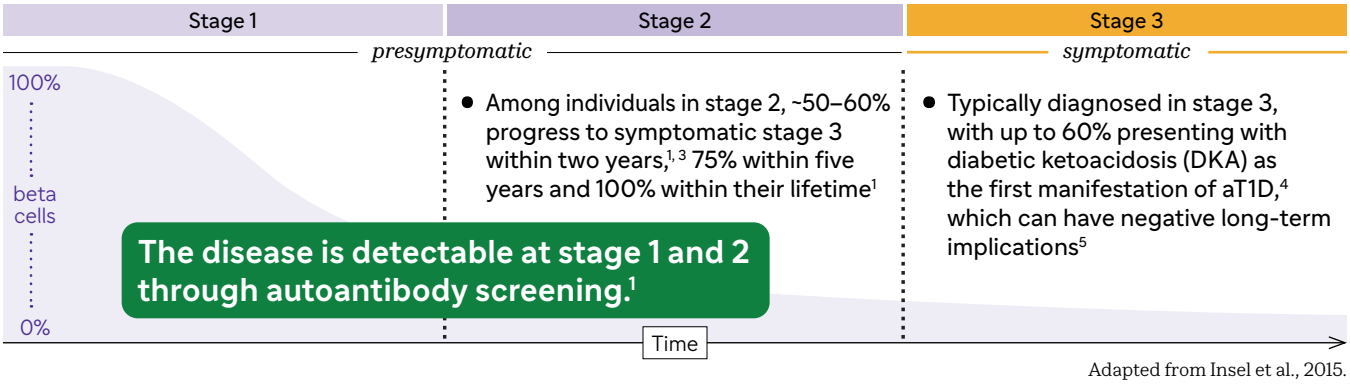
What is autoimmune Type 1 Diabetes (aT1D)?

Autoimmune type 1 diabetes is a progressive autoimmune disease characterized by the destruction of insulin-producing pancreatic beta cells[1, 2]

It begins long before symptoms appear, progressing through early stage presymptomatic stage 1 and 2 . . . before reaching symptomatic stage 3.[1]



Adapted from Insel et al., 2015.

Benefits of early detection before stage 3

- Reduce rates of life-threatening DKA and associated hospitalization costs[4, 17–19]
- Lessen stress of an acute diagnosis of aT1D[17, 20, 21]
- Significantly improve quality of life and mental health of patients and their families[22, 23]
- Provide opportunities for proactive interventions that delay onset of stage 3[1]
- Give patients, their families and caregivers more time to prepare for the complex and costly lifelong management of aT1D

aT1D can occur in anyone at any age

- Individuals are at 15× higher risk if one or more family members have aT1D[2]
- People from all backgrounds are at risk, with more than 85% of cases in those without a family history[6, 7]
- Many think of aT1D as a children's disease, but approximately 60% of cases are diagnosed in adults over 20 years of age[8]

Burden of stage 3 aT1D is high for patients and their families

- Individuals with stage 3 aT1D require lifelong exogenous insulin, which particularly impacts children and adolescents[9–11]
- Onset of stage 3 at a younger age is associated with greater risk of morbidity and early mortality (a life expectancy approximately 16 years lower than average)[12, 13]
- Out-of-pocket expenses can create a financial burden as high as $18,306 annually[14]
- Negative impact on education and labour market participation, leading to lost work productivity and earnings[15, 16]

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Parents report making career sacrifices to pursue optimal aT1D disease management for their child.[24] Early detection screening can delay the onset of aTID and allow parents to stay fully engaged and productive at work for longer. Benefits plans that cover the costs of screening for children and adults also help to protect employees from the mental health impacts of hospitalization for acute health crises and the life-changing upheaval following an unexpected aT1D diagnosis.

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