BỆNH VIỆN ĐẠI HỌC Y DƯỢC
UNIVERSITY MEDICAL CENTER

VN23VZ00040

Hiệu quả bảo vệ tim mạch của nhóm thuốc đồng vận thụ thể GLP-1 trong điều trị đái tháo đường típ 2

BSCKI. Nguyễn Thành Thuận
Khoa Nội tiết – BV ĐHYD TP.HCM

HỘI NGHỊ KHOA HỌC THƯỜNG NIÊN 2023
CẬP NHẬT CHẨN ĐOÁN & ĐIỀU TRỊ BỆNH LÝ NGƯỜI CAO TUỔI
14 - 15 - 16.04.2023 | KHÁCH SẠN NALOD - ĐÀ NẴNG

Bài báo cáo này được tài trợ bởi công ty TNHH Gigamed (Nhãn hàng Novo Nordisk)

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Ca lâm sàng

- Bệnh nhân nam 75 tuổi
- Tiền căn đái tháo đường típ 2: 10 năm, tăng huyết áp, nhồi máu cơ tim đã đặt stent gần 1 năm:
  - Empagliflozin/Metformin 12,5/850mg viên x 2
  - Gliclazide 60mg 1 viên
  - Peridopril / Amlodipin 5/5 mg 1 viên; Nebivolol 5mg
  - Rosuvastatin 20mg 1 viên
  - Aspirine 81mg 1 viên + Clopidogrel 75mg
- Tiền sử:
  - Tiền sử gia đình: chưa ghi nhận bất thường

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Ca lâm sàng

- Khám:
  - Mạch 70l/phút, huyết áp 135/80 mmHg
  - Cân nặng 79 kg, chiều cao 165 cm, BMI 29 kg/m^2
- Xét nghiệm:
  - Glucose 235 mg/dl, HbA1c 8.7%,
  - LDL-c 76 mg/dl, Triglyceride 179 mg/dl
  - Creatinin 1.2 mg/dl eGFR: 59 ml/phut/1.73m^2, ACR: 24 mg/g
  - ALT 70 UI/L, AST 34 UI/L
  - ABI: trái: 0.99; phải 0.96; FO: bình thường
  - ECG: NMCT cũ thành dưới ; Siêu âm tim: EF 59%
  - Siêu âm bụng: gan nhiễm mỡ

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Ca lâm sàng

- **Các vấn đề**
  - Đái tháo đường típ 2 lâu năm kiểm soát kém (Glucose 235mg/dl, HbA1c 8.7%)
  - Bệnh mạch vành đã đặt stent
  - Tăng huyết áp
  - Béo phì
  - Gan nhiễm mỡ

1. Mục tiêu HbA1c cá thể hóa trên bệnh nhân này là bao nhiêu?

A. < 6.5%
B. 6.5 – 6.9%
C. 7 - 8%
D. > 8%

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Ca lâm sàng: Mục tiêu HbA1c

How to Use The A1c Goal Calculator:

Consider adopting an acceptable range of A1c for your patient. This should be based on your experience with the patient and expected variation of A1c measurement depending on the technique (especially blood draw by lab versus point of care testing) and seasonal variation of A1c. When making your decision, also consider what is the lowest possible A1c without having significant side effects; among these, avoiding hypoglycemia is a priority. For example, if you consider a reasonable A1c is less than 8% and your calculation provided a value of 7.3%. You may chose a goal of A1c to be at least less than 8% and better if less than 7.5%; if achievable with no significant side effects. For more info refer to ABOUT

A1c Control Calculator

Hypoglycemia Risk
Moderate

Life Expectancy
Long

Important Comorbidities
One

Macro And Adv. Micro Complications
One

Disease Duration
5-20 years

Current A1c
8.7

Reset

HbA1c Goal: 7.2%
Mean current plasma glucose (fasting and post-prandial): 170 mg/dL
Desired reduction in mean plasma glucose: 48 mg/dL
Goal reduction in HbA1c: 1.5%

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Ca lâm sàng

- **Các vấn đề**
  - Đái tháo đường típ 2 lâu năm kiểm soát kém (Glucose 235mg/dl, HbA1c 8.7%)
  - Bệnh mạch vành đã đặt stent
  - Tăng huyết áp
  - Béo phì
  - Gan nhiễm mỡ

2. Lựa chọn kiểm soát đường huyết trên bệnh nhân này:

A. Thêm insulin nền
B. Thêm GLP-1RA
C. Thêm DPP4i
D. Tăng liều Gliclazide

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Nội dung

1. Dữ liệu lâm sàng của thuốc đồng vận thụ thể GLP-1
2. Khuyến cáo điều trị hiện tại

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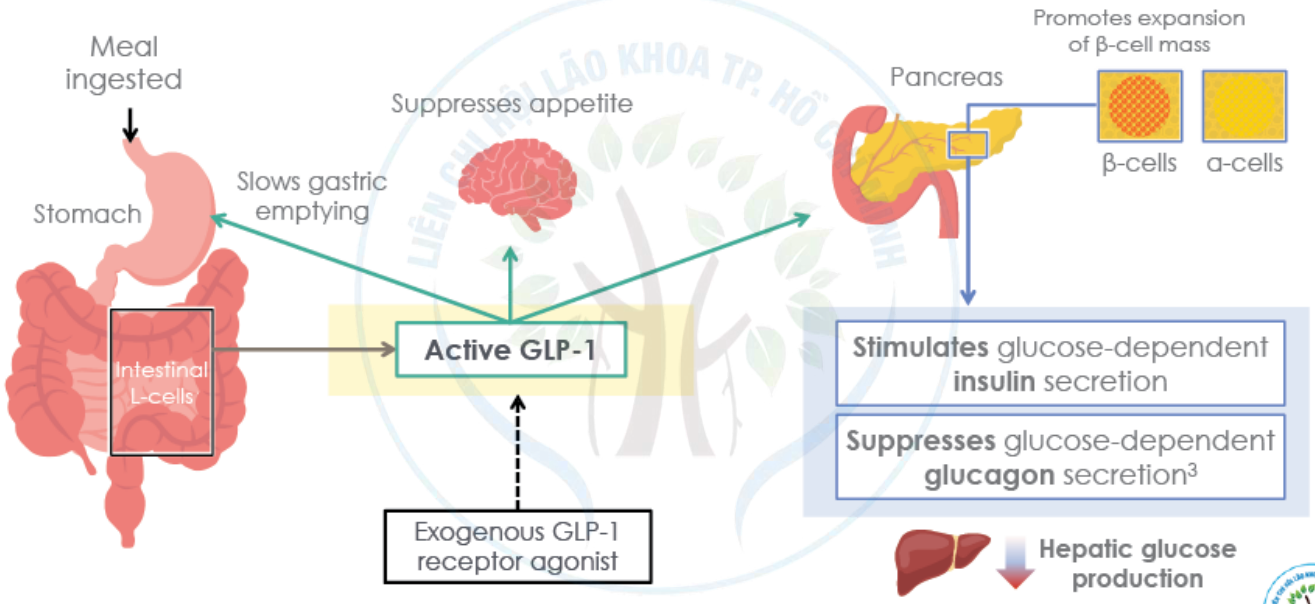
GLP-1 RAs kích thích tiết insulin phụ thuộc glucose[1,2]



Primary mechanism of action shown; there may be additional mechanisms that contribute to the glucose-lowering effect. Adapted from Ahrén B.[1]
GLP-1, glucagon-like peptide-1; GLP-1 RA, glucagon-like peptide-1 receptor agonist
1. Ahrén B. *Curr Diab Rep* 2003;3:365; 2. Baggio LL & Drucker DJ. *Gastroenterology* 2007;132:213; 3. Zhang Y *et al. Diabetes* 2019;68:34

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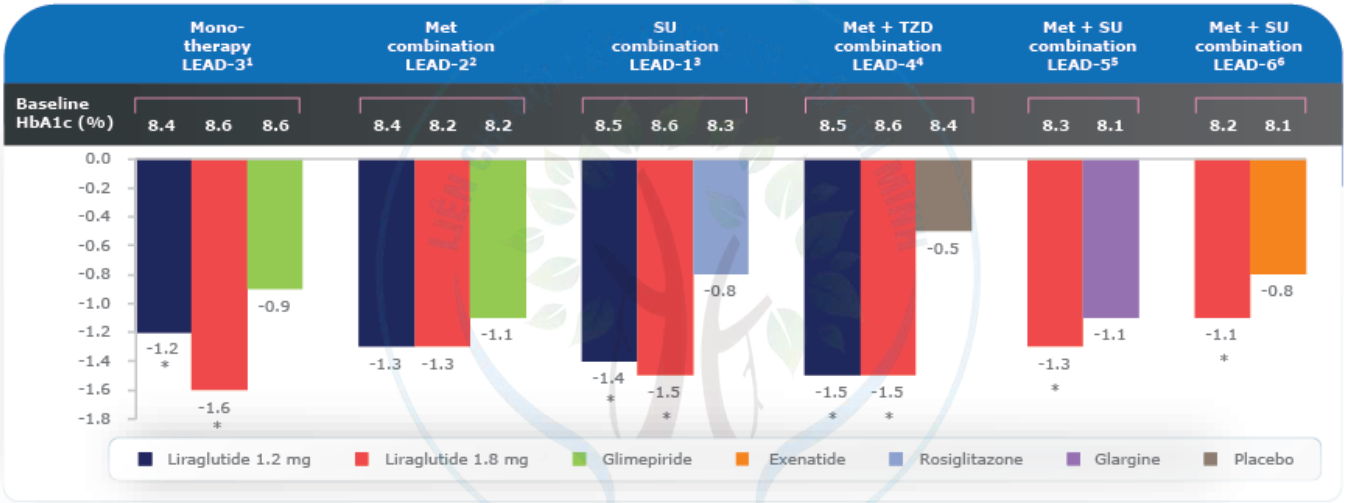
GLP-1 Ras: Kiểm soát các thông số chuyển hóa

K. Ekoru, A. Doumatey and A.R. Bentley et al. / EClinicalMedicine 16 (2019) 30–41

LIRAGLUTIDE: giảm 1.1 – 1.6% HbA1c
CÓ THỂ ĐƠN TRỊ HOẶC PHỐI HỢP LINH HOẠT VỚI CÁC NHÓM THUỐC

Trong chuỗi nghiên cứu LEAD: liraglutide giảm 1.1-1.6% HbA1c khi dùng đơn trị hoặc phối hợp



Significant *vs. comparator; change in HbA1c from baseline for overall population (LEAD-4,-5); add-on to diet and exercise failure (LEAD-3); or add-on to previous OAD monotherapy (LEAD-2,-1).
HbA1c, glycosylated haemoglobin; DPP-4, dipeptidyl petidase-4; MET, metformin; OAD, oral anti-diabetic drug; SU, sulphonylurea; TZD, thiazoladinedione.

1. Garber A et al. Lancet 2009;373:473–481; 2. Nauck M et al. Diabetes Care 2009;32;84–90; 3. Marre M et al. Diabet Med 2009;26;268–278; 4. Zinman B et al. Diabetes Care 2009;32:1224–1230; 5. Russell-Jones D et al. Diabetologia 2009;52:2046–2055; 6. Buse JB et al. Lancet 2009;374:39–47.

Semaglutide chưa được phê duyệt ở thị trường Việt Nam

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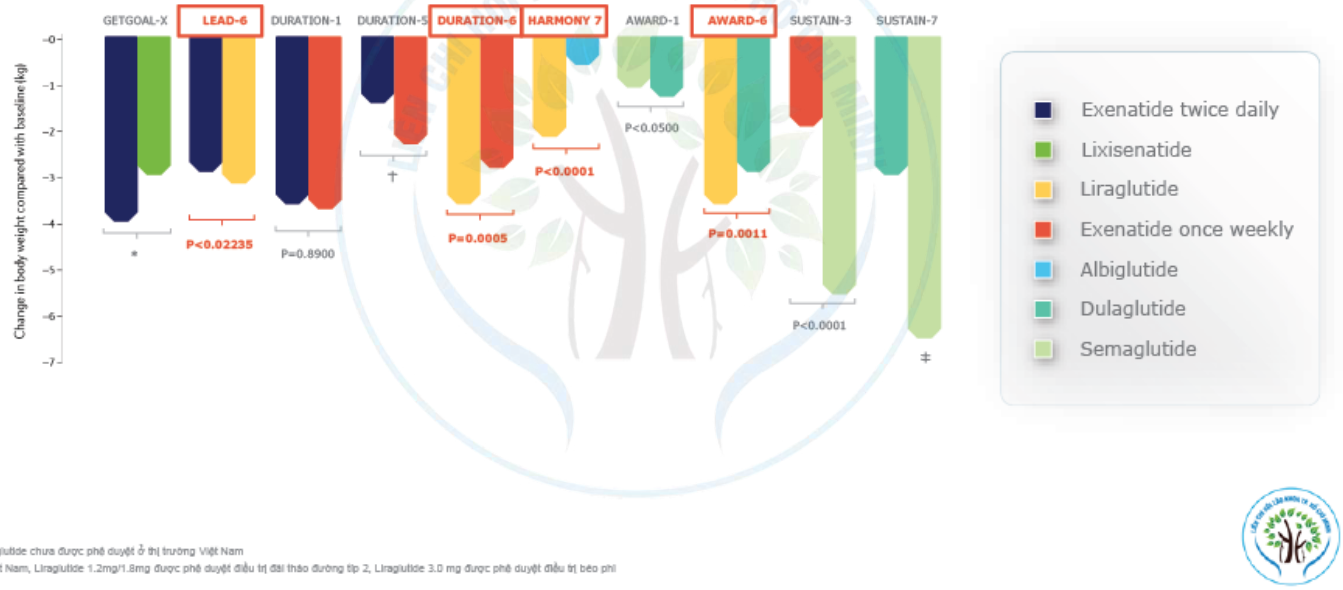
Hiệu quả giảm cân của các GLP-1
LIRAGLUTIDE giảm đến 3.5 kg Cân nặng



Semaglutide chưa được phê duyệt ở thị trường Việt Nam
Tại Việt Nam, Liraglutide 1.2mg/1.8mg được phê duyệt điều trị đái tháo đường tip 2, Liraglutide 3.0 mg được phê duyệt điều trị béo phì

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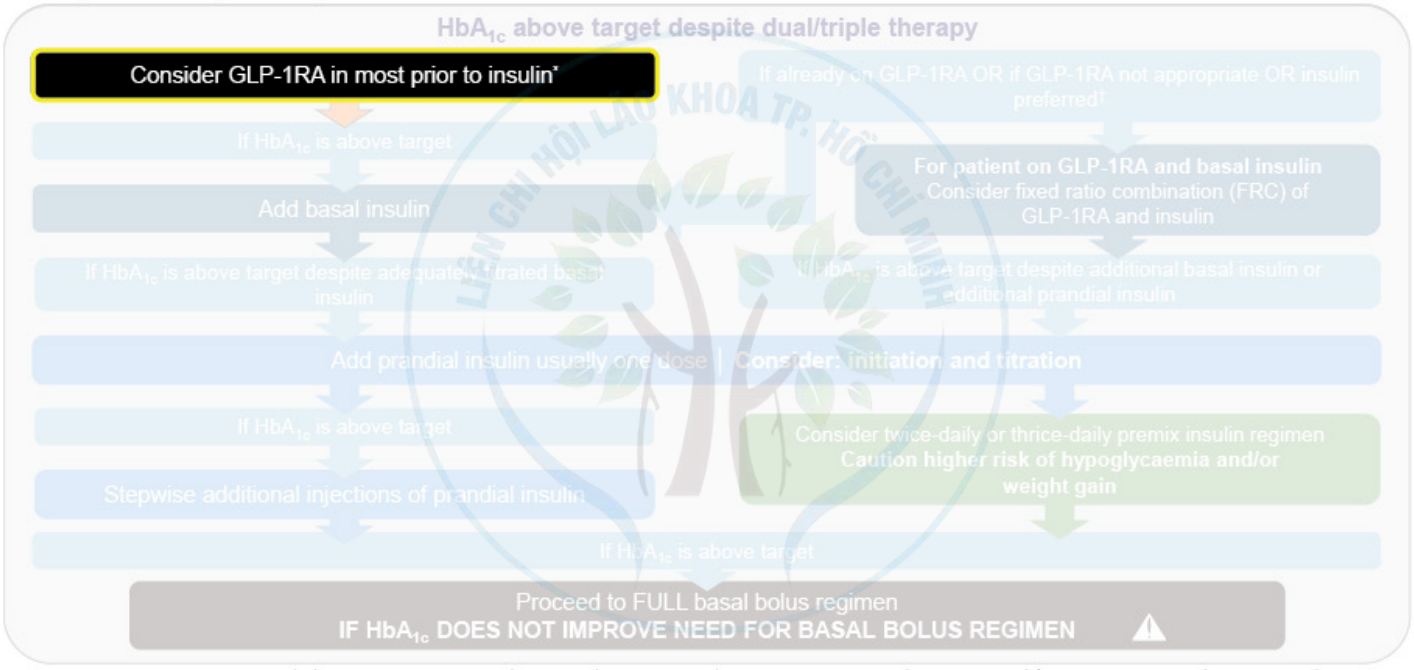
Lựa chọn liệu pháp tiêm



*Consider choice of GLP-1RA considering patient preference, HbA_{1c} lowering, weight-lowering effect or frequency of injection. If CVD, consider GLP-1RA with proven CVD benefit; †Consider insulin as preferred to GLP-1RA if symptoms of hyperglycaemia are present, or evidence of ongoing catabolism (polyuria, polydipsia or weight loss)
Adapted from Davies et al. Diabetes Care 2018;41:2669–2701

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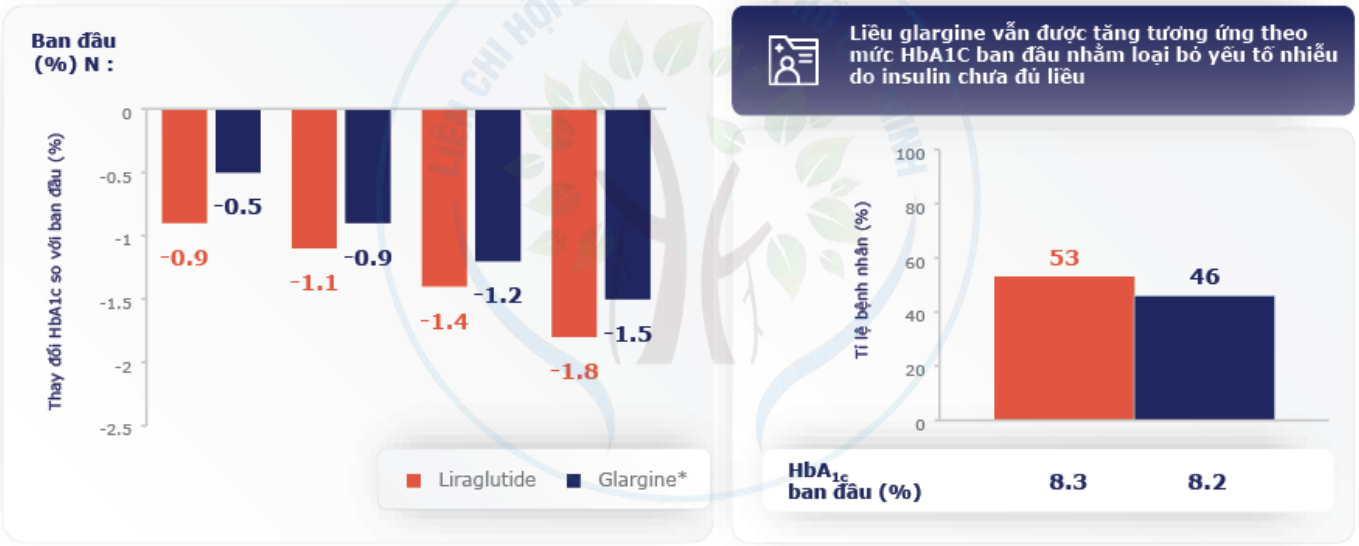
LEAD-5

Liraglutide làm giảm HbA1c nhiều hơn so với glargine ở bất kỳ mức HbA1c ban đầu



Russell-Jones et al. Diabetologia 2009

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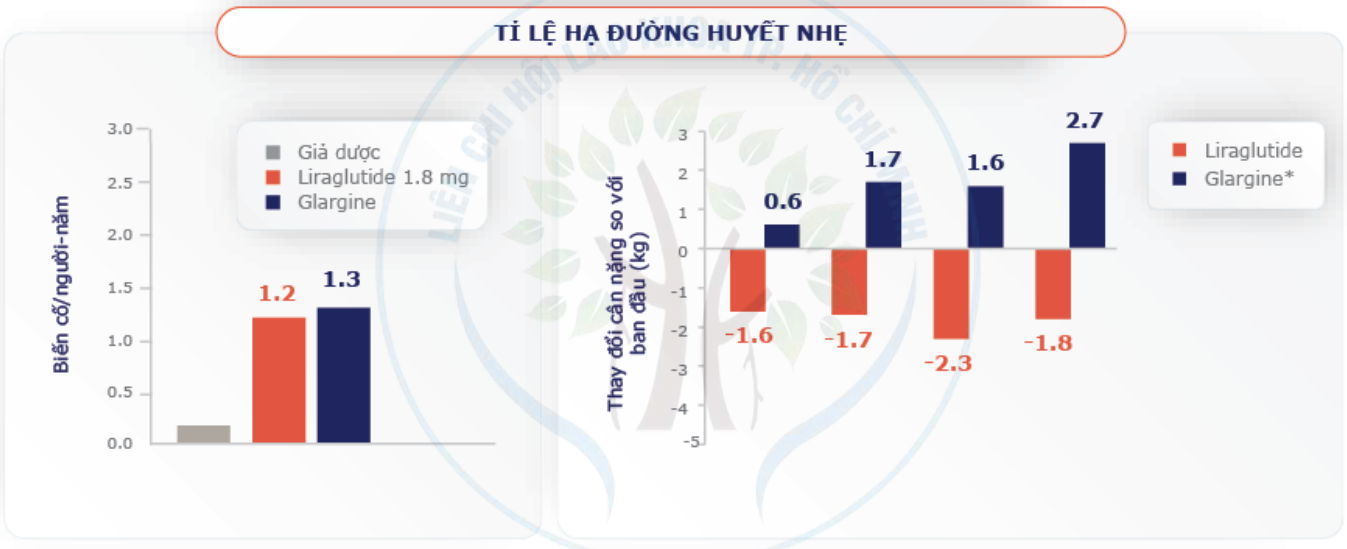
LEAD-5

Cải thiện HbA1c, cân nặng tốt hơn mà không làm tăng nguy cơ hạ đường huyết



D'Alessio et al. Diabetes Obes Metab 2014

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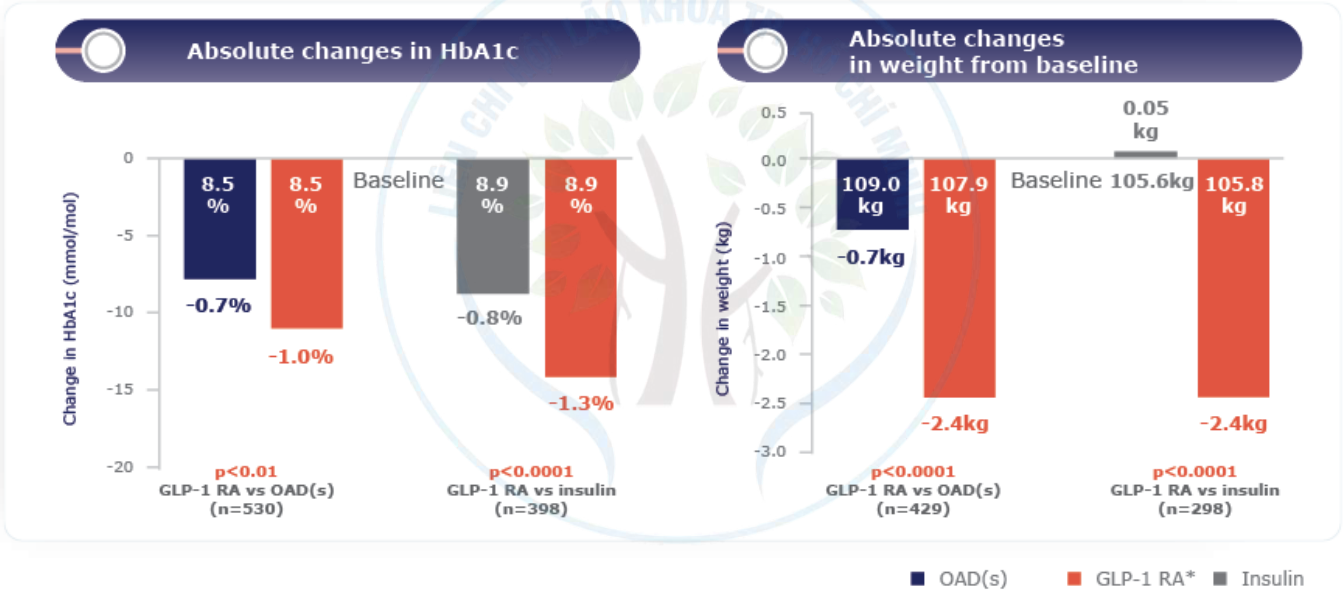
So với việc tăng cường thêm 1 OADs hoặc insulin
GLP-1 giúp kiểm soát HbA_1c & cân nặng hiệu quả hơn



GLP-1 RA, glucagon-like peptide-1 receptor agonist; HbA1c glycated hemoglobin; OAD, oral antidiabetic drug.

BMJ Open Diab Res Care 2020;8:e001830. doi:10.1136/bmjdrc-2020-001830

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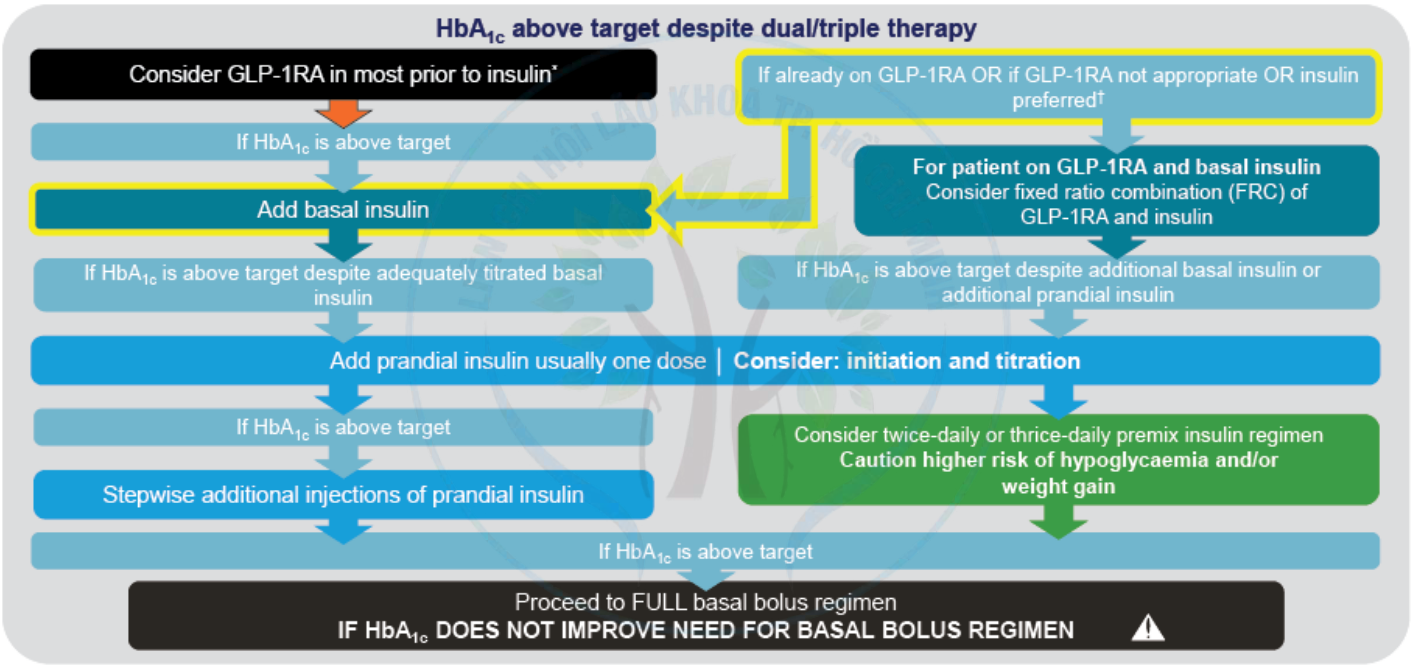
Lựa chọn liệu pháp tiêm



- *Consider choice of GLP-1RA considering patient preference, HbA_{1c} lowering, weight-lowering effect or frequency of injection. If CVD, consider GLP-1RA with proven CVD benefit; †Consider insulin as preferred to GLP-1RA if symptoms of hyperglycaemia are present, or evidence of ongoing catabolism (polyuria, polydipsia or weight loss)
- Adapted from Davies et al. *Diabetes Care* 2018;41:2669–2701

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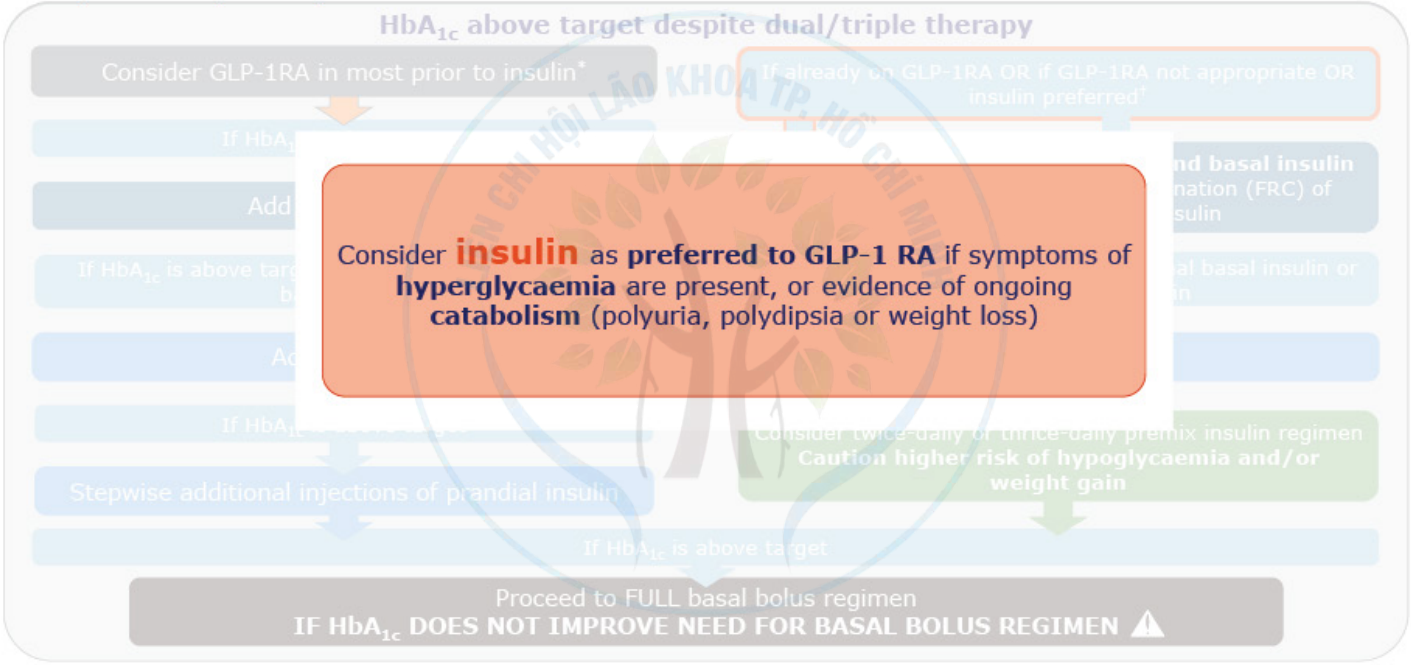
Lựa chọn liệu pháp tiêm



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- Adapted from Davies et al. *Diabetes Care* 2018;41:2669–2701

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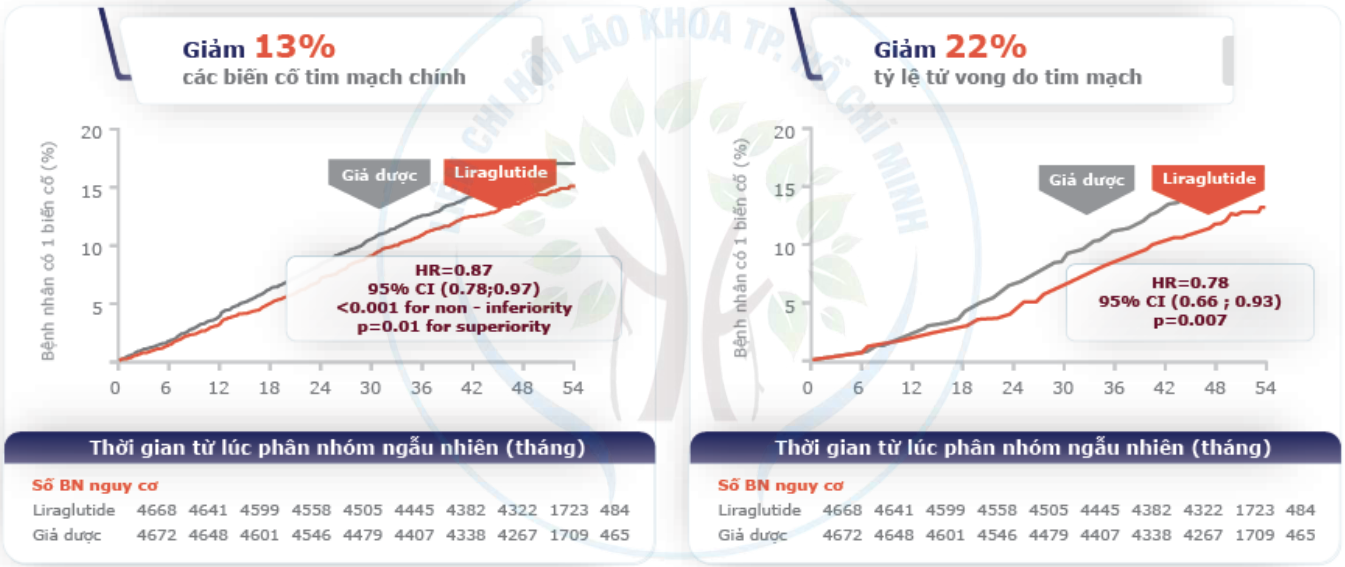
Nghiên cứu LEADER: Liraglutide cho thấy ưu thế khi Giảm cả tử vong do tim mạch và tử vong do mọi nguyên nhân



Số BN nguy cơ										
Liraglutide	4668	4641	4599	4558	4505	4445	4382	4322	1723	484
Giả dược	4672	4648	4601	4546	4479	4407	4338	4267	1709	465

Số BN nguy cơ										
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Giả dược	4672	4648	4601	4546	4479	4407	4338	4267	1709	465

1. Marso et al. N Engl J Med 2016;375:311–22

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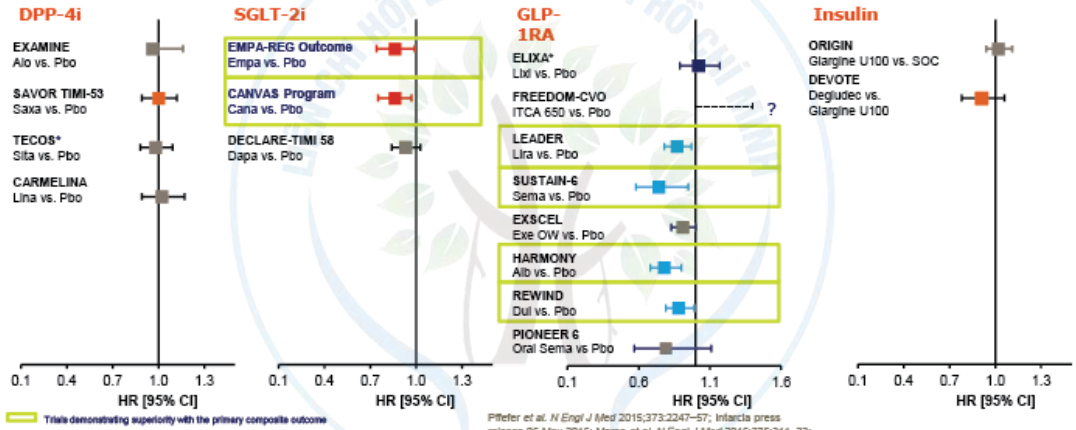
Recent CVOTs with antidiabetic agents

Primary composite endpoint: MACE



Zinman *et al. N Engl J Med* 2015; 373:2117-28; Neal *et al. N Engl J Med* 2017;377:644–57; Wiviott *et al. N Engl J Med*. 2019 Jan 24;380(4):347-357.

Pfeffer *et al. N Engl J Med* 2015;373:2247–57; Infarcia press release 06 May 2016; Marso *et al. N Engl J Med* 2016;375:311–22; Marso *et al. N Engl J Med* 2016;375:1834–44; Holman *et al. N Engl J Med* 2017;377:1228–39; Hernandez *et al. Lancet. 2018 Oct 27;392(10157):1519-1529*; Gerstein HC et al. *Lancet* 2019; S0140-6736:31149-31153; Husain M et al. *N Engl J Med* 2019; DOI:10.1056/NEJMoa1901118

Gerstein *et al. N Engl J Med* 2012;367: 319–28; Marso *et al. N Engl J Med* 2017;377:723–32

Semaglutide chưa được phê duyệt ở thị trường Việt Nam

- *MACE+

White *et al. N Engl J Med* 2013; 369:1327–35; Scirica *et al. N Engl J Med* 2013;369:1317–26; Green *et al. N Engl J Med* 2015;373:232–42; McGuire *et al. JAMA*. 2019 Jan 1;321(1):69-79.

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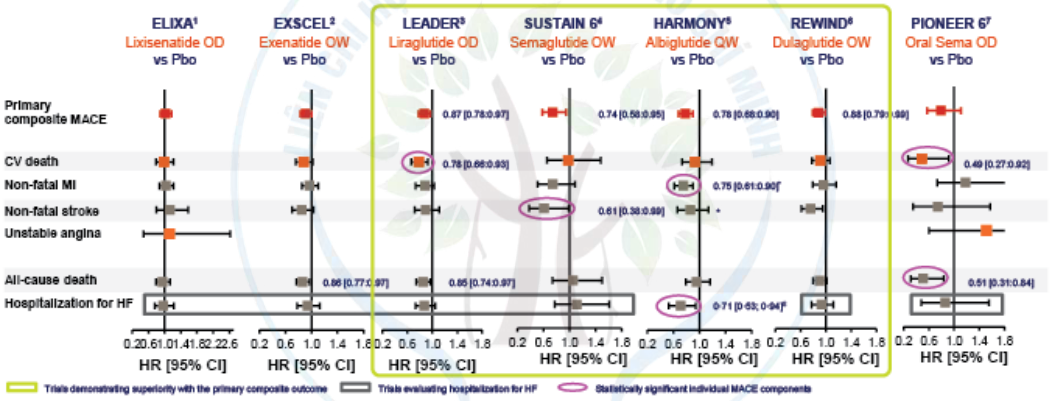
CV outcomes with GLP-1RAs

Primary composite endpoint: MACE



Semaglutide chưa được phê duyệt ở thị trường Việt Nam

Albiglutide was withdrawn from the worldwide market in July 2018; Oral semaglutide is investigational and not approved for use

*Includes fatal and non-fatal; HR (CI) are mentioned for the ones with significant p value

CI, confidence interval; CV, cardiovascular; GLP-1RA, glucagon-like peptide-1 receptor agonist; HF, heart failure; Hosp., hospitalisation; HR, hazard ratio; MACE, major adverse cardiovascular events; MI, myocardial infarction; OW, once weekly; Pbo, placebo

1. Pfeffer et al. *N Engl J Med* 2015;373:2247–57; 2. Holman et al. *N Engl J Med* 2017;377:1228–39; 3. Marso et al. *N Engl J Med* 2016;375:311–22; 4. Marso et al. *N Engl J Med* 2016;375:1834–44; 5. Hernandez et al. *Lancet* 2018;392:1519–29; 6. Gerstein et al. *Lancet* 2019 Jun 10. https://dx.doi.org/10.1016/S0140-6736(19)31149-3; 7. Husain M et al. *N Engl J Med* 2019; DOI: 10.1056/NEJMoa1901118; 8. Kristensen SL, et al. Lancet Diabetes Endocrinol, 2019 http://dx.doi.org/10.1016/S2213-8587(19)30249-9

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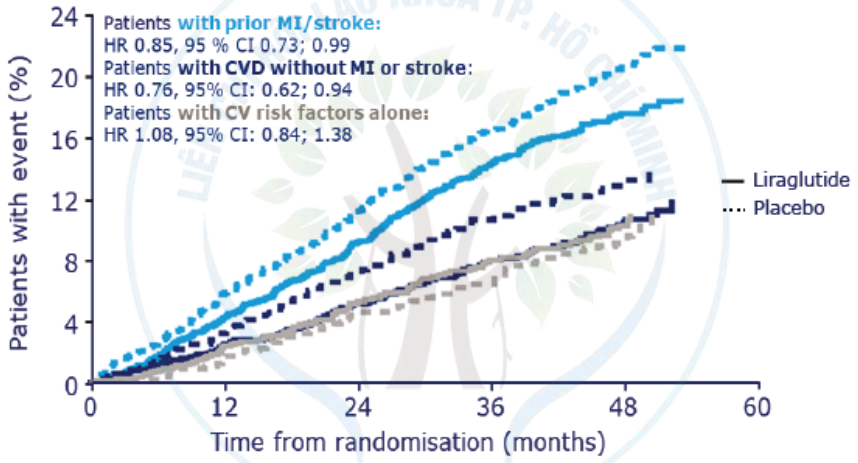
Effect of Liraglutide on MACE Stratified According to History of MI and/or stroke, established CVD without MI/stroke, or CV risk factors alone



Adapted from Figure 1A. Primary composite endpoint (CV death, non-fatal MI, or non-fatal stroke) from randomization to follow-up. The x-axis was truncated at 54 months because <10% of patients remained in the trial after this time point. CV, cardiovascular; CVD, cardiovascular disease; CI, confidence interval; HR, hazard ratio between treatment groups (liraglutide vs placebo); MI, myocardial infarction

Verma *et al. Circulation* 2018;138:2884–94

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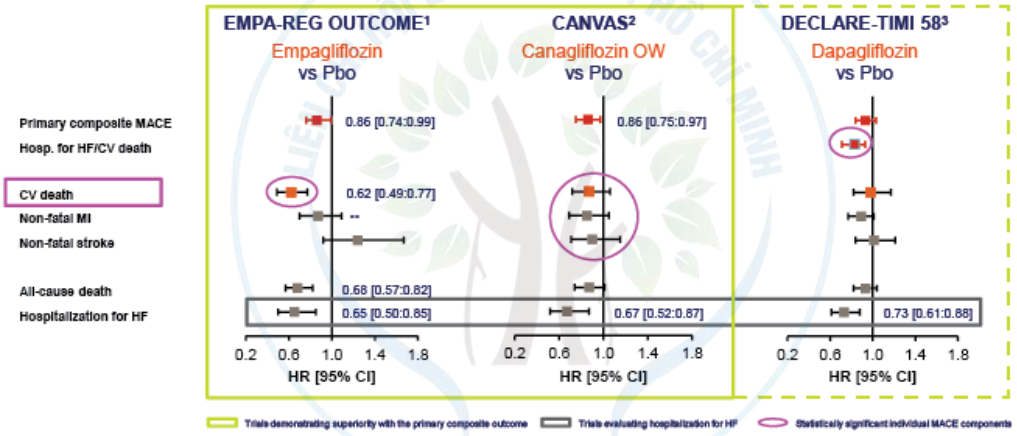
CV outcomes with SGLT-2 inhibitors

Primary composite endpoint: MACE



- *, Co-primary composite endpoint; **, excluding silent myocardial infarction.
- CI, confidence interval; CV, cardiovascular; SGLT-2, sodium glucose co-transporter; HF, heart failure; Hosp., hospitalisation; HR, hazard ratio; MACE, major adverse cardiovascular events; MI, myocardial infarction; Pbo, placebo
- 1. Zinman et al. *N Engl J Med* 2015;373:2117-28. 2. Neal et al. *N Engl J Med* 2017 Aug 17;377(7):644-657. 3. Wiviott et al. *N Engl J Med* 2019 Jan 24;380(4):347-357.

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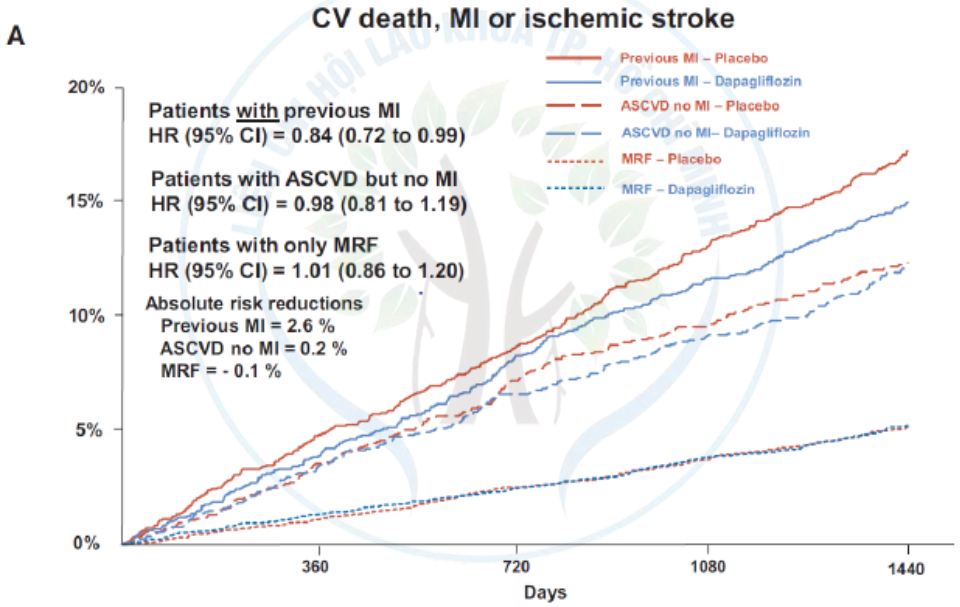
Effect of Dapagliflozin on MACE Stratified According to History of MI



Circulation. 2019;139:2516–2527.

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Đồng vận thụ thể GLP-1 và ức chế SGLT-2
CƠ CHẾ TÁC ĐỘNG LÊN TIM MẠCH

GLP-1R, glucagon-like peptide-1 receptor; SGLT-1, sodium-glucose cotransporter-1

Zinman B et al. N Engl J Med 2015;373:2117–2128; Marso SP et al. N Engl J Med 2016;375:311-22; Drucker DJ. Cell Metab 2016;24:15-30; Nauck MA, Meier JJ Lancet Diab Endo 2016;4(12):963-964

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GLP-1RAs vs SGLT2-i hiệu quả tác động trên tim mạch

	GLP-1 RECEPTOR AGONISTS	*P*	SGLT-2 INHIBITORS	*P*
Studies	ELIXA (19) LEADER (13) SUSTAIN -6 (14) EXSCEL (15) HARMONY Outcomes (16) PIONEER-6 (17) REWIND (18)		EMPA-REG OUTCOME (20) CANVAS Program (21,31) DECLARE TIMI-58 (22) VERTIS-CV (25) CREDENCE (30)	0.083
Number of patients	56,004		46,969	
3-point MACE	0.88 (0.84 - 0.93)	<0.001*	0.90 (0.85 - 0.96)	<0.001
CV mortality	0.88 (0.81 - 0.95)	0.001	0.85 (0.73 - 0.93)	<0.001
Total mortality	0.88 (0.83 - 0.94)	<0.001	0.87 (0.81 - 0.93)	<0.001
Non-fatal MI	0.91 (0.81 - 1.02)	0.092	0.91 (0.81 - 1.02)	0.092
Fatal or non-fatal MI	0.92 (0.86 - 0.99)	0.030**	0.91 (0.84 - 0.99)	0.034
Non-fatal stroke	0.80 (0.69 - 0.92)	0.002	0.98 (0.85 - 1.13)	0.756
Fatal or non-fatal stroke	0.85 (0.77 - 0.94)	0.002	0.98 (0.88 - 1.09)	0.723
Hospitalization for heart failure	0.93 (0.85 - 1.02)	0.123	0.68 (0.61 - 0.76)	<0.001

Mustafa K, Meral K, et al: *An updated perspective and pooled analysis of cardiovascular outcome trials of GLP-1 receptor agonists and SGLT-2 inhibitors.* Anatol J Cardiol 2021; 25: 61-76 62 DOI:10.14744/AnatolJCardiol.2020.06630

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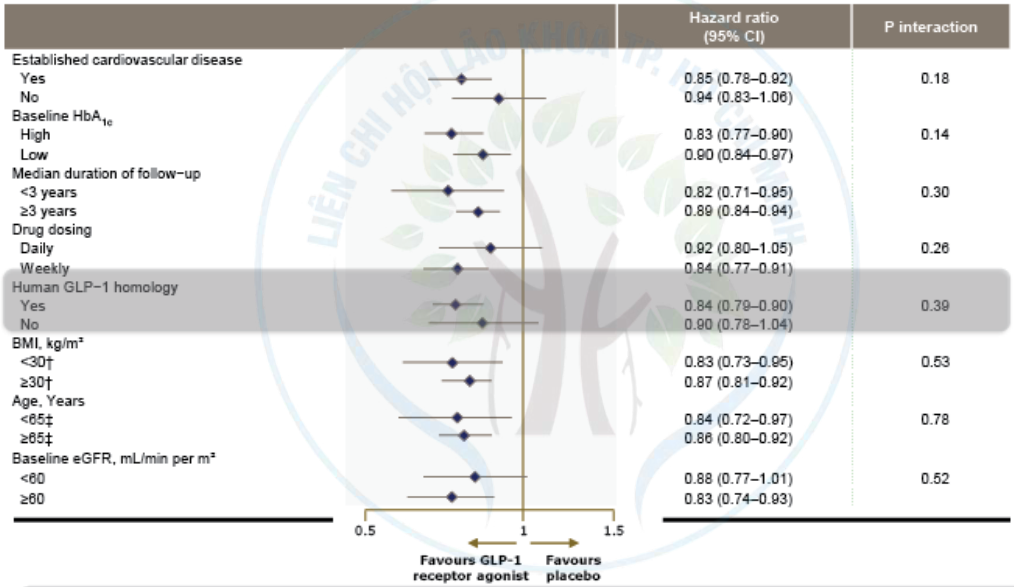
Có phải tất cả GLP1-RAs đều có hiệu quả tim mạch như nhau ?
Subgroup analyses for risk of 3-point MACE

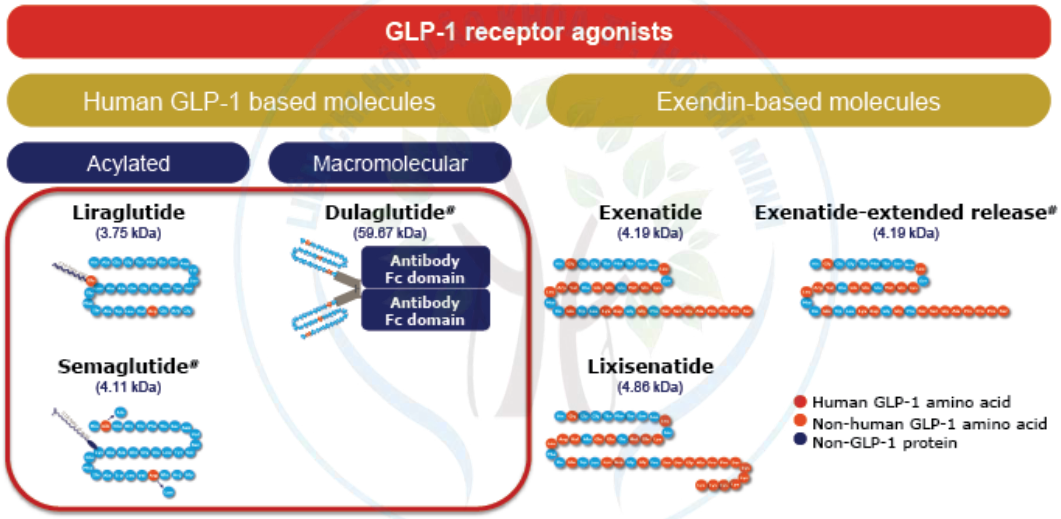


Chỉ có human GLP-1 based molecules có hiệu quả trên 3 MACE

- Sattar N, et al. *Lancet Diabetes Endocrinol.* 2021;S2213-8587(21)00212-6.

VN23VZ00040

Phân loại GLP-1 Ras dựa trên cấu trúc human- or exendin-based molecules



Semaglutide chưa được phê duyệt ở thị trường Việt Nam

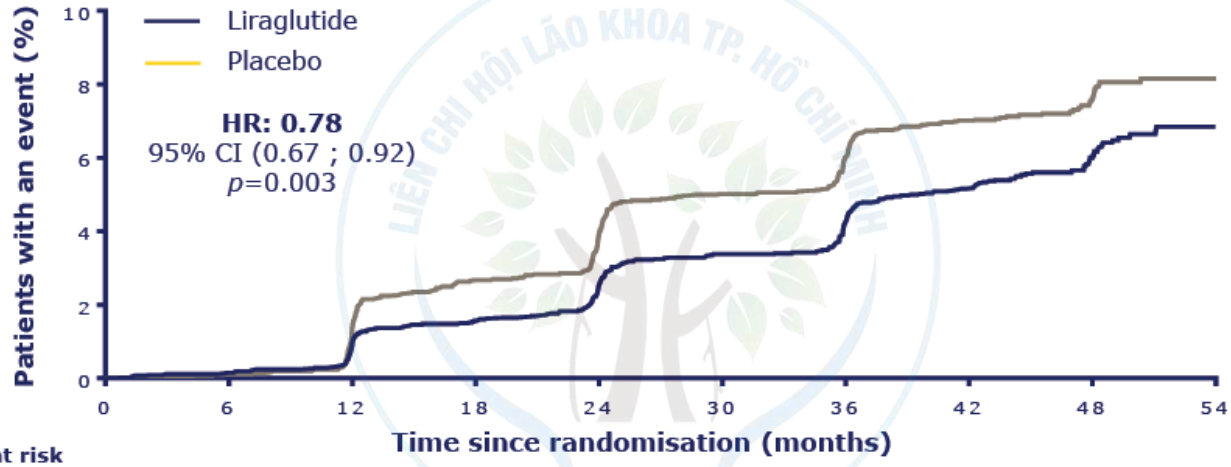
- #once weekly; *Semaglutide chưa được phê duyệt để sử dụng tại Việt Nam
- GLP-1 RA: glucagon-like peptide-1 receptor agonist.

Wick A, Newlin K. *J Am Acad Nurse Pract.* 2009;21:623–30; White J. *J Am Pharm Assoc.* 2009;49(Suppl. 1):S30–40; Madsbad S et al. *Diabetes Obes Metab.* 2011;13:394–407.

VN23VZ00040

Composite renal outcome

Macroalbuminuria, doubling of serum creatinine,* ESRD, renal death (N=605)



No. at risk										
Liraglutide	4668	4635	4561	4492	4400	4304	4210	4114	1632	454
Placebo	4672	4643	4540	4428	4316	4196	4094	3990	1613	433

*And eGFR ≤45 mL/min/1.73 m² per MDRD. The cumulative incidences were estimated with the use of the Kaplan–Meier method and the hazard ratios with the use of the Cox proportional-hazard regression model. The data analyses are truncated at 54 months because less than 10% of the patients had an observation time beyond 54 months. CI, confidence interval; eGFR, estimated glomerular filtration rate; ESRD, end-stage renal disease; HR, hazard ratio; MDRD, modification of diet in renal disease

Mann JFE et al. *N Engl J Med* 2017;377:839–848. doi:10.1056/NEJMoa1616011

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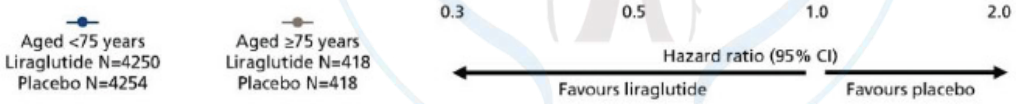
Primary and secondary outcomes

Outcome	Age	N (%) Liraglutide	N (%) Placebo	Hazard ratio (95% CI)	p-interaction
Primary composite MACE outcome	<75 years	531 (12.5)	588 (13.8)	0.90 (0.80; 1.01)	0.09
	≥75 years	77 (18.4)	106 (25.4)	0.69 (0.51; 0.92)	
Expanded composite MACE outcome	<75 years	840 (19.8)	922 (21.7)	0.90 (0.82; 0.99)	0.11
	≥75 years	108 (25.8)	140 (33.5)	0.73 (0.56; 0.93)	
CV death	<75 years	185 (4.4)	236 (5.5)	0.78 (0.64; 0.95)	0.99
	≥75 years	34 (8.1)	42 (10.0)	0.78 (0.50; 1.23)	
Non-fatal MI	<75 years	251 (5.9)	266 (6.3)	0.94 (0.79; 1.11)	0.035
	≥75 years	30 (7.2)	51 (12.2)	0.56 (0.36; 0.88)	
Non-fatal stroke	<75 years	140 (3.3)	155 (3.6)	0.90 (0.72; 1.13)	0.83
	≥75 years	19 (4.5)	22 (5.3)	0.84 (0.45; 1.55)	
All-cause death	<75 years	321 (7.6)	364 (8.6)	0.88 (0.76; 1.02)	0.22
	≥75 years	60 (14.4)	83 (19.9)	0.70 (0.50; 0.97)	



N (%), number of patients with an event (as a proportion of the full analysis set). CV, cardiovascular; MACE, major adverse cardiovascular events; MI, myocardial infarction

Gilbert *et al. Ann Intern Med* 2019;170(6):423–6

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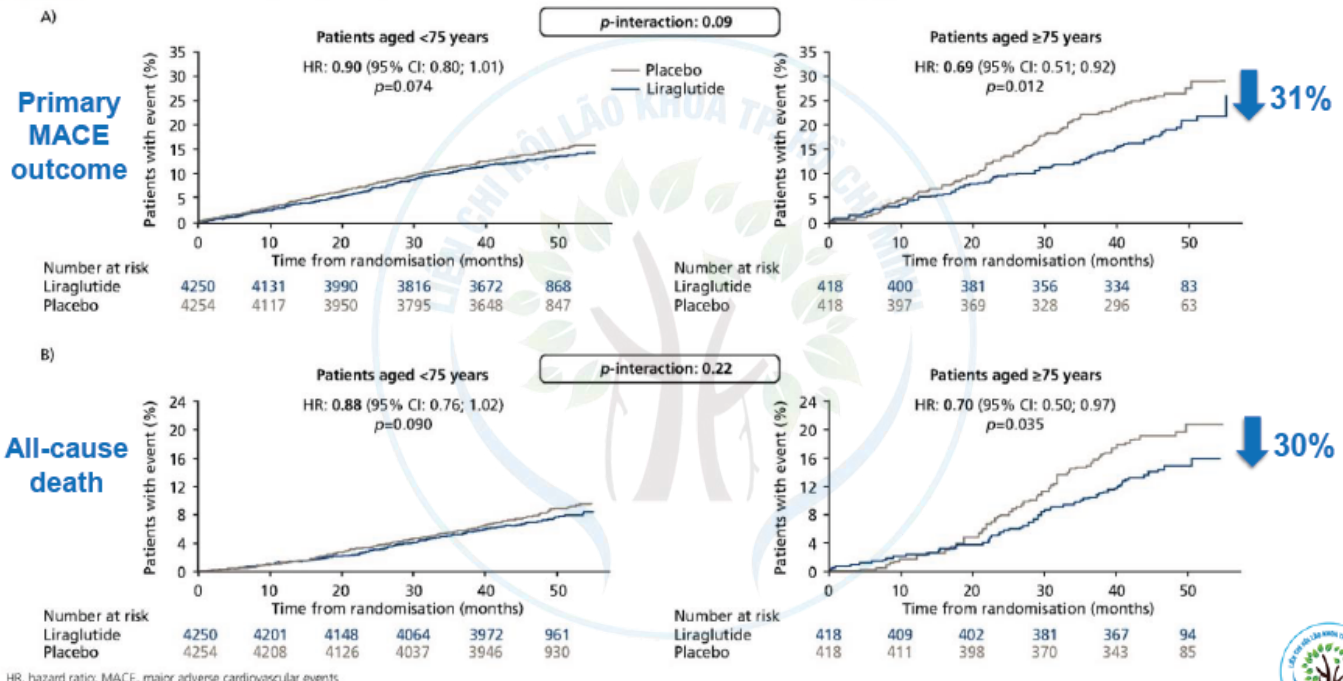
Figure 2: First occurrence of A) the primary MACE outcome and B) all-cause death – stratified by age at baseline



HR, hazard ratio; MACE, major adverse cardiovascular events

Gilbert *et al. Ann Intern Med* 2019;170(6):423–6

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GLP-1 RA hay SGLT2i

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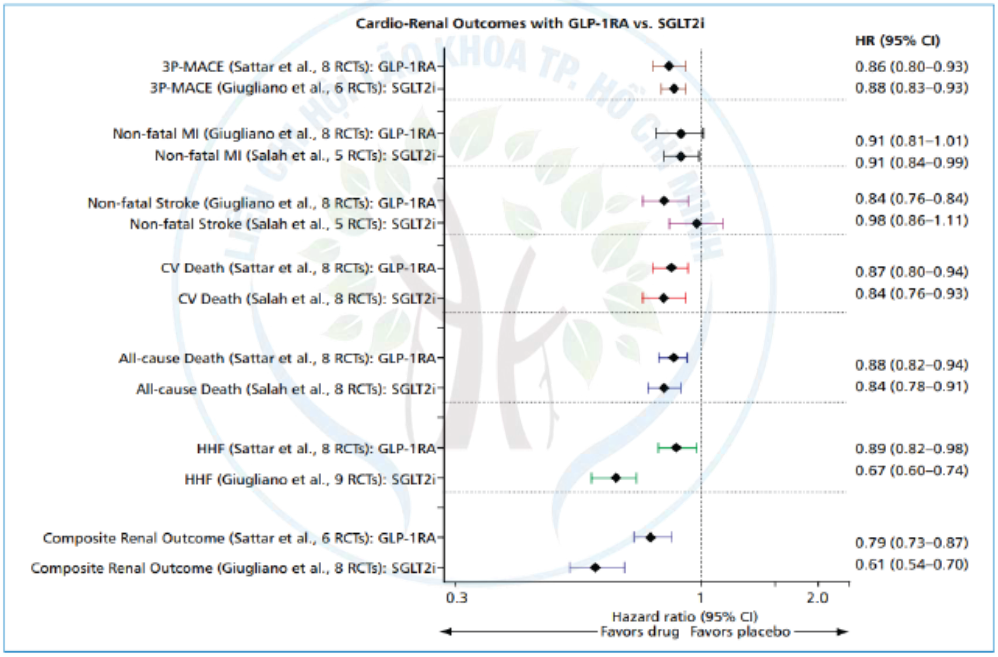
Cardio-Renal Benefits of GLP-1 Receptor Agonists vs. SGLT-2 Inhibitors in Type 2 Diabetes



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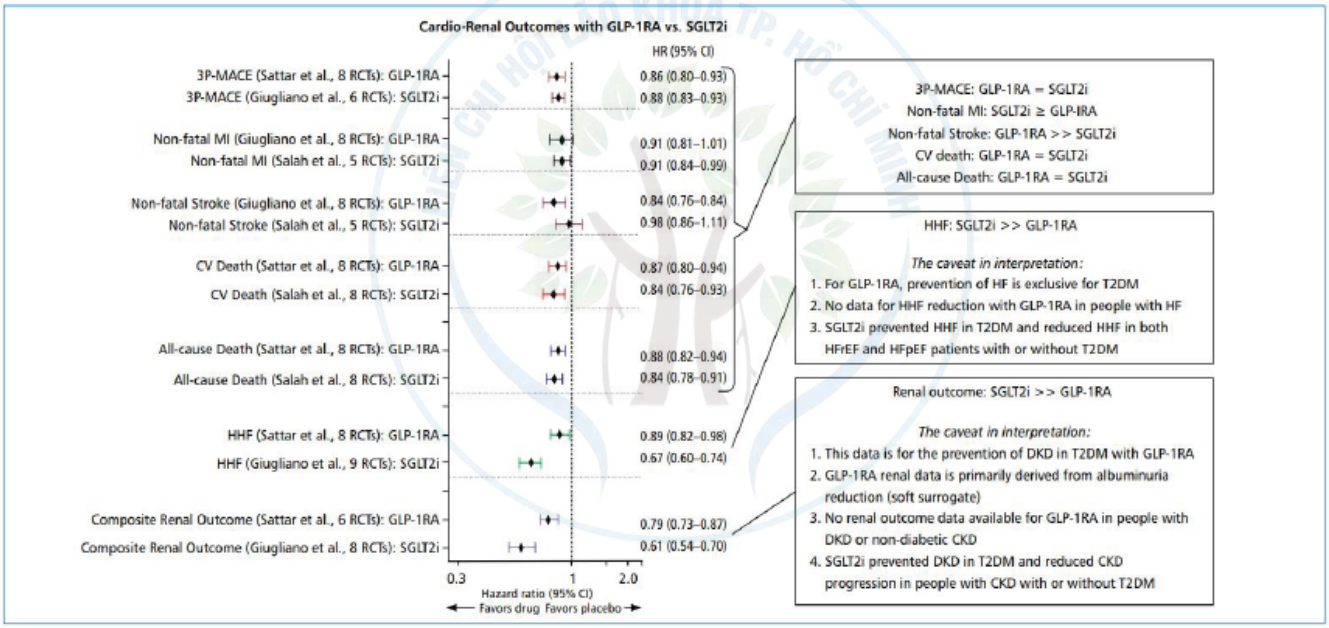
Cardio-Renal Benefits of GLP-1 Receptor Agonists vs. SGLT-2 Inhibitors in Type 2 Diabetes



Clinical Diabetology 2022, 11; 4: 215–221

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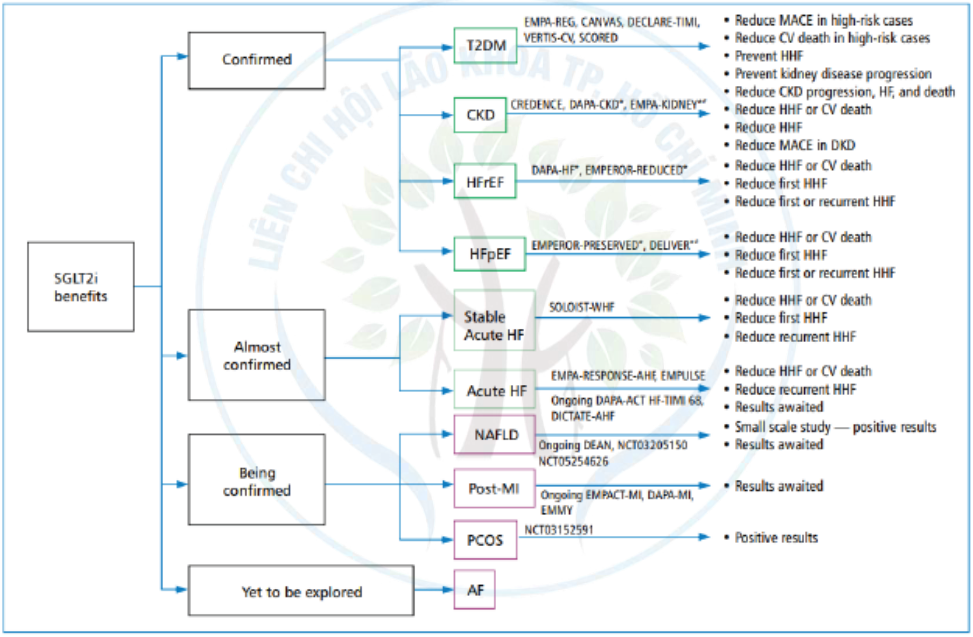
Randomized Controlled Trials of SGLT2i



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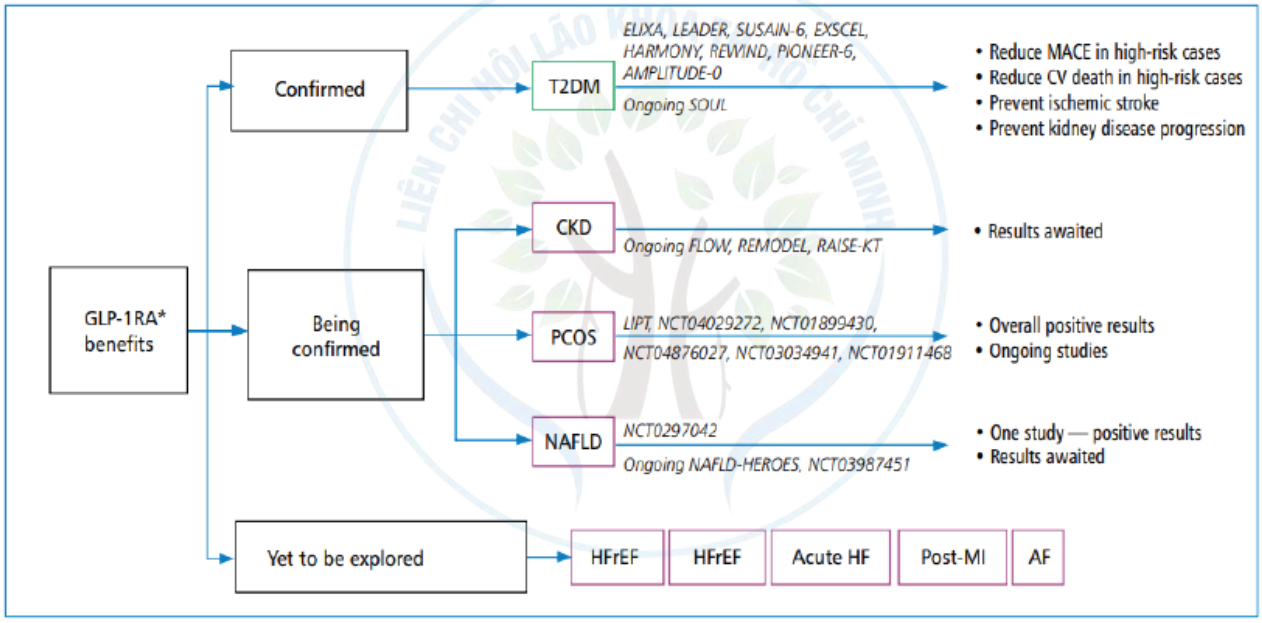
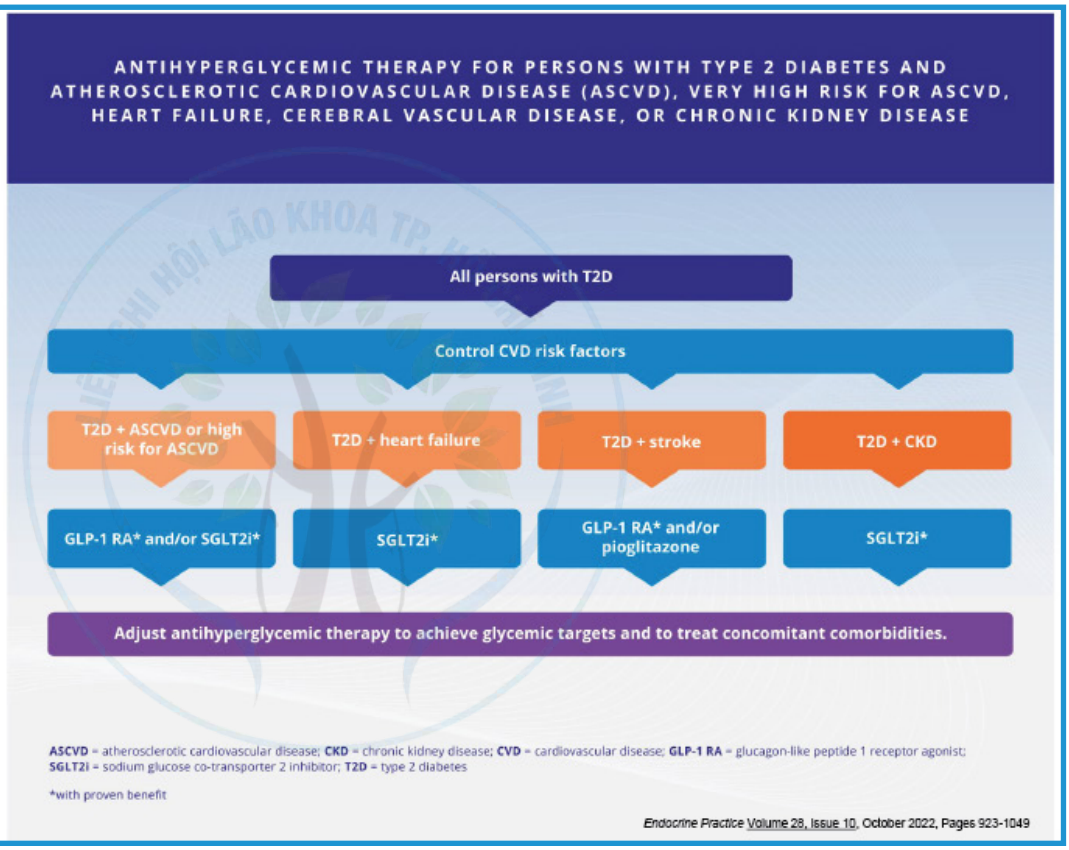
Randomized Controlled Trials of GLP-1RA



Clinical Diabetology 2022, 11; 4: 215–221

AACE 2022 Guidelines



Endocrine Practice Volume 28, Issue 10, October 2022, Pages 923-1049

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Cách giảm tác dụng phụ do GLP-1 RA

Titrate dose progressively: Start low, go slow[a]

Patient education:[a,b] Side effects, dietary advice, treatment aims

Smaller meals, eat slowly, stop before feeling full, reduce food consumption[a]

a. Lingvay I, et al. *Circulation*. 2018;137:2200-2202; b. Peng H, et al. *Curr Diab Rep*. 2016;16:44.

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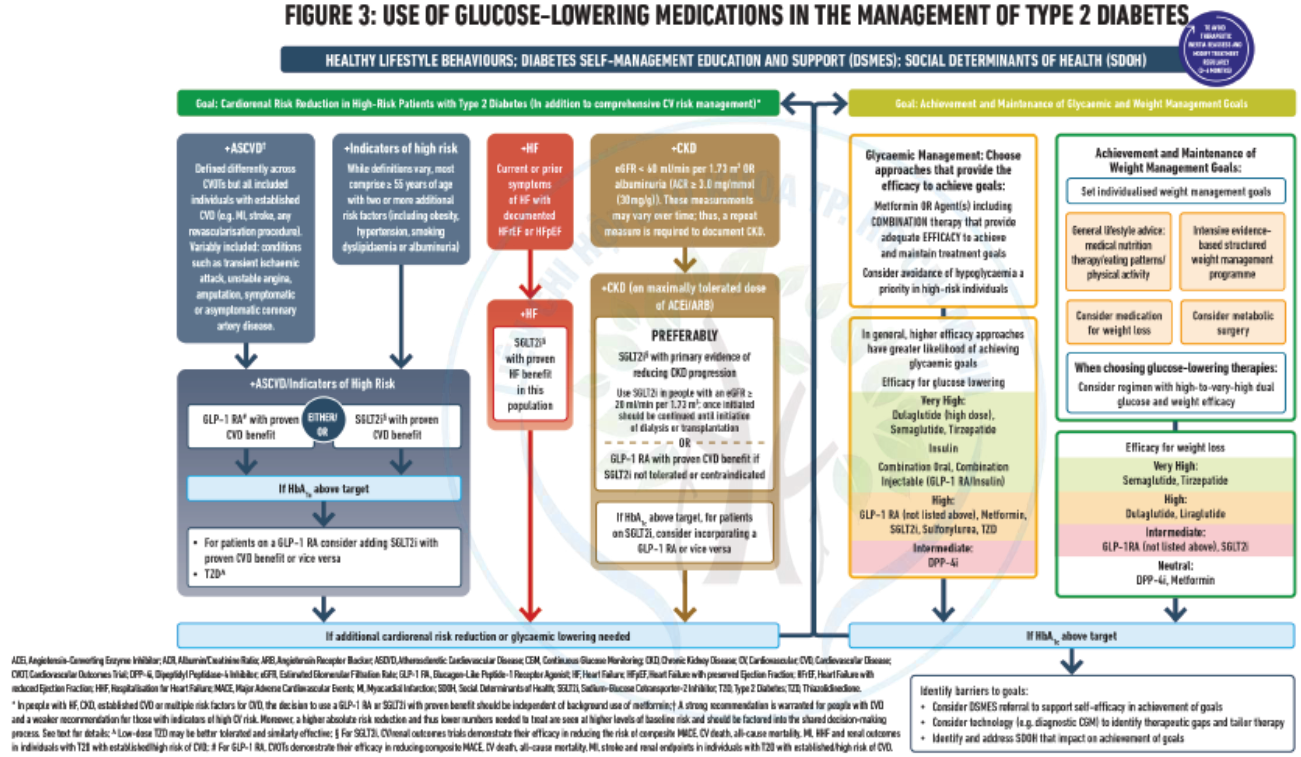
FIGURE 3: USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES



ACEI, Angiotensin-Converting Enzyme Inhibitor; ACR, Albumin/Creatinine Ratio; ARB, Angiotensin Receptor Blocker; ASCVD, Atherosclerotic Cardiovascular Disease; CGM, Continuous Glucose Monitoring; CKD, Chronic Kidney Disease; CV, Cardiovascular; CVD, Cardiovascular Disease; CVOT, Cardiovascular Outcomes Trial; DPP-4i, Dipeptidyl Peptidase-4 Inhibitor; eGFR, Estimated Glomerular Filtration Rate; GLP-1 RA, Glucagon-Like Peptide-1 Receptor Agonist; HF, Heart Failure; HFpEF, Heart Failure with preserved Ejection Fraction; HFrEF, Heart Failure with reduced Ejection Fraction; HHF, Hospitalisation for Heart Failure; MACE, Major Adverse Cardiovascular Events; MI, Myocardial Infarction; SDOH, Social Determinants of Health; SGLT2i, Sodium-Glucose Cotransporter-2 Inhibitor; T2D, Type 2 Diabetes; TZD, Thiazolidinedione.

* 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, CVrenal outcomes trials demonstrate their efficacy in reducing the risk of composite MACE, CV death, all-cause mortality, MI, HHF and renal outcomes in individuals with T2D with established/high risk of CVD; # For GLP-1 RA, CVOTs 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.

Davies MJ, Aroda VR, Collins BS, Gabbay RA, Green J, Maruthur NM, Rosas SE, Del Prato S, Mathieu C, Mingrone G, Rossing P, Tankova T, Tsapas A, Buse JB

Diabetes Care 2022; https://doi.org/10.2337/dci22-0034. *Diabetologia* 2022; https://doi.org/10.1007/s00125-022-05787-2.

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Ca lâm sàng

- **Bệnh nhân được điều trị**
  - Metformin XR 1500mg
  - Empagliflozin 10mg
  - Gliclazide 60mg 1 viên
  - Liraglutide tăng liều dần đến 1.8mg/ngày
  - Peridopril / Amlodipin 5/5 mg 1 viên; Nebivolol 5mg
  - Rosuvastatin 20mg 1 viên + Ezestimibe 10mg
  - Aspirine 81mg 1 viên + Clopidogrel 75mg
- **Kết quả sau 6 tháng**
  - Glucose: 132 mg/dl; HbA1c 7.3%
  - Cân nặng 72 kg

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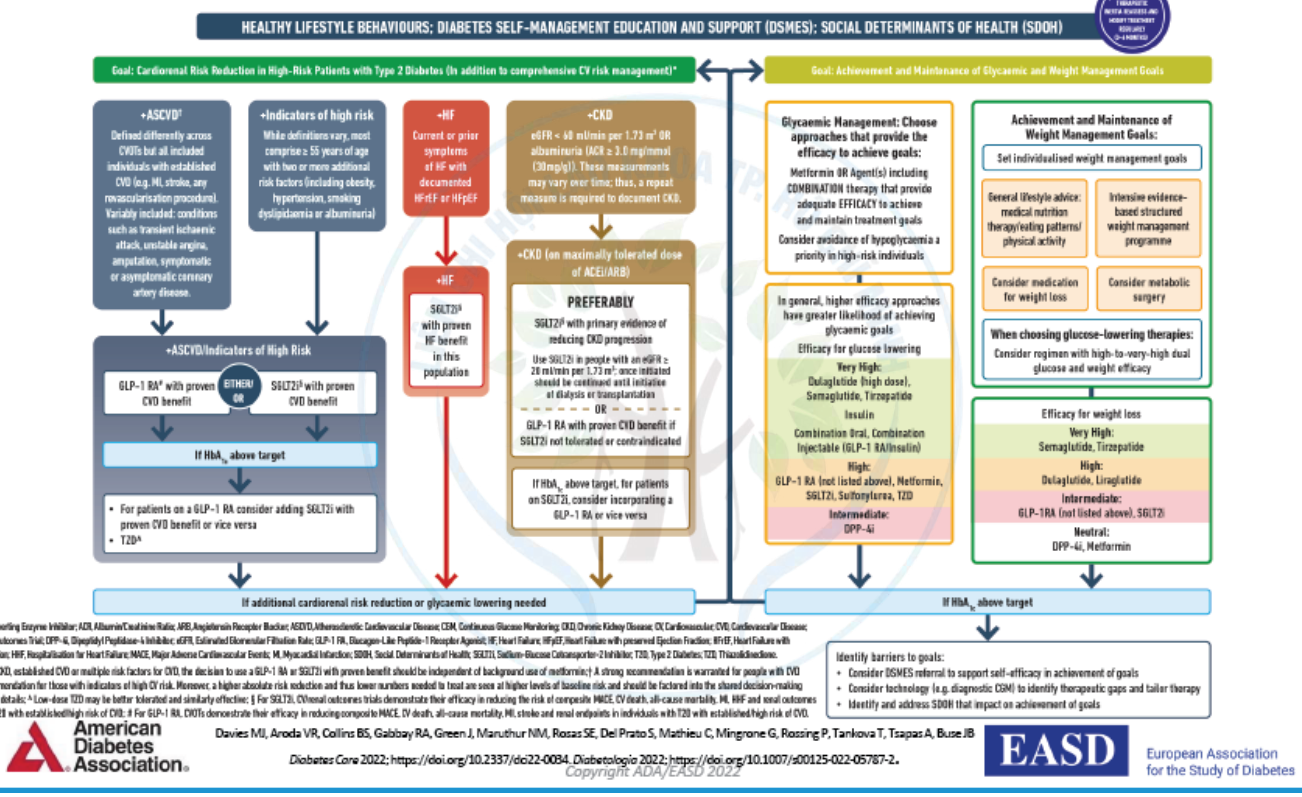
FIGURE 3: USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES



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American Diabetes Association.

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Diabetes Care 2022; https://doi.org/10.2337/dci22-0034 *Diabetologia* 2022; https://doi.org/10.1007/s00125-022-05787-2.

EASD European Association for the Study of Diabetes

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Kết luận

- **Nên xem xét sử dụng liệu pháp tiêm với GLP1 RA**

1. Bệnh nhân đái tháo đường típ 2 có bệnh tim mạch xơ vữa (bệnh mạch vành, đột quỵ nhồi máu não, tắc động mạch ngoại biên). Với 3 loại GLP-1 RA được chứng minh lợi ích tim mạch Liraglutide, Semaglutide (SQ), Dulaglutide
2. Bệnh nhân đái tháo đường típ 2 cần kiểm soát cân nặng tối ưu.
3. Bệnh nhân đái tháo đường típ 2 cần giảm nguy cơ hạ đường huyết.
4. Bệnh nhân đái tháo đường típ 2 chưa được kiểm soát đường huyết tốt, với mức giảm HbA1c cần thiết >1%

Semaglutide chưa được phê duyệt ở thị trường Việt Nam