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

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): **February 26, 2025**

SONNET BIOTHERAPEUTICS HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-35570**	**20-2932652**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

100 Overlook Center, Suite 102 Princeton, New Jersey	**08540**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(609) 375-2227**

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 Par Value	SONN	The Nasdaq Capital Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD.

On February 26, 2025, Sonnet BioTherapeutics Holdings, Inc. (the "Company") issued a press release announcing the presentation of a compilation of data at the 2025 American Association for Cancer Research (AACR) IO Conference.

The information in this Current Report on Form 8-K under Item 7.01, including the information contained in Exhibit 99.1, is being furnished to the Securities and Exchange Commission (the "SEC"), and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by a specific reference in such filing.

Item 8.01. Other Events.

On February 26, 2025, the Company, a clinical-stage company developing targeted immunotherapeutic drugs announced the presentation of a compilation of data at the 2025 American Association for Cancer Research (AACR) IO Conference.

The presentation highlighted the potential of SON-1010 as a monotherapy or a combination therapy to improve the treatment of solid tumors. The Company's novel platform that delivers either mono- or bifunctional immunomodulators linked to a Fully-Human, Albumin Binding scFv domain (F_HAB®) provides enhanced targeting to the tumor microenvironment (TME) and prolonged retention in the tumor.

As part of the conference, Dr. Sant Chawla, Principal Investigator at the Sarcoma Oncology Center in Santa Monica, California, presented a poster entitled, *"Combination immunotherapy with an albumin-binding interleukin-12 fusion protein that extends cytokine half-life, targets the tumor microenvironment, and enhances therapeutic efficacy."* This is the first time the overall strategy of the Company's Fully Human Albumin Binding (F_HAB®) platform has been compiled with existing data and presented in a poster.

SON-1010 is the Company's proprietary version of recombinant human interleukin-12 (rhIL-12), configured using genetic fusion to the FHAB platform, which extends the half-life and bioactivity of the IL-12 component due to binding native albumin in the serum. Albumin binding to FcRn, GP60, and SPARC results in an improved PK profile, decreased toxicity risk, and a broader therapeutic index preclinically, with significant targeting of the tumor microenvironment and increases in activated NK, NKT, Th1, and cytotoxic CD8 T cells, as well as marked repolarization of pro-tumor M2 MDSCs to inflammatory M1 APCs.

Key Highlights:

- A platform strategy was developed that links cytokines to the F_HAB as mono- or bifunctional fusions to bind native albumin at both physiologic and acidic pH, taking advantage of albumin's long serum half-life and concentration in tumors, allowing delivery to and accumulation of the drug in the TME. IL-12 is a potent cytokine that stimulates the innate and adaptive immune responses, functioning in combination with other cytokines, like IL-15 and IL-18. Several approaches are currently being studied in humans, such as:
    - SON-1010 monotherapy at the highest dose is continuing in patients with advanced solid tumors. In December 2024, the Company disclosed clinical benefit in 48% of patients, including a partial response at the highest dose in a patient with clear cell sarcoma. The poster reflects the current status of this trial.
    - Co-administration with a checkpoint inhibitor (atezolizumab) to activate local immune cells and upregulate PD-L1 in the TME. Safety has been monitored at each dose escalation step and the most common adverse events at each dose level have been updated for the results currently available.
    - SON-1010 is being administered alternating with an immunoreactive chemotherapy drug (trabectedin) to enhance its ability to activate a pro-inflammatory phenotype in the TME.
    - SON-1010 is being administered alternating with a potent chemotherapeutic regimen (NALIRIFOX) will be done in front-line patients with pancreatic ductal adenocarcinoma (PDAC) to enhance their response.

- Each setting has the potential to augment the effects of the licensed therapy in populations that continue to have high unmet needs for an improved outcome. Immunotherapy allows greater flexibility in selecting potentially synergistic combinations for rational implementation.
- SON-1010 and SON-1210 address paramount safety and tolerability factors, which have traditionally hindered the use of therapeutic cytokines in the treatment of solid tumors, by extending the cytokine half-life and improving the therapeutic index that may result in better patient outcomes.

SON-1010 is being evaluated in a Phase 1b/2a dose-escalation and proof-of-concept study (SB221) in combination with SON-1010 and atezolizumab (Tecentriq®) (in collaboration with Genentech, a member of the Roche Group), which is focused on platinum-resistant ovarian cancer (PROC) (NCT05756907). The extended PK of SON-1010, along with its ability to induce IFNγ in the TME causing upregulation of PD-L1, creates an opportunity for synergistic activity. Enrollment remains ongoing and an update on safety at the MTD in that trial is expected in Q1 calendar year 2025. Another trial evaluating dose escalation of SON-1210 (IL12-F_HAB-IL15), followed by its combination with NALIRIFOX in patients with metastatic pancreatic cancer, is expected to begin later this calendar year.

Forward-Looking Statements

This Current Report on Form 8-K, including Exhibit 99.1 furnished herewith, contains certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and Private Securities Litigation Reform Act, as amended, including those relating to the Company's product development, the outcome of the Company's clinical trials, the Company's cash runway, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statements that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential," "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or the Company's financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the SEC. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this Current Report. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Exhibit
99.1	Press Release, dated February 26, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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 hereunto duly authorized.

SONNET BIOTHERAPEUTICS HOLDINGS, INC.

Date: February 26, 2025

By: */s/ Pankaj Mohan, Ph.D.*
Name: Pankaj Mohan, Ph.D.
Title: Chief Executive Officer

Exhibit 99.1

Sonnet BioTherapeutics Presents Compilation of Data Highlighting the Potential of SON-1010 as a Monotherapy or a Combination Therapy to Improve the Treatment of Solid Tumors

Poster presented at the 2025 AACR:IO Conference

Company's novel platform that delivers either mono- or bifunctional immunomodulators linked to a Fully-Human, Albumin Binding scFv domain ($F_HAB^®$) provides enhanced targeting to the tumor microenvironment (TME) and prolonged retention in the tumor

PRINCETON, NJ / Globe Newswire / February 26, 2025/ Sonnet BioTherapeutics Holdings, Inc. (the "Company" or "Sonnet") (NASDAQ: SONN), a clinical-stage company developing targeted immunotherapeutic drugs, today announced the presentation of a compilation of data at the 2025 American Association for Cancer Research (AACR) IO Conference.

As part of the conference, Dr. Sant Chawla, Principal Investigator at the Sarcoma Oncology Center in Santa Monica, California, presented a poster entitled, *"Combination immunotherapy with an albumin-binding interleukin-12 fusion protein that extends cytokine half-life, targets the tumor microenvironment, and enhances therapeutic efficacy."* This is the first time the overall strategy of Sonnet's Fully Human Albumin Binding ($F_HAB^®$) platform has been compiled with existing data and presented in a poster. The presented poster is now available on the Publications page of the Company's website.

SON-1010 is the Company's proprietary version of recombinant human interleukin-12 (rhIL-12), configured using genetic fusion to the F_HAB platform, which extends the half-life and bioactivity of the IL-12 component due to binding native albumin in the serum. Albumin binding to FcRn, GP60, and SPARC results in an improved PK profile, decreased toxicity risk, and a broader therapeutic index preclinically, with significant targeting of the tumor microenvironment and increases in activated NK, NKT, Th1, and cytotoxic CD8 T cells, as well as marked repolarization of pro-tumor M2 MDSCs to inflammatory M1 APCs.

"Recombinant interleukins have generally had limited clinical success due to inefficient tumor targeting, short half-lives, and off-target toxicity. As previously disclosed, our novel F_HAB platform has demonstrated the potential for us to design product candidates that safely extend the half-life of cytokines and deliver them to the tumor, where they can convert the immunological response from 'cold' to 'hot' and potentially realize the promise of immunotherapy. We are pleased to share the compilation of data in this poster presentation and look forward to announcing additional data from our ongoing studies evaluating our SON-1010 platform in 2025," commented Pankaj Mohan, Ph.D., Founder and Chief Executive Officer of Sonnet.

Key Highlights:

- A platform strategy was developed that links cytokines to the F_HAB as mono- or bifunctional fusions to bind native albumin at both physiologic and acidic pH, taking advantage of albumin's long serum half-life and concentration in tumors, allowing delivery to and accumulation of the drug in the TME. IL-12 is a potent cytokine that stimulates the innate and adaptive immune responses, functioning in combination with other cytokines, like IL-15 and IL-18. Several approaches are currently being studied in humans, such as:
    - SON-1010 monotherapy at the highest dose is continuing in patients with advanced solid tumors. In December 2024, the Company disclosed clinical benefit in 48% of patients, including a partial response at the highest dose in a patient with clear cell sarcoma. The poster reflects the current status of this trial.
    - Co-administration with a checkpoint inhibitor (atezolizumab) to activate local immune cells and upregulate PD-L1 in the TME. Safety has been monitored at each dose escalation step and the most common adverse events at each dose level have been updated for the results currently available.
    - SON-1010 is being administered alternating with an immunoreactive chemotherapy drug (trabectedin) to enhance its ability to activate a pro-inflammatory phenotype in the TME.
    - Alternating administration with a potent chemotherapeutic regimen (NALIRIFOX) will be done in front-line patients with pancreatic ductal adenocarcinoma (PDAC) to enhance their response.
- Each setting has the potential to augment the effects of the licensed therapy in populations that continue to have high unmet needs for an improved outcome. Immunotherapy allows greater flexibility in selecting potentially synergistic combinations for rational implementation.
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SON-1010 is being evaluated in a Phase 1b/2a dose-escalation and proof-of-concept study (SB221) in combination with SON-1010 and atezolizumab (Tecentriq®) (in collaboration with Genentech, a member of the Roche Group), which is focused on platinum-resistant ovarian cancer (PROC) (NCT05756907). The extended PK of SON-1010, along with its ability to induce IFNγ in the TME causing upregulation of PD-L1, creates an opportunity for synergistic activity. Enrollment remains ongoing and an update on safety at the MTD in that trial is expected in Q1 calendar year 2025. Another trial evaluating dose escalation of SON-1210 (IL12-F_HAB-IL15), followed by its combination with NALIRIFOX in patients with metastatic pancreatic cancer, is expected to begin later this calendar year.

About SON-1010

SON-1010 is a candidate immunotherapeutic recombinant drug that links unmodified single-chain human IL-12 with the albumin-binding domain of the single-chain antibody fragment A10m3. This single-chain antibody fragment was selected to bind albumin both at normal pH, as well as at the acidic pH typically found in the TME. The F_HAB technology targets tumor and lymphatic tissue, providing a mechanism for dose sparing and an opportunity to improve the safety and efficacy profile of not only IL-12, but a variety of potent immunomodulators that can be linked using the platform. Interleukin-12 can orchestrate a robust immune response to many cancers and pathogens. Given the types of proteins induced in the TME, such as the Secreted Protein and Rich in Cysteine (SPARC) and glycoprotein 60 (GP60), several types of cancer, such as non-small cell lung cancer, melanoma, head and neck cancer, sarcoma, and some gynecological cancers are particularly relevant to this approach. SON-1010 is designed to deliver IL-12 to

local tumor tissue, turning ‘cold’ tumors ‘hot’ by stimulating IFNγ, which activates innate and adaptive immune cell responses and increases the production of Programed Death Ligand 1 (PD-L1) on tumor cells.

About Sonnet BioTherapeutics Holdings, Inc.

Sonnet is an oncology-focused biotechnology company with a proprietary platform for developing targeted biologic drugs with single or bifunctional action. Known as F_HAB (Fully Human Albumin-Binding), the technology utilizes a fully human single chain antibody fragment (scFv) that binds to and “hitch-hikes” on human serum albumin (HSA) for transport to target tissues. Sonnet’s F_HAB was designed to specifically target tumor and lymphatic tissue, with an improved therapeutic window for optimizing the safety and efficacy of immune modulating biologic drugs. F_HAB platform is the foundation of a modular, plug-and-play construct for potentiating a range of large molecule therapeutic classes, including cytokines, peptides, antibodies, and vaccines.

Sonnet’s lead program, SON-1010, or IL-12-F_HAB, is in development for the treatment of advanced solid tumors, certain types of sarcoma, and platinum-resistant ovarian cancer (PROC). SON-1010 is being evaluated in an ongoing Phase 1/2a study through a Master Clinical Trial and Supply Agreement with Roche in combination with atezolizumab (Tecentriq®) for the treatment of PROC. The Company is also evaluating its second product candidate, SON-1210, an IL12-F_HAB-IL15 for solid tumors, in collaboration with the Innovative Immuno-Oncology Consortium (IIOC), and plans to commence an investigator-initiated and funded Phase 1/2a study for the treatment of locally-advanced or metastatic pancreatic ductal adenocarcinoma (PDAC).

The Company’s SON-080 program is a low dose of rhIL-6 in development for Chemotherapy-Induced Peripheral Neuropathy (CIPN) and Diabetic Peripheral Neuropathy (DPN). SON-080 demonstrated encouraging results in a Phase 1b/2a clinical trial, being well tolerated with no evidence of a pro-inflammatory cytokine response. In October 2024, Sonnet announced a license agreement with Alkem Laboratories, Inc. who will assume responsibility for advancing development of the SON-080 program into a Phase 2 study in DPN in India.

Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section21E of the Securities Exchange Act of 1934 and Private Securities Litigation Reform Act, as amended, including those relating to the Company’s cash runway, the Company’s product development, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statements that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management’s current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, “expect,” “anticipate,” “intend,” “plan,” “believe,” “estimate,” “potential, “predict,” “project,” “should,” “would” and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company’s filings with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

Investor Relations Contact:

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