

LimmaTech Biologics Raises \$37 Million Series A to Advance Its Pipeline of Vaccines Against Multidrug-Resistant Bacterial Infections

Schlieren (Zurich), October 9, 2023 - [LimmaTech Biologics AG](#) today announced the closing of a USD 37 million (CHF 33 million) Series A financing round co-led by Adjuvant Capital, AXA IM Alts, and the Novo Holdings REPAIR Impact Fund. The proceeds will enable LimmaTech to advance its proprietary technology platform and accelerate its pipeline of preclinical and clinical vaccine candidates against increasingly dangerous bacterial infections, including programs addressing shigellosis and gonorrhea. Later-stage clinical development efforts will focus on the company's *Shigella* vaccine program, which LimmaTech developed as part of a joint collaboration with GSK and recently [exclusively in-licensed](#). The company expects to announce preliminary results from the *Shigella* program's ongoing Phase 2 clinical trial in the second half of 2023.

As part of the company's next phase of corporate growth, LimmaTech also welcomed seasoned biotech industry leader [Dr. Franz-Werner Haas](#) as CEO. Concurrent with the financing, Kabeer Aziz from Adjuvant Capital, Zina Affas Besse, PhD, from AXA IM Alts, and Camilla Petrycer Hansen, PhD from Novo Holdings will join LimmaTech's Board of Directors.

"Within the next decade, multiple bacterial infections will become untreatable due to antimicrobial resistance, which is already a significant burden on global health. By advancing our innovative technology platform, LimmaTech has the potential to simultaneously provide vaccine-induced protection against bacterial infections, mitigate the increasing risk of antibiotic resistance, and move toward the control of several highly transmissible pathogens," said **Dr. Franz-Werner Haas, CEO of LimmaTech**. "Our Series A with backing from highly experienced and strategic institutional investors reflects the increasing value of our technology and our achievements to date. With this support and our team of proven experts in bacterial vaccine development and manufacturing, we look forward to providing life-changing vaccines to address a major global medical need."

Kabeer Aziz, Partner at Adjuvant Capital, commented: "Each of the firms co-leading this financing is dedicated to using venture capital investments to support bold and innovative companies like LimmaTech that are developing technologies with the potential to generate significant improvements in global public health. Given the deadly threat posed by increasingly treatment-resistant pathogens, and the enormous scale of the problem, vaccines targeting these indications represent highly attractive commercial markets as well."

Zina Affas Besse, Partner, Deputy Head of Healthcare, Private Equity, at AXA IM Alts, further commented: “Our investment in LimmaTech through our healthcare private equity strategy supports our wider goal of investing in companies with innovative and affordable solutions to global health challenges and we are proud to collaborate with this outstanding team of biotech industry veterans. LimmaTech’s leadership team has a long track record of success, having built two vaccine technology platforms with programs in late-stage clinical development. We are happy to support LimmaTech in growing its pipeline of much-needed vaccine candidates and contributing to improving health globally.”

Camilla Petrycer Hansen, Principal at Novo Holdings and REPAIR Impact Fund, said: “Our investment in LimmaTech reflects Novo Holdings’ continued commitment to tackling antimicrobial resistance. We believe that with its outstanding record of success in the vaccine field, its seasoned leadership at the helm, and its promising technology, LimmaTech represents a very attractive investment opportunity, which we are pleased to pursue in partnership with leading investors. We are thrilled to support LimmaTech’s pipeline of much-needed vaccine candidates with the potential to significantly improve health outcomes globally.”

The Series A is the first venture-backed round of funding for LimmaTech since it was spun out of GlycoVaxyn, its predecessor company that was acquired by GSK in 2015. LimmaTech’s leadership team has in-depth bacterial vaccine development and manufacturing expertise, having sponsored, and led several clinical trials around the world. LimmaTech's unique technology platforms are all based on *E. coli* expression systems. These technologies allow the production of multivalent vaccines combining carbohydrates and protein antigens with broad and novel modes of action. The company’s overall objective is to develop and manufacture highly effective vaccines that can stop the spread of infections caused by emerging antimicrobial resistance.

About Antimicrobial Resistance (AMR)

AMR is responsible for approximately 5 million deaths annually.¹ Nearly one million of these deaths occur in children under the age of five, and these numbers are rising at an alarming rate. Treatment with antibiotics has historically been able to reliably stop bacteria from growing or kill these pathogens, however, inappropriate or excessive use of antibiotics has caused bacteria to develop natural resistance to these agents. As a result, infections that were once easily treatable have now become difficult, if not impossible, to cure. As a leading example of this threat to global health, half of the approximately 700,000 annual² gonorrhea infections in the U.S. are already resistant to antibiotics as of today, and there

¹ Antimicrobial Resistance Collaborators (2022). Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *Lancet* (London, England), 399(10325), 629–655. [https://doi.org/10.1016/S0140-6736\(21\)02724-0](https://doi.org/10.1016/S0140-6736(21)02724-0)

² Center for Disease Control and Prevention. (May 16, 2023). National Overview of STDs, 2021. Retrieved August 31, 2023, from <https://www.cdc.gov/std/statistics/2021/overview.htm>

is a real threat of gonorrhoea soon becoming untreatable.³ This development is also projected for a growing number of other infections, such as *Shigella sp.*, in both developed and low- and middle-income countries. The United States Centers for Disease Control and Prevention has identified AMR as a serious threat to public health due to its resistance to reserve antibiotics. *Shigella sp.* is responsible for approximately 450,000⁴ infections in the U.S. alone, and 700,000⁵ deaths globally each year. For children, it is the most common bacterial cause of diarrheal death worldwide.⁶ The discovery of new antibiotics, while promising, has not kept pace with the growth of AMR, making the development of vaccines against pathogens with concerning multidrug-resistant patterns an essential component of any strategy to contain this deadly global health threat.

About LimmaTech Biologics AG

LimmaTech Biologics AG is applying its deep know-how of engineering complex molecules to develop next-generation vaccines to prevent life-threatening diseases. Spun out from GlycoVaxyn after that company's acquisition by GSK, LimmaTech Bio is advancing its own proprietary clinical pipeline to halt the increasing threat of global infections due to emerging antimicrobial resistance such as gonorrhoea, alongside partnered programs with GSK. LimmaTech is committed to translating novel scientific concepts into highly effective vaccines that benefit humanity. For more information, please visit www.lmtbio.com

About Adjuvant Capital

Headquartered in New York, with offices in Zürich, Adjuvant is a global life science investment fund built to accelerate the development of new technologies for the world's most pressing public health challenges. Backed by prominent healthcare and emerging market investors, Adjuvant draws upon its network of scientists, public health experts, biopharmaceutical industry veterans, and development finance professionals to identify new investment opportunities. Adjuvant invests in companies developing promising new vaccines, therapeutics, diagnostics, and medical devices targeting high-burden infectious diseases, maternal and child health, antimicrobial resistance, and malnutrition, with a commitment to make these interventions accessible globally. For more information, visit <http://www.adjuvantcapital.com>

³ Alirol, E., Wi, T. E., Bala, M., Bazzo, M. L., Chen, X. S., Deal, C., Dillon, J. R., Kularatne, R., Heim, J., Hooft van Huijsduijnen, R., Hook, E. W., Lahra, M. M., Lewis, D. A., Ndowa, F., Shafer, W. M., Tayler, L., Workowski, K., Unemo, M., & Balasegaram, M. (2017). Multidrug-resistant gonorrhoea: A research and development roadmap to discover new medicines. *PLoS medicine*, 14(7), e1002366. <https://doi.org/10.1371/journal.pmed.1002366>

⁴ Center for Disease Control and Prevention (April 6, 2023). Questions & Answers. Retrieved August 31, 2023, from <https://www.cdc.gov/shigella/general-information.html>

⁵ World Health Organization. (March 24, 2023). Extensively drug-resistant *Shigella sonnei* infections - Europe - European Region (EURO). Retrieved August 31, 2023, from <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON364>

⁶ Fleming, J. A., Gurley, N., Knudson, S., Kabore, L., Bawa, J. T., Dapaah, P., Kumar, S., Uranw, S., Tran, T., Mai, L. T. P., Odero, C., Obong'o, C., Aburam, K., Wanjiru, S., Hanh, N. T. M., Dung, L. P., & Hausdorff, W. P. (2023). Exploring *Shigella* vaccine priorities and preferences: Results from a mixed-methods study in low- and middle-income settings. *Vaccine*, X, 15, 100368. <https://doi.org/10.1016/j.jvacx.2023.100368>

About the REPAIR Impact Fund

The REPAIR (Replenishing and Enabling the Pipeline for Anti-Infective Resistance) Impact Fund was established by Novo Holdings in 2018 with a purpose to increase humanity's therapeutic arsenal in the fight against antimicrobial resistance. With a total commitment of USD 165 million, the Fund invests in start-ups, early-stage companies and corporate spin-outs in Europe and the United States and gives priority to first-in-class therapies, covering small molecules, biologics and new modalities, from the early stage of drug development to the early stages of clinical development. The Fund focuses on priority pathogens as defined by the World Health Organization and the United States Centers for Disease Control and Prevention, a catalogue of 18 families of bacterial and fungal pathogens that pose the greatest threat to human health. For more information: [REPAIR Impact Fund - Home \(repair-impact-fund.com\)](https://repair-impact-fund.com)

Novo Holdings is a holding and investment company that is responsible for managing the assets and the wealth of the Novo Nordisk Foundation. The purpose of Novo Holdings is to improve people's health and the sustainability of society and the planet by generating attractive long-term returns on the assets of the Novo Nordisk Foundation. For more information: www.novoholdings.dk

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