WEDBUSH QUICK NOTE

LOS ANGELES | SAN FRANCISCO | NEW YORK | BOSTON | SEATTLE | MINNEAPOLIS | MILWAUKEE

April 7, 2014

Gregory R. Wade, Ph.D. (415) 274-6863 David M. Nierengarten, Ph.D. (415) 274-6862 Christopher N. Marai, Ph.D. (415) 274-6861

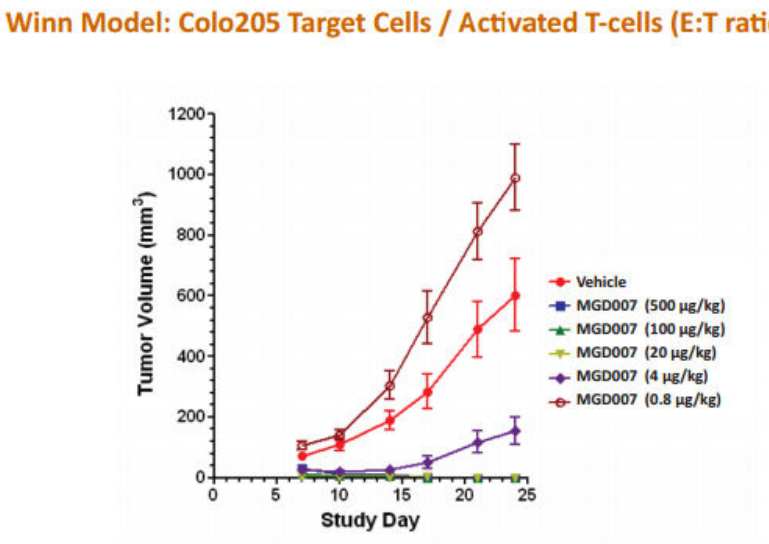
MacroGenics (MGNX - OUTPERFORM): Preclinical Data of MGD007 Demonstrate Anti-Tumor Activity in the Colorectal Cancer Setting

Price: $25.37 **12-Month Price Target: $70**

- **Dual affinity re-targeting proteins (DARTs) are a new class of protein therapeutics designed to simultaneously bind effector cells (eg. T-cells) and target cells (eg. cancer cells) to elicit the killing of the target cells.** As the originator and sole company producing DARTs, MGNX has produced over 100 DART molecules and has partnerships with Servier, Gilead, Boehringer, and Pfizer for up to 19 DART programs. To date, preclinical data from the two lead DART candidates, MGD006 (CD3xCD123) and MGD007 (CD3xgpA33), have shown similar preclinical efficacy that serve as proof of concept and support for entering clinical trials. Data from both molecules show binding of the DART to CD3 T-cells and target cells (acute myeloid leukemia for MGD006 or colorectal cancer cells for MGD007) resulting in the mediation of T-cell activation, T-cell proliferation, and tumor cell lysis. Both molecules have *in vivo* data showing mice models treated with these candidates having regression of the tumor. MGD006 and MGD007 are anticipated to enter clinical trials in Q2:14 and H2:14, respectively. Two other preclinical candidates are expected to enter the clinic in 2015. The preclinical data from these two lead DARTs provide support for the mechanism of action and potential efficacy of the novel class of DART molecules.
- **At AACR, MGNX presented preclinical data for MGD007, a bi-specific dual affinity re-targeting protein (DART) molecule, showing anti-tumor activity against colorectal cancer *in vitro* and in mice.** MGD007 targets T-cells through CD3 and gpA33 expressing cancer cells (greater than 95% of colorectal cancer, including cancer stem cells) through the glycoprotein A33 antigen. MGD007 doses of as low as 4 μg/kg were shown to elicit activity in colorectal cancer mouse models (Figure 1 and 2) suggesting potentially unprecedented potency compared to other biologics that are administered at mg/kg doses (eg. Herceptin (4 mg/kg), Kadcyla (3.6 mg/kg), rituximab (~9 mg/kg) and Adcetris (1.8 mg/kg)). MGNX also presented data that showed good tolerability of MGD007 by cynomolgus monkeys of up to 200 μg/kg qiw and a good pharmacokinetic profile with a mean half-life and a mean residence time of 6.8 days and 7.8 days for a 100 μg/kg dose (Figure 3). MGD007 specifically removes gpA33 expressing tumor cells and not tumor cells that do not express gpA33 (Figure 4), further demonstrating MGD007's specificity and mechanism of action. *In vitro* data show MGD007 elicits cytotoxic T-lymphocyte activity that requires the engagement of gpA33 containing tumor cells (Figure 5). MGD007's mechanism of action is associated with the upregulation of granzyme B and perforin in T cells and T cell activation and expansion (Figure 6). In addition to supporting an IND submission for the colorectal cancer setting, this preclinical proof of concept suggests that gpA33 may be a good target for other gpA33 expressing tumors including gastrointestinal, pancreatic, and gastroesophageal cancers.
- **MGNX expects to initiate a Phase I study of MGD007 in H2:14 in the colorectal cancer setting. Under the Servier agreement, MGNX will receive a $5M milestone payment from Servier upon IND acceptance of MGD007.** Additionally, the Phase 2 and 3 clinical trial costs will be shared between Servier and MGNX. MGNX retains the commercial rights in North America, Japan, Korea, and India, while Servier has the rights for all remaining territories. MGNX will receive low double digit to mid-teen royalties of MGD007 sales from Servier.
- **MGNX plans to initiate a global Phase III clinical trial of margetuximab in combination with irinotecan or paclitaxel in the HER2+ (IHC 3+ or IHC2+ with HER2 gene amplification by FISH) refractory gastroesophageal cancer setting in H2:14.** The primary outcome will be overall survival, and enrollment is expected to take approximately 3 years.
- **The enrollment of the first 21 patients of the Phase IIa study of margetuximab in the relapsed or refractory low HER2 expressing metastatic breast cancer setting (IHC 2+, HER2 gene not amplified by FISH) is estimated to complete by YE:14.** If two or more responses are observed, the study will be expanded to a total of 41 patients. MGNX considers five or more partial or complete responses out of the 41 patients to have adequate activity for additional clinical development.
- **The first three dose expansion cohorts of the Phase I study of MGA271 (Fc-optimized B7-H3 antibody) in the B7-H3 positive (IHC 2/3+) tumor setting is expected to complete by YE:14, and additional expansion cohorts of MGA271 as monotherapy and combination therapy in other tumors are anticipated to begin in 2014.**
- **We reiterate our OUTPERFORM rating and $70 price target.** Our $70 price target is derived from the sum of multiples of sales and royalties from the company's proprietary and partnered products, each discounted back to YE:14.

- Risks to achievement of our price target include clinical failures and product advancement and development success rates for MGNX's licensees below that for which we have modelled.

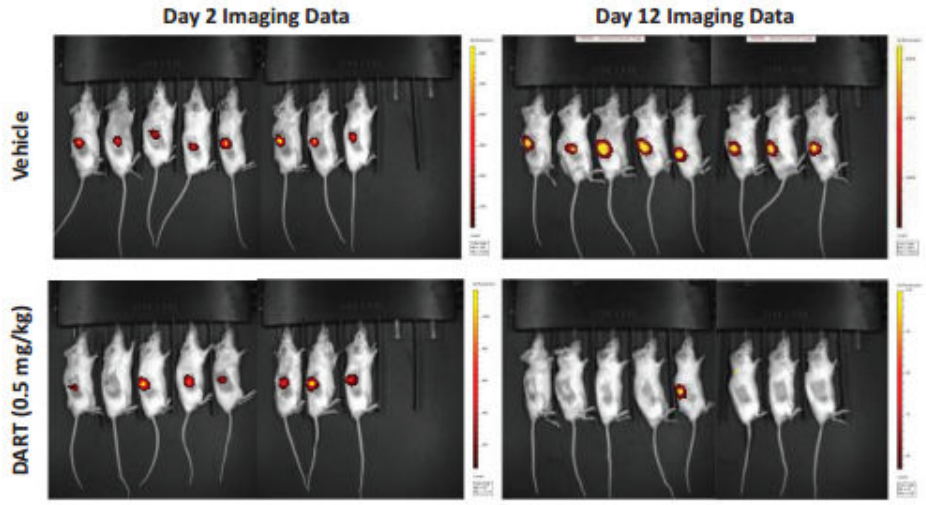
Figure 1: MGD007 Mediates Anti-tumor Activity



Female NOD/SCID mice (n = 8/group) were implanted SC with Colo205 tumor cells + human T cells (1:1 ratio) on Day 0 followed by treatment with vehicle control or 0.8 to 500 µg/kg MGD007 on Days 0-3 for a total of 4 doses administered IV. MGD007 at dose levels of 4 µg/kg or greater significantly inhibited Colo205 colorectal tumor growth.

Source: MacroGenics

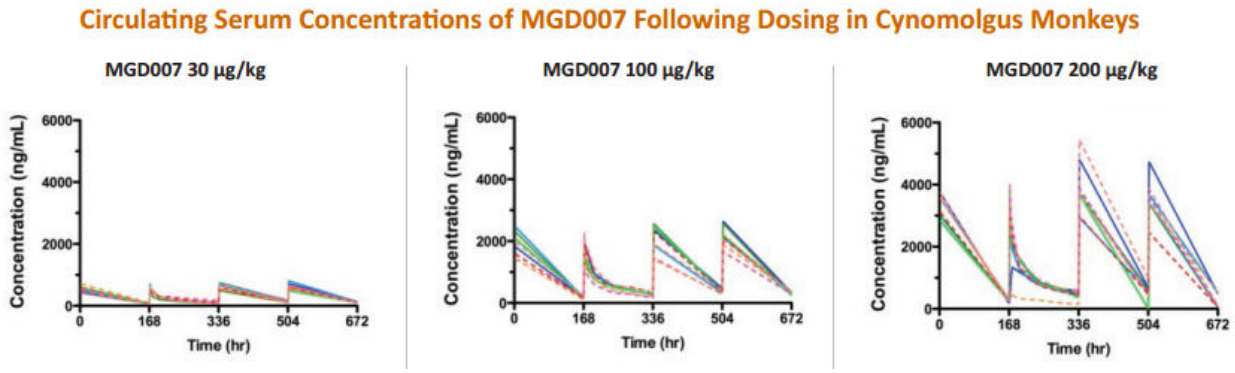
Figure 2: Xenograft Imaging Following Treatment with gpA33 x CD3 DART



Caliper imaging of NSG mice co-implanted SC with Colo205 luciferase-labeled cells and activated T-cells (E:T = 1:1). gpA33 x CD3 DART (precursor to MGD007) or vehicle were administered IV once daily for 4 days and xenografts were monitored.

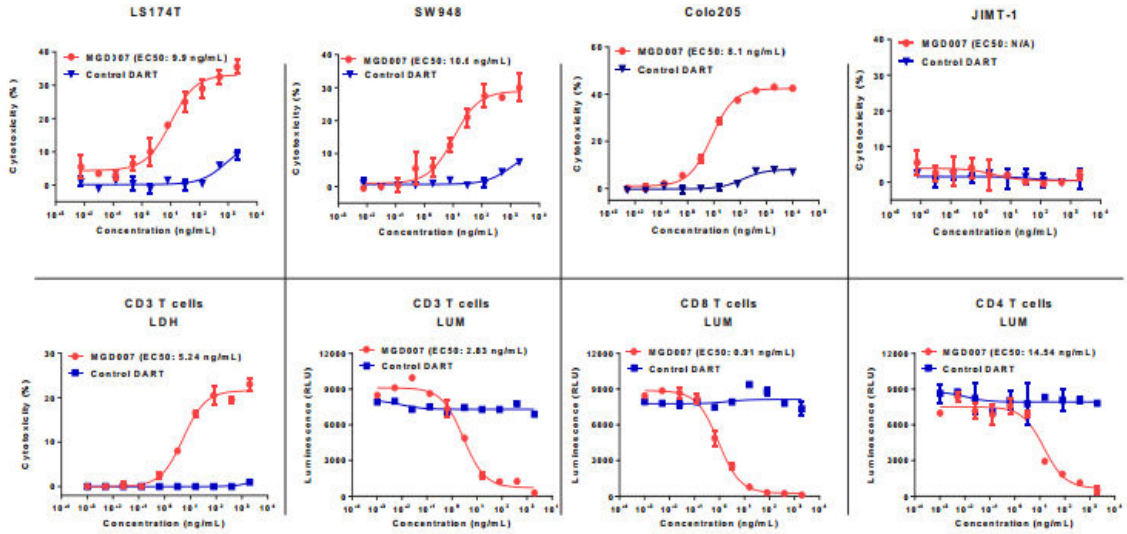
Source: MacroGenics

Figure 3: Circulating Serum Concentrations of MGD007 Following Dosing in Cynomolgus Monkeys



Source: MacroGenics

Figure 4: MGD007-Mediated CTL Activity Against gpA33-Target Cells

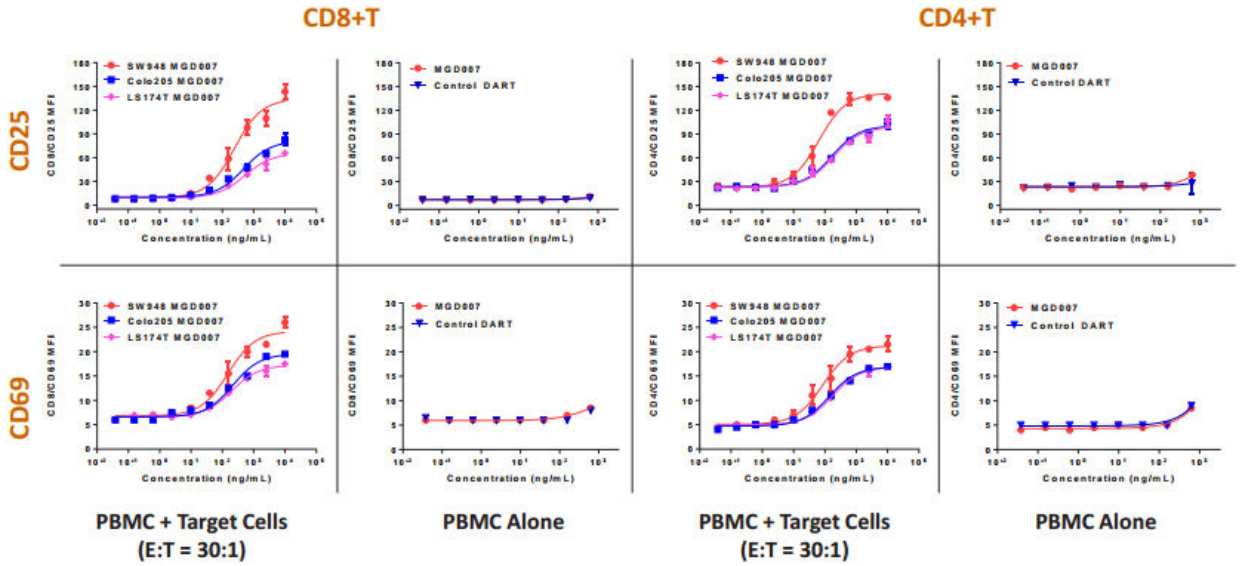


Top Row: MGD007 mediated specific redirected T-cell killing of gpA33-expressing target tumor cells (SW948, LS174T, and Colo205) by using human PBMCs as effectors (LDH-release assay; E:T cell ratio = 30:1; EC_{50} ~8-11 ng/mL). In contrast, no killing was observed against a breast cancer cell line lacking gpA33 expression (JIMT-1).

Bottom Row: MGD007 mediated cytotoxic T-lymphocyte (CTL) activity against luciferase-transduced Colo205 cells by using purified human T-cells (CD3, CD8, or CD4) from the same donor at E:T cell ratio of 10:1 by LDH-release assay or LUM assay as indicated.

Source: MacroGenics

Figure 5: MGD007-Mediated T-cell Activation is Dependent on gpA33 Target Cell Engagement



MGD007 mediated T-cell activation as measured by upregulation of CD25 and CD69 by CD8 and CD4 cells in the presence of gpA33-expressing target cells. No activation was observed with a control DART or by incubating MGD007 with PBMCs alone.

Source: MacroGenics

Figure 6: MGD007-Mediated Cytolytic Activity of T Cells is Associated with Upregulation of Granzyme B / Perforin and T-cell Expansion

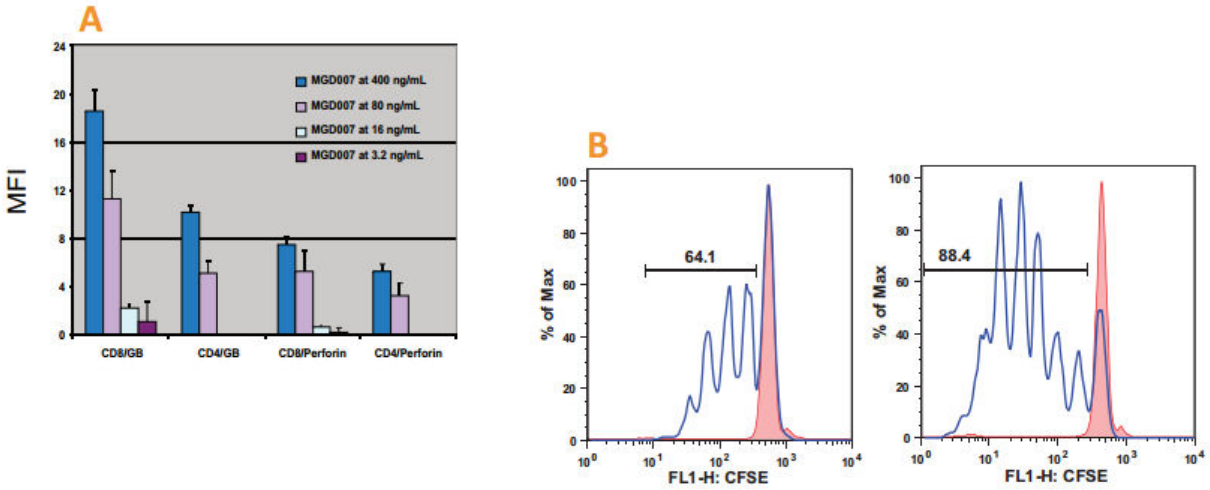


Figure A: Dose-dependent upregulation of granzyme B (GB) and perforin levels in both CD8 and CD4 human T cells was observed in the presence of MGD007 together with Colo205 target cells. Granzyme B and perforin upregulation were greater in CD8+ compared to CD4+ T cells, consistent with the greater level of CTL activity supported by CD8 vs CD4 T cells.

Figure B: MGD007 mediates T-cell expansion in the presence of LS174T target cells following 3 days (left panel) or 4 days (right panel) exposure at E:T cell ratio = 10:1 (MGD007 - blue; Control DART - red). Proliferation of CFSE-labeled T-cells was monitored by levels of CFSE dilution over time by flow cytometry.

Source: MacroGenics

Analyst Certification
I, Gregory R. Wade, Ph.D., David M. Nierengarten, Ph.D., Christopher N. Marai, Ph.D., certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

Disclosure information regarding historical ratings and price targets is available at http://www.wedbush.com/ResearchDisclosure/DisclosureQ413.pdf

Investment Rating System:
Outperform: Expect the total return of the stock to outperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.
Neutral: Expect the total return of the stock to perform in-line with the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.
Underperform: Expect the total return of the stock to underperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

The Investment Ratings are based on the expected performance of a stock (based on anticipated total return to price target) relative to the other stocks in the analyst's coverage universe (or the analyst's team coverage).*

Rating Distribution (as of December 31, 2013)	**Investment Banking Relationships (as of December 31, 2013)**
Outperform:54% Neutral: 43% Underperform: 3%	Outperform:18% Neutral: 2% Underperform: 0%

The Distribution of Ratings is required by FINRA rules; however, WS' stock ratings of Outperform, Neutral, and Underperform most closely conform to Buy, Hold, and Sell, respectively. Please note, however, the definitions are not the same as WS' stock ratings are on a relative basis.

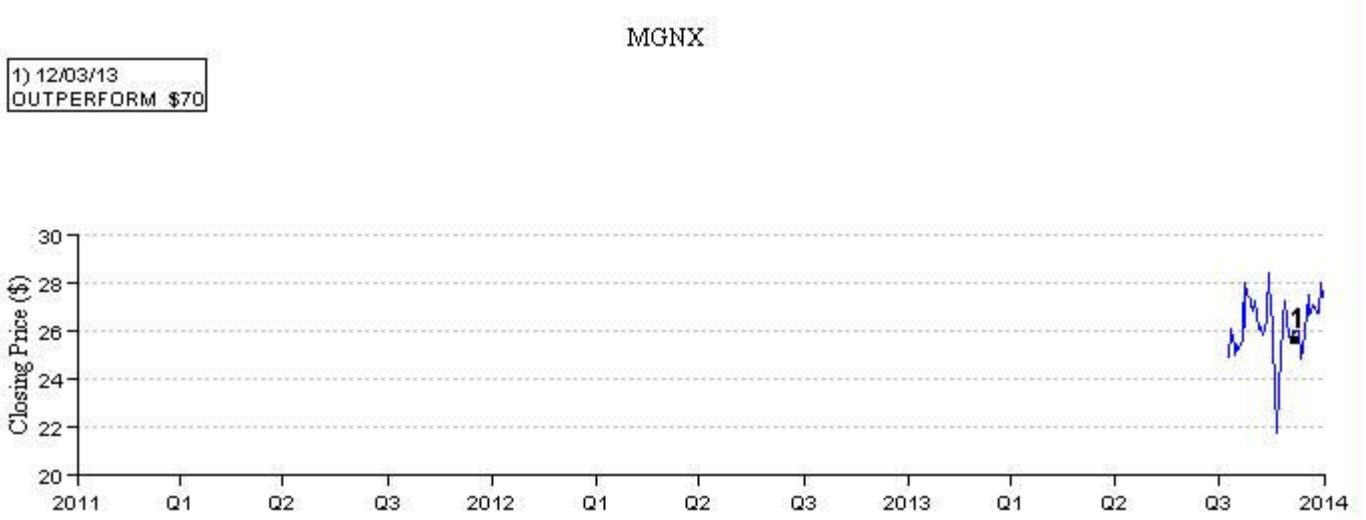
The analysts responsible for preparing research reports do not receive compensation based on specific investment banking activity. The analysts receive compensation that is based upon various factors including WS' total revenues, a portion of which are generated by WS' investment banking activities.

Wedbush Equity Research Disclosures as of April 7, 2014

Company	Disclosure
MacroGenics	1,3,4,5,7

Research Disclosure Legend
1. WS makes a market in the securities of the subject company.
2. WS managed a public offering of securities within the last 12 months.
3. WS co-managed a public offering of securities within the last 12 months.
4. WS has received compensation for investment banking services within the last 12 months.
5. WS provided investment banking services within the last 12 months.
6. WS is acting as financial advisor.
7. WS expects to receive compensation for investment banking services within the next 3 months.
8. WS provided non-investment banking securities-related services within the past 12 months.
9. WS has received compensation for products and services other than investment banking services within the past 12 months.
10. The research analyst, a member of the research analyst's household, any associate of the research analyst, or any individual directly involved in the preparation of this report has a long position in the common stocks.
11. WS or one of its affiliates beneficially own 1% or more of the common equity securities.
12. The analyst maintains Contingent Value Rights that enables him/her to receive payments of cash upon the company's meeting certain clinical and regulatory milestones.

Price Charts
Wedbush disclosure price charts are updated within the first fifteen days of each new calendar quarter per FINRA regulations. Price charts for companies initiated upon in the current quarter, and rating and target price changes occurring in the current quarter, will not be displayed until the following quarter. Additional information on recommended securities is available on request.



* WS changed its rating system from (Strong Buy/Buy/Hold/Sell) to (Outperform/ Neutral/Underperform) on July 14, 2009.
Please access the attached hyperlink for WS' Coverage Universe: http://www.wedbush.com/services/cmg/equities-division/research/equity-research Applicable disclosure information is also available upon request by contacting Ellen Kang in the Research Department at (213) 688-4529, by email to ellen.kang@wedbush.com, or the Business Conduct Department at (213) 688-8090. You may also submit a written request to the following: Business Conduct Department, 1000 Wilshire Blvd., Los Angeles, CA 90017.

OTHER DISCLOSURES

RESEARCH DEPT. * (213) 688-4505 * www.wedbush.com
EQUITY TRADING Los Angeles (213) 688-4470 / (800) 421-0178 * EQUITY SALES Los Angeles (800) 444-8076
CORPORATE HEADQUARTERS (213) 688-8000

WEDBUSH

EQUITY RESEARCH DEPARTMENT

(213) 688-4529

DIRECTOR OF RESEARCH
Mark D. Benson (213) 688-4435

MANAGER, RESEARCH OPERATIONS
Ellen Kang (213) 688-4529

RETAIL AND CONSUMER

Consumer Products
Rommel T. Dionisio (212) 938-9934
Alicia Reese (212) 938-9927

Footwear, Apparel and Accessories
Corinna Freedman (212) 668-9876

Healthy Lifestyles
Kurt M. Frederick, CFA CPA (415) 274-6822
Alicia Reese (212) 938-9927

Restaurants
Nick Setyan (213) 688-4519
Colin Radke (213) 688-6624

Specialty Retail: Hardlines
Joan L. Storms, CFA (213) 688-4537
John Garrett, CFA (213) 688-4523

Seth Basham, CFA (212) 938-9954

Specialty Retail: Softlines
Morry Brown (213) 688-4311
Taryn Kuida (213) 688-4505

RETAIL/CONSUMER MARKET RESEARCH

Gabriella Santaniello (213) 688-4557

INDUSTRIAL GROWTH TECHNOLOGY

Clean Technology
Craig Irwin (212) 938-9926
Min Xu (212) 938-9925

Environmental Services / Building Products
Al Kaschalk (213) 688-4539

Water and Renewable Energy Solutions
David Rose, CFA (213) 688-4319
James Kim (213) 688-4380

TECHNOLOGY, INTERNET, MEDIA & SOCIAL MEDIA

Communications and Application Software
Shyam Patil, CFA (213) 688-8062
Andy Cheng (213) 688-4548

Enterprise Security
Sanjit Singh (212) 938-9922

Computer Services: Financial Technology
Gil B. Luria (213) 688-4501
Aaron Turner (213) 688-4429

Enterprise Software
Steve Koenig (415) 274-6801
Kevin Ikeda (213) 688-4423

Entertainment: Retail
Michael Pachter (213) 688-4474
Nick McKay (213) 688-4343
Nick Citrin (213) 688-4495

Entertainment: Software
Michael Pachter (213) 688-4474
Nick McKay (213) 688-4343
Nick Citrin (213) 688-4495

Internet: Media and Gaming
Michael Pachter (213) 688-4474
Nick McKay (213) 688-4343
Nick Citrin (213) 688-4495

Internet: Social Media, Advertising & Technology
Shyam Patil, CFA (213) 688-8062
Andy Cheng (213) 688-4548

Media
James Dix, CFA (213) 688-4315

Movies and Entertainment
Michael Pachter (213) 688-4474
Nick McKay (213) 688-4343
Nick Citrin (213) 688-4495

Semiconductors
Betsy Van Hees (415) 274-6869
Ryan Jue, CFA (415) 263-6669

LIFE SCIENCES AND HEALTH CARE

Biotechnology/Biopharmaceuticals/BioDefense
Gregory R. Wade, Ph.D. (415) 274-6863
David M. Nierengarten, Ph.D. (415) 274-6862
Christopher N. Marai, Ph.D. (415) 274-6861
Dilip Joseph (415) 273-7308

Emerging Pharmaceuticals
Liana Moussatos, Ph.D. (415) 263-6626

Healthcare Services - Managed Care
Sarah James (213) 688-4503

Medical Devices
Tao Levy (212) 938-9948

Medical Diagnostics and Life Sciences Tools
Zarak Khurshid (415) 274-6823

EQUITY SALES		EQUITY TRADING	
Los Angeles	(213) 688-4470 / (800) 444-8076	Los Angeles	(213) 688-4470 / (800) 421-0178
San Francisco	(415) 274-6800	San Francisco	(415) 274-6811
New York	(212) 938-9931	New York	(212) 344-2382
Boston	(617) 832-3700	Boston	(617) 832-3700

CORPORATE HEADQUARTERS
1000 Wilshire Blvd., Los Angeles, CA 90017-2465
Tel: (213) 688-8000 www.wedbush.com