



**iCo Therapeutics**

TSX-V: ICO

604-602-9414

[www.icotherapeutics.com](http://www.icotherapeutics.com)



Certain of the statements contained in this presentation are forward-looking statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.



- Targeting ocular diseases
- Risk-mitigated business model
  - Acquire promising drug candidates with identified targets and demonstration of systemic safety
  - Develop novel reformulations of drugs
  - Expand and create new indications for drugs
- Broad product pipeline
  - Focused on underserved markets
  - Compelling early data
- Efficient use of capital
- Experienced management & board



## Project

## Stage

## Development

iCo-007

Phase 2

**Positive safety & efficacy trends**

1<sup>o</sup> indication: Diabetic Macular Edema

2<sup>o</sup> indication: Wet Age-Related Macular Degeneration

iCo-009

Preclinical

**Reformulated Amphotericin B**

1<sup>o</sup> indication: Fungal & Parasitic Infections

2<sup>o</sup> indication: Multiple use delivery platform

iCo-008

Phase 2

**Encouraging preclinical/clinical trends**

1<sup>o</sup> indication: Wet Age-Related Macular Degeneration

2<sup>o</sup> indication: Vernal and Atopic Keratoconjunctivitis



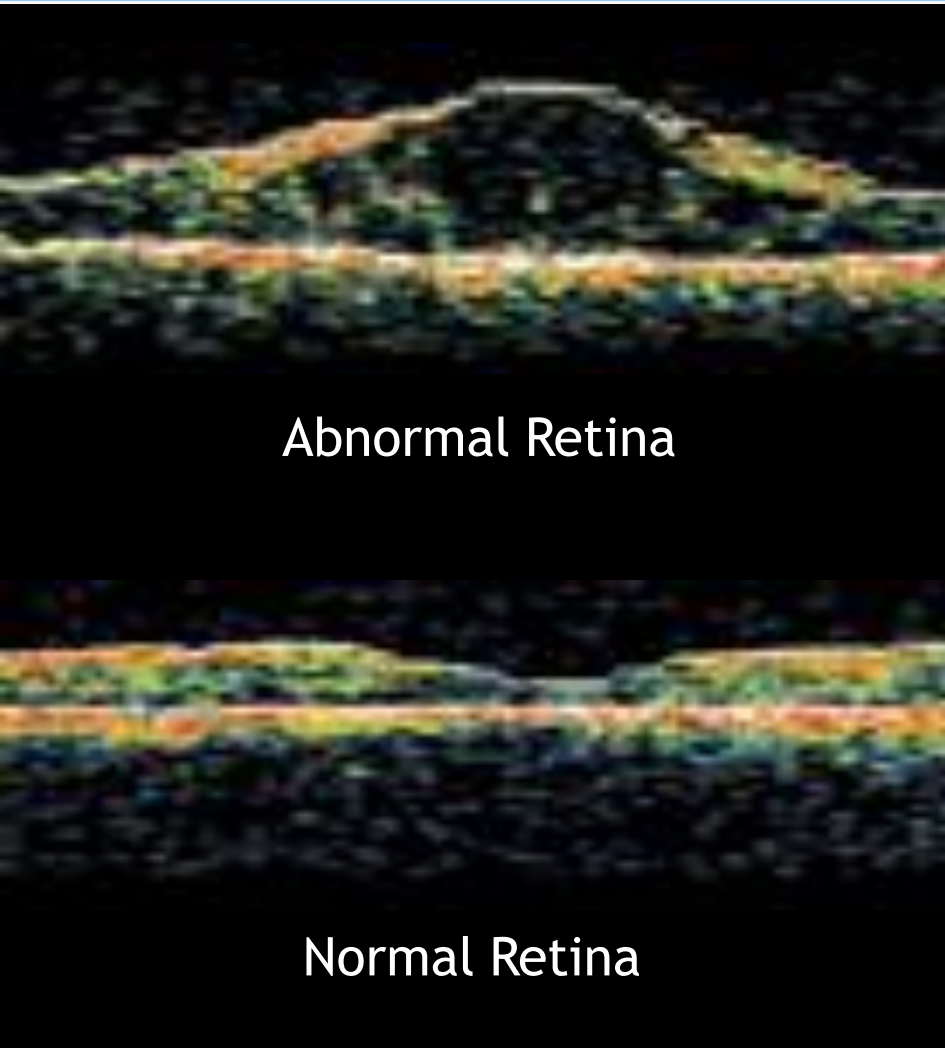
# iCo-007

Second generation  
antisense candidate  
for the treatment of

# DME

Partner: Isis Pharmaceuticals

# Diabetic Macular Edema



Abnormal Retina

Normal Retina

- Leading cause of blindness in working age adults
- Proliferation of new blood vessels which are permeable allows blood to leak into retinal area, causing swelling and deformation
- Current treatments:
  - Anti VEGF
  - Steroids
  - Laser

# Validated Therapeutic Arena



**Pfizer → OSI**

*Eyetech*

(wAMD & DME)

**Santen**

*Macusight*

(wAMD & DME)

**Novartis**

*Genentech*

(wAMD & DME)

**Bayer**

*Regeneron*

(wAMD & DME)

**Sanofi-Aventis**

*Fovea*

(DME & Other Ophthalmic Therapies)

**Alcon**

*AstraZeneca*

(Ophthalmic Uses for Pipeline)

**Alcon**

*ESBATech*

(Ophthalmic Platform)

**Novartis**

*Alcon*

(Ocular Drug and Device Pipeline)

**Merck**

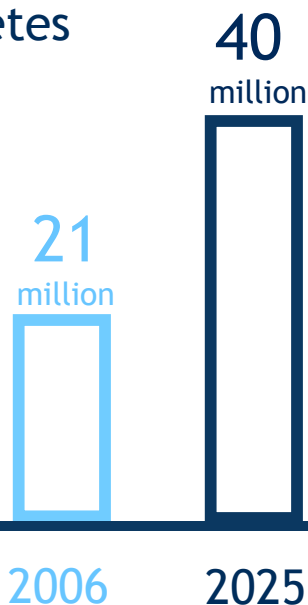
*Sirna*

(wAMD)

# Market Opportunity



U.S. Diabetes Patients



10% Penetration

\$500M

Leading cause of blindness in working age adults

1.6 million DME patients today

Assumptions: \$10,000 US per treatment/yr & initial *US market* represents only clinically significant cases



# Competitive Landscape



Category	Product	Stage	Comments
Device	Laser	Approved	Standard of care for DME
Anti-VEGF	Avastin	Off Label	No label for DME or wAMD, frequent injections
	Macugen	Phase 3	Frequent injections, only targets VEGF165 subtype
	Lucentis	Phase 3	Frequent injections, pan VEGF but targets no other pro-angiogenic factors
	VEGF-TRAP	Phase 3	'Me too' competitor to Lucentis, frequent injections
Steroids	Iluvien, Ozurdex	Phase 3	BRVO & CRVO approval for Ozurdex, steroid side effects
	Triamcinolone, etc.	Off label	Steroid side effects include glaucoma and cataracts Laser remains gold standard in longitudinal comparison



- Novel treatment specific for DME
- Mechanism of Action: c-raf kinase-targeted antisense
- How it improves on current treatments
  - Different signaling pathway, multiple targets
  - Longer half-life may mean fewer injections
  - Easy to manufacture, potential for higher margins



## Design

- Open label
- 15 patients
  - » 20/63 to 20/500 vision
  - » OCT at baseline  $\geq$  250 microns
- Single injection
- Six month follow-up
- Ascending dose ranging
  - » 110 $\mu$ g, 350 $\mu$ g, 700 $\mu$ g, 1000 $\mu$ g
- Non-responders to previous treatment
  - » Steroid, anti-VEGF, laser

## Primary Endpoint

### Safety & Tolerability

- Primary end point achieved
- PK below detectable level 2 ng/mL in blood plasma

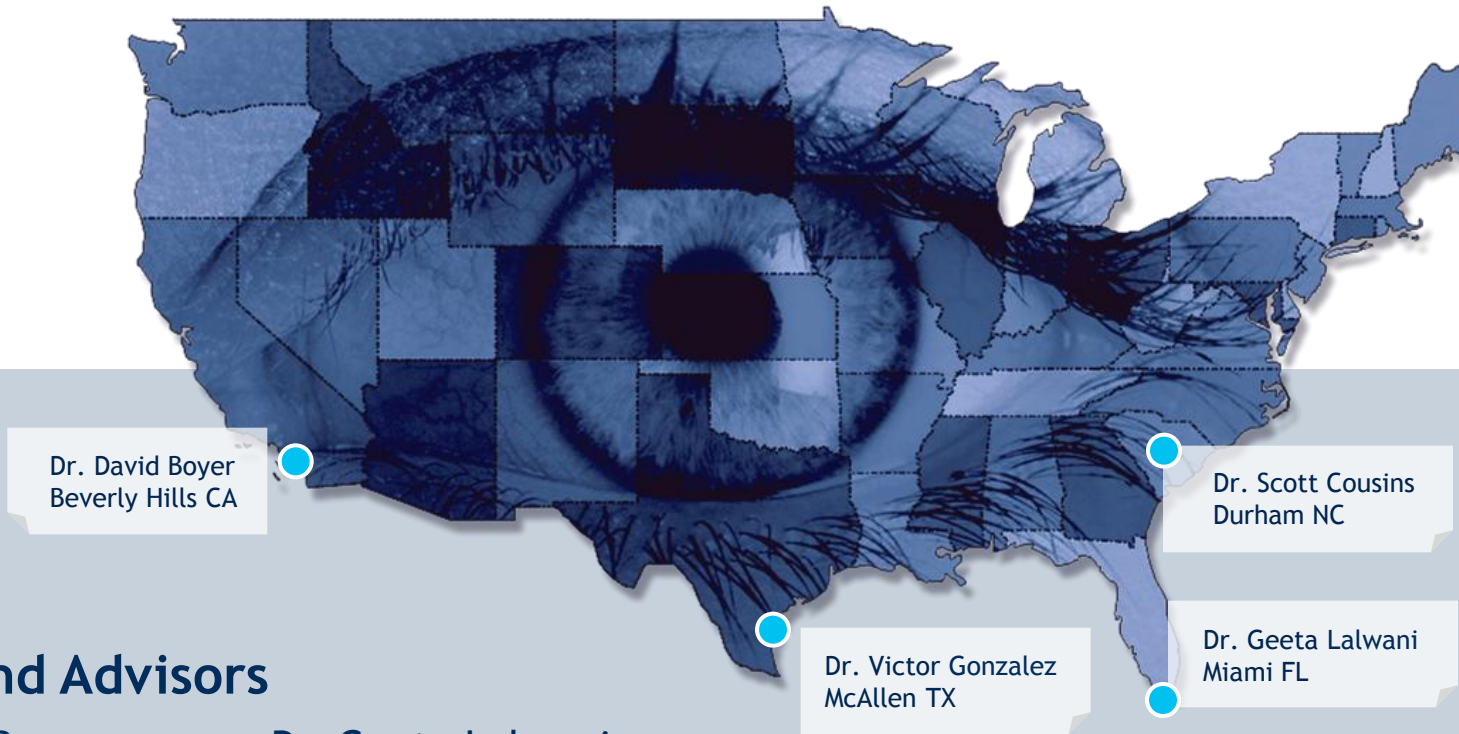
## Secondary Endpoint

### Retinal Thickness & Visual Acuity

- Encouraging trends warrant further investigation
- Mean reduction of retinal thickness 169 microns @ 24 wks\* (40% reduction of excess)

\*N=12

# KOL's and Advisors



## KOL's and Advisors

- |                      |                     |
|----------------------|---------------------|
| Dr. David Boyer      | Dr. Geeta Lalwani   |
| Dr. Scott Cousins    | Dr. Victor Gonzalez |
| Dr. Alan Bird        | Dr. Jason Slakter   |
| Dr. Philip Rosenfeld | Dr. Karl Csaky      |

● Key Phase 1 clinical trial sites

## Primary Endpoints

No Drug-related SAE's

No Signs of Ocular Inflammation

No IOP issues identified in highest doses

No Systemic Exposure

## Secondary Endpoints

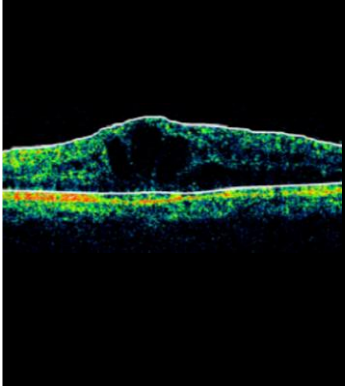
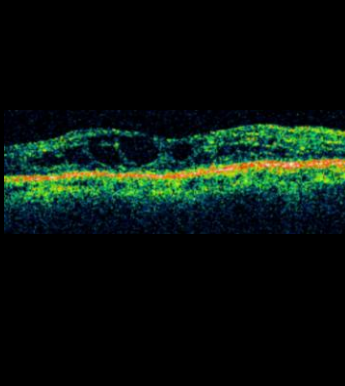
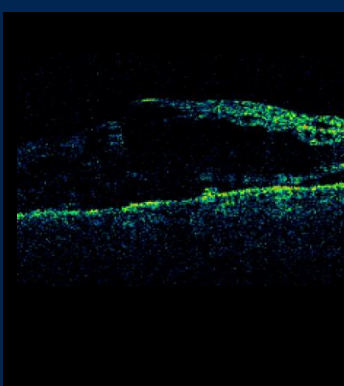
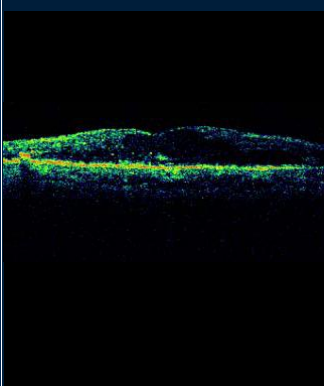
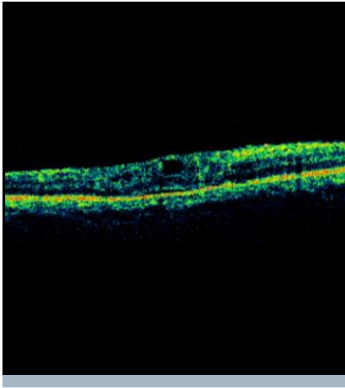
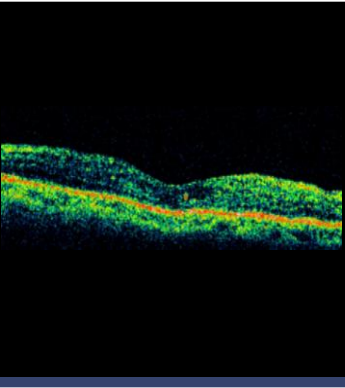
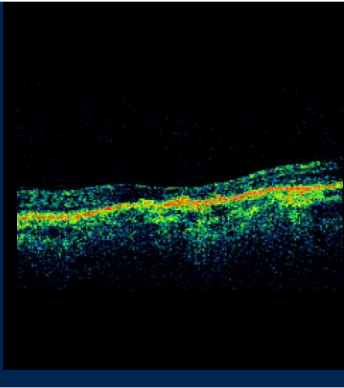
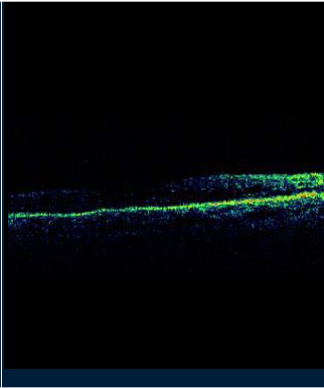
Mean change in CRT at M6 decrease in CRT at M6 (12/15) = **-169 microns**

Mean change in reduction of excess RT at W24 (12/15): **-40%**

All patients who had VA measurement at W24 (13/15) with stable or improved VA compared to baseline (defined as -5 letters or better): **69%**

# Phase 1: Patient Examples - Single Injection



	110ug dose (sample patient)	350ug dose (sample patient)	700ug dose (sample patient)	1000ug dose (sample patient)
Baseline	 <p>528 microns</p>	 <p>391 microns</p>	 <p>867 microns</p>	 <p>423 microns</p>
6 months	 <p>379 microns</p>	 <p>228 microns</p>	 <p>124 microns</p>	 <p>187 microns</p>
	Delta: 149 microns	Delta: 163 microns	Delta: 743 microns	Delta: 236 microns

# Phase 2: Randomized, Controlled, Open Label Multiple iCo-007 injections vs. laser photocoagulation



Up to 140 patients (5 groups), 12 month follow-up  
Doses: 350 & 700  $\mu\text{g}$  (Cohorts 2 & 3 from Phase 1)

## Primary Endpoints

Change in visual acuity from baseline to month 8 as compared to control group

## Secondary Endpoints

Visual acuity & reduction of retinal thickness to month 12

Duration of iCo-007 treatment effect

Safety of repeated iCo-007 injections

Pharmacokinetic (PK) assessments



- ✓ Received Health Canada Clearance for Phase 2
- ✓ Completed “fill finish” manufacturing program to produce clinical supply of iCo-007 (February ‘11)
- Phase 2 trial expected to commence ~ early 2011
- Discussions with other agencies re: Phase 2
- Continue ongoing regional partnership discussions





# iCo-009

Proprietary oral formulation  
of amphotericin B

1<sup>st</sup> World: Anti-Fungal

3<sup>rd</sup> World: Anti-Parasitic

Partner: The University of British Columbia



**iCo-009**

Identify bona fide generics

e.g.

IV Amp B to Oral

**Achieve early proof of relevance (safety)**



Re-start IP Clock & Develop Repertoire of Product Candidates

**Anti-fungal, anti-parasitic partnering**



## IT WORKS ...

- Gold standard
- AmBisome®
  - >\$400M in sales
  - Premium pricing for safety

## ... BUT NOT PRACTICAL IN MANY SITUATIONS

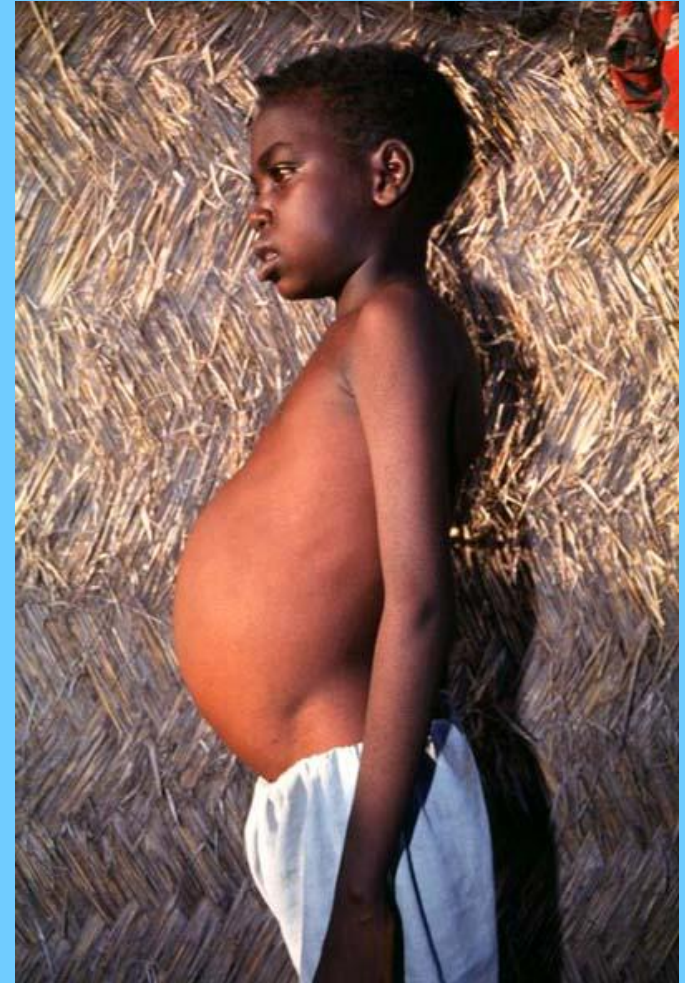
- Variety of First World fungal infections
- Lack of resources in Developing World
- Inconvenient

unmet need: oral formulation

## Visceral Leishmaniasis (VL)

- 2<sup>nd</sup> largest parasitic killer after malaria
- Fatal if left untreated
- 500,000 new infections every year \*
- Emerging problem of HIV co-infection
- Symptoms: *fever, weight loss, fatigue, anemia and substantial swelling of the liver and spleen*
- iCo-009 has Orphan Drug status for VL (September 2010)

\* *Institute of OneWorld Health*





Formulation of iCo-009

Lipid capsule - “candy wrapper”

Proprietary platform may be used for other insoluble products, including vaccines and proteins

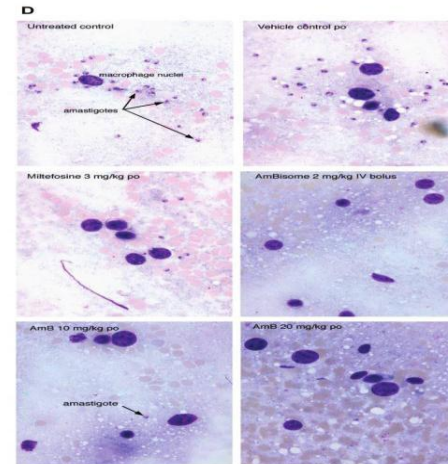
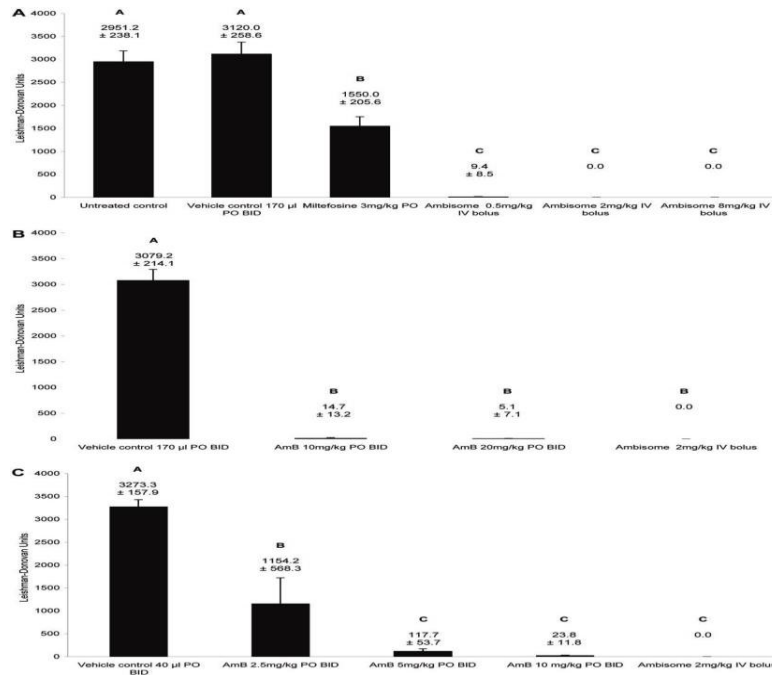
Expanding the Amp B market:  
Safety and convenience

Oral treatment:  
Goal of WHO & Gates Foundation  
and several other global health  
organizations

Non-dilutive funding:  
CPDD/Gates and CIHR

## 99% Eradication of VL

*-BRIEF REPORT, Journal of Infectious Disease 2009,  
Kishor M Wasan, et al.*





# iCo-008

Human monoclonal  
antibody treating  
both the **back** and  
**front** of the eye

Partners: AstraZeneca/MedImmune & Immune Pharmaceuticals



- Human monoclonal antibody targeting eotaxin-1
- Good safety & significant clinical history
  - Phase 1 & 2 (n=126)
- Highly specific to human eotaxin-1
- Eotaxin binds with high affinity to CCR3

**Ocular:** Wet Age Related Macular Degeneration (wAMD) & Vernal & Atopic Keratoconjunctivitis

**Systemic:** Crohn's Disease, IBD, Severe Asthma  
(License option granted to Immune Pharmaceuticals)



# US \$33M Option with Immune Pharmaceuticals

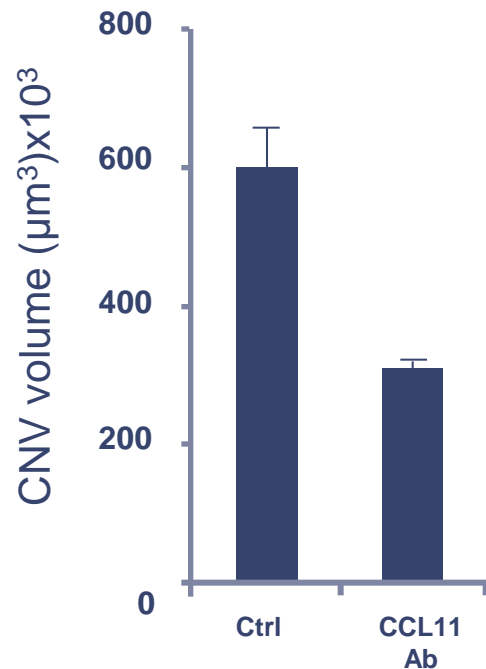


- iCo retained WW exclusive rights to all ocular applications
- IMPH's license option for systemic uses (IBD, severe asthma)
- Non-refundable option fee creditable against a US\$1 Million upfront license fee
- Up to an additional US\$32 million in milestone payments
- Royalties on net sales of licensed products
- Immune background: AstraZeneca, Novartis, GSK, Sanofi-Aventis, Roche, Merck AG, J&J, CV Therapeutics (acquired by Gilead)



- Afflicts the elderly
- Acute event - leads to rapid vision loss
- VEGF validated target
- New literature implicates Eotaxin-1:
  - CCR3/Eotaxin-1 axis is a target for age-related macular degeneration (Nature 2009, Takeda et al.)

## Laser-induced CNV in wild-type mice



eotaxin-1 = CCL11

Anti-angiogenic activity for ocular diseases

# 50%

Reduction in CNV volume for wAMD



- **Phase 1:** (n=25) No serious adverse events
- **Phase 2:** (n=101) Applied intranasally & topically
  - Safe and well tolerated
  - Evidence of efficacy in severe allergy indication - reduced post allergy nasal obstruction



- **iCo-007**
  - Phase 2 trial expected to commence ~ early 2011
  - Completed “fill finish” manufacturing to produce clinical supply
  - Received Health Canada Clearance for Phase 2
  - In partnership discussions (regional)
- **iCo-009**
  - Pre-IND meetings have taken place
  - Phase 1 trials planned for 2011
  - In partnership discussions (regional)
- **iCo-008**
  - Optioned systemic rights to Immune Pharma < US\$33 Million
  - Retained ocular rights
  - Pursuing non-dilutive funding of wAMD program

# Management and Directors



## Management

**Andrew Rae, MBA**  
Co-founder, Director,  
President & CEO

**John Clement, PhD**  
Co-founder, Director & Chief  
Technology & Development Officer

**Santa Jeremy Ono, PhD**  
Chief Scientific Officer

**Peter Hnik, MD, MHSc.**  
Chief Medical Officer

**John Meekison, BA, CIM, P. Log.**  
Co-founder & Chief Financial Officer

## Non-Executive Directors

**William Jarosz, JD**  
Chairman of the Board, iCo  
Cartesian Capital Group, LLC

**Richard Barker, PhD**  
Director General of the  
Association of the British  
Pharmaceutical Industry

**Noel Hall**  
Co-founder of Aspreva

## Strategic Advisory Board

**Donald Buell, MD**  
iCo-009 SAB Chair, Former Senior  
Medical Director, Astellas USA

**George Lasezkay, JD**  
Principal, Turning Point Consultants,  
LLC, Former VP Corp Development,  
Allergan

Extensive public company and life science experience | Solid operational and product development expertise | [Ophthalmic specific expertise](#)

# \$10 Million Equity Line Facility (ELF)



- Dutchess Opportunity Cayman Fund Limited ("Dutchess") committed to provide up to \$10M in equity capital over the next 3 years
  - Newly issued common shares subject to a minimum price set by iCo
  - No commission, warrants or any other derivative
  - iCo may chose to draw on the ELF at iCo's sole discretion
  - iCo must file and clear a short-form shelf prospectus with the applicable securities authorities in Canada
- Flexible source of capital at reasonable terms
- iCo can remain opportunistic re: ongoing corporate finance & strategic activities

# Financials (As of Year End: December 31, 2010)



Invested Capital to Date	\$18.7 million Isis Pharmaceuticals largest shareholder (12.3%)
Cash	\$2 million
Burn	Approx \$0.6 million/qtr
Share Capital	41.1 M Shares Outstanding 42.9 M Fully Diluted 1.9 M Options
Head Office	Vancouver BC, Canada





- Targeting ocular diseases
- Risk-mitigated business model
  - Acquire promising drug candidates with identified targets and demonstration of systemic safety
  - Develop novel reformulations of drugs
  - Expand and create new indications for drugs
- Broad product pipeline
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