



## BioNTech to Acquire InstaDeep to Strengthen Pioneering Position in the Field of AI-powered Drug Discovery, Design and Development

January 10, 2023

- Acquisition to enable creation of a fully integrated, enterprise-wide capability to discover, design and develop next-generation immunotherapies at scale by leveraging artificial intelligence and machine learning technologies across BioNTech's therapeutic platforms and operations
- Builds on multi-year strategic collaboration between BioNTech and InstaDeep which included the formation of an AI Innovation Lab in 2020 and completion of dozens of joint projects
- Acquisition expected to add approximately 240 highly skilled professionals and a global network of research partners in the fields of artificial intelligence, machine learning and data science based in the world's leading global technology hubs
- BioNTech to pay an upfront consideration of approximately £362 million in cash and BioNTech shares, to acquire 100% of remaining InstaDeep shares following BioNTech's Series B investment in 2022
- InstaDeep to operate globally from London headquarters as a BioNTech company post-closing, which is expected in the first half of 2023, subject to regulatory approval

**MAINZ, Germany, and LONDON, United Kingdom, January 10, 2023** – [BioNTech SE](#) (Nasdaq: BNTX, "BioNTech") and [InstaDeep Ltd.](#) ("InstaDeep") today announced that they have entered into an agreement under which BioNTech will acquire InstaDeep, a leading global technology company in the field of artificial intelligence ("AI") and machine learning ("ML"). The transaction includes a total upfront consideration of approximately £362 million in cash and BioNTech shares to acquire 100% of the remaining InstaDeep shares, excluding the shares already owned by BioNTech. In addition, InstaDeep shareholders will be eligible to receive additional performance-based future milestone payments up to approximately £200 million. The transaction follows BioNTech's initial equity investment as part of InstaDeep's Series B financing round in January 2022.

The acquisition supports BioNTech's strategy to build world-leading capabilities in AI-driven drug discovery and development of next-generation immunotherapies and vaccines to address diseases with high unmet medical need. The transaction will combine two organizations with a common culture and is expected to add approximately 240 highly skilled professionals to BioNTech's workforce, including teams in AI, ML, bioengineering, data science, and software development. Through the acquisition, BioNTech will grow its network of global research collaborators in the field and expand its footprint in key talent hubs across the United States, Europe, Africa and the Middle East.

With the acquisition of InstaDeep, validated and novel BioNTech-trained AI- and ML-based models are planned to be embedded across BioNTech's discovery platforms and connected, through InstaDeep's DeepChain™ platform, to an integrated automated lab infrastructure. This has the objective to enable high-throughput design and testing of novel drug candidates at scale. In addition, BioNTech plans to develop novel AI and ML technology solutions which it aims to apply across key strategic and operational functions.

The acquisition builds on a successful track record of increasing collaboration between the two companies since 2019: In [November 2020](#), the companies announced a multi-year strategic collaboration and joint AI Innovation Lab to apply the latest advances in AI and ML technology to develop novel medicines for a range of cancers and infectious diseases. The companies have jointly developed multiple end-to-end AI-based applications trained on public and proprietary datasets across a wide variety of scientific domains. These include projects to enhance neoantigen selection, ribological sequence optimization for BioNTech's RiboCytokine® and RiboMab® platforms as well as the development of an Early Warning System to detect and monitor high risk SARS-CoV-2 variants, based on their ability to escape immune defenses and transmissibility potential, defined as fitness, which was announced in [January 2022](#).

"Since the inception of BioNTech, we have focused on leveraging computational solutions to create personalized immunotherapies that can reach a wide patient population," said **Prof. Ugur Sahin, M.D., CEO and Co-founder of BioNTech**. "The acquisition of InstaDeep allows us to incorporate the rapidly evolving AI capabilities of the digital world into our technologies, research, drug discovery, manufacturing, and deployment processes. Our aim is to make BioNTech a technology company where AI is seamlessly integrated into all aspects of our work."

BioNTech recognized the growing importance of AI and ML capabilities early on. For example, the fully individualized neoantigen specific immunotherapy approach ("iNeST"<sup>1</sup>) is based on mRNA encoding multiple patient-specific neoepitopes. For the first patients treated with an individualized vaccine in clinical trials starting 2014, BioNTech selected the neoepitopes manually. It invested early in developing ML-trained algorithms to improve the prediction of neoepitopes with initial results published in [Nature in 2017](#). These algorithms have been further enhanced in collaboration with InstaDeep.

"AI is progressing exponentially and our mission at InstaDeep has always been to make sure it benefits everyone. We are very excited to join forces and become one team with BioNTech, with whom we share the same culture of deep tech innovation and focus on positive human impact," said **Karim Beguir, CEO and Co-Founder of InstaDeep**. "Together, we envision building a world leader that combines biopharmaceutical research and AI with the aim to design next-generation immunotherapies that enhance medical care – thus, helping fight cancer and other diseases."

The transaction is expected to close in the first half of 2023, subject to customary closing conditions and regulatory approvals. Upon closing, InstaDeep will operate as a UK-based global subsidiary of BioNTech. InstaDeep is expected to become the centerpiece of a growing portfolio of initiatives around AI and ML at BioNTech. In addition to BioNTech-focused projects, InstaDeep will continue to provide its services to clients around the world in diverse industries, including in the Technology, Transport & Logistics, Industrial, and Financial Services sectors.

### About BioNTech

Biopharmaceutical New Technologies is a next generation immunotherapy company pioneering novel therapies for cancer and other serious diseases. BioNTech exploits a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals. Its

broad portfolio of oncology product candidates includes individualized and off-the-shelf mRNA-based therapies, innovative chimeric antigen receptor T cells, bispecific immune checkpoint modulators, targeted cancer antibodies and small molecules. Based on its deep expertise in mRNA vaccine development and in-house manufacturing capabilities, BioNTech and its collaborators are developing multiple mRNA vaccine candidates for a range of infectious diseases alongside its diverse oncology pipeline. BioNTech has established a broad set of relationships with multiple global pharmaceutical collaborators, including Genmab, Sanofi, Genentech, a member of the Roche Group, Regeneron, Genevant, Fosun Pharma, and Pfizer. For more information, please visit [www.BioNTech.com](http://www.BioNTech.com).

### **BioNTech Forward-Looking Statements**

This press release contains “forward-looking statements” of BioNTech within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include, but may not be limited to, statements concerning: the expected impact of this proposed acquisition on BioNTech’s and InstaDeep’s business; the timing of the closing of the proposed acquisition; the creation of long-term value for BioNTech and InstaDeep shareholders; potential synergies between BioNTech and InstaDeep and their businesses; the ability of the DeepChain™ protein design platform to engineer new mRNA sequences for protein targets; the ability of the SARS-CoV-2 Early Warning System to predict potential high-risk variants; the ability of AI and ML to advance drug discovery and development of new drug classes; the ability of AI and ML to quicken and scale up the delivery of next generation of diagnostics and therapeutics; the ability of ML and edge analytics to identify novel predictive biomarkers, inform patient selection, and accelerate the development of therapeutic programs; the ability to utilize AI and ML applications to further optimize manufacturing and supply chain processes, including by using robotics and autonomous decision-making; and BioNTech’s efforts to combat COVID-19. Any forward-looking statements in this press release are based on BioNTech current expectations and beliefs of future events, and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: the possibility that the proposed transaction may not close, the reaction to the proposed transaction of InstaDeep’s business partners, the reaction of competitors to the proposed transaction, the retention of InstaDeep employees, BioNTech’s plans for InstaDeep, the future growth of InstaDeep’s and BioNTech’s businesses and the possibility that integration following the proposed transaction may be more difficult than expected; the risk that InstaDeep’s collaborations will not continue or will not be successful; risks related to InstaDeep’s ability to protect and maintain InstaDeep’s intellectual property position; risks related to InstaDeep’s capital requirements, use of capital and unexpected expenditures, including InstaDeep’s ability to manage operating expenses or obtain funding to support planned business activities or to explore and establish strategic alternative transactions; risks related to InstaDeep’s ability to attract and retain personnel; and the ability of AI and ML to produce improvements in the drug discovery and development process or deliver efficiencies in drug manufacturing, logistics and supply chain.

For a discussion of these and other risks and uncertainties, see BioNTech’s Quarterly Report on Form 6-K for the quarter ended September 30, 2022, filed with the SEC on November 7, 2022, which is available on the SEC’s website at [www.sec.gov](http://www.sec.gov). All information in this press release is as of the date of the release, and BioNTech undertakes no duty to update this information unless required by law.

### **About InstaDeep**

InstaDeep is a leader in decision-making AI systems with headquarters in London, and offices in Paris, Tunis, Lagos, Dubai, Cape Town, Berlin, Boston and San Francisco. InstaDeep was founded in 2014 in North Africa and has been named for three consecutive years to CB Insights’ influential AI 100 ranking, which showcases the 100 most innovative private artificial intelligence companies in the world. It was also named in 2022 as one of Europe’s 100 most promising B2B companies by the Financial Times-backed media site Sifted. With expertise in both machine intelligence research and concrete business deployments, InstaDeep gives its partners a competitive advantage in an AI-first world. Leveraging its extensive know-how in GPU-accelerated computing, deep learning and reinforcement learning, InstaDeep products, such as its DeepChain™ protein design platform, tackle the most complex challenges across a range of industries. InstaDeep has also developed collaborations with global leaders in the AI ecosystem, such as Nvidia and Google Cloud and has published joint research with DeepMind.

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<sup>1</sup> Program for personalized cancer vaccines initiated by BioNTech in 2012; in collaboration with Genentech (a member of Roche Group) since 2016.