UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 UNDER
THE SECURITIES EXCHANGE ACT OF 1934

For the month of October 2026

Commission File Number: 001-39173

NovaBridge Biosciences

2440 Research Boulevard, Suite 400
Rockville, MD 20850
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Management Change

On October 28, 2026, NovaBridge Biosciences (the "Company") announced the appointment of Charles "Chuck" Silberstein, M.D., M.B.A., CFA as the Company's Chief Financial Officer, effective November 2, 2026. Dr. Silberstein succeeds Ming (Kyler) Lei, who tendered his resignation as the Company's Chief Financial Officer, effective October 30, 2026. Mr. Lei's resignation was not the result of any disagreement with the Company on any matter relating to the Company's operations, policies or practices. The Company expresses its appreciation to Mr. Lei for his services rendered to the Company during his tenure as Chief Financial Officer.

Dr. Silberstein served as Co-Founder and Chief Executive Officer of FytonBio, Inc. from May 2024 to October 2026 and will continue to serve as a member of its board of directors. Previously, from February 2022 to May 2024, Dr. Silberstein served as Chief Financial Officer of GentiBio, Inc., and from May 2020 to January 2022, served as Chief Financial Officer and Head of Business Development of Applied Therapeutics, a clinical-stage biopharmaceutical company formerly listed on Nasdaq. From 2018 to May 2020, Dr. Silberstein served as Senior Vice President of Corporate Business Development and R&D Strategy at Allergan plc, a pharmaceutical company. Prior to Allergan plc, Dr. Silberstein served as Executive Director and Senior Healthcare Analyst for J.P. Morgan Asset Management from 2015 to 2018, as Director, Portfolio Manager and Senior Healthcare Analyst at The Boston Company Asset Management, LLC from 2006 to 2014 and as Portfolio Manager, Vice President and Healthcare Analyst at Goldman Sachs Asset Management from 2000 to 2005.

Dr. Silberstein holds a Charted Financial Analyst designation. Dr. Silberstein received a Master of Business Administration in Finance from Columbia Business School, a Doctor of Medicine from Albert Einstein College of Medicine, and a Bachelor of Arts in Biology from Yeshiva University.

A copy of the press release announcing Dr. Silberstein's appointment is attached hereto as Exhibit 99.1.

Incorporation by Reference

The information set forth in this Report on Form 6-K, excluding Exhibit 99.1, shall be deemed to be incorporated by reference into the Company's Registration Statements on Form F-3 (File No. 333-286954) and Form S-8 (File No. 333-239871, File No. 333-256603, File No. 333-265684, File No. 333-279842, File No. 333-290195 and File No. 333-298369) (including any prospectuses forming a part of such registration statements) and to be a part thereof from the date on which this Form 6-K is furnished, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release – NovaBridge Biosciences Appoints Chuck Silberstein as Chief Financial Office

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NovaBridge Biosciences

By : /s/ Srishti Gupta
Name : Srishti Gupta
Title : Chief Executive Officer

Date: October 28, 2026

NovaBridge Biosciences Appoints Chuck Silberstein as Chief Financial Officer

Biotechnology Executive Brings Extensive Capital Markets, Financing, Corporate Strategy and Investor Relations Experience

ROCKVILLE, Md., October 28, 2026 – NovaBridge Biosciences, Inc. (“NovaBridge” or the “Company”) (NASDAQ: NBP) today announced the appointment of Chuck Silberstein, M.D., M.B.A. as Chief Financial Officer, effective November 2, 2026. Dr. Silberstein succeeds Kyler Lei, who is stepping down following a successful tenure with the Company.

Dr. Silberstein has more than 25 years of experience spanning biotechnology company leadership, corporate finance, capital markets, business development and healthcare investing. He joins NovaBridge as the Company advances its lead programs and continues to execute its strategy of creating value through clinical development, strategic partnerships and disciplined capital allocation.

Most recently, Dr. Silberstein served as Co-Founder and Chief Executive Officer of FytonBio. Previously, he served as Chief Financial Officer of GentiBio and Chief Financial Officer and Head of Business Development at formerly Nasdaq-listed Applied Therapeutics, where he led corporate finance, capital markets, investor relations, business development and strategic planning activities, including public financing transactions and engagement with institutional investors and analysts. Earlier in his career, he led business development and R&D strategy at Allergan and worked as a healthcare investor and analyst with J.P. Morgan Asset Management, BNY Mellon and Goldman Sachs Asset Management.

“Chuck's combination of biotechnology operating experience, public-company financial leadership and capital markets expertise is particularly relevant as we enter an important phase of execution across the NovaBridge portfolio,” said Srishti Gupta, M.D., M.P.P., Chief Executive Officer of NovaBridge. “We believe his track record leading financings, engaging with investors and evaluating strategic opportunities will strengthen our ability to allocate capital thoughtfully, enable us to pursue value-maximizing transactions and position the Company for long-term growth.”

Dr. Silberstein added, "I am excited to join NovaBridge at such a compelling time in the Company's development. NovaBridge has assembled a differentiated portfolio with multiple opportunities to create value through clinical execution, strategic partnerships and disciplined

capital deployment. I believe the Company is well positioned to create long-term value through thoughtful portfolio management and strong execution across its development programs. I look forward to working with Srishti, the Board and the broader NovaBridge team to advance the Company's strategic objectives and deliver value for patients and shareholders."

Dr. Silberstein earned an M.B.A. in Finance from Columbia Business School, an M.D. with Distinction in Research from Albert Einstein College of Medicine, and a B.A. in Biology from Yeshiva University. He is also a Chartered Financial Analyst and a licensed physician in New York State.

About NovaBridge Biosciences
NovaBridge Biosciences ("NovaBridge") (NASDAQ: NBP) is a global biotechnology company focused on identifying, developing and maximizing the value of differentiated therapeutic assets. The Company advances programs through clinical development and pursues the financing and partnering strategies best suited to each opportunity.

NovaBridge's portfolio is led by givastomig, a Claudin 18.2 × 4-1BB bispecific antibody being developed for the potential treatment of gastrointestinal malignancies, and Visara, its majority-owned ophthalmology subsidiary. Through Visara, NovaBridge is building a diversified ophthalmology franchise designed to address unmet needs across diseases of the front and back of the eye.

NovaBridge's objective is to build a sustainable biotechnology company by repeatedly identifying differentiated innovation, advancing it efficiently, and bringing novel therapies to patients through the path best suited to each opportunity.

For more information, please visit www.novabridge.com and follow us on LinkedIn.

Forward Looking Statements
This announcement contains forward-looking statements. These statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements can be identified by terminology such as “will,” “expects,” “believes,” “designed to,” “anticipates,” “future,” “intends,” “plans,” “potential,” “estimates,” “confident,” “look forward to,” and similar terms or the negative thereof. NovaBridge may also make written or oral forward-looking statements in its periodic reports to the U.S. Securities and Exchange Commission (the “SEC”), in its annual report to shareholders, in press releases and other written materials and in oral statements made by its officers, directors or employees to third parties. Statements that are not historical facts, including statements about the Company’s beliefs and expectations, are forward-looking statements. Forward-looking statements in this press release include, without limitation, statements regarding the anticipated contributions of Dr. Silberstein, including strengthening NovaBridge’s ability to allocate capital thoughtfully, enabling NovaBridge’s pursuit of value-maximizing transactions and positioning NovaBridge for long-term growth; NovaBridge’s ability to create long-term value through thoughtful portfolio management and strong execution across its development

programs; the strategic and clinical development of NovaBridge's drug candidates, including givastomig; and anticipated clinical milestones and results, and related timing. Forward-looking statements involve inherent risks and uncertainties that may cause actual results to differ materially from those contained in these forward-looking statements, including but not limited to the following: the Company's ability to demonstrate the safety and efficacy of its drug candidates; the clinical results for its drug candidates, which may or may not support further development or New Drug Application/Biologics License Application (NDA/BLA) approval or eligibility for accelerated approval pathway or receipt of accelerated approval; the content and timing of decisions made by the relevant regulatory authorities, including the FDA, regarding regulatory approval of the Company's drug candidates; the Company's ability to achieve commercial success for its drug candidates, if approved; the Company's ability to obtain and maintain protection of intellectual property for its technology and drugs; the Company's reliance on third parties to conduct drug development, manufacturing and other services; the Company's limited operating history and the Company's ability to obtain additional funding for operations and to complete the development and commercialization of its drug candidates; the impact of macroeconomic conditions, including inflation, tariffs, volatile interest rates, regulatory uncertainty, potential government shutdowns, volatility in the capital markets, and regional and other global events, including ongoing armed conflicts in different regions of the world; and those risks more fully discussed in the "Risk Factors" section in the Company's annual report on Form 20-F filed with the SEC on April 7, 2026, and amended on June 16, 2026, as well as the discussions of potential risks, uncertainties, and other important factors in the Company's subsequent filings with the SEC. All forward-looking statements are based on information currently available to the Company. The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as may be required by law.

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