實證競賽報告

2024.12.06

團隊：李國康、沈家銘、楊宗勳

團隊成員

情境摘要

小莊是一位30出頭的年輕醫療工作者，由於最近的公司健檢報告顯示出讓他頗為擔心的結果:雖然血糖還在正常範圍， HbA1C也僅有5.3% ，但這些指標讓小莊覺得自己必須採取一些行動。

看著周遭朋友開始嘗試如間歇性斷食，生酮飲食，甚至還有開始使用健身房會員的各種減重方法，小莊也想改變一下生活方式了， 在查閱資料的過程中，他注意到一些新的降血壓藥物，如: GLP-1類的Liraglutide和semaglutide，以及SGLT2抑制劑 。對於不常運動的他來說，這些藥物看起來相當吸引人。另外，他也考慮一些傳統療法，如:中藥或針灸，希望能在改變生活習慣前，嘗試看看其他的治療選擇。

因此，小莊找到你這位熱愛實證的同事，想知道是否有研究支持這些藥物和療法在肥胖、脂肪肝患者中的減重效果，以及它們和運動或飲食控制相比的優劣之處。他希望能夠了解哪一種方式最適合他的情況，以便做出更有科學依據的選擇。

背景資料

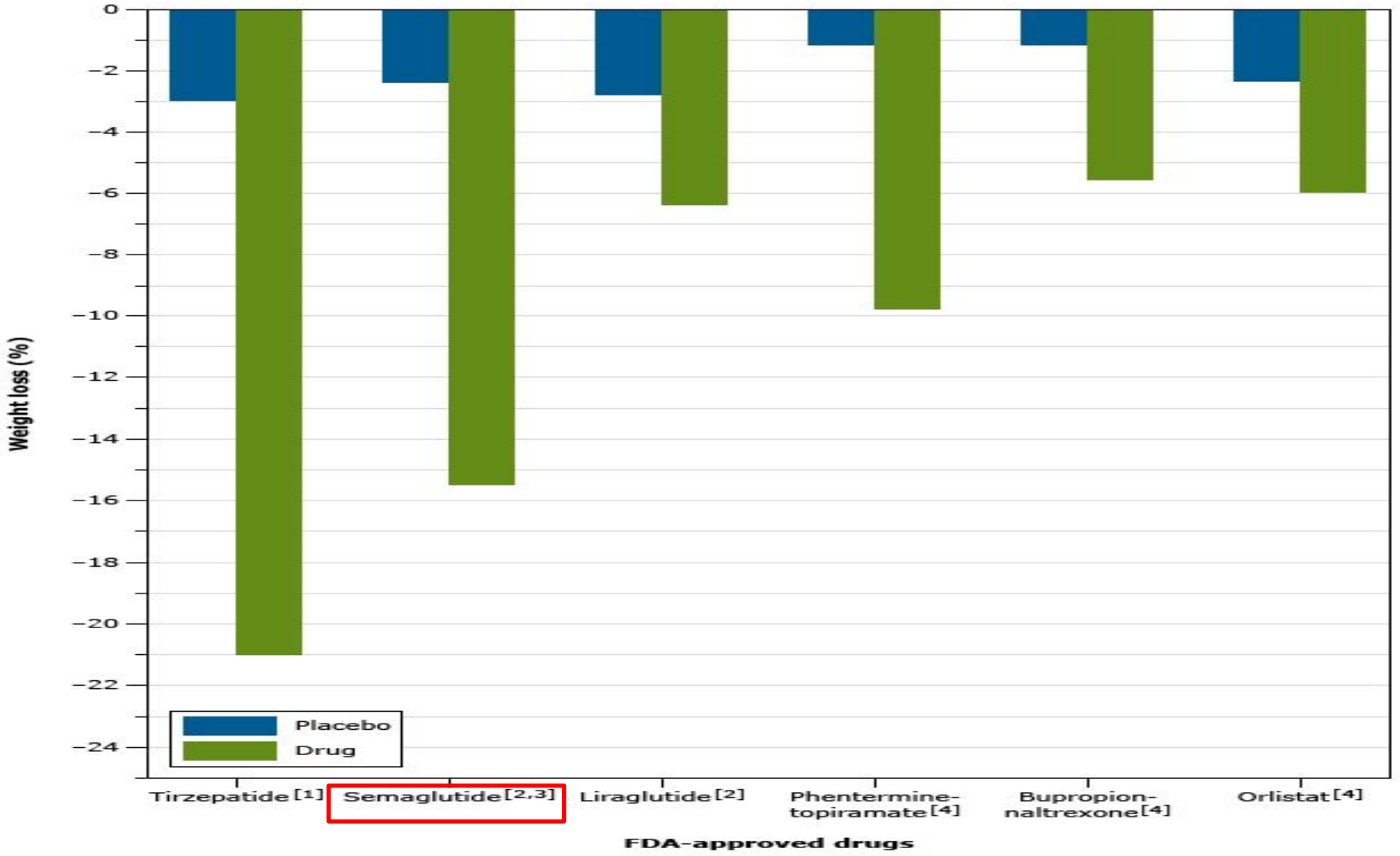
Wolters Kluwer UpToDate®

Subcutaneous semaglutide 2.4 mg — Subcutaneous semaglutide has demonstrated efficacy for weight loss in trials involving patients with and without type 2 diabetes (figure 1) [8,9,49,50]. It can also improve glycemia and lipids and has demonstrated cardiovascular benefits [8,51-53]. Selection among GLP-1-based therapies is discussed elsewhere. (See 'Choice of agent' above.)

Dosing and monitoring — Semaglutide is administered subcutaneously in the abdomen, thigh, or upper arm once weekly. The initial dose is 0.25 mg once weekly for four weeks (table 2). The dose is increased at four-week intervals (0.5, 1, 1.7, 2.4 mg) to the recommended dose of 1.7 or 2.4 mg once weekly [54]. We use the minimum dose required to achieve the desired weight loss. If dose escalation is not tolerated due to side effects (eg, nausea, vomiting), the increase in dose can be delayed by another four weeks. Patients can be maintained on the 1.7 mg dose if they have an acceptable weight loss response or cannot tolerate the 2.4 mg dose. Limited data exist regarding the efficacy of lower doses in patients without diabetes.

背景資料

Wolters Kluwer
UpToDate®



臨床問題 1

	PICO關鍵字	MeSH同義字	中文關鍵字
P	Obesity Without diabetes		肥胖 無糖尿病
I	GLP-1 agonist SGLT2 inhibitor	GLP-1 Receptor Agonist SGLT2 inhibitor	GLP SGLT2
C	Placebo	Placebo	安慰劑
O	Weight loss Adverse event	Body weight change	減重 副作用

臨床問題２

	PICO關鍵字	MeSH同義字	中文關鍵字
P	Obesity Without diabetes		肥胖 無糖尿病
I	Acupuncture	Acupuncture	針灸
C	Placebo	Placebo	安慰劑
O	Weight loss Adverse event	Body weight change	減重 副作用

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?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)	[illegible]	[illegible]	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	[illegible]	[illegible]	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
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治療性

Level ↓

SR

Ask

	Free-Text	Synonyms
P	Obesity Without diabetes	“Obesity” [All Fields] “Without diabetes” [All Fields]
I	GLP-1 agonist SGLT2 inhibitor	“GLP-1 agonist” [All Fields] “SGLT2 inhibitor” [All Fields]
C	Placebo	"Placebo" [All Fields]
O	Weight loss Adverse event	“Body weight change” [MeSH Terms] “Adverse event” [All Fields]

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 – 結合臨床
5A – 執行決策

2A–查詢研究

Query box

((obesity) AND (without diabetes))
AND ((GLP-1 agonist) OR (SGLT2 inhibitor))
AND (placebo)
AND ((body weight change[MeSH Terms]) AND (adverse event))

Search

2A–查詢研究

MY CUSTOM FILTERS

RESULTS BY YEAR

PUBLICATION DATE

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

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

See all article type filters

12 results

Page 1 of 2

Filters applied: in the last 5 years, Systematic Review. Clear all

1 Cite Share

Efficacy and safety of **GLP-1** receptor **agonists** versus SGLT-2 inhibitors in overweight/**obese** patients with or without **diabetes mellitus**: a systematic review and network meta-analysis.

Ma H, Lin YH, Dai LZ, Lin CS, Huang Y, Liu SY.

BMJ Open. 2023 Mar 7;13(3):e061807. doi: 10.1136/bmjopen-2022-061807.

PMID: 36882248 Free PMC article.

OBJECTIVE: To compare the efficacy and safety between and within **glucagon-like peptide-1** receptor **agonists** (GLP-1RAs) and sodium-glucose cotransporter 2 inhibitors (SGLT-2is) in overweight or **obese** adults with or without **diabetes** ...

2 Cite Share

Long-Term Efficacy and Safety of Once-Weekly Semaglutide for Weight Loss in Patients Without **Diabetes**: A Systematic Review and Meta-Analysis of Randomized Controlled Trials.

Moiz A, Levett JY, Filion KB, Peri K, Reynier P, Eisenberg MJ.

Am J Cardiol. 2024 Jul 1;222:121-130. doi: 10.1016/j.amjcard.2024.04.041. Epub 2024 Apr 26.

PMID: 38679221 Free article. Review.

Semaglutide, a **glucagon-like peptide-1** receptor **agonist**, has demonstrated clinically important weight loss effects in patients with type 2 **diabetes**. ...In conclusion, semaglutide is efficacious for sustained weight loss in patients with o ...

3 Cite Share

Efficacy and safety of tirzepatide for treatment of overweight or **obesity**. A systematic review and meta-analysis.

Tan B, Pan XH, Chew HSJ, Goh RSJ, Lin C, Anand VV, Lee ECZ, Chan KE, Kong G, Ong CEY, Chung HC, Young DY, Chan MY, Khoo CM, Mehta A, Muthiah MD, Noureddin M, Ng CH, Chew NWS, Chin YH.

Int J Obes (Lond). 2023 Aug;47(8):677-685. doi: 10.1038/s41366-023-01321-5. Epub 2023 May 31.

PMID: 37253796 Review.

BACKGROUND: Recent studies suggest that tirzepatide, a dual glucose-dependent insulinotropic-peptide (GIP) and **glucagon-like peptide-1** receptor **agonist** (**GLP-1** RA), has significant weight loss effects. ...For AEs, there was increase ...

4 Cite Share

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

2A–查詢研究

airiti Library

([ALL]=(肥胖) AND [ALL]=(無糖尿病)) AND ([ALL]=(SGLT2) OR [ALL]=(GLP)) AND [ALL]=(安慰劑) AND ([ALL]=(減重) OR [ALL]=(副作用)) NOT [ALL]=(手術)

資料範圍 ☑ 僅顯示所屬單位館藏

限定條件 ☐ 排除無全文書目紀錄

文章類型 ☑ 所有類型 ☐ 期刊論文 ☐ 學位論文

出版日期 ○ 不限 ○ 近一年 ◉ 近五年 ○ 近十年

○ 自訂範圍 起始年 至 迄止年

語言 ☑ 所有語言 ☐ 繁體中文 ☐ 簡體中文 ☐ 英文 ☐ 其他語言

國家/地區 ☑ 所有國家/地區 ☐ 台灣 ☐ 中國大陸 ☐ 香港 ☐ 澳門 ☐ 美國 ☐ 英國 ☐ 其他國家/地區

2A–查詢研究

資料範圍

- [x] 僅顯示所屬單位館藏 (4)

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- [ ] 排除無全文書目紀錄 (4)

文章類型

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出版日期

- ○ 近一年 (1)
- ◉ 近五年 (4)
- ○ 近十年 (4)
- ○ 自訂範圍

起始年 至 迄止年

設定出版時間範圍

淺談減重藥物的選用考量

徐麗珍

《彰基藥訊》 29卷2期 (2021 / 06) Pp. 6-8

項為期56週、收案3731位無糖尿病的肥胖症成人、比較liraglutide每日3 mg與安慰劑效果的雙盲性隨機分派試驗，其研究結果顯示兩組體重降幅≥5%的...) 療效：依據2012年一篇系統性回顧與統合分析文獻，共納入21個隨機分派試驗、13,759位肥胖受試者，orlistat相較於安慰劑，療效較優，包含減重降幅...

全文下載

期刊 OpenAccess

腸泌素在糖胖症的使用 - 過去、現在與未來

徐莞嘉

《中華民國糖尿病衛教學會會訊》 19卷4期 (2023 / 12) Pp. 11-16

量高劑量的GLP-1受體促效劑可用於減重。Liraglutide 3.0mg使用在BMI ≥ 30或BMI ≥ 27合併高血壓或高血脂並且無糖尿病的病人身上，加上飲食及運動 BMI ≥ 30或BMI ≥ 27合 併 至少一項體重相關共病且無糖尿病的病人身上 治 療104周 後，Semaglutide 2.4mg降 低體 重15.2%， 比 安 慰

全文下載

期刊 OpenAccess

綜論：慢性肝病的糖尿病藥物治療

蕭璧容

《中華民國糖尿病衛教學會會訊》 16卷1期 (2020 / 03) Pp. 2-6

，SGLT2i可以考慮用於治療NAFLD；不論有無糖尿病的NAFLD/NASH的治療，尤其是同時 併用SGLT2i和GLP-1RA，可以做為第一線的治療選擇[1、4、... pioglitazone 45 mg/d經過18個月的使用，不論有無糖尿病都可以有效改善肝功能、肝發炎和肝纖維化，而且也已經證實其長期使用的療效和安全性；...

全文下載

The American Journal of Cardiology

選擇文獻

2023

Long-Term Efficacy and Safety of Once-Weekly Semaglutide for Weight Loss in Patients Without Diabetes: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Areesha Moiz, BSc[a,b], Jeremy Y. Levett, MD[c], Kristian B. Filion, PhD[a,d,e], Katya Peri, MSc[e], Pauline Reynier, MSc[a], and Mark J. Eisenberg, MD, MPH[a,b,d,e,f,*]

選擇理由

1. 符PICO
2. 2023發表
3. 為SR of RCT

Thieme 選擇文獻 2022

Original Article: Endocrinology

Thieme

Overweight/Obese Patients Without Diabetes: A Systematic Review and Meta-Analysis

Authors
Xiaonan Guo, Zhibo Zhou, Xiaorui Lyu, Hanyuan Xu, [illegible] Hui Pan, [illegible]jie Wang, Hongbo Yang, Feng[illegible]ong

Affil[illegible]
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

[illegible]o 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

報告大綱

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4A – 結合臨床
5A – 執行決策

Critical Appraisal Skills Programme

Validity （可信性）

Importance （重要性）

Practice （適用性）

問題一：此研究是否問了一個清楚明確的問題?

☑️ Yes ⬜ No ⬜ Can't tell

P

Long-Term Efficacy and Safety of Once-Weekly Semaglutide for Weight Loss in Patients Without Diabetes: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

O

I However, its effects on sustained weight loss in patients without diabetes remains unclear. Our objective was to examine the long-term efficacy and safety of semaglutide use for weight loss in patients with overweight/obesity and without diabetes. MEDLINE, EMBASE, and the Cochrane Libraries were systematically searched to identify randomized controlled trials that randomized participants with overweight/obesity and without diabetes to once-weekly 2.4 mg subcutaneous semaglutide versus placebo with a follow-up of at least 68 weeks

C

問題二：作者是否尋找適當研究型態的文獻?

☑️ Yes ⬜ No ⬜ Can't tell

Using predetermined inclusion and exclusion criteria, 2 authors (A.M. and K.P.) independently screened the titles and abstracts of identified publications to determine eligibility. A citation deemed potentially eligible by either reviewer was carried forward to full-text review, where discrepancies were addressed by consensus or by a third reviewer (J.Y.L.). The included studies were RCTs that randomized participants to once-weekly semaglutide versus placebo, in combination with lifestyle interventions. Once-weekly semaglutide was defined as an injectable subcutaneous 2.4 mg dose of semaglutide that is administered once a week. Pharmacokinetic modeling has suggested that this dose achieves maximum weight loss in adults with overweight/obesity.[9,10] The detailed inclusion and exclusion criteria is listed in Supplementary Appendix 2.

問題三：你認為所有重要且相關的研究都被納入？

☑️ Yes ⬜ No ⬜ Can't tell

We systemically searched the MEDLINE (by way of PubMED), EMBASE (by way of Ovid), and Cochrane CENTRAL databases from their inception to June 29, 2023, to identify relevant trials. We also searched *ClinicalTrials.gov* for potentially eligible trials that our database search did not identify. Keywords (title/abstract), Medical Subject Headings, and EMTREE terms searched included those for semaglutide, overweight or obesity, and RCTs; the detailed search is listed in Supplementary Table 1. The Cochrane Handbook for Systematic Reviews of Interventions was used to apply a modified search hedge to limit the findings to RCTs in MEDLINE and EMBASE (by way of Ovid). No language restrictions were used in the search. Duplicates of publications identified by our search were removed after their import into EndNote (Clarivate).[8] The deduplicated search results were then imported into Covidence (Veritas Health Innovation Ltd), a systematic review management software.

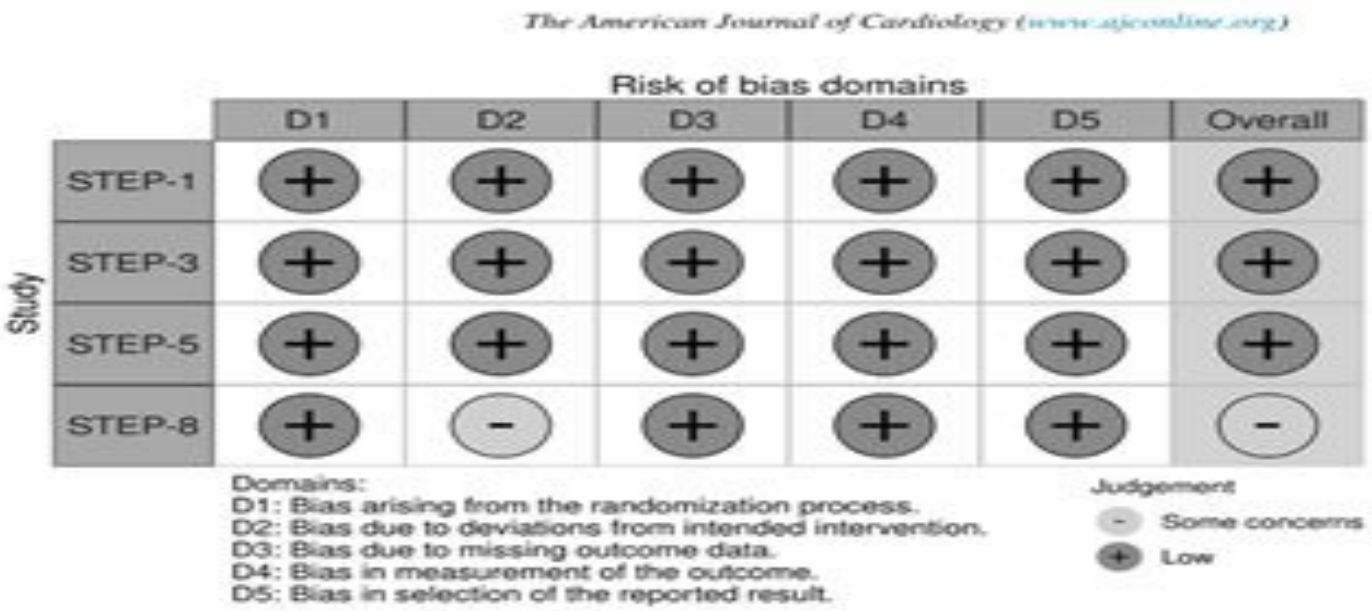
問題四：作者是否評估所納入研究文獻的品質?

☑️ Yes ⬜ No ⬜ Can't tell

A total of 2 reviewers (A.M. and K.P.) independently assessed the risk of bias in the included RCTs using version 2 of the Cochrane Collaboration's tool for assessing risk of bias in randomized trials (RoB 2),[11] resolving any disagreements by consensus or with third reviewer (J.Y.L.). The RoB 2 tool provided an overall structured assessment of the quality of a randomized trial by dividing it into 5 domains (randomization process, deviations from intended interventions, missing outcome data, measurement of outcome, and selection of reported result). Regardless of study quality, all eligible RCTs were included in our meta-analysis.

問題四：作者是否評估所納入研究文獻的品質?

☑ Yes ☐ No ☐ Can't tell



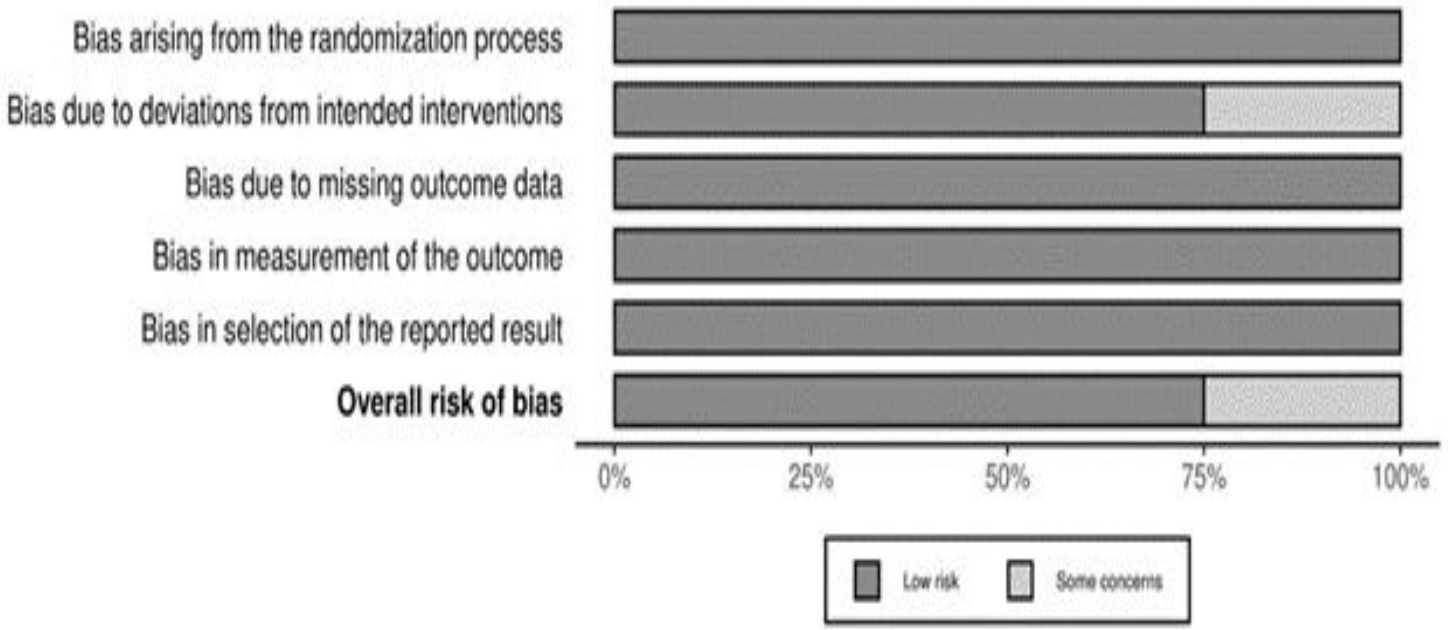
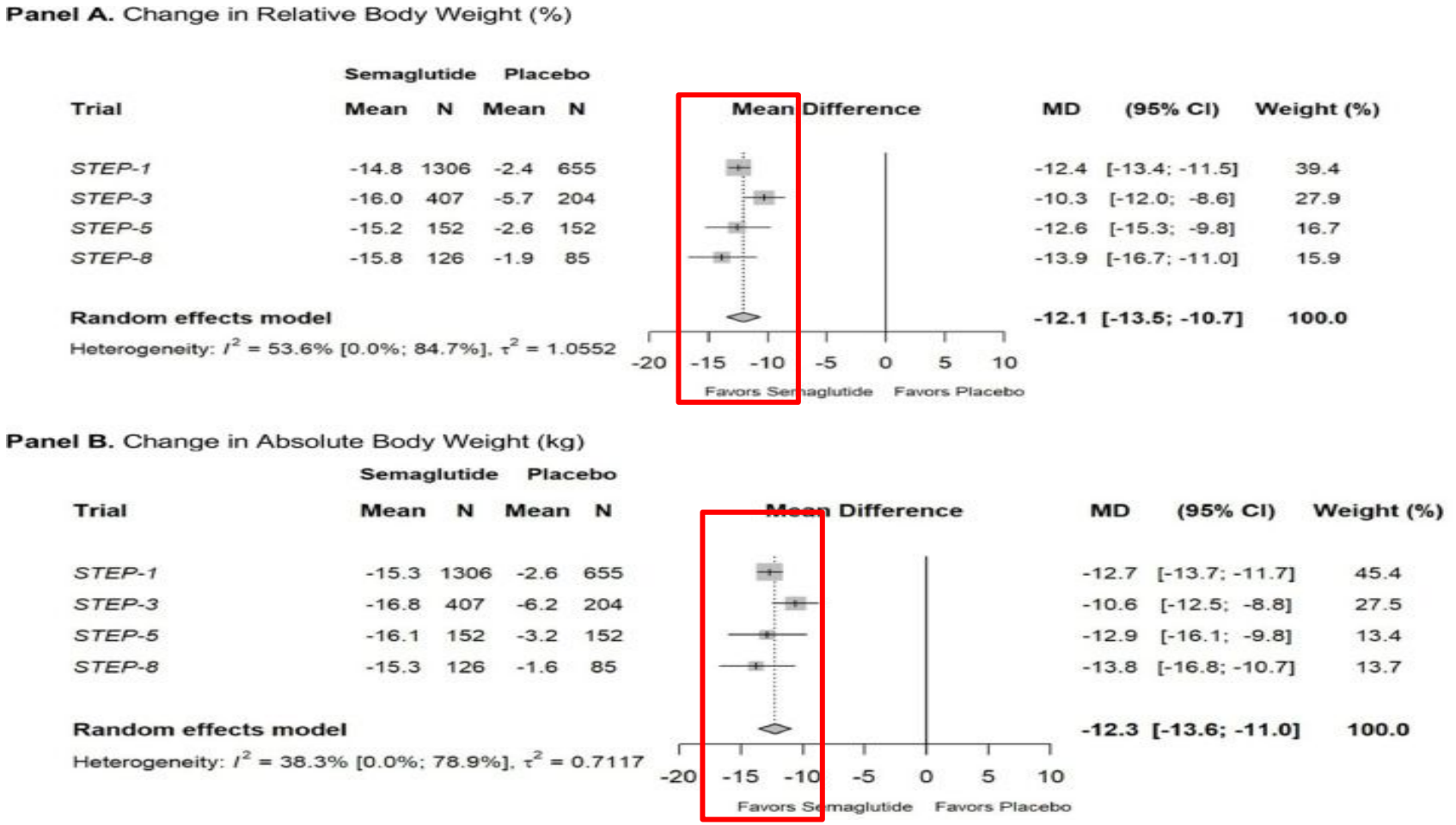


Figure 2. Summary of the Cochrane quality assessment risk of Bias 2 (RoB 2) results stratified by risk domains.

問題五：如果作者將研究結果進行合併，是否合理？

⬜ Yes ⬜ No ☑️ Can’t tell

問題六：這篇系統性文獻回顧的整體結果為



問題六：這篇系統性文獻回顧的整體結果為

Table 4 Pooled relative risks of safety outcomes in participants enrolled in trials of semaglutide use for weight loss*

Outcome	Number of Participants (%)		Relative Risk (95% Confidence Interval)	I^2
	Semaglutide	Placebo		
Any Adverse Event During Treatment Period†	1827/1991 (91.8%)	979/1096 (89.3%)	1.02 (0.97, 1.08)	45.1%
Gastrointestinal Adverse Events During Treatment Period	1537/1991 (77.2%)	572/1096 (52.2%)	1.47 (1.28, 1.68)	47.0%
Any Adverse Events Leading to Trial Product Discontinuation During Treatment Period	129/1991 (6.5%)	36/1096 (3.3%)	1.94 (1.15, 3.28)	0.0%
Gastrointestinal Adverse Leading to Trial Product Discontinuation During Treatment Period	80/1991 (4.0%)	7/1096 (0.6%)	5.36 (1.64, 17.52)	0.0%
Serious Adverse Events During Treatment Period‡	187/1991 (9.4%)	72/1096 (6.6%)	1.36 (0.51, 3.60)	63.4%
Death at Maximum Follow-Up§	2/1991 (0.1%)¶	1/1096 (0.1%)#	1.05 (0.28, 3.93)	0.0%

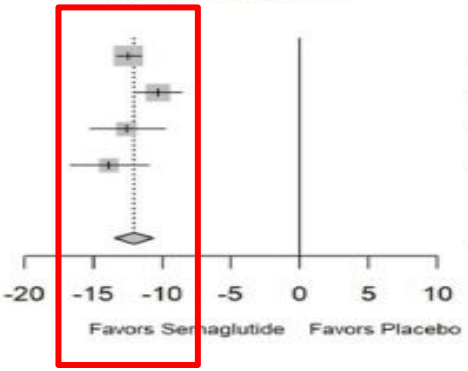
問題七：結果精準嗎？

☑ Yes ☐ No ☐ Can't tell

Panel A. Change in Relative Body Weight (%)

Trial	Semaglutide Mean	Semaglutide N	Placebo Mean	Placebo N	MD	(95% CI)	Weight (%)
STEP-1	-14.8	1306	-2.4	655	-12.4	[-13.4; -11.5]	39.4
STEP-3	-16.0	407	-5.7	204	-10.3	[-12.0; -8.6]	27.9
STEP-5	-15.2	152	-2.6	152	-12.6	[-15.3; -9.8]	16.7
STEP-8	-15.8	126	-1.9	85	-13.9	[-16.7; -11.0]	15.9
Random effects model					**-12.1**	**[-13.5; -10.7]**	**100.0**

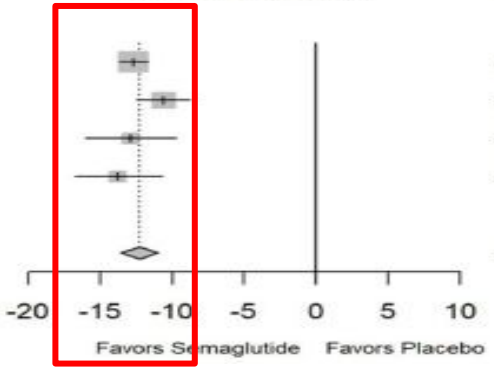
Heterogeneity: I^2 = 53.6% [0.0%; 84.7%], τ^2 = 1.0552



Panel B. Change in Absolute Body Weight (kg)

Trial	Semaglutide Mean	Semaglutide N	Placebo Mean	Placebo N	MD	(95% CI)	Weight (%)
STEP-1	-15.3	1306	-2.6	655	-12.7	[-13.7; -11.7]	45.4
STEP-3	-16.8	407	-6.2	204	-10.6	[-12.5; -8.8]	27.5
STEP-5	-16.1	152	-3.2	152	-12.9	[-16.1; -9.8]	13.4
STEP-8	-15.3	126	-1.6	85	-13.8	[-16.8; -10.7]	13.7
Random effects model					**-12.3**	**[-13.6; -11.0]**	**100.0**

Heterogeneity: I^2 = 38.3% [0.0%; 78.9%], τ^2 = 0.7117



問題七：結果精準嗎？

☑ Yes ☐ No ☐ Can't tell

Table 4 Pooled relative risks of safety outcomes in participants enrolled in trials of semaglutide use for weight loss*

Outcome	Number of Participants (%)		Relative Risk (95% Confidence Interval)	I^2
	Semaglutide	Placebo		
Any Adverse Event During Treatment Period†	1827/1991 (91.8%)	979/1096 (89.3%)	1.02 (0.97, 1.08)	45.1%
Gastrointestinal Adverse Events During Treatment Period	1537/1991 (77.2%)	572/1096 (52.2%)	1.47 (1.28, 1.68)	47.0%
Any Adverse Events Leading to Trial Product Discontinuation During Treatment Period	129/1991 (6.5%)	36/1096 (3.3%)	1.94 (1.15, 3.28)	0.0%
Gastrointestinal Adverse Leading to Trial Product Discontinuation During Treatment Period	80/1991 (4.0%)	7/1096 (0.6%)	5.36 (1.64, 17.52)	0.0%
Serious Adverse Events During Treatment Period‡	187/1991 (9.4%)	72/1096 (6.6%)	1.36 (0.51, 3.60)	63.4%
Death at Maximum Follow-Up§	2/1991 (0.1%)¶	1/1096 (0.1%)#	1.05 (0.28, 3.93)	0.0%

問題八：此研究結果是否可應用到當地的族群？

☑️ Yes ⬜ No ⬜ Can't tell

	STEP-1
Location	Argentina, Belgium, Bulgaria, Canada, Denmark, Finland, France, Germany, India, Japan, Mexico, Poland, Puerto Rico, Russia, Taiwan, United Kingdom, and United States
Population	STEP Program Population*

問題九：是否所有重要的臨床結果都有被考量到？

☑️ Yes ⬜ No ⬜ Can't tell

Table 3 Pooled weighted mean differences and relative risks of efficacy outcomes in participants enrolled in semaglutide use for weight loss

Outcome	Mean†		Weighted Mean Difference (95% Confidence Interval)	I^2
	Semaglutide	Placebo		
Change in Relative Body Weight (%)	-15.1	-3.0	-12.1 (-13.5, -10.7)	53.6%
Change in Absolute Body Weight (kg)	-15.7	-3.3	-12.3 (-13.6, -11.0)	38.3%
Change in Body Mass Index (kg/m^2)*	-5.6	-1.3	-4.3 (-4.9, -3.7)	59.7%
Change in Waist Circumference (cm)*	-13.8	-4.7	-9.2 (-10.0, -8.4)	0.0%
Change in Systolic Blood Pressure (mmHg)*	-6.0	-1.3	-4.8 (-5.8, -3.7)	0.0%
Change in Diastolic Blood Pressure (mmHg)*	-3.0	-0.5	-2.5 (-3.2, -1.8)	0.0%

問題十：傷害和花費換得介入所產生益處是否值得

☑ Yes ☐ No ☐ Can't tell

Our study was designed to assess the long-term efficacy and safety of once-weekly semaglutide versus placebo for sustained weight loss in adults with overweight/obesity and without diabetes. We found that the use of once-weekly 2.4 mg semaglutide, compared with placebo, was associated with a substantial increase in long-term relative (−12.1%) and absolute (−12.3 kg) weight loss. A third of participants randomized to semaglutide achieved at least a 20% reduction in body weight by the end of the treatment period compared with 2.2% of participants randomized to placebo. Semaglutide use also led to decreased BMI, waist circumference, SBP, and DBP. The rate of GI AEs was higher in the semaglutide group than in the placebo group; however, the majority of these events were transient and mild-to-moderate in severity and occurred primarily during and shortly after dose escalation. The rate of SAEs, AEs requiring treatment discontinuation, and death were low across all trials. Our results suggest that semaglutide is beneficial for promoting sustained weight loss in adults with overweight/obesity and without diabetes.

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?	Can't tell
6	這篇系統性文獻回顧的整體結果為何？	Yes
7	結果精準嗎？	Yes
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

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 – 結合臨床
5A – 執行決策

臨床應用

5.1.3.2. Liraglutide（如 Victoza）、dulaglutide（如 Trulicity）、lixisenatide(如 Lyxumia）、semaglutide（如 Ozempic）(101/10/1、105/5/1、105/8/1、107/4/1、107/7/1、109/5/1、109/8/1、109/9/1、109/12/1)

1. 限用於已接受過最大耐受劑量的 metformin 及/或 sulfonylurea 類藥物，且併用下列藥品之一持續6個月之後，HbA1c 仍高於8.5%以上之第二型糖尿病患者：(109/5/1)
   (1)SGLT-2抑制劑
   (2)DPP-4抑制劑
   (3)SGLT-2抑制劑合併 DPP-4抑制劑複方藥品
   (4)Insulin
2. 當患者已接受前述口服降血糖藥物，及/或基礎胰島素治療仍未達理想血糖控制時，與口服降血糖藥物及/或基礎胰島素併用。
3. 發生重大心血管事件，如心肌梗塞、接受冠狀動脈或其他動脈血管再通術(revascularization)、動脈硬化相關之缺血性腦中風等之病人，於接受過最大耐受劑量的 metformin 後，仍無法理想控制血糖之第二型糖尿病患者，可考慮不須使用其他口服降血糖藥品而考慮使用 liraglutide 或 dulaglutide 或 semaglutide。(109/12/1)
4. 本藥品不得與 DPP-4抑制劑、SGLT-2抑制劑併用。
5. 109年5月1日前已依生效前之給付規定使用本類藥物之病人，得繼續使用原藥物至醫師更新其處方內容（109/8/1）。

健保給付規定：非第二型糖尿病患者須自費

臨床應用

三軍總醫院 Tri-Service General Hospital

藥品基本資料			
英文名	OZEMPIC SOLN FOR INJ 4 MG/3 ML (***)	院內碼	005OZE02
中文名	胰妥讚 注射劑	申請商	台灣諾和諾德藥品股份有限公司
健保碼	KC01107216	健保價	3585
成份名	SEMAGLUTIDE		

藥物施打：一週施打一次、一針可施打四週

藥物費用：3585元（依照各家醫院彈性調整）

報告大綱

情境摘要
背景搜尋

1A – 提出問題
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4A – 結合臨床
5A – 執行決策

共享決策

醫療現況(實證醫學)

證據等級：CEBM level 1
建議等級：_

病人的治療偏好

希望可以藉由瘦瘦針達到減重效果。

利弊平衡

使用瘦瘦針(Semaglutide)治療可預期體重減輕12.3公斤，效果十分顯著。

常見的腸胃道副作用如噁心嘔吐，但因此停藥者極少

費用資源

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 **一月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喔！


THANK YOU :)