

# 報告大綱

①

情境摘要  
背景搜尋

②





③

- 1A - 提出問題
- 2A - 查詢研究
- 3A - 嚴謹評讀
- 4A - 結合臨床
- 5A - 執行決策

# 情境摘要

**34歲**莊先生是醫院的行院人員，上個月員工健檢被指出嚴重肥胖(170公分，88公斤，**BMI:30.4kg/m<sup>2</sup>**)，還有輕度脂肪肝。抽血則顯示糖化血色素HbA1c 6.3%。看著身邊年齡相仿的朋友紛紛開始間歇性斷食，或生酮飲食，或開始上健身房，小莊才驚覺自己可能需要一點改變。他有聽到醫院有一些人在打**瘦瘦針(Liraglutide或Semaglutide)**、或是在吃排糖藥(Empagliflozin或Dapagliflozin)，好像還滿適合不常運動的他。或是如果中藥或針灸鈺可以有效減重，他也願意嘗試。於是他來找熱愛實證的你討論，你會如何以實證手法，和他討論出比較適合他的**減重方法**呢？

- **GLP-1 agonist therapy** – For patients who are overweight or with obesity in whom pharmacologic therapy is warranted for further weight reduction, we suggest using a glucagon-like peptide 1 (GLP-1) receptor agonist rather than other agents as first-line treatment (**Grade 2C**). We prefer treatment with **semaglutide** rather than **liraglutide**; administration of **semaglutide** is once weekly rather than once daily, and **semaglutide** has greater efficacy than liraglutide. (See 'GLP-1 receptor agonists' above.)
- **Other pharmacotherapy options** – If there is an inadequate response to initial therapy with a (GLP-1) agonist, or it is not accessible or tolerated, and treatment with a different drug is considered, we switch to another agent ( **table 2** and  **figure 1**). Options include:
  - Combination **phentermine-topiramate** (see 'Phentermine-topiramate' above)
  - **Orlistat** (see 'Orlistat' above)
  - Combination **bupropion-naltrexone** (see 'Bupropion-naltrexone' above)
  - **Phentermine** (See 'Sympathomimetic drugs' above.)

# 1A-提出問題

PICO表

CEBM表

## PICO設計 - 治療型問題

	PICO關鍵字	MeSH同義字	中文關鍵字
<b>P</b>	Obesity (BMI>30) Non-Diabetes mellitus Age ≥ 18	Obesity Diabetes Mellitus Adult	肥胖 糖尿病 成人
<b>I</b>	Semaglutide	Semaglutide GLP-1 Receptor Agonist	胰妥讚注射劑 GLP-1受體促進劑
<b>C</b>	Placebo	Placebo	安慰劑
<b>O</b>	Body Weight Loss(BWL) Nausea	Body Weight Nausea	體重變化量 嘔吐

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 n-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, n-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 n-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".

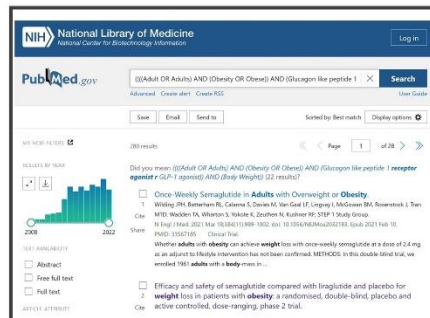
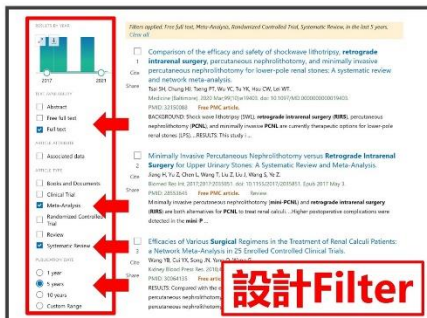
Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?toc=5653>

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

## 2A-查詢研究

# Filter設計

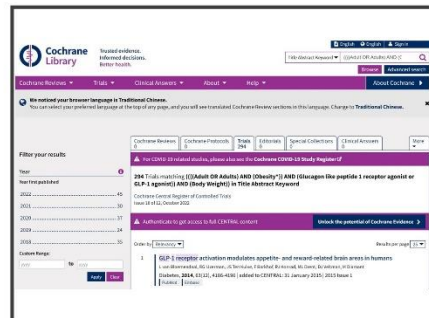
## PubMed截圖



## 2A-查詢研究

## Cochrane 截圖

## 搜尋策略流程



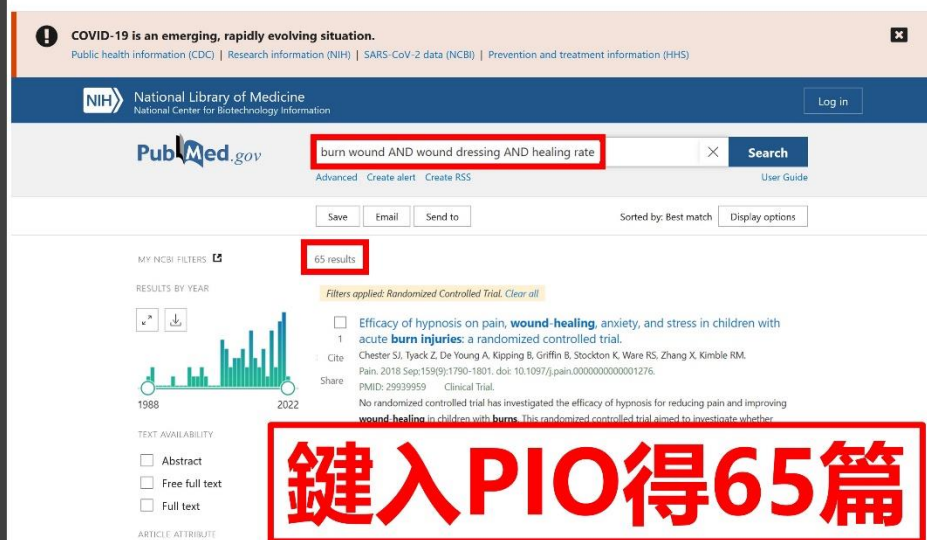
Search	Query	Items
7	(((Adult OR Adults) AND (Obesity*)) AND (Glucagon like peptide 1 receptor agonist or GLP-1 agonist)) AND (Body Weight))	280
6	Body Weight	726,736
4	Semaglutide	959
3	Glucagon like peptide 1 receptor agonist or GLP-1 agonist	6,906
2	Obesity*	435,659
1	Adult OR Adults	8,562,891

## 2A-查詢研究

## 文獻選擇



# 鍵入IC/PIC/IO/PIO





# 3A-嚴謹評讀

## 十個問題

## CheckList

### 問題十：傷害和花費換得介入所產生益處是否值得

In conclusion, our meta-analysis provided that the GLP-1RAs, including liraglutide, exenatide, and semaglutide displayed a more obvious antiobesity effect in terms of the weight loss, the reduction of BMI and WC compared with placebo/Met. Most importantly, our study showed that semaglutide could **have a more obvious antiobesity effect and lower gastrointestinal adverse events** than liraglutide and exenatide. However, the present RCTs of semaglutide only recruited the overweight/obese patients without diabetes from the western countries. More RCTs in the patients from different countries, such as eastern countries, should also be conducted in the future to confirm the antiobesity effect of semaglutide in the overweight/obese patients without diabetes

☒ Yes ☐ No ☐ Can't tell

如果內文沒有算損益比  
就找利>弊

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？	Yes
2	作者是否尋找適當研究型態的文獻？	Yes
3	你認為所有重要且相關的研究都被納入？	Yes
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？	Yes
5	如果作者將研究結果進行合併，這樣的合併是否合理？	Yes
6	這篇系統性文獻回顧的整體結果為何？	Yes
7	結果精準嗎？	No
8	此研究結果是否可應用到當地的族群？	Yes
9	是否所有重要的臨床結果都有被考量到？	Yes
10	付出的傷害和花費換得介入措施所產生的益處是否值得？	Yes

# 4A-結合臨床

## 藥物/處置價格

## 成本效益分析

### 臨床應用

OZEMPIC SOLUTION FOR INJECTION	SEMAGLUTIDE 1.34MG/ML	1.5ML	台灣諾和諾德藥品股份有限公司	3,585
OZEMPIC SOLUTION FOR INJECTION	SEMAGLUTIDE 1.34MG/ML	3ML	台灣諾和諾德藥品股份有限公司	3,585

藥物施打：一週施打一次

藥物費用：3585元 (依照各家醫院彈性調整)

### 預防一次費用(COPE)

- 比較使用PPI類與H2RA類藥物的預防一次事件所需費用 (Cost Of Preventing an Event; COPE)

**COPE = NNT x NNT時間 x 治療所需日費用**

#### [間接比較]

比較PPI類與H2RA類藥物及對照組 (尤其是安慰劑) 的COPE

#### [直接比較]

比較PPI類 與 H2RA類藥物的COPE

例

COPE = 25人 x 28天 x 28.8元/天 = 20,160元  
(必須付出這個價錢以 減少一次事件發生)

# 5A-執行決策

## 四象限分析

## 去專業化回應

### 共享決策

醫療現況(實證醫學)	病人的治療偏好
證據等級: CEBM(Level 1) 建議等級: Weak Recommendation	希望可以藉由瘦瘦針達到減重效果。
利弊平衡	費用資源
使用瘦瘦針(Semaglutide)治療可預期體重減輕8.76公斤, 效果十分顯著。  除了常見的腸胃道副作用如噁心嘔吐, 亦有案例報導指出可能導致甲狀腺癌。	注射瘦瘦針(Semaglutide), 一週需注射一次, 注射費用為3500-3800元/劑, 可顯著減少使用者之體重。而過重會造成心血管疾病和中風風險提高, 所產生之住院和介入/手術處置花費和醫療成本將遠大於預防。

### 共享決策

莊先生您好, 經過我們團隊縝密的實證搜尋後, 目前現有最佳證據是由**系統性回顧文獻**的研究支持, 使用瘦瘦針(Semaglutide)治療可預期有效的協助體重減輕, 且花費是**一週3500-3800元**, 因為您的體重落於肥胖族群, **肥胖族群在心肌梗塞, 血管硬化等慢性疾病中屬高危險族群**, 所以建議您接受一週施打一次的瘦瘦針(Semaglutide)的治療。另外平常仍須注重**飲食控制和養成合適的運動習慣**, 這樣才能達成長期性的體重控制效果噢!

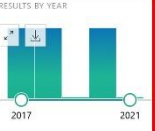


# 2A-查詢研究

## Filter設計

## PubMed截圖

RESULTS BY YEAR



TEXT AVAILABILITY

- ☐ Abstract
- ☐ Free full text
- ☒ Full text

ARTICLE ATTRIBUTE

- ☐ Associated data

ARTICLE TYPE

- ☐ Books and Documents
- ☐ Clinical Trial
- ☒ Meta-Analysis
- ☐ Randomized Controlled Trial
- ☐ Review
- ☒ Systematic Review

PUBLICATION DATE

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

Filters applied: Free full text, Meta-Analysis, Randomized Controlled Trial, Systematic Review, in the last 5 years. Clear all

1 Comparison of the efficacy and safety of shockwave lithotripsy, **retrograde intrarenal surgery**, percutaneous nephrolithotomy, and minimally invasive percutaneous nephrolithotomy for lower-pole renal stones: A systematic review and network meta-analysis.  
Tsai SH, Chung HJ, Tseng PT, Wu YC, Tu YK, Hsu CW, Lei WT.  
Medicine (Baltimore). 2020 Mar;99(10):e19403. doi: 10.1097/MD.00000000000019403. PMID: 32150088 Free PMC article.

2 Minimally Invasive Percutaneous Nephrolithotomy versus **Retrograde Intrarenal Surgery** for Upper Urinary Stones: A Systematic Review and Meta-Analysis.  
Jiang H, Yu Z, Chen L, Wang T, Liu J, Wang S, Ye Z.  
Biomed Res Int. 2017;2017:2035851. doi: 10.1155/2017/2035851. Epub 2017 May 3. PMID: 28553645 Free PMC article. Review.

3 Efficacies of Various **Surgical** Regimens in the Treatment of Renal Calculi Patients: a Network Meta-Analysis in 25 Enrolled Controlled Clinical Trials.  
Wang YB, Cui YX, Song JN, Yang Q, Wang G.  
Kidney Blood Press Res. 2018; PMID: 30064135 Free article.

RESULTS: Compared with the e percutaneous nephrolithotomy, percutaneous nephrolithotomy...

## 設計Filter

NIH National Library of Medicine  
National Center for Biotechnology Information

PubMed.gov

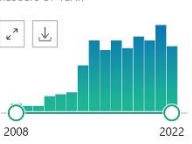
Search: (((Adult OR Adults) AND (Obesity OR Obese)) AND (Glucagon like peptide 1 receptor agonist r GLP-1 agonist)) AND (Body Weight)) (22 results?)

Advanced Create alert Create RSS User Guide

Save Email Send to Sorted by: Best match Display options

MY NCBI FILTERS 280 results

RESULTS BY YEAR



TEXT AVAILABILITY

- ☐ Abstract
- ☐ Free full text
- ☐ Full text

ARTICLE ATTRIBUTE

1 Once-Weekly Semaglutide in **Adults** with Overweight or **Obesity**.  
Wilding JPH, Batterham RL, Calanna S, Davies M, Van Gaal LF, Lingway I, McGowan BM, Rosenstock J, Tran MT, Wadden TA, Wharton S, Yokote K, Zeuthen N, Kushner RF; STEP 1 Study Group.  
N Engl J Med. 2021 Mar 18;384(11):989-1002. doi: 10.1056/NEJMoa2032183. Epub 2021 Feb 10. PMID: 33567185 Clinical Trial.

2 Whether **adults** with **obesity** can achieve **weight** loss with once-weekly semaglutide at a dose of 2.4 mg as an adjunct to lifestyle intervention has not been confirmed. METHODS: In this double-blind trial, we enrolled 1961 **adults** with a **body-mass** in ...

Efficacy and safety of semaglutide compared with liraglutide and placebo for **weight** loss in patients with **obesity**: a randomised, double-blind, placebo and active controlled, dose-ranging, phase 2 trial.

# 2A-查詢研究

## Cochrane截圖

## 搜尋策略流程

The screenshot shows the Cochrane Library search results page. The search query is displayed in the search bar: `(((Adult OR Adults) AND (Obesity*)) AND (Glucagon like peptide 1 receptor agonist or GLP-1 agonist)) AND (Body Weight))`. The results show 294 trials matching the query. The first result is titled "GLP-1 receptor activation modulates appetite- and reward-related brain areas in humans" by L van Bloemendaal, RG Jzerman, JS Ten Kulte, P Barkhof, RJ Konrad, ML Drent, DJ Veltman, M Diamant, published in Diabetes, 2014, 63(12), 4186-4196. The page also includes filters for year first published (2018 to 2022) and a custom range.

Search	Query	Items
7	(((Adult OR Adults) AND (Obesity*)) AND (Glucagon like peptide 1 receptor agonist or GLP-1 agonist)) AND (Body Weight))	280
6	Body Weight	726,736
4	Semaglutide	959
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2	Obesity*	435,659
1	Adult OR Adults	8,562,891

# 2A-查詢研究

## 文獻選擇



選擇文獻

2022

Original Article: Endocrine Care

Thieme

### The Antiobesity Effect and Safety of GLP-1 Receptor Agonist in Overweight/Obese Patients Without Diabetes: A Systematic Review and Meta-Analysis

#### Authors

Xiaonan Guo, Zhibo Zhou, Xiaorui Lyu, Hanyuan Xu, Huijuan Zhu, Hui Pan, Linjie Wang, Hongbo Yang, Fengying Gong

#### 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

#### 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

**Aim** 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



選擇理由

1.符合PICO

2.2022發表

3.為SR of RCT

# 鍵入IC/PIC/IO/PIO

範例



**COVID-19 is an emerging, rapidly evolving situation.**

Public health information (CDC) | Research information (NIH) | SARS-CoV-2 data (NCBI) | Prevention and treatment information (HHS)



National Library of Medicine  
National Center for Biotechnology Information

Log in

PubMed.gov

burn wound AND wound dressing AND healing rate



Search

Advanced Create alert Create RSS

User Guide

Save

Email

Send to

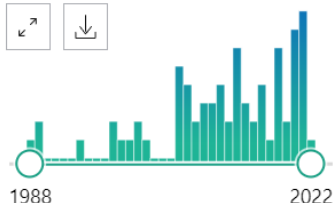
Sorted by: Best match

Display options

MY NCBI FILTERS

65 results

RESULTS BY YEAR



Filters applied: Randomized Controlled Trial. Clear all



Efficacy of hypnosis on pain, **wound-healing**, anxiety, and stress in children with acute **burn injuries**: a randomized controlled trial.



Chester SJ, Tyack Z, De Young A, Kipping B, Griffin B, Stockton K, Ware RS, Zhang X, Kimble RM.

Share

Pain. 2018 Sep;159(9):1790-1801. doi: 10.1097/j.pain.0000000000001276.

PMID: 29939959 Clinical Trial.

No randomized controlled trial has investigated the efficacy of hypnosis for reducing pain and improving **wound-healing** in children with **burns**. This randomized controlled trial aimed to investigate whether

TEXT AVAILABILITY



Abstract



Free full text



Full text

ARTICLE ATTRIBUTE

# 鍵入PIO得65篇