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Primary intervention with mucosal insulin for prevention of type one diabetes in infants at high genetic risk to develop diabetes

Submission date	Recruitment status	[X] Prospectively registered
07/02/2007	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
01/03/2007	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
28/04/2015	Nutritional, Metabolic, Endocrine	

Plain English summary of protocol
http://www.diabetes-point.org/nav4uk.html

Contact information

Type(s)
Scientific

Contact name
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Contact details
DFG-Center for Regenerative Therapies Dresden
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Additional identifiers

Clinical Trials Information System (CTIS)
2005-001621-29

Protocol serial number
80804002

Study information

Scientific Title

Primary intervention with mucosal insulin for prevention of type one diabetes in infants at high genetic risk to develop diabetes

Acronym
Pre-POINT (Primary Oral INsulin Trial)

Study objectives
Oral application of insulin induces a protective immune response for the purpose of vaccination in infants at high risk of developing type one diabetes mellitus (T1DM).

Please note that as of 18/02/2010 this record has been extensively updated.
1. The intranasal arm of this trial has been removed. Italy and Switzerland have been removed from the countries of recruitment, and Canada has been added.
2. The overall trial start and end date were changed from 01/04/2007 and 30/09/2008 to 01/11/2008 and 30/06/2011, respectively.
3. The target number of participants has been reduced to 25.
4. The sponsor and contact information for this trial has changed.
Previous sponsor:
Institute for Diabetes Research at the Paediatric Clinic (Institut für Diabetesforschung an der Kinderklinik)
Munich Techical University (Technische Universität München)
Kölner Platz 1
Munich (München)
Germany

Previous contact:
Prof Anette-G Ziegler

On 09/07/2013 the overall trial end date was changed from 30/06/2011 to 31/12/2013.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Ethics committee of the Bayrische Landesärztekammer, ref: 05135
2. Ethikkommission der Mediz. Univ. Wien (ref: 341/2007), NHS National Research Ethics Service, ref: 10/H0106/33, COMIRB (05-1043)

Study design
Randomised placebo-controlled double-blind/double-masked multi-centre dose-escalation primary intervention pilot study

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Type 1 diabetes-associated development of autoimmunity

Interventions
Current information as of 18/02/2010:
Active arm: insulin given orally at 2.5 mg, 7.5 mg, 22.5 mg, or 67.5 mg daily
Control arm: placebo administered orally

Initial information at time of registration:
Active arm A: insulin given orally at 2.5 mg, 7.5 mg, 22.5 mg, or 67.5 mg daily
Active arm B: insulin given intra-nasally at 0.28 mg, 0.83 mg, 2.5 mg, or 7.5 mg daily for ten days and twice weekly thereafter
Control arm A: placebo administered orally
Control arm B: placebo administered intra-nasally

Children will be treated for the duration of the Pre-POINT study or until becoming Glutamic Acid Decarboxylase (GAD) or IA-2 auto-antibody positive or until diabetes onset. Average expected duration of treatment: 11 months (minimum three months; maximum 18 months corresponding to expected Pre-POINT study duration).

Intervention Type
Drug

Phase
Not Applicable

Drug/device/biological/vaccine name(s)
Insulin

Primary outcome(s)
The development of immunity to insulin (Immunoglobulin G [IgG] or Immunoglobulin A [IgA] antibodies, or T-cell response to insulin and/or insulin peptides).

Key secondary outcome(s))
1. Safety and bioavailability of mucosal insulin
2. Determination of an appropriate route and dose for insulin

Completion date
31/12/2013

Eligibility

Key inclusion criteria
Current inclusion criteria as of 09/07/2013:
1. Children aged 2 to 7 years who:
1.1. Have a multiplex first degree family history of T1DM (both parents, parent and siblings, or two siblings) and a type 1 diabetes susceptible Human Leukocyte Antigen (HLA) DR4-DQB1*0302 or DR4-DQB1*0304 haplotype and none of the following HLA DR or DQB1 alleles:
1.1.1 DR 11
1.1.2 DR 12
1.1.3 DQB1*0602
1.1.4 DR7-DQB1*0303
1.1.5 DR14-DQB1*0503

1.2. Have a sibling with T1DM and are identical by descent for the HLA DR3/DR4-DQ8 genotype with their diabetic sibling
2. Islet auto-antibody (IA-2) negative at time of recruitment

Previous inclusion criteria:
1. Children aged 2 to 7 years who:
1.1. Have a multiplex first degree family history of T1DM (both parents, parent and siblings, or two siblings) and have one of the following Human Leukocyte Antigen (HLA) genotypes:
1.1.1. DR4- DQA1*0301-DQB1*0302 / DR3- DQA1*0501-DQB1*0201
1.1.2. DR4- DQA1*0301-DQB1*0302 / DR4- DQA1*0301-DQB1*0302
1.1.3. DR4- DQA1*0301-DQB1*0302 / DR4- DQA1*0301-DQB1*0201
1.1.4. DR4- DQA1*0301-DQB1*0302 / DR4- DQA1*0301-DQB1*0304, or
1.2. Have a sibling with T1DM and are identical by descent for the HLA DR3/DR4-DQ8 genotype with their diabetic sibling
2. Islet auto-antibody (IA-2) negative at time of recruitment

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Child

Lower age limit
2 years

Upper age limit
7 years

Sex
All

Key exclusion criteria
1. Children with any kind of congenital or acquired chronic disease that potentially interfere with the study objectives
2. Prior or current participation in another intervention trial

Date of first enrolment
01/11/2008

Date of final enrolment
31/12/2013

Locations

Countries of recruitment
United Kingdom

Austria

Germany

Italy

Switzerland

United States of America

Study participating centre
DFG-Center for Regenerative Therapies Dresden
Dresden
Germany
01307

Sponsor information

Organisation
Medical Faculty Carl Gustav Carus (Germany)

ROR
https://ror.org/04za5zm41

Funder(s)

Funder type
Charity

Funder Name
Juvenile Diabetes Research Foundation (JDRF) (USA)

Funder Name
German Federal Ministry of Education and Research (Bundesministerium Für Bildung und Forschung [BMBF]) (Germany)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	21/04/2015		Yes	No
HRA research summary			28/06/2023	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes