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## Flowbone Raises CHF 2.1 Million to Bring Nanomedicine-based Bone Repair to the Market

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flowbone, an EPFL spin-off active in the field of bone regeneration, has closed a seed round for CHF 2.1 million, mostly with experienced business angels. The funds enable the company to prepare its US market entry, including FDA clearance for a first bone repair product, and to continue its pre-clinical developments for the strengthening of osteoporotic bone. flowbone won a Venture Kick award in 2020 and was a Venture Leader Medtech in 2021. The startup was featured at the TOP 100 Swiss Startup Award in 2021.

Founded by Dr. Ulrike Kettenberger, Prof Dominique Pioletti, and Dr. Régis Gauderon and incorporated in July 2020, [flowbone](#) leverages regenerative nanomedicine to transform the care of millions of patients with bone diseases and disorders, such as osteoporosis. Currently, flowbone is transferring its technology to the first commercial product for bone repair. The company will target the treatment of bone marrow lesions, a condition associated with knee osteoarthritis. The goals consist of stopping pain, slowing down the progression of the disease, and preserving joints.

In addition to the CHF 2.1 million seed round, flowbone benefits from non-equity-based grants and awards, totaling CHF 2.2 million. The latest award received is the [Healthy Longevity 2022 QuickFire Challenge](#) from the National Academy of Medicine, which includes grant funding and access to mentorship from experts across the Johnson & Johnson Family of Companies.

Gaëtan Marti, serial entrepreneur and one of the business angels supporting flowbone, explains “With aging population, fractures resulting from osteoporosis will significantly increase. Since current osteoporosis drugs have only limited efficacy in the hip region, there is an urgent need for a complimentary, local, and simple procedure to build up bone mass to resist breaking. This is why I am excited to back the talented and experienced flowbone’s team on their mission to reduce the incidence of osteoporotic hip fractures thanks to their

breakthrough nanotechnology.”

Flowbone’s platform technology is based on a hydrogel matrix incorporating a few percent of mineral nanoparticles, made of one of the main ingredients of natural bone. The nano-biomaterial, which can easily be injected percutaneously into weakened bone tissue, stimulates the body’s natural ossification process. Within weeks, native bone is repaired and strengthened; no residues of the injected material are left behind.

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Read the [original article](#) on Venturelab.