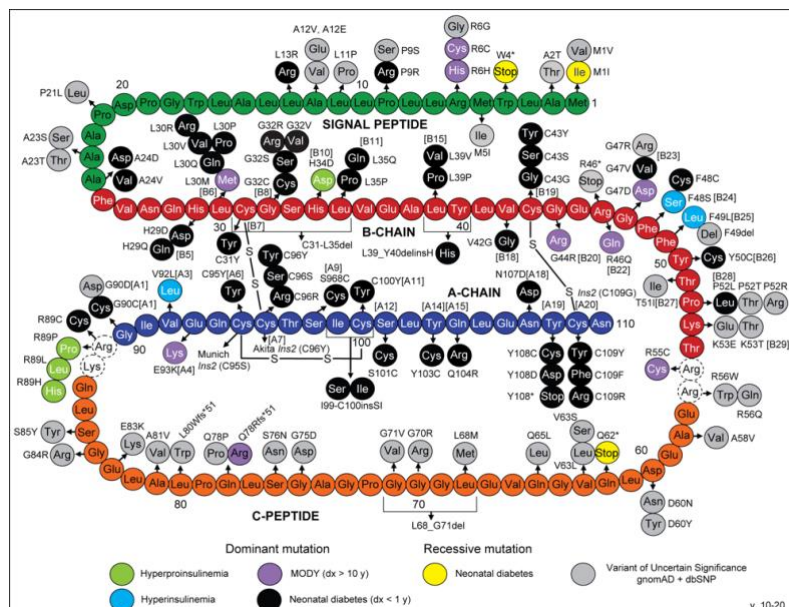


INS-related Neonatal Diabetes



Overview:

Diabetes caused by genetic changes (sometimes called ‘mutations’) in the INS gene is one of the most common types of neonatal diabetes. Neonatal diabetes means diabetes diagnosed under approximately 6-12 months of age. INS-related neonatal diabetes is usually permanent neonatal diabetes – this means the high blood sugars do not go away over time. The INS gene contains instructions for producing the hormone insulin. Insulin is necessary to keep blood sugars in a normal range.

Genetic changes in INS can occur spontaneously, such as when a person does not inherit the change from their parent. Sometimes the genetic changes are passed on from a parent to a child. If a parent has INS-related neonatal diabetes, there is a 50% chance that their child will inherit the genetic change and be at risk of developing diabetes during the first year of life.

Presentation:

People with INS-related neonatal diabetes are typically diagnosed with high blood sugars before 6-12 months of age. Oftentimes, this is misdiagnosed as Type 1 diabetes.

Treatment:

Unlike some other forms of monogenic or neonatal diabetes, oral medications (‘pills’) do not correct high blood sugars caused by INS-related neonatal diabetes. Lifelong insulin shots or insulin pump therapy is required.

Inheritance:

Finding out someone has INS-related neonatal diabetes may have implications for other family members as those family members may also have INS-related neonatal diabetes. A child of a person with INS-related neonatal diabetes will have a 50% chance of inheriting the genetic change and developing diabetes during the first year of life.

Research:

If you or a family member have INS-related neonatal diabetes, or think you may have it, then please contact us at monogenicdiabetes@uchicago.edu to learn more about our studies.