Medicenna's MDNA11 Potential in Earlier Line Melanoma Setting Highlighted in Presentation of the NEO-CYT trial at ASCO 2026

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NEO-CYT positions MDNA11 in a frontline neoadjuvant melanoma setting, where immunotherapy before surgery may help generate deeper and more durable anti-tumor immune responses

Up to 80 patients with locally advanced melanoma will be randomized in this Investigator-sponsored, multicenter Phase 1b NEO-CYT trial led by Professor Paolo A. Ascierto of the Istituto Nazionale Tumori Fondazione "G. Pascale" and sponsored by Fondazione Melanoma Onlus

Together with the ongoing Phase 1/2 ABILITY-1 expansion cohorts in the 2L/3L Tx setting, NEO-CYT supports a broader clinical strategy to evaluate MDNA11 across select tumor types and multiple stages of disease, expanding future commercial opportunities

MDNA11 clinical data updates from the ABILITY-1 and NEO-CYT trials are anticipated in H2 2026

TORONTO and HOUSTON, June 03, 2026 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or the "Company") (TSX: MDNA, OTCQX: MDNAF), a clinical-stage immunotherapy company developing Superkines targeting cancer and autoimmune disease, today announced that its long-acting, "beta-enhanced not-alpha" IL-2 Superkine, MDNA11, was featured in a poster presentation describing the investigator-sponsored NEO-CYT trial at the 2026 Annual Meeting of the American Society of Clinical Oncology (ASCO), held in Chicago from 28th May to 2nd June.

Surgery has long been the first course of action in treating locally advanced melanoma. Recently, the landmark NADINA clinical trial (comprised of 2 pre-operative cycles of ipilimumab plus nivolumab) completely flipped the conventional treatment paradigm on its head by proving that giving combination immunotherapy before surgery is significantly more effective than the previous post-surgery standard, setting a new gold standard of care. However even with this regimen, 41% of patients did not achieve a Major Pathologic Response (< 10% of viable tumor). In view of the promising single agent activity of MDNA11 in patients with metastatic melanoma, the hypothesis of the NEO-CYT trial is to demonstrate if patient outcomes can be further enhanced over the gold-standard of care by introducing MDNA11 in combination with nivolumab +/- ipilimumab.

"NEO-CYT provides an important opportunity to evaluate MDNA11, a potentially best-in-class IL-2 superagonist, in a frontline neoadjuvant setting where immune activation may be especially impactful," said Fahar Merchant, Ph.D., President and Chief Executive Officer of Medicenna. " If the tumor is still present at the time of the treatment, the immune cells 'see' more of the cancer cells. This allows the most potent anti-tumor immune cells to expand and attack the tumor and can remain active in the body for many years, preventing the tumors from recurring. Importantly, this trial complements our ongoing ABILITY-1 study, which has already demonstrated durable disease control in more advanced stages of melanoma. The ABILITY-1 trial is also advancing MDNA11 into earlier lines of therapy through expansion cohorts in 2L/3L melanoma, endometrial cancer, colorectal cancer, lung cancer and tumor agnostic biomarker driven cancers. We look forward to sharing updates on the ABILITY-1 trial and the NEO-CYT study during the second half of 2026."

NEO-CYT is a randomized, multicenter Phase 1b trial evaluating MDNA11 in combination with nivolumab, with or without ipilimumab, as neoadjuvant therapy in patients with high-risk, surgically resectable Stage IIIB/C/D cutaneous melanoma. The study is sponsored by Fondazione Melanoma Onlus and led by Professor Paolo A. Ascierto of the Istituto Nazionale Tumori Fondazione "G. Pascale" in Naples, Italy.

The trial represents an important expansion of MDNA11's clinical development into an earlier-line, curative-intent melanoma setting. Neoadjuvant immunotherapy, administered before surgery while the tumor and its immune microenvironment remain intact, has emerged as a promising strategy to generate deeper anti-tumor immune responses and improve long-term outcomes for patients with high-risk resectable melanoma. However, a meaningful proportion of patients still do not achieve a major pathologic response with checkpoint-based neoadjuvant therapy, underscoring the need for novel immune-activating approaches that may improve depth and durability of response.

The NEO-CYT poster at ASCO highlighted the scientific rationale for combining MDNA11 with checkpoint inhibitors in the neoadjuvant setting. Prior clinical and translational research has shown that lack of response to neoadjuvant checkpoint therapy may be associated with an immunologically "cold" tumor microenvironment, including IL-2–related immune features. MDNA11 was designed to selectively engage the IL-2 receptor beta pathway, promoting expansion and activation of CD8^{+} T cells and NK cells that are central to anti-tumor immunity, while minimizing stimulation of immunosuppressive regulatory T cells.

The study is expected to enroll up to 80 patients across four treatment arms. The control arm will comprise of patients treated with the current gold-standard, ipilimumab plus nivolumab, while investigational arms will evaluate MDNA11 in combination with nivolumab alone, MDNA11 in combination with ipilimumab plus nivolumab, and an optional arm adding tocilizumab to MDNA11 plus ipilimumab and nivolumab following Steering Committee safety review.

The primary efficacy endpoint is Major Pathologic Response at surgery, defined as 10% or less viable tumor in the treated tumor bed. Co-primary safety endpoints include the incidence, severity and duration of treatment-related adverse events, with particular focus on immune-related adverse events.

MDNA11 is also being evaluated in Medicenna's ongoing Phase 1/2 ABILITY-1 study, where it has demonstrated immune activation, including expansion of CD8^{+} T cells and NK cells, as well as single-agent clinical activity and a manageable safety profile in patients with advanced solid tumors. Together, NEO-CYT and ABILITY-1 are intended to inform Medicenna's broader development strategy for MDNA11 across multiple treatment settings, including earlier-line melanoma populations where patients may have more intact immune systems and greater potential to benefit from

immunotherapy.

Clinical updates from MDNA11 studies are anticipated in the second half of 2026.

About High-Risk Stage III Surgically Resectable Melanoma

Melanoma is the fifth most common cancer in the United States and the most lethal form of skin cancer. Stage III melanoma refers to disease that has spread beyond the primary tumor to regional lymph nodes or nearby tissue, but not to distant organs. In high-risk Stage III melanoma, patients face a significant risk of recurrence even after complete surgical removal, underscoring the need for effective systemic treatment strategies. Neoadjuvant immunotherapy, administered before surgery while the tumor and its immune microenvironment remain intact, has emerged as a promising approach to improve pathologic responses and long-term outcomes in this setting.

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 Fast Track 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 ABILITY-1 study, 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.

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