



ISPAD Guidelines Quiz 2024 - Booklet with Answers and Explanations

Thank you to all participants! You can find the quiz answers and a short explanation below. All 2024 Clinical Practice Consensus Guidelines are available [here](#). Don't forget that the 2022 Guidelines are also available for download in French, Spanish, Hindi, and Portuguese [here](#).



◇ [Chapter 2: Screening, Staging, and Strategies to Preserve Beta-Cell Function](#) in Children and Adolescents with Type 1 Diabetes

Q1: Which of the following statements best reflects the current understanding of Stage 2 Type 1 Diabetes (T1D) as outlined in the 2024 ISPAD Guidelines?

- A) Stage 2 T1D includes the presence of one islet autoantibody and normal glucose tolerance, with no risk of progression to clinical diabetes.
- B) Stage 2 T1D includes multiple islet autoantibodies and early glycemic abnormalities, and individuals are eligible for monitoring or interventions like teplizumab.
- C) Stage 2 T1D is diagnosed based solely on elevated HbA1c values above 7.0%, regardless of autoantibody status.

Correct Answer: B

Explanation: Stage 2 T1D is defined by the presence of multiple islet autoantibodies and mild dysglycemia. This stage is asymptomatic but indicates a high risk of progression to clinical diabetes. The 2024 Guidelines highlight that teplizumab is now FDA-approved to delay progression from Stage 2 to Stage 3, making early identification and monitoring crucial.

◇ Chapter 3: Type 2 Diabetes in Children and Adolescents

Q2: According to the 2024 ISPAD Guidelines, which of the following best describes the diagnostic approach to Type 1 Diabetes in children and adolescents?

- A) Diagnosis can be confirmed solely on elevated HbA1c levels 6.5%, without clinical symptoms or additional tests.
- B) Diagnosis should be based on clinical presentation and confirmed with glucose criteria, with autoantibody testing aiding classification rather than initial diagnosis.
- C) C-peptide measurement is required in all cases to confirm a diagnosis of Type 1 Diabetes in the pediatric population.

Correct Answer: B

Explanation: ISPAD emphasizes that diagnosis of T1D in children should primarily be based on clinical symptoms and glucose measurements (e.g., fasting plasma glucose, OGTT, or random glucose with symptoms). Autoantibody testing is useful for confirming autoimmune diabetes and distinguishing it from other types (e.g., monogenic diabetes), but it is not required for diagnosis.

◇ [Chapter 8: Glycemic Targets](#)

Q3: Which of the following best reflects the 2024 ISPAD Guidelines on managing severe hypoglycemia in children and adolescents with Type 1 Diabetes?

A) Intramuscular glucagon is no longer recommended for severe hypoglycemia; only oral carbohydrates should be used regardless of consciousness level.

B) Nasal glucagon is a safe and effective alternative to injectable glucagon for treating severe hypoglycemia and is preferred when trained caregivers are not available.

C) Continuous glucose monitoring (CGM) should only be used for preventing mild hypoglycemia and has no role in managing severe hypoglycemia.

Correct Answer: B

Explanation: *The 2024 Guidelines endorse nasal glucagon as a non-invasive, fast-acting, and effective treatment for severe hypoglycemia, particularly in situations where caregivers may not be comfortable or trained to use intramuscular injections. It broadens access to emergency treatment and enhances safety in school and home settings.*

◇ Chapter 9: Insulin and Adjunctive treatment in Children and Adolescents with Diabetes

Q4: Which of the following statements reflects a new or updated recommendation from the 2024 ISPAD Guidelines regarding insulin treatment in children and adolescents with Type 1 Diabetes?

- A) Premixed insulin regimens using NPH and regular insulin are recommended as a standard of care in all pediatric age groups.
- B) Although there are subtle differences from brand name insulins, biosimilar insulins can be used to manage diabetes.
- C) Insulin glargine must always be administered twice daily in all pediatric patients.
- D) Use of intermediate-acting NPH insulin is preferred due to its lower risk of nocturnal hypoglycemia compared to basal analogs.

Correct Answer: B

Explanation: The 2024 update emphasizes that biosimilar insulins have been approved by the FDA and EMA. Premixed regimens are not recommended as best practice. Glargine can be given once daily and does not always require twice-daily dosing. NPH carries a higher risk of nocturnal hypoglycemia compared to basal analogs.

◇ [Chapter 16: Diabetes Technologies - Insulin Delivery](#)

Q6: According to the 2024 ISPAD Guidelines, which of the following is a key updated recommendation for insulin pump and automated insulin delivery (AID) systems in youth with Type 1 Diabetes?

- A) Insulin pump therapy is only recommended after at least 6 months of MDI experience.
- B) AID systems should only be offered to children older than 12 years due to safety concerns in younger populations.
- C) AID systems are recommended at diagnosis and for all age groups, including preschool children, to improve glycemia and reduce burden.
- D) Connected insulin pens are preferred over AID systems for adolescents due to lower cost and fewer psychosocial risks.

Correct Answer: C

Explanation: The 2024 update strongly recommends AID systems for all age groups, including preschoolers, school-aged children, adolescents, and newly diagnosed patients. These systems improve time-in-range (TIR), reduce glycemic variability, and have been shown to lower diabetes-related burden without increasing risk for severe hypoglycemia or DKA.

◇ Chapter 17: Diabetes Technologies: Glucose Monitoring

Q5: Which of the following statements aligns with a key updated recommendation from the 2024 ISPAD Guidelines on CGM use in children and adolescents with diabetes?

- A) CGM should be reserved for patients who fail to achieve glycemic targets after 1 year of diagnosis.
- B) CGM is only recommended for children with Type 1 Diabetes who are on insulin pump therapy.
- C) Real-time CGM (rtCGM) should be initiated as early as possible after a Type 1 Diabetes diagnosis to optimize outcomes.
- D) CGM has no demonstrated benefit in reducing the risk of diabetic ketoacidosis or severe hypoglycemia.

Correct Answer: C

Explanation: The 2024 guidelines place a strong emphasis on the early initiation of CGM, particularly rtCGM, for children and adolescents with T1D, highlighting its benefits in improving HbA1c, increasing time-in-range (TIR), reducing glucose variability, and decreasing rates of diabetic ketoacidosis (DKA) and severe hypoglycemia.