Sana Biotechnology Presents Preclinical Data for In Vivo CAR T Cell Therapy SG293 Surrogate Demonstrating Cell-Specific Delivery, Potent CAR T Cell Generation, and Deep B Cell Depletion in NHPs

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Data presented at the American Society of Gene & Cell Therapy (ASGCT) 2026 Annual Meeting

SEATTLE, May 12, 2026 (GLOBE NEWSWIRE) -- Sana Biotechnology, Inc. (NASDAQ: SANA), a company focused on changing the possible for patients through engineered cells, today announced the presentation of preclinical data demonstrating that a surrogate SG293, an *in vivo* CAR T cell therapy, achieved cell-specific delivery, robust and dose-dependent CAR T cell generation, and deep B cell depletion in non-human primates (NHPs) without the use of lymphodepleting chemotherapy. SG293 is a CD8-targeted fusosome that delivers the genetic material to make CD19-directed CAR T cells. The data were reported in an oral presentation at the American Society of Gene & Cell Therapy (ASGCT) 2026 Annual Meeting.

"SG293 represents a differentiated *in vivo* CAR T cell approach designed to work without lymphodepletion to deliver potent therapeutic activity and exceptional specificity to minimize off-target effects," said Dhaval Patel, MD, PhD, Executive Vice President, Chief Scientific Officer. "Data presented at ASGCT highlight the fusogen platform's potential to enable development of therapies that offer off-the-shelf treatment options for patients with blood cancers, B cell-mediated autoimmune disorders, and multiple myeloma. The data support our strategy of advancing SG293 into the clinic for the treatment of non-Hodgkin lymphoma (NHL) later this year and SG227, a BCMA-targeted *in vivo* CAR T cell therapy, into the clinic for the treatment of multiple myeloma as early as mid-2027."

In an NHP model, a one-time intravenous administration of the surrogate SG293 led to potent CAR T cell generation, dose-dependent CAR T cell expansion, and complete peripheral B cell depletion. At 3 weeks, B cells were undetectable or minimally detectable in lymph nodes, and as B cells returned after depletion, the vast majority exhibited a naïve phenotype indicative of a "reset" of the B cell compartment. The targeted fusogen used in SG293 demonstrates a differentiated level of protection from off-target delivery risks *in vitro* when compared to other targeted fusogen technologies. The specific delivery and favorable on-target safety profile were confirmed *in vivo* in NHPs with surrogate SG293. Post-necropsy analysis of tissues showed no evidence of delivery to non-target cells, including hepatocytes, heart, or gonadal tissue. Post-infusion symptoms were mild and managed with acetaminophen, and CAR T-associated toxicities were manageable and consistent with autologous CAR T toxicities in this NHP model. Finally, the novel transgene design used in SG293 diminishes CAR protein incorporation onto the vector during manufacturing, which mitigates anti-CAR immunogenicity in NHPs and may enable improved durability of *in vivo* CAR T cells. These data demonstrate that SG293 represents a differentiated approach for enabling potent and precise *in vivo* CAR T cell therapy for oncology and autoimmune indications. Sana intends to explore SG293 initially in NHL and expects to generate first-in-human data as early as this year. If successful, the company intends to expand clinical development with SG293 into B cell-mediated autoimmune diseases and to initiate clinical development of SG227 for patients with multiple myeloma.

About SG293
SG293, which uses Sana's proprietary fusogen-based *in vivo* delivery technology, is a CD8-targeted fusosome that delivers to CD8+ T cells the genetic material to make CD19-directed CAR T cells while avoiding potentially troublesome delivery to tissues such as the liver, heart, and gonadal tissue. Sana intends to explore SG293 in both B cell cancers and B cell-mediated autoimmune diseases.

About SG227
SG227, which uses Sana's proprietary fusogen-based *in vivo* delivery technology, is a CD8-targeted fusosome that delivers to CD8+ T cells the genetic material to make BCMA-directed CAR T cells while avoiding potentially troublesome delivery to tissues such as the liver, heart, and gonadal tissue. Sana intends to explore SG227 as a potential therapy for the treatment of multiple myeloma.

About the Sana Fusogen Platform
Fusogens are a well-studied and widespread class of proteins whose biology mediates membrane fusion in the trillions of cell-to-cell and intracellular interactions, including the delivery of complex materials to specific cell types. Drawing on Sana's deep expertise in fusogen biology and protein engineering, its fusogen *in vivo* delivery platform leverages engineered fusogens, combined with optimized delivery vehicles, to enable targeted and efficient delivery of therapeutic payloads to specific cells *in vivo*. This modular system is designed to target diverse cell surface receptors, enabling cell-specific delivery, and deliver a wide range of therapeutic payloads across multiple cell types, including gene-editing machinery or integrating DNA. This flexibility supports tailored therapeutic approaches for different diseases, while highly specific delivery vehicles expand the potential of *in vivo* therapies.

About Sana
Sana Biotechnology, Inc. is focused on creating and delivering engineered cells as medicines for patients. We share a vision of repairing and controlling genes, replacing missing or damaged cells, and making our therapies broadly available to patients. We are a passionate group of people working together to create an enduring company that changes how the world treats disease. Sana has operations in Seattle, WA, Cambridge, MA, and South San Francisco, CA.

Cautionary Note Regarding Forward-Looking Statements
This press release contains forward-looking statements about Sana Biotechnology, Inc. (the "Company," "we," "us," or "our") within the meaning of the federal securities laws, including those related to the Company's vision, progress, and business plans; preclinical, clinical, and regulatory development plans and timing expectations for its fusogen platform and SG293 and SG227 programs, including with respect to potential indications and the commencement and expansion of clinical development and generation of first-in-human data; the potential significance and impact of preclinical data for the SG293 program; the potential benefits of the fusogen platform, including the ability to enable development of therapies that offer off-the-shelf

treatment options for patients with blood cancers, B cell-mediated autoimmune disorders, and multiple myeloma, the ability to enable targeted and efficient delivery of therapeutic payloads to specific cells *in vivo* and avoid potentially troublesome delivery to tissues such as the liver, heart, and gonadal tissue, the ability to target diverse cell surface receptors, enabling cell-specific delivery, and deliver a wide range of therapeutic payloads across multiple cell types, including gene-editing machinery or integrating DNA, and the ability to support tailored therapeutic approaches for different diseases and expand the potential of *in vivo* therapies; the potential benefits of SG293, including the ability of SG293 to work without lymphodepletion to deliver potent therapeutic activity and exceptional specificity to minimize off-target effects, the ability of the SG293 transgene design to improve the durability of *in vivo* CAR T cells, and the ability of SG293 to provide a differentiated approach for enabling potent and precise *in vivo* CAR T cell therapy for oncology and autoimmune indications; and statements by the Company's Executive Vice President, Chief Scientific Officer. All statements other than statements of historical facts contained in this press release, including, among others, statements regarding the Company's strategy, expectations, future operations, and prospects, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "design," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "positioned," "potential," "predict," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. The Company has based these forward-looking statements largely on its current expectations, estimates, forecasts and projections about future events and financial trends that it believes may affect its financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. These statements are subject to risks and uncertainties that could cause the actual results to vary materially, including, among others: the risks inherent in drug development such as those associated with the initiation, cost, timing, progress, and results of the Company's current and future research and development programs and preclinical and clinical trials, including that the timing of clinical development for SG293 and/or SG227 is subject to change, that the initiation or expansion of clinical development for SG293 and/or SG227 are not predictive of clinical trial results or whether clinical trials will successfully enroll and treat patients, that results of preclinical studies may not be predictive of results of potential future studies, including clinical trials, of SG293, SG227, or other product candidates, and that Sana's product candidates may not be successfully developed or commercialized in any indication; and risks related to economic, market, and other disruptions, which could cause delays in the Company's business plans, impede the Company's access to additional capital, and impede the clinical development of SG293 and SG227, among other things. For a detailed discussion of the risk factors that could affect the Company's actual results, please refer to the risk factors identified in the Company's Securities and Exchange Commission ("SEC") reports, including but not limited to its Annual Report on Form 10-Q dated May 11, 2026. Except as required by law, the Company undertakes no obligation to update publicly any forward-looking statements for any reason.

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