

December 2023



The BOX Study Research Group and Laboratory Staff



Introducing our new study

Thanks to all we have learned about type 1 diabetes from BOX study participants, we have launched a new study looking at risk of type 1 diabetes in adults in the UK.

Read more here

Please share our T1DRA website **www.t1dra.bristol.ac.uk** and follow on 'X' **@T1DRAdiabetes**

with interested friends and extended family who are not eligible for BOX.

What happens to immune markers after diagnosis of type 1 diabetes?



Islet autoantibodies help to identify people who later develop type 1 diabetes. Thanks to your help, BOX is currently the **only study in the world** that can examine these markers over time.

We found that islet autoantibodies are lost at different rates, and that genetic risk and age at diagnosis can influence how quickly these markers disappear. This will help us to understand what happens to the immune response when living with type 1 diabetes.

Read more about this



Dr Lowri Allen

Risk of type 1 diabetes is lower in children of mothers with type 1 diabetes than fathers with type 1 diabetes

Dr Lowri Allen, a clinical PhD student working with us has looked at all the published studies of children where one or both parents have type 1 diabetes.

As part of her PhD, Lowri is using data from BOX as well as many other large studies of people with type 1 diabetes, to try to understand how mothers with type 1 diabetes might give their children some relative protection.

Find out more here



Oral glucose tolerance test at home

We are working with a team in Oxford to use a home kit to test the function of the insulin producing beta cells. We will be in touch shortly with a small group of eligible people who have multiple islet autoantibody markers.



Risk of most cancers are lower in people with T1D.

In a ground-breaking study of 23,473 UK patients with insulin-treated diabetes diagnosed at ages <30 years, including BOX study participants were followed up for an average of 30 years for incidence of cancer compared with general population rates. Risks of cancer overall were reduced with lung cancer significantly lower.

Read more here



Five yearly islet autoantibody measurement in adults

We have introduced a five-year islet autoantibody test and are inviting adults that have previously tested negative to volunteer a further finger prick sample. We aim to identify people who have developed risk markers of type 1 diabetes since their previous sample.

Thank you to the 182 people who have donated samples so far.

Do you have a kit at home and are unsure how to collect your sample? View our finger prick and mouth swab <u>online video guides here</u>.

To update your contact details or if you have any questions about BOX please

email us: box-study@bristol.ac.uk

Thank you once again for continuing to take part in the BOX family study we could not do the work we do without you.

Merry Christmas and Best Wishes for the coming year.

Professor Kathleen Gillespie and the BOX Study Team.