

TIP 2 DİYABETTE KOMBİNASYON TEDAVİLERİ

Prof. Dr. Erdiñç ERTÜRK
Uludağ Üniversitesi Tıp Fakóltesi
Endokrinoloji Bilim Dalı

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RB, 44 y E, AKŞ 215, HbA1c: % 8.2

Sadece yaşam biçimi değişikliği
önerisi ile izleme alınabilir mi?

Table 6—Summary of recommendations for adults with diabetes

Glycemic control

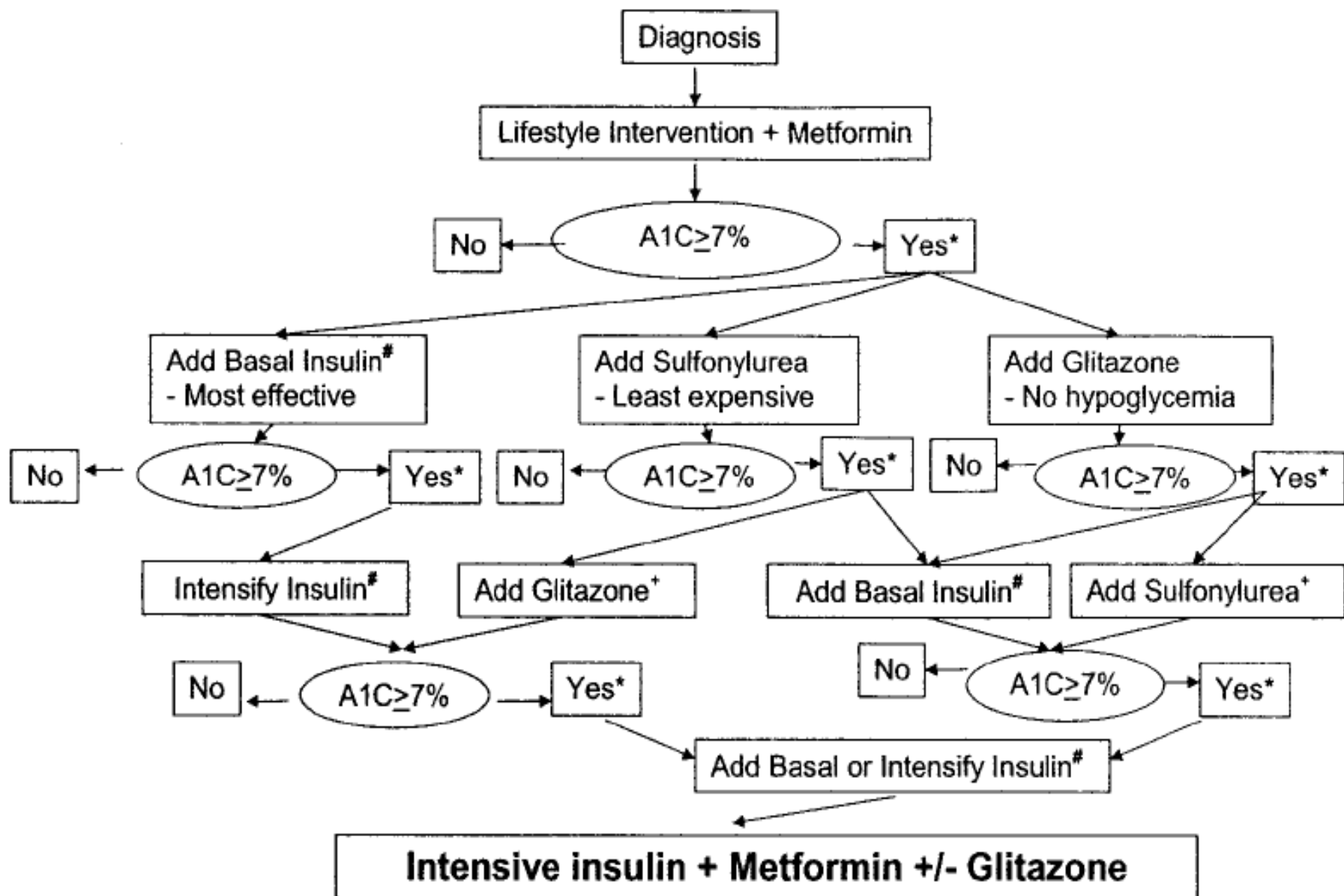
A1C	<7.0%*
Preprandial capillary plasma glucose	90–130 mg/dl (5.0–7.2 mmol/l)
Peak postprandial capillary plasma glucose†	<180 mg/dl (<10.0 mmol/l)
Blood pressure	<130/80 mmHg

Lipids‡

LDL	<100 mg/dl (<2.6 mmol/l)
Triglycerides	<150 mg/dl (<1.7 mmol/l)
HDL	>40 mg/dl (>1.0 mmol/l)§

Key concepts in setting glycemic goals:

- A1C is the primary target for glycemic control
- Goals should be individualized
- Certain populations (children, pregnant women, and elderly) require special considerations
- More stringent glycemic goals (i.e., a normal A1C, <6%) may further reduce complications at the cost of increased risk of hypoglycemia
- Less intensive glycemic goals may be indicated in patients with severe or frequent hypoglycemia
- Postprandial glucose may be targeted if A1C goals are not met despite reaching preprandial glucose goals



Management of Hyperglycemia in Type 2 Diabetes: A Consensus Algorithm for the Initiation and Adjustment of Therapy

A consensus statement from the American Diabetes Association and the European Association for the Study of Diabetes

Table 1—Summary of antidiabetic interventions as monotherapy

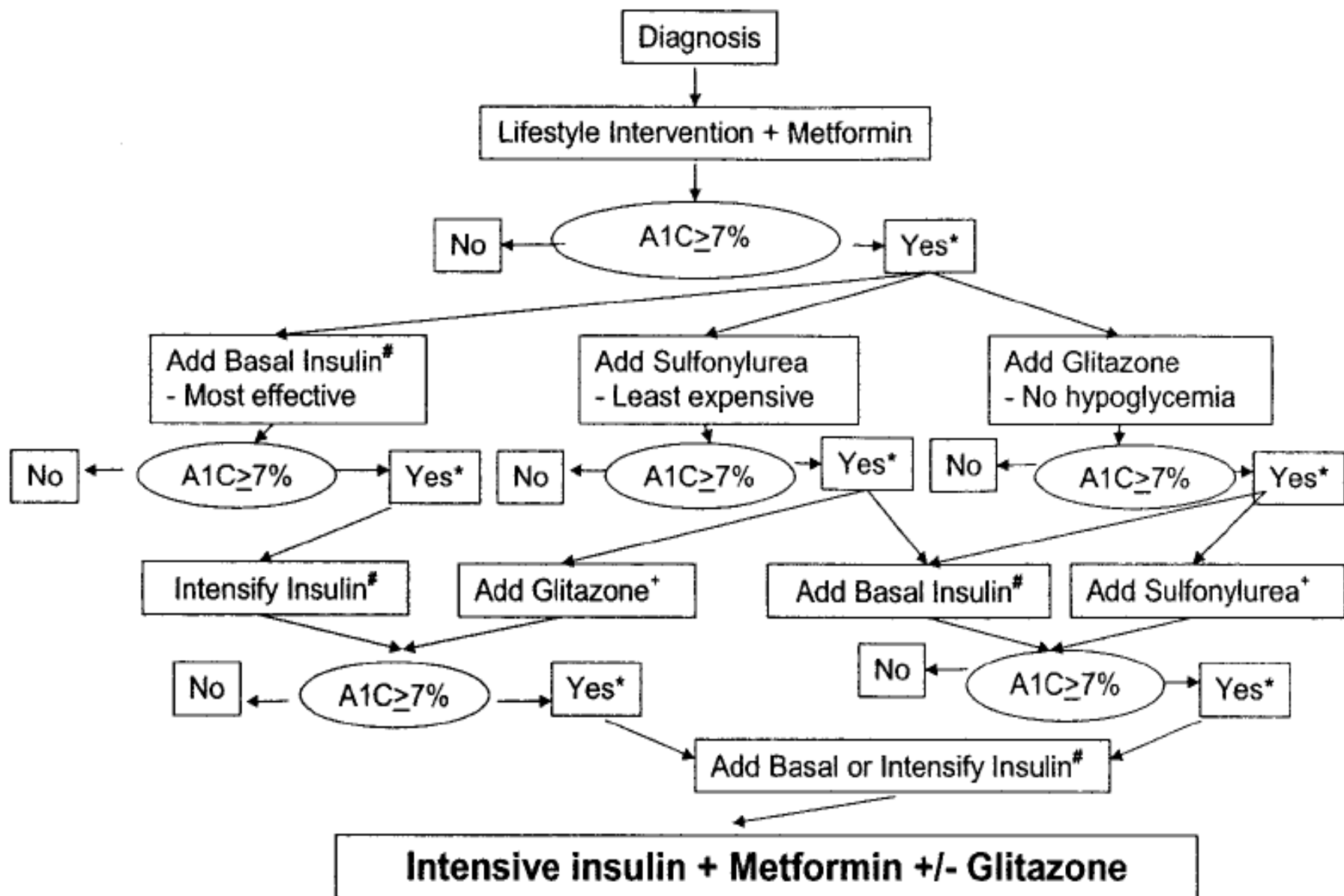
Interventions	Expected decrease in A1C (%)	Advantages	Disadvantages
Step 1: initial			
Lifestyle to decrease weight and increase activity	1–2	Low cost, many benefits	Fails for most in 1st year
Metformin	1.5	Weight neutral, inexpensive	GI side effects, rare lactic acidosis
Step 2: additional therapy			
Insulin	1.5–2.5	No dose limit, inexpensive, improved lipid profile	Injections, monitoring, hypoglycemia, weight gain
Sulfonylureas	1.5	Inexpensive	Weight gain, hypoglycemia*
TZDs	0.5–1.4	Improved lipid profile	Fluid retention, weight gain, expensive
Other drugs			
α-Glucosidase inhibitors	0.5–0.8	Weight neutral	Frequent GI side effects, three times/day dosing, expensive
Exenatide	0.5–1.0	Weight loss	Injections, frequent GI side effects, expensive, little experience
Glinides	1–1.5†	Short duration	Three times/day dosing, expensive
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Metformin-yaşam biçimi değişiklikleri

- Etkinlik
- Yan etkiler
- Ekonomi
- Komplikasyon

44 y E, AKŞ 215, HbA1c: % 8.2

Metformin dışında seçenek
düşünülemez mi?



44 y E, AKŞ 215, HbA1c: % 8.2

Metformin dozu ne olmalı?
Maksimum doz mu, kombine tedavi mi?

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Table 2—*Titration of metformin*

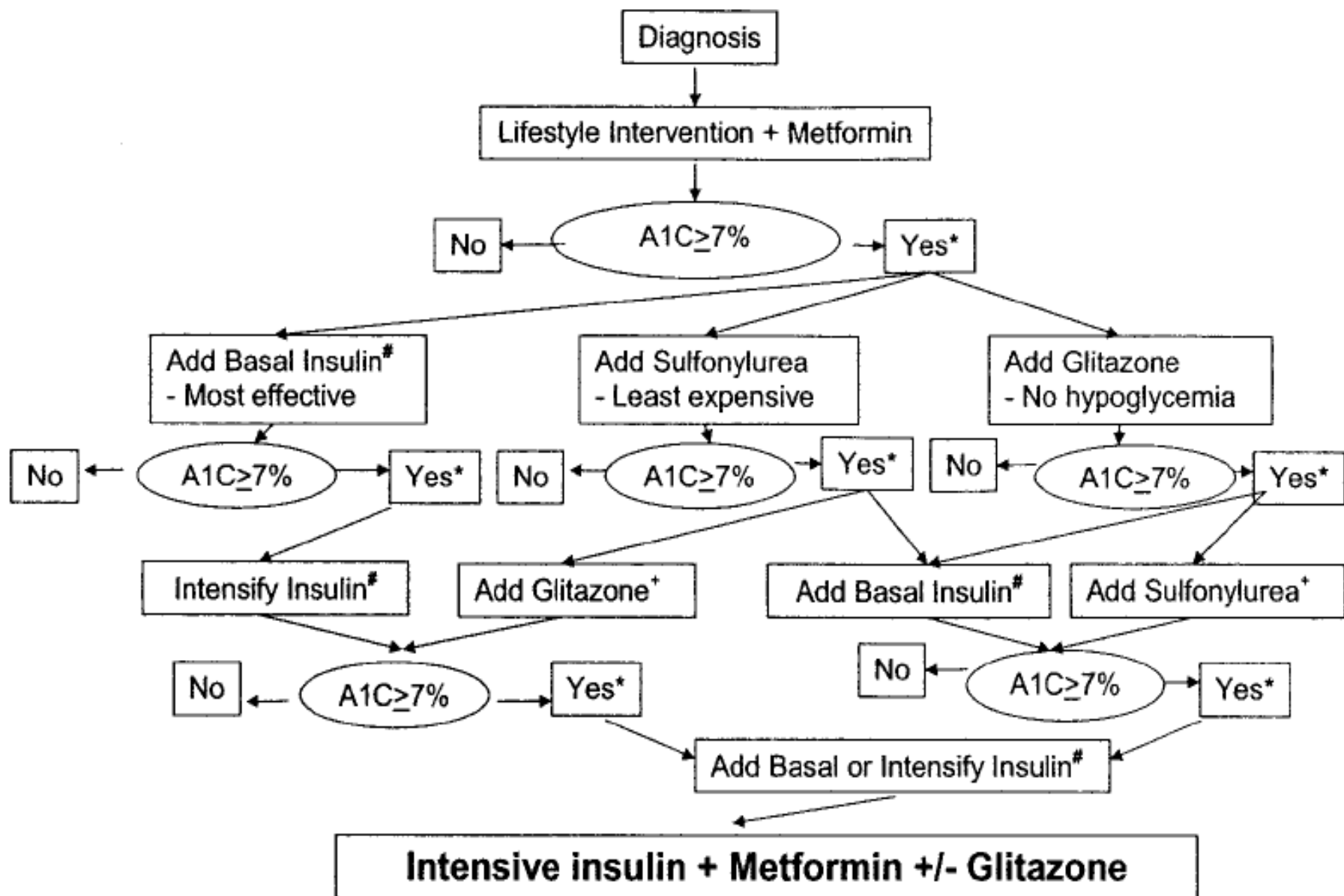
- 1) Begin with low-dose metformin (500 mg) taken once or twice per day with meals (breakfast and/or dinner).
- 2) After 5–7 days, if GI side effects have not occurred, advance dose to 850 or 1,000 mg before breakfast and dinner.
- 3) If GI side effects appear as doses advanced, can decrease to previous lower dose and try to advance dose at a later time.
- 4) The maximum effective dose is usually 850 mg twice per day, with modestly greater effectiveness with doses up to 3 g per day. GI side effects may limit the dose that can be used.
- 5) Based on cost considerations, generic metformin is the first choice of therapy. A longer-acting formulation is available in some countries and can be given once per day.

GI, gastrointestinal.

44 y E,

6 ay sonra AKŞ 138 mg/dl, HbA1c % 7.8

Metformine kombinasyonda ilk
seçenek ne olmalı ?



Review Article

Metformin Hydrochloride in the Treatment of Type 2 Diabetes Mellitus: A Clinical Review with a Focus on Dual Therapy

Authors	No. of Patients	Duration	Treatment Arms	Change in HbA _{1c} from Baseline (percentage points)
Dual therapy—combination tablets				
<i>Metformin plus a sulfonylurea</i>				
Erle et al ⁹⁶	40	26 wk (crossover and 2-wk washout at wk 12)	MET/GLY GLY + PLA	−0.89 (mo 3), −0.99 (mo 6) 0.47 (mo 3), 0.8 (mo 6)
Blonde et al ⁹⁷	639	16 wk	MET GLY MET/GLY 500/2.5 mg MET/GLY 500/5 mg	0.18 and 0.39* 0.10 and −0.11* −1.33 and −1.64* −1.76 and −1.38*
Garber et al ⁹⁸	806	20 wk	MET GLY MET/GLY 250/1.25 mg MET/GLY 500/2.5 mg PLA	−1.03 −1.24 −1.48 −1.53 −0.21
Marre et al ⁹⁹	411	16 wk	MET GLIB MET/GLIB 500/2.5 mg MET/GLIB 500/5 mg	−0.19 −0.33 −1.20 −0.91
Goldstein et al ¹⁰⁰	247	18 wk	MET GLIP MET/GLIP	−0.2 −0.4 −1.3

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Metformin Hydrochloride in the Treatment of Type 2 Diabetes Mellitus: A Clinical Review with a Focus on Dual Therapy

Authors	No. of Patients	Duration	Treatment Arms	Change in HbA _{1c} from Baseline (percentage points)
Dual therapy—separate agents				
<i>Metformin plus a thiazolidinedione</i>				
Einhorn et al ⁸⁸	328	16 wk	MET + PIO	−0.63
			MET + PLA	0.2
Fonseca et al ⁸⁹	348	26 wk	MET + ROSI 4 mg	0.56
			MET + ROSI 8 mg	0.78
			MET + PLA	0.45
Gomez-Perez et al ⁹⁰	116	26 wk	MET + ROSI 4 mg	−0.7
			MET + ROSI 8 mg	−1.2
			MET + PLA	0.3

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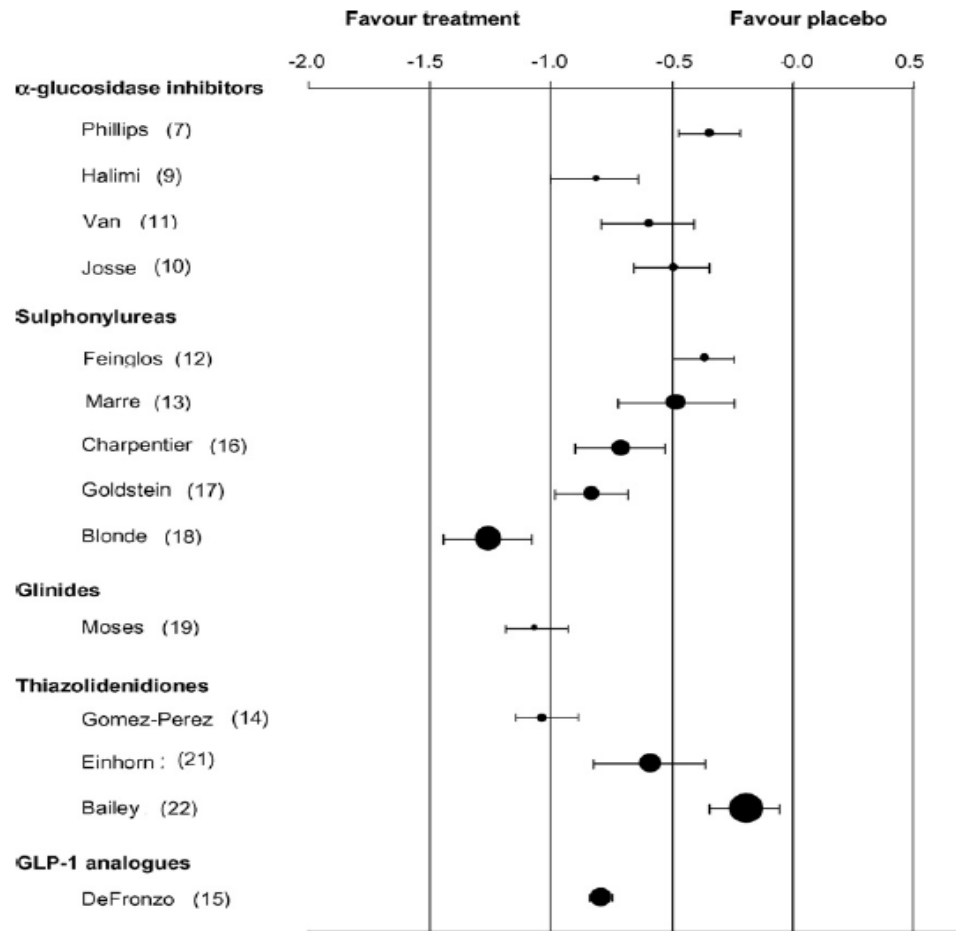
Authors	No. of Patients	Duration	Treatment Arms	Change in HbA _{1c} from Baseline (percentage points)
<i>Metformin plus a "glitinide"</i>				
Moses et al ⁸¹	83	16–20 wk	MET	–0.33
			REPAG	–0.38
			MET + REPAG	–1.41
Horton et al ⁸²	701	24 wk	MET	–0.8
			NAT	–0.5
			MET + NAT	–1.4
			PLA	0.5
Furlong et al ⁹¹	80	13 wk	MET + insulin	–0.3
			REPAG + insulin	0.5
Raskin et al ⁹²	192	16 wk	MET + REPAG	–1.28
			MET + NAT	–0.67

Review Article

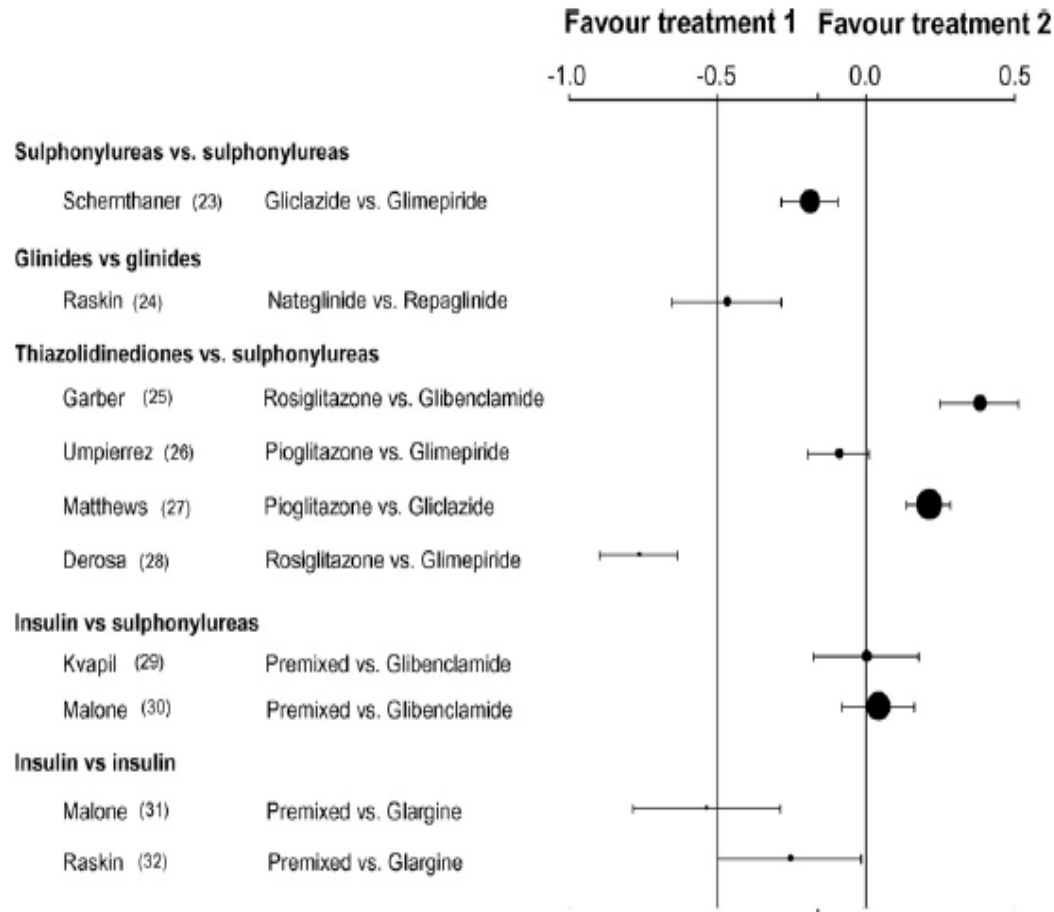
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Authors	No. of Patients	Duration	Treatment Arms	Change in HbA _{1c} from Baseline (percentage points)
<i>Metformin plus an alpha-glucosidase inhibitor</i>				
Rosenstock et al ⁹³	168	24 wk	MET + ACAR	-0.57
			MET + PLA	0.08
Willms and Ruge ⁹⁴	89	12 wk	MET + ACAR + SU	-2.5
			ACAR + SU	-2.3
			PLA + SU	-1.3
Chiasson and Naditch ⁹⁵	324	36 wk	MET	-0.85
			MIG	0.02
			MET + MIG	-1.39
			PLA	0.38

Comparison of different drugs as add-on treatments to metformin in type 2 diabetes: A meta-analysis



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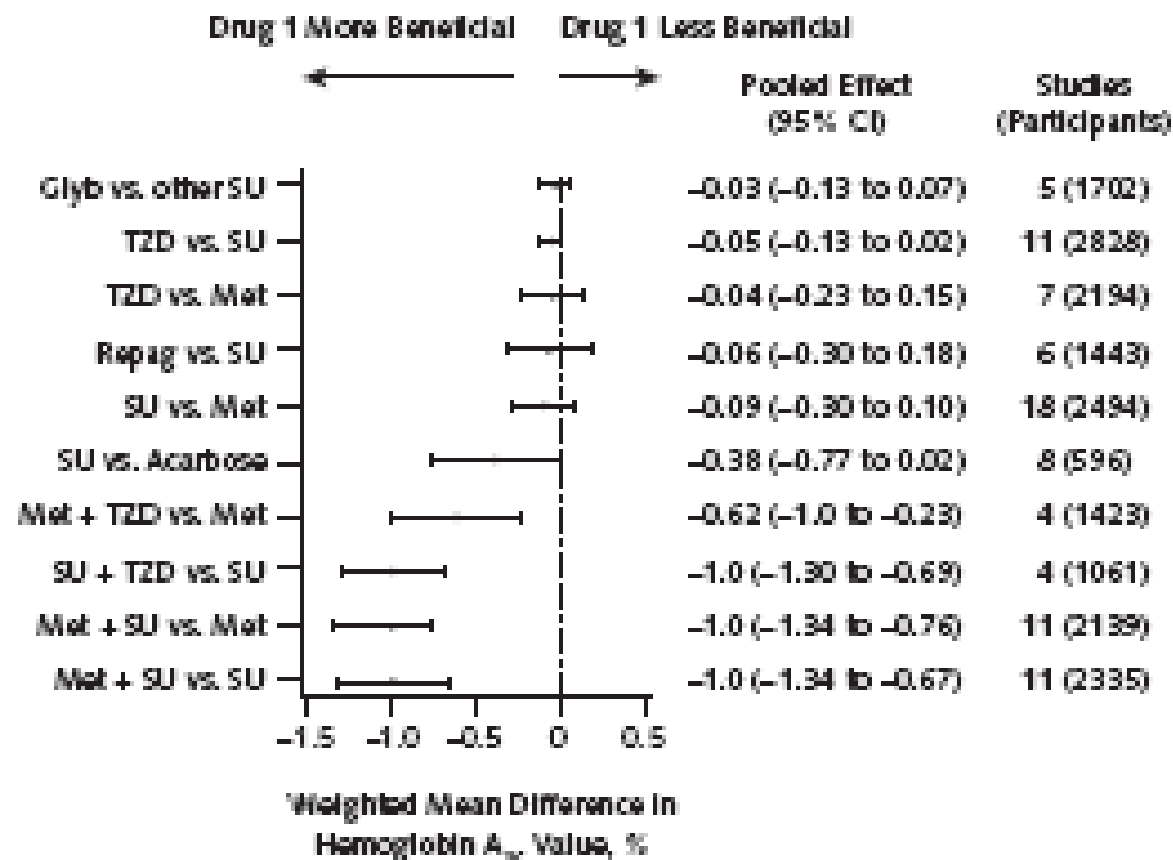


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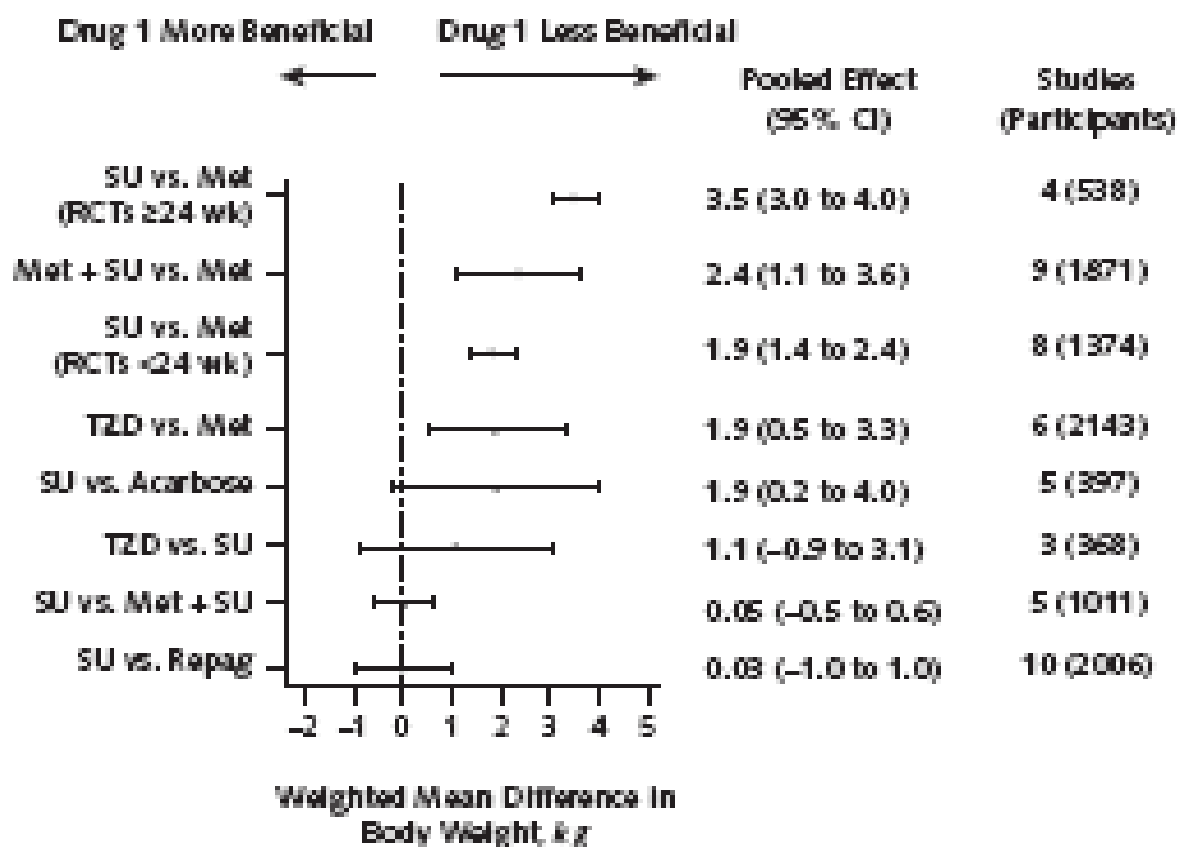
6 ay sonra AKş 138 mg/dl, HbA1c % 7.8

Kombinasyon yapılırken KŞ
düşürmede additif etki dışında başka
faktör aranmalı mı ?

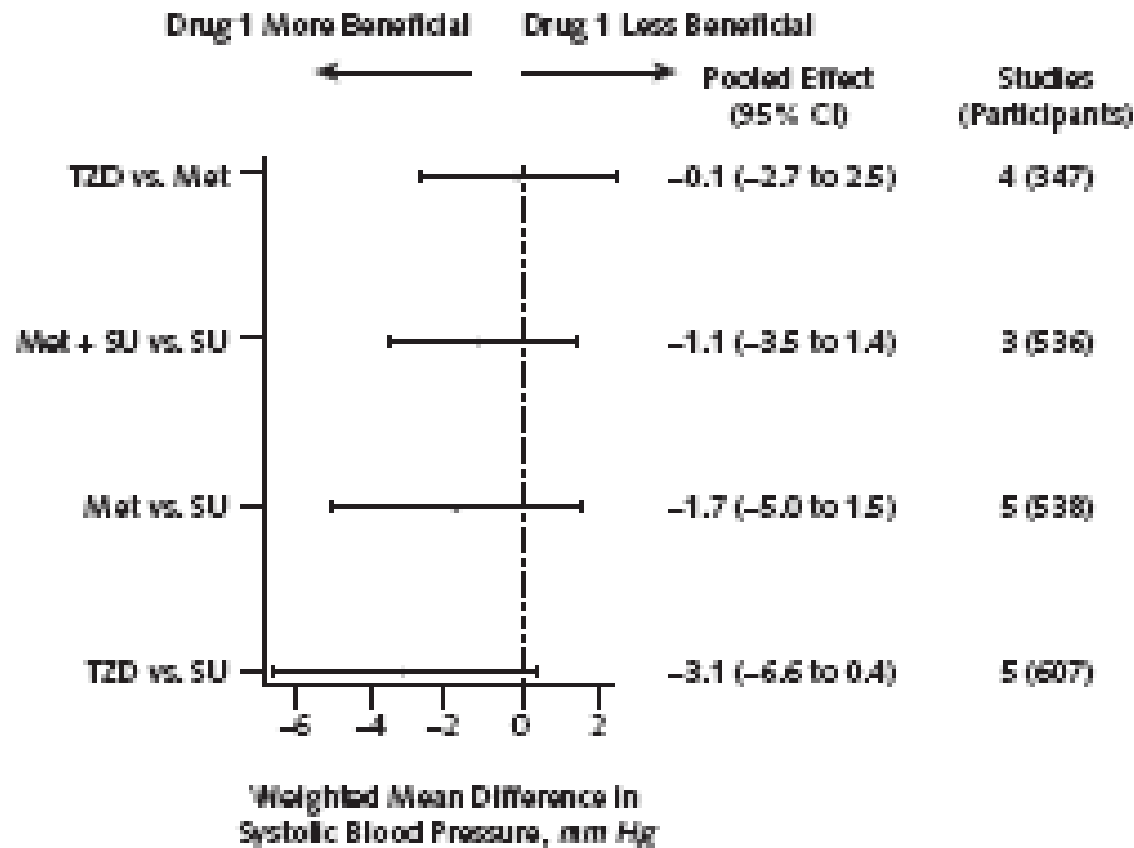
Systematic Review: Comparative Effectiveness and Safety of Oral Medications for Type 2 Diabetes Mellitus



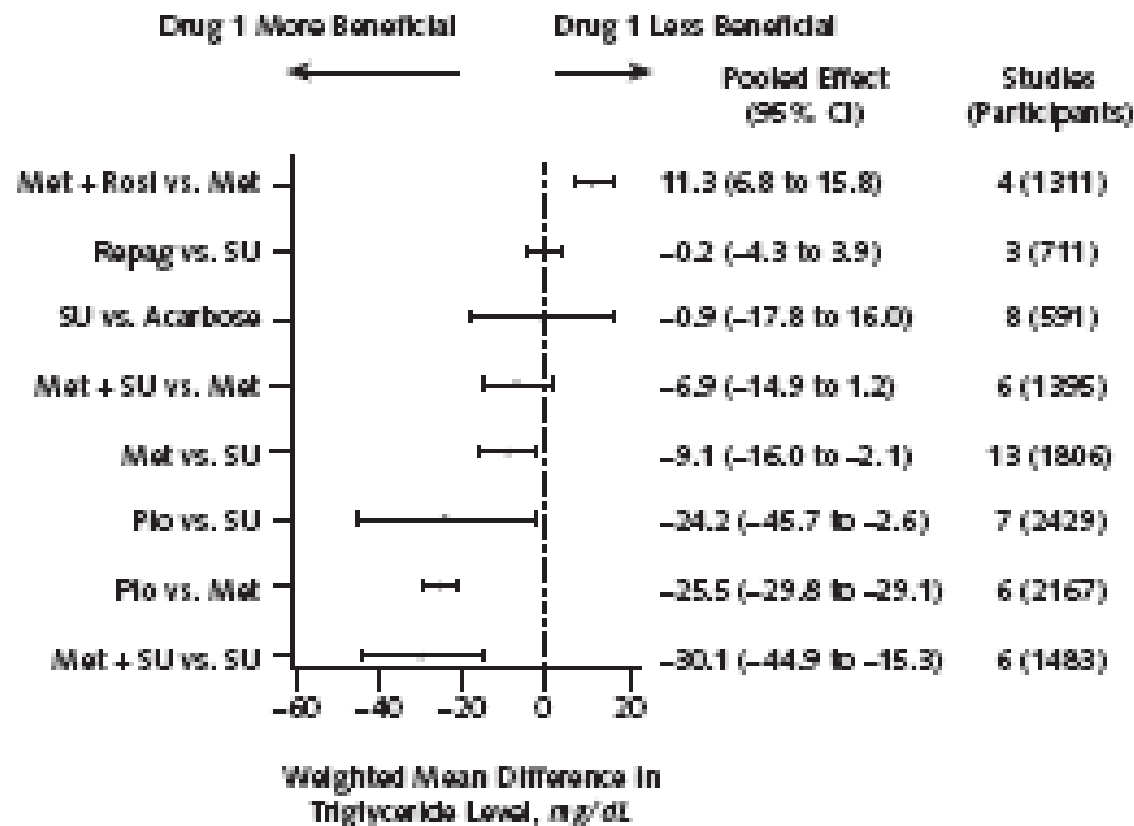
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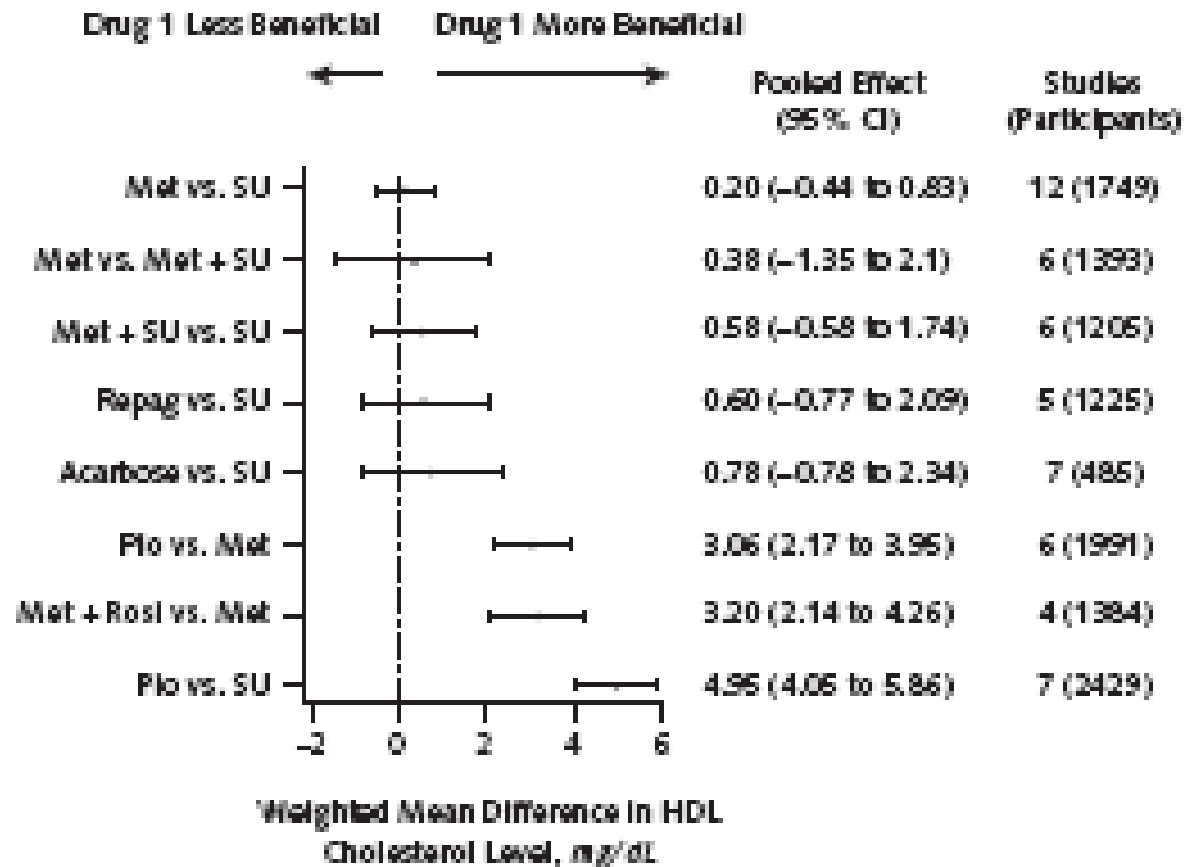
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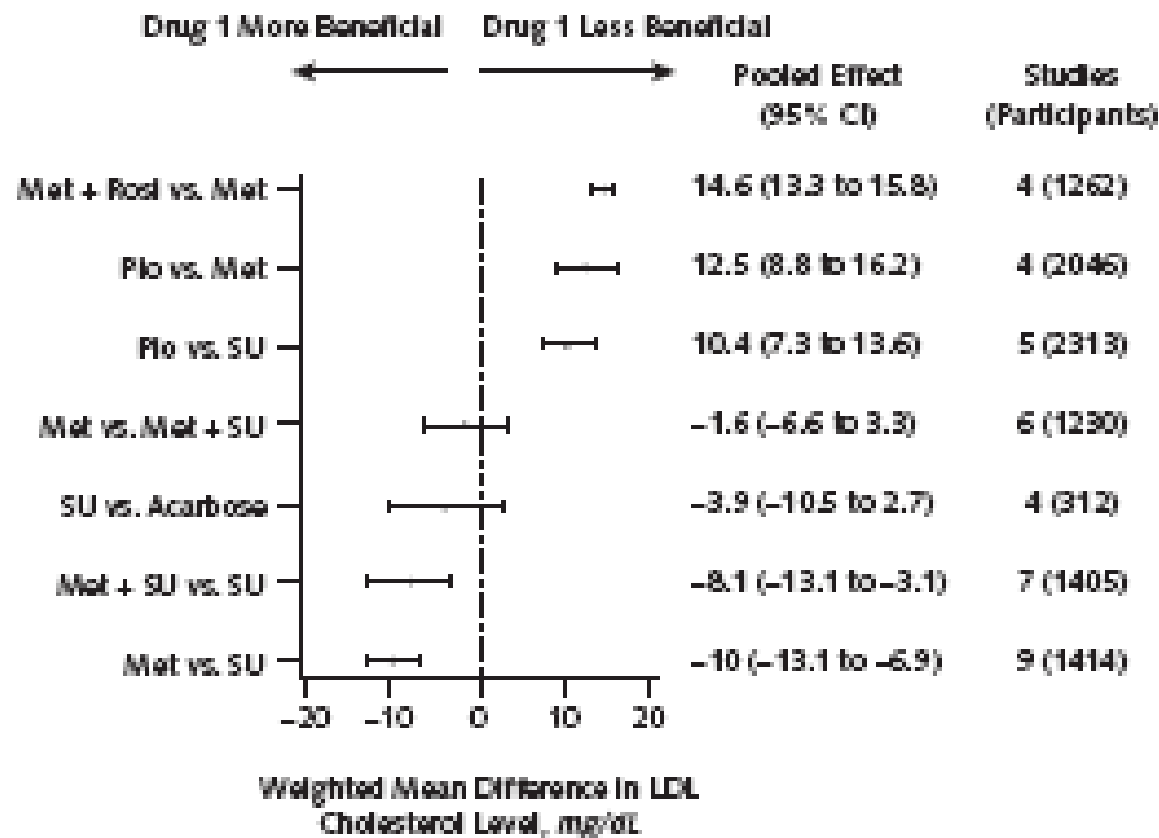
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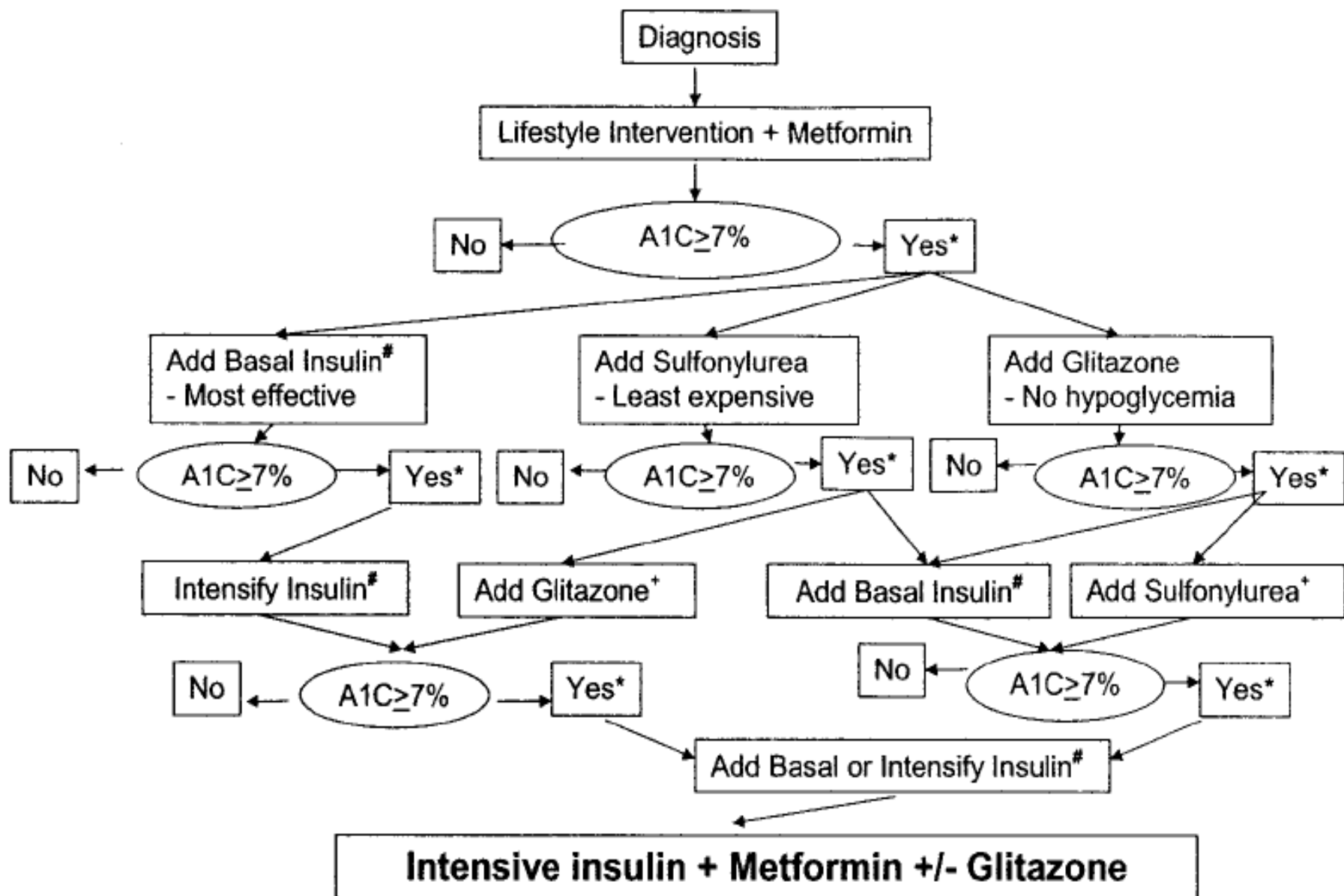
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Maksimum OAD kombinasyonundan
önce insülin tedavisi eklenebilir mi ?



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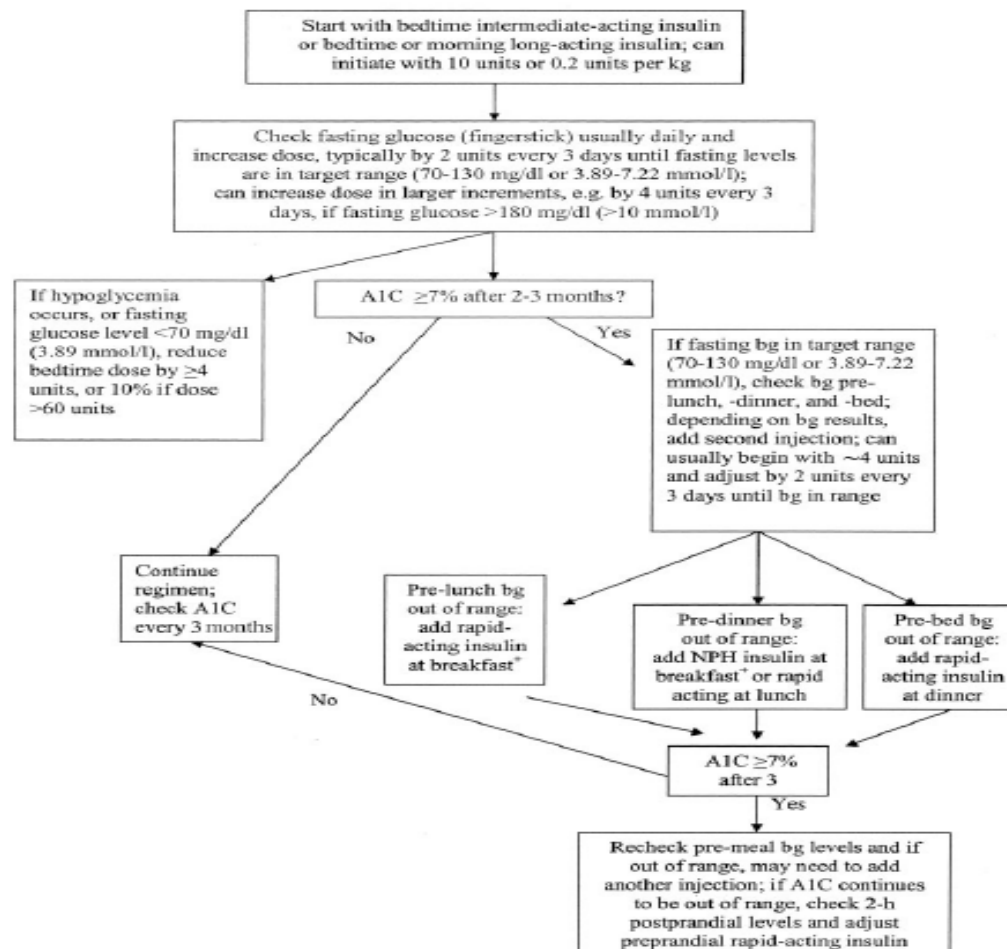
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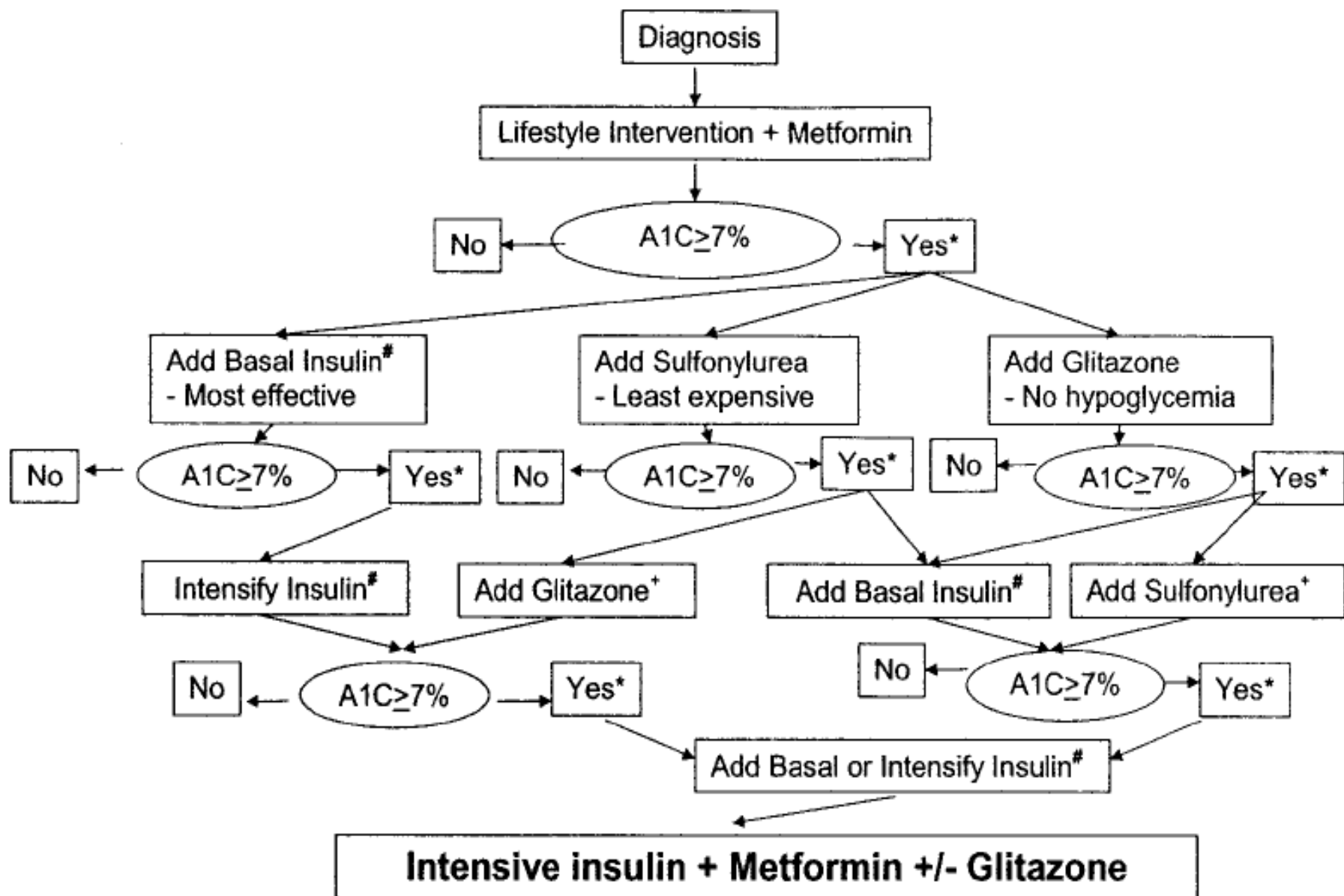
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İnsülin tedavisi hastane yatışı
yapılmadan başlanabilir mi ?



Algoritmda eksiklikler

- Alfa GI, Glinidler yok
- İncretinmimetikler yok
- Postprandial KŞ kriteri yok
- Lipid ve diğer parametreler yok
- Komorbiditeler yok
- Üçlü kombinasyon yok
- Hastanın eğitimi yok

