



Minimum effective low dose of ATG in people recently diagnosed with Type 1 diabetes

Participant Information Sheet (ages 11-15)

Here is some information about a research study called MELD-ATG. We would like to invite you to take part in this study, and we are happy to talk to you, and to your parent(s) or the adult(s) who look after you (your guardian(s)) about it.

Why is this study being done?

People develop Type 1 diabetes because their immune system, the part of the body which helps fight infections, mistakenly attacks and destroys the insulin-producing cells in the pancreas (beta cells). When the immune system destroys these cells, the body's ability to produce insulin decreases, blood glucose levels run high, and diabetes develops.

At diagnosis, a small number of beta cells (10-20%) are left in the pancreas, which still produce some insulin. We call this level of activity "beta cell function". Most people with diabetes will eventually stop producing insulin themselves. This may occur rapidly in a few months, or more slowly over several years. However, the longer people with diabetes can produce their own insulin, the better it is for the control of blood glucose levels and to stay healthy.

In this study Doctors want to find out if taking a certain amount of a medicine/drug called 'Anti-Thymocyte Globulin' (ATG), which has been shown to improve beta cell function in some studies, can be used at a lower dose in younger people recently been diagnosed with diabetes, while they are still making insulin.

Why have I been asked to take part?

We are asking children, young people and adults aged between 5 and 25 years, just like you, who have just been told they have type 1 diabetes, if they would like to join the MELD-ATG study.

Do I have to take part?

No, taking part is up to you, it is your choice. Even if your parent(s) or guardian(s) are keen for you to take part, you do not have to.

You can also stop taking part at any time during the study without saying why, and this will not affect the care you receive for your diabetes.

What will happen to me if I take part in this study?



If you decide you would like to be in the study, you will be asked to complete a form that we keep, that tells us that you are happy to take part. We will also ask permission from your parent(s) or guardian(s).



You will need to come to the hospital 10 times during the study, with one of your parents or guardians. We will always try to make sure that you do not miss too much school! We will try to line up these visits with your regular clinic attendance.



During 4 out of the 10 visits we will do a 'MMTT' - this means a 'Mixed-Meal-Tolerance-Test'. It is a special test to check how well your beta-cell function is doing.



As part of the study, we will ask you to come to the hospital for 2 days to have a drip with the MELD-ATG drug in it - called an infusion. It will be given to you on both days and will take most of the first day, so you may have to stay overnight. But one of your parents or guardians will be able to stay with you. These 2 days will be called 'treatment days'.



We would also like you to fill out a diary (along with your parent(s) or guardian(s)), after you have had the MELD-ATG medicine/drug to tell us how you are feeling and if you have taken any other medication.



While you are taking part in the study you will also need to do a test at home, called a Dried Blood Spot (DBS) collection, before and after breakfast once a month. You will need to have a special 'milkshake' type drink instead of your breakfast on each of these days.



We will also ask you to bring some urine and stool (poo) samples with you from home, to these study visits.



Later in the study, we will ask you to wear a Continuous Glucose Monitor (CGM) to use at home. If you already use one, you can use the one you have, but if not, we will give you one to use during the study. The CGM measures your glucose levels 24 hours a day using a tiny sensor inserted just under your skin.

Let's find out more!



What will happen during your hospital visits? (See TABLE 1 on page 7)



At the start of the study, your doctor or nurse will examine you; measure your height, weight, blood pressure, heartbeat and temperature, ask some questions about your diabetes, and how you and your family are.



Next the doctor or nurse will take blood samples from your arm. This will be done by inserting a cannula - very small plastic tube - into a vein in your arm. We will have given you some numbing cream to put on your arm at home or we can use some cold spray to put on your arm beforehand so that it won't hurt so much.



These blood tests will let the doctor see that you are well and that it is okay for you to be in the study. The blood samples will also let the doctors find out more about your diabetes, your immune system (the part of the body that fights infection) and your genes. Genes are the building blocks in our bodies which we get from our parents when we are born, that decide the colour of our eyes and hair or how tall we are.

The maximum amount of blood we will take from you at a visit is around 50mls, but for most visits, it would be a lot less than this.



What is a MMTT test?

For some of the hospital visits you will be able to have your breakfast before coming, but other times you will not be able to. Although, it is important that you have a drink of water when you wake up on those mornings.

This is because we need to do the special 'MMTT' test. This test needs to be carried out before you have any food in the morning, and you will have a special 'milkshake'-type drink, which you will have instead of your breakfast. But we also need to take some small samples of blood at different times during this test. We will use the cannula in your arm to collect these. We will explain to you and your parent(s) or guardian(s) what to do on these mornings with your insulin or see MMTT instructions.

The test takes about 2 hours so you can watch TV, play games, read or even do some homework? You will always be given something to eat and drink after the MMTT and return to school in the afternoon, if possible.



The 2 days having the study medicine/drug?

On the morning that you come to the hospital to have the MELD-ATG medicine/drug infusion, you will be able to have your breakfast. And remember to bring games, crafts, books (even your favourite pillow, if you like), as this will take all day. You will also need to bring your blood glucose testing kit, your insulin pens and needles, etc.

It might be too late for you to go home at the end of the first day, so you may have to stay that night in the hospital. But remember one of your parents or guardian(s) will be staying with you. You should be able to go home at the end of the second day, unless you live very far away. But we will discuss all of this with you, and your parent(s) or guardian(s) before you need to come in.



What are Dried Blood Spots (DBS)?

We call Dried Blood Spots 'DBS' because it's easier to say! DBS are drops of blood that can be put on to a special white card when you do a finger prick; like you do when you check your blood glucose levels.



Once the drops of blood are on the card, it's really important to let them dry for 24 hours before posting the card to us. That is why they are called Dried Blood Spots!

Before you go home from your first study visit, we will teach you, and your parent(s) or guardian(s) how to take the DBS samples from your finger.



Other samples?

As well as the DBS samples that you do at home, for some of your study visits at the hospital you will also need to bring a urine sample and a stool sample with you. We will tell you, and your parent(s) or guardian(s), when you will need to do this and how to do it.



Pregnancy & Contraception



We are required to ask all girls in the study who have started their periods, for permission to carry out monthly pregnancy tests using urine or blood samples. It is very important as the study drug could affect the way a baby will grow and perhaps lead to serious problems for the baby.

We would also expect any young people (both male and female) who are sexually active to be taking adequate contraceptive precautions. It is important to continue using a safe method of contraception throughout the duration of the study.

In the event that you should become pregnant in spite of these precautions, it is important that you inform the study team immediately. We would also ensure that you receive appropriate counselling and care needed.



What is the medicine/drug I will be given?

ATG is made from a collection of proteins (called antibodies), from rabbits, and are sanitised, to make it very safe to use. It is already used in other medical conditions, for example, in people receiving organ transplants to help prevent rejection by their immune system.

There will be 114 people taking part in the study and they will be split into 7 different groups. A computer programme will decide which group everyone (including you) will be in. Some of the groups will be given the ATG medicine/drug that is being tested, and other groups will be given a “placebo” which is a “dummy” medicine/drug.

The placebo medicine will look exactly like the ATG medicine/drug but will have no ‘active’ medicine/drug in it. Neither the doctors/nurses, nor you or your parent(s) or guardian(s), will know which group you are in. More people in the study will receive the ATG medicine/drug than the “dummy” medicine/drug, and those who do get the ATG medicine/drug, will get different doses than others to see which dose works best.

The ATG medicine drug/placebo needs to be given one day after the other by infusion, by inserting a cannula with a drip in your arm. We will again use either the numbing cream or cold spray on your arm so that that it won't hurt so much.



What will happen after having the study drug? (See TABLE 2 on page 8)

When you go home after you have had the study drug, we would also like you to fill out a diary every week, for the first few weeks, to tell us how you are feeling.

The study doctor will like to see you 3 times at the hospital, within the first 4 weeks, after you have had the study infusion. These study visits will not take very long. We will check how you are, but we will also need to take a small amount of blood to check how the study drug is working. You will be able to go back to school after your visit.

After these visits we will see you at the hospital for a further 3 visits, at 3 months, 6 months and 12 months. We will do a MMTT at these visits, which will take longer.



Possible Problems

Having blood tests in your arm may be uncomfortable, but the nurse/doctor will apply either the numbing cream or the cold spray on your skin, so that it won't hurt so much.

The study drug (ATG) might make you feel a bit poorly or unwell straight after the ATG infusion or a few days to a two weeks later. You may have a headache, runny nose, feel hot/cold, feel achy all over, see a rash on your arms, legs or body, feel very tired and not want to get out of bed. We can give you medicine to take away these problems, although they usually do not last very long. But if you feel or notice anything like these, do tell your parents straight away.

If you are not happy with anything about the study at any time, you can speak to the nurse or doctor, their name and telephone number are at the end of this sheet.

What else?

What will happen after the study is over?

The study team would like to stay in touch with you and your family.

Will joining the study help me?

Being in the study may not help you directly, your diabetes may not get better, but doctors will use the important information they find out from this study to help other people with diabetes in the future.

What happens when the research stops?

When you have finished taking part in the study, you will continue to take insulin by injections or through your pump, as normal. We plan to send you a newsletter at the very end of the study to thank you and to let you know what we learned from the study.

What if I don't want to do the research anymore?

If you choose to join the study and then change your mind, that is okay, and it will not change things for you when you next go to clinic. You can stop taking part at any time. Just tell your parents and study nurse or doctor. They will not be upset or annoyed with you.

Can I speak to someone about the study?

Yes, you can. We would be very happy to talk to you and answer any of your questions. You can ask your parent(s) or guardian(s) to speak to the nurse or doctor at the hospital or you can speak to them yourself! The nurse's and doctor's name are in the box below!

Thank you for taking the time to read this information sheet.

Study Doctor:

Address:

Study Nurse(s):

Telephone Number:

Email:

TABLE 1 - Hospital/clinic visit schedule







































































<div></div> <div>Hospital/clinic visit schedule</div> <div>Trial assessments start after you have signed the consent form</div>	Screening visit	Baseline visit	Treatment visit		Follow up visits after treatment					
	No more than 6 weeks from diagnosis	No more than 3 weeks from screening visit	Day 1	Day 2	1 week	2 weeks	4 weeks	3 months	6 months	12 months
			No more than 9 weeks after diagnosis No more than 1 week from baseline visit							
Arrive having fasted for 8 hours		Fasted						Fasted	Fasted	Fasted
Medical history/changes in health										
Family medical history/changes in family health										
Physical examination										
Medication and vaccines review										
Blood samples										
Pregnancy test (if applicable)										
Mixed meal tolerance test										
Treatment allocation										
Overnight stay										
Trial treatment infusion										
Total duration of visit	2h	4h	2 days		1h	1h	1h	4h	4h	4h

TABLE 2 - At-home schedule

 At-home schedule	Screening visit	Baseline visit	Treatment visit		Follow up visits after treatment					
	No more than 6 weeks from diagnosis	No more than 3 weeks from screening visit	Day 1	Day 2	1 week	2 weeks	4 weeks	3 months	6 months	12 months
			No more than 9 weeks after diagnosis							
			No more than 1 week from baseline visit							
Dried blood spots		At hospital /clinic visit			 Home collection will be monthly, starting 1–4 weeks after trial treatment Before and after a liquid meal					
Urine & stool samples										
Trial diary										
CGM for 14 days after the visit										



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Type 1 diabetes**

ASSENT FORM - AGES 11-15

Participant identification number:

Study ID

Principal Investigator: _____

If you agree, please initial boxes below

1. I confirm that I have read, or that someone has read to me, the information sheet for this study.	
2. I confirm that someone has explained this study to me.	
3. I confirm that I understand what this study is about.	
4. I confirm that I have had the chance to ask questions.	
5. I confirm that I have had my questions answered in a way that I understand.	
6. I understand that it is up to me whether I join the study.	
7. I understand that I can stop the study at any time if I want to, and I will not have to give a reason.	

8. I am happy to give blood samples.	
9. I agree to my General Practitioner (GP) being told I am taking part in the study.	

10. Please tick one of the boxes below to say whether you want to join the study or not.

YES I want to take part in this study ☐

NO I don't want to take part in this study ☐

_____	_____	_____
<i>Name of Participant</i>	<i>Date</i>	<i>Signature</i>
_____	_____	_____
<i>Name of Person receiving Assent</i>	<i>Date</i>	<i>Signature</i>

<i>Role of Person receiving Assent</i>		

**1 copy for participant; 1 copy for researcher site file; 1 (original) to be kept in medical record*