

Turning Beta-Cell Death Into a **Real-Time Endpoint**

Kihealth's Beta Intercept™ is a next-generation liquid biopsy assay enables real-time detection of active beta-cell injury through tissue-specific unmethylated INS cfDNA analysis — enabling earlier therapeutic response signals, improved patient stratification, and dynamic longitudinal monitoring.



The Problem

Current diabetes biomarkers measure downstream metabolic dysfunction rather than active beta-cell destruction.

Traditional markers such as



HbA1c



C-peptide



Glucose



Autoantibodies

These biomarkers often require months or years to reflect meaningful biological change. By the time metabolic dysfunction becomes clinically visible, substantial beta-cell loss may have already occurred.

The Beta Intercept™ Advantage

BETA INTERCEPT™ incorporates

- Simultaneous analysis of 3 INS CpG methylation sites
- Enhanced specificity and robustness
- Intrachromosomal normalization
- Improved signal consistency
- ddPCR-based high-sensitivity detection

As beta cells undergo apoptosis, fragments of unmethylated insulin DNA are released into circulation, enabling direct measurement of active beta-cell destruction through a simple blood draw.

Why This Matters

Kihealth introduces BETA INTERCEPT™ first of its kind assay capable of measuring active beta-cell destruction in real time — enabling faster trials, earlier intervention, and improved precision medicine approaches.

First-of-its-kind

Real-time measurement of active beta-cell destruction — enabling faster trials, earlier intervention, and precision medicine.

Validated Performance

0.979

AUC (ROC) — validated in TrialNet TN10 (n=15 pediatric T1D subjects)

85.7%
Stability

95.8%
Specificity

4.08
Limit of
Detection

5 days at room
temperature
Sensitivity

Clinical Applications



Earlier
therapeutic
response
detection



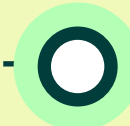
Faster
clinical trial
endpoints



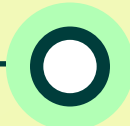
Prevention and
interception
trials



Longitudinal
disease
monitoring



Precision
patient
stratification



Pharmacodynamic
treatment
monitoring

WHAT MAKES US DIFFERENT

- Measures active destruction, not downstream consequences
- Identify signal earlier than conventional C-peptide
- Simple blood draw — scalable to any clinical lab
- Dynamic biological monitoring

