



# MOSS-AGAL FOR FABRY DISEASE

Moss-aGal will be the first enzyme replacement treatment of Fabry disease produced in moss that exhibits optimized N-glycosylation patterns of the protein alpha-galactosidase A. Studies in mice show that this translates into enhanced cellular uptake and favourable organ distribution.

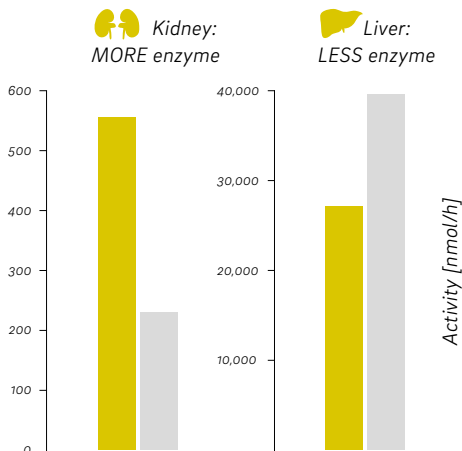


**GREENOVATION**  
Biopharmaceuticals

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# Moss-aGal: enhanced cellular uptake into the target organ kidney

Being an enzyme replacement therapy, moss-aGal replaces the missing or reduced activity of the lysosomal enzyme alpha-galactosidase A in patients with Fabry disease. The kidney and heart are the organs most affected by the disease. Compared with other replacement therapies, the mannose receptor-mediated uptake of moss-aGal leads to an increased uptake of the enzyme in the kidney in mice. This has the potential for substantial improvements to patients' quality of life.



 moss-aGal  
 Other replacement enzyme

Favourable organ-specific uptake of moss-aGal in Fabry mice

## + Phase I clinical trial for the world's first moss-produced drug candidate completed



After successful preclinical studies, Greenovation's first drug candidate moss-aGal phase I clinical trial is completed. Greenovation has used its proprietary BryoTechnology® to express the moss-aGal protein in *Physcomitrella patens*. As a result, mannose molecules are attached to the surface of the recombinant proteins, which improves cellular uptake. This milestone validates the use of BryoTechnology as a production system for biopharmaceuticals. For more information, please visit [www.clinicaltrialsregister.eu](http://www.clinicaltrialsregister.eu), EudrCT-No.: 2014-004325-40.

### STUDY SETUP

One dose group with 6 patients:  
0.2mg/kg i.v.; single dose;  
clinical schedule of 28 days

#### Primary endpoints:

- Safety
- Pharmacokinetics

#### Secondary (exploratory) endpoints

- Efficacy (Gb3/lyso-Gb3 levels in plasma and urine)

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