UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 29, 2012

Ohr Pharmaceutical, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**333-88480**	**#90-0577933**
(State or other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

489 5th Ave, 28th Floor, New York, NY	**10017**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: (212)-682-8452

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

£ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

£ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

£ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

£ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 7.01. Regulation FD Disclosure.

Ohr Pharmaceutical Inc. (the "Company") has updated its corporate presentation to reflect recent events including our presentation of Squalamine eye drop data at the ARVO 2012 meeting and the FDA granting Fast Track Status to our Squalamine eye drop program for the treatment of the wet form of macular degeneration (wet-AMD). The slide address will provide, among other things, an update on our active clinical development programs, the Company's business outlook, select financial and operational metrics, and expected milestones for 2012 and the first quarter of 2013. The slides will be available on the Company's website at www.ohrpharmaceutical.com

The information contained herein is being furnished pursuant to Item 7.01 of Form 8-K, "Regulation FD Disclosure." This information shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Exhibit No.	Description
99.1	Ohr Pharmaceutical Slide Deck Dated May 29, 2012

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

OHR PHARMACEUTICAL, INC.

By: /s/ Irach Taraporewala
Dr. Irach Taraporewala, President and CEO

Dated: May 29, 2012

Exhibit 99.1

OHR Pharmaceutical Inc.

Corporate Presentation

May 2012

Safe Harbor Statement

This presentation contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward looking statements are made only as the date thereof, and Ohr undertakes no obligation to update or revise the forward looking statement whether as a result of new information, future events or otherwise. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including the future success of our scientific studies, our ability to successfully develop products, rapid technological change in our markets, changes in demand for our future products, legislative, regulatory and competitive developments, the financial resources available to us, and general economic conditions. For example, there can be no assurance that Ohr will be able to sustain operations for expected periods. Shareholders and prospective investors are cautioned that no assurance of the efficacy of pharmaceutical products can be claimed or assured until final testing; and no assurance or warranty can be made that the FDA will approve final testing or marketing of any pharmaceutical product. Ohr's most recent Annual Report and subsequent Quarterly Reports discuss some of the important risk factors that may affect our business, results of operations and financial condition. We disclaim any intent to revise or update publicly any forward-looking statements for any reason.

Management Team

- Dr. Irach Taraporewala, CEO
  - Over 30 years experience in drug development and regulatory affairs
  - Former Vice President, Regulatory Affairs & Clinical Research, Mystic Pharmaceuticals
  - Former Senior Consultant at PAREXEL Drug Development Consulting, advising pharmaceutical and biotechnology company clients on regulatory strategy and product manufacturing
  - Well versed in pharmaceutical technology evaluation due diligence and intellectual property matters
- Dr. Shalom Hirschman, Chief Scientific Advisor
  - 30+ years as Director of Infectious Diseases and Vice Chairman of Mount Sinai School of Medicine
  - Former CEO & President of Advanced Viral Corp.
  - Founder and Board member of Xtramedics (Quantrx)
  - Founder of Touro College
- Sam Backenroth, VP of Business Development
  - Former Investment Banker with The Benchmark Co.
  - Completed numerous biotech transactions, raising $75+MM for micro-cap companies
  - Strategic advisor to multiple micro-cap public and private biotech companies
- Orin Hirschman, Executive Director
  - 20+ years experience in money management, leveraged buyouts, restructuring and venture capital.
  - General Partner at three private investment funds including the well known Adam Smith Investment Partnerships as well as AIGH Investment Partners
  - Actively involved in the financing and structuring of over 70 companies
  - Over the last four years structured and led 18 private placements
- Ira Greenstein, Director
  - President of IDT corporation (NYSE:IDT) since 2001
  - Former partner and chairman of NY business practice for the law firm of Morrison & Foerster
  - Former General Counsel and Secretary of Net2Phone, Inc
  - Currently serves on the board of Document Security Systems (AMEX:DMC)

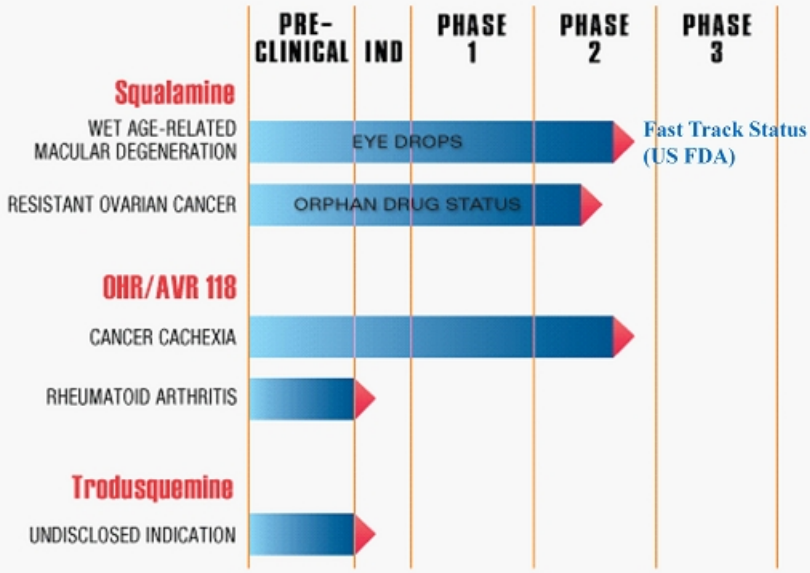
Corporate History

- Founded in late 2008
- Execute on strategy to acquire late stage clinical programs
  - Wealth of preclinical and clinical data
  - Clear competitive path forward
  - Risk mitigation
- Acquisitions
  - OHR/AVR118- March 2009
    - Advanced Viral Research Corp.
  - Squalamine & Trodusquemine- August 2009
    - Genaera Corp.

Company Overview

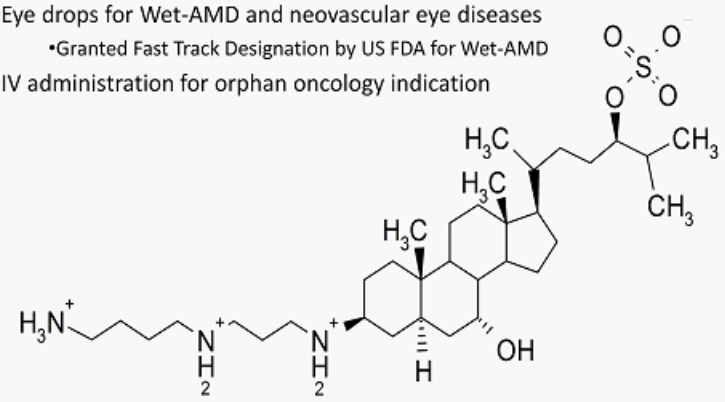
- 2 compounds in active development
- 3 major clinical Phase II applications
- Extensive clinical data showing safety and activity of compounds
- Multiple indications with billion dollar market potential
- Lead indications address unmet medical needs including an orphan drug and a fast track indication
- Strong intellectual property protection
- Good management team with tight expense controls
- Unknown story with several upcoming catalysts

Drug Pipeline

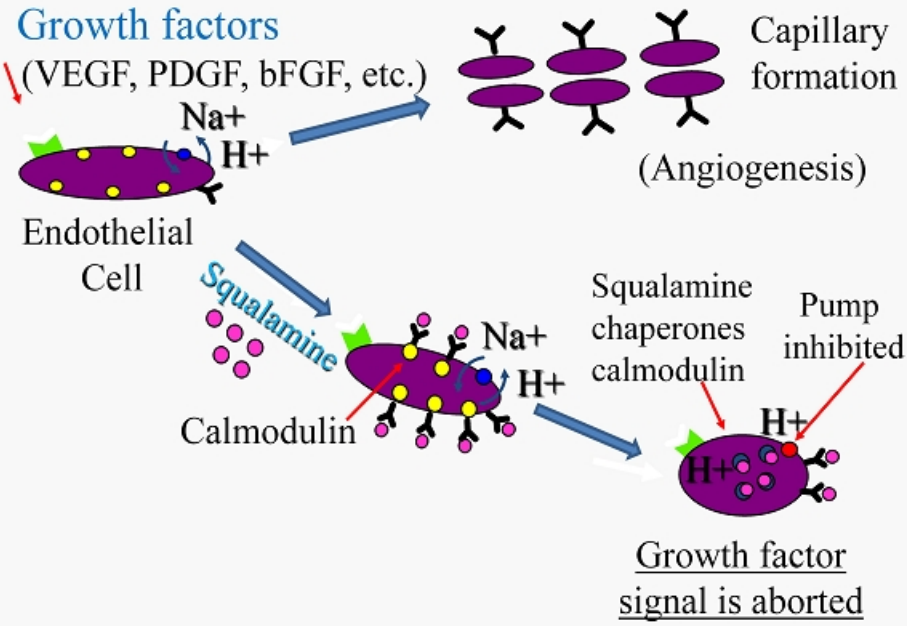


Squalamine

- Small molecule aminosterol
- Novel intracellular anti-angiogenic mechanism
- Inhibitor of multiple angiogenic growth factors
  - VEGF, PDGF, and bFGF
- Development pathway
  - Eye drops for Wet-AMD and neovascular eye diseases
    - Granted Fast Track Designation by US FDA for Wet-AMD
  - IV administration for orphan oncology indication

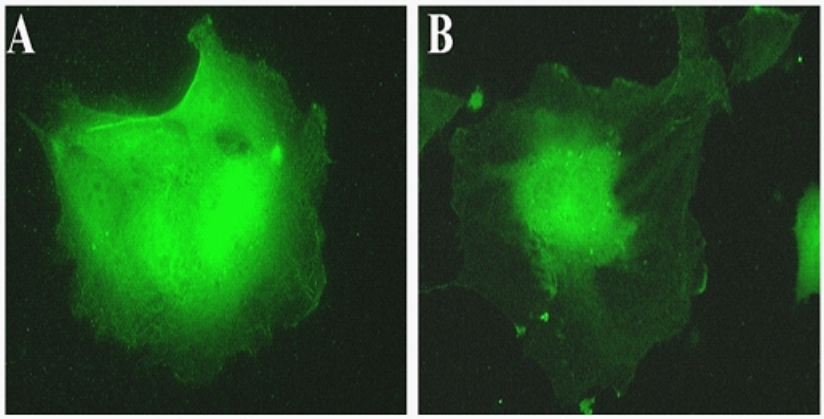


Anti-Angiogenic Mechanism



Squalamine Chaperones Calmodulin

After Entry into Activated Endothelial Cells, Squalamine and Calmodulin Bind, and the Complex is Transported to a Perinuclear Membrane Compartment



Control Squalamine treated

FITC (green fluorescence) labeled anti-calmodulin antibody

Squalamine Ophthalmic Snapshot

- Lead clinical indication for treatment of Wet-AMD using an eye drop formulation
- Previously studied in over 450 patients using an intravenous formulation by Genaera Corp.
  - ~250 patients with Wet-AMD
  - ~200 oncology patients (solid tumors, ovarian, lung, and prostate cancers)
- Intravenous clinical data in Wet-AMD
  - Demonstrated biologic effect
  - Gains in visual acuity
  - Strong maintenance of vision
  - Effect in advanced, low vision wet-AMD ("fellow eye")
- IV formulation entered phase III trials for wet-AMD under fast track status and a Special Protocol Assessment (US FDA)
  - Discontinued due to enrollment difficulty of chronic IV infusion and suboptimal dosing/pharmacokinetics of systemic administration

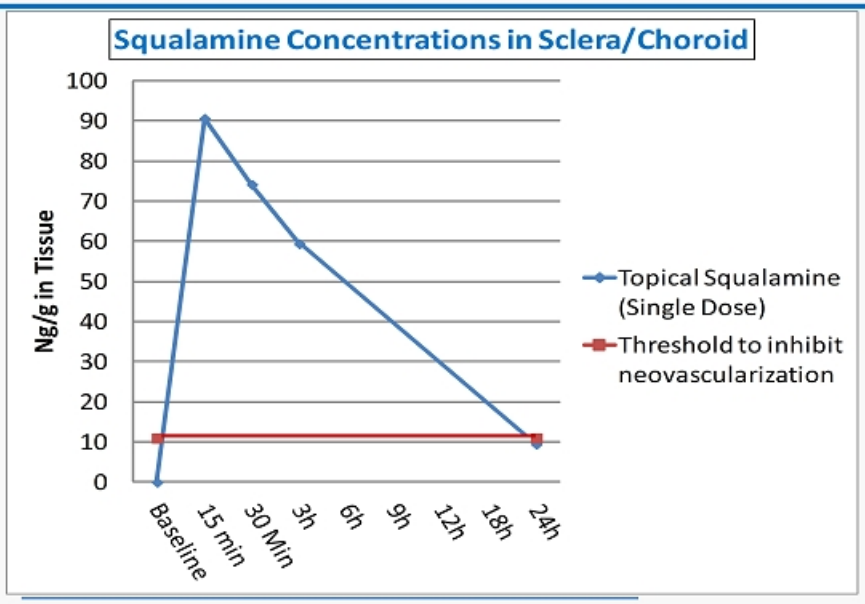
IV Drawbacks & Topical Solutions

- IV drawbacks
  - Suboptimal dosing- Pharmacokinetic analysis confirms that prior IV dosing was suboptimal especially when going from a weekly to monthly "maintenance" dosing period
  - Patient compliance- 40 minute weekly infusion very burdensome on elderly patient population
  - Commercial challenges- ophthalmologist offices not equipped to give large scale prolonged infusions
  - Infusion site reactions- High infusion rates
- Topical (Eye drop) solutions
  - *In vivo* studies confirm tissue concentrations well in excess of what is necessary to provide therapeutic effect in wet-AMD and consistently stay above threshold levels
  - Eye drop is easy to use for self administration
  - Topical treatment does not require ophthalmologist infrastructure build up to accommodate large scale infusions
  - *In vivo* studies indicate no systemic uptake and topical dosing is orders of magnitude less than previous IV MTD

Squalamine Eye Drop Formulation

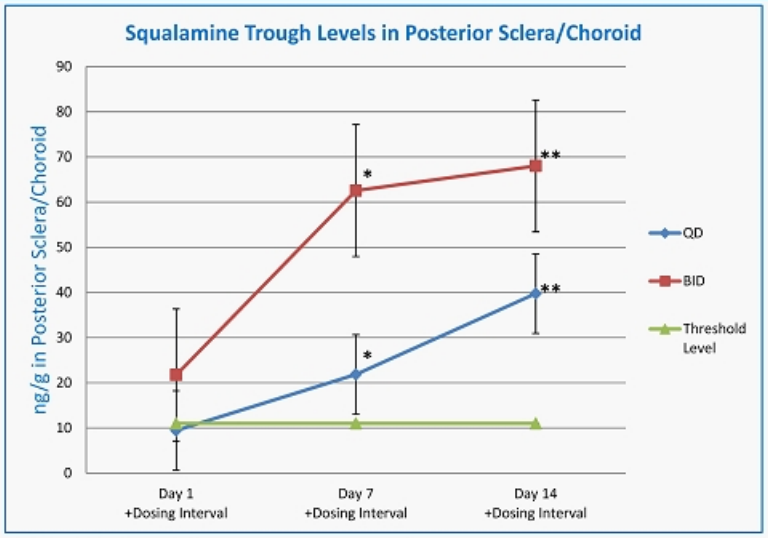
- Proprietary reformulation using FDA approved excipients
- *In-vivo* studies in Dutch belted rabbits
  - 28 day ocular tolerance and toxicity
    - Demonstrated safety and tolerability to ocular tissues
    - No macroscopic or histopathology changes
  - Biodistribution study- single dose
    - Peak concentrations 8x the threshold level to inhibit choroidal neovascularization
  - Biodistribution study- QD & BID up to 14 days
    - Results disclosed at ARVO & upcoming Macula Society conference in Q2 2012

Eye Drop Single Administration



Threshold level refers to tissue concentrations above which Squalamine is known to inhibit neovascularization

Eye Drop
Multi Dose "Trough" Levels



Dosing Interval= QD 24 Hours, BID 12 Hours
*=p-value <.01 **=p-value <.001 (values vs day 1+Dosing Interval)

Trough levels represent tissue concentrations just prior to next dosing

Presented at ARVO 2012. Full poster can be found at
http://ohrpharmaceutical.com/ARVO%20poster%20FINAL.pdf

Biodistribution Studies Conclusions

- Studies Demonstrated:
  - Rapid uptake to the posterior sclera/choroid ocular tissues with slow tissue clearance
  - Sustained Squalamine concentrations well above threshold anti-angiogenic levels, which persist throughout the period in between doses ("trough level")
  - Safety to ocular tissues with no signs of ocular adverse clinical findings
  - Negligible systemic uptake which minimizes the potential for systemic adverse events

Competitive Advantages

Potential advantages over intravitreal injections ("IVT") Lucentis and Eylea for Wet-AMD

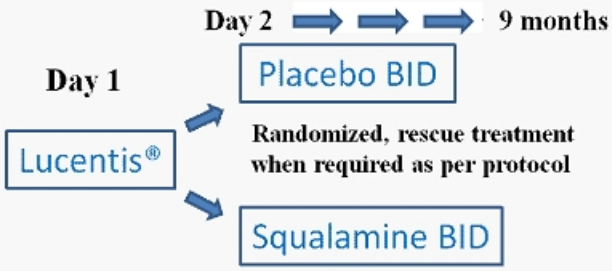
- **Superior delivery method**
  - Proprietary reformulation of Squalamine into a topical eye drop for increased patient ease of use and a consistent delivery of therapeutic concentrations.
  - Current approved therapies are delivered via intravitreal injection directly into the eye every month or two.
- **Cost effective manufacture**
  - IVT's are large molecules which cost ~$11,000-$24,000 per year of treatment. Squalamine is a small molecule which is inexpensive to produce.
- **Safety profile**
  - Squalamine had minimal systemic or ocular drug-related adverse events when tested using the IV formulation at higher doses.
  - IVT's cause increased IOP as well as incidence of adverse ocular events including cataracts and potential complications associated with injections of the eye.
- **Broad spectrum inhibition**
  - Novel intracellular mechanism inhibits the effects of VEGF *and* PDGF angiogenesis, as opposed to Lucentis & Eylea which targets VEGF.
  - Clinical evidence has shown that inhibiting VEGF and PDGF provides improvement over historical Lucentis VA gain response rates.
- **Activity in the "fellow eye"**
  - Many Wet-AMD patients have a more advanced, low vision wet AMD eye ("fellow eye"). Squalamine clinical data has shown significant VA improvement in these fellow eyes using the IV formulation.

Topical Path Forward

- Trial design crafted with input from KOL's in the wet-AMD space
- Trial will focus on newly diagnosed wet-AMD patients
  - Randomized, placebo controlled study (n=120)
- Trial design includes anti-VEGF treatment (Lucentis) as needed
  - Helps facilitate enrollment while providing clear indication of efficacy
- Design provides for multiple outcome scenarios to guide the path forward in future registration studies
  - Monotherapy
  - Adjunct therapy
    - Less Lucentis retreatments with better Visual Acuity response (due to synergistic PDGF mechanism)
    - Equivalent Lucentis retreatments with better Visual Acuity response
    - Less Lucentis retreatments with equivalent Visual Acuity response
- **Initiate clinical Phase II trial by end of Q3 2012 for wet-AMD**

Phase II Trial Design

- Newly diagnosed wet-AMD patients
- Duration: 9 month treatment period with interim analysis (50% completed)



- Rescue criteria closely mirrors CATT study (NIH Lucentis vs. Avastin study)
- Efficacy Endpoints (10 endpoint hierarchical analysis)
  - 1°: Mean number of Lucentis injections
  - 2°: Mean time to Lucentis retreatment
  - 2°: VA gains, maintenance, and safety
- Primary endpoint is powered (90%) to detect a 1.5 injection difference between the arms
- 60 patients per arm (120 total)

Ophthalmic Advisory Board

Key Opinion Leaders (KOL) in retinal disorders

- Thomas Ciulla MD
  - Midwest Eye Institute (Indianapolis, IN)
- Michael Elman MD
  - Elman Retina Group (Baltimore, MD)
- Jason Slakter MD
  - Vitreous Retina Macula Consultants of NY (NY, NY)
- Additional members to be added

The KOL's have been involved in development of the FDA approved products Lucentis® and Eylea®, and leading clinical programs for retinal disorders

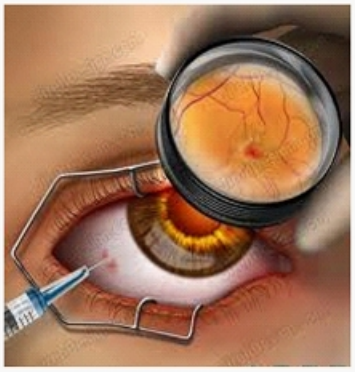
Squalamine Markets

Initial Indication	Future Indications	
Wet Macular Degeneration	Retinopathy & Macular Edema	Dry AMD Prophylaxis
1,750,000 Patients (U.S.)	1,200,000 Patients (U.S.)	13,000,000 Patients (U.S.)
200,000 New Cases (Annual, U.S.)	130,000 New Cases (Annual, U.S.)	300-700K New Cases (Annual, U.S.)

Current Market Leader:
Intravitreal Lucentis®
($3.5b+ Annual Revenue(WW),~35% Market Share)

The Next Frontier in Wet-AMD

Intravitreal Injections
(Lucentis®, Eylea®)



VS.

Eye Drops

The choice is clear…

Resistant Ovarian Cancer Indication

- Primary mechanism
  - –Interaction with endothelial cells indicate that Squalamine binds with cell membranes and inhibits the Na^+/H^+ antiporter, thus creating entry points in the cell membrane for chemotherapeutic agents to enter
  - –Secondary anti-angiogenic activity, blocking the tumor's ability to obtain additional nutrients

Comparison to standard of care

	Doxil	Hycamtin	Squalamine + Carboplatin
Objective Response Rate	12.3%	6.5%	34%*
Complete Response Rate	0.8%	0.8%	15%*
Median PFS (Weeks)	9.1	13.6	To be presented at a scientific meeting 2013
Median Overall Survival (weeks)	35.6	41.3	
N=	130	124	26

- Awarded **Orphan Drug Status** for resistant ovarian cancer

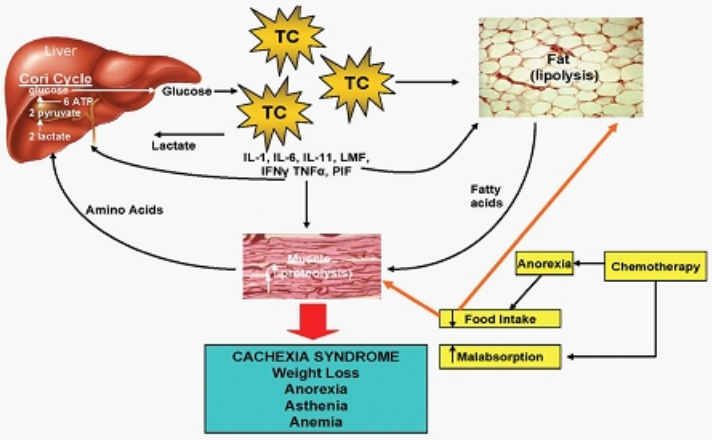
Development Plan

- Planning to conduct a sponsored Phase IIb study at a cancer research center or enter into a strategic partnership to further this indication

*Presented at ASCO

OHR/AVR118 in Cancer Cachexia

- Broad spectrum, peptide based immuno-modulator
- Modulates immune response by regulating multiple cytokines and chemokines involved in the disease process



From Loberg, R. D. et al.
CA Cancer J Clin 2007;57:225-241.

Copyright ©2007 American Cancer Society

Cancer Cachexia Indication

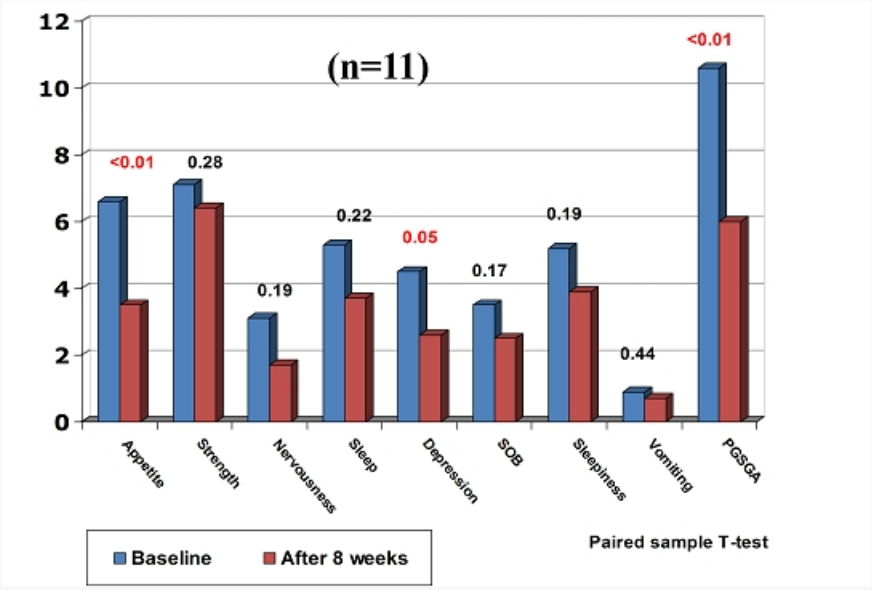
- Wasting disorder often seen in late stage cancer patients characterized by anorexia, loss of muscle mass, fatigue, weakness, and poor quality of life
- Cachexia is triggered by the cellular stress of chemotherapy, radiation and the cancer itself
- Research has shown that the etiology of cancer cachexia is likely attributable to a cascade of pro-inflammatory cytokine release (cytokine storm)
- OHR/AVR 118 modulates immune response to temper the action of multiple cytokines implicated in the disease process
- 20-30% of cancer patients will succumb to cachexia
- Currently in a Phase II trial at the Ottawa Cancer Centre
- Presented positive Phase II interim data at the Society of Cachexia and Wasting Disorders Conference in Barcelona
- **No FDA approved therapy for cancer cachexia**
- **Phase II trial fully funded to completion from QTDP grant**

Interim Phase II Data

- Interim Phase II data selected for oral presentation at the 5th annual meeting of the Society of Cachexia and Wasting Disorders
- Weight stabilization or gain was observed in 7 of 11 patients.
- Total PG-SGA scores improved significantly ($p \leq 0.01$)
- Appetite ($p \leq 0.01$) and depression ($p = 0.05$) scores improved on ESAS
- Frequent burping / belching ($p = 0.02$), feeling full ($p = 0.04$) and stomach distention ($p = 0.03$) improved on the DSSI
- OHR/AVR118 was well tolerated with no serious side effects reported

Chasen, *et al,* J Am Med Dir Assoc 2011; 12: 62–67

Interim Data-ESAS & PGSGA Means



*Lower score denotes improvement in criteria (0 is best, 11 is worst)

Competitive Advantages- OHR/AVR 118

- Addresses underlying etiology
  - Broad spectrum modulation of pro-inflammatory cytokine response cascade, the potential root cause of cancer cachexia, as opposed to therapies that target a single cytokine or just one of the cachexia symptoms
- Mitigates multiple symptoms
  - By modulating the underlying immune response to the cancer/chemotherapy, OHR/AVR 118 addresses many of the cachexia symptoms
- Allows concomitant chemotherapy
  - Ohr's trial allows concomitant chemotherapy as opposed to the other investigational drugs which do not. Chemotherapy has been shown to exacerbate the cytokine response in cachectic patients, thereby accelerating the wasting syndrome
- Safety profile
  - Good safety profile demonstrated in all clinical trials to date
- First mover advantage
  - OHR/AVR 118 is at the forefront of clinical development for cancer cachexia

Financial Highlights

Ticker	**OTCBB: OHRP**
Recent Share Price *(5-22-12)*	$0.95
Market Capitalization *(5-22-12)*	~$39.6mm
52 week High (5/2012)	$1.07
52 Week Low (6/2011)	$0.18
Average Daily Volume (90 day)	25,253
Cash on Hand *(3-31-12)*	~$775K
Prepaid Expenses (3-31-12)	~$441K
Debt *(3-31-11)*	$0
Shares outstanding *(3-31-12)*	41,702,589
Preferred Shares* *(3-31-12)*	5,583,333
Fully Diluted** *(3-31-12)*	78,206,190

*Convertible 1:1 into common stock at the holders option, no coupon
**Preferred + Warrants & options at strike prices ranging from $0.50 to $1.19. ~12mm warrant tranche exercisable at $1.19 expiring 10/31/12

Potential proceeds from warrant exercises are ~$18.4mm

Investment Summary

- 2 compounds in late stage development
- **Significant milestone events expected in 2012-early 2013**
  - Initiation of Phase II wet-AMD trial
  - Presentation of additional longer term *in-vivo* Squalamine eye drop data at Macula Society
  - Results of phase II cancer cachexia trial
  - Publication of final trial results on resistant ovarian cancer orphan indication (median PFS, overall survival)
  - Uplisting to a national exchange (AMEX or Nasdaq)
- Lead indications address large unmet medical needs
- Extensive safety and activity data from drugs under development
- Strong intellectual property protection
- Unknown story with several upcoming catalysts
- Good management team with tight expense controls