

In nanomedicine, the decisive question is no longer what nanoparticles can do, but what actually reaches patients. The pattern is consistent: simple, robust, scalable systems translate, while more complex architectures often stall between the paper and the clinic. This talk follows one platform of sphingomyelin-based nanoparticles, from a first generation for small molecules, proteins and peptides, to a second generation for mRNA and gene therapy, and the steps needed to carry it across the translational gap. Using DIVERSA, a hospital-born spin-off, as a case study, I will argue that small, focused companies play a specific and often underestimated role: they translate the science, serve the wider ecosystem, and help build the shared infrastructure the field needs to move.