Zacks Small-Cap Research
Sponsored – Impartial - Comprehensive

November 13, 2023
David Bautz, PhD
(312) 265-9471
dbautz@zacks.com

scr.zacks.com
10 S. Riverside Plaza, Chicago, IL 60606

Medicenna Therapeutics Corp. (T.MDNA-TSX)

T.MDN: Additional Confirmed PR in Phase 1/2 ABILITY Trial of MDNA11…

Based on our probability adjusted DCF model that takes into account potential future revenues of MDNA55, MDNA11, and the Superkine platform MDNA.T is valued at $9.00/share. This model is highly dependent upon continued clinical success of those compounds and will be adjusted accordingly based upon future clinical results.

Current Price (11/13/23)	$0.50
Valuation	**$9.00**

OUTLOOK

On November 6, 2023, Medicenna Therapeutics Corp. (MDNA.T) announced the presentation of updated data for the Phase 1/2 ABILITY trial of MDNA11, the company's long-acting 'beta-enhanced not-alpha' IL-2 Superkine at the 38th Annual Meeting of the Society for Immunotherapy of Cancer (SITC). The updated data from the ABILITY trial show that MDNA11 continues to show encouraging single-agent activity, including 100% reduction of target lesions in a pancreatic cancer patient and 70% reduction in target lesions in a melanoma patient. Durability of response is strong with 3 melanoma patients showing stable disease for at least five to 18 months. The company has initiated the monotherapy expansion portion of the trial and will be initiating the combination trial with Keytruda before the end of 2023.

SUMMARY DATA

52-Week High	**$1.13**
52-Week Low	**$0.22**
One-Year Return (%)	**-27.54**
Beta	**0.88**
Average Daily Volume (sh)	**97,896**
Shares Outstanding (mil)	**70**
Market Capitalization ($mil)	**35**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**14**
Insider Ownership (%)	**24**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2023 Estimate	**N/A**
P/E using 2024 Estimate	**N/A**

Risk Level	**High**
Type of Stock	**Small-Value**
Industry	**Med-Biomed/Gene**

ZACKS ESTIMATES

Revenue
(In millions of $CAD)

	Q1 (Jun)	Q2 (Sep)	Q3 (Dec)	Q4 (Mar)	Year (Mar)
2023	0 A	0 A	0 A	0 A	0 A
2024	0 A	0 E	0 E	0 E	0 E
2025					0 E
2026					0 E

Earnings per Share

	Q1 (Jun)	Q2 (Sep)	Q3 (Dec)	Q4 (Mar)	Year (Mar)
2023	-$0.08 A	- $0.01 A	-$0.02 A	-$0.05 A	-$0.16 A
2024	-$0.04 A	-$0.05 E	-$0.05 E	-$0.06 E	-$0.21 E
2025					-$0.20 E
2026					-$0.20 E

© Copyright 2023, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

Business Update

Update on Phase 1/2 ABILITY Trial

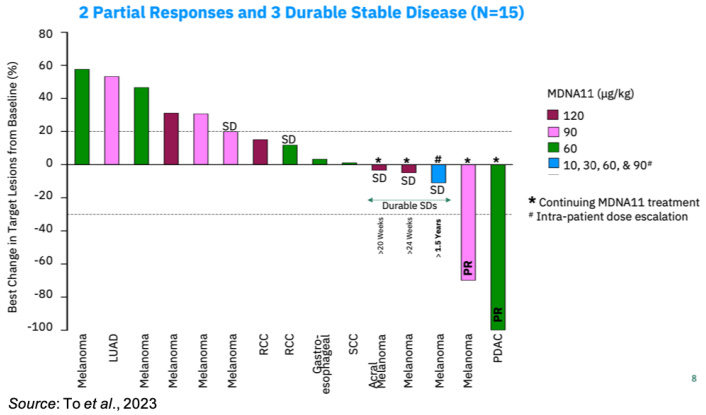
On November 6, 2023, Medicenna announced that updated results from the Phase 1/2 ABILITY (A Beta-only IL-2 ImmunoTherapY Study) trial of MDNA11 were presented at SITC. MDNA11 is the company's albumin-fused, long-acting, IL-2 agonist that induces strong activation of CD8+ T cells and NK cells, has minimal impact on Treg cells, and reduced toxicity compared to recombinant, human IL-2 (rhIL-2).

The following figure shows the best change in target lesion for patients on ≥ 60 μg/kg MDNA11 monotherapy. There have been two partial responses (PRs) and three patients with stable disease (SD).

- One patient that experienced a PR has metastatic pancreatic ductal adenocarcinoma (PDAC; MSI-H). This patient had previously failed on multiple systemic therapies and was resistant to immune checkpoint inhibitors. Treatment with MDNA11 resulted in 100% shrinkage of target lesions, however this complete resolution of two target and one non-target lesions could not be considered a complete response (CR) according to RECIST 1.1 criteria due to the presence of a new lesion that was detected after the patient had returned from a seven-week vacation (during which time no treatment was received). The patient received one cycle of radiotherapy to treat the new lesion and continues on MDNA11 treatment.

- A patient with cutaneous melanoma, who had progressed on dual checkpoint inhibitors, showed a 70% reduction of the target lymph node lesion at Week 12 and is classified as a PR. This patient received a more rapid dose escalation than the first three patients treated in the 90 μg cohort (30, 60, 90 μg/kg Q2W; previously 30, 30, 90 μg/kg Q2W), which is the same dosing schedule that will be utilized in the dose expansion portion of the trial. The rate of tumor shrinkage is particularly encouraging and compares favorably to the PDAC patient who experienced a PR (who was on therapy for 22 weeks prior to a confirmed PR).

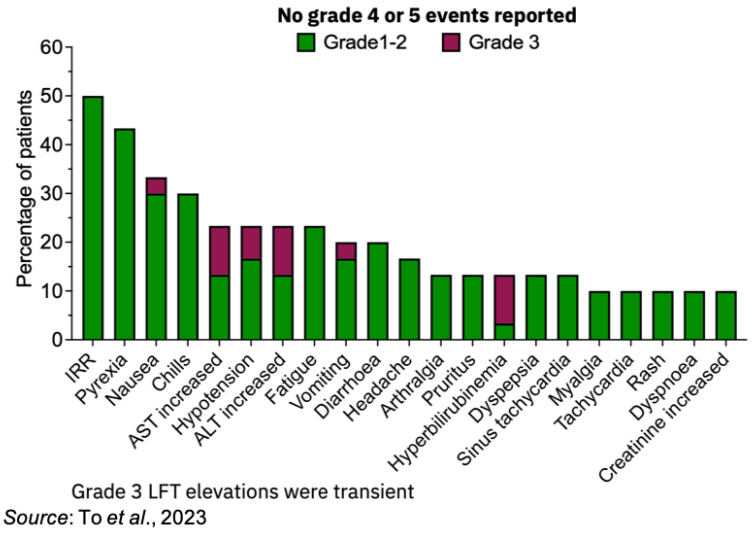
- Three metastatic melanoma patients exhibited SD. Two patients have experienced SD for > 20 weeks (acral melanoma) while the other patient has experienced SD for >24 weeks (cutaneous melanoma). The patient with cutaneous melanoma has experienced SD for > 1.5 years and had started in the trial at an MDNA11 dose of 10 μg/kg with subsequent dose escalations to 30, 60, and 90 μg/kg.



Source: To *et al.*, 2023

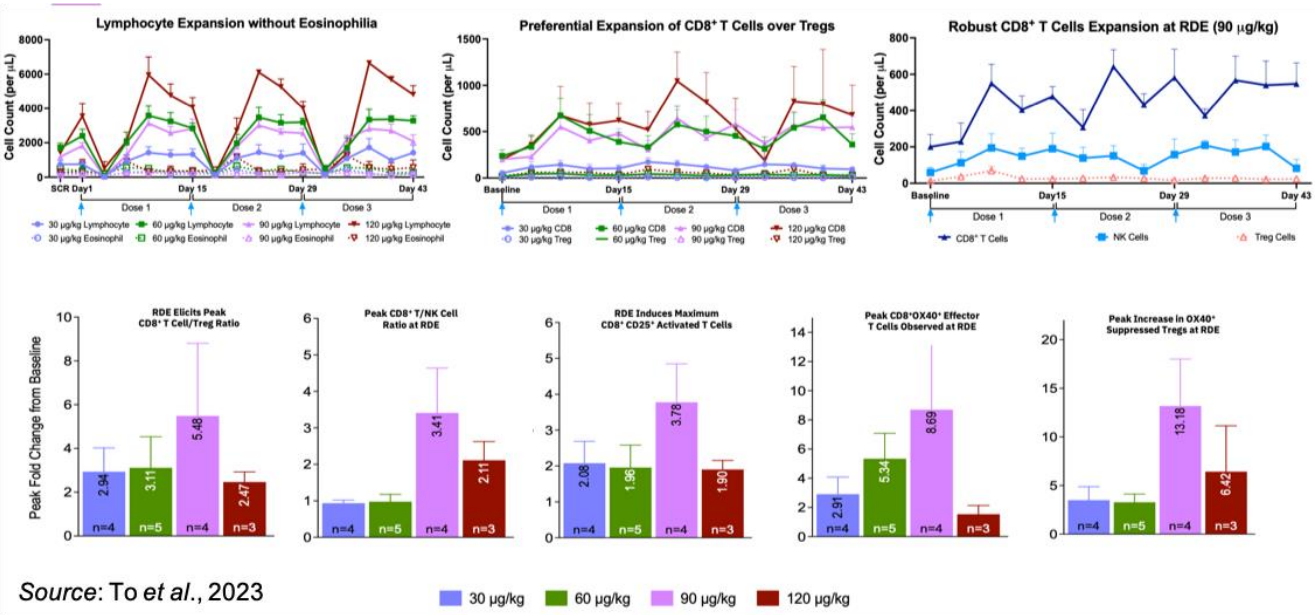
Investors should be aware of additional IL-2 results reported at SITC that included data from Werewolf Therapeutics (WOLF) on their lead IL-2 compound WTX-124, which uses a masking technology whereby IL-2 is specifically released in the tumor microenvironment (TME). At the 12 mg dose (highest dose tested; n=5), the company reported one unconfirmed partial response and results that were consistent with a partial response on a restaging scan for another patient. These data are very encouraging for the IL-2 space, which has experienced a number of setbacks over the past couple of years. While Werewolf's data is promising, we will be following the results closely to determine how durable they are given that the alpha activity of WTX-124 is still present, thus Treg activation may become an issue.

In regards to safety, MDNA11 has exhibited a favorable tolerability profile as there have been no reports of dose-limiting toxicities (DLTs) and no evidence of vascular leak syndrome. The vast majority (95.6%) of treatment-related adverse events (TRAEs) were of grade 1-2 severity and resolved within 48 hours. The grade 3 TRAEs were mostly transient liver enzyme elevations. There were no reports of grade 4 or 5 events.



Source: To *et al.*, 2023

Lastly, the following slide shows the pharmacodynamic parameters for MDNA at the various dose levels along with T cell expansion for the 90 μg/kg dose. The data show a robust activation of effector immune cells (particularly CD8+ T cells), with minimal impact on the population of immunosuppressive Treg cells.



Source: To *et al.*, 2023

Conclusion

The ABILITY data continue to show that MDNA11 is well tolerated and the two PRs are particularly exciting, especially in the pancreatic cancer patient as that tumor type is not typically thought to be amenable to immunotherapy. Now that single-agent anti-tumor activity has been shown for MDNA11 (in an advanced patient population), we will be very interested to see how the compound performs in combination with Keytruda. That trial should initiate before the end of 2023. In the meantime, the company is continuing to enroll patients in the monotherapy dose expansion trial, with a focus on patients with melanoma, non-melanoma skin cancers, and MSI-H/dMMR tumors. With no changes to our model our valuation remains at $9.00 per share.

PROJECTED FINANCIALS

Medicenna Therapeutics Corp. In Canadian Dollars	FY 2023 A	Q1 FY24 A	Q2 FY24 E	Q3 FY24 E	Q4 FY23 E	FY 2024 E	FY 2025 E	FY 2026 E
MDNA55	$0	$0	$0	$0	$0	$0	$0	$0
YOY Growth	-	-	-	-	-	-	-	-
MDNA11	$0	$0	$0	$0	$0	$0	$0	$0
YOY Growth	-	-	-	-	-	-	-	-
Other Income	$0	$0	$0	$0	$0	$0	$0	$0
YOY Growth	-	-	-	-	-	-	-	-
Total Revenues	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
YOY Growth	-	-	-	-	-	-	-	-
Cost of Sales	$0	$0	$0	$0	$0	$0	$0	$0
Product Gross Margin	-	-	-	-	-	-	-	-
Research & Development	$9.3	$2.8	$2.2	$2.5	$2.9	$10.4	$10.5	$11.0
General & Administrative	$7.0	$1.6	$1.7	$2.0	$2.2	$7.5	$8.0	$8.5
Other (Income) Expense	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Operating Income	($16.3)	($4.5)	($3.9)	($4.5)	($5.1)	($18.0)	($18.5)	($19.5)
Operating Margin	-	-	-	-	-	-	-	-
Non-Operating Expenses (Net)	($6.3)	($1.6)	($0.2)	($0.2)	($0.2)	($2.2)	($0.4)	($0.4)
Pre-Tax Income	($10.0)	($2.9)	($3.7)	($4.3)	($4.9)	($15.8)	($18.1)	($19.1)
Income Taxes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cumulative translation adjustment	($0.1)	($0.1)	($0.1)	($0.0)	($0.0)	($0.2)	($0.2)	($0.2)
Net Income	**($10.1)**	**($2.9)**	**($3.8)**	**($4.3)**	**($4.9)**	**($15.9)**	**($18.3)**	**($19.3)**
Net Margin	-	-	-	-	-	-	-	-
Reported EPS	**($0.16)**	**($0.04)**	**($0.05)**	**($0.05)**	**($0.06)**	**($0.21)**	**($0.20)**	**($0.20)**
YOY Growth	-	-	-	-	-	-	-	-
Basic Shares Outstanding	64.7	69.6	70.0	80.0	85.0	76.2	90.0	95.0

Source: Zacks Investment Research, Inc. *David Bautz, PhD*

© Copyright 2023, Zacks Investment Research. All Rights Reserved.

HISTORICAL STOCK PRICE



©2023 barchart.com

© Copyright 2023, Zacks Investment Research. All Rights Reserved.

DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, David Bautz, PhD, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.
Zacks SCR has received compensation from the issuer directly, from an investment manager, or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business.
SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover. SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer. Therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.