

MB THERAPEUTICS: THE STARTUP THAT IS REINVENTING THE PHARMACEUTICAL SECTOR

MB Therapeutics was founded to offer a new generation of medications to patients. In the future, your medications will be produced on-demand and customized to meet your specific needs. A closer look at a unique process in France that addresses both health, environmental, and economic challenges.

Key Challenge and First Step: Improving children's health with a new generation of medications.

Because patients, especially children, deserve medications tailored to their needs, MB Therapeutics was born.

"We are excited to launch MB Therapeutics and provide innovative solutions to meet the needs of patients in personalized medicine, especially those of children," said Dr. Stéphane Roulon, co-founder of the company.

Currently, for certain medical conditions, the pharmaceutical industry does not meet the needs of children. That's why pharmacists prepare medications with customized dosages (38% of children receive at least one medication prepared by a pharmacist [1]). However, "We do not have a process for automatically producing customized solid oral forms," said Dr. Ian Soulairol, co-founder of the company and hospital pharmacist. Capsules and tablets are not suitable for children in terms of size and quantity of active ingredient. Furthermore, liquid suspensions carry a risk of administration errors. In fact, 40% of parents make dosing errors when administering medication to their children [2].



Next-generation personalized medications: Taste, smell, shape, and dosage are tailored to the child.

With the MB Therapeutics solution, pharmacists will be able to produce ondemand, personalized dispersible medications that are easy to administer and have the correct dosage, **preventing any errors**.



Pharmaceutical 3D printing, a solution for industrial sovereignty and waste reduction

Using 3D printing technology, MB Therapeutics enables pharmacists to produce oral forms tailored to the specific needs of each patient. The solution can address **supply shortages** by giving hospital pharmacies and community pharmacies with compounding capabilities the ability to produce medications with industrial quality automatically. Moreover, this solution contributes to a healthcare improvement by reducing medication waste, which amounts to 15,000 tons in France [3].

It is possible to produce medications with personalized dosages and also modify their forms to make them easier to swallow. Multiple active ingredients can be combined to reduce the number of medications to be taken, especially for elderly individuals, for example.



Medication 3D Printer: MED-U Modular and medications of various sizes and shapes

MB Therapeutics collaborates closely with healthcare professionals, including the University Hospital Center of Nîmes, to develop customized medication production solutions for children with illnesses. The company is confident that the use of 3D printing technology can have a significant impact on the quality of life for children and their families.

MB Therapeutics history

MB Therapeutics is the result of over 8 years of experience led by Dr. Stéphane Roulon at Sanofi and Dr. Ian Soulairol at the Faculty of Pharmacy of the University of Montpellier and the University Hospital Center of Nîmes. These research efforts led to a collaboration with Lynxter, a company based in Bayonne specializing in the development and production of industrial 3D printers. Over the years, this collaboration fostered friendship and a shared desire to go further for the benefit of patients. It's through this partnership that MB Therapeutics was founded in 2023 by Stéphane Roulon and Ian Soulairol. By 2026, patients will be able to benefit from personalized medications.





Stéphane Roulon (left) et lan Soulairol (right)

MB Therapeutics is a company born in Montpellier, thanks to the support provided by BIC 3M, the AD'OCC region, and BPI.

About MB Therapeutics

MB Therapeutics is a startup located at the Faculty of Pharmacy in Montpellier. Specializing in personalized medicine and 3D printing technology, the company aims to improve drug administration. They are currently in the process of recruiting three engineers to join the team of two doctors.

Patients who are especially close to the hearts of these two young fathers: Children with heart diseases.

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Access MB Therapeutics Photographs:

https://1drv.ms/f/s!AkEi8RAVxn3lpyMqE8qw-qIS7zc4?e=wbJOaK

Access Demonstration Videos:

https://1drv.ms/f/s!AkEi8RAVxn3lpyQkllogBPKyXL9t?e=6FLD2h



Sources:

- [1] http://pediatrics.aappublications.org/content/pediatrics/135/1/49.full.pdf
- [2] <u>https://publications.aap.org/pediatrics/article-abstract/134/2/e354/32966/Unitof-Measurement-Used-and-Parent-Medication?redirectedFrom=fulltext</u>
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