

Reason for report:

COMPANY UPDATE

## MACROGENICS, INC.

### Preclinical Data at AACR Suggests mAb-like Dosing of MGD007 Likely

• **Bottom Line:** MGNX presented promising preclinical data on MGD007 at American Association for Cancer Research (AACR) yesterday. MGD007 is a first-in-class gpA33 x CD3 bi-specific dual-affinity re-targeting (DART) molecule targeting colorectal cancer (CRC) stem-like cells. MGD007 appears safe in tested doses, based on preclinical non-human primate data presented at AACR. A favorable pharmacokinetic (PK) profile supports convenient antibody-like weekly dosing, which is in our view a tremendous advantage over "traditional" bi-specific molecules, since it enables longer-term chronic intermittent dosing, and thus access to large solid tumor indications. MGD007 is part of a broader partnership with Servier, and MGNX expects to initiate Phase I for colorectal cancer in 2H14. We continue to have a favorable view on MGNX's diversified and fast-growing pipeline with many shots on goal. **Reiterate OP; our price target remains \$52.**

• **MGD007 is a first-in-class gpA33 x CD3 DART molecule targeting colorectal cancer stem-like cells discovered by MGNX.** MGD007 is designed to redirect the body's T-cells to target gpA33-expressing colon cancer cells. GpA33 is found on over 95% of primary and metastatic human colorectal cancers, including cancer stem cells. In contrast to previously described cancer stem cell markers such as CD133 and CD44, gpA33 expression was observed on all cancer stem cell line models. Unlike previously developed bispecific molecules, MGD007 incorporates a neonatal FcR-binding Fc domain, significantly enhancing its half-life.

• **Favorable PK support convenient weekly dosing.** Cynomolgus monkeys received 4 weekly doses of up to 200ug/kg. MGD007 demonstrated enhanced PK properties with a mean half-life of ~7 days, consistent with that of Fc-containing molecules, such as monoclonal antibodies.

• **Safety profile promising in preclinical studies.** Weekly dosing of 200ug/kg in cynomolgus monkeys was well tolerated. Additionally, potent lysis of gpA33-positive colorectal cancer cell lines was observed both in vivo and in vitro while cytokine release was not observed in gpA33-negative cells and in non-human primates. gpA33 is ubiquitously expressed in colorectal cancer and not in normal mucosa.

• **Phase I start for colorectal cancer in 2H14.** IND acceptance is expected in mid-14 (which would trigger a \$5M milestone payment) and Servier could opt-in thereafter, which would trigger another milestone payment (we assume in 2015). Three additional INDs are expected in 2015. MGD007 is part of a broader DART partnership with Servier, including MGD006, MGD007, and another undisclosed DART.

#### Key Stats:

(OTC Un:MGNX)

<b>S&amp;P 600 Health Care Index:</b>	<b>1,233.05</b>
<b>Price:</b>	<b>\$26.06</b>
Price Target:	\$52.00
Methodology:	Sum-of-the-parts DCF analysis
52 Week High:	\$41.00
52 Week Low:	\$21.50
Shares Outstanding (mil):	27.0
Market Capitalization (mil):	\$703.6
Book Value/Share:	\$0.00
Cash Per Share:	\$5.91
Dividend (ann):	\$0.00
Dividend Yield:	0.0%

Shares Outstanding (mil): as of 1Q14E

Cash Per Share: based on 1Q14E



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	
2013A	\$10.6	\$12.3	\$20.2	\$14.9	\$58.0	(\$2.80)	(\$0.29)	\$0.14	(\$0.13)	(\$0.04)	NM
2014E	\$20.3	\$7.9	\$7.9	\$7.9	\$44.0	(\$0.05)	(\$0.50)	(\$0.50)	(\$0.50)	(\$1.57)	NM
2015E	--	--	--	--	\$48.0	--	--	--	--	(\$2.19)	NM

Source: Company Information and Leerink Partners LLC Research  
Revenues in \$MM.

GAAP EPS. Quarterly figures may not sum to annual total due to change in shares out.

## INVESTMENT THESIS

**We rate MGNX Outperform.** MGNX is a leader in the area of immune-modulation and is a fully integrated R&D-driven biotechnology company. The company is focused on developing new antibody-based therapeutics for cancer and autoimmune diseases and is based on a suite of platform technologies that allow rapid generation of novel therapeutic antibodies with superior properties. MGNX has applied its antibody discovery and engineering platform to generate a proprietary product pipeline and to enter into strategic collaborations that provide the company with funding and leverage the additional expertise of partners. We believe MGNX shares will appreciate as the company advances its proprietary and partnered pipeline products. We also believe MGNX could close additional product development partnerships and existing partners could license further products.

## VALUATION

Our \$52 price target for MGNX shares in 12 months is based on a discounted cash flow (DCF) sum-of-parts analysis. We use a 12% discount rate for probability of success-weighted margetuximab (25%), MGA271 (15%), and MGD006 (20%) sales. Based on our DCF analysis, we attribute \$8/share to margetuximab, \$11/share to MGA271, \$9/share to MGD006, and \$18/share to the preclinical pipeline and platform and the remainder to expected cash in one year.

## RISKS TO VALUATION

Developmental pipeline agents face clinical and regulatory development risk, as well as commercial risks. MGNX also faces execution risk and financial risk. We estimate that MGNX's current cash will be sufficient to fund operations into 2017, and the company may have additional financing needs before turning cash flow positive.

Program	Target	Platform	Partner	Indication	Current Status	Next milestone	Timing
Margetuximab	Her2	Fc	proprietary	Breast cancer (Her2 IHC2+)	Phase IIa	Phase IIa data	late 2014
						Initiate Phase IIb/III	2015
				3rd line Gastric cancer	Phase I	Initiate Phase III	2H14
						Phase III data	2018
MGA271	B7-H3	Fc, CSLC	Servier (EU rights)	Other cancers (bladder)	Phase I	Initiate Phase II	2015
				Solid tumors	Phase Ib	Phase Ib initiation of additional cohorts	2H14
						Phase Ib dose-expansion data monotherapy	2015
						Phase Ib dose-expansion data combinations	2015
MGD006	CD123 x CD3	DART	Servier (EU rights)	AML	IND	Servier opt-in	2015
						Initiate Phase I	2Q14
MGD007	gpA33 x CD3	DART, CSLC	Servier (EU rights)	Colorectal cancer	Preclinical	IND accepted	mid-14
						Initiate Phase I	2H14
						Servier opt-in	2015
MGD010	CD32B x CD79B	DART	proprietary	Autoimmune (SLE, RA)	Preclinical	Partnership	2014/15
						Initiate Phase I	2015
MGD011	undisclosed	DART	proprietary	Oncology	Preclinical	Initiate Phase I	2015
MGD012	undisclosed	DART	proprietary/Servier (EU)	Oncology	Preclinical	Initiate Phase I	2015
Teplizumab	CD3	Fc	proprietary	Type 1 Diabetes	Investigator-Sponsored Study	Partnership	n/a

Source: SEC Filings, Leerink Partners Estimates

MGNX P&L	2011A	2012A	1Q13A	2Q13A	3Q13A	4Q13A	2013A	1Q14E	2Q14E	3Q14E	4Q14E	2014E	2015E
Collaborative research revenue	47.1	59.6	10.1	11.8	20.1	14.7	56.8	20.0	7.7	7.7	7.7	43.0	48.0
Grant revenue	10.2	4.2	0.5	0.5	0.1	0.2	1.3	0.3	0.3	0.3	0.3	1.0	-
Royalties	-	-	-	-	-	-	-	-	-	-	-	-	-
Product sales	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	<b>57.2</b>	<b>63.8</b>	<b>10.6</b>	<b>12.3</b>	<b>20.2</b>	<b>14.9</b>	<b>58.0</b>	<b>20.3</b>	<b>7.9</b>	<b>7.9</b>	<b>7.9</b>	<b>44.0</b>	<b>48.0</b>
COGS	-	-	-	-	-	-	-	-	-	-	-	-	-
R&D	41.1	45.4	10.1	11.1	11.1	14.3	46.6	16.8	16.8	16.8	16.8	67.0	83.0
SG&A	10.9	10.2	3.8	1.5	2.0	3.8	11.1	5.0	5.0	5.0	5.0	20.0	25.0
Operating expenses	52.0	55.6	13.9	12.6	13.1	18.1	57.7	21.8	21.8	21.8	21.8	87.0	108.0
Operating income (expense)	5.2	8.2	(3.3)	(0.3)	7.2	(3.2)	0.37	(1.5)	(13.8)	(13.8)	(13.8)	(43.0)	(60.0)
Total Other income (expense)	1.5	0.2	(0.0)	(0.0)	(0.6)	0.0	(0.6)	-	-	-	-	-	-
EBT	6.7	8.4	(3.3)	(0.3)	6.6	(3.2)	(0.3)	(1.5)	(13.8)	(13.8)	(13.8)	(43.0)	(60.0)
Tax expense (income)	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net income</b>	<b>6.7</b>	<b>8.4</b>	<b>(3.3)</b>	<b>(0.3)</b>	<b>6.6</b>	<b>(3.2)</b>	<b>(0.3)</b>	<b>(1.5)</b>	<b>(13.8)</b>	<b>(13.8)</b>	<b>(13.8)</b>	<b>(43.0)</b>	<b>(60.0)</b>
GAAP EPS	6.55	7.72	(2.80)	(0.29)	0.14	(0.13)	(0.04)	(0.05)	(0.50)	(0.50)	(0.50)	(1.57)	(2.19)
Common shares outstanding	1.0	1.1	1.2	1.2	1.2	25.2	6.8	27.5	27.5	27.5	27.5	27.5	27.5

BS & CFS	2011A	2012A	1Q13A	2Q13A	3Q13A	4Q13A	2013A	1Q14E	2Q14E	3Q14E	4Q14E	2014E	2015E
Cash & equivalents	55.2	47.7	43.5	33.8	33.6	116.5	116.5	193.2	180.8	168.5	156.1	156.1	103.8
Debt	-	-	-	-	-	-	-	-	-	-	-	-	-

Change in Cash	18.3	(7.5)	(4.2)	(9.7)	(0.2)	82.9	68.7	76.7	(12.3)	(12.3)	(12.3)	39.7	(52.4)
<b>Cash from operations</b>	<b>6.8</b>	<b>(6.6)</b>	<b>(3.8)</b>	<b>(9.9)</b>	<b>0.8</b>	<b>(1.2)</b>	<b>(14.2)</b>	<b>0.5</b>	<b>(11.8)</b>	<b>(11.8)</b>	<b>(11.8)</b>	<b>(35.0)</b>	<b>(50.4)</b>
Net income (loss)	6.7	8.4	(3.3)	(0.3)	6.6	(3.2)	(0.3)	(1.5)	(13.8)	(13.8)	(13.8)	(43.0)	(60.0)
Share based comp	2.3	0.8	0.1	0.1	0.1	0.5	0.9	1.7	1.7	1.7	1.7	7.0	8.6
D&A	1.1	1.0	0.3	0.3	0.3	0.4	1.2	0.3	0.3	0.3	0.3	1.0	1.0
Other (Change in WC)	(3.5)	(16.7)	(0.9)	(10.0)	(6.3)	1.2	(16.0)	-	-	-	-	-	-
<b>Cash from investing</b>	<b>(0.5)</b>	<b>(0.9)</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>(1.2)</b>	<b>(0.9)</b>	<b>(3.0)</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(0.5)</b>	<b>(2.0)</b>	<b>(2.0)</b>
CapEx	(0.5)	(0.9)	(0.4)	(0.5)	(1.2)	(0.9)	(3.0)	(0.5)	(0.5)	(0.5)	(0.5)	(2.0)	(2.0)
Acquisitions	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cash from financing</b>	<b>12.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.7</b>	<b>0.1</b>	<b>85.0</b>	<b>85.9</b>	<b>76.7</b>	-	-	-	<b>76.7</b>	-
Equity issue (buyback)	12.1	0.0	0.1	0.7	0.1	85.0	85.9	76.7	-	-	-	76.7	-
Debt issue (principal payment)	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Leerink Partners Estimates and Company Filings

## Disclosures Appendix

### Analyst Certification

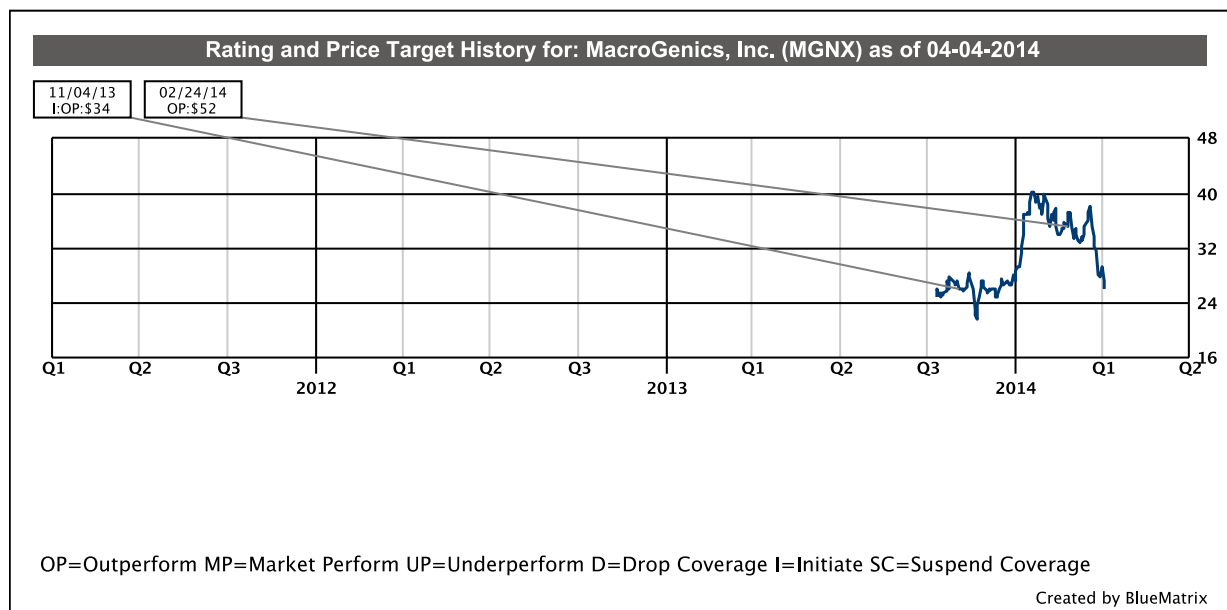
I, Michael Schmidt, Ph.D., certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

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Distribution of Ratings/Investment Banking Services (IB) as of 03/31/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	131	68.23	46	35.11
HOLD [MP]	61	31.77	3	4.92
SELL [UP]	0	0.00	0	0.00

## Explanation of Ratings

**Outperform (Buy):** We expect this stock to outperform its benchmark over the next 12 months.

**Market Perform (Hold/Neutral):** We expect this stock to perform in line with its benchmark over the next 12 months.

**Underperform (Sell):** We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

## Important Disclosures

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**In the past 12 months, the Firm has received compensation for providing investment banking services to MacroGenics, Inc. .**

**Leerink Partners LLC makes a market in MacroGenics, Inc.**

**Leerink Partners LLC has acted as a co-manager for a public offering of MacroGenics, Inc. in the past 12 months.**

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