GLP1 tedavisi insülin alternatifi midir?

Prof. Dr. Alper Sönmez

Ankara Güven Hastanesi

Endokrinoloji ve Metabolizma Hastalıkları Bölümü

Çıkar çelişkisi beyanı

- Danışma kurulu
  - Novonordisk, Sanofi, AstraZeneca, Eczacıbaşı, Econix, Roche Diagnostics
- Klinik araştırma yürütücülüğü
  - Novonordisk, Novartis, Sanofi
- Kongre Desteği
  - Bilim ilaç, Novonordisk, AstraZeneca

İçerik..

- «GLP1 tedavisi insülin alternatifi midir?» sorusuna hızlı cevap
- Kanıtlar
- GLP-1 agonisti tedavisinde püf noktalar

GLP-1 Agonisti insülin alternatifi midir?

İnsülin tedavisi endikasyonları

- Tip 1 Diyabet
- Hiperglisemik acil durumlar
- Diyabetli bireyde perioperatif izlem
- Gebelik diyabeti

HAYIR

- Tip 2 Diyabetli bireyde tedaviye yetersiz yanıt
  - Diyet + Egzersiz + Oral antidiyabetikler

EVET

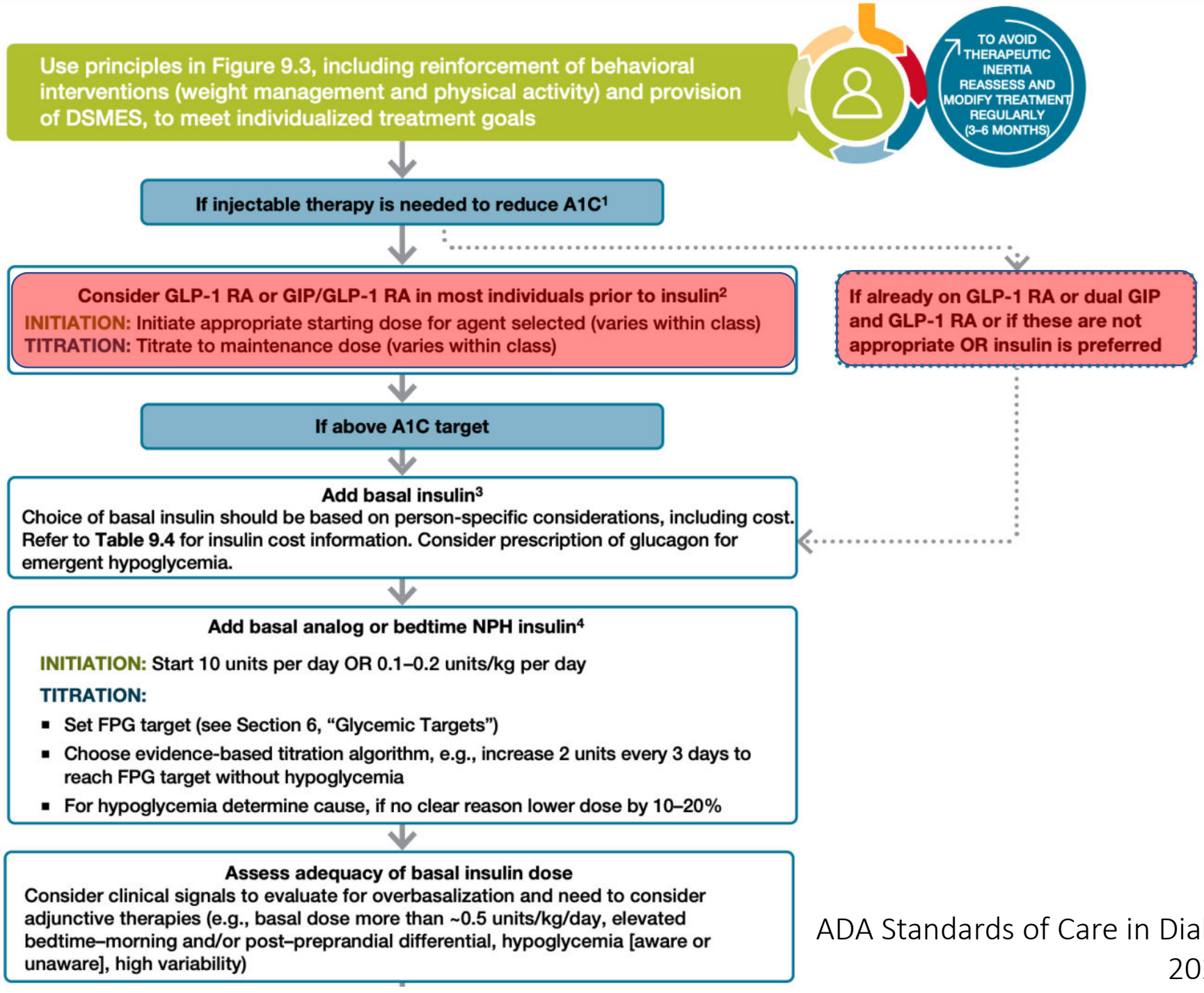
Tip 2 Diyabet güncel tedavi yaklaşımı

Yaşam biçimi yönetimi + Oral antidiyabetik
Metformin (Çoğu defa)

Oral kombinasyon
Endikasyon, Etki, Yan etki, Maliyet

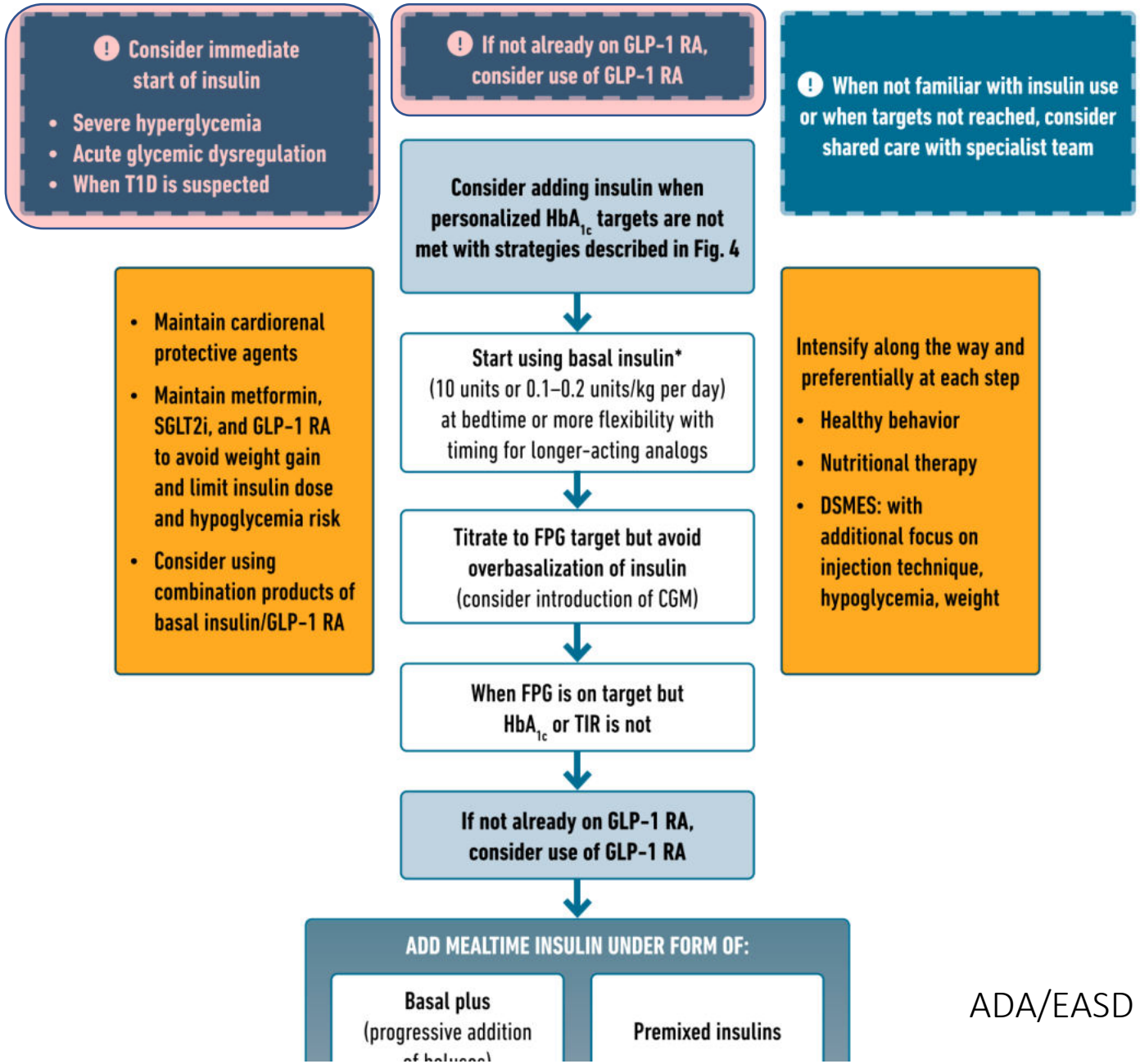
Enjektabl tedavi
GLP-1 reseptör agonisti
İnsülin

Consensus Report by the ADA and EASD. *Diabetes Care* 2022; 45 (11): 2753 2786
Standards of Care in Diabetes-2023. Diabetes Care. 2023 ;46(Suppl 1):S140 S157
TEMD Diabet Mellitus Tanı ve Tedavi Kılavuzu 2022



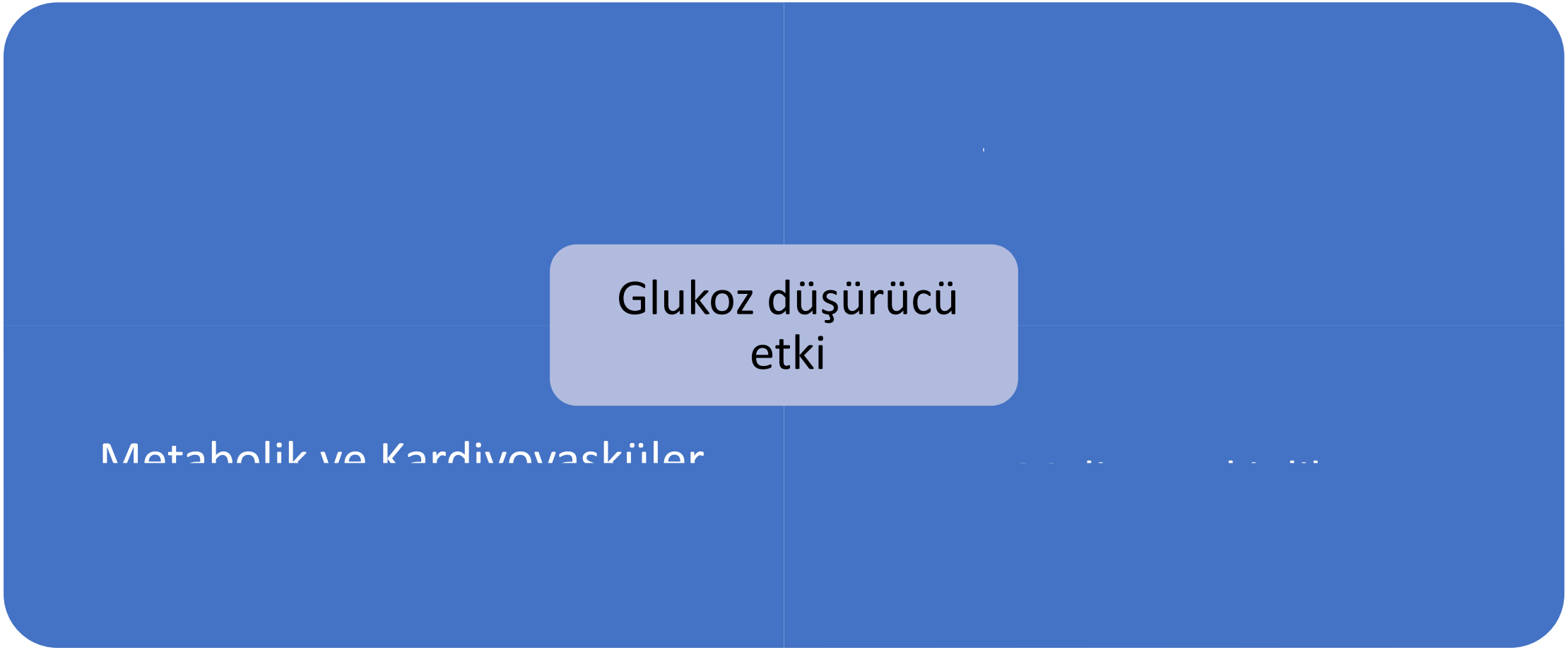
ADA Standards of Care in Diabetes-2023. Diabetes Care. 2023;46 (Suppl 1):S140-S157.

PLACE OF INSULIN[1]



ADA/EASD Consensus Report *Diabetes Care* 2022; 45 (11): 2753–2786

İnsülin ve GLP-1 agonisti karşılaştırma



GLP-1 Reseptör Agonistleri

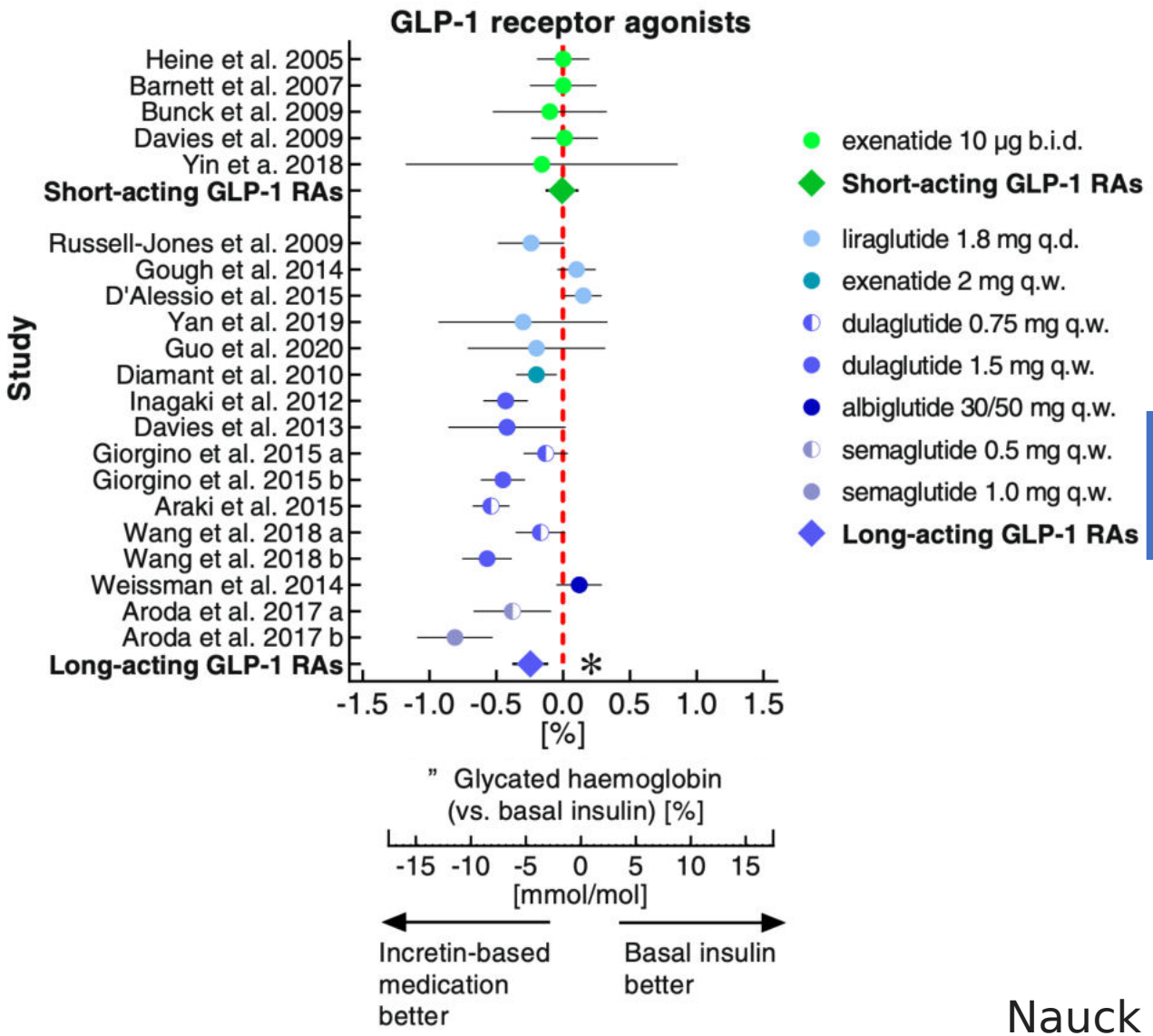
Kısa etkili

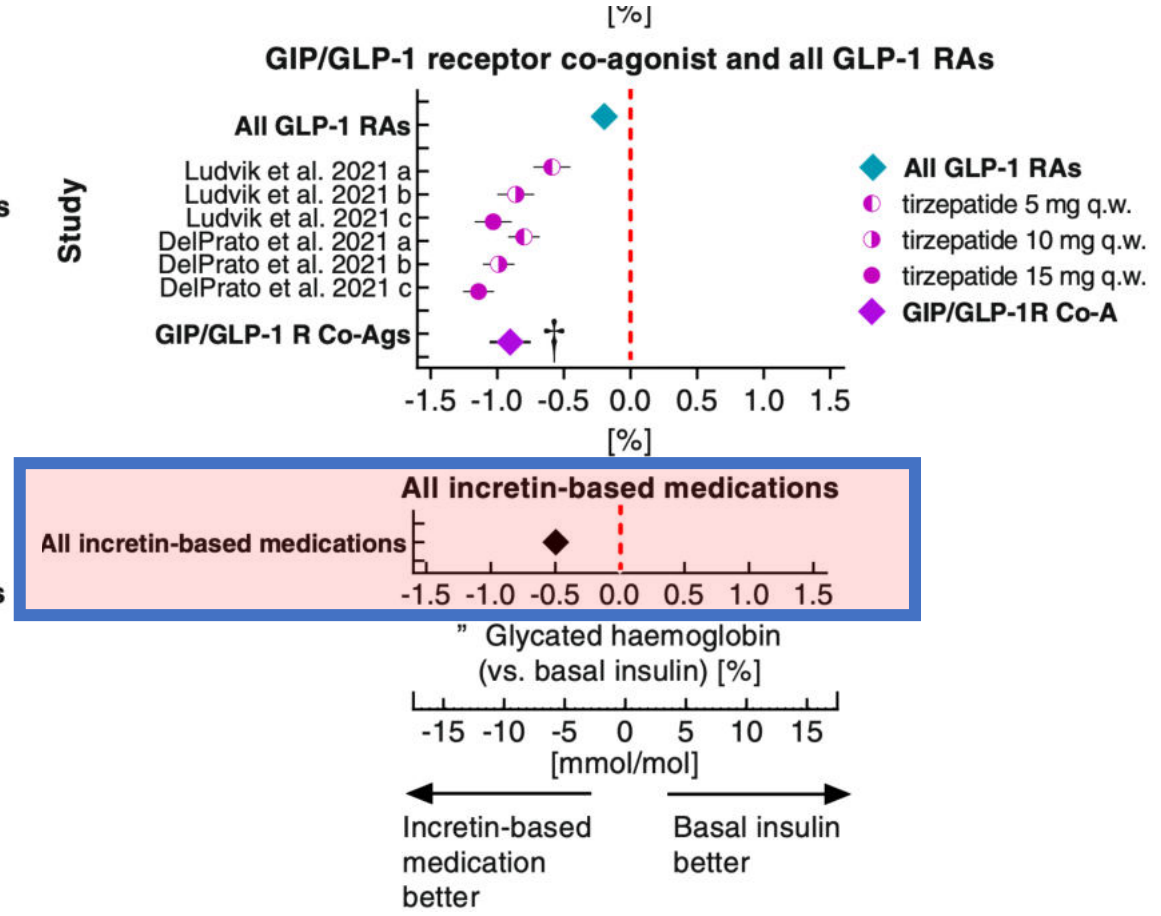
Exenatide
b.i.d.
Byetta®

ᵽ-1/GIP dual agonistler

Tirzepatide
Mounjaro

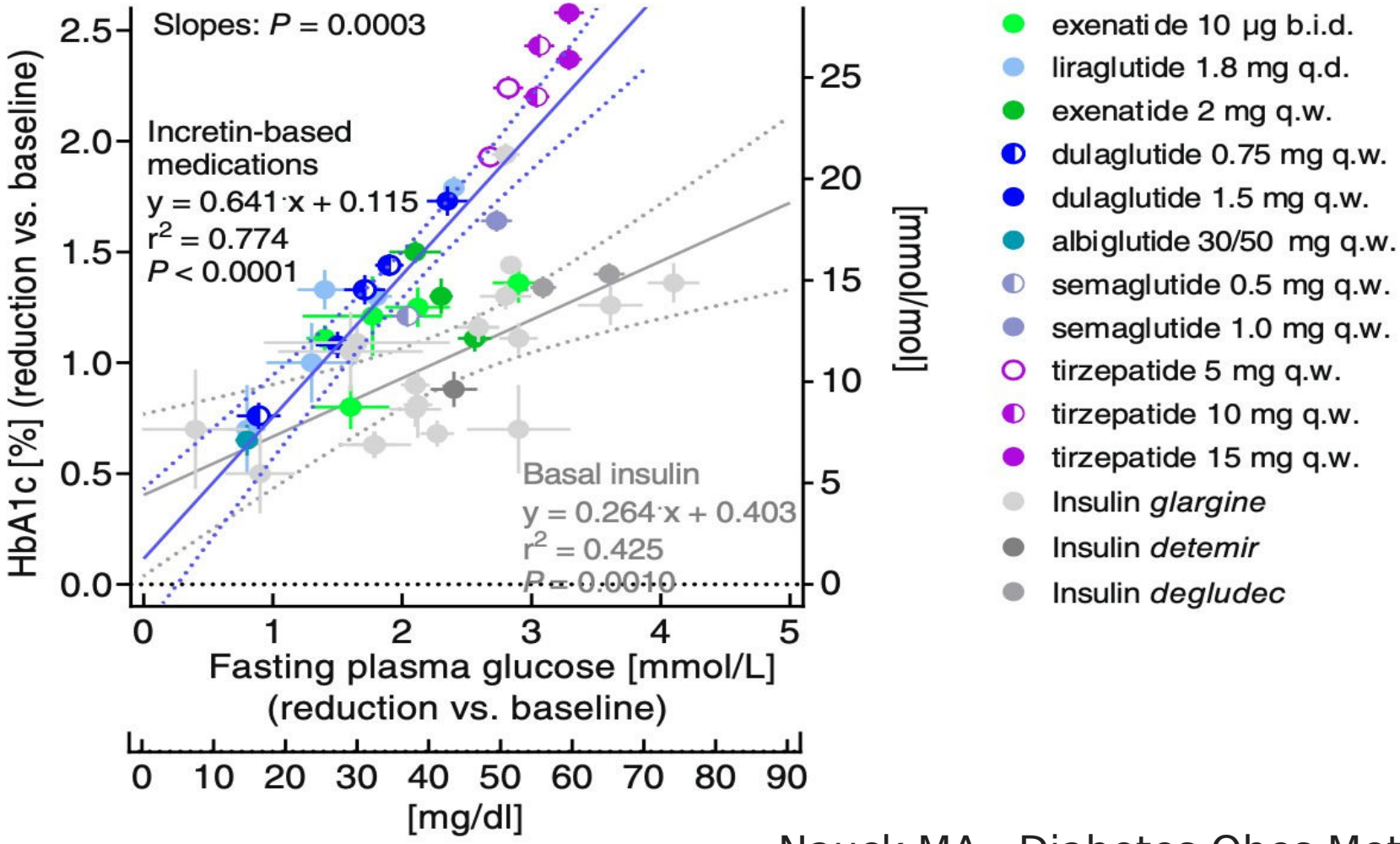
A1c üzerindeki etkinlik





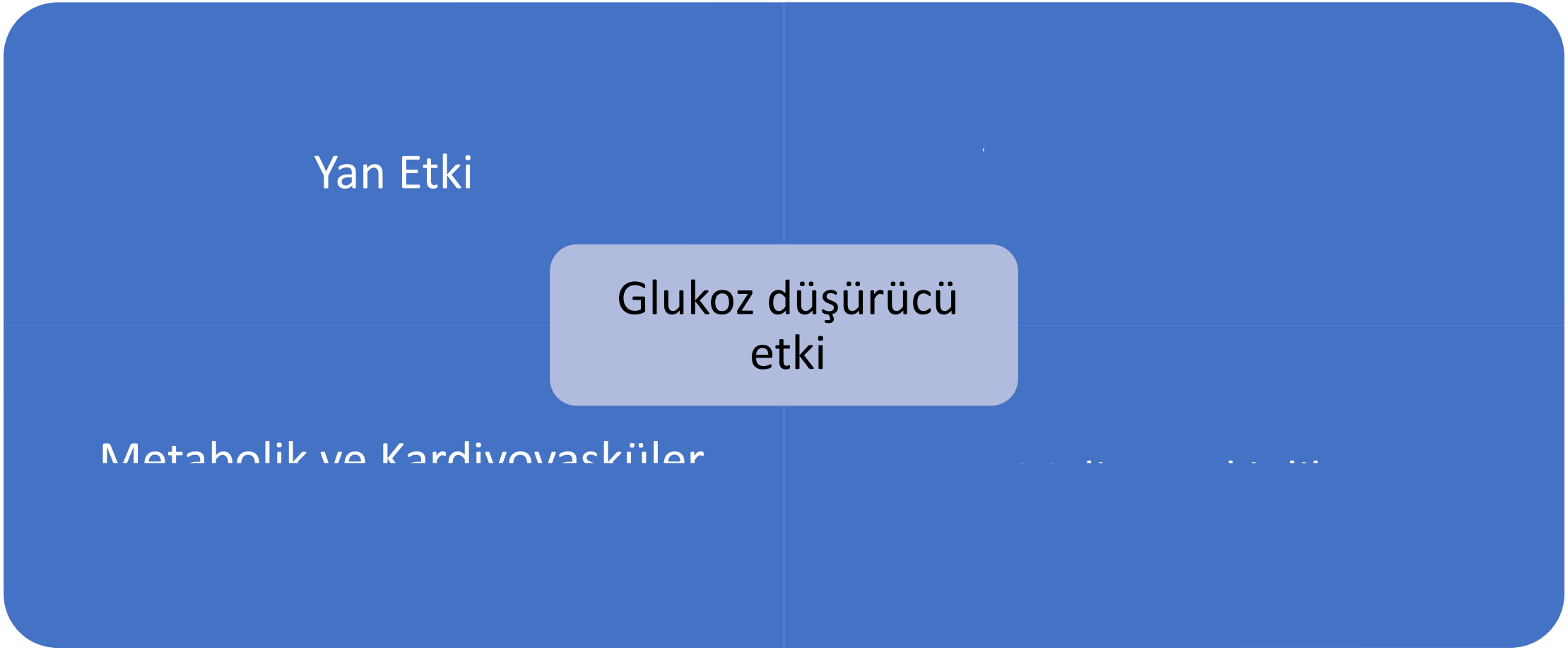
Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-13

Açlık glukozu üzerindeki etkinlik

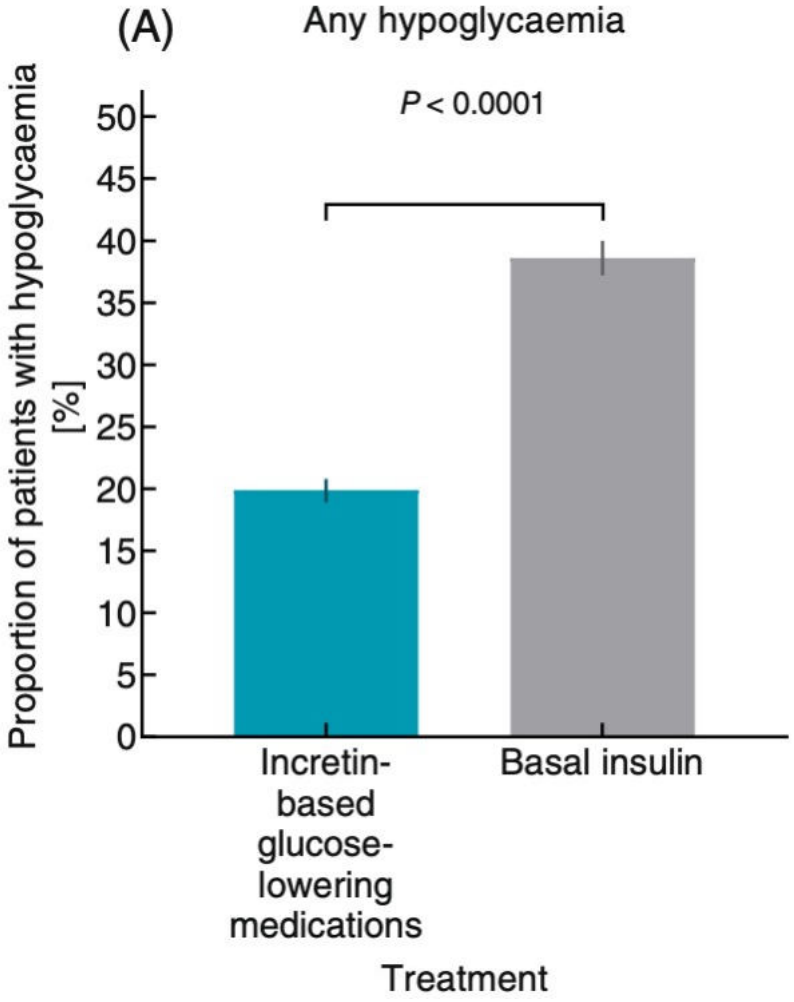


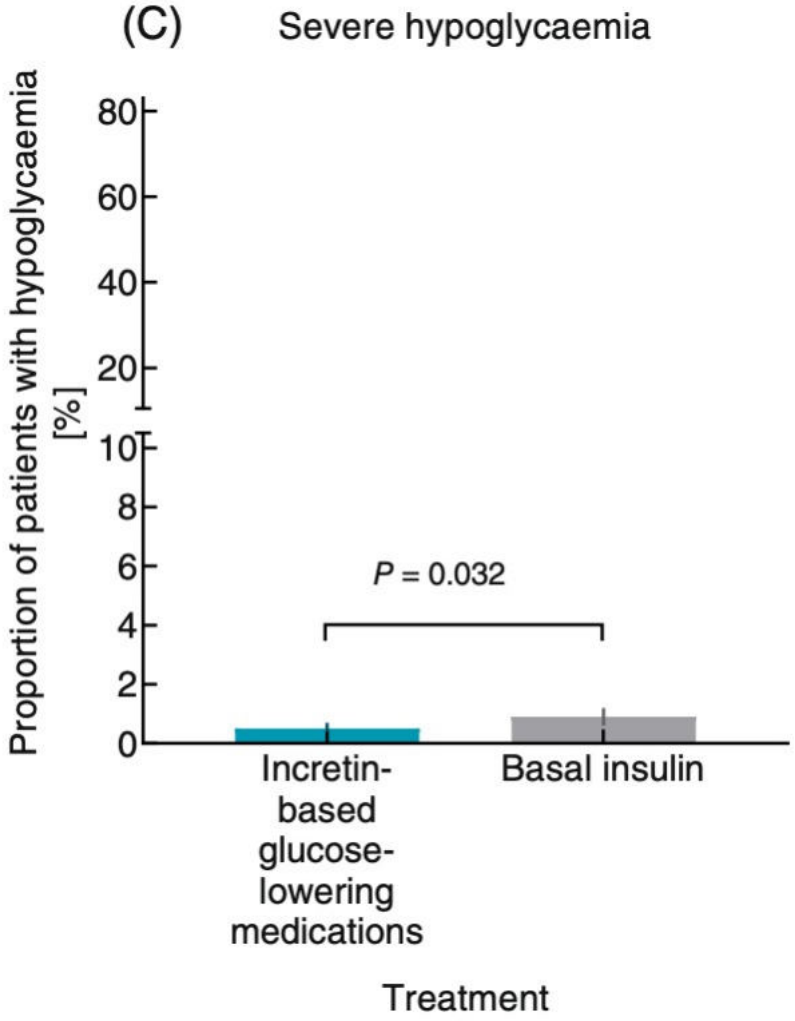
Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-137

İnsülin ve GLP-1 agonisti karşılaştırma



Hipoglisemi riski..





Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-13

Gastrointestinal yan etkiler..

Supplementary Table 3. Comparison of the proportion of patients reporting "gastrointestinal" adverse events (nausea, vomiting diarrhoea) in hear-to-head trials with incretin-based glucose-lowering medications (GLP-1 receptor agonists and the GIP/GLP-1 receptor co-agonist tirzepatide

	Number of studies reporting this adverse event	Number of patients reporting this adverse event	Number of patients exposed to the drug(s) of interest	Proportion reporting this adverse event [%]	Number of studies reporting this adverse event	Number of patients reporting this adverse event	Number of patients exposed to the drug(s) of interest	Proportion reporting this adverse event [%]	Number of studies reporting this adverse event	Number of patients reporting this adverse event	Number of patients exposed to the drug(s) of interest	Proportion reporting this adverse event [%]
Adverse event of interest	Nausea				Vomiting				Diarrhoea			
Medication class(es) analyzed												
Short-acting GLP-1 RAs	3	289	561	51.5	2	61	407	15.0	2	46	400	11.5
Long-acting GLP-1 RAs	11	663	4158	15.9	10	255	3654	7.0	9	508	4190	12.1
All GLP-1 RAs	14	925	4719	20.2	12	316	4061	7.8	11	554	4590	12.1
Tirzepatide	2	351	2072	16.9	2	163	2072	7.0	2	351	2072	16.9
All incretin-based glucose-lowering medications	16	1303	6791	19.2	14	479	6133	7.8	13	905	6662	13.6
Comparison (incretin-based glucose-lowering medication vs. basal insulin	Relative risk	95 % confidence interval		Significance (p-value)	Relative risk	95 % confidence interval		Significance (p-value)	Relative risk	95 % confidence interval		Significance (p-value)
Short-acting GLP-1 RAs	6.3	4.4-9.0		< 0.0001	3.9	2.2-6.8		< 0.0001	1.9	1.2-3.1		0.011
Long-acting GLP-1 RAs	6.2	4.9-7.9		< 0.0001	3.2	2.3-4.3		< 0.0001	2.7	2.2-3.3		< 0.0001
All GLP-1 RAs	6.1	4.9-7.4		< 0.0001	3.7	2.8-4.8		< 0.0001	2.6	2.1-3.1		< 0.0001
Tirzepatide	6.1	4.8-10.1		< 0.0001	4.4	3.0-6.5		< 0.0001	3.6	2.7-4.7		< 0.0001
All incretin-based glucose-lowering medications	6.2	5.3-7.1		< 0.0001	3.9	3.1-4.8		< 0.0001	2.9	2.3-.3.3		< 0.0001

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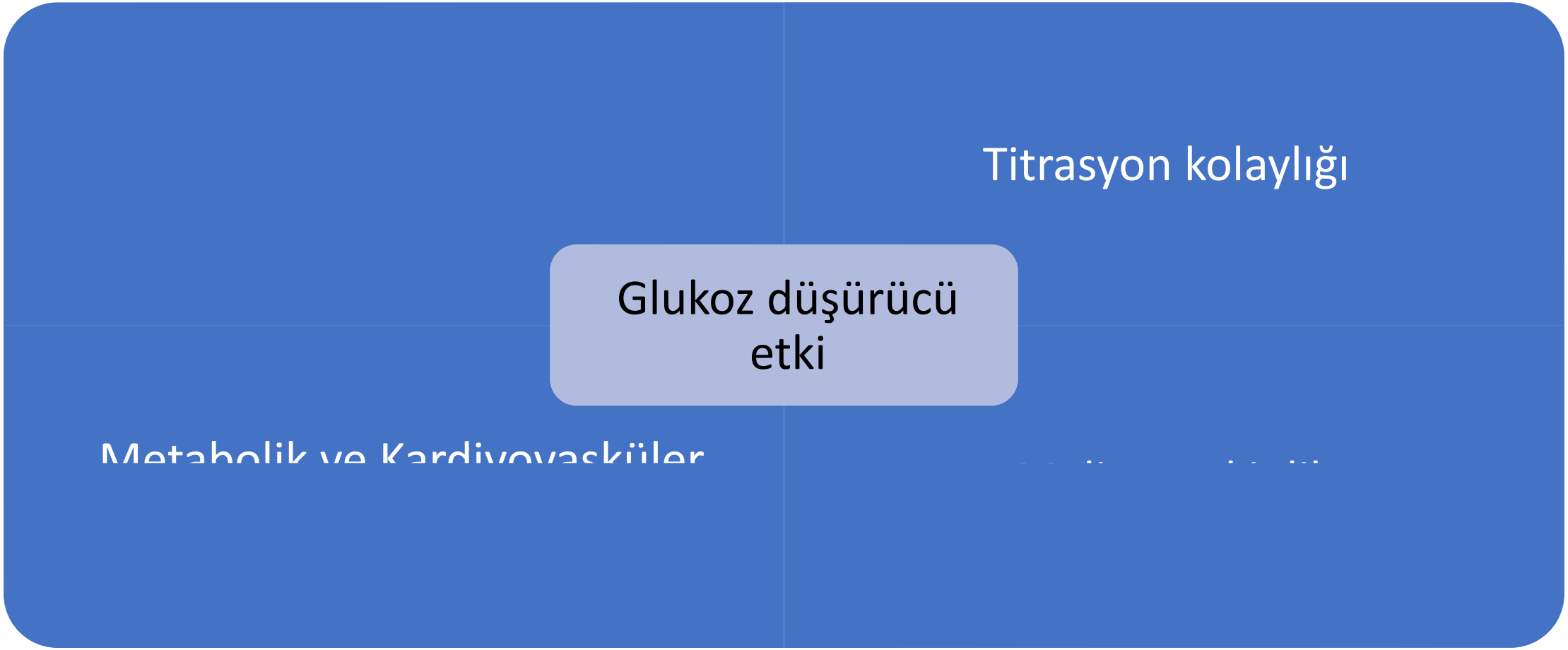
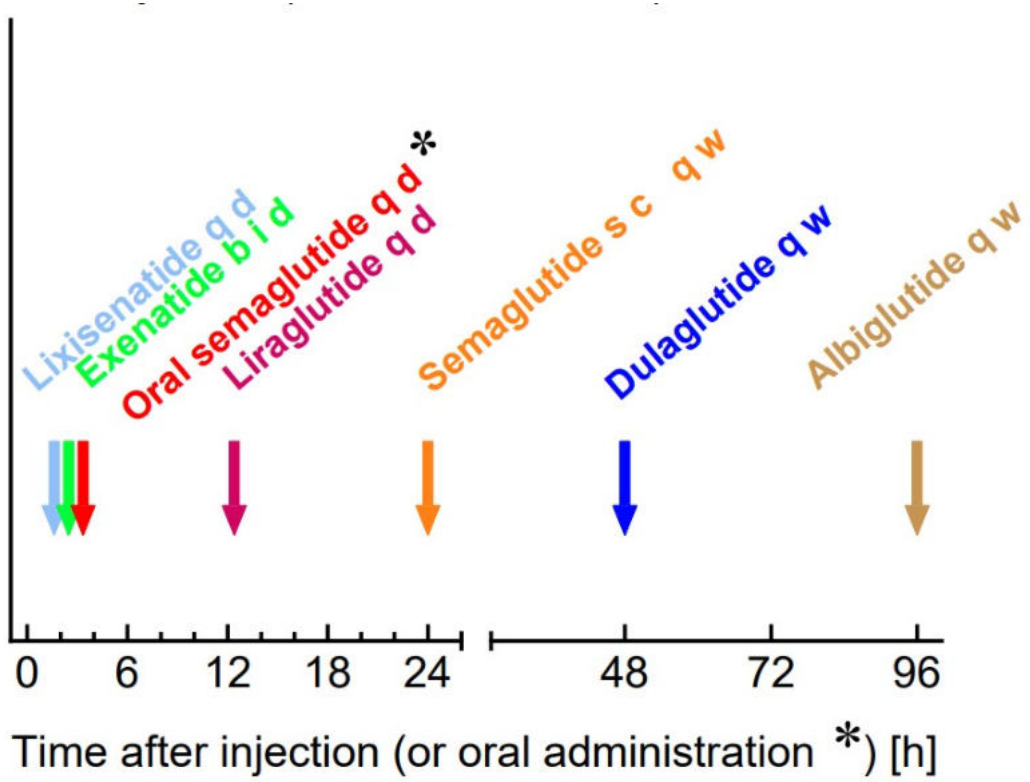
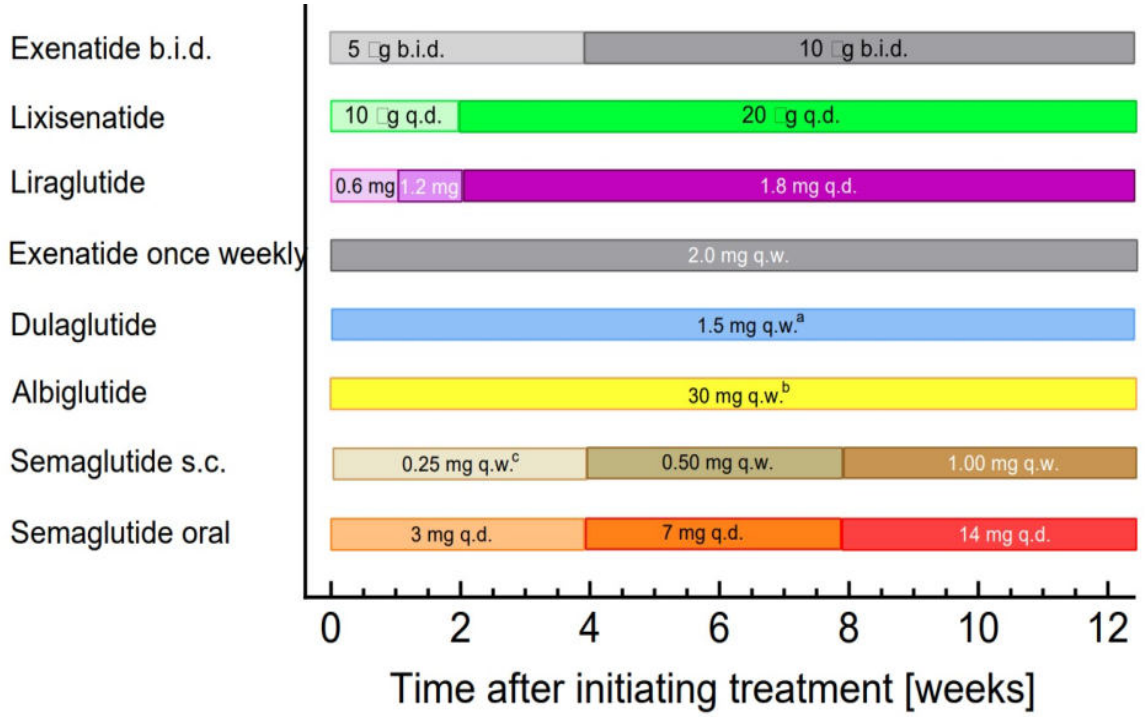
İnsülin ve GLP-1 agonisti karşılaştırma



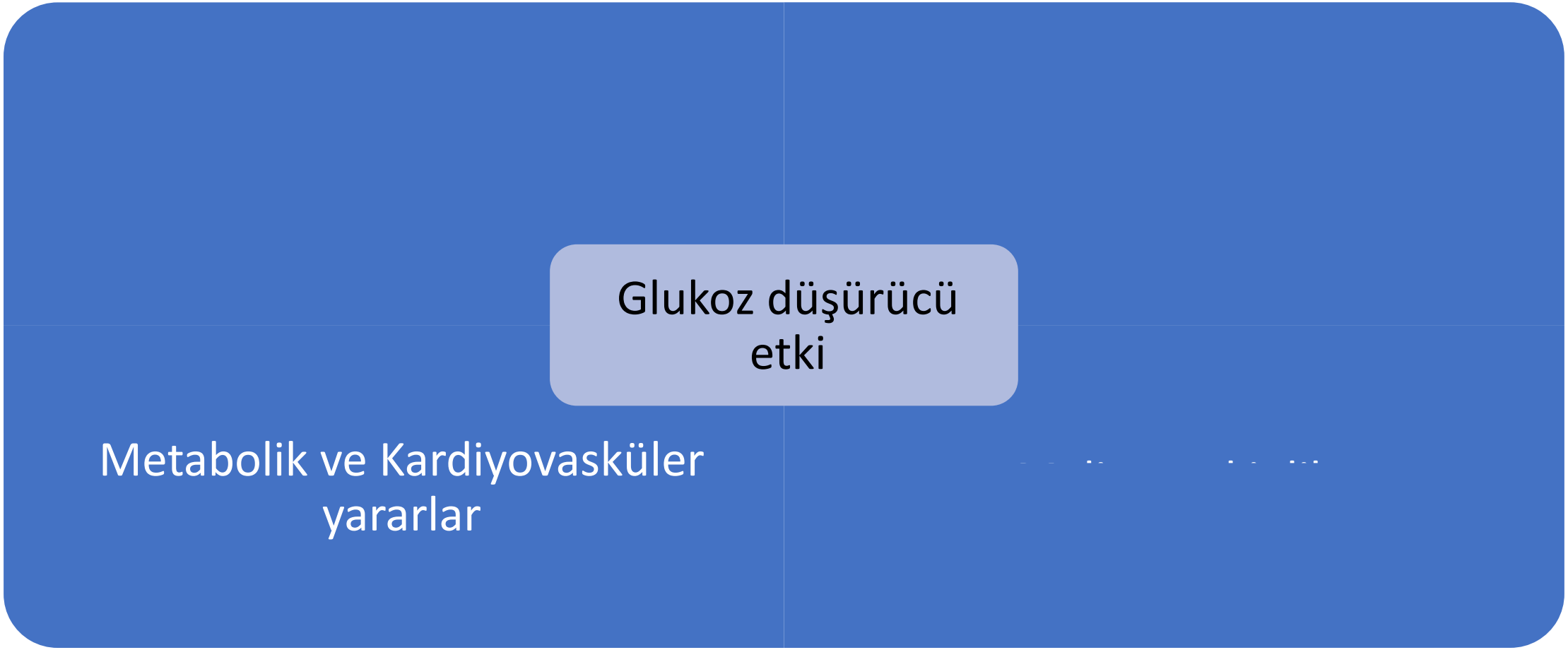
GLP-1 titrasyonla ilgili ip uçları..



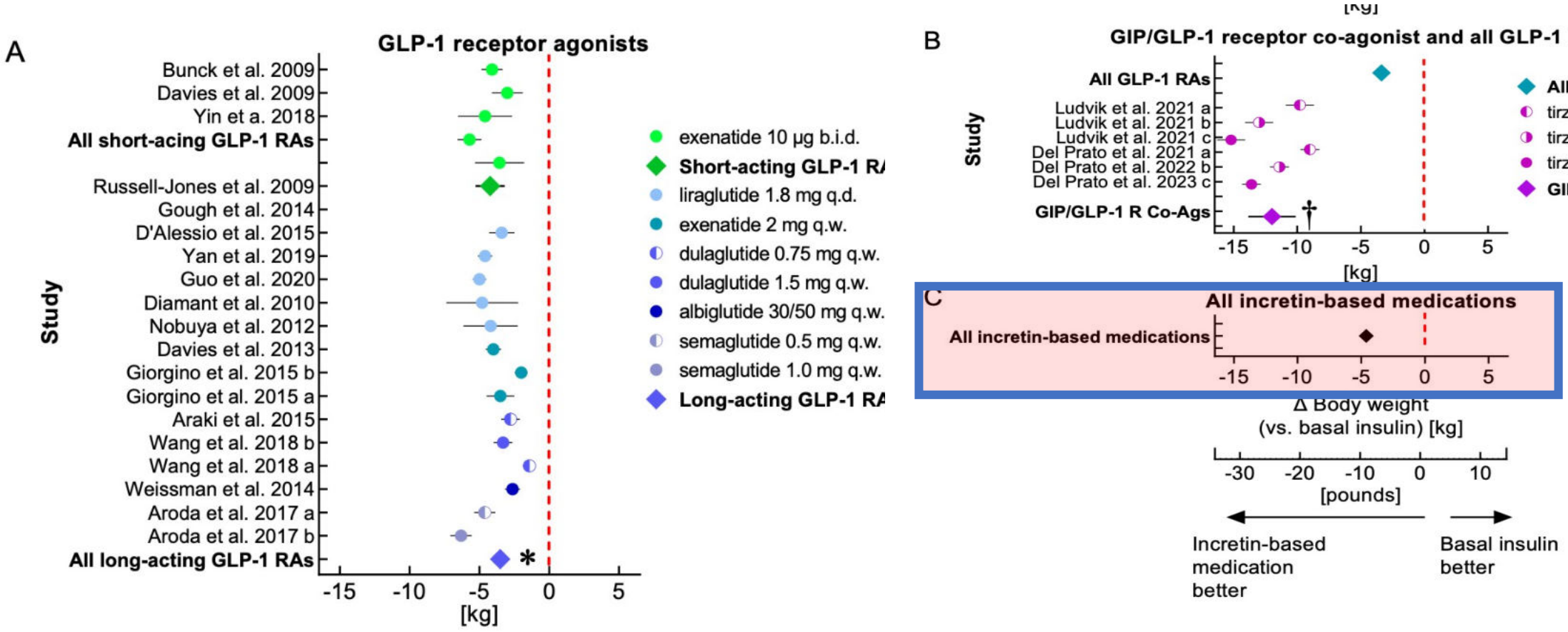


Nauck MA., Mol Metab. 2021 Apr;46:101102

İnsülin ve GLP-1 agonisti karşılaştırma

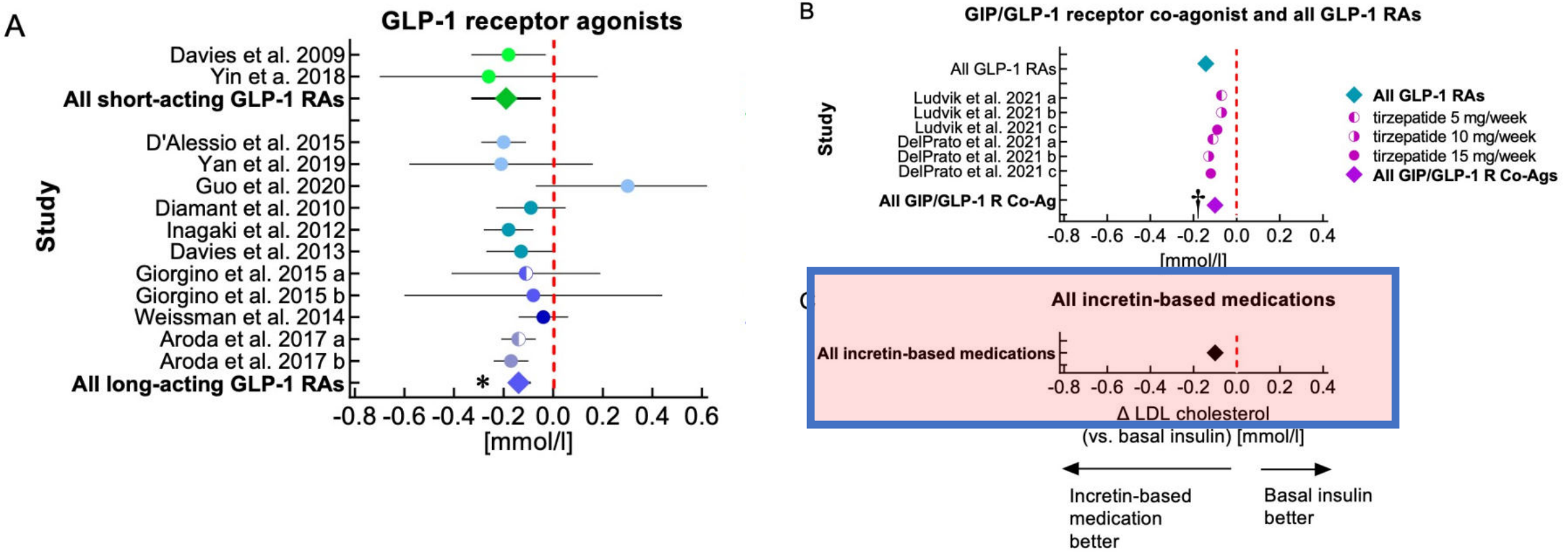


Kilo kontrolü



Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-1

LDL Düşürücü etki



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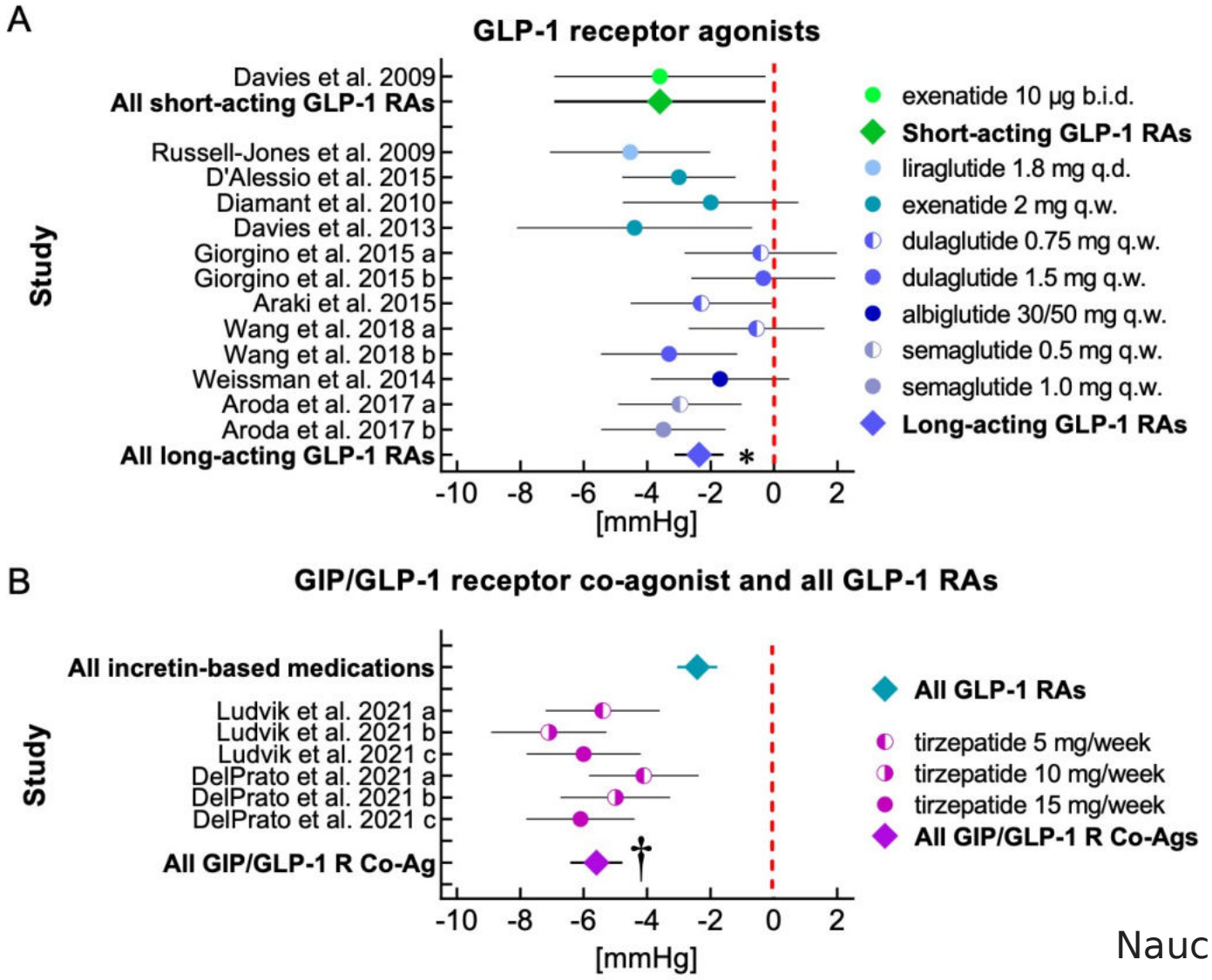
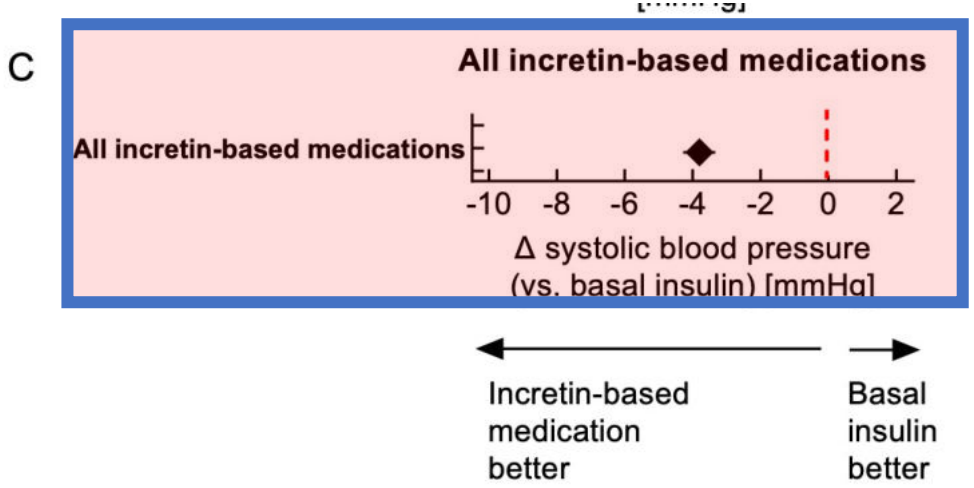
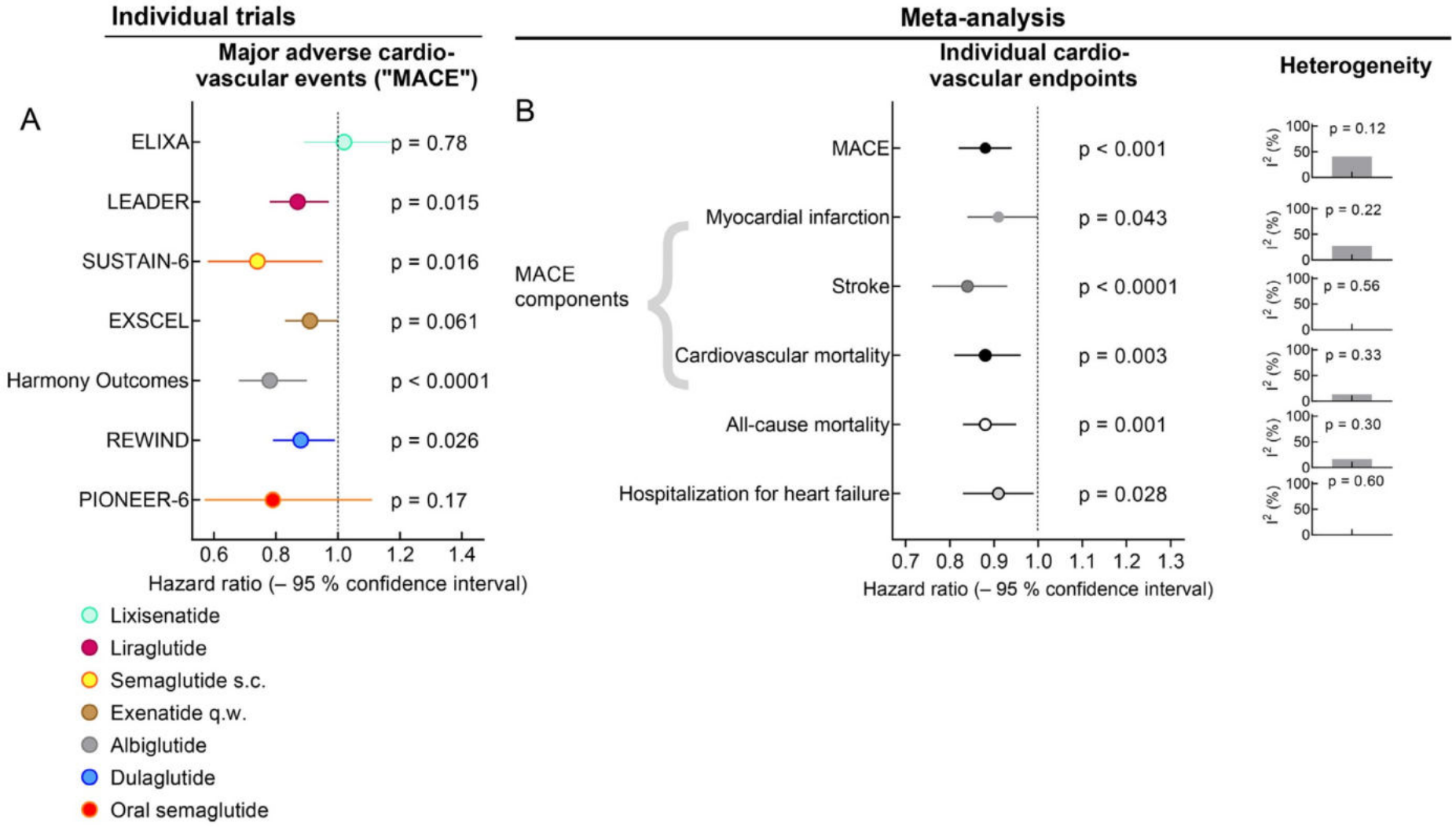
Kan basıncı üzerindeki etki





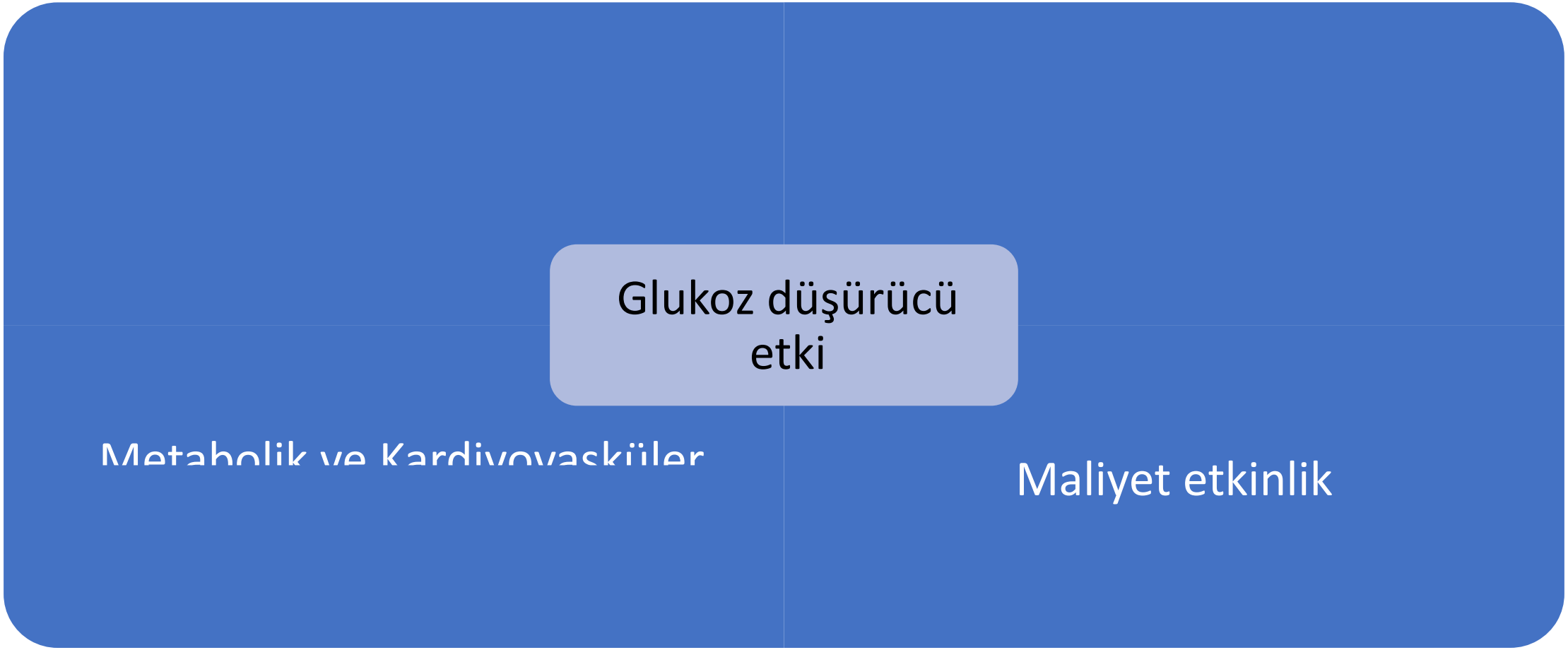
Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-1

Olay ve ölümler açısından GLP-1 agonistleri

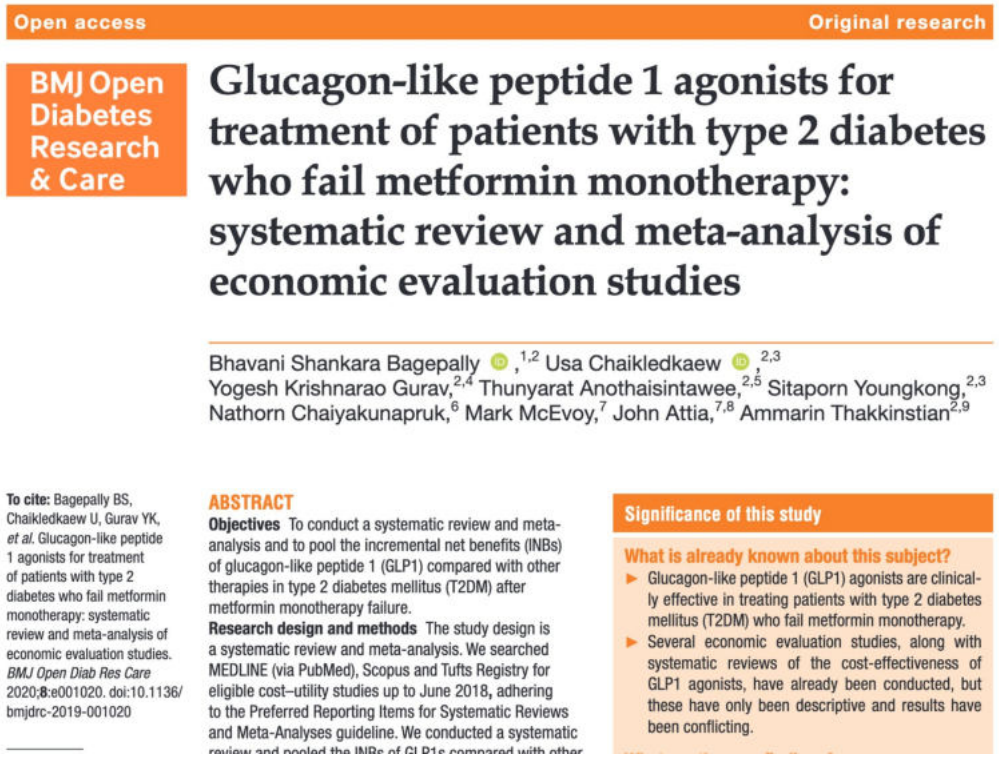


Nauck MA, Mol Metab. 2021 Apr;46:101102

İnsülin ve GLP-1 agonisti karşılaştırma



GLP-1 agonistlerinin maliyet etkinliği insülinden daha iyidir..



Open access Original research

BMJ Open Diabetes Research & Care

Glucagon-like peptide 1 agonists for treatment of patients with type 2 diabetes who fail metformin monotherapy: systematic review and meta-analysis of economic evaluation studies

Bhavani Shankara Bagepally ,[1,2] Usa Chaikledkaew ,[2,3] Yogesh Krishnarao Gurav,[2,4] Thunyarat Anothaisintawee,[2,5] Sitaporn Youngkong,[2,3] Nathorn Chaiyakunapruk,[6] Mark McEvoy,[7] John Attia,[7,8] Ammarin Thakkinstian[2,9]

To cite: Bagepally BS, Chaikledkaew U, Gurav YK, *et al*. Glucagon-like peptide 1 agonists for treatment of patients with type 2 diabetes who fail metformin monotherapy: systematic review and meta-analysis of economic evaluation studies. *BMJ Open Diab Res Care* 2020;**8**:e001020. doi:10.1136/bmjdrc-2019-001020

ABSTRACT

Objectives To conduct a systematic review and meta-analysis and to pool the incremental net benefits (INBs) of glucagon-like peptide 1 (GLP1) compared with other therapies in type 2 diabetes mellitus (T2DM) after metformin monotherapy failure.

Research design and methods The study design is a systematic review and meta-analysis. We searched MEDLINE (via PubMed), Scopus and Tufts Registry for eligible cost–utility studies up to June 2018, adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guideline. We conducted a systematic review and pooled the INBs of GLP1s compared with other

Significance of this study

What is already known about this subject?

- Glucagon-like peptide 1 (GLP1) agonists are clinically effective in treating patients with type 2 diabetes mellitus (T2DM) who fail metformin monotherapy.
- Several economic evaluation studies, along with systematic reviews of the cost-effectiveness of GLP1 agonists, have already been conducted, but these have only been descriptive and results have been conflicting.

ELSEVIER

Diabetes Research and Clinical Practice

Volume 198, April 2023, 110625

Value of GLP-1 receptor agonists versus long-acting insulins for type 2 diabetes patients with and without established cardiovascular or chronic kidney diseases: A model-based cost-effectiveness analysis using real-world data

Chun-Ting Yang [a], Wen-Yu Yao [a], Huang-Tz Ou [a b], Shihchen Kuo [a c]

GLP-1 Agonisti kullanmamak daha güvenli olabilir..

Sarkopeni
İleri karaciğer hastalığı
Pankreatit öyküsü
Yaşlı, kırılgan hasta
Akut katabolik durum
Yatan hasta

Nauck MA., Diabetes Obes Metab. 2023 May;25(5):1361-1

Bitirirken..

- İnsülin yaşam kurtarır, aşağıdaki durumlarda mutlaka kullanılmalıdır:
  - Tip 1 Diyabet
  - Hiperglisemik acil durumlar
  - Diyabetli bireyin perioperatif izlemi
  - Gebelik diyabeti

- Tip 2 Diyabette
  - Yaşam biçimi yönetimi ve Oral antidiyabetiklerle yeterli metabolik kontrol sağlanamazsa GLP-1 Agonisti insüline tercih edilmelidir
  - Aterosklerotik hastalık, kronik böbrek hastalığı, Obezite varsa GLP-1 agonisti (± Metformin) kullanılmalıdır.

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Teşekkürler..