# Supplementary Online Content

eFigure. Confidence Interval of the Difference of the Composite Criterion Rates and Noninferiority Margin

eTable 1. Primary and Secondary Intention-to-Treat Analysis

eTable 2. Post Hoc Intention-to-Treat Analyses

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Confidence Interval of the Difference of the Composite Criterion Rates and Noninferiority Margin
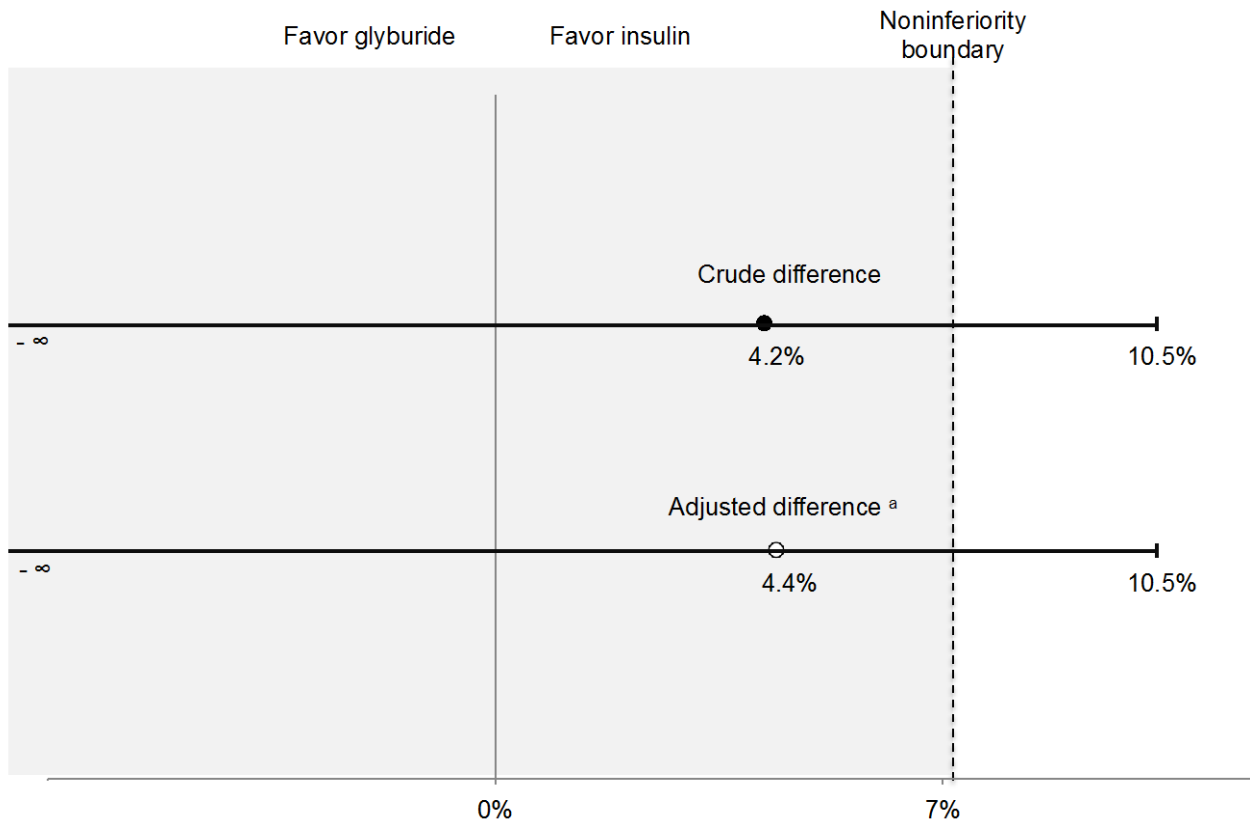
Differences are (glyburide rate) – (insulin rate)
Solid lines are the confidence intervals and their boundaries. Sample sizes are N=367 and N=442 in the Glyburide and in the insulin group respectively
Dashed line indicates noninferiority margin; grey-tinted region in the left of 7% indicates values for which glyburide would be considered noninferior to insulin.
The interpretation is therefore that this study fails to reject the null hypothesis that glyburide is non-inferior to insulin because the confidence intervals cross the a priori non-inferiority boundary of 7%.

eTable 1. Primary and Secondary Intention-to-Treat Analysis

	Glyburide n = 448	Insulin n = 442	Difference, % (95% CI)	P Value [a]
Primary outcome				
Neonatal composite criterion, No. (%)	123 (27.5)	103 (23.3)	4.2 (- ∞ to 10.0) [b]	0.17 [c]
Neonatal secondary outcomes				
Admission to NICU [d] before 48 h of life, No. (%)	11 (2.2)	11 (2.4)	0.2 (-2.4 to 2.3)	0.96
Admission to neonatal ward [e], No. (%)	36 (7.9)	34 (8.2)	-0.3 (-4.2 to 4.8)	0.87
Severe respiratory distress syndrome, No (%)	9 (1.8)	11 (2.2)	-0.4 (-2.7 to 1.8)	0.62
Birth injury, No. (%)	7 (1.5)	9 (1.9)	-0.5 (-2.4 to 1.3)	0.59
Shoulder dystocia, No	1	2		
Bone fracture, No	1	6		
Nerve palsy, No	2	0		
Other [f], No	3	1		
Ponderal index [g], mean (SD)	2.75 (0.04)	2.74 (0.04)	0.01 (-0.06 to 0.09)	0.43
pH < 7, No. (%)	2 (0.5)	2 (0.5)	0.0 (-1.0 to 1.0)	0.98
Lactates, mmol/L [h], No. (%)				0.25
< 6	220 (81.8)	219 (82.3)	-0.5 (-7.1 to 6.0)	
[6 – 9[	36 (13.4)	41 (15.4)	-2.0 (-8.0 to 3.9)	
> 9	13 (4.8)	6 (2.3)	2.6 (-0.6 to 5.7)	
Maternal secondary outcomes				
Glycemic control during pregnancy [i]				
Fasting blood glucose > 0.95 g/L, No. (%)				0.29
good: ≤ 20%	283 (66.3)	264 (63.2)	3.1 (-3.3 to 9.6)	
moderate or fair:]20% to 40%]	88 (20.6)	83 (19.9)	-0.7 (-4.7 to 6.2)	
poor: > 40%	56 (13.1)	71 (17.0)	-3.9 (-8.7 to 1.0)	
Postprandial blood glucose >1.20 g/L, No. (%)				0.39
good: ≤ 20%	217 (50.8)	206 (49.3)	1.5 (-5.2 to 8.3)	
moderate or fair:]20% to 40%]	152 (35.6)	165 (39.5)	-3.9 (-10.4 to 2.7)	
poor: > 40%	58 (13.6)	47 (11.2)	2.3 (-2.1 to 6.8)	
Maternal hypoglycemia: at least one fasting or post prandial glycaemia < 0.6 g/L during pregnancy, No. (%)	117 (30.1)	13 (3.6)	26.5 (17.6 to 35.3)	<0.001
Preterm delivery, No. (%)	29 (6.2)	18 (4.0)	2.3 (-1.1 to 5.6)	0.12
Mode of delivery				0.26
Spontaneous Vaginal, No. (%)	255 (56.9)	251 (56.8)	0.1 (-6.4 to 6.6)	
Assisted Vaginal, No. (%)	73 (16.3)	67 (15.2)	1.1 (-3.7 to 5.9)	
Elective Cesarean section, No. (%)	49 (10.9)	66 (14.9)	-4.0 (-8.4 to 0.4)	
Emergency Cesarean section, No. (%)	71 (15.9)	58 (13.1)	2.7 (-1.9 to 7.4)	
Any perineal trauma, No. (%)	3 (0.7)	1 (0.2)	0.5 (-0.8 to 1.7)	0.35
Maternal satisfaction: Preferred treatment for a future pregnancy [j]				<0.001
Glyburide, No. (%)	227 (72.3)	125 (43.6)	28.7 (21.2 to 36.3)	
Insulin, No. (%)	30 (9.6)	57 (19.9)	-10.3 (-16.1 to -4.7)	
Unknown, No. (%)	57 (18.2)	105 (36.6)	-18.4 (-25.5 to -11.4)	

[a] P value of the test of the coefficient of the mixed effects model used to account for multiple centers: logistic for qualitative variables, linear for quantitative ones

[b] Confidence interval for the primary outcome represents a 1-sided 97.5% CI

[c] P Value of the non-inferiority test

[d] Neonatal Intensive Care Unit

[e] Unit where the less sick newborns are hospitalized, the more severely ill are in the NICU

[f] glyburide group: facial hematoma, serosanguine hump, scalp wound ; insulin group: serosanguine hump

[g] Ponderal Index (100*birth weight (g) / size (cm)^3) may increase when quality maternal glycemic control decreases. The usual 10th, 50th, and 90th percentiles of ponderal index are 2.2, 2.6 and 3.1

[h] Lactate was known for 60% of newborns in both groups

[i] percentage of blood glucose concentrations greater than the thresholds: 0.95 g/L for fasting and 1.20 g/L for two hours postprandial. Missing data: 21 in the glyburide group, 24 in the insulin group

[j] n=605 (68.0%) responses

eTable 2. Complementary Post Hoc Intention-to-Treat Analyses

	Glyburide n = 448	Insulin n = 442	Difference, % (95% CI)	P Value [a]
Composite criterion components				
Macrosomia, No. (%)	75 (16.7)	65 (14.8)	2.0 (-3.1 to 7.1)	0.41
Hypoglycemia, No. (%)	50 (10.9)	32 (7.2)	3.8 (-0.3 to 7.9)	0.045
Hyperbilirubinemia, No. (%)	17 (3.8)	14 (3.1)	0.6 (-1.8 to 3.1)	0.61
Neonatal outcomes				
Birth weight, mean (SD), g	3349 (497)	3331 (476)	18 (-47 to 81)	0.60
Birth weight > 4000g, No. (%)	40 (9.3)	28 (6.6)	2.7 (-1.9 to 7.2)	0.14
APGAR ≤ 7 at 5 min, No. (%)	5 (1.1)	11 (2.5)	-1.4 (-3.1 to 0.04)	0.13
Reason for admission to NICU [b] before 48 h of life				
Severe respiratory distress syndrome, No	9	11		
Other reason [c], No	2	0		
Maternal outcomes				
Insulin dose received, mean (SD), units/day [g]	-	19.6 (14.6)		
Glyburide dose received, mean (SD), mg/day [g]	5.6 (3.5)	-		
Maternal hypoglycemia: at least one fasting or post prandial glycaemia < 0.4 g/L during pregnancy, No. (%)	16 (3.8)	4 (1.0)	2.8 (0.4 to 5.4)	0.013

[a] P value of the test of the coefficient of the mixed effects model used to account for multiple centers: logistic for qualitative variables, linear for quantitative ones
[b] Neonatal Intensive Care Unit
[c] 1 malformation and 1 maternal/fetal infection
[g] Mean doses were calculated from diagnosis to delivery