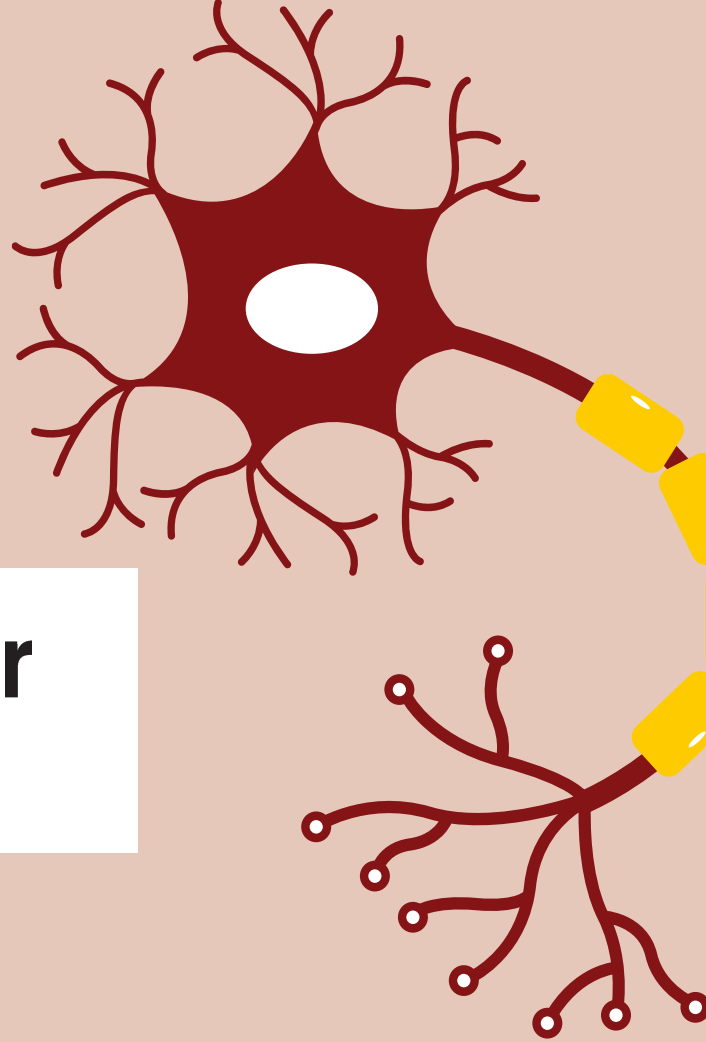
EpiGeneer



The First Regenerative Treatment for Multiple Sclerosis

An Afternoon with EpiGeneer · Basel, 9 October 2026

AdRegeneer

EpiGeneer is AdRegeneer's Theophylline Patch Company

Multiple Sclerosis (MS) still faces high unmet medical needs

Progressive loss of function, and unmet hope for recovery despite good treatments (DMTs) slowing down immune attacks

MS: Prevalence - Onset age



2

100K

per year

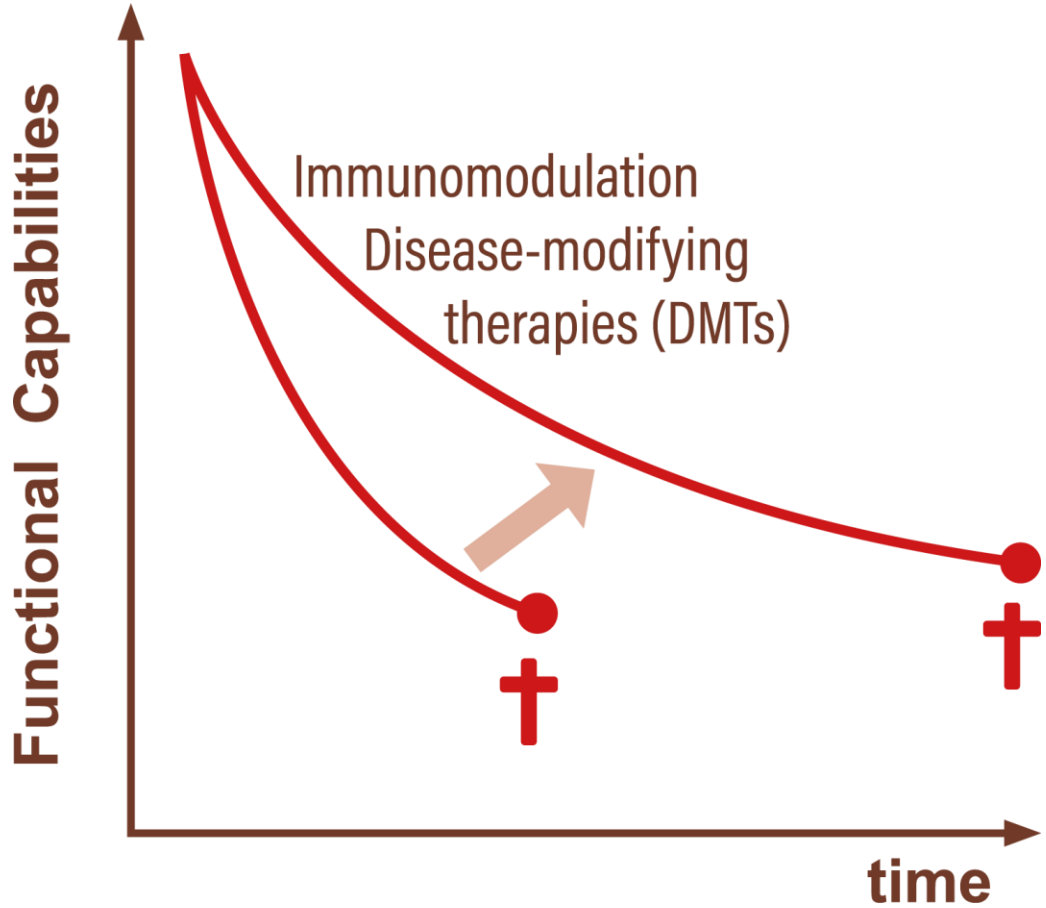


3.1 mio

Onset age **20-40**

Progressive disability despite DMTs

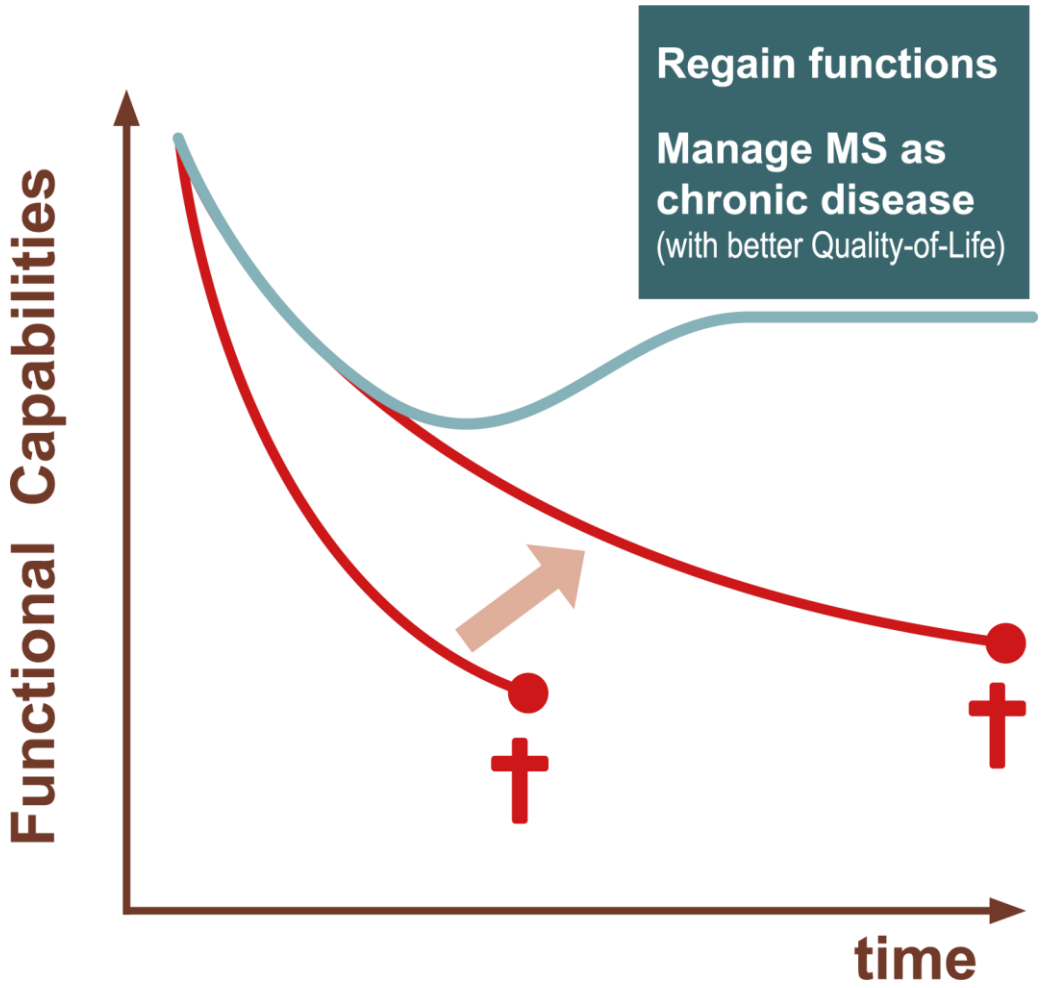
Available Treatments for MS



Our approach aims to regain functions and to manage Multiple Sclerosis (MS) as chronic disease

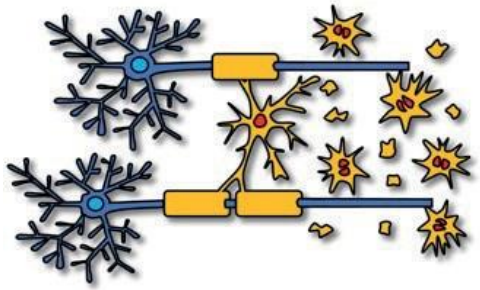
By activating regeneration via epigenetic pathways

Our objective

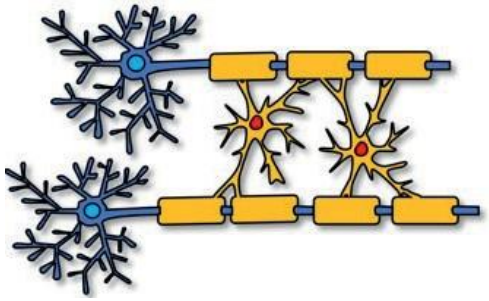


Our Mode of Action (MoA)

Lesion



Repair

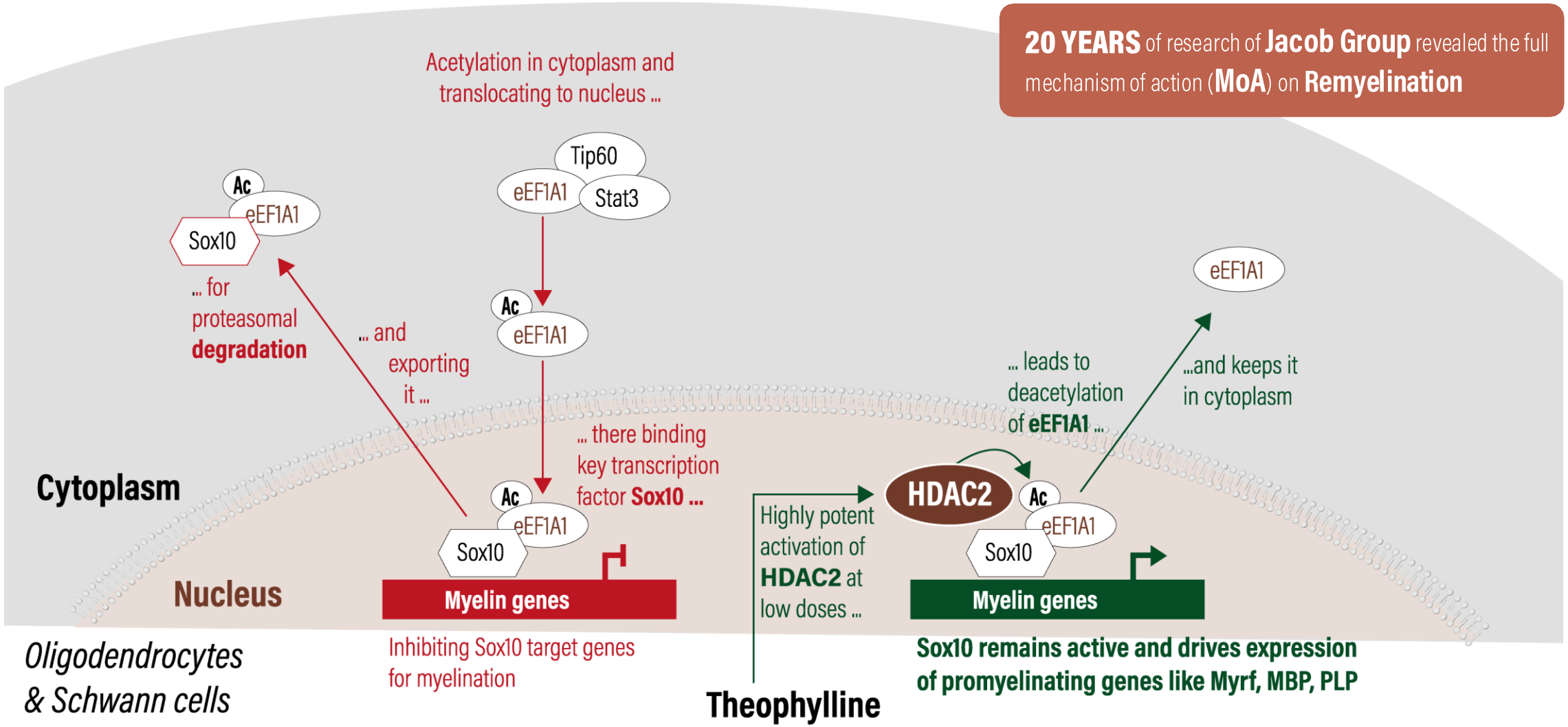


Activating Regeneration via Epigenetic Pathways

Theophylline modulating epigenetic HDAC1/2 pathways, leading to efficient activation of remyelination by oligodendrocyte precursor cells (OPCs)

We target the novel epigenetic factor of HDAC2, that induces the full program of remyelination

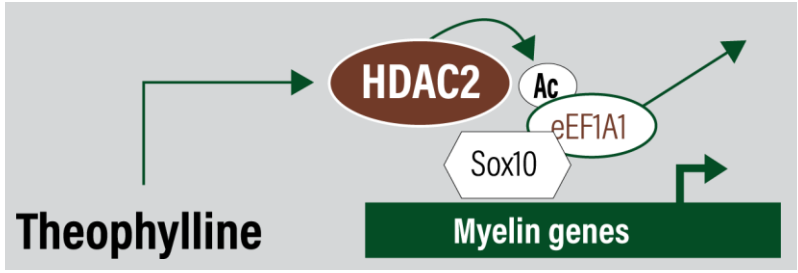
Theophylline is a highly potent HDAC2 activator when used at low doses



Unpublished data demonstrating additional therapeutic benefits

Treating MS at 4 different levels for maximal efficacy

Low risk approach



Highly innovative, first-in-class epigenetic gene activation approach

Potential to be first on market drug for remyelination

1 **Enhancing remyelination**

\+

2 **Protecting oligodendrocytes**

3 **Decreasing immune cell attacks**

4 **Decreasing microglia activation**

Additional unpublished confidential pre-clinical, manuscript in revision for publication

Our transdermal patch outperforms oral formulations

No commercial risk due to off-label use in the market

EpiGeneer Transdermal patch

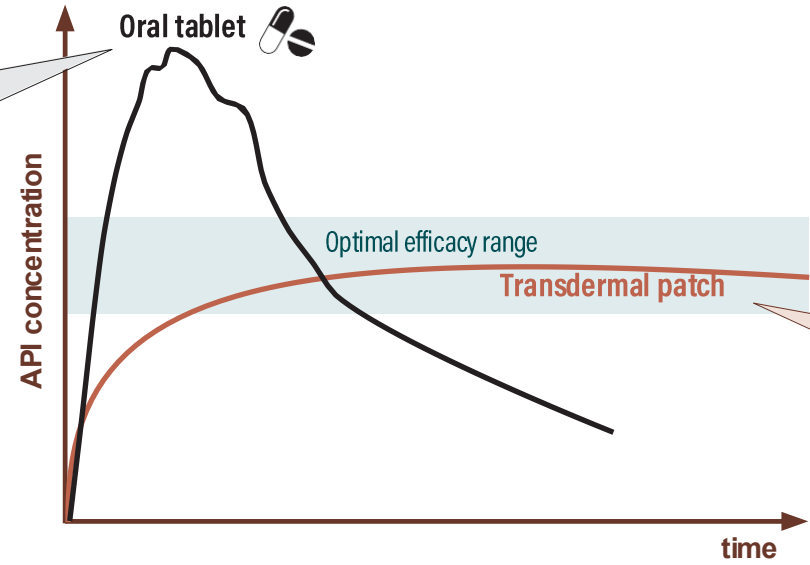
- **Constant** API release over time = constantly within therapeutic window
- **Efficient** OPC activation = constant induction of remyelination
- Very low risk of side effects due to **steady low dose delivery**

Oral tablet

- **Quick** spike and drop-off in API concentration = outside efficacy range
- **Shorter** duration of OPC activation = lower remyelination capacity
- **Higher risk** of side effects due to initial peak and accumulation

Additionally,..

- *off-label use for remyelination would violate our MOA patent*
- *doctors who would prescribe it as an individual healing attempt take a high personal risk in the presence of an approved and more potent patch*



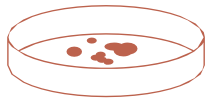
Developed for sustained release of precise dose and Improved compliance ► Increasing efficiency and minimizing side effects compared to use of oral formulations

We have compelling Pre-Clinical data

Theophylline treatment results in faster and more efficient remyelination in young and old adults

Extensive own **Pre-clinical Validation**

In Vitro
cell-based models



In Vivo
4 mouse models



MS

3x Faster Regeneration in young adults

60% more efficient in old mice

+ Data on Post-Mortem MS Brain Lesions and on human iPSC-derived oligodendrocytes confirm our translational rationale *(unpublished)*

+ Published results & Mechanism of Action in high ranking scientific journals

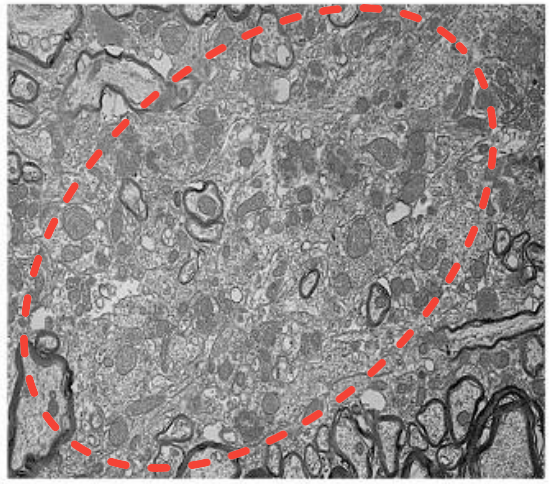


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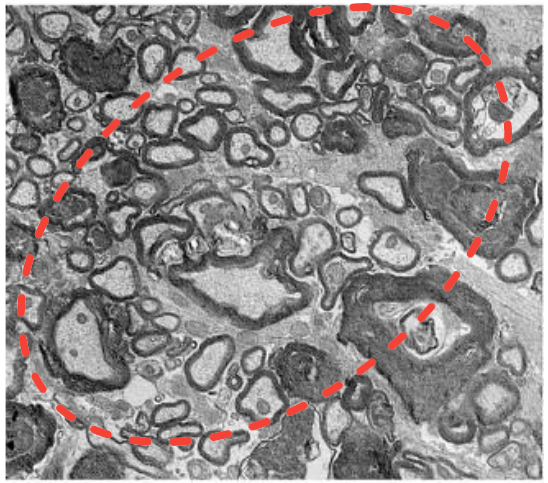
14 days post-lesion ► 4-day treatment

Vehicle



Mostly naked axons in lesion site

Theo



Mostly remyelinated axons in lesion site

Electron micrographs of spinal cord ultrathin sections in the lesion site

Lesion site



Black ring: **Myelin**
Inside: **Axon**

Our innovative MS therapy is patent-protected

MoA - Patent

"HDAC1/2 activators for promoting and/or accelerating myelination and remyelination"

Priority date June 2017

Patent Applications

- n° EP17174916
- n° PCT/EP2018/065168
- n° US20200182859A1 ***(granted)***

RoA - Transdermal Patch - Patent

"Transdermal patch for promoting or accelerating myelination and/or remyelination"

Priority date Sept. 2022

Patent Applications

- n° EP22195291, EP4587027
- n° PCT/EP2023/074981
- n° WO/2024/056642
- n° CA3267676

Our innovative MS therapy is patent-protected

EpiGeneer

JGU JOHANNES GUTENBERG UNIVERSITÄT MAINZ

"Activators of HDAC1/2 for Treating and Preventing Disorders Mediated by MyD88 and/or BTK"

Priority date May 2026

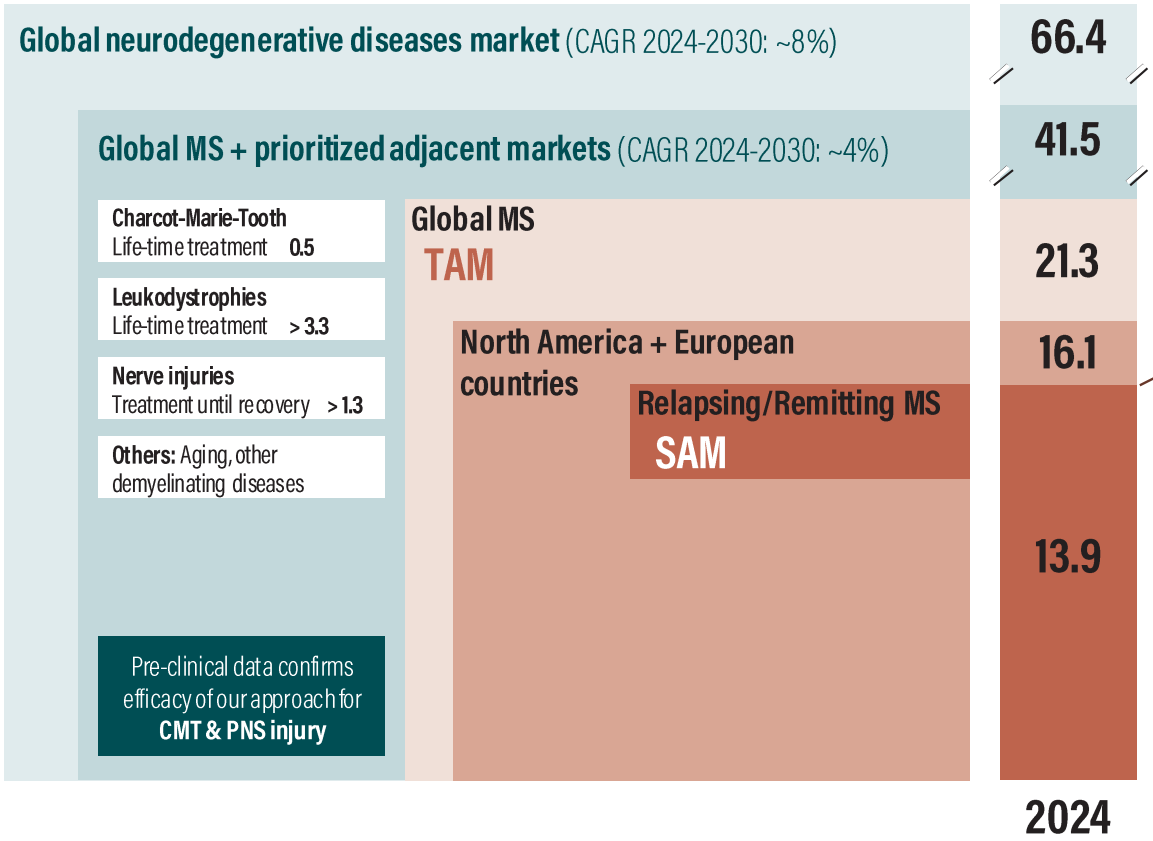
Patent Application

n° *EP26178066.2*

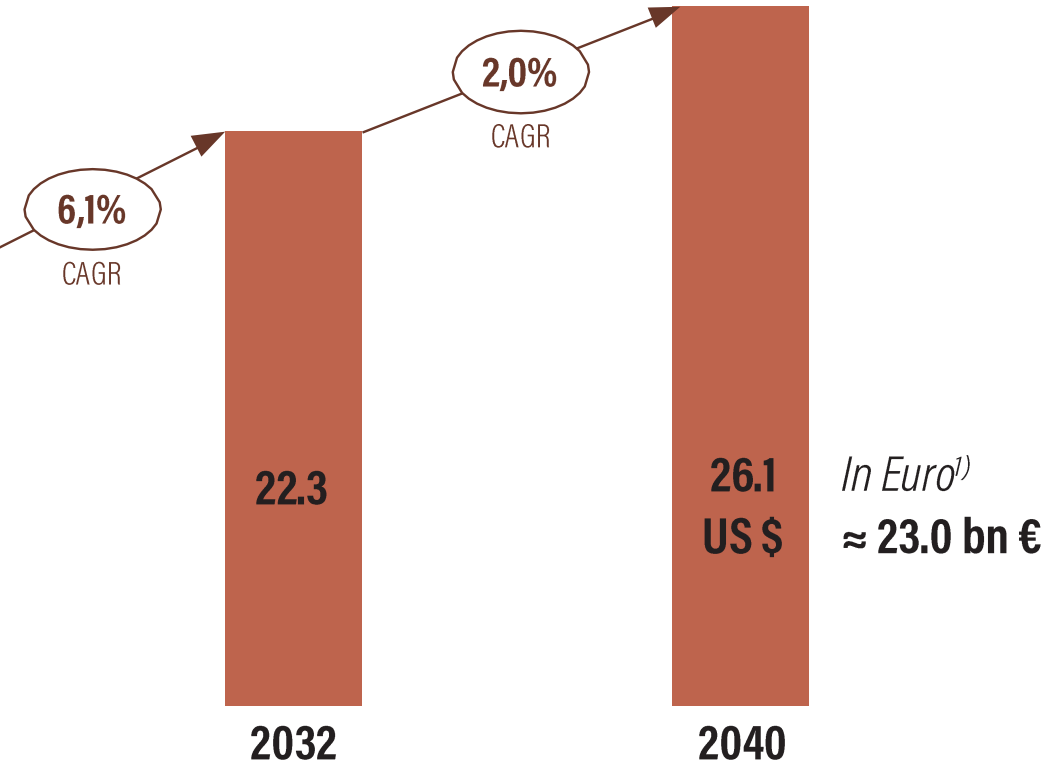
EpiGeneer's addressable MS Market is > 20 bn

With an upside potential for other neurodegenerative diseases beyond MS indication

Market for **MS** & neurodegenerative diseases in **billion US $**



Growth rate of Serviceable Available Market



In Euro[1)]

≈ 23.0 bn €

1) Average rate of last 3 years

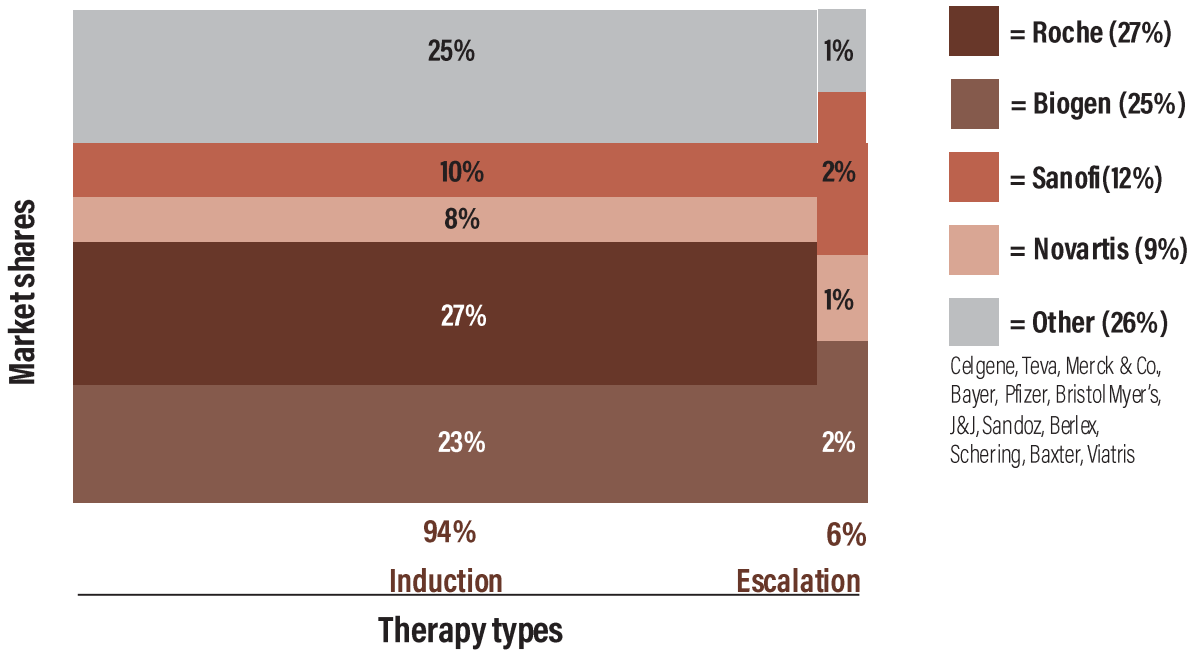
Current MS treatment market is dominated by large pharmaceutical players …

… but they are not competitors, they rather provide partner opportunities

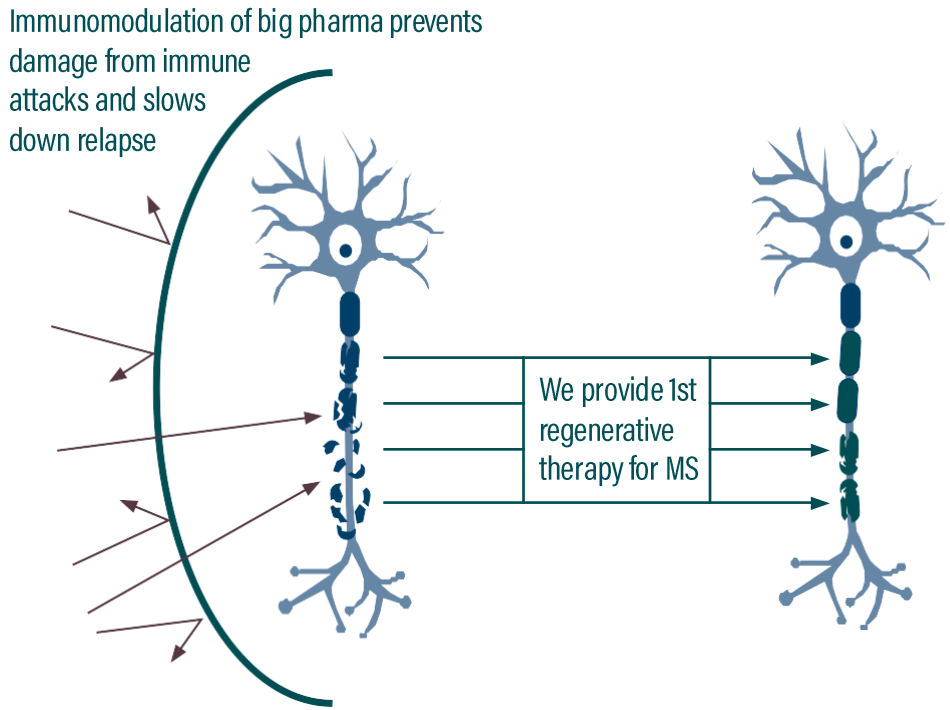
Market shares in MS treatment

2024 MS drug market: ~**21 bn $**

2032 MS drug market: ~33-40 bn $[1)]



Complementarity of approaches enables partnership



1) Some upper scenaios reach ub to 46 bn in 2034 - the role of novel and remyelinating therapies also plays a role for wide range of forecasts

Our team



Mert Duman
CEO

10 years neuroscience experience



Claire Jacob
Co-founder & CSO

Prof. Johannes Gutenberg University Mainz



Thomas Meier
Co-founder

CEO Medios AG; former CEO Bachem AG



Ingo Schroeter
Strategy & Business

BCG, Philips Head of strategy + Corporate VC, Project Co-lead GeneNovate

Our Scientific Advisory Board



Roland Martin
Head of Neuroimmunology and Multiple Sclero-sis Research , University Hospital Zürich



Martin Schwab
Professor of Brain Research
at the University and ETH Zurich