

# QUIZ

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Dr Kishore S Dharan  
Consultant Nephrologist  
MOSC Medical College, Kolenchery

Which CGM parameter correlates most strongly with risk of microvascular complications?

- A. Mean glucose
- B. Time in Range (TIR)
- C. Standard deviation
- D. Hypoglycemia events per week

Answer : B Time in Range (TIR)

Among the parameters derived from CGM,

Time In Range (TIR) and glycemic variability (GV) show the strongest correlation with microvascular complications

As a metric that integrates hyperglycemia, hypoglycemia, and glucose fluctuations, TIR is especially useful and is widely endorsed by diabetes care organizations and is supported by large studies.

High glycemic variability, characterized by frequent and wide swings in blood glucose, also has been consistently linked to microvascular complications

- Mean Amplitude of Glycemic Excursions (MAGE): had a nearly threefold increased risk of microvascular complications, independent of HbA1c.
- Coefficient of Variation (CV) and Standard deviation is associated with macrovascular complications

# Winner Q no : 1

Dr.SUNAYANA.P

Assistant Professor &  
Consultant Nephrologist,  
KMCT Medical college,  
Mukkam, Kozhikode



All are true about interferences causing false values in CGM except

- A. Hydroxy urea causes false low values due to oxidative interference
- B. Compression during sleep causes false low values
- C. In Rapid rise in blood sugar , a falsely low value appears in all types of CGMs
- D. Acetaminophen causes a false high value due to electrochemical activity

*Ans: A. Hydroxy urea causes false low values due to oxidative interference*

- Acetaminophen can cause falsely elevated, or high, glucose readings in many CGM models. This interference is due to the electrochemical technology that many CGMs use to measure glucose
- Hydroxy urea and Vitamin C also by their activity on Glucose oxidase cause falsely high readings
- The most common cause of falsely low readings is putting direct pressure on the sensor, especially while sleeping. This is known as a "compression low".
- False values in CGM during a rapid rise in blood sugar are primarily caused by a physiological delay between blood and interstitial fluid, where the sensor is located

# Winner Q no: 2

Dr Saravana Balaji  
DM nephrology resident  
3rd year  
Madras medical College



Thank You