

How to reach CNS with ERT – brainstorming meeting on May 23, 2007 at 8:30 am in Hillerød

Background: CNS effect has been noticed in knock-out animals after ERT for several lysosomal diseases lately. Among those are alpha-Mannosidosis and MLD.

Aim: To try to understand the possible mechanism behind the CNS effect and to find common denominators between the 2 projects. Also, to try to design what type of experiments are relevant to perform in order to verify the effect.

Agenda

Arrival at Hotel Hillerød, Milnersvej 41, Hillerød on May 22 by 19:00.

Dinner at Hotel Store Kro in Fredensborg at 19:30 (leave hotel at 19:00 and travel to dinner is arranged)

May 23 at 8:30: Meeting starts at Zymenex, Roskildevej 12C, Hillerød (5 minutes walk towards west from hotel)

1. Introduction – *Jens*
2. Background BBB and a summary of methods and published studies to target CNS with proteins/peptides - *Claes*
3. Presentation of CNS effect in LAMAN k.o. mice after ERT treatment (old data from Diego + new experiments) - Conclusions and thoughts – *Judith*
4. Presentation of CNS effect in MLD k.o. mice + immunotolerant mice after ERT treatment - Conclusions and thoughts – *Uli*
5. Intra-techal administration of enzyme in mice, conclusions from experiments performed – *Uli*
6. Experience from ongoing MLD clinical trial - *Christine*
7. Discussion, brainstorming – *All*
 - a. Mechanism of uptake and receptors involved?
 - b. Optimal glycosylation and phosphorylation profile for CNS effect?
 - c. Design of *in vitro* and *in vivo* test to verify theory.
 - d. Alternative administration routes (e.g.intratechal)
 - e. Alternative approaches (cellular therapy, gene therapy etc.)
8. Summary and conclusions

Lunch when time is convenient

Meeting ends at 14:00

Participants:

Judith Blanz (Christians-Albrecht Universität Kiel)
Paul Saftig (Christians-Albrecht Universität Kiel)
Uli Matzner (Rheinische Friedrich Wilhelms Universitaet Bonn)
Volkmar Gieselmann (Rheinische Friedrich Wilhelms Universitaet Bonn)
Cecilia Weigelt (Zymenex, Lidingö)
Pia Hydén (Zymenex, Lidingö)
Helena Reuterwall (Zymenex, Lidingö)
Claes Andersson (Zymenex, Lidingö)
Stefan Nilsson (Zymenex, Lidingö)
Carl Eistrup (Zymenex, Hillerød)
Christine i Dali (Rigshospitalet, Copenhagen)
Allan Meldgaard Lund (Rigshospitalet, Copenhagen)
Jens Fogh (Zymenex, Hillerød)