

Technology Offer

Novel treatment to restore neurological function in patients with Multiple Sclerosis Ref.-No.: 0707-5835-IKF

Multiple sclerosis (MS) is the most common non-traumatic disabling disease among young adults. It affects approximately 2.8 million individuals worldwide, with increasing incidence and prevalence in both developed and developing countries.

The current immunomodulatory treatments for MS primarily address inflammation but fall short in promoting myelin repair and neurological function restoration.

Therefore, there is an urgent need for novel therapeutic strategies that can both reduce inflammation and restore neurological function in MS patients.

Technology

Researchers at the Max Planck Institute of Experimental Medicine have identified **squalene**, a cholesterol-synthesis intermediate, as pharmaceutically active agent for **use in the prevention** and/or **treatment of demyelinating disorders such as multiple sclerosis**.

This compound acts as **LXR agonist**, facilitating the **resolution of inflammatory processes** and promoting the availability of cholesterol necessary for **remyelination**.



Oral administration of **squalene** in relevant **mouse models** of demyelinating diseases has demonstrated the resolution of inflammation and the promotion of remyelination, with a **significant improvement in the clinical score**.

Therefore, **squalene** could serve as a **valuable complement** to disease-modifying therapies, significantly **enhancing their effectiveness** and offering new hope to patients affected by Multiple Sclerosis.

Patent Information

International Patent Application No. PCT/EP2020/084338, filed on December 2, 2020.

Opportunity

We are open to **research collaborations** or **license agreements** to accelerate the integration of this promising compound into the clinical practice.

Contact

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