

## PURPOSE

Comparing **prevalence, risk factors and glucose parameters of GDM**  
Twin vs. Singleton pregnancy

## METHODS

- Retrospective, multicenter study
- Inclusion criteria
  - Women who underwent 50g OGTT
- Exclusion criteria
  - Type 1 or 2 DM
  - Early diagnosis of GDM
  - No results for 100g OGTT
- Group
  - Twin pregnancy - singleton pregnancy
- Comparing
  - GDM prevalence
  - Risk factors (age, BMI, parity, IVF, family hx of DM, HTN, PCOS, CVD previous GDM, dyslipidemia)
  - Glucose parameters  
Results of 50g OGTT and 100g OGTT

## RESULTS

- Group
  - Twin (608) vs. Singleton (11,976)
- Prevalence of GDM
  - 7.1% in twin vs. 3.8% in singleton
  - aRR of twin for GDM = 1.55 (1.08-2.23)**
- Risk factors for GDM
  - Advanced maternal age, IVF, obesity, family hx of DM, previous GDM in twin and singleton pregnancy
  - preexisting HTN in singleton pregnancy
- Glucose parameters
  - $\geq 140$ mg/dL of 50g OGTT  
20.6% in twin vs. 16.0% in singleton
  - mean PP3 value of 100g OGTT  
128.9 in twin vs. 119.7 in singleton

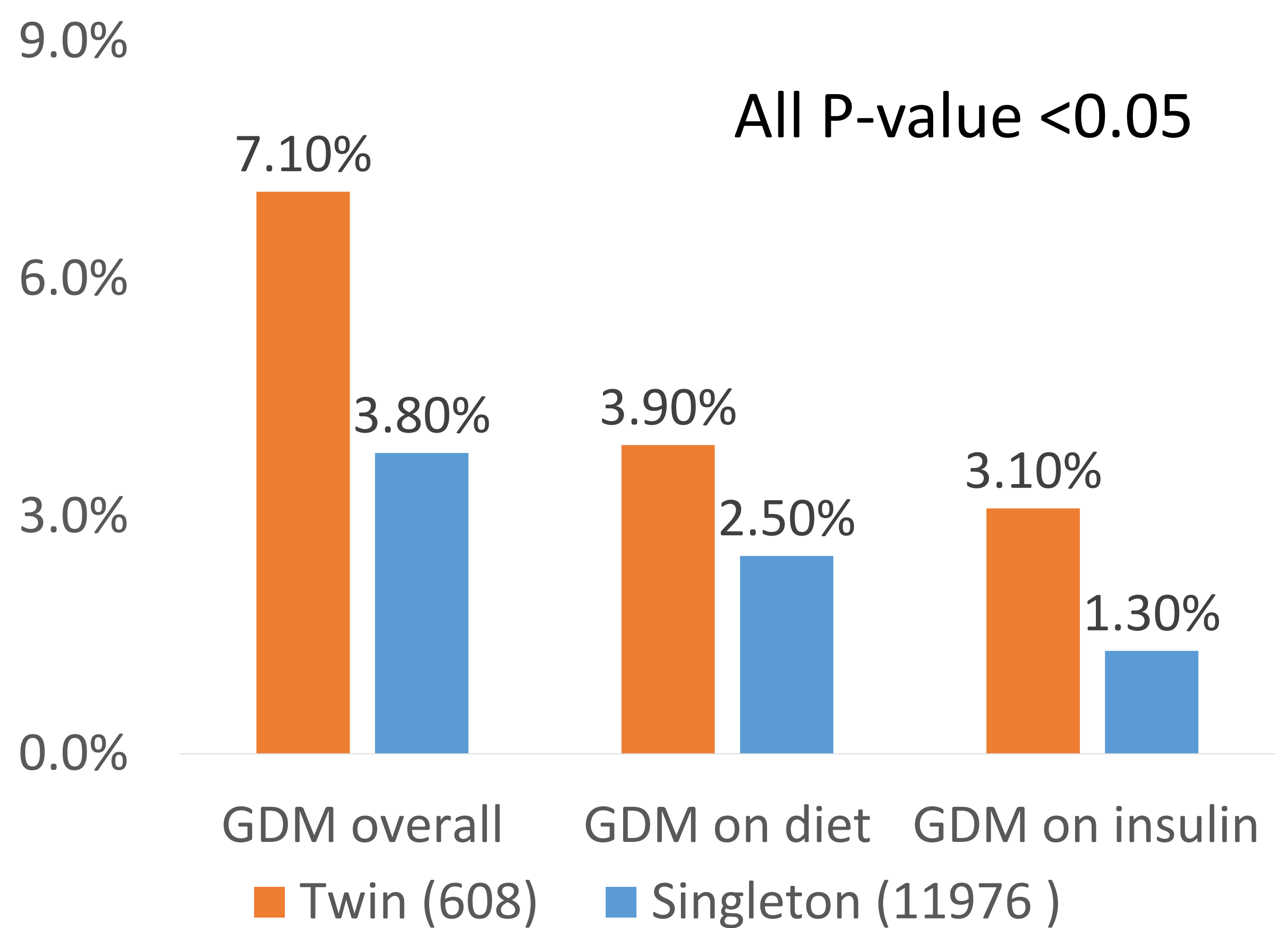


Figure. Prevalence of GDM in twin and singleton pregnancy

Table 1. Adjusted odds ratio of Risk factors for GDM in twin and singleton pregnancy

	Twin	Singleton
Age $\geq 35$	1.19 (0.61-2.31)	1.81 (1.49-2.20)
BMI $\geq 25$	3.21 (1.47-7.03)	3.29 (2.66-4.08)
IVF	2.18 (1.11-4.26)	1.54 (1.03-2.31)
Family Hx of DM	3.01 (1.35-6.97)	2.05 (1.61-2.60)
preexisting HTN	-	1.98 (1.46-2.69)
previous GDM	3.07 (1.35-6.97)	3.22 (1.91-5.47)
Dyslipidemia	1.68 (0.35-8.10)	1.10 (0.68-1.78)
Hx of CVD	4.35 (0.81-23.53)	-

Table 2. Glucose parameters from OGTT results in twin and singleton pregnancy

	Twin	Singleton	P-value
50g OGTT			
Positive rate	20.6%	16.0%	0.003
Value (mg/dL)	122.2	118.1	<0.001
100g OGTT			
1 positive	15.9%	21.3%	0.149
2 positive	20.6%	12.8%	0.011
3 positive	10.3%	8.1%	0.383
4 positive	4.8%	4.0%	0.687
FBS (mg/dL)	84.6	85.5	0.428
PP1 (mg/dL)	156.5	156.0	0.879
PP2 (mg/dL)	144.0	141.0	0.323
PP3 (mg/dL)	128.9	119.7	0.001

## CONCLUSION

In twin pregnancy Risk of GDM  
Positive rate of 50g OGTT  
PP3 value of 100g OGTT

