Medicenna and Fondazione Melanoma Onlus Collaborate to Advance MDNA11 Before First-Line Therapy in a Randomized Neoadjuvant Combination Trial, “NEO-CYT”, in High-Risk, Surgically Resectable Stage III Melanoma

November 6, 2025

NEO-CYT is a randomized, multi-centre trial of neoadjuvant MDNA11 (before curative intent surgery) sponsored by the Fondazione Melanoma Onlus, and led by Professor Paolo A. Ascierto of the Istituto Nazionale Tumori Fondazione “G. Pascale”, a leading cancer centre in Europe

The NEO-CYT Study will evaluate MDNA11 as a neoadjuvant immunotherapy in earlier-stage melanoma patients whose immune systems are more amenable to immunotherapy and may be more likely to benefit from MDNA11 treatment

Based on deep and durable responses reported to date in the ABILITY-1 study treating patients with end-stage advanced metastatic and non-resectable tumors, MDNA11 is believed to have the potential to profoundly reduce the risk of cancer returning after initial surgery

MDNA11 will be evaluated in combination with the checkpoint inhibitors nivolumab (anti-PD1) alone or with ipilimumab (anti-CTLA4), with Major Pathologic Response (MPR) as a primary endpoint, which is considered predictive of long-term survival outcomes

Under the terms of the clinical trial collaboration, the Fondazione Melanoma Onlus is the Sponsor and Medicenna will supply the study medications

Medicenna’s runway remains unchanged with cash & equivalents expected to last into at least the middle of calendar 2026

TORONTO and HOUSTON, Nov. 06, 2025 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. (“Medicenna” or the “Company”) (TSX: MDNA, OTCQX: MDNAF), a clinical-stage immunotherapy company developing Superkines for cancer, today announced NEO-CYT, a randomized, investigator-initiated neoadjuvant trial testing MDNA11, a long-acting, “beta-enhanced not-alpha” IL-2 Superkine, in combination with nivolumab (anti-PD-1) with or without ipilimumab (anti-CTLA-4) for patients with high-risk, surgically resectable Stage III cutaneous melanoma. The study is sponsored by the non-profit Melanoma Foundation (Fondazione Melanoma Onlus) at the National Cancer Institute ‘G. Pascale Foundation’. Medicenna will supply study drugs under a collaboration and supply agreement.

Fahar Merchant, Chief Executive Officer, Medicenna Therapeutics, stated: *“We are honored to have Fondazione Melanoma Onlus sponsor the NEO-CYT trial evaluating MDNA11 as a potentially promising immunotherapy for treating patients with high risk earlier stage melanoma. MDNA11 was designed to selectively awaken the immune system’s cancer fighting immune cells without fanning the flames of suppression. We’ve already seen deep durable responses with MDNA11 in heavily pretreated patients with advanced metastatic cancers and profoundly compromised immune systems in the on-going ABILITY-1 trial. NEO-CYT is our next chapter — testing MDNA11 where the immune system is whole, the tumor can educate cancer fighting immune cells, and pathologic response gives a fast, rigorous signal of activity within weeks. We are excited to explore this opportunity under Professor Ascierto’s guidance and to redefine the role of IL-2 in early-stage melanoma and further establish MDNA11’s potential as a best-in-class, versatile, next-generation IL-2 therapy. We look forward to sharing updated clinical data from the on-going ABILITY study with MDNA11 at the upcoming ESMO-IO congress and results from the NEO-CYT study throughout 2026.”*

Professor Paolo A. Ascierto, Lead Principal Investigator of NEO-CYT, commented: *“Neoadjuvant therapy has taught us that timing of immunotherapy matters. Treating patients undergoing curative surgery while the tumor is still present can generate deeper and more durable immune responses. Advancing into the neoadjuvant setting represents a logical next-step in clinical development of any promising immunotherapy by treating earlier-stage, high-risk patients. Importantly, NEO-CYT is designed to evaluate combinations of MDNA11 with two major immunotherapies, nivolumab with or without ipilimumab. NEO-CYT will test whether adding a next-generation IL-2 superkine, MDNA11, to proven checkpoint combinations in resectable, high-risk melanoma can improve pathologic responses with the potential to improve curative benefit after surgery.”*

Neoadjuvant immunotherapy is emerging as a clinical and commercial frontier in melanoma and several other solid tumors. Pathologic response endpoints both predict long-term survival outcomes and may provide an efficient regulatory and go-forward signal for immunotherapies. NEO-CYT is designed to produce early, actionable neoadjuvant data to support clinical positioning of MDNA11 in melanoma and significantly broaden the use case for MDNA11 immunotherapy, expanding its addressable market to include the earliest line of systemic therapy for solid tumors with the potential to treat a large patient population with high-risk melanoma. By evaluating pathologic response rates at the time of surgery in a randomized setting, NEO-CYT aims to provide an early, rigorous signal of activity — potentially accelerating the clinical development strategy for MDNA11 and expanding its commercial opportunity.

To date, MDNA11 has been studied in ABILITY-1 (NCT05086692), an ongoing Phase 1/2 study in advanced, treatment-refractory solid tumors as monotherapy and in combination with pembrolizumab. Early readouts have shown robust anti-tumor activity of MDNA11 both as single-agent and in combination with pembrolizumab in heavily pre-treated patients, including those progressed on immune checkpoint inhibition, alongside expansion of effector lymphocytes and a manageable safety profile.

NEO-CYT is designed to prospectively evaluate the potential of MDNA11 to enhance the efficacy of standard-of-care cancer immunotherapy in the neoadjuvant setting. Specifically, whether Medicenna’s best-in-class IL-2 agonist can deepen neoadjuvant pathologic responses predictive of patient outcomes when added to established anti-PD-1 ± anti-CTLA-4 regimens at a time when the tumor is still present to optimize the anti-tumor immune response.

About MDNA11

MDNA11 is a long-acting, ‘beta-enhanced not-alpha’ IL-2 Superkine specifically engineered to overcome the shortcomings of aldesleukin and other

next generation IL-2 variants by preferentially activating immune effector cells (CD8+ T and NK cells) responsible for killing cancer cells, with minimal or no stimulation of immunosuppressive Tregs. These unique proprietary features of the IL-2 Superkine have been achieved by incorporating seven specific mutations and genetically fusing it to a recombinant human albumin scaffold to improve the pharmacokinetic (PK) profile and pharmacological activity of MDNA11 due to albumin's natural propensity to accumulate in highly vascularized sites, in particular tumor and tumor draining lymph nodes. MDNA11 is currently being evaluated in the Phase 1/2 ABILITY-1 study as both monotherapy and in combination with pembrolizumab.

About Fondazione Melanoma Onlus

Fondazione Melanoma Onlus is a non-profit organization based in Naples, Italy, that supports and promotes melanoma research, education, and clinical trials. It is known for organizing international conferences like the Melanoma Bridge, which bring together clinicians and researchers to discuss advancements in melanoma treatment and its related fields. The foundation also sponsors scientific awards for outstanding achievements in melanoma research.

About Medicenna Therapeutics

Medicenna is a clinical-stage immunotherapy company focused on developing novel, highly selective versions of IL-2, IL-4 and IL-13 Superkines and first-in-class Empowered Superkines. Medicenna's long-acting IL-2 Superkine, MDNA11, is a next-generation IL-2 with superior affinity toward CD122 (IL-2 receptor beta) and no CD25 (IL-2 receptor alpha) binding, thereby preferentially stimulating cancer-killing effector T cells and NK cells. Medicenna's first-in-class targeted PD-1 x IL-2 bispecific, MDNA113, is in development for solid tumors and was designed using the Company's proprietary BiSKITs ™ (Bifunctional SuperKine ImmunoTherapies) and T-MASK™ (Targeted Metalloprotease Activated SuperKine) platforms Medicenna's IL-4 Empowered Superkine, bizaxofusp (formerly MDNA55), has been studied in 5 clinical trials enrolling over 130 patients, including a Phase 2b trial for recurrent GBM, the most common and uniformly fatal form of brain cancer. Bizaxofusp has obtained FastTrack and Orphan Drug status from the FDA and FDA/EMA, respectively.

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

Forward-Looking Statements

This news release may contain forward-looking statements within the meaning of applicable securities laws. Forward-looking statements include, but are not limited to, express or implied statements regarding the future operations of the Company, estimates, plans, strategic ambitions, partnership activities and opportunities, objectives, expectations, opinions, forecasts, projections, guidance, outlook or other statements that are not historical facts, such as statements on the potential for the NEO-CYT trial, the therapeutic treatment potential and safety profile of MDNA11**,** cash runway, and the timing and/or release of any additional clinical updates. Drug development and commercialization involve a high degree of risk, and only a small number of research and development programs result in commercialization of a product. Results in early-stage pre-clinical or clinical studies may not be indicative of full results or results from later stage or larger scale clinical studies and do not ensure regulatory approval. You should not place undue reliance on these statements, or the scientific data presented.

Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expect", "believe", "seek", "potentially" and similar expressions. and are subject to risks and uncertainties. Forward-looking statements are based on a number of assumptions believed by the Company to be reasonable at the date of this news release. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, there can be no assurance that such statements will prove to be accurate. These statements are subject to certain risks and uncertainties and may be based on assumptions that could cause actual results and future events to differ materially from those anticipated or implied in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the risks detailed in the latest annual information form of the Company and in other filings made by the Company with the applicable securities regulators from time to time in Canada.

The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management, may prove to be incorrect and actual results may differ materially from those anticipated or implied in forward-looking statements. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date hereof and except as required by law, we do not intend and do not assume any obligation to update or revise publicly any of the included forward-looking statements.

This news release contains hyperlinks to information that is not deemed to be incorporated by reference in this new release.

Investor and Company Contact:

Shushu Feng
Investor Relations, Medicenna Therapeutics
(416) 964-5442
ir@medicenna.com

MEDICENNA

Source: Medicenna Therapeutics Corp.