

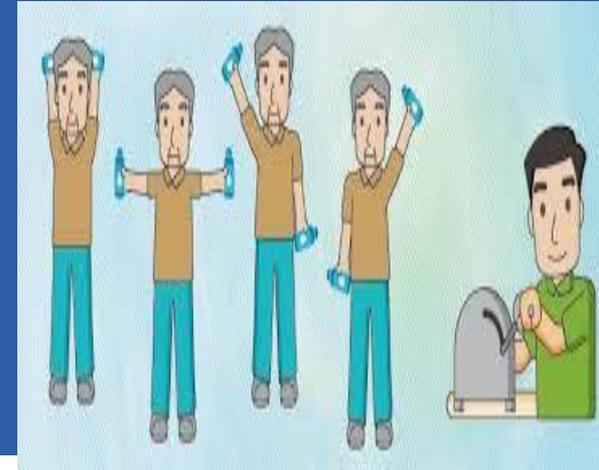
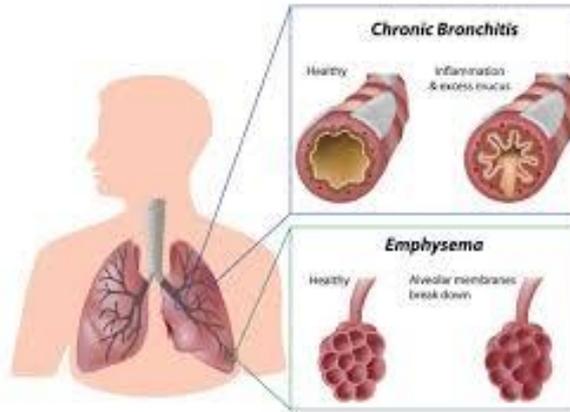
實證競賽報告

常見支氣管擴張劑

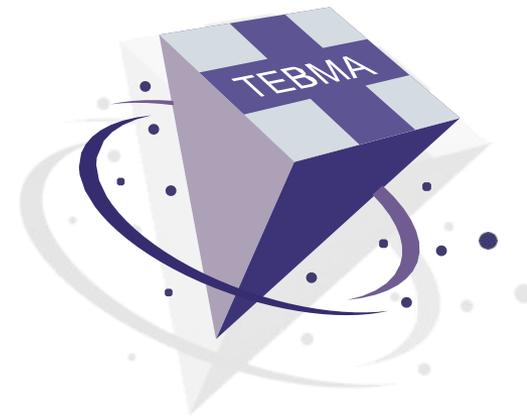


台中榮總藥劑科製劑組製作 2019/05

Chronic Obstructive Pulmonary Disease (COPD)



團隊：簡敏如、黃郁惠、杜家宏



情境摘要

- ◆ 一群**45-60歲中年**，**輕度至中度慢性阻塞性肺疾病(COPD)**，肺功能**FEV1預測值50%-80%**，醫療團隊討論應先以**肺康復治療(包括運動訓練、呼吸肌訓練、教育)**作為初期主要治療。與直接以**長效支氣管擴張劑**起始治療相比
- ◆ 對於這樣病人族群，肺康復治療相比長效支氣管擴張劑，是否能在**降低急性加重次數**、**改善生活品質**、**延緩肺功能惡化**方面取得較佳成效?並評估於台灣教學醫院內部實施的可行性

背景資料

LESS SYMPTOMATIC PATIENTS AT LOW RISK OF EXACERBATION (GROUP A)

Choice of long-acting bronchodilator agent — In addition to short-acting bronchodilator rescue therapy, we suggest that Group A patients use a long-acting bronchodilator ([🔗 algorithm 1](#)). Long-acting bronchodilators have been shown to be effective even in patients with mild symptoms and low baseline exacerbation rates.

Pulmonary rehabilitation — Comprehensive pulmonary rehabilitation that includes exercise, promotion of healthy behaviors, education, adherence to medication, and psychological support has been shown to improve exercise capacity, improve quality of life, decrease dyspnea, and decrease health care utilization. In addition, it may be helpful following hospitalizations to reduce mortality [20]. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) strategy suggests participation in pulmonary rehabilitation as part of a comprehensive COPD management strategy, particularly for patients with persistent dyspnea ([🔗 algorithm 1](#)) [1]. (See "Pulmonary rehabilitation".)

背景資料

- ◆ 一群**45-60歲中年**，**輕度至中度慢性阻塞性肺疾病(COPD)**，肺功能**FEV1預測值50%-80%**，醫療團隊討論應先以**肺康復治療(包括運動訓練、呼吸肌訓練、教育)**作為初期主要治療。與直接以**長效支氣管擴張劑**起始治療相比
- ◆ 對於這樣病人族群，肺康復治療相比長效支氣管擴張劑，是否能在**降低急性加重次數、改善生活品質、延緩肺功能惡化**方面取得較佳成效?並評估於台灣教學醫院內部實施的可行性

臨床問題 1

	PICO關鍵字	MeSH同義字	中文關鍵字
P	Chronic Obstructive Pulmonary Disease		慢性阻塞 性肺疾病
I	pulmonary rehabilitation		肺康復治 療
C	long-acting bronchodilators		長效支氣管擴張劑
O	Hospitalation	moderate COPD	

臨床問題 2

	PICO關鍵字	MeSH同義字	中文關鍵字
P	COPD		慢性阻塞性肺疾病
I	pulmonary rehabilitation		肺康復治療
C	LABA、LAMA		長效支氣管擴張劑
O	Hospitalation	moderate COPD	

Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case-control studies, or poor quality prognostic cohort study**	n/a
Does this intervention help? (Treatment Benefits)	Systematic review of randomized trials or <i>n</i> -of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, <i>n</i> -of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	Systematic review of randomized trials or <i>n</i> -of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

* Level may be graded down on the basis of study quality, imprecision, indirectness (study PICO does not match questions PICO), because of inconsistency between studies, or because the absolute effect size is very small; Level may be graded up if there is a large or very large effect size.

** As always, a systematic review is generally better than an individual study.

How to cite the Levels of Evidence Table

OCEBM Levels of Evidence Working Group*. "The Oxford 2011 Levels of Evidence".

Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=5653>

* OCEBM Table of Evidence Working Group = Jeremy Howick, Iain Chalmers (James Lind Library), Paul Glasziou, Trish Greenhalgh, Carl Heneghan, Alessandro Liberati, Ivan Moschetti, Bob Phillips, Hazel Thornton, Olive Goddard and Mary Hodgkinson

Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances	Case-control or random sample*	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-conservative studies, or studies without consistent applied reference standard**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case-control studies, or poor quality prognostic cohort study**	n/a
Does this intervention help? (Treatment Benefits)	Systematic review of randomized trials or <i>n-of-1</i> trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, <i>n-of-1</i> trial with the patient raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (not including surveillance) provided there are sufficient numbers to rule out a common harm. (For long term harms the duration of follow-up must be sufficient.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	Systematic review of randomized trials or <i>n-of-1</i> trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study*	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

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	Free-Text		Synonyms
P	Chronic Obstructive Pulmonary Disease		慢性阻塞性肺疾病
I	pulmonary rehabilitation		肺康復治療
C	long-acting bronchodilators		長效支氣管擴張劑
O	Hospitalation		

Ask

問題設計： 治療型 傷害型 診斷型 篩檢型 預後型

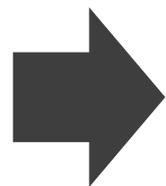
治療型問題，建議選讀之最佳證據等級Level I 的文獻為：

Systematic review of RCT

報告大綱



情境摘要
背景搜尋



1A - 提出問

題

2A - 查詢研

究

3A - 嚴謹評

讀

4A - 結合臨

2A-查詢研究



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#44	...	>	Search: (((chronic obstructive pulmonary disease) AND (pulmonary rehabilitation or exercise training)) AND (long-acting bronchodilator)) AND (hospitalization) Filters: in the last 5 years, Free full text, Meta-Analysis	2	22:52:32

2A-查詢研



(((chronic obstructive pulmonary disease) AND (pulmonary rehabilitation or

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2 results

Page 1 of 1

RESULTS BY YEAR



PUBLICATION DATE

- 1 year
- 5 years
- 10 years
- Custom Range

TEXT AVAILABILITY

- Abstract
- Free full text
- Full text

ARTICLE ATTRIBUTE

Filters applied: in the last 5 years, Free full text, Meta-Analysis. [Clear all](#)

1 **The efficacy and safety of additional treatment with short-acting muscarinic antagonist combined with long-acting beta-2 agonist in stable patients with chronic obstructive pulmonary disease: A systematic review and meta-analysis.**

Cite

Tanimura K, Sato S, Fujita Y, Yamamoto Y, Hajiuro T, Horita N, Kawayama T, Muro S. Chron Respir Dis. 2023 Jan-Dec;20:14799731231166008. doi: 10.1177/14799731231166008. PMID: 36967224 [Free PMC article.](#)

BACKGROUND: The rationale for additional treatment with short-acting bronchodilators combined with long-acting bronchodilators for patients with chronic obstructive pulmonary disease (COPD) is not adequately studied. METHODS ...

2 **Exercise capacity and physical activity in COPD patients treated with a LAMA/LABA combination: a systematic review and meta-analysis.**

Cite

Miravittles M, García-Rivero JL, Ribera X, Galera J, García A, Palomino R, Pomares X. Respir Res. 2022 Dec 15;23(1):347. doi: 10.1186/s12931-022-02268-3. PMID: 36522735 [Free PMC article.](#)

BACKGROUND: Persistent airflow limitation and dyspnoea may reduce chronic obstructive pulmonary disease (COPD) patients exercise capacity and physical activity, undermining their physical status and quality of life. Long-acting mus ...

選擇文獻

RESEARCH

Open Access

Exercise capacity and physical activity in COPD patients treated with a LAMA/LABA combination: a systematic review and meta-analysis



Marc Miravittles^{1*}, Juan Luís García-Rivero², Xavier Ribera³, Jordi Galera⁴, Alejandra García⁵, Rosa Palomino⁵ and Xavier Pomares⁶



Thieme

選擇理由

Original Article: Endocrine

Thieme

Antidiabetic Efficacy and Safety of GLP-1 Receptor Agonists in Overweight/Obese Patients Without Diabetes: A Systematic Review and Meta-Analysis

1. 符PICO

Authors

Xiaomeng Cao, Zhibo Wang, Xuehui Li, Huijuan Zhu, Hui Pan, Linjie Wang, Hongbo Yang, Fengying Wang

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Affiliation

Key Laboratory of Endocrinology of National Health Commission, Department of Endocrinology, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

3. 為SR

Key words

glucagon-like peptide-1 agonist (GLP-1RA), overweight/obese, antiobesity effect, safety, meta-analysis



Supplementary material is available under <https://doi.org/10.1055/a-1844-1176>

ABSTRACT

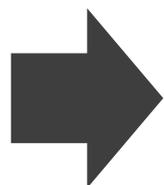
To determine the antiobesity effect and safety of glucagon-like peptide-1 receptor agonist (GLP-1RA) including liraglutide, exenatide and semaglutide treatment in overweight/obese patients without diabetes. The random-effect model was used to pool data extracted from included literatures. The

PCT

報告大綱



情境摘要
背景搜尋



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4A - 結合臨

CNSP

Critical Appraisal
Skills Programme

Validity

(可信性)

Importance

(重要性)

Practice

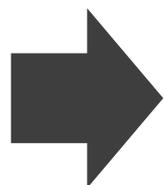
(適用性)

No	Examination	Yes/No
1	此篇系統性文獻回顧是否問了一個清楚、明確的問題？	Y
2	作者是否尋找適當研究型態的文獻？	Y
3	你認為所有重要且相關的研究都被納入？	Y
4	系統性文獻回顧的作者是否評估所納入研究文獻的品質？	Y
5	如果作者將研究結果進行合併，這樣的合併是否合理？	Y
6	這篇系統性文獻回顧的整體結果為何？	Y
7	結果精準嗎？	Y
8	此研究結果是否可應用到當地的族群？	Y
9	是否所有重要的臨床結果都有被考量到？	Y

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臨床應用



對於這樣病人族群，肺康復治療與支氣管擴張劑，**同時使用**可降低住院次數、改善生活品質、延緩肺功能惡化

