OSLO UNIVERSITY HOSPITAL

To Nordic colleagues working with X-ALD

**Division of Clinical Neuroscience**
Department of Neurology
Date: June 13th 20023

## Invitation to digital Nordic meeting on X-linked adrenoleukodystrophy (X-ALD)

Dear colleague,

A digital meeting on X-ALD will be held on **Friday September 29th 2023, at 13:00-15:00 (CET)**.

Program:

1. Leriglitazone for children and adults with X-ALD, and brief update on allo-HSCT for adults and gene therapy cerebral ALD. Wolfgang Köhler, University of Leipzig, Germany.
2. Danish natural history of X-ALD, presentation and discussion of project. Cecilie Videbæk, Rigshospitalet, Copenhagen, Denmark.
3. The road ahead and structure of a Nordic collaboration on X-ALD, discussion.

Background:

In the field of X-ALD there are important developments underway:
- leriglitazone is under consideration for prevention of progressive myeloneuropathy (adult males with adrenomyeloneuropathy, AMN)
- allogeneic hematopoietic stem cell therapy (allo-HSCT) is becoming an option for adult males who develop cerebral ALD
- gene therapy (autologous hematopoietic stem cell therapy using own stem cells genetically modified using a lentiviral vector) is approved therapy (yet unavailable in Europe) for cerebral ALD in boys lacking suitable donor, and may become an option for adult males as well
- new-born screening(NBS) for X-ALD has been implemented in 30 U.S. states, and is under consideration in several European countries as well
- with NBS and the increasing use of gene panels a larger number of patients principally harbouring an *ABCD1* mutation and the biochemical defect in very long chain fatty acid (VLCFA) metabolism, are being identified. In particular, more mild, late or even asymptomatic cases are being found
- while X-ALD was previously seen as mostly a disease affecting young boys, a more modern view is that it's a life-long disease with myeloneuropathy in both men and women as the predominant and most basic phenotype

These developments underscores the increasing need for systematic diagnosis and follow-up for X-ALD patients in the Nordic countries. In Norway, there is a somewhat good overview of the X-ALD cohort, following the national survey of X-ALD (Horn et al, Pediatr Neurol 2013). A national survey is currently being planned in Denmark. Overview over X-ALD in Sweden, Finland and Iceland is needed as well.

Despite having a somewhat good overview of the patient cohort, the systematic diagnosis and follow-up of patients remain a challenge in Norway, not least due to the absence of a cohesive group of professionals working with X-ALD. There are difficult questions to be answered, such as when and whether to offer allo-HSCT or even gene therapy, whether to introduce and how to follow-up leriglitazone, and whether to offer guidance on dietary measures (with or without Lorenzo's oil) to reduce the levels of VLCFAs. Apparently, the Nordic countries are too small, the patients too few, to effectively organize local professional groups working with X-ALD, thus a Nordic collaboration might be useful.

As a first step, the working group would like to invite you (and any colleague who might be interested) to a digital Nordic meeting aimed at pediatric and adult neurologist and endocrinologists, laboratory physicians and geneticists, as well as researchers, with an interest in X-ALD. The digital meeting will be hosted by Frambu centre for rare diagnosis in Oslo. Digital link will be provided for those who confirm they will attend.

A response whether you will attend the meeting is appreciated before August 21st 2023.
Any questions may be directed to morten.andreas.horn@ous-hf.no.

For the Nordic X-ALD working group,


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