

2018 Update

11 April, 2019



Continues its plans as expected; Financing is required to continue operations at the beginning of 2020; received Orphan drug designation from the FDA for its main product affirming clinical potential and expected economic benefits; target price unchanged.

Primary Exchange: TASE

Ticker: TLV:KDST

Sector: Healthcare

Industry: Pharmaceuticals

Data as at 11 April, 2019
(Source: TASE)

Closing price: NIS 0.92

Market cap: NIS 87.3M

of shares: 94.8M

Stock performance (12 mos.): 119%

Daily-trading-vol. (12 mos.):
NIS 562k

Stock target price:
NIS 1.12

Company Overview

Kadimastem Ltd. (hereinafter "Kadimastem" or "the company") is a clinical stage biopharmaceutical company that specializes in regenerative therapies and that has two stem cell based therapies in research phase: 1. AstroRx (astrocytes- support cells of the central nervous system) for the treatment of ALS and 2. Encapsulin (insulin secreting cells) for the treatment of diabetes. Both products were developed on the back of the company's embryonic stem cell differentiation platform which has the potential to treat additional diseases.

Highlights & Analysis

In Frost and Sullivan's immediate report on October 10, 2018 we present the company's latest raise of capital:

\$5.15 million in capital was raised at a price of NIS 0.65. In addition warrants were realized providing an additional NIS 3.6M to the company.

- The Company raised \$5.15 million, through private placement, from a number of investors, including the controlling shareholders of the company, Prof. M Revel and Mr. J Rogery (who invested a combined \$1.1 million out of the total).
- To our understanding, the fact that controlling shareholders, who are well acquainted with the company's activity, invested a relatively significant amount compared to the total investment, attests to their belief in the company. Funds were raised from the controlling shareholders at NIS 0.65 per share, a slight discount compared to the trading price of the company's shares at the time (NIS 0.68).

Kadimastem is included in the TASE Indices

On November 27, 2018, Kadimastem (TASE: KDST) received an announcement from the TASE, that it will be included in the TASE Growth Index, the TASE Biomed Index and the TASE Global BlueTech Index. The company will be included in the indices starting December 6, 2018.

During 2018, the Company had no income; The loss amounted to NIS 24 million compared to the corresponding period in 2017, in which the loss amounted to NIS 21.5 million

- An increase in research and development expenses of NIS 1.7 mainly due to an increase in expenses in respect of the promotion of the Company's main clinical trial.
- The Company has a cash balance at the end of the year of NIS 11.1 million, while the cash flow used for operating activities amounted to NIS 20.9 million during 2018, meaning that the Company needs to continue financing around the beginning of 2020 at the latest.
- The Company has a capital deficiency of NIS 6.7 million as at December 31, 2018, compared to NIS 4.3 million as of December 31, 2017.
- The Company's auditors gave it "going concern" company status.

Clinical Developments:

- The FDA has granted the company's leading product orphan drug status in the United States, which is granted for the purpose of promoting the development of medical treatments for rare diseases. The economic implications of this status are: a longer exclusive marketing period (7 years versus 5 years), tax benefits, and benefits along the clinical trial pipeline. The clinical implications of this status are an affirmation of the company's medical potential. The company has completed the cells implantation of 5 patients for its Cohort A and has performed, for the first time, an astrocyte transplant using astrocytes (AstroRx®) developed through their unique technology, in the first ALS patient. Results for this cohort are expected in mid-2019.
- The company has won several awards and its research has been published on major platforms, affirming the scientific basis of the company's technology. On November 11, 2018 the company announced that it had been accepted to receive a joint research grant from the European Union and the Innovation Authority of the Ministry of Economy of Israel as part of the prestigious Eurostars program, for the clinical development of the company's technology for the treatment of diabetes, together with the medical device developed by Defymed. The grant amount is NIS 4.5M over two years with the part allotted to Kadimastem totaling NIS 1.5M for the first year, half of which is the contribution of the Israeli Innovation Authority.
- The company received an international cooperation grant with a company from the State of New South Wales, Australia, to test additional technology in the field of encapsulation. The expected project budget is NIS 3.3 million for two years, with the Company's share in the first year being NIS 1.1 million, of which the Authority's participation in innovation will be half.

We maintain the company's value in NIS 97M; Target price range remains between NIS 1.03 and NIS 1.21, an average of NIS 1.12.

See our [Initiation of Coverage report dated June 12, 2018](#) for full details on Kadimastem and our valuation methodology.

**Frost & Sullivan
Research & Consulting Ltd.**

A: Abba Even 1, Herzliya Pituach

T: +972 (0) 9 950 2888

E: equity.research@frost.com

W: www.frost.com/equityresearch

Kobi Hazan - Lead Analyst

Analysis

Kadimastem is a public Israeli company specializing in regenerative medicine. In March 2018, the company began its first clinical trial, stage I/IIa, with human astrocytes (AstroRx®) to replace the defective astrocytes in ALS patients. The unique characteristics of AstroRx® are expected to significantly slow the progression of the disease, as the company has demonstrated in its preclinical trials. The Phase I/IIa clinical trial is expected to be completed by mid-2020.

Only two drugs have so far been approved by the FDA to treat ALS, and neither of the drugs can reverse or stop the progression of the disease. In the stem cell field, there is one treatment available (based on mesenchymal stem cells) marketed by Corestem and approved in South Korea since 2014. Corestem may apply for approval in the US towards the end of 2018 or the beginning of 2019.

Another treatment based on stem cells (also based on mesenchymal stem cells) is BrainStorm Cell Therapeutics, a public Israeli company, with its lead asset currently undergoing Phase III clinical trials. If the trial succeeds, the company is expected to launch its leading product by 2020.

In the two stem cell treatments above, it is necessary to isolate the mesenchymal stem cells from the ALS patient and develop them into the final product. The process takes a few weeks (for example, the Brainstorm product requires about 28 days) and a laboratory for cell isolation and processing is required. This limits the ability of Corestem and Brainstorm to provide treatment for ALS patients, which are spread over different regions. Kadimastem's AstroRx®, as a shelf product, does not have these limitations.

In the area of diabetes, the company's treatment, Encapsulin, is designed for diabetics who are currently taking insulin to manage their blood glucose levels. The company is in the preclinical stage. The product is made up of insulin-producing and glucagon-producing products in response to external glucose levels. The company is examining and promoting cooperation in the field of encapsulation in order to select a partner with technological capabilities suitable for implementation of the company's cellular product for the treatment of diabetes. As part of this strategy, the company recently signed a memorandum of understanding with Defymed, a French medical device company, to conduct a feasibility study in the framework of preclinical trials deploying Kadimastem's cells with Defymed's device to assess the effectiveness of the combination. In addition, the company received an international cooperation grant with a company from the State of New South Wales in Australia to test additional technology in the field of encapsulation.

We contend that 2019 will be a crucial year for Kadimastem with the forecasted release of both clinical trial results for its ALS treatment and a prec-linical POC trial for its diabetes treatment. Both have the potential to impact the company's strategic position within the stem cells domain.

Upcoming Potential Catalysts

Program	Event	Significance	Timeline
ALS: AstroRx	Results on drug safety and efficacy will be declared. Information on measurable parameters such as improvement in muscle strength and quality of life due to the use of AstroRx will be reported.	High	Mid-2019
ALS: AstroRx	Commencement of a pivotal clinical trial	High	2020
Diabetes: Encapsulin	Proof of concept pre-clinical test using Defymed's MailPan device and Kadimastem's Islet-of-Langerhans-like cell clusters to evaluate the efficacy of the combination in treating diabetes.	High	Mid-2019

12-month stock movement

*The trading volume over the last quarter has almost doubled



Source: TASE

Appendix – Financial Statements

Balance Sheet (NIS 000s)		
As at:	12/31/2017	12/31/2018
Cash And Cash Equivalents	9,549	11,108
Net Receivables	911	1,274
Total Current Assets	10,460	12,382
Property, Plant and Equipment	1,068	1,427
Restricted Cash	604	600
Total Assets	12,132	14,616
Liabilities to suppliers and service providers	4,917	4,674
Accounts Payable	1,650	2,024
Advanced Deposit	0	587
Short Term Credit, and others	772	0
Total Current Liabilities	7,339	7,285
Total Non-Current Liabilities	513	593
Total Liabilities	7,852	7,878
Shareholder's Equity	4,280	6,738
Total, Liabilities + Equity	12,132	14,616

Statement of P/L (NIS 000s) for the period of 6 months ending on:

<i>Six-Months Ending</i>	<u>30/06/2017</u>	<u>31/12/2017</u>	<u>6/30/2018</u>	<u>12/31/2018</u>
Total Revenue	(589)	(95)	0	0
Cost of Revenue	41	7	0	0
Gross Loss (Profit)	548	(548)	0	0
Research & Development Expenses	8,895	5,975	7,323	9,331
Selling, General & Administrative Expenses	3,151	3,352	3,401	3,561
Operating Loss	11,598	9,239	10,724	12,892
Net Financial Expenses	347	419	284	119
Earnings Before Taxes	11,945	9,658	11,008	13,011
Income Tax	(62)	(113)	(51)	0
Net Loss	11,883	9,771	10,957	13,011

Credit to Experts: Dr. Tiran Rothman and Dr. Hadar Cohen-HaLevy

About Frost & Sullivan

Frost & Sullivan* is a global leader in strategic and financial consulting, as well as, market and technology research. Frost & Sullivan is comprised of an integrated global team of 1,800, including; analysts, experts, and growth strategy consultants across 50 branches on six continents, including in Herzliya Pituach, Israel. Frost & Sullivan's Independent Equity Research leverages the in-house experience accumulated from working with leading players in medical technologies, life sciences, ICT, cybersecurity, renewable energy, and other industrial fields, for the past 55 years. Alongside, we utilize our tens of thousands proprietary of market and technology research reports, and economic forecasts. For additional information visit: www.frost.com. For access to our reports and further information on our Independent Equity Research program visit www.frost.com/equityresearch.

*Frost & Sullivan Research and Consulting Ltd., a wholly owned subsidiary of Frost & Sullivan, is registered and licensed in Israel to practice as an investment adviser.

What is Independent Equity Research?

Nearly all equity research is nowadays performed by stock brokers, investment banks, and other entities which have a financial interest in the stock being analyzed. On the other hand, Independent Equity Research is a boutique service offered by only a few firms worldwide. The aim of such research is to provide an unbiased opinion on the state of the company and potential forthcoming changes, including in their share price. The analysis does not constitute investment advice, and analysts are prohibited from trading any securities being analyzed. Furthermore, a company like Frost & Sullivan conducting Independent Equity Research services is reimbursed by a third party entity and not the company directly. Compensation is received up front to further secure the independence of the coverage.

Analysis Program with the Tel Aviv Stock Exchange (TASE)

Frost & Sullivan is delighted to have been selected to participate in the Analysis Program initiated by the Tel Aviv Stock Exchange Analysis (TASE). Within the framework of the program, Frost & Sullivan produces equity research reports on Technology and Biomed (Healthcare) companies that are listed on the TASE, and disseminates them on exchange message boards and through leading business media channels. Key goals of the program are to enhance global awareness of these companies and to enable more informed investment decisions by investors that are interested in "hot" Israeli hi-tech and healthcare companies. The terms of the program are governed by the agreement that we signed with the TASE and the Israel Securities Authority (ISA) regulator.

For further inquiries, please contact our lead analyst.

Kobi Hazan
T: +972 (0) 9 950 2888
E: equity.research@frost.com

Some of the companies we cover



BIOLINERX



VONETIZE!



Disclaimers, disclosures, and insights for more responsible investment decisions

Definitions: "Frost & Sullivan" – A company registered in California, USA with branches and subsidiaries in other regions, including in Israel, and including any other relevant Frost & Sullivan entities, such as Frost & Sullivan Research & Consulting Ltd. ("FSRC"), a wholly owned subsidiary of Frost & Sullivan that is registered in Israel – as applicable. "The Company" or "Participant" – The company that is analyzed in a report and participates in the TASE Scheme; "Report", "Research Note" or "Analysis" – The content, or any part thereof where applicable, contained in a document such as a Research Note and/or any other previous or later document authored by "Frost & Sullivan", regardless if it has been authored in the frame of the "Analysis Program", if included in the database at www.frost.com and regardless of the Analysis format-online, a digital file or hard copy; "Invest", "Investment" or "Investment decision" – Any decision and/or a recommendation to Buy, Hold or Sell any security of The Company.

The purpose of the Report is to enable a more informed investment decision. Yet, nothing in a Report shall constitute a recommendation or solicitation to make any Investment Decision, so Frost & Sullivan takes no responsibility and shall not be deemed responsible for any specific decision, including an Investment Decision, and will not be liable for any actual, consequential, or punitive damages directly or indirectly related to The Report. Without derogating from the generality of the above, you shall consider the following clarifications, disclosure recommendations, and disclaimers. The Report does not include any personal or personalized advice as it cannot consider the particular investment criteria, needs, preferences, priorities, limitations, financial situation, risk aversion, and any other particular circumstances and factors that shall impact an investment decision. Nevertheless, according to the Israeli law, this report can serve as a *raison d'être* off which an individual/entity may make an investment decision.

Frost & Sullivan makes no warranty nor representation, expressed or implied, as to the completeness and accuracy of the Report at the time of any investment decision, and no liability shall attach thereto, considering the following among other reasons: The Report may not include the most updated and relevant information from all relevant sources, including later Reports, if any, at the time of the investment decision, so any investment decision shall consider these; The Analysis considers data, information and assessments provided by the company and from sources that were published by third parties (however, even reliable sources contain unknown errors from time to time); the methodology focused on major known products, activities and target markets of the Company that may have a significant impact on its performance as per our discretion, but it may ignore other elements; the Company was not allowed to share any insider information; any investment decision must be based on a clear understanding of the technologies, products, business environments, and any other drivers and restraints of the company's performance, regardless if such information is mentioned in the Report or not; an investment decision shall consider any relevant updated information, such as the company's website and reports on Magna; information and assessments contained in the Report are obtained from sources believed by us to be reliable (however, any source may contain unknown errors. All expressions of opinions, forecasts or estimates reflect the judgment at the time of writing, based on the Company's latest financial report, and some additional information (they are subject to change without any notice). You shall consider the entire analysis contained in the Reports. No specific part of a Report, including any summary that is provided for convenience only, shall serve per se as a basis for any investment decision. In case you perceive a contradiction between any parts of the Report, you shall avoid any investment decision before such contradiction is resolved. Frost and Sullivan only produces research that falls under the non-monetary minor benefit group in MiFID II. As we do not seek payment from the asset management community and do not have any execution function, you are able to continue receiving our research under the new MiFID II regime. This applies to all forms of transmission, including email, website and financial platforms such as Bloomberg and Thomson.

Risks, valuation, and projections: Any stock price or equity value referred to in The Report may fluctuate. Past performance is not indicative of future performance, future returns are not guaranteed, and a loss of original capital may occur. Nothing contained in the Report is or should be relied on as, a promise or representation as to the future. The projected financial information is prepared expressly for use herein and is based upon the stated assumptions and Frost & Sullivan's analysis of information available at the time that this Report was prepared. There is no representation, warranty, or other assurance that any of the projections will be realized. The Report contains forward-looking statements, such as "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe" and similar expressions. Undue reliance should not be placed on the forward-looking statements because there is no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, they involve inherent risks and uncertainties. Forward-looking information or statements contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results to be materially different from current projections. Macro level factors that are not directly analyzed in the Report, such as interest rates and exchange rates, any events related to the eco-system, clients, suppliers, competitors, regulators, and others may fluctuate at any time. An investment decision must consider the Risks described in the Report and any other relevant Reports, if any, including the latest financial reports of the company. R&D activities shall be considered as high risk, even if such risks are not specifically discussed in the Report. Any investment decision shall consider the impact of negative and even worst case scenarios. Any relevant forward-looking statements as defined in Section 27A of the Securities Act of 1933 and Section 21E the Securities Exchange Act of 1934 (as amended) are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

TASE Analysis Scheme: The Report is authored by Frost & Sullivan Research & Consulting Ltd. within the framework of the Analysis Scheme of the Tel Aviv Stock Exchange ("TASE") regarding the provision of analysis services on companies that participate in the analysis scheme (see details: www.tase.co.il/LPages/TechAnalysis/Tase_Analysis_Site/index.html, www.tase.co.il/LPages/InvestorRelations/english/tase-analysis-program.html), an agreement that the company has signed with TASE ("The Agreement") and the regulation and supervision of the Israel Security Authority (ISA). FSRC and its lead analyst are licensed by the ISA as investment advisors. Accordingly, the following implications and disclosure requirements shall apply.

The agreement with the Tel-Aviv Stock Exchange Ltd. regarding participation in the scheme for research analysis of public companies does not and shall not constitute an agreement on the part of the Tel-Aviv Stock Exchange Ltd. or the Israel Securities Authority to the content of the Equity Research Notes or to the recommendations contained therein.

As per the Agreement and/or ISA regulations: A summary of the Report shall also be published in Hebrew. In the event of any contradiction, inconsistency, discrepancy, ambiguity or variance between the English Report and the Hebrew summary of said Report, the English version shall prevail. The Report shall include a description of the Participant and its business activities, which shall inter alia relate to matters such as: shareholders; management; products; relevant intellectual property; the business environment in which the Participant operates; the Participant's standing in such an environment including current and forecasted trends; a description of past and current financial positions of the Participant; and a forecast regarding future developments and any other matter which in the professional view of Frost & Sullivan (as defined below) should be addressed in a research Report (of the nature published) and which may affect the decision of a reasonable investor contemplating an investment in the Participant's securities. An equity research abstract shall accompany each Equity Research Report, describing the main points addressed. A thorough analysis and discussion will be included in Reports where the investment case has materially changed. Short update notes, in which the investment case has not materially changed, will include a summary valuation discussion. Subject to the agreement, Frost & Sullivan Research & Consulting Ltd. is entitled to an annual fee to be paid directly by the TASE. The fees shall be in the range of 35 to 50 thousand USD per each participant. Each participant shall pay fees for its participation in the Scheme directly to the TASE.

The named lead analyst and analysts responsible for this Report certify that the views expressed in the Report accurately reflect their personal views about the Company and its securities and that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation or view contained in the Report. Neither said analysts nor Frost & Sullivan trade or directly own any securities in the company.

© 2018 All rights reserved to Frost & Sullivan and Frost & Sullivan Research & Consulting Ltd. Any content, including any documents, may not be published, lent, reproduced, quoted or resold without the written permission of the companies.