

INTERPRETING SCREENING RESULTS

Autoantibody (AAb) SCREENING GUIDANCE FROM THE **BARBARA DAVIS CENTER FOR DIABETES**¹

Guidance on initial screening[†]

Children

Screen during recommended well-child visits to improve feasibility, starting as early as age 1 year.

Screen at:

- ✓ 1-2 years of age
- ✓ 4-6 years of age
- ✓ 11-13 years of age

Adults

Screen during recommended yearly visits to help improve feasibility.

If negative for AAbs[‡]

Children

- Rescreen patients with increased risk in 1 year
- For all other patients, rescreen around 6 years and 9-11 years

Adults

Rescreen patients with increased risk in 1 year

If positive for 1 AAb[‡]

Children

Conduct confirmatory tests and consider collaborating with specialists

- **If <3 years:** rescreen every 6 months for 3 years, then annually for 3 more years
 - If no additional AAbs, stop AAb screening
- **If ≥3 years:** rescreen annually for 3 years
 - If no additional AAbs, stop AAb screening

Adults

Conduct confirmatory tests

- **For patients with increased risk:** to monitor for risk of progression, screen annually
- **For all other patients:** repeat screen every 3 years

If positive for ≥2 AAbs, collaborate and/or refer to a specialist to be staged^{1,2}

MONITORING GUIDANCE TO TRACK DISEASE PROGRESSION²

Patients positive for 1 AAb^{††}

Children

After first positive screen: RBG and HbA1c with AAb screening for 2 years

Adults

• **Consider annual monitoring** if the patient has a first-degree relative with type 1 diabetes (T1D) or elevated T1D genetic risk, dysglycemia, or history of stress hyperglycemia

• **If no risk factors,** perform metabolic monitoring every 3 years

Patients with Stage 1 T1D^{††}

Children

- **Repeat HbA1c with RBG or 10-14 day CGM:**
 - If <3 years of age: every 3 months
 - If 3-9 years of age: every 6 months
 - If >9 years of age: annually
- **To diagnose progression to Stage 2 or Stage 3:** use OGTT or a 2-hour blood glucose test

Adults

- **Provide SMBG meters/strips to check glucose with illness or symptoms**
- **Repeat HbA1c annually**
 - Adjust frequency according to individual risk
 - If HbA1c changes by ≥10%, perform OGTT to stage
 - If normoglycemic for 5 years, reduce monitoring to every 2 years

Patients with Stage 2 T1D^{††}

Children

- Provide SMBG meters/strips
- Monitor metabolic status every 3 months

Adults

- **Monitor metabolic status every 6 months using HbA1c and one of the following:** blinded CGM, higher frequency SMBG, or 2-hour plasma glucose following OGTT
 - If HbA1c changes by ≥10%, perform OGTT to stage
- **Consider C-peptide assessment to ensure proper classification**

1. Simmons KMW, Frohnert BI, O'Donnell HK, et al. Historical insights and current perspectives on the diagnosis and management of presymptomatic type 1 diabetes. *Diabetes Technol Ther.* 2023;25(11):790-799.

2. Phillip M, Achenbach P, Addala A, et al. Consensus guidance for monitoring individuals with islet autoantibody-positive pre-stage 3 type 1 diabetes. *Diabetes Care.* 2024;47(8):1276-1298.

* Please refer to the full consensus monitoring guidance led by Breakthrough T1D (formerly JDRF) for recommendations on psychological assessment and support for screened patients.

† The full consensus monitoring guidance recommends metabolic monitoring in clinic via the following methods: HbA1c, OGTT, and random BG, plus SMBG at home. Breakthrough T1D was formerly known as the Juvenile Diabetes Research Foundation (JDRF).

BG=blood glucose; OGTT=oral glucose tolerance test; RBG=random blood glucose; SMBG=self-monitoring blood glucose.