

Key Takeaways



As of 2021, the percentage of clinical trials related to mitochondrial dysfunction is **negligible compared to trials focused on other hallmarks of ageing (~3% of the total amount)**. **In Switzerland only 15 clinical trials for study of mitochondrial function are provided for the last 10 years:** 8 trials for therapeutic programmes, 3 - dietary supplements, 3 - behavioral study.



Many of the BioTech companies in the country are connected to **the University of Lausanne (UNIL)**, as well as the renowned **Swiss Federal Institute of Technology Lausanne (EPFL)**. BioTechs in Lausanne are particularly solid in medical applications. The pharmaceutical companies, **Nestle, Roche** and **Novartis**, also provide fundamental research and study therapeutic targets of mitochondrial dysfunction.



A spin-off of EPFL, **Amazentis**, is developing anti-ageing products based on a **uroolithin A**, targeting PINK1, which has been shown to improve the mitophagia process. The company is conducting clinical trials using this molecule to target **age-related muscle decline**, or **sarcopenia**, which affects many people as they grow older.



Cellvie, a Harvard spin-off founded in the US with headquarters in Zurich, pioneering **therapeutic mitochondria transplantation**. Employing proprietary preparation and delivery techniques, Cellvie is transplanting mitochondria directly into compromised cells. The company has now set out to bring it about as a new treatment modality in **ischemia-reperfusion injury, ageing, and beyond**.



Research & Development centres focus on the treatment of **muscle dysfunction, neurodegenerative disorders, obesity, wound healing**, etc. R&D centres create an important background for BioTech companies. So, the **new mitochondrial approach** in Swiss BioTech market will be intensively developed in the next few years.
