
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): January 13, 2014

Agios Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-36014
(Commission
File Number)

26-0662915
(IRS Employer
Identification No.)

38 Sidney Street, 2nd Floor, Cambridge, MA
(Address of Principal Executive Offices)

02139
(Zip Code)

Registrant's telephone number, including area code: (617) 649-8600

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

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 (*see* General Instruction A.2. below):

- 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))
-
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Forward Looking Statements

This Form 8-K and the exhibits attached hereto contain forward-looking statements of Agios Pharmaceuticals, Inc. (“Agios” or the “Company”) within the meaning of The Private Securities Litigation Reform Act of 1995, including statements regarding Agios’ expectations and beliefs about its business, plans and prospects. The words “believe,” “expect,” “could,” “should,” “will,” “would,” “may” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Such statements are subject to important risks and uncertainties that may cause actual events or results to differ materially from Agios’ current expectations and beliefs, including the risks and uncertainties relating to: Agios’ ability to successfully commence and complete necessary preclinical and clinical development of its product candidates; Agios’ results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; Agios’ ability to maintain its collaboration with Celgene on acceptable terms; the content and timing of decisions made by the U.S. FDA and other regulatory authorities, investigational review boards at clinical trial sites and publication review bodies; unplanned cash requirements and expenditures; competitive factors; Agios’ ability to obtain, maintain and enforce patent and other intellectual property protection for any product candidates it is developing; Agios’ ability to obtain the substantial additional capital required to execute its plans and strategies; and general economic and market conditions. These and other risks are described under the caption “Risk Factors” in Agios’ Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, which is on file with the Securities and Exchange Commission (SEC), and in other filings that Agios may make with the SEC in the future. Any forward-looking statements contained in this Form 8-K and the exhibits attached hereto speak only as of the date hereof, and Agios expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Item 7.01. Regulation FD Disclosure.

On January 13, 2014, the Company intends to make a slide presentation at the 32nd Annual J.P. Morgan Healthcare Conference which contains, among other things, an update on the Company’s active clinical development programs and business outlook. A form of the slide presentation is furnished herewith as Exhibit 99.1 and is incorporated herein by reference.

The information responsive to Item 7.01 of this Form 8-K, including Exhibit 99.1, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Form of Presentation as of January 13, 2014.

SIGNATURE

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.

AGIOS PHARMACEUTICALS, INC.

Date: January 13, 2014

By: /s/ Glenn Goddard

Glenn Goddard

Sr. Vice President of Finance

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
99.1	Form of Presentation as of January 13, 2014.



The people pictured here are some of the many friends and family of Agios employees affected by cancer. All of us at Agios are passionate about transforming patients lives. This is our vision and what motivates, inspires, and drives us.

January 2014

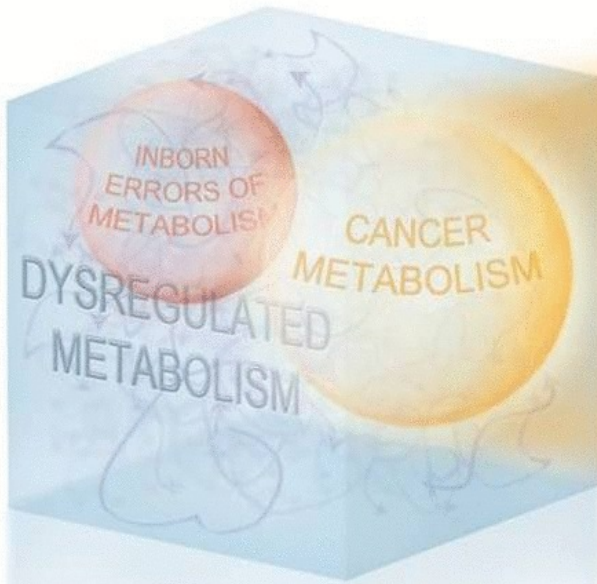
Cautionary Note Regarding Forward-Looking Statements



This presentation and various remarks we make during this presentation contain forward-looking statements of Agios Pharmaceuticals, Inc. within the meaning of The Private Securities Litigation Reform Act of 1995, including statements regarding Agios' expectations and beliefs about its business, plans and prospects. The words "believe," "expect," "could," "should," "will," "would," "may", "anticipate" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements contained in this presentation and in remarks made during this presentation are subject to important risks and uncertainties that may cause actual events or results to differ materially from Agios' current expectations and beliefs, including risks and uncertainties relating to: Agios' ability to successfully commence and complete preclinical and clinical development of its product candidates; results of clinical trials and preclinical studies; Agios' ability to maintain its collaboration with Celgene on acceptable terms; the content and timing of decisions made by regulatory authorities, investigational review boards and publication review bodies; unplanned cash requirements and expenditures; competitive factors; Agios' ability to obtain, maintain and enforce intellectual property protection; Agios' capital requirements and need for funding; and general economic and market conditions. These and other risks are described under the caption "Risk Factors" in Agios' most recent Quarterly Report on Form 10-Q, which is on file with the SEC, and in other filings that Agios may make with the SEC in the future.

Any forward-looking statements contained in this presentation or in remarks made during this presentation speak only as of the date hereof, and Agios expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.



VISION

AgiOS is passionately committed to the fundamental transformation of patients' lives through scientific leadership in the field of cancer metabolism and inborn errors of metabolism

Disruptive Area of Biology Precision Medicine

- A leader in field of dysregulated cellular metabolism – a breakthrough area for drug discovery and development
- Biomarkers for patient selection for every program

Experienced Leadership

- Agios leadership team is highly accomplished in drug development and commercialization
- SAB members include leading researchers in cancer metabolism and IEMs

Robust First in Class Pipeline

- IDH candidates: AG-221 in clinical trial and AG-120 expected in clinical trials in early 2014
- Lead IEM candidate: AG-348 expected in clinical trials in mid-2014

Strong Financial Position

- Cancer metabolism collaboration with Celgene
- Runway to drive multiple programs to meaningful milestones

Management

David Schenkein, M.D.

- Chief Executive Officer and Director
- Previously, SVP of Clinical Hematology / Oncology at Roche / Genentech and SVP of Clinical Research at Millennium Pharmaceuticals

Duncan Higgons

- Chief Operating Officer

Scott Biller, Ph.D.

- Chief Scientific Officer
- Previously, VP and Head of global discovery chemistry for the Novartis Institutes for Biomedical Research

Glenn Goddard

- Senior Vice President Finance

Michael Su, Ph.D.

- Senior Vice President, R&D

Marion Dorsch, Ph.D.

- Vice President, Biology

John Evans

- Vice President, Business Development & Operations

Min Wang, J.D., Ph.D.

- Vice President Legal Affairs

Camille Henderson, Ph.D.

- Director of Human Resources

Board of Directors

David Schenkein, M.D.

- 20+ yrs experience in hematology and medical oncology

Kevin Starr (Chairman) –Third Rock Ventures

- Partner of Third Rock Ventures

Lew Cantley, Ph.D. – Agios Co-Founder

- Director of the Cancer Center at Weill Cornell Medical College and New York-Presbyterian Hospital

Doug Cole, M.D. – Flagship Ventures

- General Partner of Flagship Ventures

Perry Karsen – Celgene

- CEO of Celgene Cellular Therapeutics

John Maraganore, Ph.D. – Alnylam

- CEO and Director of Alnylam

Bob Nelsen – ARCH Venture Partners

- Co-founder and Managing Director of ARCH Venture Partners

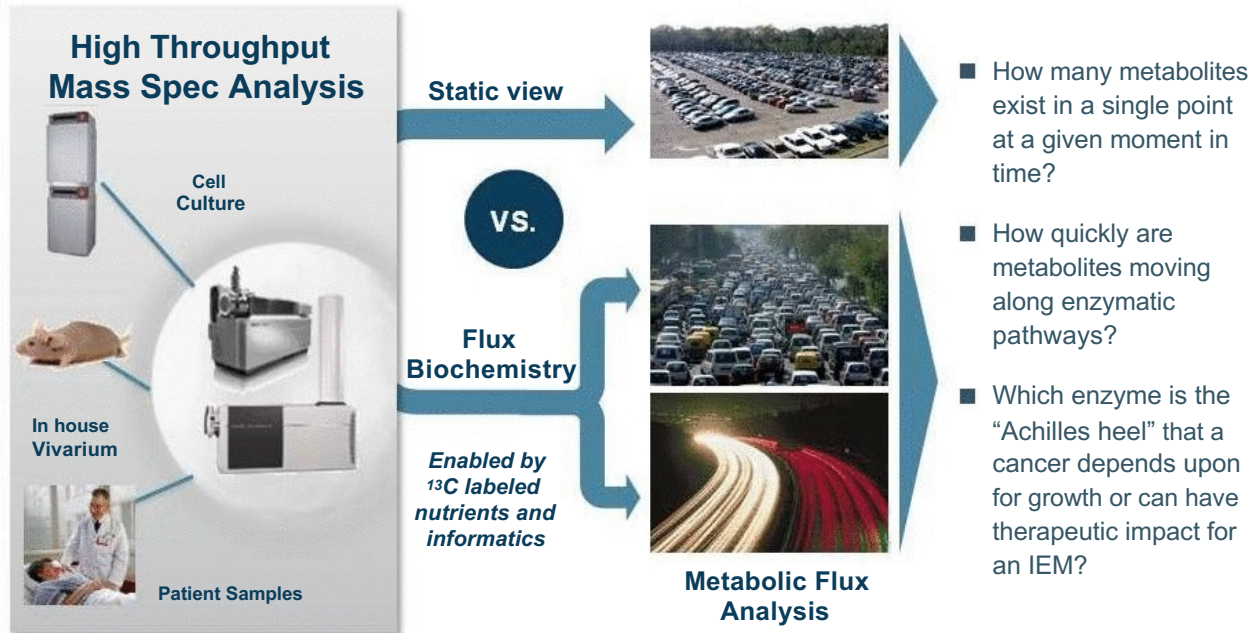
Marc Tessier-Lavigne, Ph.D. – Rockefeller University

- President of the Rockefeller University

Paul Clancy – Biogen Idec

- CFO of Biogen Idec

Deep Understanding of Metabolic Pathways Drives Development of Transformational Medicines



Flux biochemistry is a critical systems biology approach that has enabled Agios to drive groundbreaking clinical insights

Novel First-in-Class Portfolio: Precision Medicine Approach



Research

Development

Upcoming Milestones

Est. # of Patients

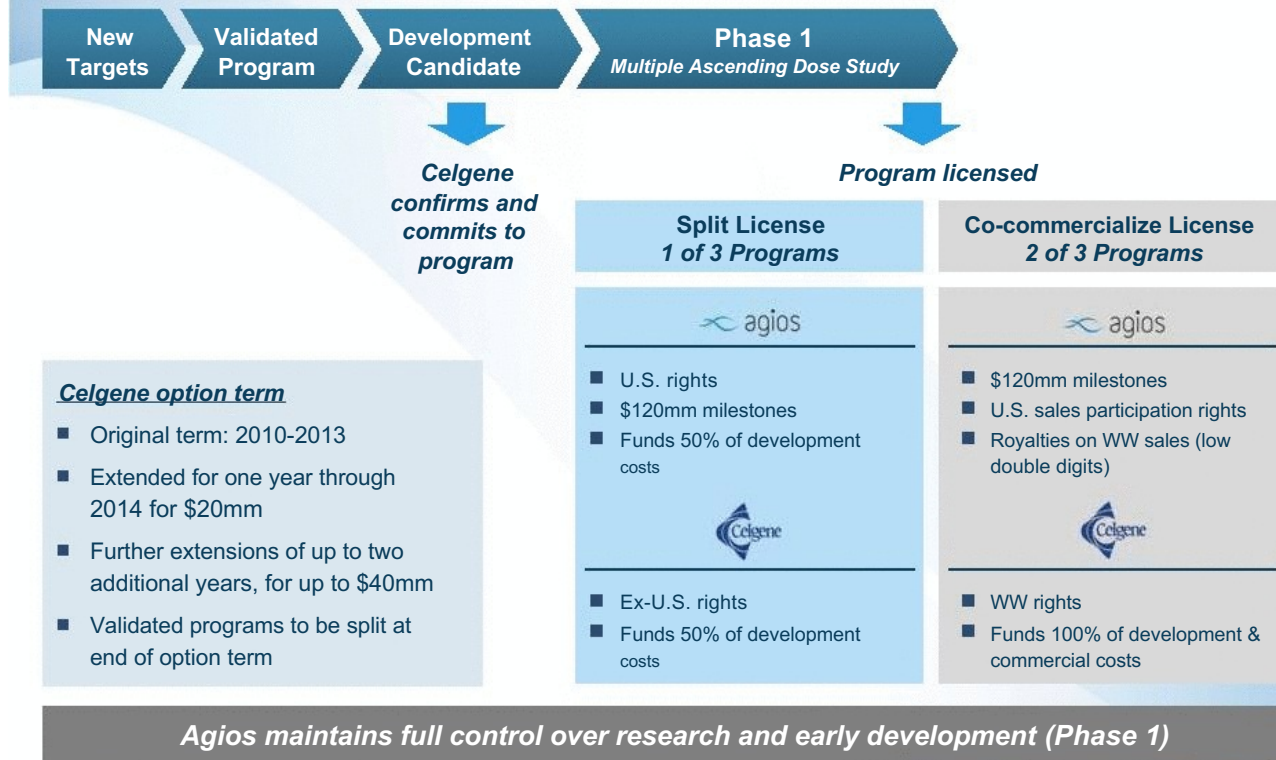
Primary Commercial Rights

Development Programs:

AG-221 (IDH2m inhibitor)		Ph1 on-going	Expansion Cohorts Late 2014	Multiple cancers ~11,000	
AG-120 (IDH1m inhibitor)		IND filed	FIH studies Early 2014	Multiple cancers ~31,000	 US Rts ex-US Rts
AG-348 (Pyruvate kinase (R) activator)		IND-enabling studies	FIH studies Mid-2014	PKD 1,000 – 3,000 (U.S.)	

Research Programs:

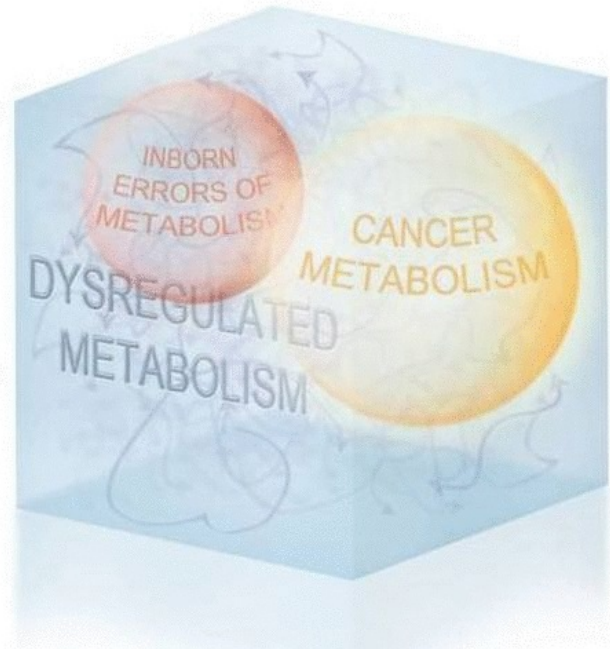
Cancer Metabolism		Multiple Novel Targets	
Inborn Errors of Metabolism		Multiple Monogenic Diseases	



CANCER METABOLISM

AG-221 (IDH2M INHIBITOR)

AG-120 (IDH1M INHIBITOR)



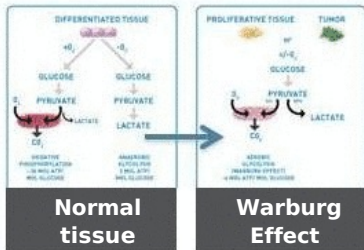
Link between Dysregulated Cellular Metabolism and Cancer is a Proven Concept



1920s



Otto Warburg



1970s

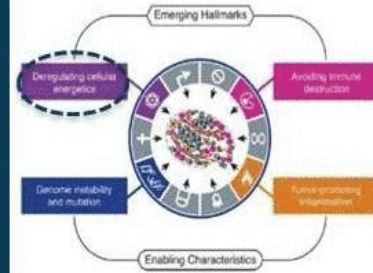


PETScans

2000s

HALLMARKS OF CANCER: THE NEXT GENERATION

Douglas Hanahan and Robert A. Weinberg



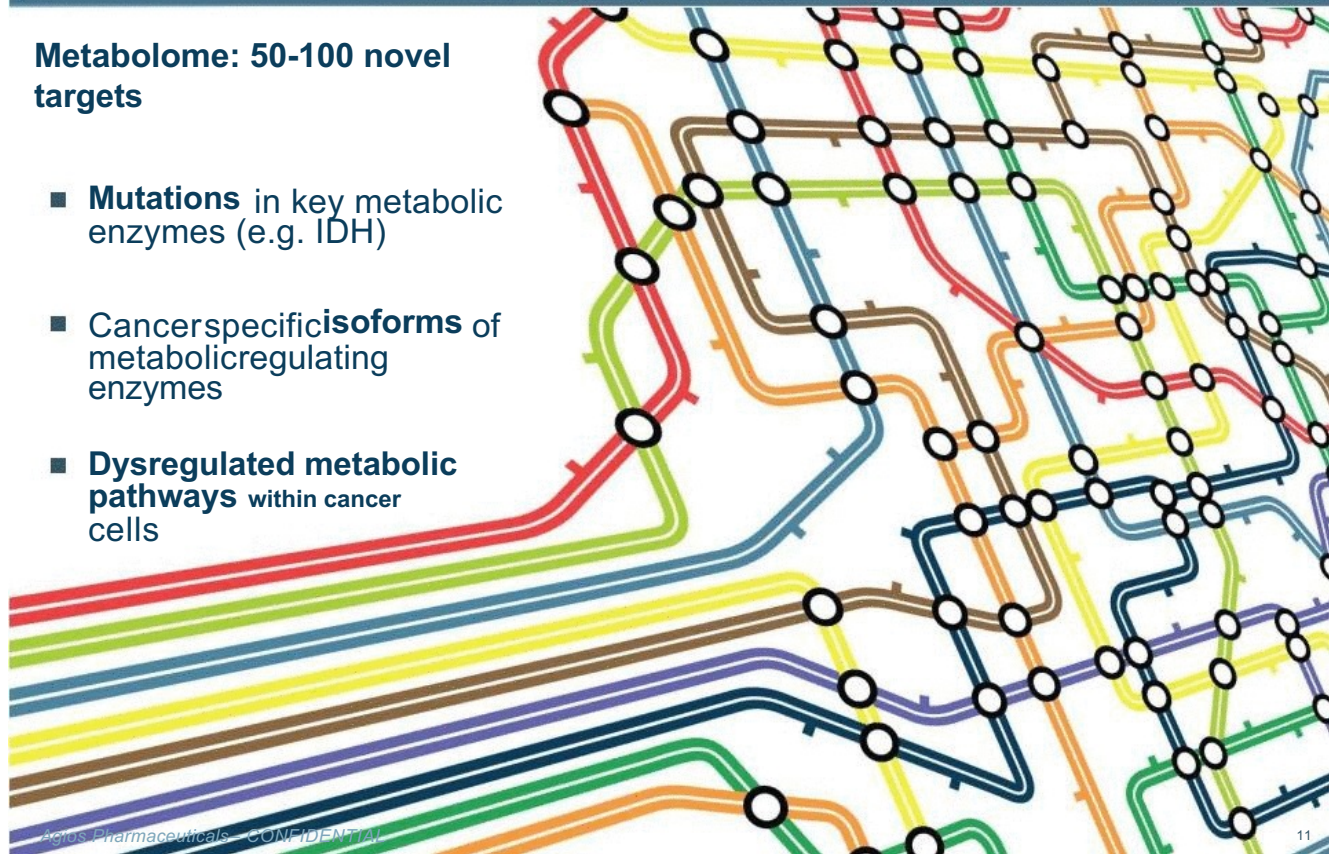
Hallmarks of Cancer

Metabolome: Untapped Opportunity For Novel Therapeutic Targets



Metabolome: 50-100 novel targets

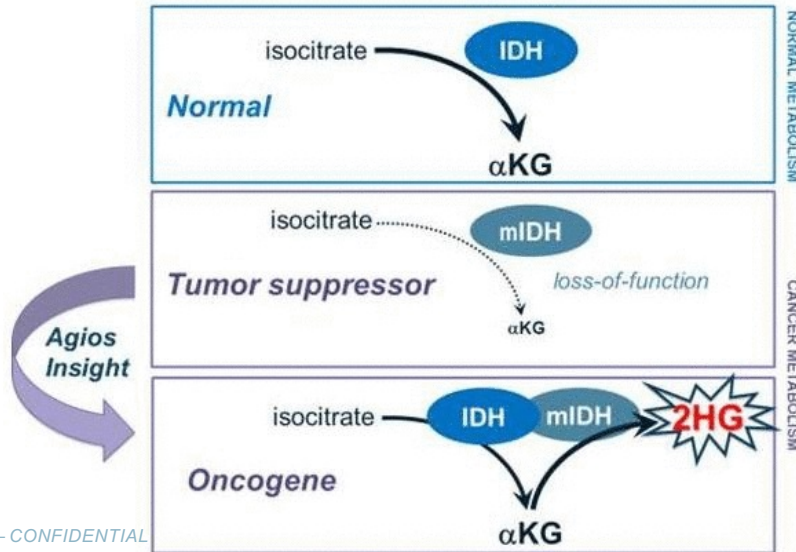
- **Mutations** in key metabolic enzymes (e.g. IDH)
- **Cancerspecific isoforms** of metabolicregulating enzymes
- **Dysregulated metabolic pathways** within cancer cells



Emergence of IDHm Targets validates Agios' approach





- Two normal metabolic enzymes (IDH1 and IDH2) mutated in a wide range of cancers
- Agios makes discovery that IDH mutants create the oncometabolite 2-hydroxyglutarate (2HG)
 - Gain of function with a new metabolic pathway



2009

IDH1m and IDH2m: Two Distinct Genetically Defined Patient Populations



Product	Indication	% IDHm	Est. # pts.***
 IDH1m (~31,000*)	Low grade glioma & 2 ^{ary} GBM**	70%	11,000
	Chondrosarcoma	>50%	4,600
	Acute Myeloid Leukemia (AML)	7.5%	3,600
	MDS/MPN	5%	2,000
	Intrahepatic Cholangiocarcinoma	20%	1,600
	Others* (colon, melanoma, lung)	1-2%	~8,000+
 IDH2m (~11,000*)	Acute Myeloid Leukemia (AML)	15%	7,200
	MDS/MPN	5%	2,000
	Angio-immunoblastic NHL	25%	400
	Others* (melanoma, glioma, chondro)	3-5%	1,500
	Type II D-2HG Aciduria (Inborn Error of Metabolism)	100%	50 reported

Patient populations being refined continuously with new sequencing and literature

* Includes "basket" of emerging unconfirmed indications; all patient populations being further refined with new sequencing

** Includes 8.5% of Primary GBM

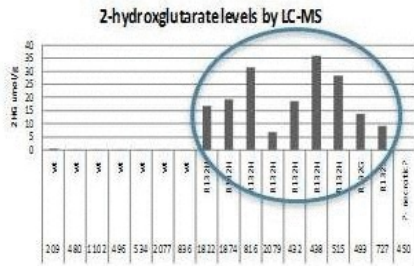
*** Estimated, U.S. + EU27 + JP incidence

2-Hydroxyglutarate, an Oncometabolite: A Surrogate for Treatment Effect & Clinical Benefit



SPECIFIC

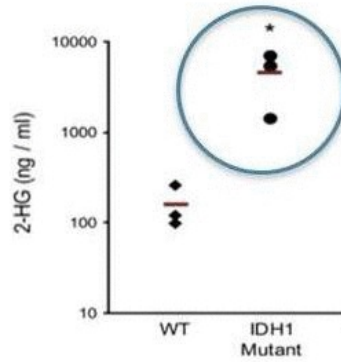
Brain Tumor Samples



*Linda Liou / UCLA

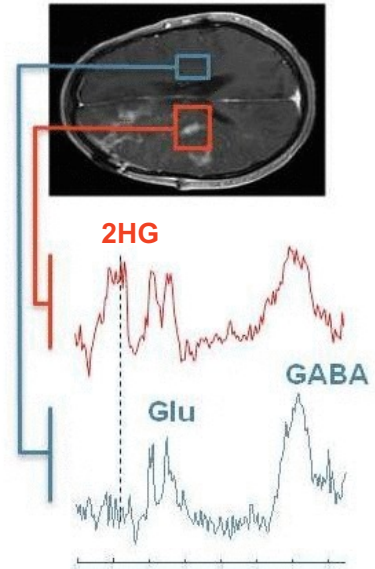
MEASURABLE

Blood Samples

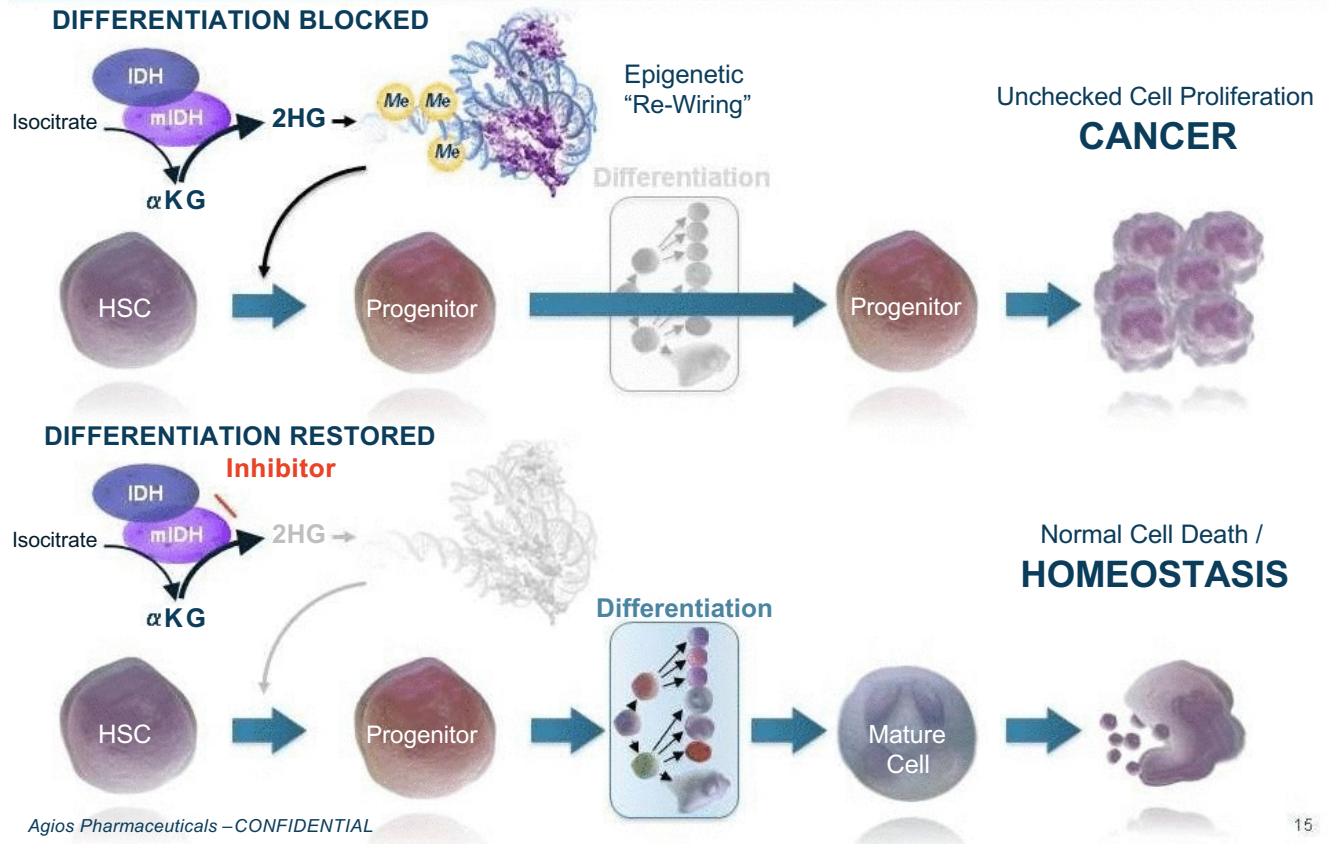


CAN BE IMAGED

MRI / MRS



IDH Mutations and 2-hydroxyglutarate



AG-221 Can Reverse Differentiation Block in Primary Patient Samples

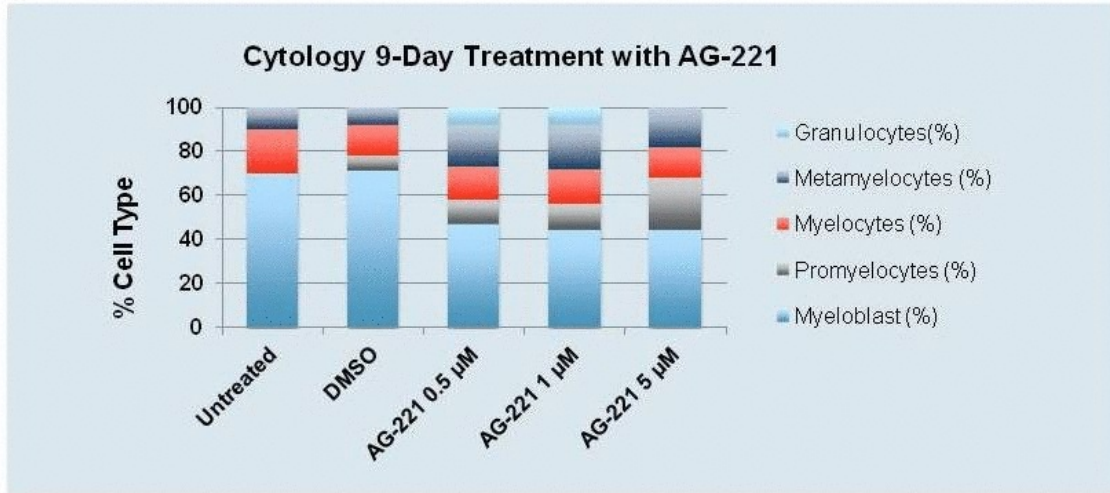


Scienceexpress

Targeted Inhibition of Mutant IDH2 in Leukemia Cells Induces Cellular Differentiation

Fang Wang,^{1*} Jeremy Trivins,^{1*} Byron DeLaBarre,^{1*} Virginie Penard-Lacronique,^{2,3,4*} Stefanie Schalm,^{5*} Erica Hansen,¹ Kimberly Straley¹

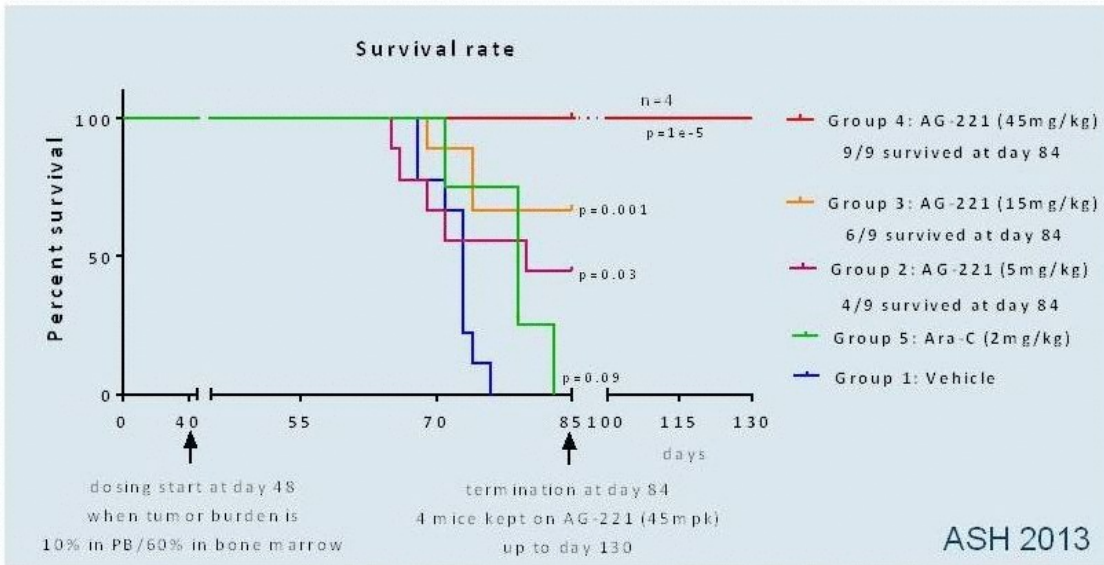
- Agios publication in *Science* (2013)
- Lower blast count and higher percentage of differentiated cells in AG-221 treated samples



AG-221 Induces Dose-Dependent Survival Benefit



- **Compelling in vivo single agent survival benefit in aggressive IDH2m AML model**
- **AG-221 treated animals also have:**
 - Lower 2HG level and tumor burden
 - Dose-dependent increase in markers of differentiation



Profile and Status

- **AG-221: Potent & selective inhibitor of IDH2 mutations**
 - Potent (IC50 = 12nM) and reversible IDH2m inhibitor
 - Once or twice daily oral dosing
- **Phase 1 started in Q3-2013, enrollment on track**

Clinical Plan

Hematologic malignancies

Phase 1 dose escalation

- “3 + 3” Design
- All patients IDH2m+
- Assess safety, PK
- Assess 2HG levels, differentiation, efficacy
- Foundation One™ test for broad genomic profile

MTD

Multiple expansion cohorts

- AML
- MDS
- MPD

Potential for rapid entry into definitive efficacy trials in IDH2m+ patients

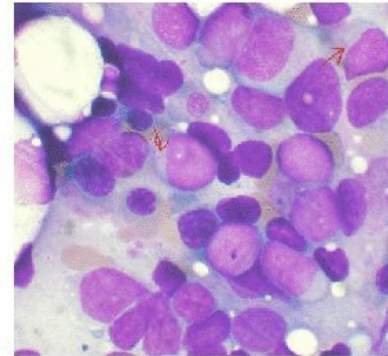
Trigger additional development based on data

Solid tumors

Combination with standard of care and/or targeted agents

D2HGA

- **Most common acute leukemia affecting adults**
 - ~15,000 patients diagnosed per year in US
 - Average age of diagnosis 50-70
- **Dismal long term survival rate**
 - ~10,000 deaths per year in US
 - Long term survival varies widely by age and risk factors
- **Goal of therapy is to induce remission**
 - Most patients receive cytotoxic chemotherapy
 - Transplant is goal for cure for younger patients
- **IDH mutation occurs in up to 25% adult AML patients**
- **Precedent for differentiation therapy**
 - All Trans Retinoic Acid (ATRA) induces remissions in rare form of AML (APL)



AG-120 (IDH1m Inhibitor) Summary



Profile and Status

- **AG-120: Potent & selective inhibitor of IDH1 mutations**
 - Potent (IC50 = 8nM) and reversible IDH1m inhibitor
 - Once or twice daily oral dosing
- **On track for Phase 1 in early 2014**

Clinical Plan

Hematologic malignancies

Phase 1 dose escalation

MTD

Multiple expansion cohorts

Solid tumors

Phase 1 dose escalation

MTD

Multiple expansion cohorts

- "3 + 3" design
- All patients IDH1m+
- Assess safety, PK
- Assess 2HG levels, differentiation, efficacy
- Foundation One™ test for broad genomic profile

- AML, MDS, MPD

- IHCC, chondrosarcoma, glioma, others

Potential for rapid entry into definitive efficacy trials in IDH1m⁺ patients

Trigger additional development based on data

Combination with standard of care and/or targeted agents

Chondrosarcoma

- Rare malignant cancer of cartilage & bone
- Majority of tumors are incurable
- Surgery followed by chemotherapy are standard of care
 - No targeted therapies available
- ~50% high grade tumors are IDHm⁺
 - Data evolving, could be higher, mIDH1>2

Journal of Pathology
J Pathol (2011)
Published online in Wiley Online Library
(wileyonlinelibrary.com) DOI: 10.1002/jpa.21913

ORIGINAL PAPER

IDH1 and IDH2 mutations are frequent events in central chondrosarcoma and central and periosteal chondromas but not in other mesenchymal tumours

Agios Pharmaceuticals – CONFIDENTIAL

Cholangiocarcinoma

- Rare cancer of the bile ducts
- Majority of tumors are incurable
- Chemotherapy & radiation are standard of care
 - No targeted therapies available
 - 5-year survival <5%
- IDHm occurs in up to 25% intrahepatic subtype
 - Data evolving, mIDH1>>2



The Oncologist

Frequent Mutation of Isocitrate Dehydrogenase (IDH)1 and IDH2 in Cholangiocarcinoma Identified Through Broad-Based Tumor Genotyping

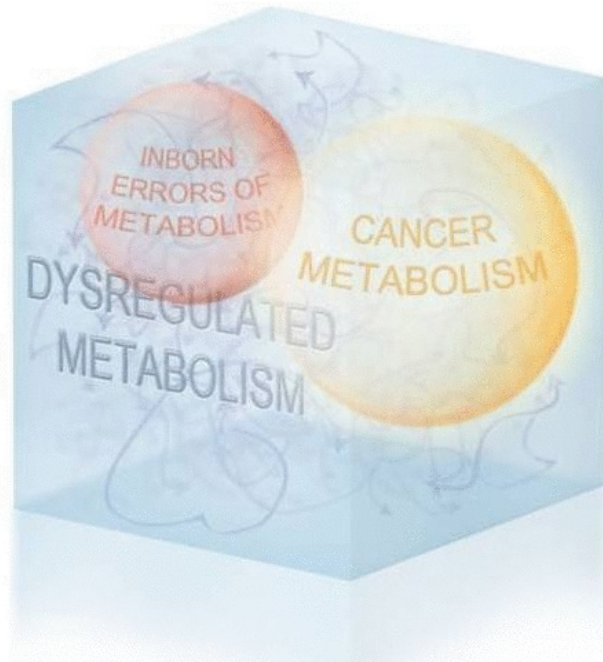
Emergence of IDH Target is a Fundamental Component of Agios' Cancer Metabolism Program



- **Two normal metabolic enzymes (IDH1 and IDH2) mutated in cancers**
 - Gain of function with a new metabolic pathway
 - Agios discovered that IDH mutants create the oncometabolite 2HG
- **Agios elucidated the mechanism of 2HG as a oncometabolite**
 - Blocks normal differentiation via multiple downstream effects
 - Initiating and driving event based on animal studies
 - Correlated with disease - excellent biomarker
- **IDH – a genetically validated target in many solid and hematologic cancers**
 - IDH1m: ~31,000 patients
 - IDH2m: ~11,000 patients
- **Developing breakthrough medicines**
 - Novel and potent, orally-active, selective inhibitors developed
 - Compelling preclinical validation
 - IDH2 inhibitor in Phase 1/2 trial; IDH1 inhibitor anticipated in clinical trials in early 2014

INBORN ERRORS OF METABOLISM

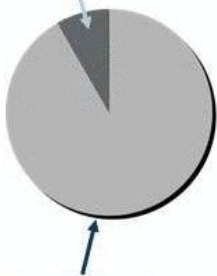
AG-348 (PYRUVATE KINASE DEFICIENCY)



ERT – Traditional Therapeutic Approach

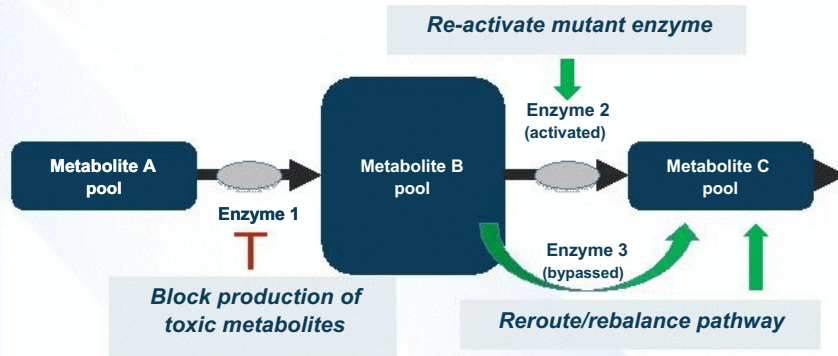
Vast majority of IEMs lack therapeutic options:

Enzyme Replacement Therapies
(mostly Lysosomal Storage Disorders)



Unaddressed IEMs
Significant unmet need

Agios Approach – Transformative Potential to Correct Metabolic Pathway Defects with Small Molecules



Characteristics of Potential Target Candidates

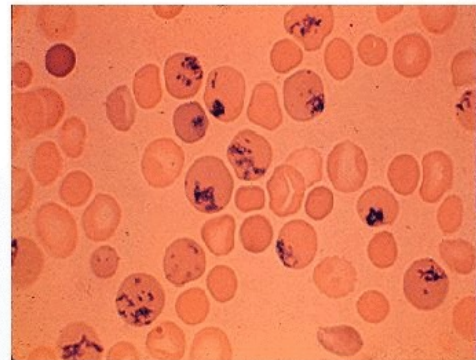
- ✓ High unmet medical need
- ✓ Clear path to clinical approval
- ✓ POC evidence or hypothesis
- ✓ Identifiable patient population
- ✓ Minimal time to Proof of Concept
- ✓ Clinical and regulatory path validated

Pyruvate Kinase (PK) Deficiency: Rare Hematological IEM Without Therapy



- **Autosomal recessive disorder characterized by chronic hemolytic anemia**
- **Rare genetic disease**
 - Estimated 1,000-3,000 in USA
- **Poor prognosis**
 - Presents in infancy or childhood with severe hemolytic anemia and jaundice
 - No disease-altering therapies
 - Transfusions and splenectomy common to manage symptoms
 - Lifelong risks from chronic hemolysis and iron overload

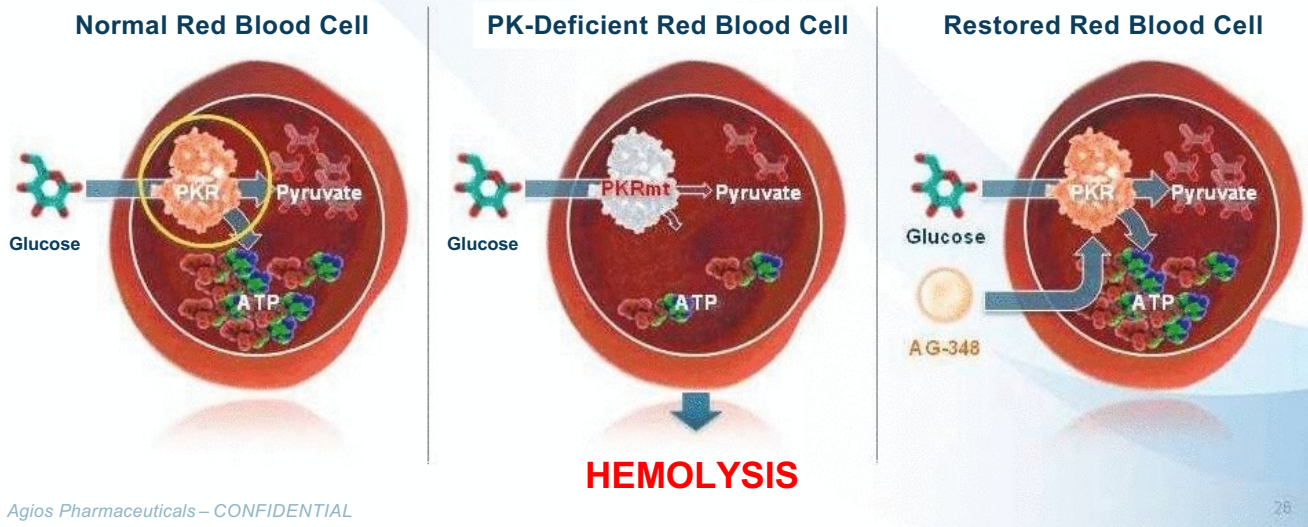
Blood smear in PKD



Therapeutic Approach to Treating PK Deficiency



- Glycolysis is the only source of energy (ATP) for red blood cells
- PKR enzyme catalyzes the final step in glycolysis in red blood cells
- In PK Deficiency, low PKR activity leads to low ATP levels and high rate of hemolysis in red blood cells
- Agios has developed AG-348, a small molecule activator that restores activity of mutant PKR



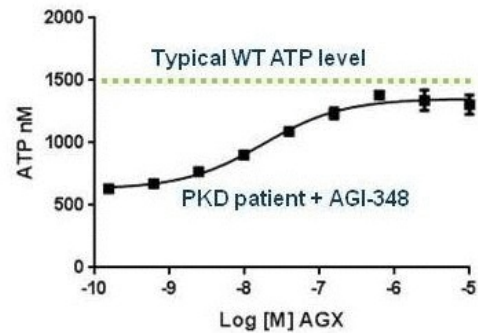
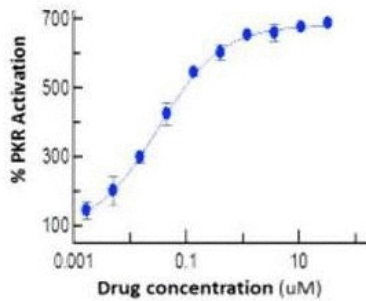
Agios Activators Show Early Efficacy in Ex-Vivo Patient Samples



AG-348 improves kinetic defect of mutant enzymes



AG-348 corrects ATP deficit in patient red blood cells (R486W / G341A)



- Compound heterozygous patients have 3-10% residual activity
 - Parents each carry one mutation, clinically normal with partial activity ~50%
- Lead molecules activate broad range of mutant proteins & restore metabolic flux
 - Activate 10 of 11 most common alleles (and may only need one allele per patient)
- Agios molecules bind unique allosteric site – not the active site

Profile and Status

- **AG-348: Potent & selective activator of PK-(R) mutations**
 - Reversible and orally bioavailable
 - Once or twice daily oral dosing
 - IND activities substantially completed, clinical trials to initiate in mid-2014
 - Natural history study being launched by Agios & investigators

Clinical Plan

Healthy Volunteer Clinical Studies

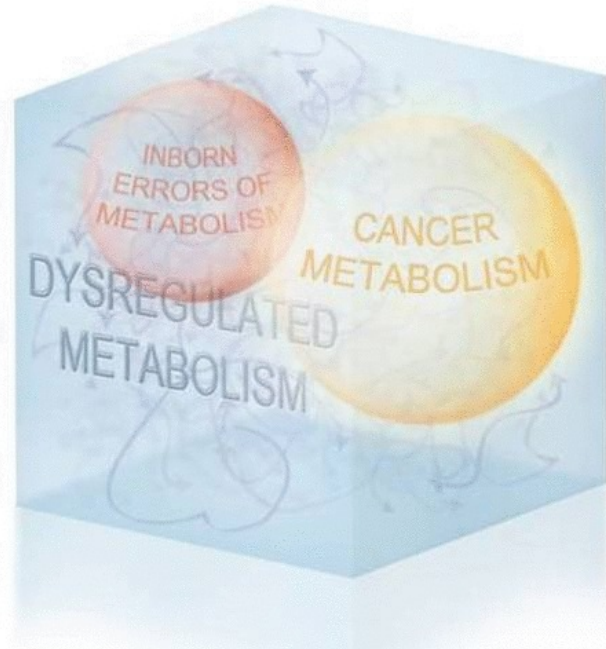
Phase 1 single ascending dose escalation

Phase 1 multiple ascending dose escalation

Potential for rapid entry into proof of concept trials in patients with PK deficiency

- Randomized double blind placebo controlled trials
- Single experienced US site selected
- Assess safety, PK and PD
- Potential for activation of wild type PK enzyme and effect on metabolites
- Select target dose range for proof of concept study in patients

FINANCIAL OVERVIEW



Financial Summary

(\$ in thousands)



■ Financial support has been strong from investors

- Raised \$385M in 3+ years
- Celgene Collaboration has provided \$141M of non-dilutive funding
 - Significant ongoing financial commitment, including R&D funding, payments to extend agreement, milestones and royalties
- In 2013, successfully completed our IPO, raised net proceeds of \$111M

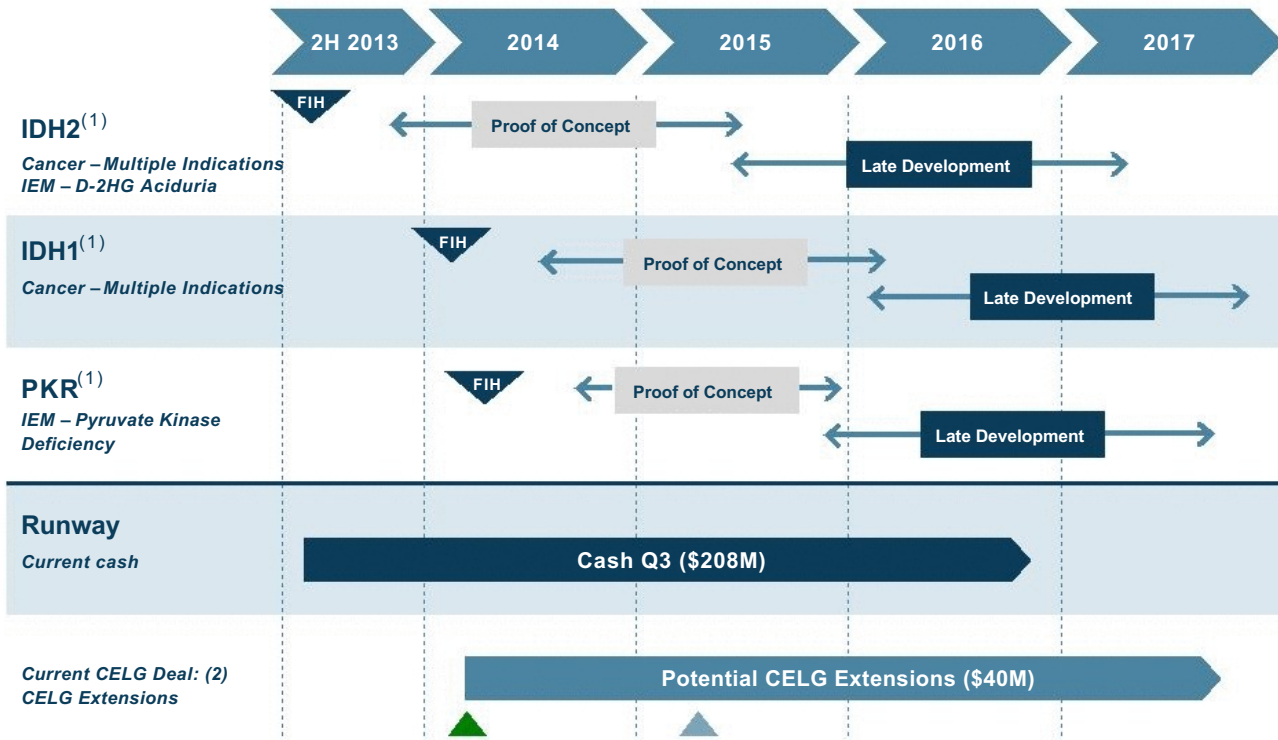
■ Select financial summary:

Statement of Operations	Years Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
Revenue	\$21,837	\$25,106	\$18,824	\$18,804
Operating Costs	38,468	48,101	35,322	45,445
Net Loss	(23,706)	(20,102)	(14,789)	(27,025)

Ended Q3 2013 with \$208M in cash

Strong position expected to drive multiple programs to meaningful milestones

Potential Timeline & Milestones



(1) Time frames are estimated and assume the program successfully advances into later stages of development

(2) 2014 extension announced, CELG milestone payments are not included; 1st Split Program \$25M LPO Ph2; each Ph3 start \$25M

Fast Start and Build 2009-2012

- Labs open in January 2009
- Major breakthrough on IDH biology
- Entered collaboration deal with Celgene
- Research engine built
- IEM research initiated
- Crossover financing

Drive to the Clinic 2013-2014

- AG-221 in Phase 1 trial
- Potential for 2 more novel NMEs in Phase 1
 - AG-120 in cancer
 - AG-348 in PK Deficiency
- All programs with biomarker guided patient selection and Phase 1 POC potential
- Initial Public Offering

Anticipated milestones 2014

- AG-221 initiating expansion cohorts and presenting dose escalation data in late 2014
- AG-120 initiating clinical trials in early 2014
 - Exercising option on U.S. rights
- AG 348 initiating clinical trials in mid 2014

AgiOS has rapidly emerged as a clinical company dedicated to making transformational medicines for patients



*“Hire great people, think big, have fun,
follow the science and do what’s right for patients”*