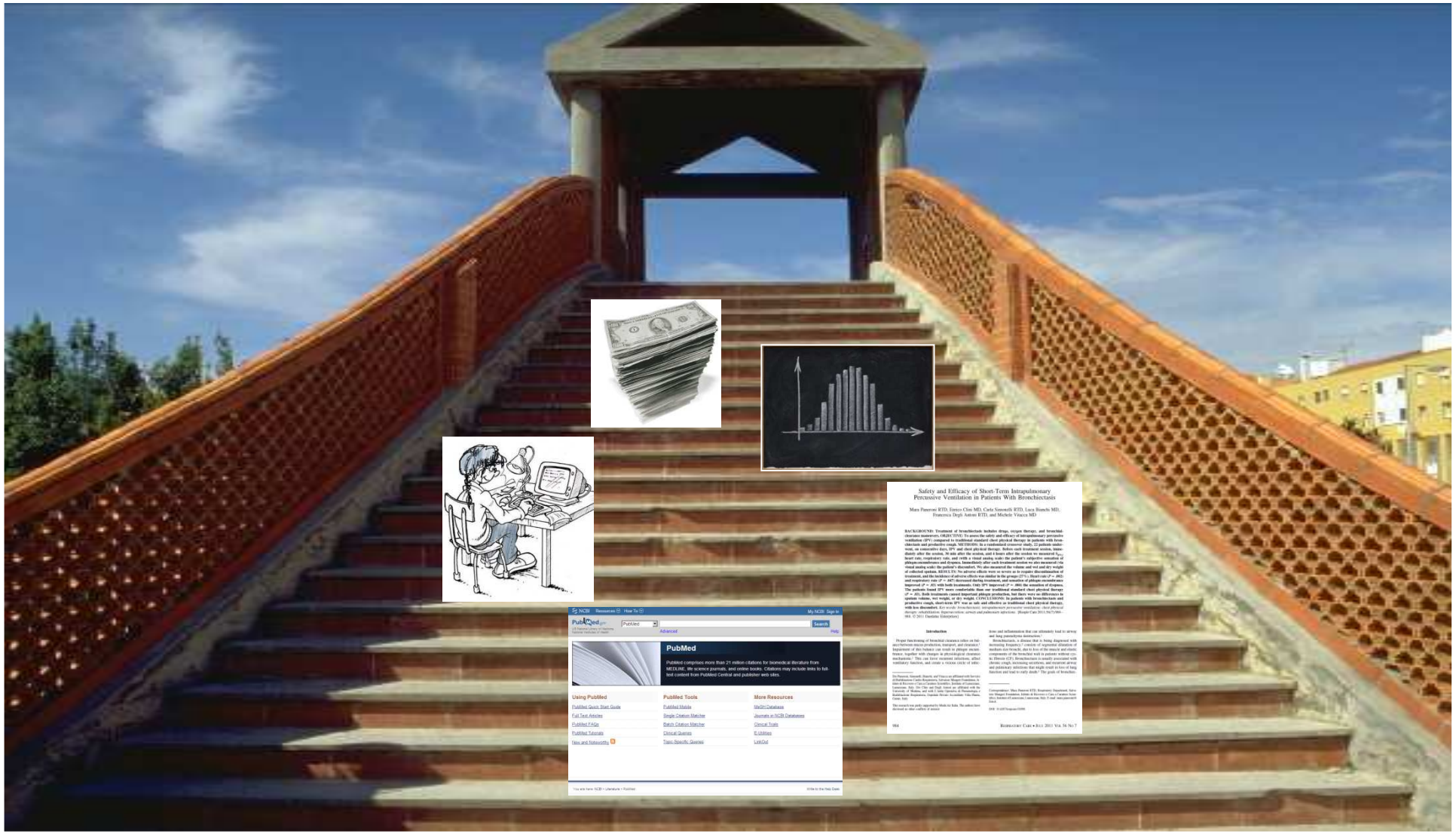

# A randomised crossover trial of chest physiotherapy in non-cystic fibrosis bronchiectasis

**M.P. Murray*, J.L. Pentland# and A.T. Hill***



| Outcome |
| --- |
| Total LCQ score improvement |
| 24-h sputum volume mL |
| $FEV_1$ L |
| FVC L |
| $FEF_{25-75\%}$ $L \cdot s^{-1}$ |
| MIP $cmH_2O$ |
| MEP $cmH_2O$ |
| Exercise capacity m |
| Sputum bacterial load $cfu \cdot mL^{-1}$ |
| Total SGRQ score improvement |
| Exacerbations n |

Idée | **Protocole** | Démarches administratives | Mise en œuvre | Communication des résultats

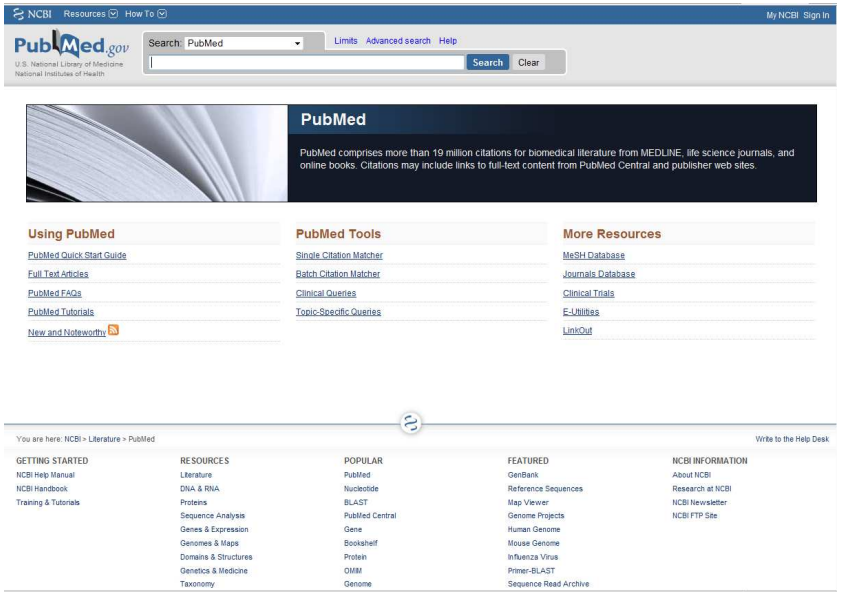


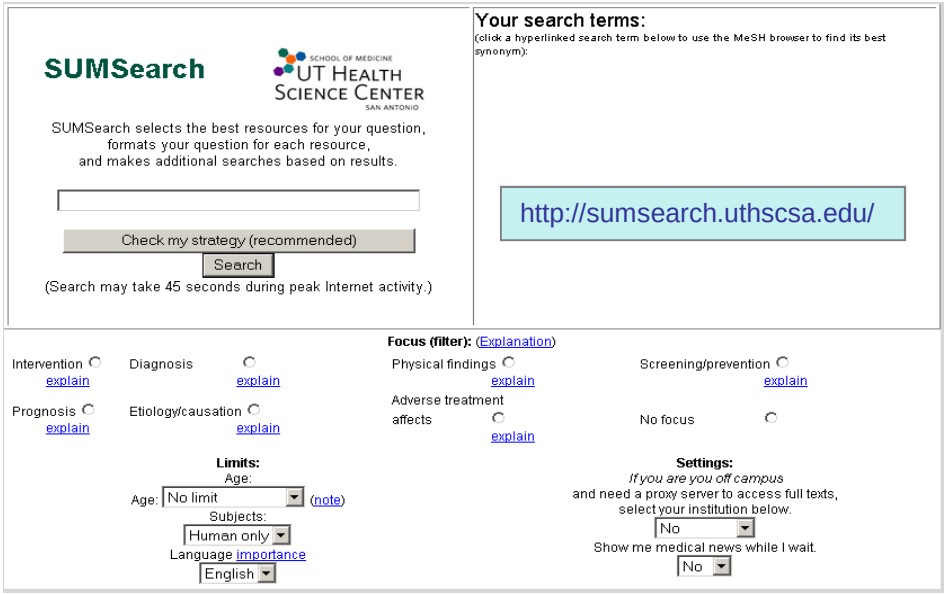
# Quoi, où et comment?

*Quoi* = *question posée*

*Où* = *choix de la base de données*

*Comment* = *détermination de la stratégie de recherche*


NCBI Resources How To
My NCBI Sign In
PubMed.gov
U.S. National Library of Medicine
National Institutes of Health
Search PubMed
Limits Advanced search Help
Search Clear
PubMed
PubMed comprises more than 19 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.
Using PubMed
PubMed Quick Start Guide
Full Text Articles
PubMed FAQs
PubMed Tutorials
New and Noteworthy
PubMed Tools
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Topic-Specific Queries
More Resources
MeSH Database
Journals Database
Clinical Trials
E-Utilities
LinkOut
You are here: NCBI > Literature > PubMed
Write to the Help Desk
GETTING STARTED
NCBI Help Manual
NCBI Handbook
Training & Tutorials
RESOURCES
Literature
DNA & RNA
Proteins
Sequence Analysis
Genes & Expression
Genomes & Maps
Domains & Structures
Genetics & Medicine
Taxonomy
POPULAR
PubMed
Nucleotide
BLAST
PubMed Central
Gene
Bookshelf
Protein
OMIM
Genome
FEATURED
GenBank
Reference Sequences
Map Viewer
Genome Projects
Human Genome
Mouse Genome
Influenza Virus
Primer-BLAST
Sequence Read Archive
NCBI INFORMATION
About NCBI
Research at NCBI
NCBI Newsletter
NCBI FTP Site


SUMSearch
SCHOOL OF MEDICINE
UT HEALTH
SCIENCE CENTER
SAN ANTONIO
SUMSearch selects the best resources for your question, formats your question for each resource, and makes additional searches based on results.
Check my strategy (recommended)
Search
(Search may take 45 seconds during peak Internet activity.)
Your search terms:
(click a hyperlinked search term below to use the MeSH browser to find its best synonym):
http://sumsearch.uthscsa.edu/
Focus (filter): (Explanation)
Intervention explain
Diagnosis explain
Physical findings explain
Screening/prevention explain
Prognosis explain
Etiology/causation explain
Adverse treatment affects explain
No focus
Limits:
Age:
Age: No limit (note)
Subjects:
Human only
Language importance
English
Settings:
If you are you off campus
and need a proxy server to access full texts,
select your institution below.
No
Show me medical news while I wait.
No

Comment?


PEDro
Physiotherapy Evidence Database
home
SEARCH
questions
tutorial
links
supporters
cebp
search
advanced search
Abstract & Title:
Therapy:
- No Selection -
Problem:
- No Selection -
Body Part:
- No Selection -
Subdiscipline:
- No Selection -
Method:
- No Selection -
Author/ Association:
Title Only:
Source:
Published since:
[yyyy]
New records added since:
[dd/mm/yyyy]
Score of at least:
(/10)
When Searching:
Match all search terms (AND)
Match any search term (OR)
Return:
20
records at a time.
Start Search
Reset Form
The oldest record on the database was published in 1929. The database was last updated on 5 November 2007 (this includes records added or amended since 8 October 2007). The next update is planned for Monday 3 December 2007. The total number of records on the database is 11,807.
If you know of a randomised controlled trial, systematic review or clinical practice guideline that is not indexed on PEDro, please click here. If you are the author of a randomised trial or systematic review in physiotherapy that is not indexed on PEDro we would appreciate a reprint.
Please mail reprints to us at this address.

# Quel est le niveau de mes articles?

## *Echelle PEDro*

- *Cote sur 10 points*
- *Plus le score se rapproche de 10, plus grande est la qualité de l'article*

| | | |
|---|---|---|
| 1. | eligibility criteria were specified | no ❑ yes ❑ where: |
| 2. | subjects were randomly allocated to groups (in a crossover study, subjects were randomly allocated an order in which treatments were received) | no ❑ yes ❑ where: |
| 3. | allocation was concealed | no ❑ yes ❑ where: |
| 4. | the groups were similar at baseline regarding the most important prognostic indicators | no ❑ yes ❑ where: |
| 5. | there was blinding of all subjects | no ❑ yes ❑ where: |
| 6. | there was blinding of all therapists who administered the therapy | no ❑ yes ❑ where: |
| 7. | there was blinding of all assessors who measured at least one key outcome | no ❑ yes ❑ where: |
| 8. | measures of at least one key outcome were obtained from more than 85% of the subjects initially allocated to groups | no ❑ yes ❑ where: |
| 9. | all subjects for whom outcome measures were available received the treatment or control condition as allocated or, where this was not the case, data for at least one key outcome was analysed by "intention to treat" | no ❑ yes ❑ where: |
| 10. | the results of between-group statistical comparisons are reported for at least one key outcome | no ❑ yes ❑ where: |
| 11. | the study provides both point measures and measures of variability for at least one key outcome | no ❑ yes ❑ where: |

# Plan expérimental

*Population*

- Définir la population d’où provient l’échantillon
- Définir l’échantillon
  - Spécifique au type d'étude réalisé
  - Mode de recrutement des sujets
  - Clé de répartition (ordinateur, tirage au sort,…)
  - Randomisation
  - Critère de maladie/non maladie
  - Critère d'exposition/non exposition à un facteur
  - Critères d'inclusion et de non inclusion des sujets

# *Calcul de l'échant*

## Updating the Minimal Important Difference for Six-Minute Walk Distance in Patients With Chronic Obstructive Pulmonary Disease

*Anne E. Holland, PhD, Catherine J. Hill, PhD, Tshepo Rasekaba, BPhysio, Annemarie Lee, PhD, Matthew T. Naughton, MD, Christine F. McDonald, PhD*

ABSTRACT. Holland AE, Hill CJ, Rasekaba T, Lee A, Naughton MT, McDonald CF. Updating the minimal important difference for six-minute walk distance in patients with chronic obstructive pulmonary disease. Arch Phys Med Rehabil 2010; 91:221-5.

**Objective:** To establish the minimal important difference (MID) for the six-minute walk distance (6MWD) in persons with chronic obstructive pulmonary disease (COPD).

**Design:** Analysis of data from an observational study using distribution- and anchor-based methods to determine the MID in 6MWD.

**Setting:** Outpatient pulmonary rehabilitation program at 2 teaching hospitals.

**Participants:** Seventy-five patients with COPD (44 men) in a stable clinical state with mean age 70 years (SD 9y), forced expiratory volume in one second 52% (SD 21%) predicted and baseline walking distance 359 meters (SD 104m).

**Interventions:** Not applicable.

**Main Outcome Measures:** Participants completed the six-minute walk test before and after a 7-week pulmonary rehabilitation program. Participants and clinicians completed a global rating of change score while blinded to the change in 6MWD.

**Results:** The mean change in 6MWD in participants who reported themselves to be unchanged was 17.7 meters, compared with 60.2 meters in those who reported small change and 78.4 meters in those who reported substantial change ($P$=.004). Anchor-based methods identified an MID of 25 meters (95% confidence interval 20–61m). There was excellent agreement with distribution-based methods (25.5–26.5m, $\kappa$=.95). A change in 6MWD of 14% compared with baseline also represented a clinically important effect; this threshold was less sensitive than for absolute change (sensitivity .70 vs .85).

**Conclusions:** The MID for 6MWD in COPD is 25 meters. Absolute change in 6MWD is a more sensitive indicator than percentage change from baseline. These data support the use of 6MWD as a patient-important outcome in research and clinical practice.

**Key Words:** Exercise test; Outcome assessment; Pulmonary disease, chronic obstructive; Rehabilitation.



THE SIX-MINUTE WALK distance is an important measure of functional exercise capacity in people with COPD. The distance walked is associated with clinical outcomes such as hospitalization and mortality.[1,2] Changes in 6MWD are used to evaluate the efficacy of therapeutic interventions including pulmonary rehabilitation,[3] surgery,[4] and pharmaceutical management.[5] In order to make treatment decisions based on the 6MWD, it is important to understand whether an observed change in walking distance over time represents a clinically important effect.

The MID is defined as "the smallest difference in score in the outcome of interest that informed patients or informed proxies perceive as important and which would lead the patient or clinician to consider a change in the management."[6] The advantage of defining an MID is that it can be used to determine whether important changes in health status have occurred in individual patients. Recently, the existence of an MID for the 6MWD in patients with COPD has been questioned. A retrospective study using clinical trial data found a poor correlation between change in 6MWD and patient-reported change on quality of life questionnaires.[7] The authors conclude that the 6MWD may not be an outcome of importance to patients and that no MID exists. However, walking tests and quality of life questionnaires may measure different constructs in COPD,[8] which could explain the inability of this methodology to identify an MID for walking distance.

Methods for determining the MID can be classified as anchor-based or distribution-based. Anchor-based methods involve comparing a patient's change score to another measure of clinically relevant change.[9] This approach recognizes the importance of patients' perspective when assessing change in their status. Distribution-based methods, such as the SEM[10] and the effect size,[11] are built on the statistical and psychometric properties of the measure in a population. Concurrent use of

# Quelques notions…

## Biais d'attrition

Différences entre les groupes initiaux et les groupes finaux

Exemple : 2 groupes de n=100. Groupe A : 50 drop-out, 25 améliorations, 25 stagnations – Groupe B : 0 drop-out, 25 améliorations, 75 stagnations. Si on n'analyse pas les drop-out, 50 % d'amélioration dans le Gr A contre 25 % dans le Gr B. En revanche si on analyse en intention de traiter…

## Biais de confusion

Confusion entre les effets du traitement et les conséquences de la maladie (groupe-contrôle)

## Biais de sélection

Différence entre le groupe traité et le groupe témoin

## Biais de suivi et d'évaluation

Différences de prise en charge ou d'évaluation entre groupes


| Ethique | Budget / Bourses | Enregistrement | Assurance |
|---|---|---|---|
| • Approbation par un CE | • Financement<br>• Subsides | • ClinicalTrial<br>• EudraCT | • Protection<br>• Responsabilité de l'expérimentateur |

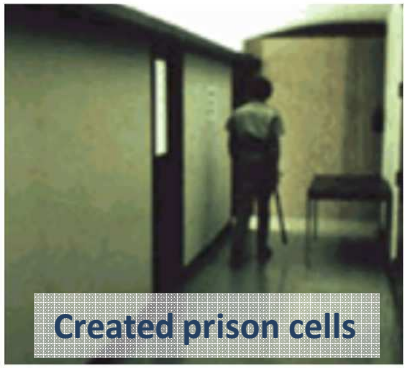

# Ethique et recherche clinique

# Stanford Prison Experiment


Arrestation of student


Go to jail

Calling for volunteers


Created prison cells


Humiliation

Philip Zimbardo fut professeur à Stanford de 1968 jusqu'à sa retraite en 2003. Il mena cette étude en 1971…


Free to be guard


Rebellion


Visit of parents

*Les sujets avaient été choisis pour leur stabilité. Ils se prirent au jeu. L'étude s'arrêta après 6j au lieu de 15j… Un seul sujet exigea de sortir de l'étude!!!*

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

- Déterminer le but de l'étude et la faisabilité
- Evaluer le nombre de sujets nécessaires
- Rédaction précise de la méthode utilisée
- Préciser l'intérêt clinique

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

- Protocole complet
- Protocole court
- Formulaires d'information et de consentement (bilingue)
- Formulaire de demande

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

- Adjoindre l'assurance en RC
- Réunion des membres du comité d'éthique
- Personnes d'horizons divers

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

- Réponse envoyée endéans les 28 jours
- Comprend des demandes d'amendement

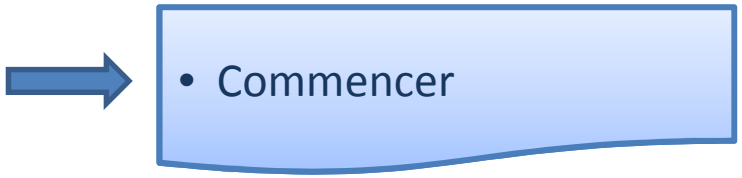
# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

- Corriger les items
- Envoyer une lettre de réponse

# Etapes de la démarche éthique

- Conception du protocole
- Création des différents documents
- Envoi des documents au comité d'éthique
- Réception de la réponse et de la demande éventuelle de correction
- Envoi des corrections
- Approbation définitive

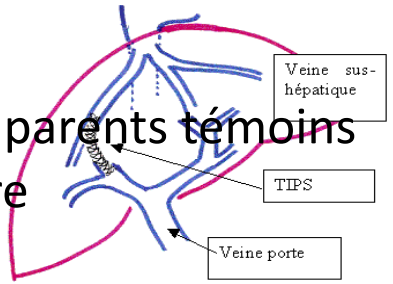


# Ethique vs Droit de l'homme

Ethique médicale
*Opérer et transfuser*

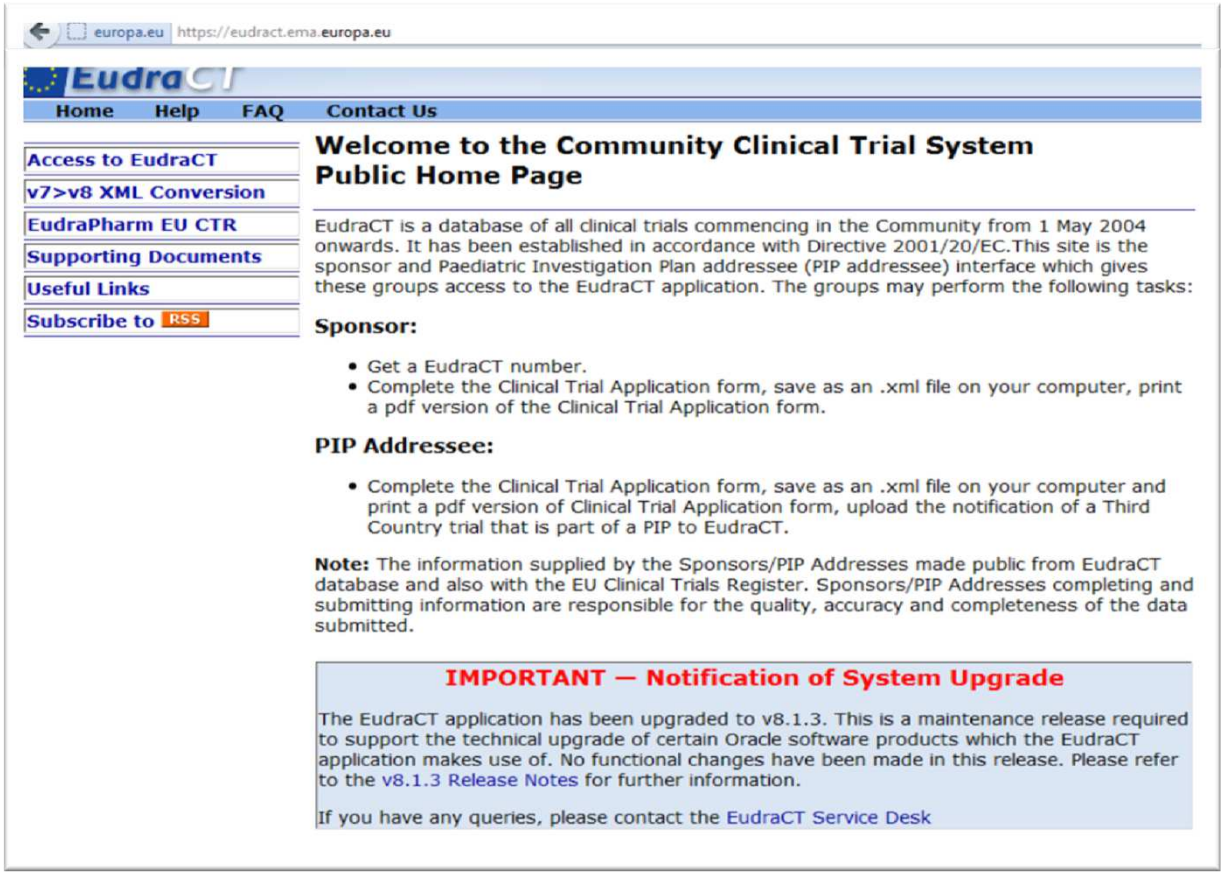
Droits de l'Homme
*Ne pas donner de sang*

- Histoire : Violetta C., 11 ans, atteinte de mucoviscidose, parents témoins de Jehovah. Un jour elle a eu besoin d'une tips pour vivre



# EudraCT

*Base de données des essais cliniques interventionnels portant sur des médicaments, soumis au CE et à l'autorité compétente (Directive 2001/20/CE – 01/05/2004)*




- Obtenir un numéro EudraCT
- Formulaire de demande d'autorisation d'essai clinique

# ClinicalTrials

**ClinicalTrials.gov**
A service of the U.S. National Institutes of Health

ClinicalTrials.gov is a registry and results database of federally and privately supported clinical trials conducted in the United States and around the world. ClinicalTrials.gov gives you information about a trial's purpose, who may participate, locations, and phone numbers for more details. This information should be used in conjunction with advice from health care professionals.
Read more...

- **Search for Clinical Trials**

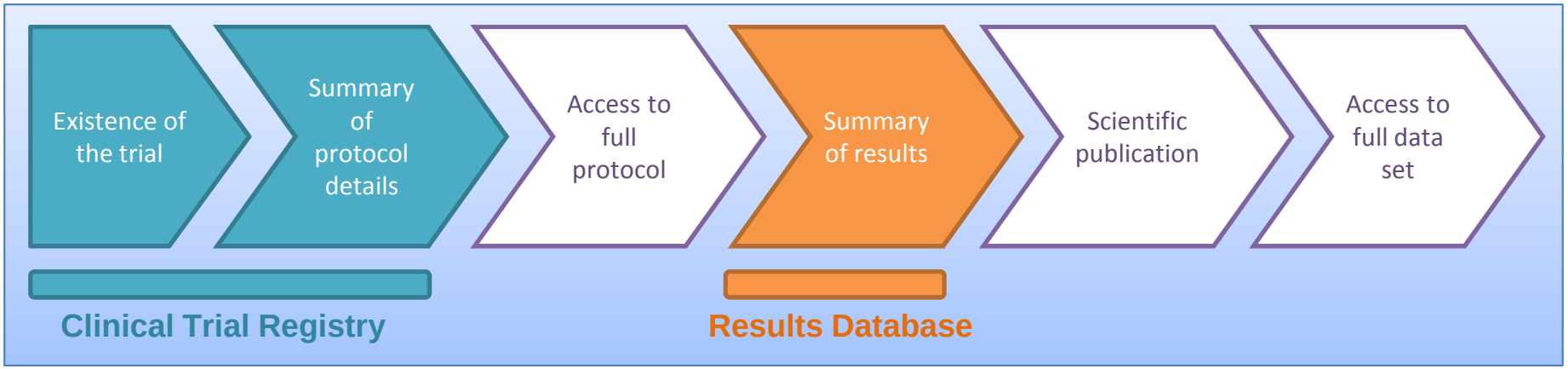
  Find trials for a specific medical condition or other criteria in the ClinicalTrials.gov registry. ClinicalTrials.gov currently has 124,324 trials with locations in 179 countries.

- **Investigator Instructions**

  Get instructions for clinical trial investigators/sponsors about how to register trials in ClinicalTrials.gov. Learn about mandatory registration and results reporting requirements and US Public Law 110-85 (FDAAA).

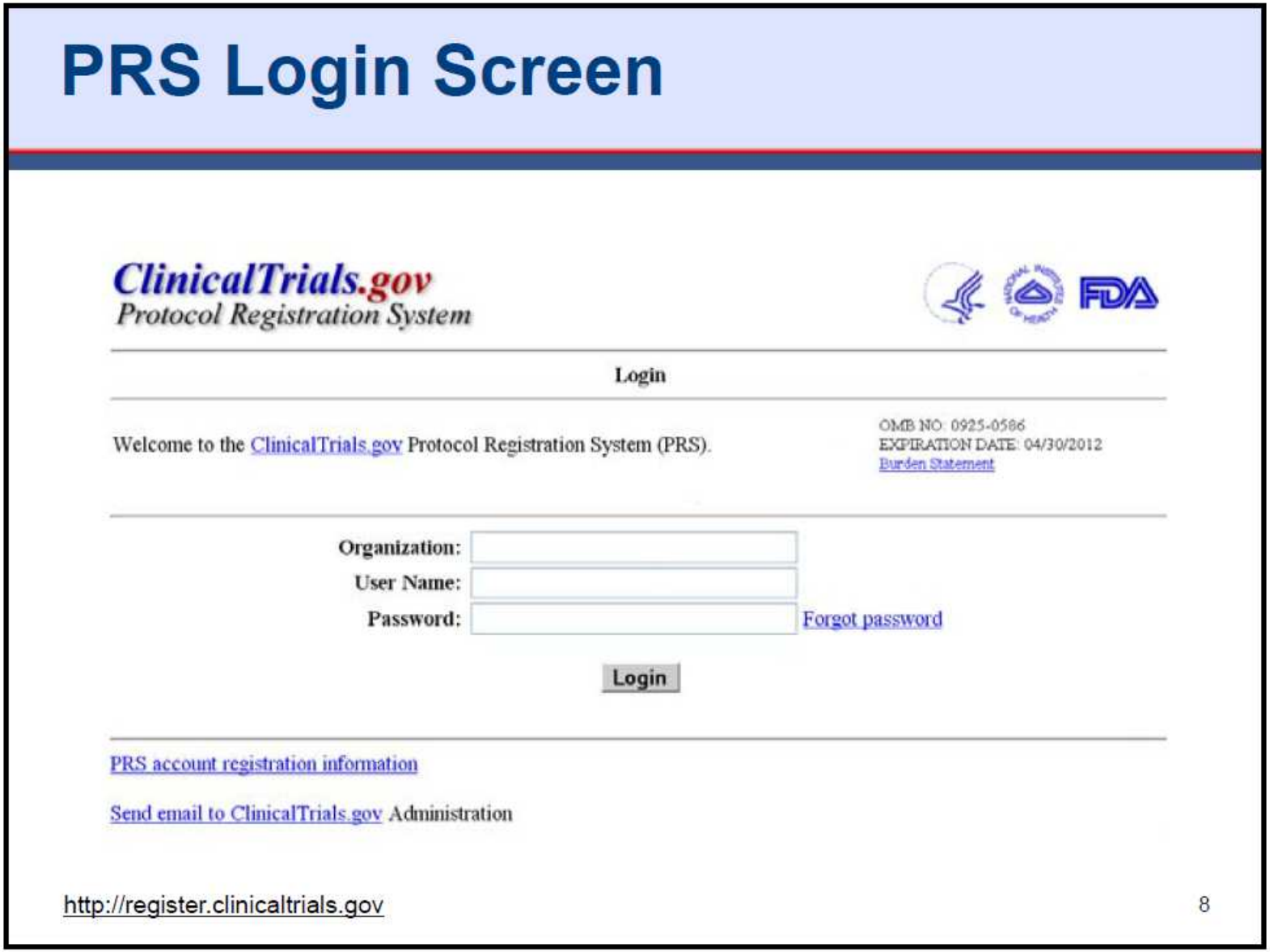
- **Background Information**

  Learn about clinical trials and how to use ClinicalTrials.gov, or access other consumer health information from the US National Institutes of Health.



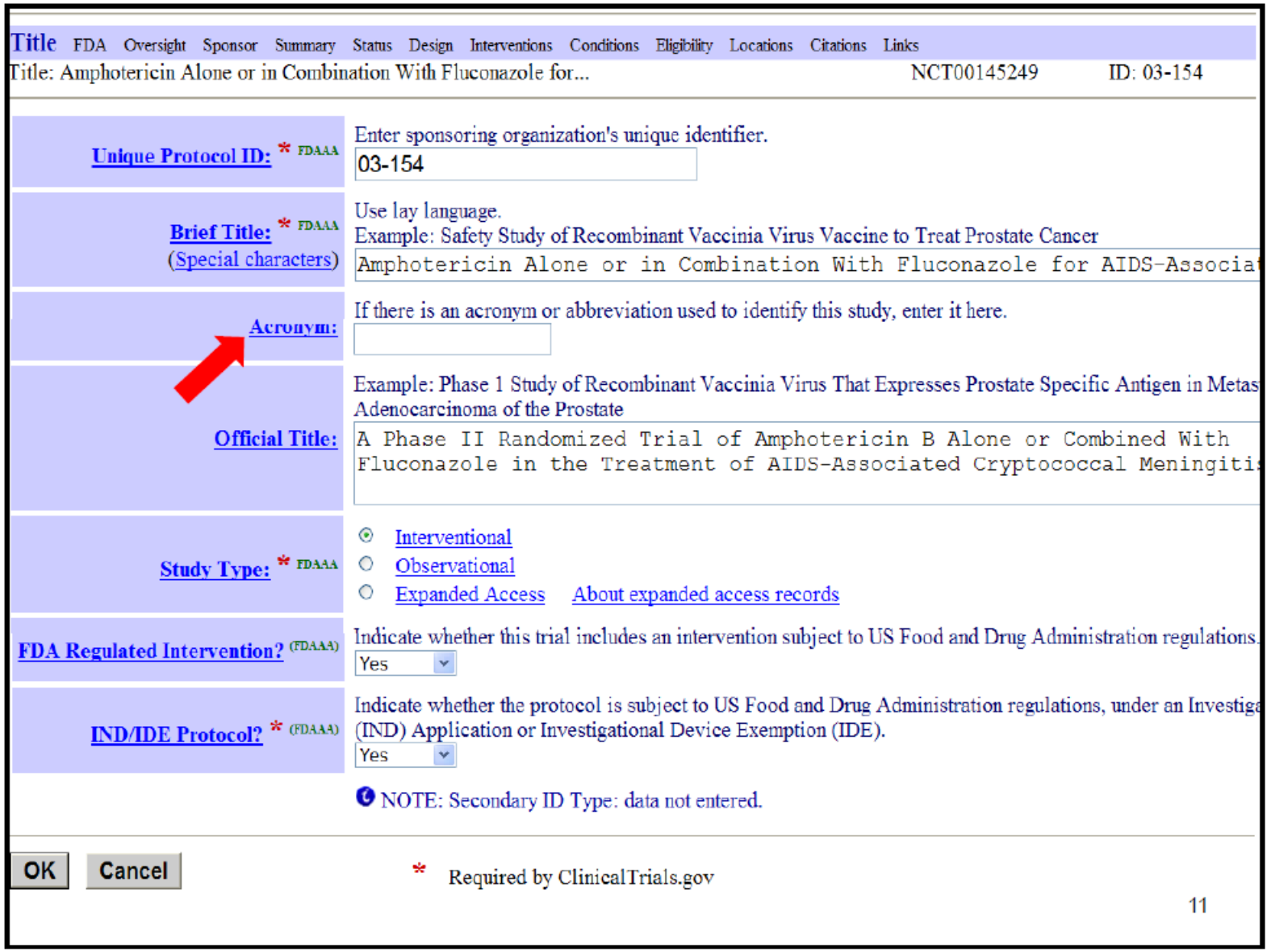
# ClinicalTrials : enregistrement

## PRS Login Screen




http://register.clinicaltrials.gov

# ClinicalTrials : enregistrement



Title FDA Oversight Sponsor Summary Status Design Interventions Conditions Eligibility Locations Citations Links

Title: Amphotericin Alone or in Combination With Fluconazole for... NCT00145249 ID: 03-154

**Unique Protocol ID:** * FDAAA
Enter sponsoring organization's unique identifier.
03-154

**Brief Title:** * FDAAA
(Special characters)
Use lay language.
Example: Safety Study of Recombinant Vaccinia Virus Vaccine to Treat Prostate Cancer
Amphotericin Alone or in Combination With Fluconazole for AIDS-Associat

**Acronym:**
If there is an acronym or abbreviation used to identify this study, enter it here.

**Official Title:**
Example: Phase 1 Study of Recombinant Vaccinia Virus That Expresses Prostate Specific Antigen in Metas
Adenocarcinoma of the Prostate
A Phase II Randomized Trial of Amphotericin B Alone or Combined With
Fluconazole in the Treatment of AIDS-Associated Cryptococcal Meningiti

**Study Type:** * FDAAA
- Interventional
- Observational
- Expanded Access About expanded access records

**FDA Regulated Intervention?** (FDAAA)
Indicate whether this trial includes an intervention subject to US Food and Drug Administration regulations.
Yes

**IND/IDE Protocol?** * (FDAAA)
Indicate whether the protocol is subject to US Food and Drug Administration regulations, under an Investig
(IND) Application or Investigational Device Exemption (IDE).
Yes

NOTE: Secondary ID Type: data not entered.

OK Cancel

* Required by ClinicalTrials.gov

# ClinicalTrials : études en cours

**ClinicalTrials.gov**
A service of the U.S. National Institutes of Health

Home

List Results | Refine Search | Results by Topic | Results on Map | Search Details

**Found 834 studies with search of: physiotherapy**

Hide studies that are not seeking new volunteers.
Hide studies with unknown recruitment status.

| Rank | Status | Study |
|---|---|---|
| 1 | Active, not recruiting | Physiotherapy Treatment for Patients Suffering From Head and Neck Cancer<br>Conditions: Cancer Cavi Oris; Cancer Oropharynges; Radiotherapy; Trismus<br>Intervention: Other: physiotherapy |
| 2 | Completed | Evaluation of Functional Rehabilitation in Patients Undergoing Physiotherapy After Total Hip Arthroplasty<br>Condition: Osteoarthritis, Hip<br>Interventions: Procedure: THA Physiotherapy; Procedure: No physiotherapy after THA |
| 3 | Unknown † | Specialized Physiotherapy Program for Cervical Dystonia<br>Condition: Cervical Dystonia<br>Intervention: Other: Physiotherapy |
| 4 | Completed | Climate Influence on Physiotherapy in Multiple Sclerosis<br>Condition: Multiple Sclerosis<br>Intervention: Other: Physiotherapy |
| 5 | Completed | Evaluation of Chest Physiotherapy for Acute Bronchiolitis in Toddlers (BRONKINOU)<br>Condition: Viral Bronchiolitis<br>Interventions: Procedure: Chest Physiotherapy with Forced Expiratory Technique; Procedure: Nasopharyngeal Aspiration |
| 6 | Terminated | Chest Physiotherapy on Immediate Postoperative in Patients Submitted to High Abdominal Surgery<br>Conditions: Abdominal Surgery; Spirometry; Chest Physiotherapy<br>Intervention: Other: chest physiotherapy |
| 7 | Recruiting | Effectiveness of Physiotherapy Interventions for Patients With Parkinson's Disease<br>Condition: Parkinson Disease<br>Interventions: Other: Physiotherapy Interventions; Other: Education Classes |
| 8 | Unknown † | A Comparison of Kneipp Hydrotherapy With Conventional Physiotherapy in the Treatment of Osteoarthritis of the Hip or Knee: Protocol of a Prospective Randomised Controlled Clinical Trial<br>Condition: Osteoarthritis of the Hip or Knee<br>Interventions: Procedure: Physiotherapy; Procedure: Affusion; Procedure: Affusion/ Physiotherapy |
| 9 | Not yet recruiting | Active MOBility Early After Stroke : What Should be the Best Physiotherapy Early After Stroke ?<br>Condition: Rehabilitation<br>Interventions: Procedure: standard physiotherapy; Procedure: experimental physiotherapy |

Idée → Protocole → Démarches administratives → **Mise en œuvre** → Communication des résultats

Idée | Protocole | Démarches administratives | Mise en œuvre | Communication des résultats

World Physical Therapy 2011
16th International WCPT Congress
20-23 June 2011 Amsterdam Holland
www.wcpt.org/congress
World Confederation for Physical Therapy


[ ... ]

Idée | Protocole | Démarches administratives | Mise en œuvre | **Communication des résultats**

**[Poster Board # L1] The Effect Of Different Exercise Modalities On Dyspnea And Leg Fatigue In Healthy Subjects, [Publication Page: A4848]**

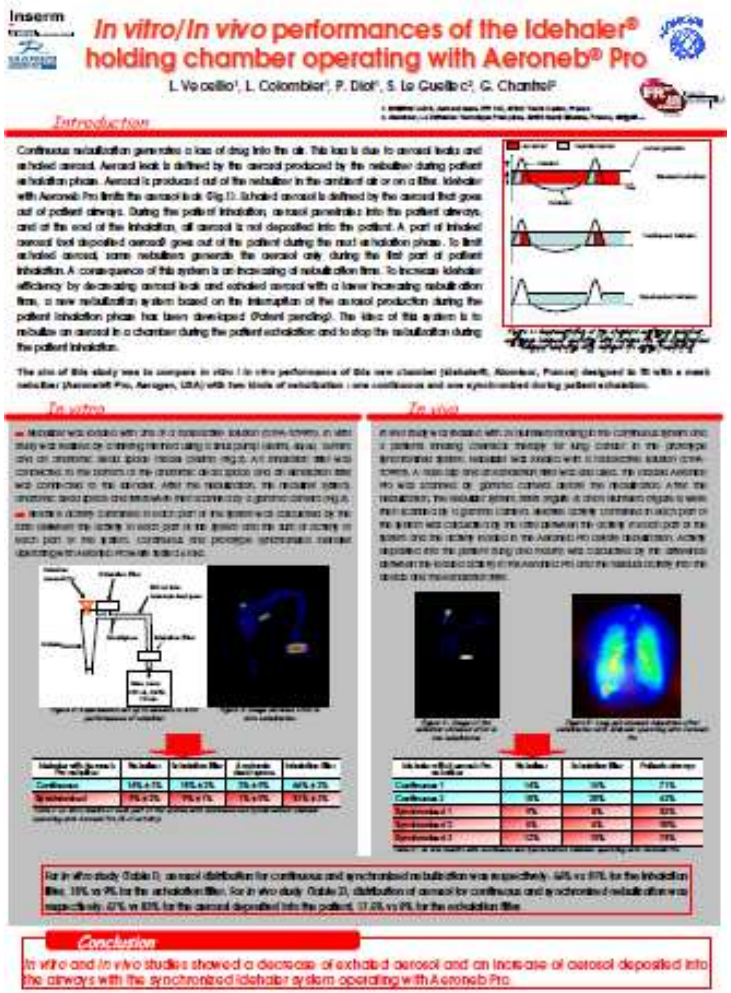
P. Sharma, M.Sc. Human Physiology, N.R. Morris, PhD, L. Adams, PhD
Gold Coast, QLD/AU

**Rationale:** Dyspnea and leg fatigue are the principal symptoms limiting exercise in humans, becoming especially problematical in cardiorespiratory disease. These symptoms are regarded as arising respectively from the respiratory system and from peripheral muscles, and generally it is assumed that their intensities can be rated independently of one another during an exercise bout. This study examined the following hypotheses in healthy subjects: 1. at a given level of exercise-induced ventilation, ratings of dyspnea are independent of exercise modalities involving different patterns of leg muscle activation; 2. at a given level of oxygen consumption, ratings of leg fatigue are greater when a greater proportion of the work is being done by the leg muscles.

**Methodology:** Following familiarization, 13 healthy subjects (29.5±7.6 years; 8 males) performed six 5-min exercise tests on 3 separate days, randomized among: 2 steep slope treadmill tests (speed ~4kph; grade 25%), 2 fast speed treadmill tests (speed ~7kph; grade ~12%) and 2 bike tests. The two tests per day were separated by 30 min. Oxygen consumption (VO2, L/min), ventilation (VE,L/min), and respiratory rate (fR) were measured breath by breath via a facemask/metabolic cart (Cosmed). Heart rate (HR) was measured continuously as was either intensity of dyspnea or leg fatigue using a 0 to 10 numerical scale with 0.5 resolution.

**Results:** Data were averaged over 30-second intervals and analysed using repeated measures ANOVA. Mean (SD) values for steep treadmill vs. fast treadmill vs. bike were: VO2 2.16 (0.37) vs. 2.00 (0.39) vs. 2.00 (0.41); VE50.1 (10.6) vs. 51.3 (10.8) vs. 50.9 (10.8); HR 140 (11) vs. 136 (14) vs. 139 (11); fR 24.4 (5.5) vs. 25.0 (5.8) vs. 24.3 (4.4); dyspnea 3.0 (1.3) vs. 3.1(1.6) vs. 3.5 (1.8) and leg fatigue 3.4 (1.5) vs. 3.2 (1.6) vs. 3.5 (1.3) (see figure). All variables were not statistically significantly different among the three conditions ($p>0.05$).

**Conclusion:** These findings support the hypothesis that in healthy subjects, at equivalent levels of cardiopulmonary stress, perceived dyspnea intensity reflects the level of respiratory drive independent of exercise modality. The findings do not support the hypothesis that for equivalent cardiorespiratory stress perceived leg fatigue reflects the intensity or pattern of leg muscle activation.



Idée → Protocole → Démarches administratives → Mise en œuvre → Communication des résultats

Idée → Protocole → Démarches administratives → Mise en œuvre → **Communication des résultats**

# Conclusions

*Faire de la recherche est accessible à tous!!!!*

*Travailler en équipe et se faire aider… Indispensable*


Merci pour votre attention!