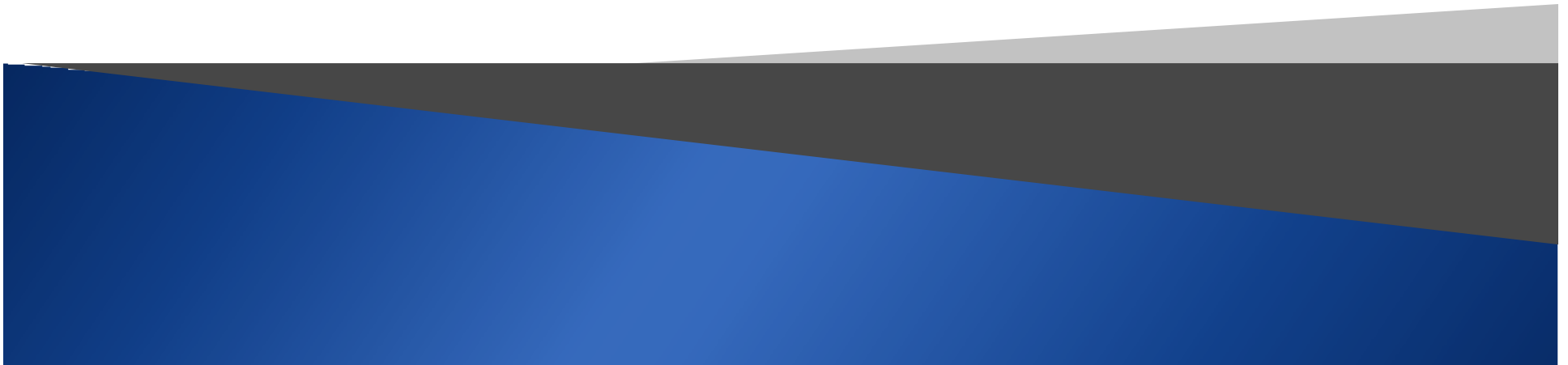




**Critical Outcome**  
Technologies Inc.



# **Business Review and Update**

## **Fifth Annual and Special Meeting of Shareholders**

**September 27, 2011**

# Forward-Looking Statements

When used anywhere in this presentation, the words expects, believes, anticipates, estimates, and similar expressions are intended to identify forward-looking statements. Forward-looking statements herein may include statements addressing future financial and operating results for Critical Outcome Technologies Inc. (COTI).

COTI has based these forward-looking statements on its current expectations about future events. Such statements are subject to risks and uncertainties including, but not limited to, the successful implementation of COTI's strategic plans, the acceptance of new products, the obsolescence of existing products, the resolution of existing and potential future patent issues, additional competition, changes in economic conditions, and other risks described in documents COTI has filed with the Toronto Stock Exchange and Ontario Securities Commission.

All forward-looking statements in this document are qualified entirely by the cautionary statements included in this document and such filings. These risks and uncertainties could cause actual results to differ materially from results expressed or implied by forward-looking statements contained in this document. These forward-looking statements speak only as of the date of this document.

# Current Business Overview

- Drug discovery and preclinical drug development engine
- Discovery engine uses “Artificial Intelligence” software and proprietary algorithms to create a novel, proprietary process
- Core platform technology – CHEMSAS® – Computerized Hybrid Expert Molecular Structure Activity Screening
- Efficiently accelerates drug discovery and provides optimized lead compounds with a higher probability of clinical success = risk reduction

# Our Business – Transacting with Pharma/Biotech and Others – Why?

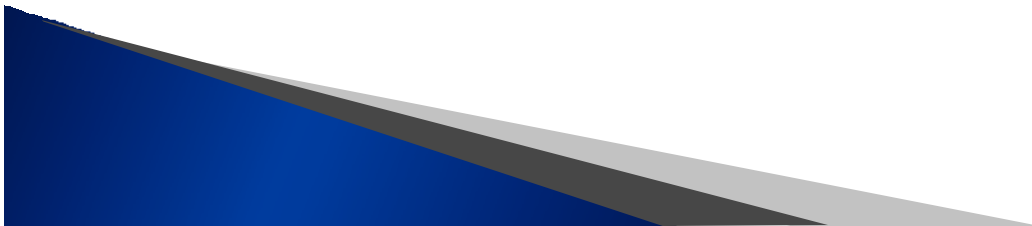
- Technology model that minimizes Regulatory risk
- Drug discovery, Preclinical development, IP generating
- Reduces time, cost and investment risk
- Adds marketing life at patent protected price
- Strategic asset to large Pharma/Biotech
- Decision tool for scientists and investors

# Strategic Direction

- **Value creation through third party validation and revenues**
  - License COTI-2 with upfront payment, milestones and royalty
  - Co-development deal with Pharma – 2<sup>nd</sup> deal is easier
  - Live Auction – March 2012 – license with upfront payments
- **Using momentum**
  - Other drug development projects – AML, HIV
  - Other potential revenue streams:
    - Online access to CHEMSAS<sup>®</sup> engine – fee for service
    - CHEMFirm – due diligence tool for investors
    - Drug repositioning
- **Strong position**
  - Strategic asset to Pharma/Biotech companies of all sizes



# Pharmaceutical Industry Market Conditions



# Industry Market Conditions 2007-2010

- Flight from risk with financial markets meltdown
- Large Pharmaceuticals facing a number of challenges:
  - Experiencing low productivity from R&D pipelines reflected in decreasing FDA approvals
  - New drug approvals not making up the lost revenue/profits for drugs coming off patent
  - Loss of patent protection for a large number of blockbuster drugs (patent cliff) during 2011-2014 period
  - Generic competition – sales volume and margin squeeze
  - Uncertainty surrounding health care reform



# R&D Productivity Creates Opportunity

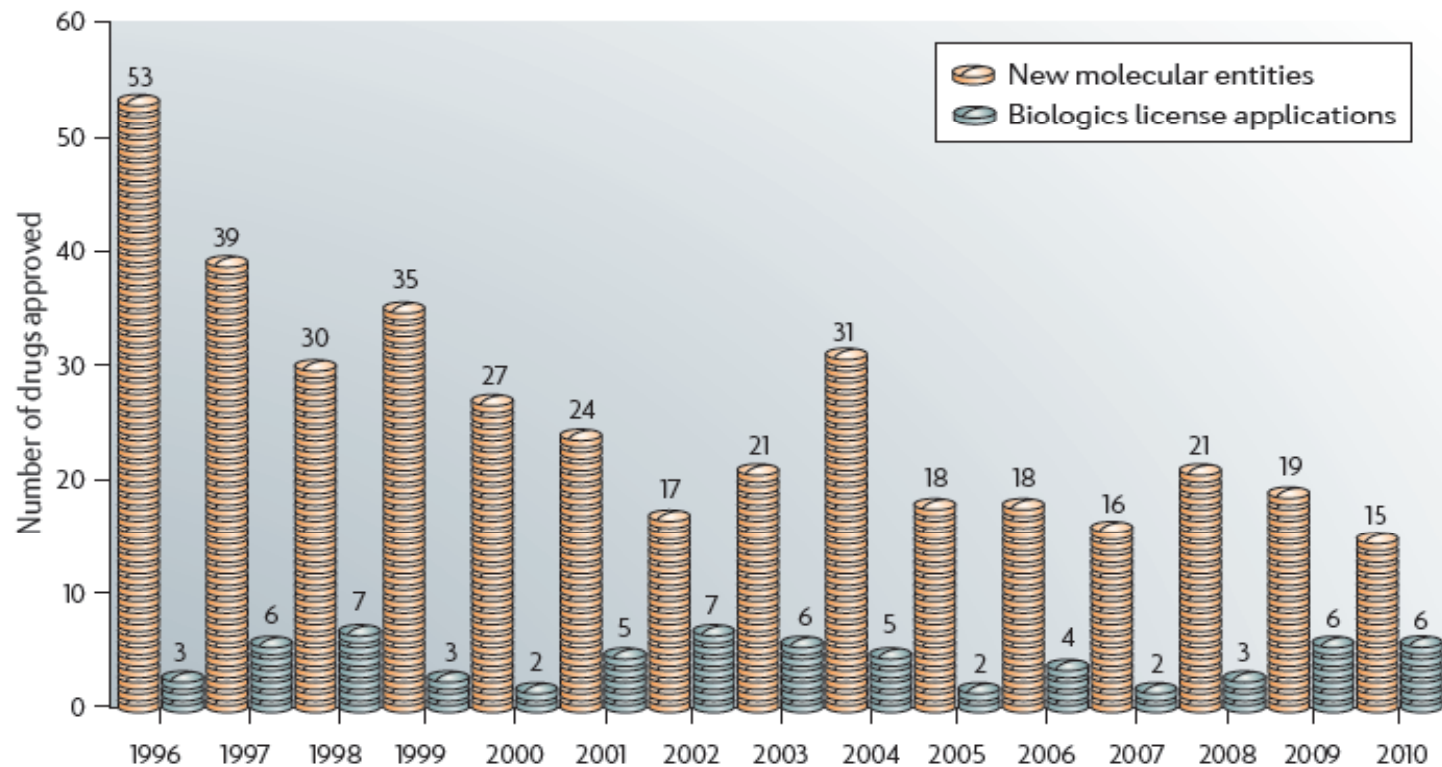
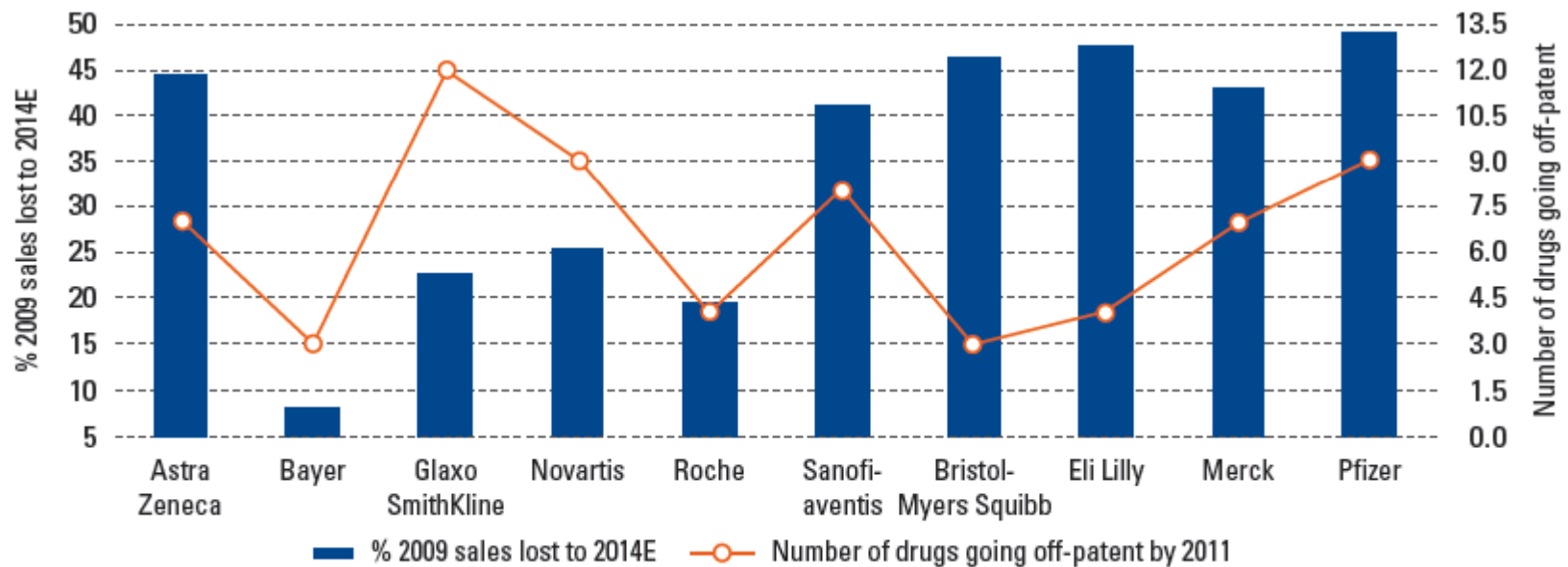


Figure 1 | **FDA drug approvals since 1996.** New molecular entities and biologics license applications approved by the US Food and Drug Administration's (FDA's) Center for Drug Evaluation and Research, by year.

# Pharmaceutical Pipeline Patent Cliff

- By the end of 2014, drugs representing ~ \$90B in sales will lose patent protection



Source: European Pharmaceuticals for Beginners 2010, Deutsche Bank

- Pharmaceutical companies continue to evaluate their research and development and business development strategies

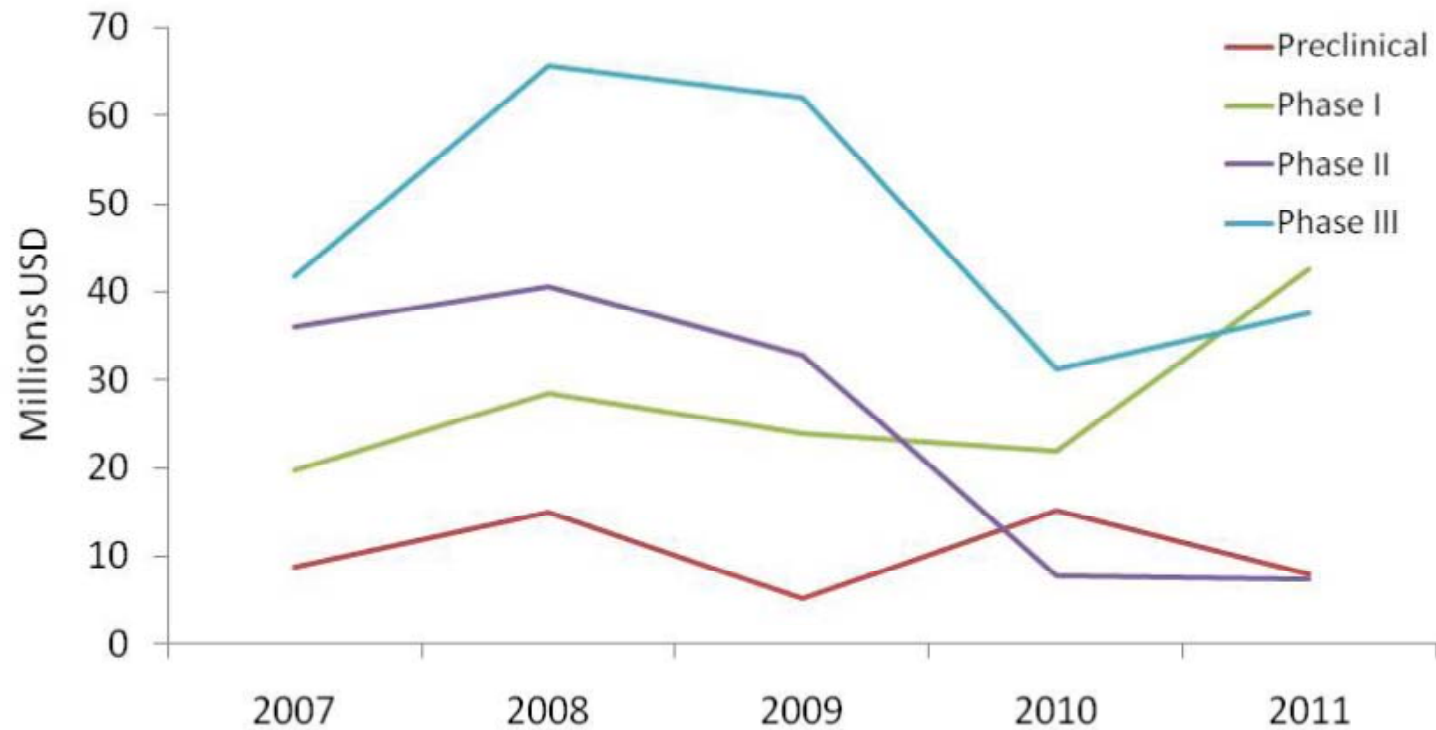
# Personalized Medicine Transforming the Pharmaceutical Industry

- Industry's historic business model for developing blockbusters is broken — one drug doesn't suit all
- Backbone of its research and development (R&D) strategy for many years — forced to change
- Growing opportunity to provide appropriate and effective treatment to patients based on their genetic profile
  - The R&D paradigm is evolving and the personalized approach is gaining traction.

# 2010-11 Improving Market Conditions

- 2007-2009 failed to address fundamental R&D productivity
- High quality late stage compounds either picked over or companies taking to market themselves
- Need to look earlier in R&D process to find high potential promising assets
- 2010-11 has seen an increase in Phase 1 and pre-clinical deals
- Appears Big Pharma focusing on strengths in late stage clinical trials, manufacturing, marketing and distribution
- Expect trend to continue into the future

# Upfront Payments for Oncology Compounds



Source: IN VIVO Blog, Strategic Transactions Group, July 8, 2011. Data up to June 30, 2011.

# COTI-2: Our Most Advanced Oncology Product

# COTI-2: Scientific Merit

- Novel mechanism of action
  - Modulates/inhibits the amount and activation of Akt/Akt2 protein thereby preventing its cancer promoting activities
- Potential biomarker
  - through a simple test (tumour biopsy) indicating a level of Akt higher than normal healthy cells – prescribe COTI-2
- Single and combination therapy effectiveness
- Multiple cancer indications based on Akt/Akt2 status
  - Ovarian, endometrial, pancreatic, colon and melanoma
- Easily synthesized with no stability issues
- Low toxicity
- Oral formulation in development

# COTI-2: Robust Patent Protection

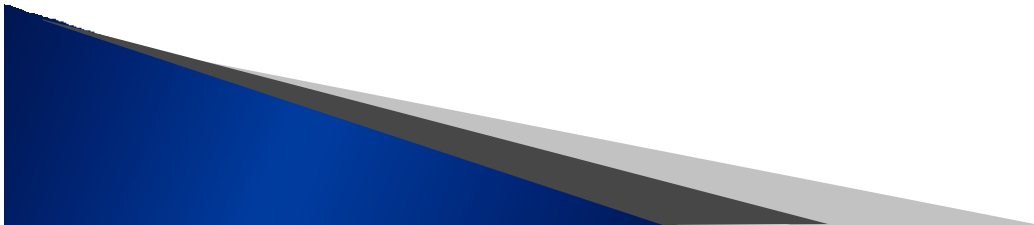
- US Patent grant imminent
- Multiple patents filed through 2030 and beyond
- Composition of matter
  - Route to synthesis/MOA/combination therapy
- New patents filed as IP develops
  - Formulations etc.



# COTI-2: WIP Key Milestones

Activity	Status
Complete an in vivo study on the pharmacodynamics of AKT (June and August 2011 announced positive test results)	In Progress – completion in September 2011
Select the optimal oral formulation candidate	In Progress – completion in October 2011
Confirmation and comparison to MK-2206 in a xenograft model	Completion in December 2011
Complete the two species acute toxicity package using the optimal oral formulation	To commence upon completion of oral formulation work – completion in first quarter 2012
IND submission to FDA	TBD (2012)
Phase 1 Clinical trial	To follow IND filing

# COTI-2 Licensing



# COTI-2: Market Perspective

Key Attributes	Licensing Challenges
Novel small molecule – potential first-in-class and best-in-class mechanism of action	Completion of final two species toxicology IND enabling studies and receipt of IND each viewed as significant risk reduction points
Preclinical data demonstrates greater selectivity, improved safety profile and pharmacokinetics compared to other AKT inhibitors	Lack of human clinical data
Potential biomarker – high levels of AKT expression	
Initial clinical targets include: ovarian, endometrial and pancreatic cancers; estimated > \$4.65 billion market by 2018	
Other potential cancer indications: breast, lung, brain, colon and leukemia	
Novel intellectual property – multiple patents filed including composition of matter through 2030	

# Proximity to Licensing

- Need to keep moving COTI-2 forward in development
  - every risk reduction step enhances asset and licensing value
- License potential exists throughout development continuum as positive test results are socialized with interested parties
- Established relationships with 13 of top 15 licensee companies of biotech programs as part of the COTI-2 marketing program
- Relationships with many of the emerging drug development companies (Phase 1 and 2)
- Multiple term sheet interest

# Other Products, Collaborations, and Co-developments

# Acute Leukemia Project

- Patents issued for NA and Europe
- Need to synthesize 4-6 candidates
  - synthesis commenced August 2011
- Obtain in vitro target confirmation – Kinase screen
- Obtain efficacy (IC50) results in 6 leukemia cell lines
- Assess results and decide about proceeding to MTD, in vitro pharmacology etc.
- IRAP contribution in F'12 = \$100,000 CAD

# HIV Integrase Inhibitor Program

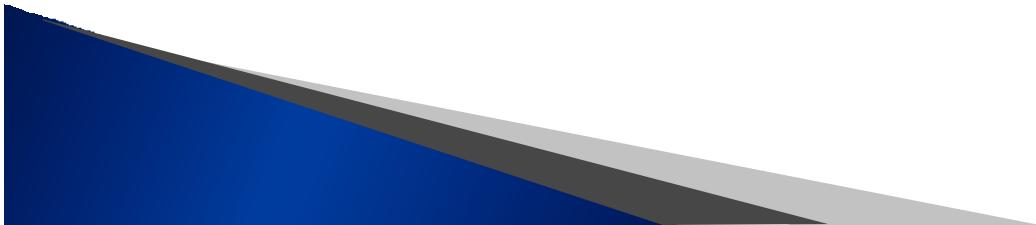
- Collaboration identified three scaffolds demonstrating good inhibitory activity in a biochemical HIV Integrase assay at nanomolar concentrations
- Filed composition of matter patents and moved ahead with optimizing a small series of potential lead candidates
- Reviewed major Pharma collaborator's test results:
  - Updated our criteria for successful final candidates to include optimal virus killing activity and activity against known resistant mutations
- Currently seeking additional funding and partner to move the compounds forward through optimization, synthesis and testing

# Co-development Opportunity with Major Pharma Partner

- Approached by a potential partner to use CHEMSAS<sup>®</sup> to develop novel leads for a non oncology target with high commercial potential
- High risk/high reward research and discovery project
- Objective: Build the relationship and revenue opportunities
- Financial terms to be negotiated



# Financial Update



# Macro-economic Conditions

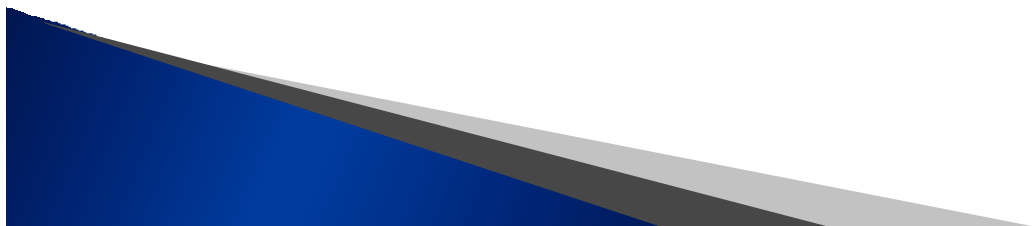
- Equity markets in Canada and around world remain nervous
- Weak economic environment
- US based consumer driven recovery slow to develop – unemployment high, mortgage foreclosures continue
- Sovereign debt issues – PIGS but US debt as well
- Global impact:
  - US, Europe and Asia – even China facing an inflationary bubble fueled by real estate
  - growth rates constrained
  - short term outlook guarded

# Impact on Biotech Investments

- Venture capitalists (VC), institutions and angels not cash flush
- VC biotech focus is on later stage assets to improve risk profile
- Risk sector of market is highly selective
- Biotech in Canada up against resource sector – oil, gas & gold
- COTI focused on:
  - *The compelling scientific and business case of COTI-2*
  - *Our AI technology platform as a software technology play and not a traditional life science play*

# Financial Status

- Sufficient cash through Spring 2012
- Management continues to monitor strategic options
- Timing of a licensing deal and cash there from is uncertain



# Summary

- COTI-2 is a highly marketable asset both scientifically and commercially
  - asset value continues to increase
- Term sheet interest
- CHEMSAS<sup>®</sup> is a novel robust technology
- Multiple revenue opportunities from CHEMSAS<sup>®</sup>
- COTI team committed to success

Thank you for your continued support!