

## **TREAT-AT Research project FAQ's**

### **What is the 'UK' mutation and how do you know/find out if you have it?**

The "UK mutation" is c.5763-1050A>G. It is a very specific spelling mistake which lays in the middle of a non-coding region, which can be corrected by so called antisense oligonucleotides. All individuals who have a diagnosis of A-T and attend the national A-T clinics will have had genetic testing and this will show whether their disease is caused by the A-T mutation or not and the team at Papworth or Nottingham can advise. However, as part of our study we will contact all patients we are aware of who carry this mutation and eligible for the study and will offer participation.

### **Does the 'UK' mutation mean that mainly people who live in the UK have this mutation?**

This mutation arose many years ago in the UK, therefore it is more frequent here, but it also presents in patients in other countries – usually these patients originate from the UK.

### **Can you estimate the percentage of A-T patients who are likely to have the 'UK' mutation?**

We are aware of 13 patients in our cohort. We estimate that there are probably some more patients, who do not attend the Cambridge A-T Clinic.

### **Is the 'UK mutation' only found in patients who have the 'mild variant A-T' (meaning a mutation that enables them to produce a small amount of functioning ATM protein)?**

The UK mutation mostly causes a mild, variant form of A-T, which frequently is only diagnosed later in life.

### **Is the 'UK mutation' found in people with 'classic A-T' (meaning where no active ATM is produced)?**

Usually, the UK mutation is not leading to complete loss of ATM, which corresponds to the milder and later onset symptoms we see in most individuals with the mutation.

### **In terms of a timeline, how soon after this research project ends do you anticipate human trials may be possible? Will more research projects need to be done first?**

In an optimal case we would like to continue right at the end of our 2-year natural history study with a clinical trial. For this we are in discussions about the development of the antisense oligonucleotide and we are looking for funding opportunities.

### **Will you have to wait for the ASO therapy trial in the USA to finish and to have published its results before designing this future clinical trial? If so, how many years is this likely to be?**

Not necessarily. We are in contact with the doctors in the USA and will get the necessary information from them about the results to enable starting our study, if no major issues arise in the original American study.

**When is the earliest that this trial may be able to start?**

We [plan to start the trial at the end of our natural history study in a 2-year time but this is of course also very much dependent on the progress with developing the treatment. Our study will provide important information on the clinical status of the patients without treatment and we will use this data as baseline to compare the effect of the treatment. It will also help us selecting the most useful parameters to measure in the trial.

**What type of A-T will this be aimed at?**

We include patients with the c.5763-1050A>G variant.

**What is likely to be the age criteria?**

We will include patients aged 16 years or older on the date of signed informed consent.

**Will it be a UK trial only with the criteria being that you need to live in the UK to participate?**

We will conduct a single site study in Cambridge, and we are mainly planning to include patients living in the UK, who carry the so-called UK mutation.

**Will the trial only be open for a small number of people to enrol and actively participate?**

We will offer participation to all A-T patients >16 years of age who carry the UK mutation.

**Are you currently looking for patients to come forward who know they have this mutation?**

We will contact patients who we are aware of with the UK mutation, but we appreciate it if patients who carry this mutation and would like to hear more about our study contact us. As soon as we have the ethics approval, we will advertise our study widely to facilitate participation. At that point we will provide the lay summary and contact information.