

Category

Best Incubator, Accelerator, Equity

Drug / Device Name

N/A

Compound/ Tech Name**Trade Name****Date of Approval**

N/A

Indications

N/A

Therapeutic Categories

N/A

Background information and need for drug/device

N/A

History of the development of the drug/device

N/A

Why this drug or device is innovative, the broad implications for future research, and/or how it will improve the human condition

The Novartis Biome surrounds partners with a network of resources and unique platforms to support their success.

The support begins with our flagship 'partner relationship management' platform called the Digital Brain. This tool tracks engagement with partners and helps internal Novartis teams connect with them to find opportunities to expand their solution into other use cases and markets. Recently, we opened this platform to external partners, allowing them to curate their profiles and facilitate connections directly with business teams at Novartis (See Appendix 3).

Through our Enablement Guild, we have recently developed a 30-day contracting process bespoke for innovators versus the 180-day average contracting period time before the Novartis Biome. We also offer a white glove service to support innovators as they navigate the necessary compliance checks to be approved as a partner (See Appendix 4).

The Novartis Biome provides complementary subject matter experts as needed to support health tech innovators in developing their solutions. These are in areas such as regulatory affairs and legal support,

where Novartis has extensive and broad experience.

The Novartis Biome also helps channel unique capabilities and resources to our innovators through several larger strategic partnerships with companies like Amazon and Microsoft. Our innovators can access free cloud computing and technical development resources as needed.

As discussed above, we have established an industry-first platform called the Evidence Lab. The Evidence Lab collaborates with hospitals and health systems to test digital health solutions in real-life contexts. This real-life testing accelerates product-market fit and successful commercial deployment.

The Novartis Biome also plays the role of connector within Novartis, coordinating with other teams internally to support the scaling and international expansion of solutions to new healthcare system contexts. In this way, we have helped scale 10+ solutions across health systems, some internationally.

Please provide appropriate references (ie Pubmed links)

While the Novartis Biome program is bespoke to each of the startups and healthcare innovators involved, below we offer some examples of the amazing impact on healthcare we have been able to achieve together with our partners.

Hemex Health: Hemex Health was one of the inaugural companies participating in the Novartis Biome program. We supported Hemex Health by matching them with Novartis' Global Health initiative to improve access to medicines for Sickle Cell disease patients. Moreover, the Novartis Biome provided regulatory support to accelerate the approval of Hemex's point-of-care diagnostic (The Gazelle) in Ghana so that it could be incorporated into the launch of the initiative. The introduction of Hemex's solution was critical to effectively diagnosing patients. Together, Hemex and Novartis are saving lives that would have otherwise been lost due to lack of healthcare access. Given the success of the initial program, Novartis recently expanded its commitment to place Hemex's Gazelle diagnostic solution in more regions and countries in Sub-Saharan Africa. Based on this initial program, the Novartis Biome launched a hub in Sub-Saharan Africa last year to focus on democratizing access to digital innovation to support the journey towards greater health equity for that region. See Appendix 5: link to video case study and accompanying news articles for more context on the program and its impact.

Tilak Healthcare: The Novartis Biome engaged France-based Tilak Healthcare early in its startup journey. Together, we worked to measure the potential of their Odysight solution to transform healthcare access and quality for patients with degenerative eye diseases, most of whom are elderly and often lack an optimal care support structure. We conducted a market test—in coordination with our Ophthalmology business unit—to characterize the impact across 2,500+ patients and 800 ophthalmologists. The market test generated critical data that indicated the potential for Tilak's solution to have a positive impact in supporting patients with chronic eye diseases. During this validation period, the patient support platform achieved engagement rates that rivaled well-known social media platforms like Facebook and Instagram. The solution also achieved a high net promoter score rating from ophthalmologists who used the solution with patients, indicating a fit into the existing flow of healthcare delivery. Based on this validation data, Novartis ultimately decided to support expanding Tilak's solution internationally, and the Novartis Biome coordinated a multinational expansion effort to help launch it in markets like US, Spain, and Germany. See Appendix 5: link to video case study for more context on the program.

UK National Health Service (NHS): The Novartis Biome has increasingly focused on partnering with healthcare systems across the world to accelerate their innovation agendas to improve access and delivery to patients. Over the past three years, through the Health Hub accelerator (a subsidiary of the Novartis Biome UK), we have partnered with the NHS to define problem statements and select innovators to address these problems. In 2020, the Novartis Biome UK's Health Hub platform played a vital role in supporting the NHS's response to the emerging Covid-19 pandemic. See Appendix 5: read more about the partnership with the NHS in the attached supplementary information.

Medable: Medable is a leading provider of decentralized clinical trial solutions and was recently valued at \$2.1 billion during its most recent round of fundraising. The Novartis Biome supported Medable to accelerate its onboarding into Novartis and navigate the third-party compliance checks required to be deployed into clinical trials. This acceleration led to Novartis being one of their first large pharma customers, supporting their pathway for subsequent growth and success. See Appendix 5: link to video case study.

Biofourmis: Our Novartis Biome Singapore Hub engaged Biofourmis early in the company's lifecycle and supported pilot studies in combination with our heart failure medication Entresto. These studies helped to demonstrate the value of Biofourmis's platform, which was able to reduce re-hospitalizations of heart failure patients. This evidence prompted a much larger strategic partnership and expansion of the solution into the US. Recently, Biofourmis raised \$300 million and is valued at more than \$1 billion. See Appendix 5: link to quote from COO of Biofourmis on impact of the Novartis Biome on growth of company.