



## The Medical **Bulletin**

### In Critical Care

1. GLP-1 receptor agonists and DPP-4 inhibitors should not be used in combination because they exert their actions through the same incretin pathway.
2. The ADA recommends consideration of a GLP-1 receptor agonist as the first injectable agent in people with T2D because of drug efficacy, low hypoglycemia risk, and beneficial weight effects. For those requiring insulin therapy to meet individualized goals, the stepwise addition of basal insulin and, if needed, mealtime bolus insulin is recommended.
3. Pre-diabetes is an easily identifiable metabolic disorder that predicts a significant future risk for T2D development. Diagnosing pre-diabetes is critical so that measures can be instituted to proactively prevent T2D and its attendant emotional, socioeconomic, and medication burdens and the chronic complications that T2D promotes.
4. For people with pre-diabetes, intense lifestyle interventions that result in sustained weight loss of  $\geq 7\%$  and include  $\geq 150$  minutes/week of moderate-intensity physical activity are effective and essential for preventing progression to T2D.
5. Metformin can be considered for the treatment of pre-diabetes, especially if body mass index (BMI) is  $\geq 35$  kg/m<sup>2</sup>, age is  $< 60$  years old, or there is a history of gestational diabetes mellitus (GDM). Shared decision making is crucial for these vulnerable people.
6. Women with T1D or T2D who are considering pregnancy can reduce the risk for congenital abnormalities to the baseline population risk if A1c is  $\leq 6.5\%$  prior to conception (or before 5–8 weeks of gestation).
7. Insulin requirements decrease in the first pregnancy trimester but increase (two-to four fold) in the second and third trimesters as a result of pregnancy-induced insulin resistance. Adding metformin to decrease insulin requirements is not the standard of care and may be associated with an increased risk of small-for-gestational-age (SGA) infants.
8. Insulin requirements drastically drop upon placental delivery; women with diabetes are at high risk of hypoglycemia postpartum, requiring less insulin than they did pre-pregnancy.
9. Pregnancy is a ketogenic state; women with diabetes can develop DKA at lower BG levels ( $< 200$  mg/dL) in pregnancy (“euglycemic diabetic ketoacidosis”).
10. GDM management with oral agents is controversial because of the ability of glyburide and metformin to cross the placenta, leading to unknown long-term effects on the fetus.

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