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### 一、臨床情境描述(200 字內、中英文皆可)

66 歲男性，過去抽菸抽了 30 年，近來因長期咳嗽、呼吸困難而到醫院就醫。經過肺功能檢查為重度慢性阻塞性肺病，醫師開了吸入型的藥物來治療。回家一看，居然發現藥物含有類固醇，他很困惑為何醫師要開這樣的藥物讓他使用？類固醇不是副作用很大嗎？他很擔心長期使用會不會有後遺症？這樣長期吸藥他的病會好嗎？

### 二、PICO

#### PICO-1

- Patient, problem : COPD (severe obstructive defect)
- Intervention : inhaled corticosteroid agents
- Comparison : no inhaled corticosteroid agents
- Outcome : frequency of acute exacerbation

#### PICO-2

- Patient, problem : COPD (severe obstructive defect)
- Intervention : inhaled corticosteroid agents
- Comparison : no inhaled corticosteroid agents
- Outcome : Lung function improvement

#### PICO-3

- Patient, problem : COPD (severe obstructive defect)
- Intervention : inhaled corticosteroid agents
- Comparison : no inhaled corticosteroid agents
- Outcome : incidence of pneumonia development

### 三、最佳文獻(請參照 APA6 格式列出所有文獻，並挑選最佳 5 篇文獻附上 PDF 檔) 最佳文獻五篇：

- 文獻 1: Vestbo J, Hurd SS, Agusti AG, et al. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: GOLD executive summary. *Am J Respir Crit Care Med*. 2013;187:347-365.
- 文獻 2: Calverley PM, Anderson JA, Celli B, et al. TOUCH investigators. Salmeterol and fluticasone propionate and survival in chronic obstructive pulmonary disease. *N Engl J Med*. 2007;356:775-798.

- 文獻 3: Kew KM, Dias S, Cates CJ. Long-acting inhaled therapy (beta-agonists, anticholinergics and steroids) for COPD: a network meta-analysis. *Cochrane Database Syst Rev*. 2014; Mar. 26:3
- 文獻 4: Dransfield MT, Bourbeau J, Jone PW, et al. Once-daily inhaled fluticasone furoate and vilanterol versus vilanterol only for prevention of exacerbation of COPD: two replicate double-blind, parallel-group, randomized controlled trials. *Lancet Respir Med*. 2013 May; 1(3): 210-23.
- 文獻 5: Suissa S, Patenaude V, Lapi F, Ernst P. Inhaled corticosteroids in COPD and the risk of serious pneumonia. *Thorax*. 2013;68:1029-1036.

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- 文獻 7: Fry AM, Shay DK, Holman RC, et al. Trends in hospitalizations for pneumonia among persons aged 65 years or older in the United States, 1988-2002. *JAMA*. 2005;294:2712-2719.
- 文獻 8: Farr BM, Bartlett CLR, Wadsworth J, et al. Risk factors for community- acquired pneumonia diagnosed upon hospital admission. British Thoracic Society Pneumonia Study Group. *Respir Med*. 2000;94:954-963.
- 文獻 9: Restrepo MI, Mortensen EM, Pugh JA, et al. COPD is associated with increased mortality in patients with community-acquired pneumonia. *Eur Respir J*. 2006;28:346-351.
- 文獻 10: Holguin F, Folch E, Redd SC, et al. Comorbidity and mortality in

COPD- related hospitalization in the United States, 1971 to 2001. *Chest*. 2005;128:2005-2011.

- 文獻 11: Szafranski W, Cukier A, Ramirez A, et al. Efficacy and safety of budesonide/formoterol in the management of chronic obstructive pulmonary disease. *Eur Respir J*. 2003;21:74-81.
- 文獻 12: Spencer S, Calverley PMA, Burge PS, Jones PW. Impact of preventing exacerbation on deterioration of health status in COPD. *Eur Respir J*. 2004;23:698-702.
- 文獻 13: Calverley P, Pauwels R, Vestbo J, et al. Combined salmeterol and fluticasone in the treatment of chronic obstructive pulmonary disease: a randomized controlled trial. *The Lancet*. 2003;361:449-456.
- 文獻 14: Vestbo J, Hurd SS, Agusti AG, et al. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: GOLD executive summary. *Am J Respir Crit Care Med*. 2013;187:347-365.
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- 文獻 19: Calverley PM, Anderson JA, Celli B, et al. TOUCH investigators. Salmeterol and fluticasone propionate and survival in chronic obstructive pulmonary disease. *N Engl J Med*. 2007;356:775-798.
- 文獻 20: Welte T, Miravittles M, Hernandez P, et al. Efficacy and Tolerability of Budesonide/Formoterol Added to Tiotropium in Patients with Chronic Obstructive Pulmonary Disease. *Am J Respir Crit Care Med*. 2009;180:741-750.
- 文獻 21: Sin DD, Tashkin D, Zhang X, et al. Budesonide and the risk of pneumonia: a meta-analysis of individual patient data. *The Lancet*. 2009;374:712-719.

- 文獻 22: Rennard SI, Tashkin DP, McElhattan J, et al. Efficacy and tolerability of budesonide/formoterol in one hydrofluoroalkane pressurized metered-dose inhaler in patients with chronic obstructive pulmonary disease: results from a 1-year randomized controlled clinical trial. *Drugs*. 2009;69:549-565.
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