

Injectable Anti-diabetic Medications in Hong Kong 2023



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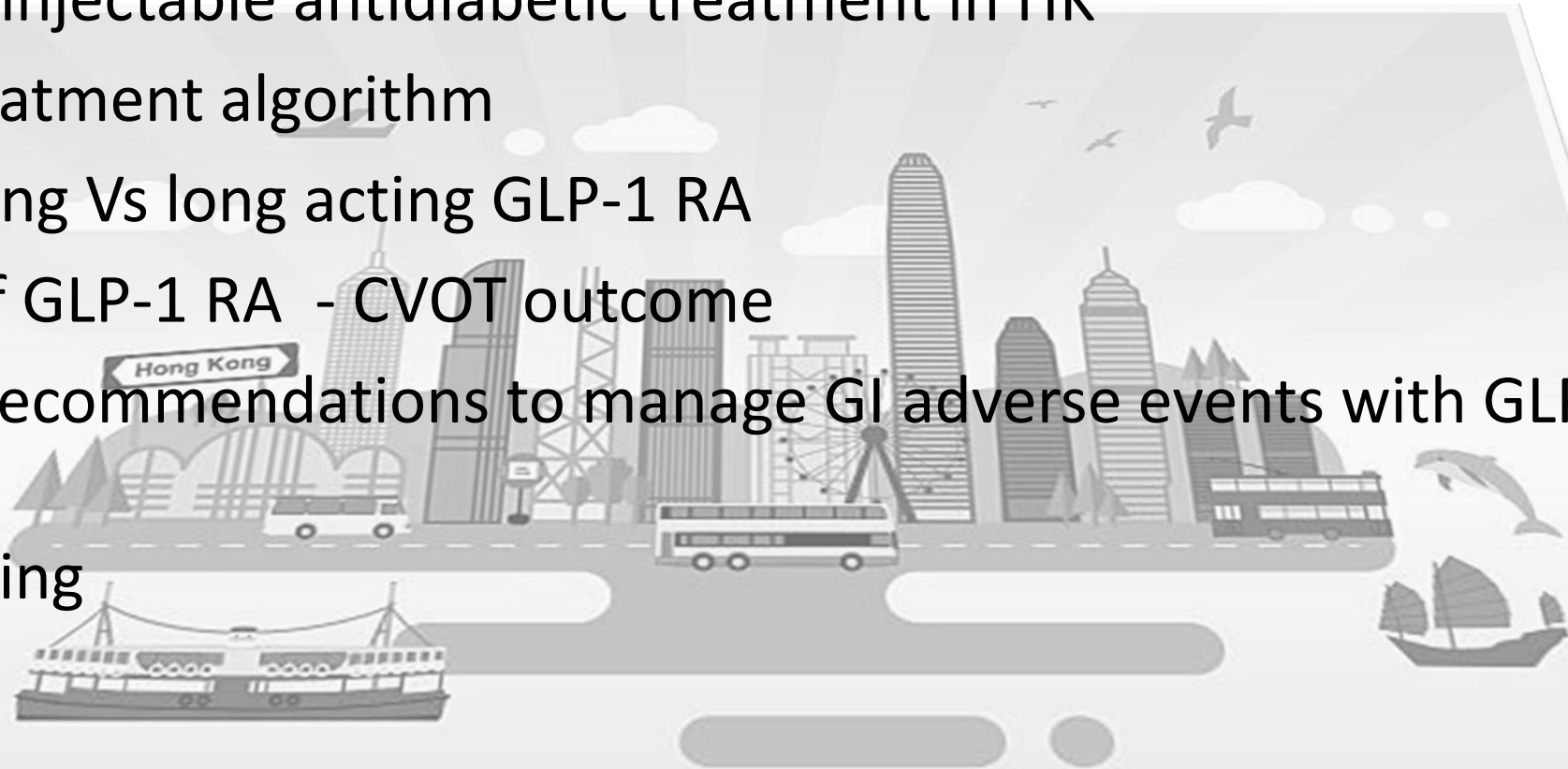
Vice president, Hong Kong Obesity Society

Vice president, Diabetes HongKong

Council member, diabetic division, Hong Kong Society of Endocrinology, Metabolism and Reproduction (HKSEMR)

Agenda

- Available injectable antidiabetic treatment in HK
- T2DM treatment algorithm
- Short acting Vs long acting GLP-1 RA
- Benefit of GLP-1 RA - CVOT outcome
- Clinical Recommendations to manage GI adverse events with GLP-1RAs
- Case sharing



Injectable Anti-diabetic Treatment in HK

GLP-1RA

- Victoza (Liraglutide)
- Bydureon bcise (Exenatide extended release)
- Trulicity (Dulaglutide)
- Ozempic (Semaglutide)

GLP-1RA+ insulin

- Soliqua (Glargine / Lixisenatide)
- Xultophy (Degludec /Liruglutide)

GIP/GLP-1RA (not available in HK yet)

- Tirzepatide

Insulin

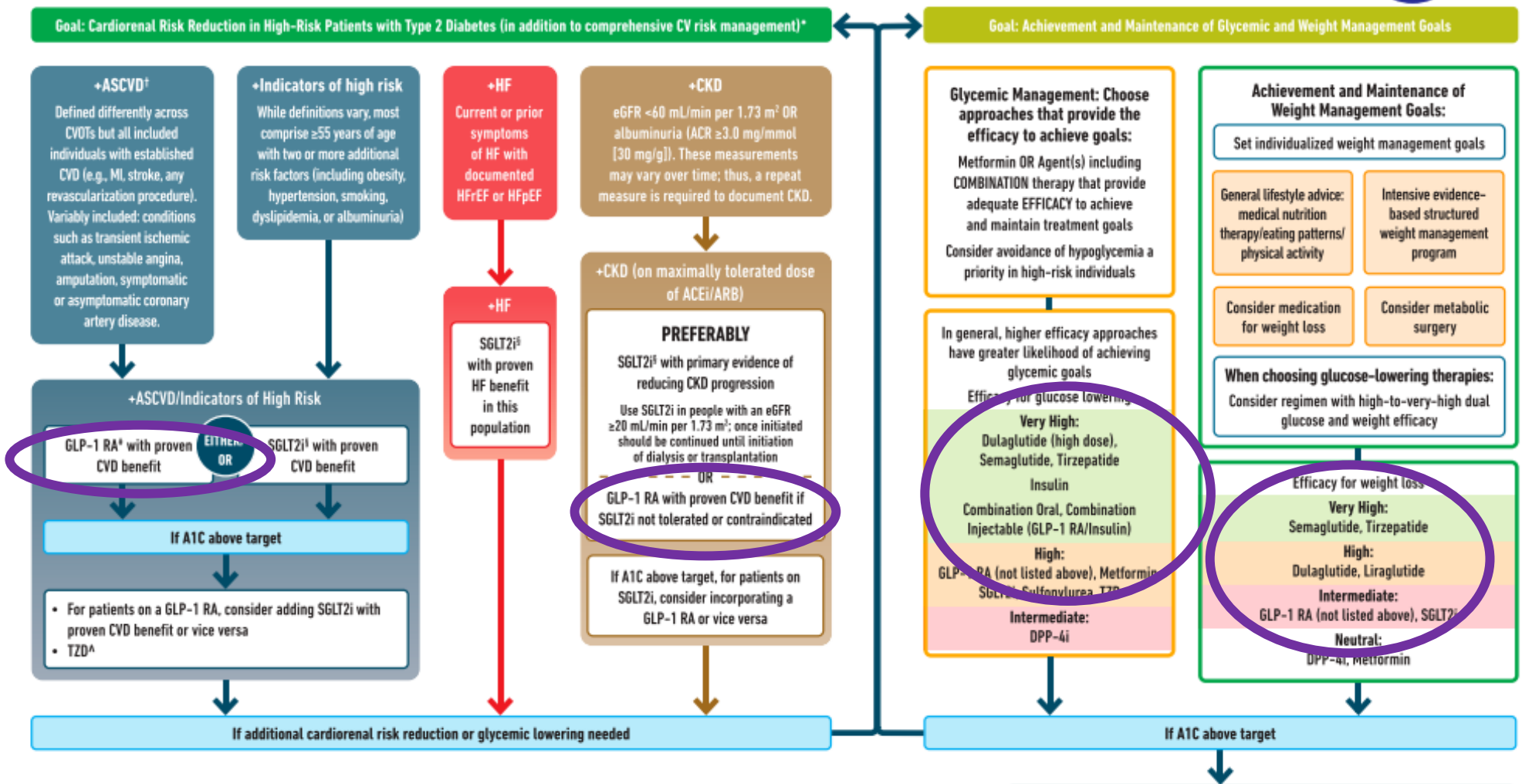
- Short acting
- Intermediate acting
- Rapid acting
- Long acting
- Premixed insulin



USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES

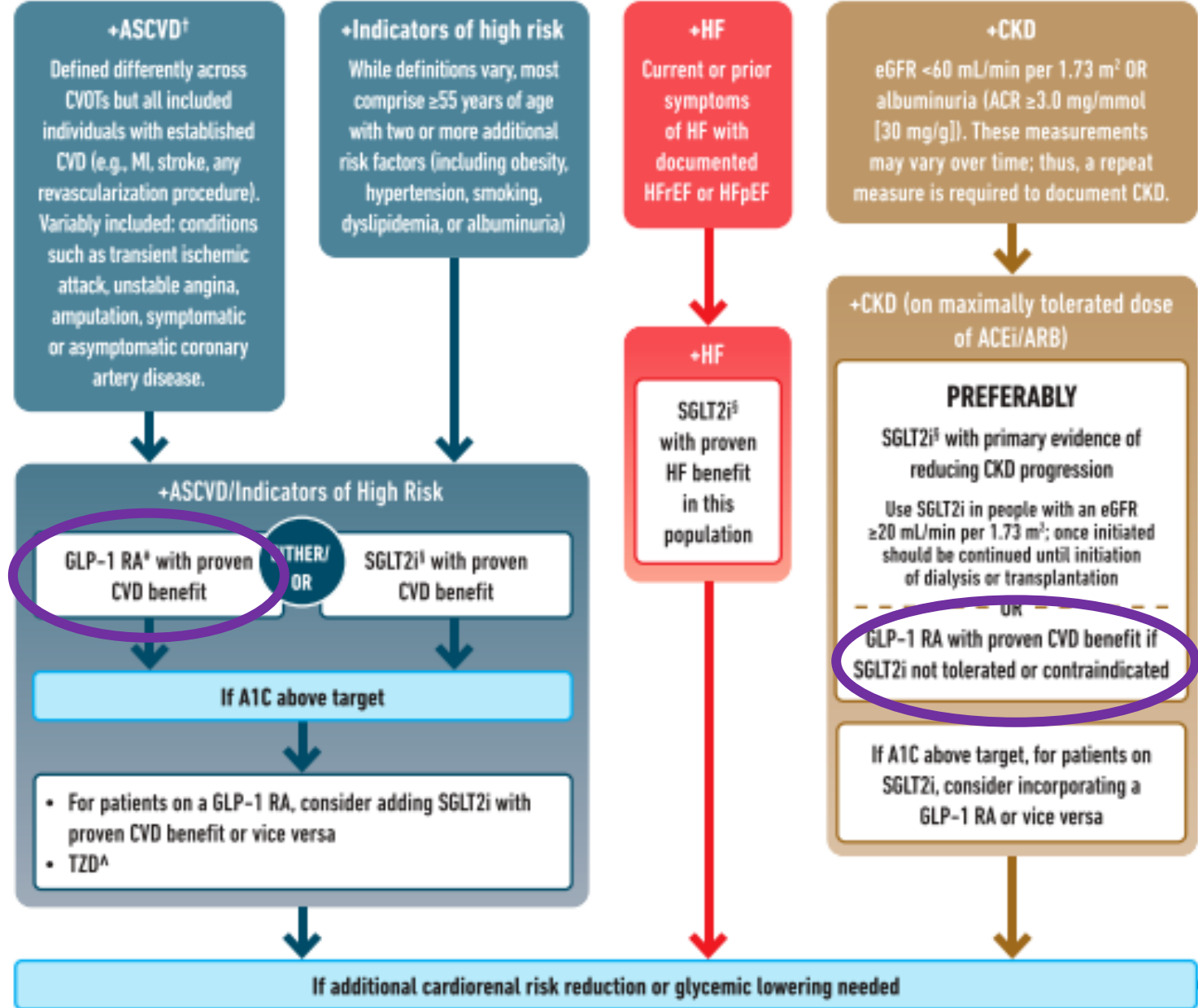


HEALTHY LIFESTYLE BEHAVIORS; DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES); SOCIAL DETERMINANTS OF HEALTH (SDOH)



* In people with HF, CKD, established CVD or multiple risk factors for CVD, the decision to use a GLP-1 RA or SGLT2i with proven benefit should be independent of background use of metformin; † A strong recommendation is warranted for people with CVD and a weaker recommendation for those with indicators of high CV risk. Moreover, a higher absolute risk reduction and thus lower numbers needed to treat are seen at higher levels of baseline risk and should be factored into the shared decision-making process. See text for details; ‡ Low-dose TZD may be better tolerated and similarly effective; § For SGLT2i, CV/renal outcomes trials demonstrate their efficacy in reducing the risk of composite MACE, CV death, all-cause mortality, MI, HFrEF, and renal outcomes in individuals with T2D with established/high risk of CVD; ¶ For GLP-1 RA, CVDs demonstrate their efficacy in reducing composite MACE, CV death, all-cause mortality, MI, stroke, and renal endpoints in individuals with T2D with established/high risk of CVD.

Goal: Cardiorenal Risk Reduction in High-Risk Patients with Type 2 Diabetes (in addition to comprehensive CV risk management)*



Goal: Achievement and Maintenance of Glycemic and Weight Management Goals



Glycemic Management: Choose approaches that provide the efficacy to achieve goals:

Metformin OR Agent(s) including COMBINATION therapy that provide adequate EFFICACY to achieve and maintain treatment goals
Consider avoidance of hypoglycemia a priority in high-risk individuals

In general, higher efficacy approaches have greater likelihood of achieving glycemic goals

Efficacy for glucose lowering

Very High:

Dulaglutide (high dose), Semaglutide, Tirzepatide

Insulin

Combination Oral, Combination Injectable (GLP-1 RA/Insulin)

High:

GLP-1 RA (not listed above), Metformin, SGLT2i, Sulfonyleurea, TZD

Intermediate:

DPP-4i

Achievement and Maintenance of Weight Management Goals:

Set individualized weight management goals

General lifestyle advice: medical nutrition therapy/eating patterns/physical activity

Intensive evidence-based structured weight management program

Consider medication for weight loss

Consider metabolic surgery

When choosing glucose-lowering therapies:

Consider regimen with high-to-very-high dual glucose and weight efficacy

Efficacy for weight loss

Very High:

Semaglutide, Tirzepatide

High:

Dulaglutide, Liraglutide

Intermediate:

GLP-1 RA (not listed above), SGLT2i

Neutral:

DPP-4i, Metformin



If A1C above target

Identify barriers to goals:

- Consider DSMES referral to support self-efficacy in achievement of goals
- Consider technology (e.g., diagnostic CGM) to identify therapeutic gaps and tailor therapy
- Identify and address SDOH that impact achievement of goals

A strong evidence to treat For SGLT2i, CV/ risk of CVD; CVD.

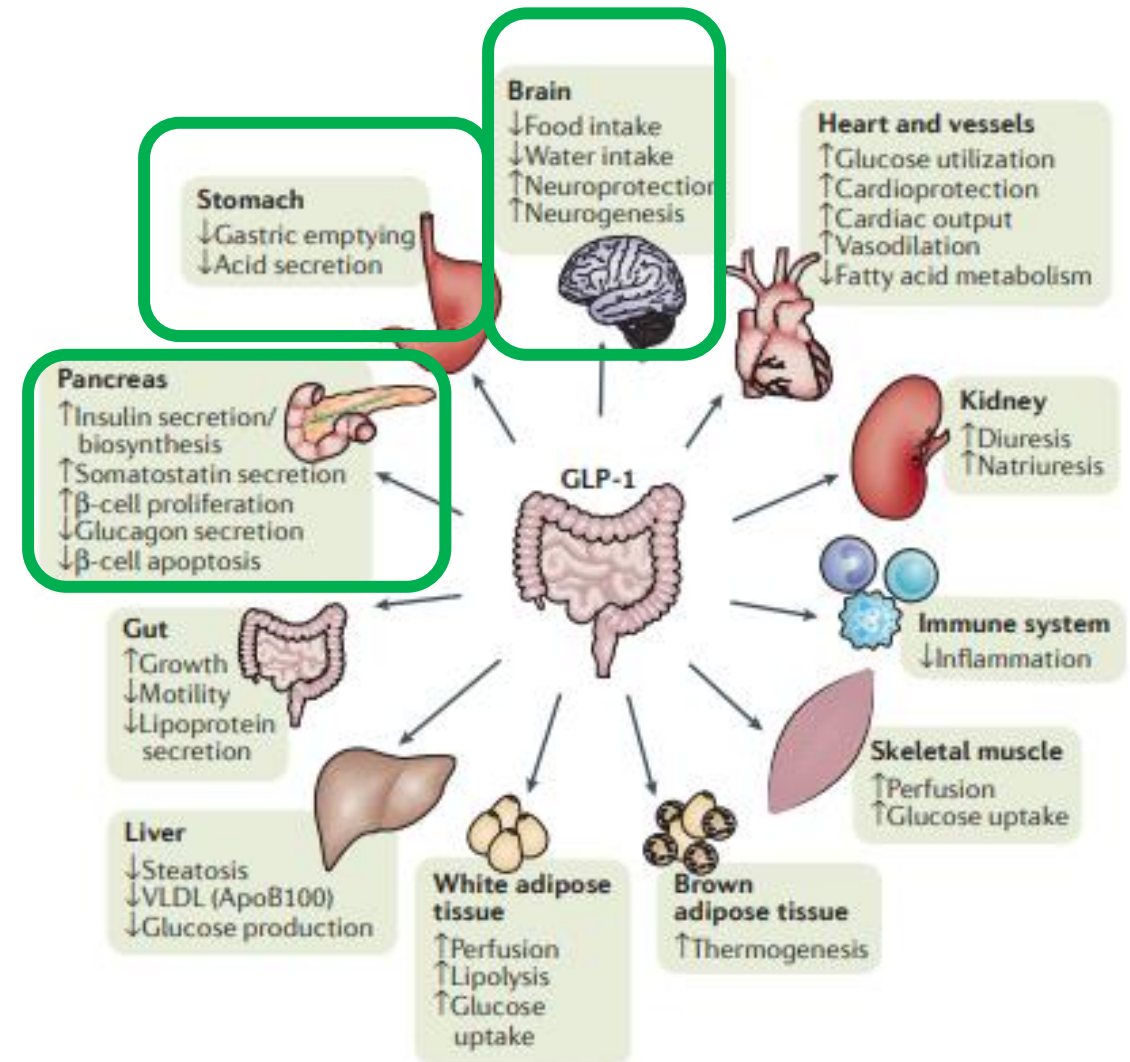
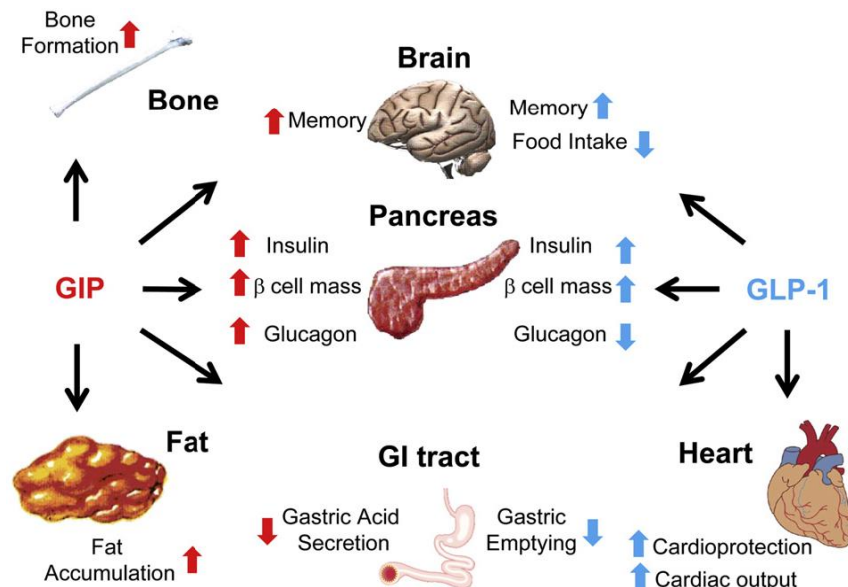
When to use GLP-1RA ?

- 1st injectable treatment in Type 2 DM when OAD failure
- Diabesity
- ASCVD (atherosclerotic cardiovascular disease)
- CKD (if SGLT-2 inhibitor intolerated or contraindicated)

What is GLP-1/GIP? Pathophysiology

The incretins glucagon-like peptide 1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP)

- gut-derived hormones that potentiate insulin secretion
- contribute to glucose metabolism through a wide range of physiological actions



Nature Reviews Nephrology volume 13, pages605–628 (2017)

Progress in biophysics and molecular biology vol107, issue2, Nov2011 ,pages248-256

Table 1. Currently available GLP-1 RAs.

	Drug	Approval date (US, EMA)	Phase III clinical trial program	Base	Homology to native GLP-1 (%)	Dose and frequency	Route	T_{max}	Half-life
Short-acting	Exenatide (Byetta®)	28 April 2005, 20 November 2006	AMIGO	Exendin-4	53	5–10 mcg twice daily	SC	2.1 h	2.4 h
	Lixisenatide (Adlyxin®, Lyxumia®)	28 July 2016, 1 February 2013	GetGoal	Exendin-4	50	10–20 mcg once daily	SC	1–3.5 h	3 h
Long-acting	Liraglutide (Victoza®)	25 January 2010, 30 June 2009	LEAD	Human GLP-1	97	0.6–1.8 mg once daily	SC	8–12 h	13 h
	Exenatide (Bydureon®)	26 January 2012, 17 June 2011	DURATION	Exendin-4	53	2 mg once weekly	SC	2.1–5.1 h	NR
	Dulaglutide (Trulicity®)	18 September 2014, 21 November 2014	AWARD	Human GLP-1	90	0.75–1.5 mg once weekly	SC	24–72 h	5 days
	Semaglutide (Ozempic®)	5 December 2017, 8 February 2018	SUSTAIN	Human GLP-1	94	0.25–1 mg once weekly	SC	1–3 days	1 week
	Oral Semaglutide (Rybelsus®)	20 September 2019, 3 April 2020	PIONEER	Human GLP-1	94	3–14 mg once daily	PO	1 h	1 week

EMA, European Medicines Agency; FDA, Food and Drug Administration; GLP-1 RA, glucagon-like peptide-1 receptor agonists; NR, not reported; PO, by mouth; SC, subcutaneous; US, United States.

Daily SC injection

Weekly SC injection

Fixed-dose combinations
(GLP-1 RA/basal insulin)

Pen devices
for injection

Drug:
Generic/
commercial











Single (1) or
multiple (x) use?

Predefined (p) or
variable (v) dosing

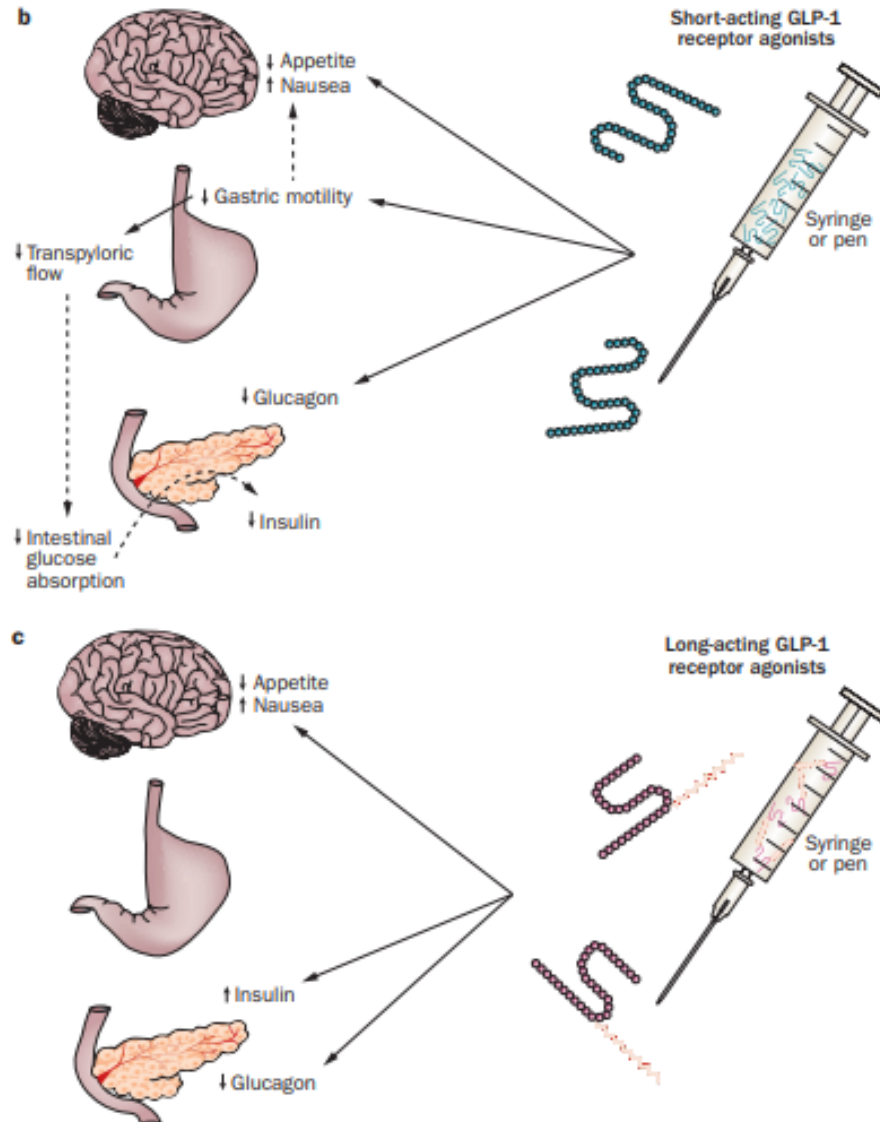
Pens available
(maximum dose)

Resuspension
necessary?

Ease of use

										
	Exenatide b.i.d. Byetta®	Lixisenatide Lyxumia®	Liraglutide Victoza®	Exenatide once weekly Bydureon®	Exenatide once weekly Bydureon® BCise	Dulaglutide Trulicity®	Albiglutide Eperzan®/ Tanzeum®	Semaglutide Ozempic®	iDegLira Xultophy®	iGlarLixi Soliqua®/ Suliqua®
	x	x	x	1	1	1	1	x	x	x
	p	p	v	p	p	p	p	p	v (for titration)	v (for titration)
	a. 5 µg b. 10 µg	a. 10 µg b. 20 µg	a. 0.6 mg b. 1.2 mg c. 1.8 mg	2 mg	2 mg	a. 0.75 mg b. 1.5 mg	a. 30 mg b. 50 mg	a. 0.25 mg b. 0.5 mg c. 1.0 mg	1.8 mg/ iDeg 50 IU per dose	a. 20 µg/iGlar 40 IU per dose or b. 20 µg/iGlar 60 IU per dose
	no	no	no	yes	no*	no	yes	no	no	no
	+	+	+	-	(-)	+++	(-)	+	+	+

Short Vs long acting GLP-1RA



Short-acting GLP-1 receptor agonists

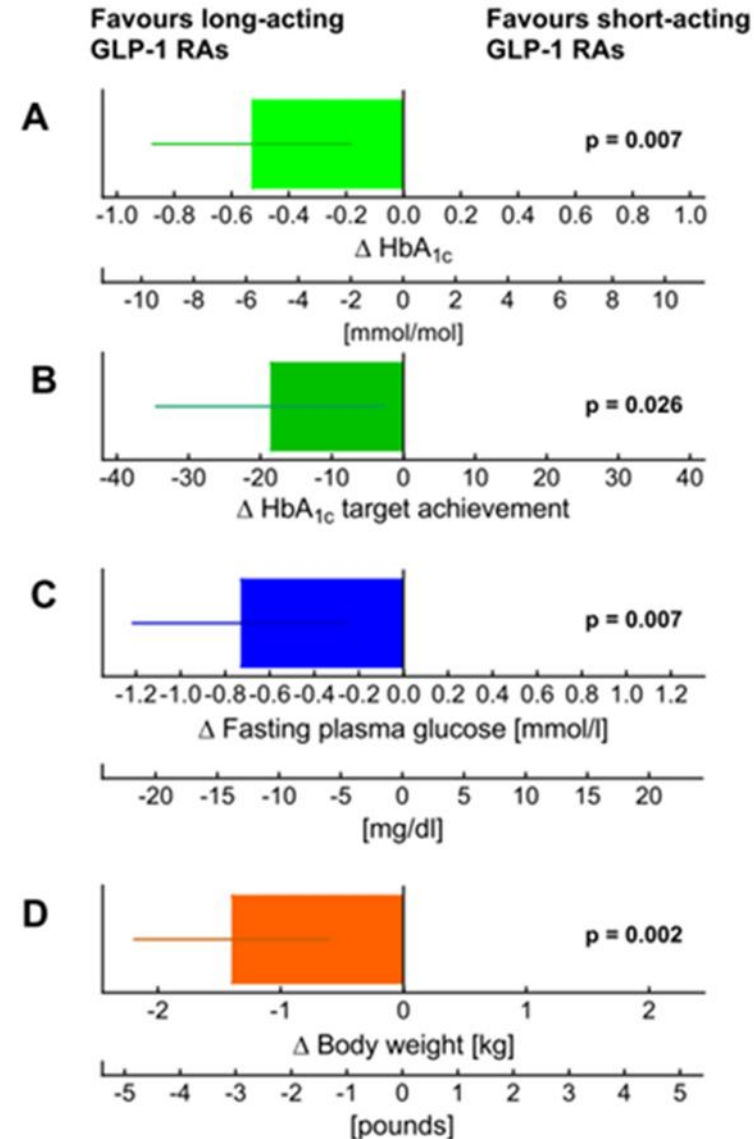
- inhibit gastric motility, reducing transpyloric flow (solid lines).
- lead to delayed intestinal glucose absorption and, indirectly, to a reduction in postprandial insulin secretion
- appetite suppression and induction of nausea (dashed lines).
- have direct effects on the CNS and on glucagon secretion

Fasting blood glucose levels	Modest reduction	Strong reduction
Postprandial hyperglycaemia	Strong reduction	Modest reduction
Fasting insulin secretion	Modest stimulation	Strong stimulation
Postprandial insulin secretion	Reduction	Modest stimulation
Glucagon secretion	Reduction	Reduction
Gastric emptying rate	Deceleration	No effect
Blood pressure	Reduction	Reduction
Heart rate	No effect or small increase (0–2 bpm)	Moderate increase (2–5 bpm)
Body weight reduction	1–5 kg	2–5 kg
Induction of nausea	20–50%, attenuates slowly (weeks to many months)	20–40%, attenuates quickly (~4–8 weeks)

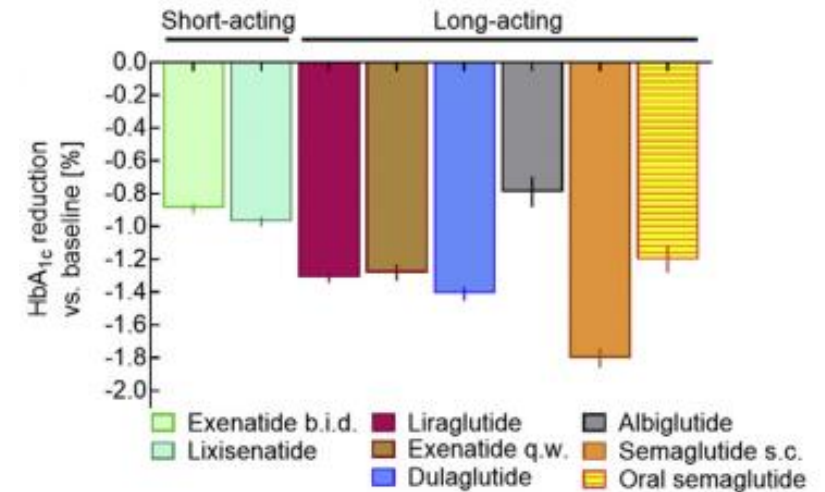
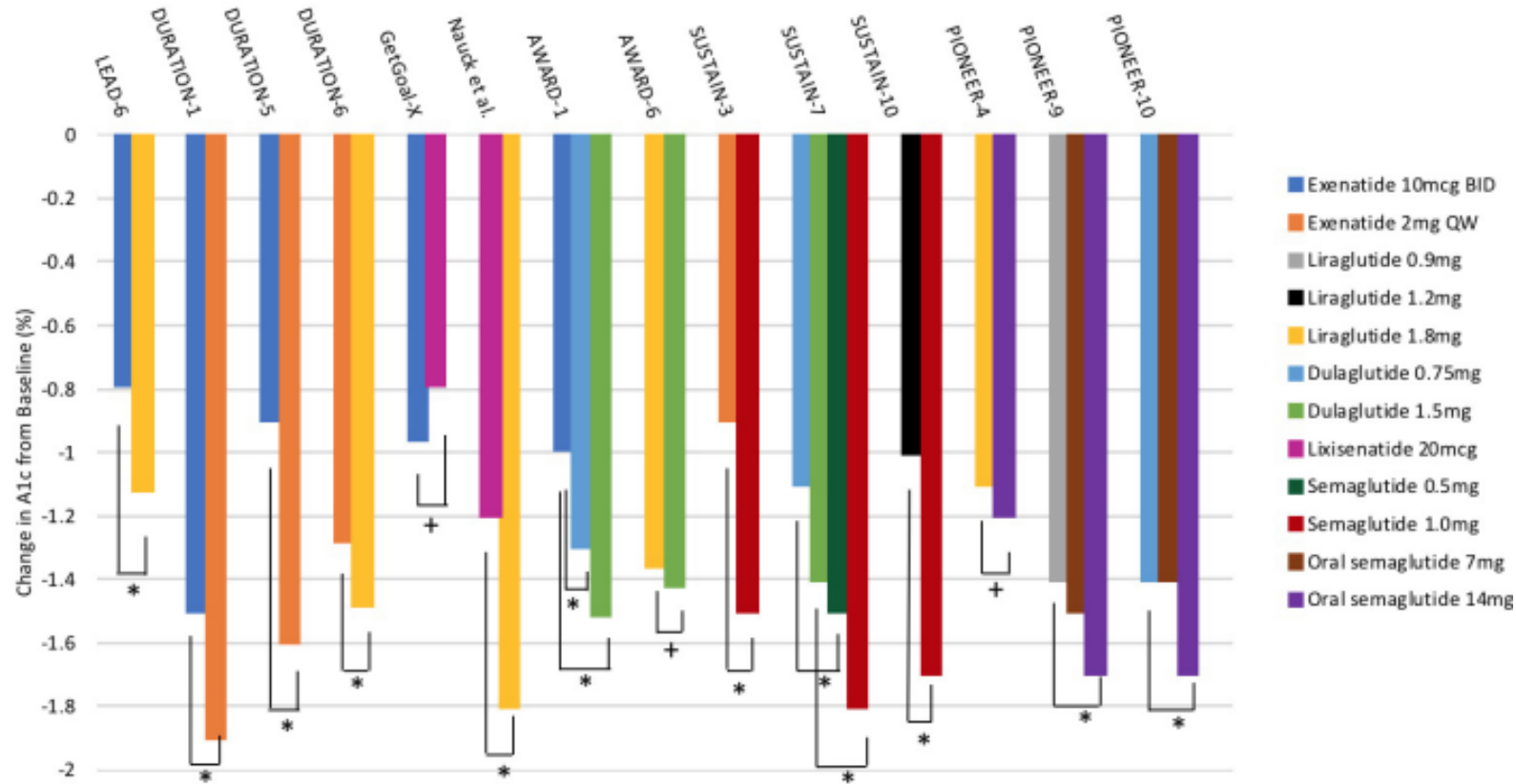
Abbreviations: GLP-1, glucagon-like peptide 1; LAR, long-acting release.

Long acting GLP-1 RAs better in

- Lowering Hba1c
- Achieving target Hba1
- Lowering fasting plasma glucose
- Lowering in body weight

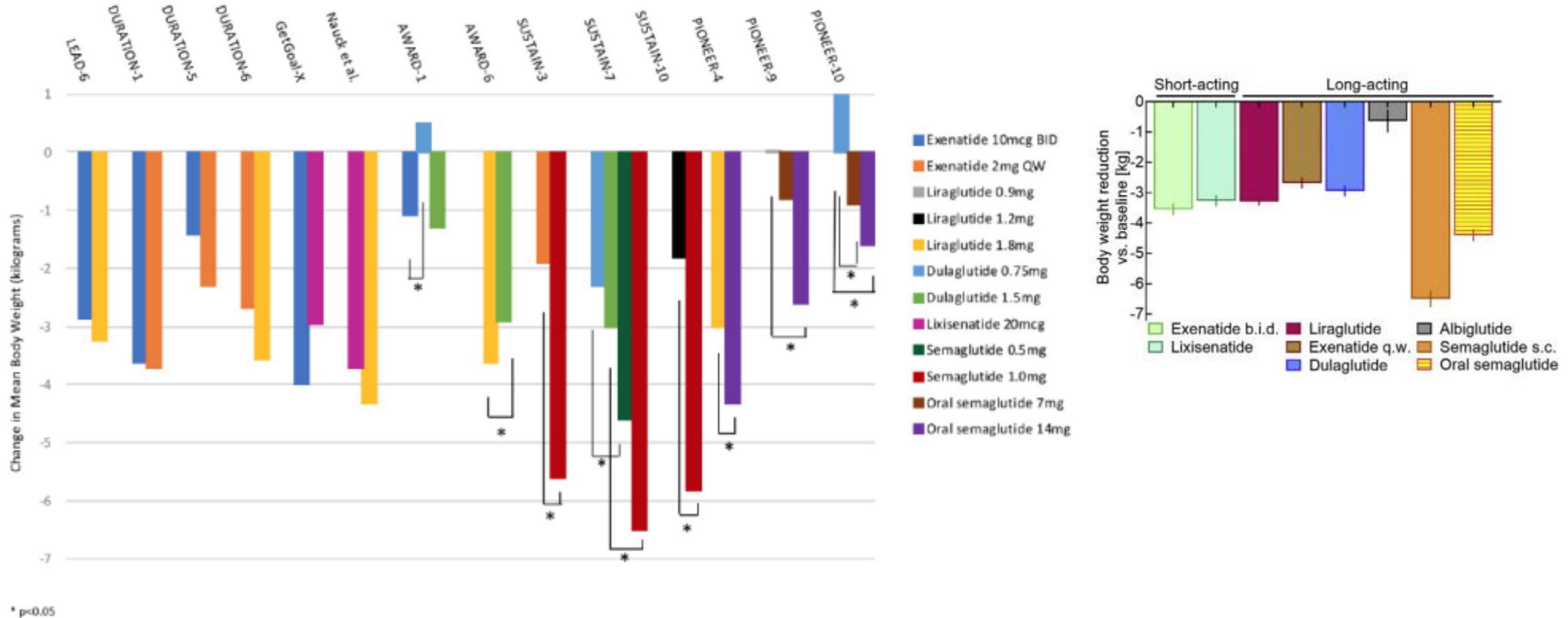


Changes in A1C values with GLP-1 RAs in head-to-head clinical studies.

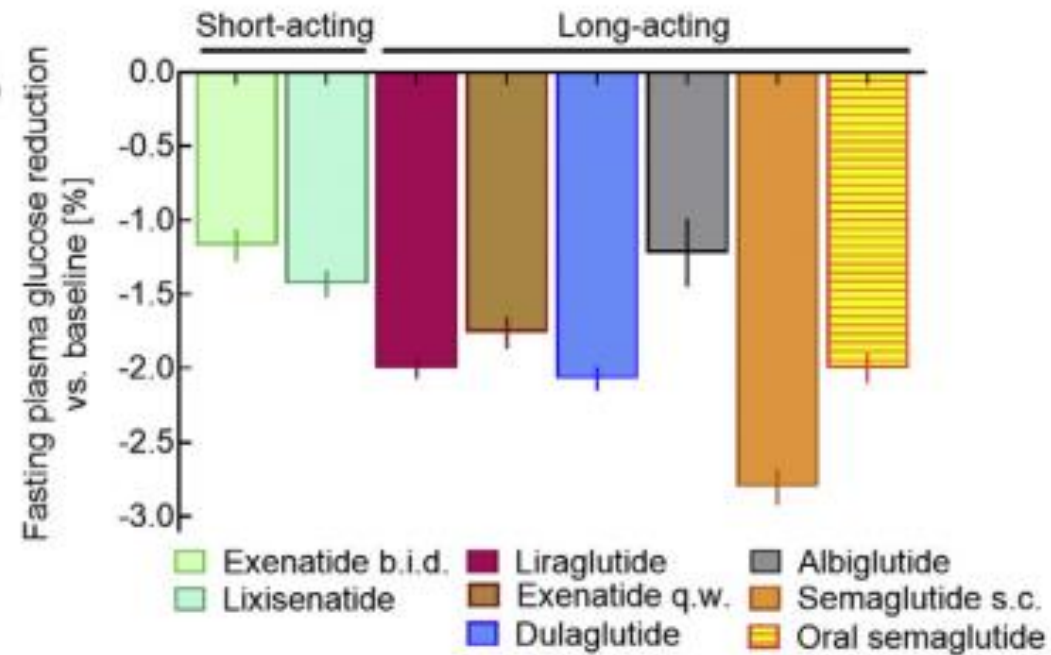


* p<0.05, + p<0.05 for a pre-defined non-inferiority margin

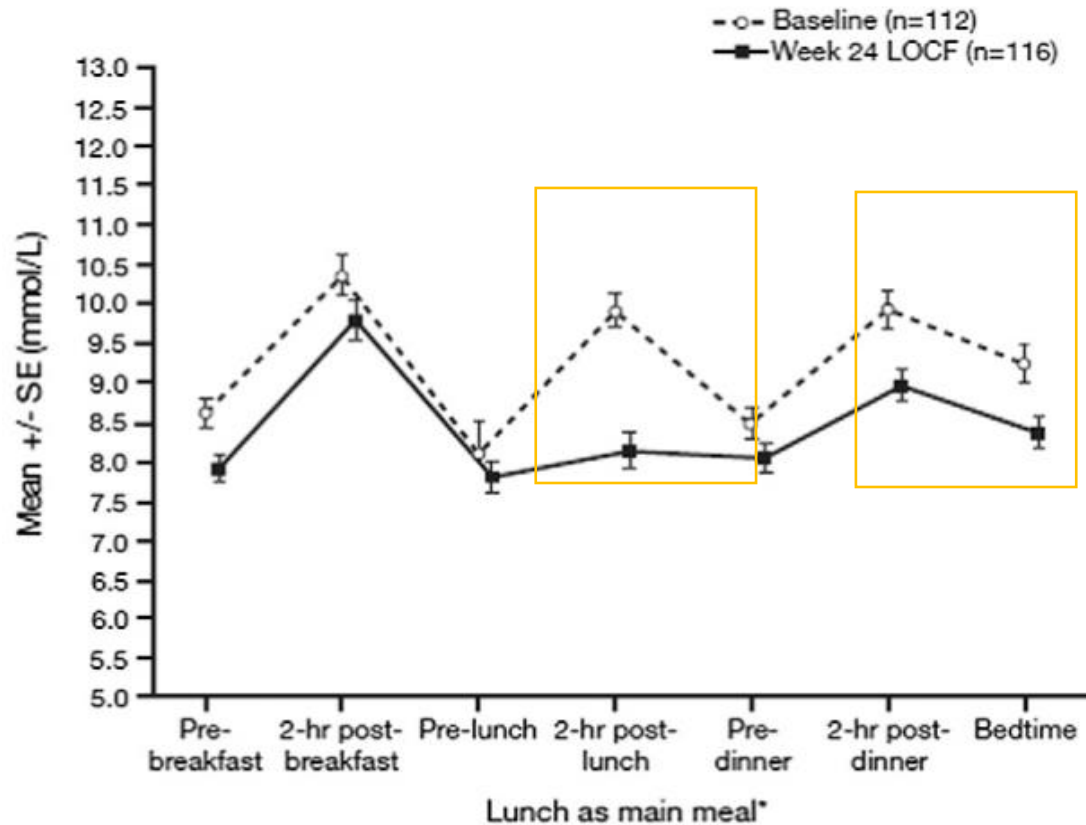
Changes in weight with GLP-1 RAs in head-to-head clinical studies



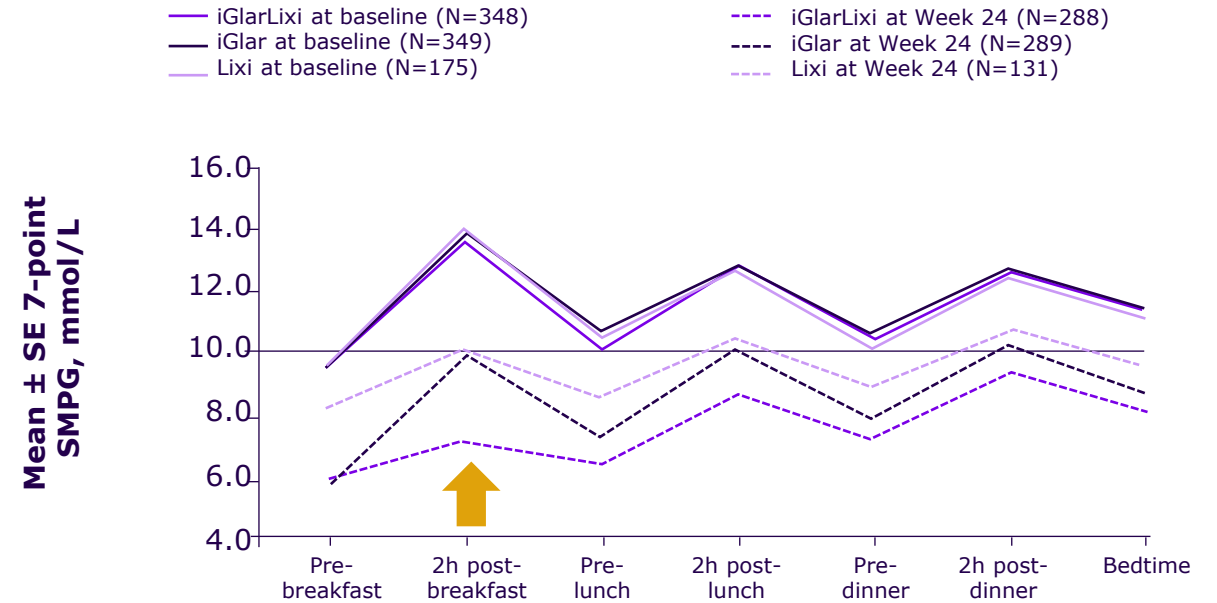
Changes in fasting plasma glucose with GLP-1 RAs



Short acting GLP-1 RA like Lixisenatide showed significant reduction in PPG excursions lasting for at least 1-2 main meals of the day



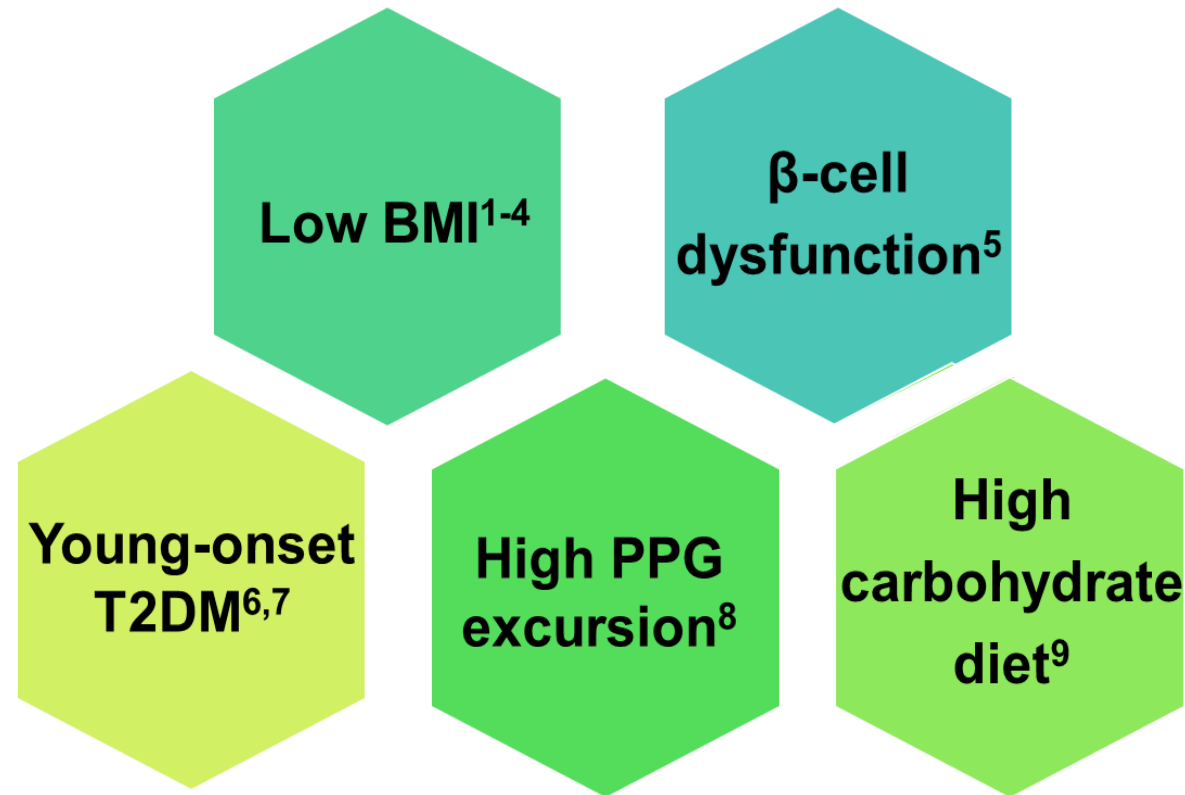
iGlarLixi LixiLan-O-AP



Significant reduction in PPG excursions for the main meal of the day (Patients may inject **iGlarLixi** with whichever their largest meal*)

*REALI study

Unique Characteristics of T2DM in Asian Populations



BMI = body mass index; PPG = postprandial glucose.

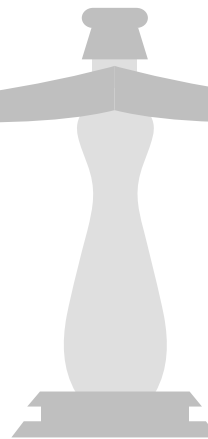
1. Tsai S, et al. *J Diabetes*. 2011;3(3):208-216. 2. Kim S, et al. *Acta Diabetol*. 2014;51(4):655-661. 3. Monami M, et al. *J Endocrinol Invest*. 2006;29(7):619-624. 4. Freemantle N, et al. *Diabetes Obes Metab*. 2012;14(10):901-909. 5. Møller JB, et al. *J Clin Endocrinol Metab*. 2014;99(11):4273-4280. 6. Chan JC, et al. *JAMA*. 2009;301(20):2129-2140. 7. Ma R and Chan JC. *Ann NY Acad Sci*. 2013;1281(2013):64-91. 8. Venn BJ, et al. *Diabet Med*. 2010;27(10):1205-1208. 9. ChartsBin statistics collector team 2011, chartsbin.com/view/1154. Accessed 7 July 2015.

Unlike basal insulin alone,
fixed-ratio combination (FRCs) can help address both PPG and FPG challenges

FRCs: Titratable, co-administration of BI/GLP-1RA in a single once-daily injection with greater reduction in HbA1c, improving convenience and mitigating GI symptoms due to gradual dose increment (compared with each component alone)¹

Basal insulin is the most effective agent to lower FPG but it is associated with hypoglycemia and weight gain^{2,3}

GLP-1 RAs can lower both FPG and PPG without an intrinsic effect to cause hypoglycemia, while promoting weight loss⁴⁻⁶

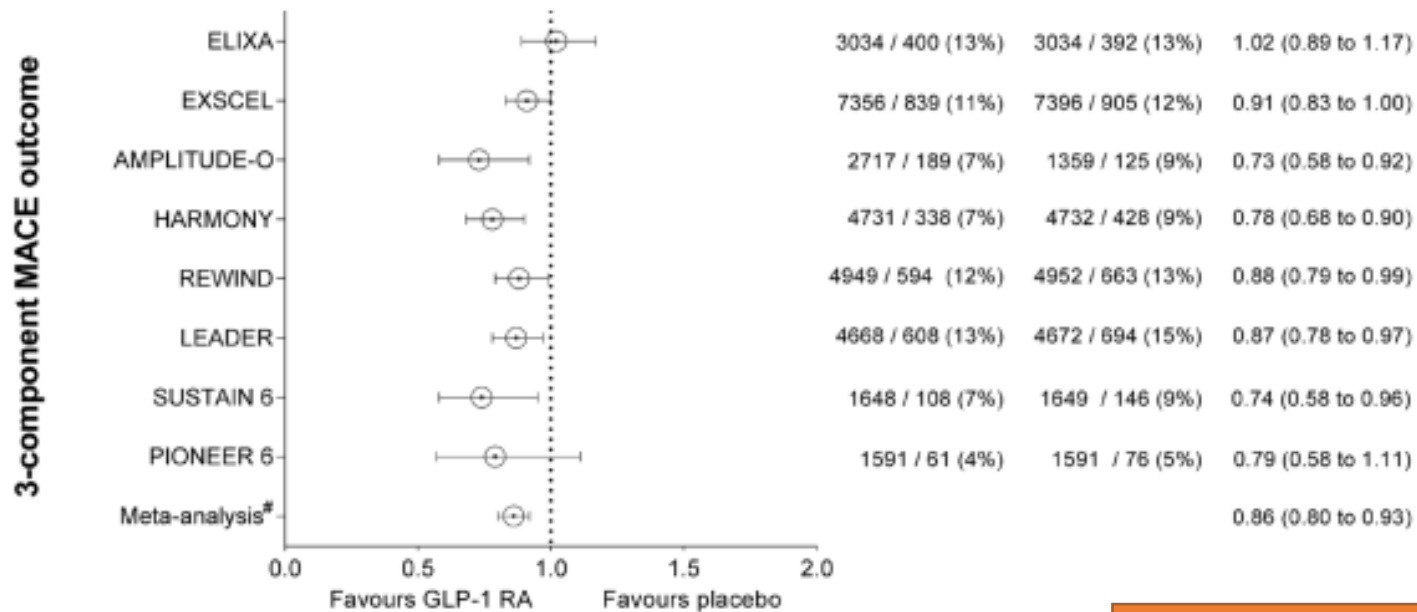


1. Perreault L, et al. Adv Ther 2019;36:265–77
2. Buse JB, et al. Diabetes Obes Metab 2015;17:145–151
3. Balena R, et al. Diabetes Obes Metab 2013;15:485–502
4. Diamant M, et al. Diabetes Care 2014;37:2763–73
5. Rosenstock J, et al. Diabetes Care 2014;37:2317–25
6. Porcellati F, et al. Diabetes Metab 2015;41:6S16–20



Benefit of GLP-1 RA - CVOT outcome

Results of **cardiovascular outcome** studies comparing GLP-1 RAs with placebo on a background of standard of care



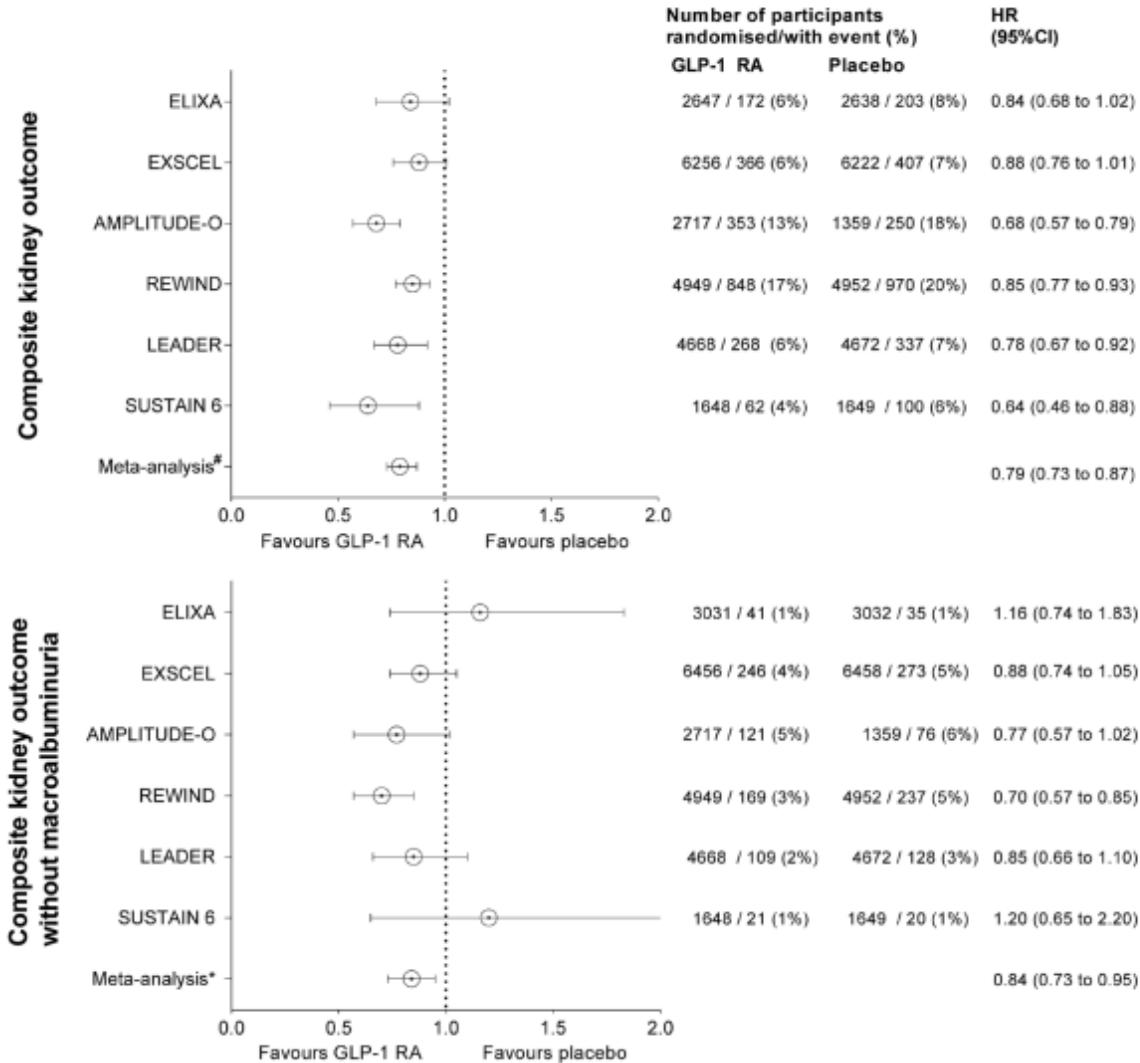
- Dulaglutide
- Liruglutide
- semiglutide

3-component MACE: cardiovascular death, myocardial infarction and stroke

GLP-1 RA drug class as a whole appears to be associated with a 14% reduction in 3-component MACE(cardiovascular death, myocardial infarction and stroke) (HR=0.86; 95% CI=0.8-0.93)

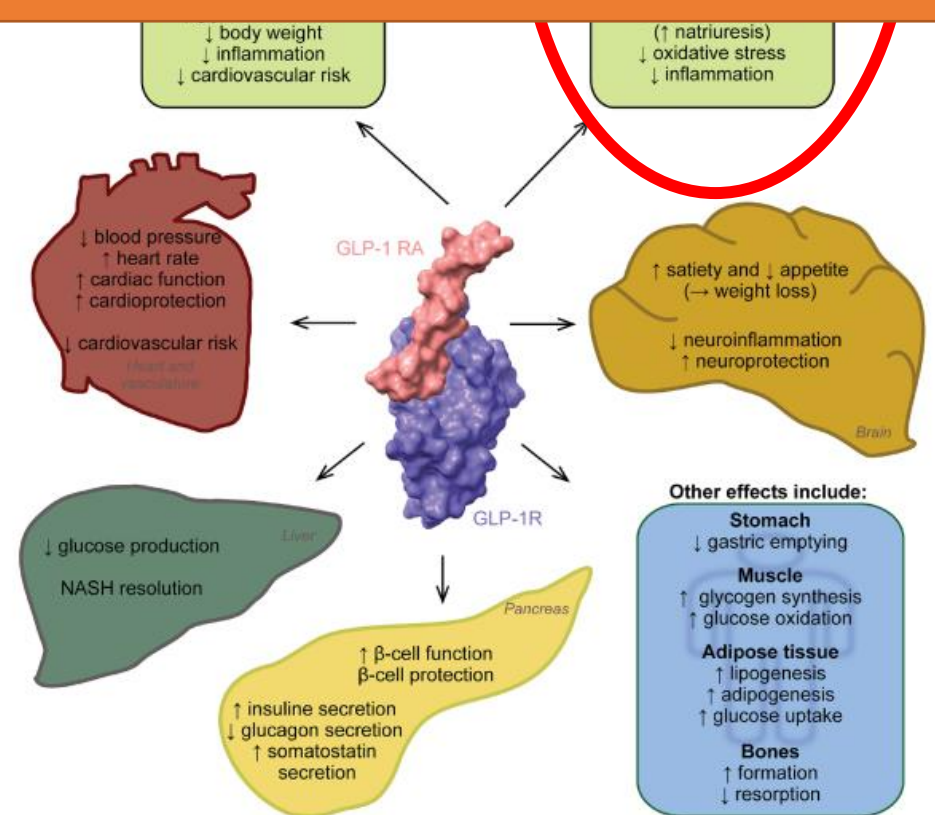
Kidney outcomes with GLP-1 receptor agonists.

GLP-1 RA drug class as a whole appears to be associated with a 21% reduction in incident kidney risk (HR=0.79; 95% CI=0.73–0.87) as evaluated using a composite kidney outcome that included macroalbuminuria



Dulaglutide
Liruglutide
semigliutide

Dulaglutide



Clinical Recommendations to manage GI adverse events with GLP-1RAs

Nausea

Eat crackers, apples, mint, ginger-based drinks 30 min after GLP-1 RA

Avoid strong smells

Vomiting

Generous hydration

More frequent meals in smaller amounts

Diarrhoea

Generous hydration (water, lemon, bicarbonate)

No sport drinks

No high fibre content foods (gradually restore them upon improvement)

Yes: chicken broth, rice, carrots, ripe peeled fruit, baked fruit

No: dairy products, laxatives, coffee, alcohol, soft drinks, very cold/hot foods, products with "art"-ending sweeteners

Constipation

Enough fiber in diet

Increase physical activity

Healthy, balanced diet

Generous hydration (water, sugar-free liquids)

In case of severe/persistent nausea/vomiting, no drinks during meals, rather 30-60 minutes before and/or after



Should any GI AE be severe/persistent in spite of following all guidelines, contact HCP as soon as possible



Key messages

- Clear instruction
- Good hydration
- Start from low dose
- Frequent small meal
- STOP and seek medical advice if any severe abdominal symptoms

1. Eating habits



2. Food composition



3. Lifestyle



1. Before



Save time to speak with the patient

- Transmit realistic expectations regarding treatment results
- Inform about GI AEs, pointing out that they will soon pass
- Highlight the importance of following the available guidelines

2. Dose-escalation

For this purpose, choose one/several among these:

- Extend current phase for 2-4 more weeks before moving forward to next dose
- Suspend treatment temporarily
- If GI AEs appear just after escalation, go back to prior dose for a few days, then increase dose gradually
- If problem persists, consider setting up as maintenance therapy a dose lower than the maximum one

If GI AEs occur, slow down the planned dose increments to reach success

3. Dose-escalation or maintenance phase

Consider one/several of these:

- Start a differential diagnosis procedure to rule out underlying conditions that may be responsible
- Check patient understands/complies with diet/lifestyle guidelines
- Start measures specifically focused on the troublesome symptoms
 - Additional patient guidelines (see Figure 2)
 - Pharmacological support (at short term)

nausea	vomiting	diarrhoea	constipation
<ul style="list-style-type: none"> •Anti-emetics •Prokinetics (domperidone) 	<ul style="list-style-type: none"> •Anti-emetics •Prokinetics (domperidone) •Standard procedures for severe cases (do not rule out i.v. rehydration) 	<ul style="list-style-type: none"> •Probiotics •Antidiarrhoeals (loperamide) •Consider metformin dose reduction when needed 	<ul style="list-style-type: none"> •Stool softeners •Consider reducing GLP-1 RA dose

- Switch to another GLP-1 RA (start at lowest escalation dose)

If GI AEs persist beyond normal in time/severity, implement additional measures

Case sharing



Mr Chan 72/M

Body Weight: 90.6 kg
Height: 1.65 m
BMI: 33.28
BP: 125/61 mmHg
Pulse: 97/min

- T2 DM since 1997, complicated by Non sight threatening retinopathy and Microalbuminuria , CKD stage 3B (eGFR 41)
- HT, Hyperlipidaemia, OSA

ASPIRIN TABLET 80MG (ORAL)	TAKE WITH / AFTER MEAL <1> TABLET(S) DAILY
BUDESONIDE 80MCG + FORMOTEROL 4.5MCG INHALER 120DOSE(S) (INHALATION)	INHALE <1> PUFF(S) TWICE DAILY WHEN NECESSARY
CALCITRIOL CAPSULE 0.25MCG (ORAL)	TAKE <1> CAPSULE(S) AT NIGHT (ON EVERY MON, THU)
EMPAGLIFLOZIN TABLET 10MG (ORAL)	TAKE WITH MEAL <1> TABLET(S) DAILY
FAMOTIDINE TABLET 20MG (ORAL)	TAKE <1> TABLET(S) TWICE DAILY
FELODIPINE EXTENDED RELEASE TAB 10MG (ORAL)	TAKE <1> TABLET(S) DAILY
GLICLAZIDE TABLET 80MG (ORAL)	TAKE WITH MEAL <2> TABLET(S) IN THE MORNING
LORATADINE TABLET 10MG (ORAL)	TAKE <1> TABLET(S) DAILY
METFORMIN HCL TABLET 500MG (ORAL)	TAKE WITH MEAL <1> TABLET(S) TWICE DAILY
SIMVASTATIN TABLET 20MG (ORAL)	TAKE <1> TABLET(S) AT NIGHT
TELMISARTAN TABLET 40MG (ORAL)	TAKE <1> TABLET(S) AT BEDTIME

***** Lab Results *****

(09/08/22) HbA1c: 8.4 % (H)
(09/08/22) Fasting Glucose: 7.3 mmol/L (H)
(09/08/22) TC: 3.70 mmol/L
(09/08/22) LDL-C: 2.11 mmol/L
(09/08/22) HDL-C: 0.86 mmol/L
(09/08/22) TG: 1.60 mmol/L
(09/08/22) Serum K: 4.5 mmol/L
(09/08/22) Serum Na: 140.0 mmol/L
(09/08/22) Serum Cr: 147 umol/L (H)
(09/08/22) Estimated GFR: 41 ml/min/1.73 sq. m. (by CKD-EPI formula)
(09/08/22) Bilirubin, Total: 9.0 umol/L
(09/08/22) ALP: 68 U/L
(09/08/22) ALT: 34 U/L
(09/08/22) Haemoglobin: 13.2 g/dL (L)
(09/08/22) Urine protein/Cr ratio: 0.3 mg/mg Cr (H)

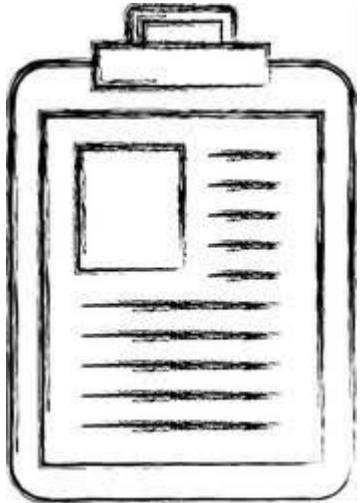
DM nurse clinic 10/2022

- Social history : Retired (previously worked as chief) , Live with wife, Children live apart
- Meal patterns:
 - 6-7am: sandwiches + 4-5 scoops of milk powder
 - noon: 1 bowl of rice / noodle + pork / fish +/- veg
 - 3-4pm: snack with a fruit /milk / a pack of biscuit
 - 7-8pm: same as lunch + starchy soup
 - 11pm: sleep
- Exercise :
 - Walking or limbs exercise 15mins / day
- Medication adherence:
 - claimed may forget om dose medication 1x/week
 - Misunderstood and not taking empagliflozin and resume recently



Diabetic intensification Clinic 1/2023

- Problem identification
 - Lifestyle modification for 3/12 (poor compliance)
 - Fair drug compliance as well as forgetfulness



BMI 33.2 >31.8
Hba1c 8.4 >8.1 eGFR 41
Urine protein/Cr ratio: 0.3 mg/mg Cr

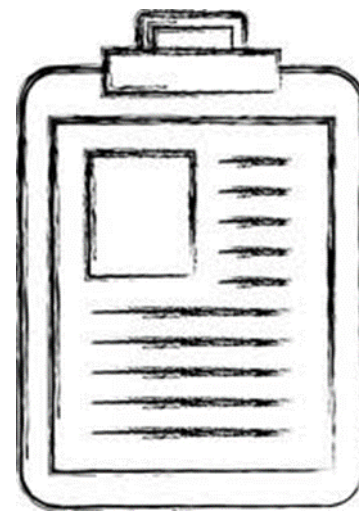
Metformin 500mg BD
Empagliflozin 10 mg daily
Diamciron 160 mg OM

What will you do ?



What will you do ?

- A. Lifestyle modification
- B. Add basal insulin SC
- C. Add GLP-1RA SC
- D. A+B
- E. A+C
- F. A+B+C



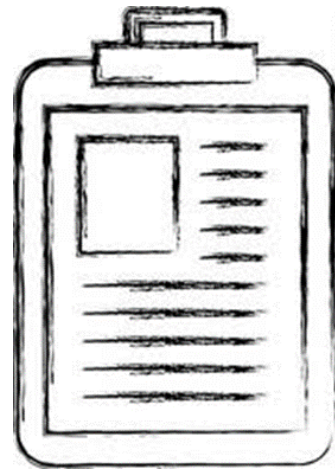
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Hba1c 8.4 >8.1 eGFR 41
Urine protein/Cr ratio: 0.3 mg/mg Cr

Metformin 500mg BD
Empagliflozin 10 mg daily
Diamciron 160 mg OM



What we did ...

- Lifestyle modification
- Drug simplification (metformin +empagliflozin > Xigduo (Dapagliflozin +metformin)
- Omit DM medication which may have weight gain effect (Diamicron)
- Add GLP-1RA (Victoza)



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Hba1c 8.4 >8.1 eGFR 41
Urine protein/Cr ratio: 0.3 mg/mg Cr

Metformin 500mg BD
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FAMOTIDINE TABLET 20MG (ORAL)	TAKE <1> TABLET(S) TWICE DAILY
FELODIPINE EXTENDED RELEASE TAB 10MG (ORAL)	TAKE <1> TABLET(S) DAILY
LIRAGLUTIDE (VICTOZA) PREFILLED PENINJECT 6MG/ML 3ML (SUBCUTANEOUS)	SUBCUTANEOUSLY <1.2> MG DAILY FOR 28 DAY(S) THEN <1.8> MG DAILY FOR 56 DAY(S).
TELMISARTAN TABLET 40MG (ORAL)	TAKE <1> TABLET(S) AT BEDTIME
XIGDUO XR EXTENDED RELEASE TAB 10MG/1000MG (ORAL)	TAKE <1> TABLET(S) WITH DINNER

Victoza

- DM control
- Weight control
- Renal benefit

Patient's journey



90.6 kg BMI: 33.28 150/61 P97	89.8 kg BMI: 31.82 158/74 P80	87.2 kg BMI: 30.90 152/72 P84	85.2 kg BMI: 30.1 148/72 P84	82.2 kg BMI: 29.12 140/66 P87	74 kg BMI: 26.22 125/68 P 73
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Hba1c 8.6	8.1			7.2	6.1
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10/2022 1/2023 2/2023 3/2023 4/2023 8/2023

Weight loss of ~16 kg over 7 months after starting Victoza plus LSM , Hba1c drop from 8.6 to 6.1

Nurse clinic

DINT clinic

Nurse clinic

DINT clinic

Nurse clinic

Nurse clinic

DINT clinic

Nurse clinic

DINT clinic

Nurse clinic

LSM
Xigduo
Off Diamicon
+ Victoza 0.6
mg daily

LSM
Step up Victoza
to 1.2 mg daily
for 2 weeks
then 1.8 mg
daily

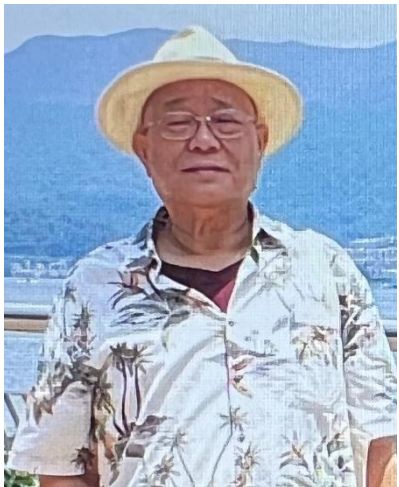
SMBG
BF : 6.7 - 9.1
BL : 7.1 - 13.4
BD 5.7 - 9.1
bedtime: 8.0,
11.7

encourage home
made food

Patient like to
eat fruits and
drink sugary milk
supplement >
advise to cut

~45mins swimming
after breakfast
daily

Drug compliance:
claimed no
omission





CGM report

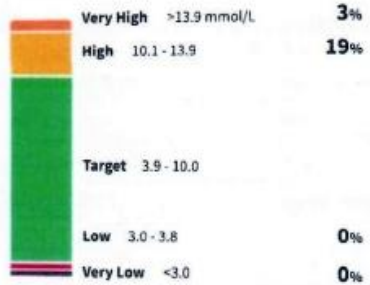
CGM end July 2023 – Aug 2023

CGM april 2023

Selected Dates: 1 Apr - 14 Apr 2023 (14 Days)

Time Sensor Active: 96%

Time in Ranges



Glucose Statistics

Average Glucose
8.4 mmol/L Goal: ≤8.6 mmol/L

Glucose Management Indicator (GMI)
Approximate A1C level based on average CGM glucose level.
6.9% Goal: 7.0% 52 mmol/mol Goal: ≤53 mmol/mol



Selected Dates: 25 Jul - 7 Aug 2023 (14 Days)

Time Sensor Active: 100%

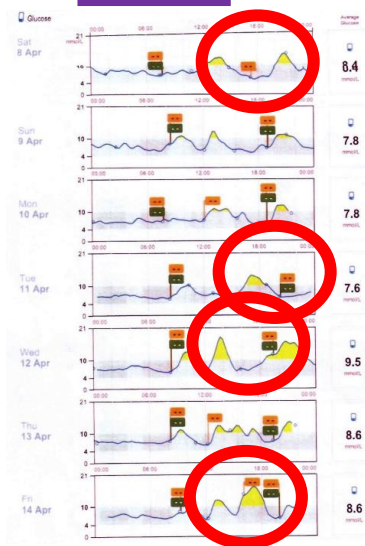
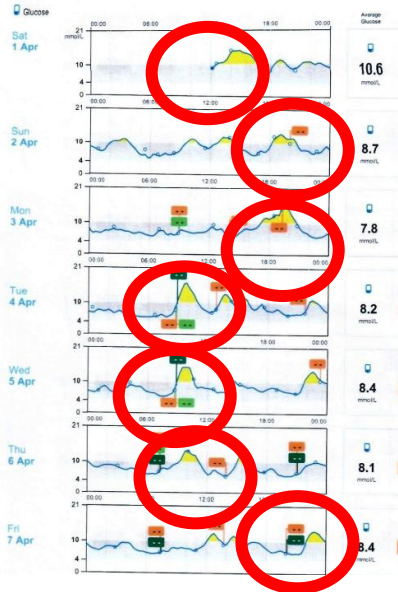
Time in Ranges



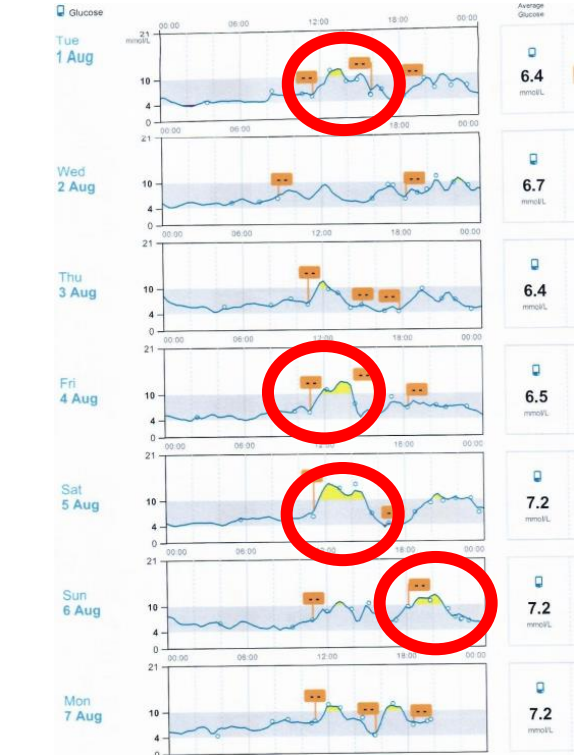
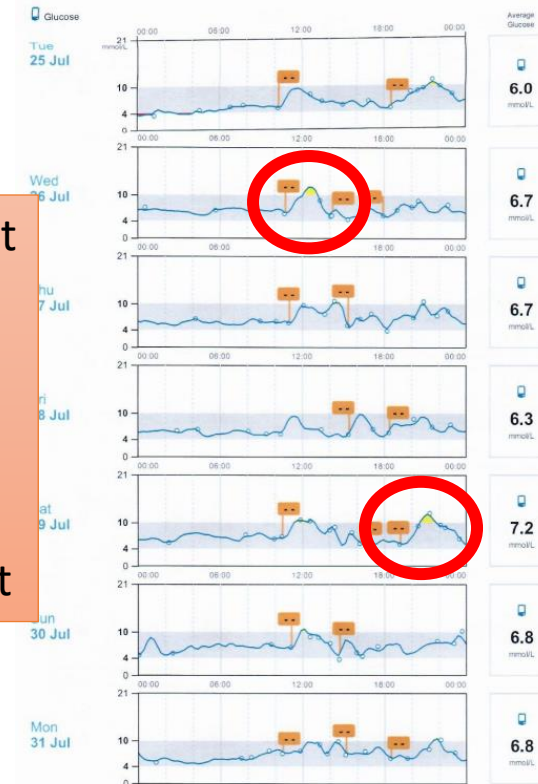
Glucose Statistics

Average Glucose
6.7 mmol/L Goal: ≤8.6 mmol/L

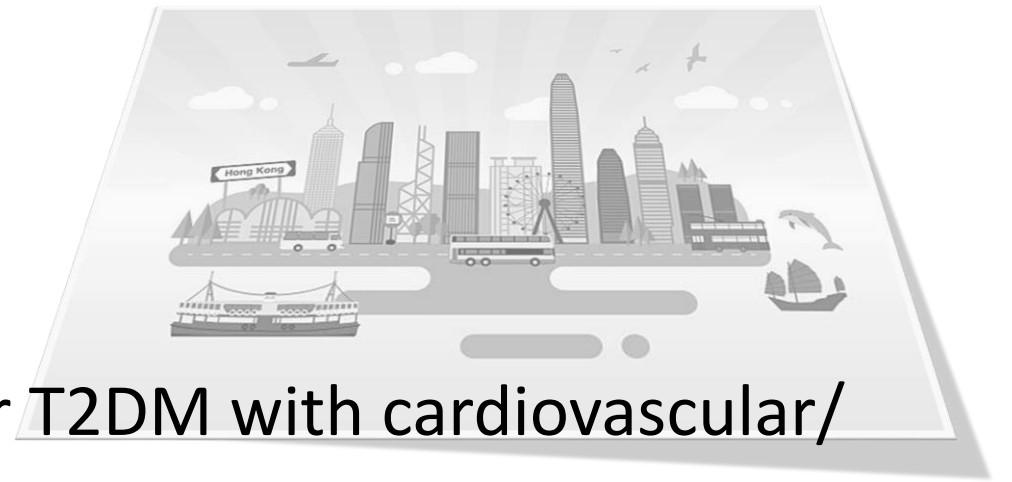
Glucose Management Indicator (GMI)
Approximate A1C level based on average CGM glucose level.
6.2% Goal: ≤7.0% 44 mmol/mol Goal: ≤53 mmol/mol



Advise him to cut intake of fruits and sugary milk drink
+LSM
+ drug treatment

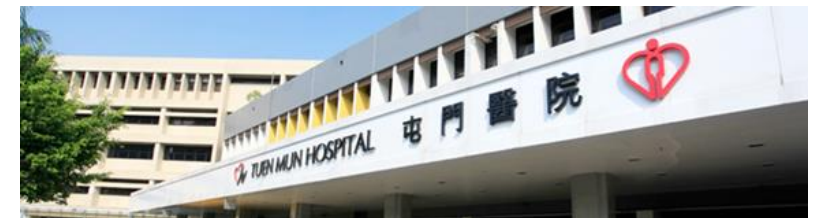


Take home message



- GLP-1RA is used as first line treatment for T2DM with cardiovascular/renal comorbidities
- GLP-1RA can be used
 - as first line injectable treatment upon OAD failure
 - in diabetes with both glycaemic and weight control effect
- The most common side effect of GLP-1RAs are GI-related
- Fixed dose combination of insulin and GLP-1 RA can have effective glycaemic control in Asian T2DM

Patient empowerment work in TMH



Serve >1 M population cover NTW cluster

Patient
Resource
Center

Medical Social Collaboration



“ Sweetie buddies “
NGOs



Hong Kong Obesity Society
香港肥胖學會



Council members of “Sweetie Buddies “

糖糖正正

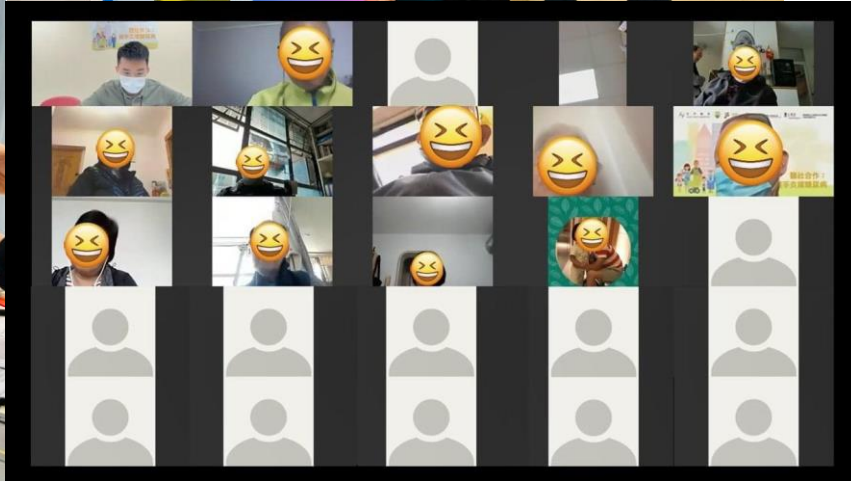
病友組織「糖糖正正」由屯門醫院糖尿及內分泌專科及病人資源中心成立，為糖尿患者提供病人賦能活動、義工服務及「同路人」分享等，提升患者的生活質素。

A colorful poster for the 'Sugar Buddies' organization. It features a bee character with 'Sweetie Buddies' written on its wings. The text includes '糖尿病人互助組織' (Diabetes Patient Mutual Aid Organization), '糖糖正正' (Sugar Buddies), and '精彩活動包括:' (Amazing activities include:). The activities listed are '專題講座' (Special Lecture), '同路人行分享' (Sharing with Fellow Travelers), and '「糖心」美點示範' ('Sugar Heart' Dessert Demonstration). The poster also highlights benefits: '加強糖尿病患者的自我管理' (Strengthening self-management of diabetes patients), '為患者提供心理社交支援以提升生活質素' (Providing psychological and social support for patients to improve quality of life), and '促進糖尿病患者的溝通及交流' (Promoting communication and exchange among diabetes patients). Contact information includes a Facebook page '糖糖正正 - 糖心小聚', a QR code, a WhatsApp number '69350701', and an address '屯門醫院特別座4樓' (4th floor, Special Wing, Tuen Mun Hospital). The phone number '2468 6167' is also provided. A QR code for the membership application form is at the bottom right.

Patient empowerment work in TMH



Hybrid educational talk



Webinar talk during covid-19

WDD 2022

世界糖尿病日： 醫社與你 共建控糖生活



為響應每年11月14日「世界糖尿病日」，以加強大眾對糖尿病的關注，屯門醫院與區內服務單位合辦一系列講座及活動。

世界糖尿病日 專題講座系列

- **糖尿病醫療新趨勢**
吳文玉醫生 屯門醫院內分泌及糖尿病科 副顧問醫生
許潔明女士 屯門醫院內分泌及糖尿病科 顧問護師
 - **樂齡科技與健康飲食**
蕭鳳而女士 嶺南大學政策研究院 經理
 - **病友組織「糖糖正正」**
分享及會員大會
「糖糖正正」委員
- 2022年11月14日(一)
下午2:30-4:30
- 2022年11月14日(一)
上午10:00-11:30

康健體驗日 (與屯門地區康健中心合辦)

- **糖尿防治運動體驗**
健體教練
 - **糖尿與復康治療講座**
物理治療師
- 2022年11月14日(一)
下午2:30-4:30
- 屯門地區康健中心
(玫瑰花園商場一樓)
- 實體活動
(名額有限，非會員優先)

社區資源多面睇

- 呂惠玲女士
香港復康會社區復康網絡(大興中心) 社工
 - 呂秀蘭女士
香港紅十字會 高級經理(社區服務)
- 2022年11月17日(四)
上午11:00-中午12:00



與屯門地區康健中心合辦「疾病預防系列」講座：

- **糖尿病全面睇**
糖尿病內分泌專科
馬煇傑醫生
2022年11月5日(六)
下午3:30-4:30
- **識食我有法**
營養師及藥劑師
2022年12月1日(四)
上午11:00-中午12:00
- **糖尿足有辦法**
足病診療師
施學明先生
2022年11月17日(四)
上午11:00-中午12:00

對象：
患者及家屬、從事醫療或社會服務人士、
對資訊感興趣的社區人士。

主要以 ZOOM 進行，參加者需預先下載 ZOOM 視像應用程式。
查詢：病人資源中心 劉姑娘 / 張小姐 電話：2468 6167



Hiking



Exercise class in district health center



Cooking class



Healthy recipe verify by dietician

低糖高纖節日食物—迷你冰皮月餅



餡料：

南瓜/番薯 450 克
代糖 1 湯匙
澄面 3-4 湯匙
亞麻子粉 2 湯匙

做法：

1. 南瓜/番薯去皮, 切片, 隔水蒸 15 分鐘
2. 取出倒入鑊中加入全部餡料拌勻, 慢火煮至乾身, 待凍用

皮料：

澄面粉 10 克
糯米粉 20 克
粘米粉 20 克
代糖 5 克
鮮奶 80 克
橄欖油 1 湯匙

做法：

1. 皮料混合, 過篩
2. 倒入不粘鍋的平底鑊中, 慢光火不停攪成糊狀, 搓成軟滑麵糰
3. 取出將冷, 分 12 份, 壓扁, 包入餡料,
放入已灑粉的月餅模中, 按平出。
4. 放入保鮮盒中冷凍才吃



Thank You

