AMX0035 from Amylyx: FAQs September 2022

What was the announcement on 29 September 2022?
AMX0035 has been approved by the Food and Drug Administration (FDA) in the United States as RELYVRIÒ™, a treatment for motor neurone disease (MND). FDA approval is a welcome step forward in the fight against MND and further highlights the necessity of ongoing research to find effective treatments.

Two countries have now approved AMX0035, with Canada conditionally approving the drug, known there as Albrioza, back in June 2022. It is now commercially available in Canada. Canadian approval is dependent on the results of the ongoing Phase 3 clinical trial and approval could be withdrawn.

The European Medicines Agency (EMA) is expected to make a decision in early 2023 about approving the drug for use in the UK and Europe. However, the UK is no longer in the EU and it’s not yet clear whether the UK will continue to be involved in EMA approval beyond 2022 or whether there will be a new approval process for the UK.

What is the drug?
AMX0035 (Albrioza or RELYVRIÒ™) is a combination of two compounds, sodium phenylbutyrate (PB) and taurursodiol (TURSO or TUDCA). A Phase 2 clinical trial (called CENTAUR) has been carried out by the company Amylyx to see if, together, they will slow the progress of the symptoms of MND. A larger Phase 3 clinical trial (named PHOENIX) is now underway (recruitment has completed in the US and remains ongoing in Europe) with initial results expected in 2024.

What does the drug do?
The combined two drugs target the disease in slightly different ways. The combination has been designed to stop the motor neurones dying, in order to try to slow progression of the disease.

Is it approved in the UK?
Not yet – so far it has only been approved in the US and Canada. The EMA has agreed to review an application from Amylyx Pharmaceuticals requesting the approval of AMX0035. The EMA will be using information, results and data from Phase 2 of the clinical trial but may also request Phase 3 data as well. The EMA decision is expected in early 2023.

Will it get approval in the UK?
We’re not sure yet. The EMA has agreed to review an application from Amylyx Pharmaceuticals requesting the approval of AMX0035. This is based on the Phase 2 data, but it may be they will need the Phase 3 data for approval. The EMA decision is to be made early 2023.

How can I access it?
Currently the compound is only available in Canada and the US or for those involved in the trial being carried out by Amylyx. The Phase 3 PHOENIX study is currently the only route to access AMX0035 in Europe. More information on PHOENIX, including enrolment criteria and participating sites, can be found at https://www.amylyxaltrial.com.

**Where is the phase 3 trial happening?**
The trial is currently recruiting in the UK at the following sites:

- **Plymouth** – please contact the MND care coordinator on tracy.thomas9@nhs.net

- **University College London** – is fully recruited but may be opening back up for recruitment in September. We are in contact with the site lead and will confirm on our webpage once open for recruitment. You can also email uclh.kdregister@nhs.net to register interest for clinical trials at this site.

- **Sheffield** – please contact the Lead Research Nurse for MND, Lee Tuddenham, lee.tuddenham@nhs.net if you’re interested in taking part.

- Other sites in the UK are due to open for recruitment in the coming months:
  - King’s College London
  - Walton Centre (Liverpool)

**Can I get on the Phase 3 trial?**
Like every trial, there are specific criteria which people must meet before being considered for involvement. You can find the details here. Your neurologist or the trial site leads will be able to discuss your eligibility in more depth. When you take the first step to take part in a trial you will undergo pre-screening to determine if you are eligible to take part.

**When will the Phase 3 trial end?**
The Phase 3 trial is due to end late 2023/early 2024. The topline results from the trial will be available shortly after the trial ends, so early/mid 2024.

**What have the results from the trials shown so far?**
In the phase 2 CENTAUR trial the average fall in the ALSFRS-R score (MND symptom scale) was ~1.24 points per month in people taking the active drug and ~1.66 points per month with placebo. An average difference of 2.32 points in the ALSFRS-R was seen at the end of the six-month trial between those on the drug and those on placebo. This represents a relatively modest but important slowing of the progression of disease symptoms.

In addition, median survival duration (that is the time until half of participants taking part in each arm of the trial died) was 25 months in the group being given the active treatment and 18.5 months in the group receiving the placebo, a 6.5 month difference.

Further analysis of the data after the trial ended compared the people on the trial who received the treatment to historical data of people living with MND. This found that there is potential for an 11 month increase in survival.

**I have familial MND. Will this drug help me?**
Possibly, the drug is designed to treat mechanisms within the body that can impact sporadic or familial MND.

**I have sporadic MND. Will this drug help me?**
Possibly, the drug is designed to treat mechanisms within the body that can impact sporadic or familial MND.
Were there side effects recorded?
Around 30% of participants who took AMX0035 reported to have nausea, diarrhoea and stomach pain within the first three weeks of the starting the treatment. This declined after that time. The majority of those effects reported were mild to moderate and could be overcome by reducing the dose temporarily.

Current status
AMX0035 (sodium phenylbutyrate and taurursodiol) is an oral fixed-dose medication with marketing application pending in the European Union and approved with conditions as ALBROIZA™ to treat amyotrophic lateral sclerosis (ALS) in Canada and RELYVRO™ in the US. The combination of sodium phenylbutyrate and taurursodiol may reduce neuronal cell death, hypothesized to occur by simultaneously mitigating endoplasmic reticulum (ER) stress and mitochondrial dysfunction. AMX0035 is also being explored for the potential treatment of other neurodegenerative diseases.

For more info:
We will continue to provide information as soon as we have it on the MND Research website. In the meantime, here is an up to date summary:
https://www.mndassociation.org/research/clinical-trials/treatment-trials/amx0035/