



Huma Therapeutics Recognized for

2021

Technology Innovation Leadership

European

Digital Hospitals at Home Industry

Excellence in Best Practices

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Huma Therapeutics excels in many of the criteria in the digital hospitals at home space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Business Impact</i>
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Stage Gate Efficiency	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

Ensuring a Longer, Fuller Life

Healthcare systems worldwide face the pressures of rising costs, personnel shortages, and the ever-increasing challenges put forth by the COVID-19 pandemic. Responding to these challenges, innovative digital solutions enable new care delivery models, expanded care access, and improved total wellbeing, patient outcomes, and, ultimately, greater value to all stakeholders.

Founded in 2011, Huma Therapeutics (Huma) is an innovative health technology company designing and developing healthcare software. Leveraging its considerable experience, Huma provides a software platform to support digital ‘hospital at home’ across various disease areas. Its ‘hospital at home’ technology remotely and continuously collects patient-generated data, enables greater access to care outside of conventional settings, improves healthcare efficiency, and empowers patients to manage their health better. The company works alongside scientists, healthcare organizations, pharmaceutical companies, and governments to help provide better care and research through digital hospitals at home and decentralized clinical trials.

“Leveraging its considerable experience, Huma provides a software platform to support digital ‘hospital at home’ across various disease areas.”

- Pavel Zhebrowski, Best Practices Research Analyst

Huma’s platform leverages predictive algorithms, digital biomarkers, and real-world data to advance proactive, predictive care and research. The company aims to allow more people to access patient care or participate in clinical trials when at home or going about their daily lives through remote monitoring.

Huma does so by using real-time health data collected simply through smartphones. Gathering real-time health data from patients creates insights leading to tangible improvements in diagnosis, treatment, and prevention.

The modular solution tracks symptoms and vital signs, flags deterioration, incorporates telemedicine functionality, and integrates with medical devices. As a result, it helps patients, clinicians, researchers, and entire healthcare systems to provide care and research globally and seamlessly.

Huma's technology connects clinicians with patients, facilitating remote care through 'hospital at home' for a particular episode of care as well as chronic and long-term illnesses. This approach eases pressure on healthcare systems (by preventing avoidable hospital visits) and helps patients better understand and manage their health. The company brings infrastructure to capture, ingest, structure, and analyze continuously generated high-frequency patient data to develop and validate artificial intelligence (AI)-driven digital phenotypes, digital biomarkers, and predictive algorithms to support predictive and proactive healthcare. Specifically, it provides a device-agnostic application (app) for iOS and Android, enabling remote patient data capture and timeline tasks and delivering educational content and questionnaires for improved patient engagement. The app is easily configurable from a portfolio of various modules and features to meet exact user needs.

Also, a web-based portal provides clinicians with insights into patient data generated from their app and enables multiple patient cohort management. It also allows remote monitoring and patient prioritization through automated flagging systems and incorporates telemedicine for direct communication. As a result, clinicians can quickly and securely connect with patients to ensure their care plan is on track or relay irregularities flagged in their health records.

Huma's platform integrates health data from existing hospital databases, patient wearables, and other mobile devices and transmits it to clinicians. Also, clinicians can export data from the web-based portal in multiple formats and integrate with electronic health systems and data lakes to enable data export automatically based on set timeframes.

Today, healthcare is not only about regular appointments to check disease progression or determine the course of treatment. It is evolving to a more proactive approach, with patients becoming more aware and involved in their health and wellness and healthcare providers and researchers driving actions to improve outcomes. Therefore, Huma aims to collect and analyze data intelligently through specific algorithms, providing more predictive and proactive care as opposed to conventional reactive approaches; thus, allowing people to live longer, fuller lives. Its 'hospital at home' technology improves patient outcomes, increases pathway efficiency, optimizes the patient journey, enhances clinical decision-making, generates insights to optimize treatment, and empowers patients to manage their health, distinctly differentiating in the space.

Impactful, Collaborative, and Passionate Approach Brings Value for the Healthcare Space

Apart from its considerable expertise and innovative, flexible platform, Huma leverages a patient-centric philosophy, with the patient at the heart of everything it does. Thus, the company works closely with the patients, clinicians, and other healthcare providers to collect their feedback and address all the pain points

they experience. It receives positive feedback from patients (93% patient satisfaction in using the Huma app), who are very satisfied with the easy-to-use tool. Huma works closely with its partners, so its product design positively speaks to patients, ensuring a solid adherence level (90% patient adherence in using the Huma app).¹

The company understands that healthcare systems are completely overburdened, facing continuously rising costs, an increasingly aging population, clinician shortages, and limited access to care. Also, dramatic issues with the COVID-19 pandemic resulted in overcrowded hospitals and limited bed capacity coupled with restricted medical personnel availability. Furthermore, many chronic disease patients cannot go to the hospital for their usual check-ups. Huma believes that seamlessly collecting patient data provides a meaningful way for caregivers to decide on appropriate treatment steps proactively; thus, ensuring convenience for patients and reducing the burden on healthcare systems.

Specifically, supporting the battle against the COVID-19 pandemic, the company helps manage self-isolated patients diagnosed with COVID-19 by using remote monitoring under the virtual supervision of a care team. This approach effectively tracks a patient's COVID-19 infection and enables timely interventions to avoid sudden deterioration while optimizing the capacity of clinical resources and healthcare systems.²

Responding to market and customer demands, Huma has been successful in bringing valuable use cases. It runs live 'hospital at home' projects across the United Kingdom (Huma is an approved supplier for remote patient monitoring for the National Health Service), Germany, India, and the United Arab Emirates. Notably, the company's 'hospital at home' platform was deployed in more than 100 clinics in Germany in a single day. The solution can reduce readmission rates by over 30% while almost doubling clinical capacity. Frost & Sullivan appreciates how Huma's customer-oriented approach adds real value to patients' wellbeing and contributes to their longer, fuller lives.

"The company's platform is highly configurable: users can choose any information available for different access and various levels. Huma offers an agnostic forum to therapeutic areas, device types, and cloud environments; thus, platform versatility makes it open for partnership opportunities, including leading clinical research organizations, healthcare providers, payers, and technology companies."

- Pavel Zhebrouski, Best Practices Research Analyst

The company differentiates itself from competing solutions through its proven accuracy. Its 'hospital at home' platform complies with Good Clinical Practice, 21 CFR Part 11 & Part 50 & ISO27001. It is also CE-marked as a Class I medical device for remote patient monitoring. Huma's effective partnership strategy further drives its innovation focus and growth.

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¹ <https://huma.com/>, accessed August 2021

² <https://huma.com/covid-19/healthcare>, accessed August 2021

opportunities, including leading clinical research organizations, healthcare providers, payers, and technology companies.

Notably, the synergy between Huma and Smith+Nephew resulted in Peri-Op solution helping clinical teams support patients before and after knee or hip replacement surgery. The app allows patients to remotely track symptoms, outcomes, and vitals, helping hospitals to plan their surgical pathways; thus, improving patient care.³ It also partners with Discover-NOW to drive remote care for Type 2 diabetes patients. Video consultations and remote monitoring through the Huma app help improve patient experience and reduce costs.

Huma works with leading life science companies, including AstraZeneca, Bayer, and Janssen. The company validates its platform's apparent benefits and high-quality outcomes by leveraging clinical and scientific research. It works jointly with leading academic institutions such as Stanford Medicine, the Johns Hopkins Bloomberg School of Public Health, and the University of Cambridge.⁴

'Hospitals at home' is only a part of Huma's vision for bringing value to the healthcare space; the research at home concept is the other part. The company provides the same platform and powerful capabilities to identify and drive research. Specifically, its Decentralized Clinical Trials and digital companion products remotely and continuously collect patient-generated data, optimize clinical trials, post-approval research, real-world data, and companion products. Huma's platform accelerates timelines and reduces costs, recruits suitable patients quicker, keeps patients engaged and improves retention, and supports real-world evidence collection while generating novel insights to improve therapies and transform the clinical trial experience.

With its focus on continuous growth, the company completed its latest funding round with approximately \$130 million. This investment will scale its modular platform powering digital 'hospitals at home' nationally and support the pharmaceutical and research industries to run the largest ever decentralized clinical trials.⁵

Frost & Sullivan commends Huma for its innovative mindset, ongoing excellence, as well as its leadership role in setting new market trends that address unmet customer needs. The company is in a good position at the right time to lead the digital therapeutics space as it brings its remarkable 'hospitals at home' solution to market.

³ Huma's Peri-Operative solution for Smith & Nephew, <https://info.huma.com/periop-solution>, accessed August 2021

⁴ Huma raises \$130 million financing to scale its digital health platform for better care and research, <https://www.prnewswire.com/news-releases/huma-raises-130-million-financing-to-scale-its-digital-health-platform-for-better-care-and-research-301288726.html>, accessed August 2021

⁵ Ibid.

Conclusion

As the cost and resource constraints intensify, exacerbated by the COVID-19 pandemic, the need to shift care out of hospitals to the home environment is even greater. This situation requires digital healthcare companies to expand their existing capabilities and develop new functionalities to ensure usability and efficiency. Responding to these needs, Huma Therapeutics (Huma) provides a software platform to support digital 'hospital at home' across various disease areas. Huma's 'hospital at home' technology remotely and continuously collects patient-generated data, enabling greater access to care outside of conventional settings, improving efficiency, and empowering patients to manage their health better.

For its commitment to innovation and strong overall performance, Huma is recognized with Frost & Sullivan's 2021 European Technology Innovation Leadership Award in the digital hospitals at home market.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Award Analysis

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

