

Project title:**BIOBANKING OF BIOLOGICAL MATERIAL AT THE ONSET OF TYPE 1 DIABETES (T1D) AND IN AT-RISK FAMILY MEMBERS****Acronym/working title:****Bionank T1D****Principal Investigator**

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Registration number of the Ethical approval

Comitato Etico Interaziendale di Novara N° N/A

Project summary

Although over the past 25 years, T1D patients' survival and quality of life have been improved by disease managing therapies, a specific treatment targeting the pathological mechanisms is still lacking. When clinical symptoms become manifest, the pancreatic damage is too extended to be completely rescued. Increasing efforts addressed new strategies in the last years including immune therapies, like as teplizumab. However the finding of early biomarkers useful as diagnostic and therapeutic tools before the development of autoantibodies is still a challenge. Moreover, Siblings of childhood-onset diabetic patients have an increased risk of developing T1D compared with the general population. Studying subjects at risk of T1D (affected siblings and/or first-degree relatives) constitutes a great resource in the study of potentially involved environmental factors.

In this scenario, the primary aim of the project was to store biological material to characterize the immune or genetic phenotype at the onset of T1D to identify new targets of intervention.

Secondary objective: identification of other risk factors (antibody, genetic and/or biochemical markers) implicated in the development of T1D in subjects at risk (siblings of diabetic children), for the purpose of primary prevention.

Duration of Study*Total duration of the study: 10 years**Study start: 03/2024**Study end: 03/2034***Total number of participants involved:**

N/A

Samples collected:

- ✓ Whole blood
- ✓ Plasma EDTA
- ✓ Plasma lithium-heparin
- ✓ Serum
- ✓ Urine
- ✓ PBMC