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): October 16, 2015

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

Delaware	**001-36014**	**26-0662915**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

88 Sidney Street, Cambridge, MA	**02139**
(Address of Principal Executive Offices)	**(Zip Code)**

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

(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))

Item 7.01 Regulation FD Disclosure.

On October 16, 2015, Agios Pharmaceuticals, Inc. (the "Company") intends to make a slide presentation at its Research and Development Day. A form of the slide presentation is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

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 8.01 Other Events.

On October 16, 2015, the Company issued a press release announcing its clinical development strategy for its lead cancer metabolism and rare genetic metabolic disorders programs, as well as insights into its emerging research, each of which will be discussed at its Research and Development Day on October 16, 2015. The full text of the press release issued in connection with this announcement is filed as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) The following exhibits are included in this report:

Exhibit No.	Description
99.1	Form of Presentation as of October 16, 2015.
99.2	Press release issued by Agios Pharmaceuticals, Inc. on October 16, 2015.

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.

AGIOS PHARMACEUTICALS, INC.

Date: October 16, 2015

By: /s/ David P. Schenkein
David P. Schenkein, M.D.
Chief Executive Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Form of Presentation as of October 16, 2015.
99.2	Press release issued by Agios Pharmaceuticals, Inc. on October 16, 2015.

Exhibit 99.1

What's Possible at Agios

October 16, 2015

David Schenkein, M.D.
Chief Executive Officer

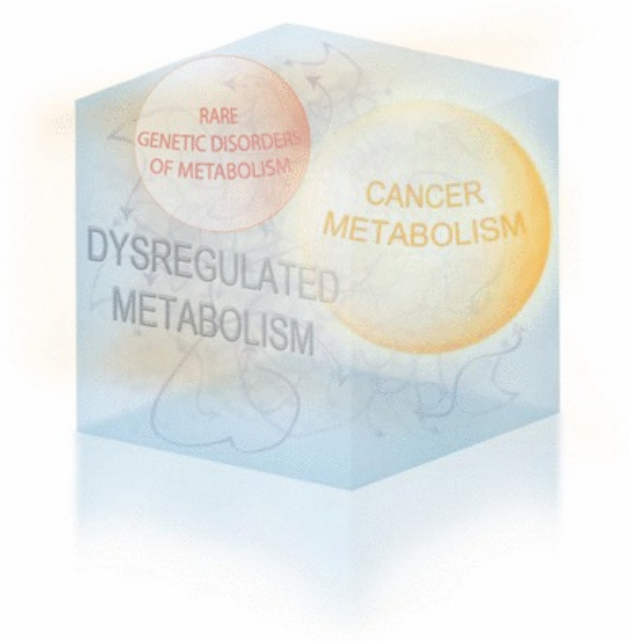
Cautionary Note Regarding Forward-Looking Statements

This “2015 Research & Development Day” 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. Such forward-looking statements include those regarding the potential benefits of Agios' product candidates targeting IDH1/IDH2 or pyruvate kinase-R mutations, including AG-221, AG-120, AG-881, AG-348 and AG-519; its plans and timelines for the clinical development of AG-221, AG-120, AG-881, AG-348 and AG-519; its plans regarding future data presentations; and the benefit of its strategic plans and focus. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "potential," "hope," "could," "would" 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 numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from Agios' current expectations and beliefs. For example, there can be no guarantee that any product candidate Agios is developing will successfully commence or complete necessary preclinical and clinical development phases, or that development of any of Agios' product candidates will successfully continue. There can be no guarantee that any positive developments in Agios' business will result in stock price appreciation. Management's expectations and, therefore, any forward-looking statements in this presentation or the various remarks made during this presentation could also be affected by risks and uncertainties relating to a number of other important factors, including: Agios' results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; 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; Agios' ability to obtain and maintain requisite regulatory approvals and to enroll patients in its planned clinical trials; 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 maintain key collaborations, such as its agreement with Celgene; and general economic and market conditions. These and other risks are described in greater detail under the caption "Risk Factors" included in Agios' Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, and other filings that Agios may make with the Securities and Exchange Commission 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, except as required by law.

We Are Driven By a Clear Vision and Values

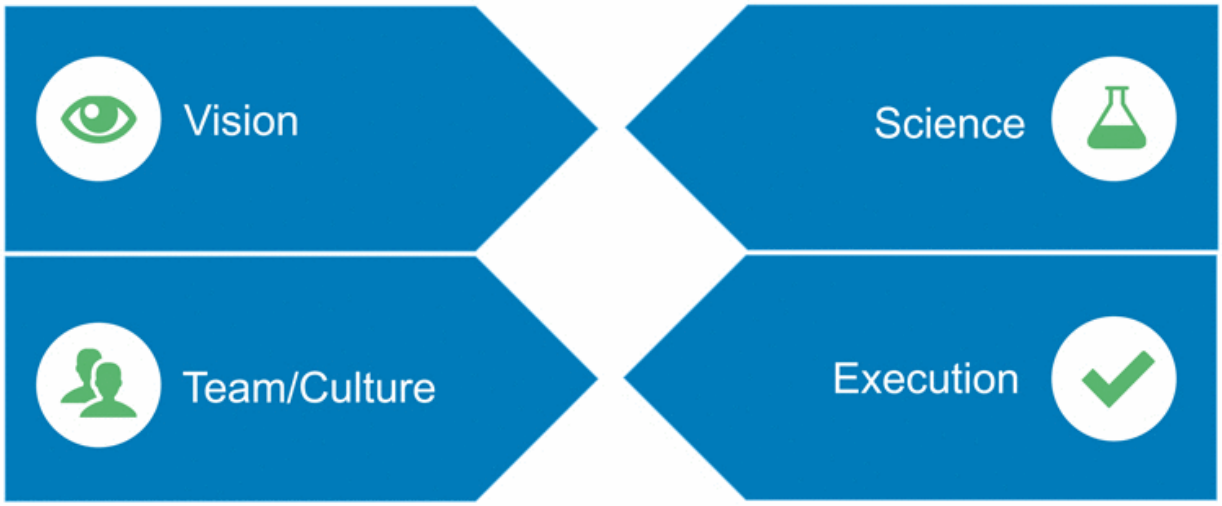


agios

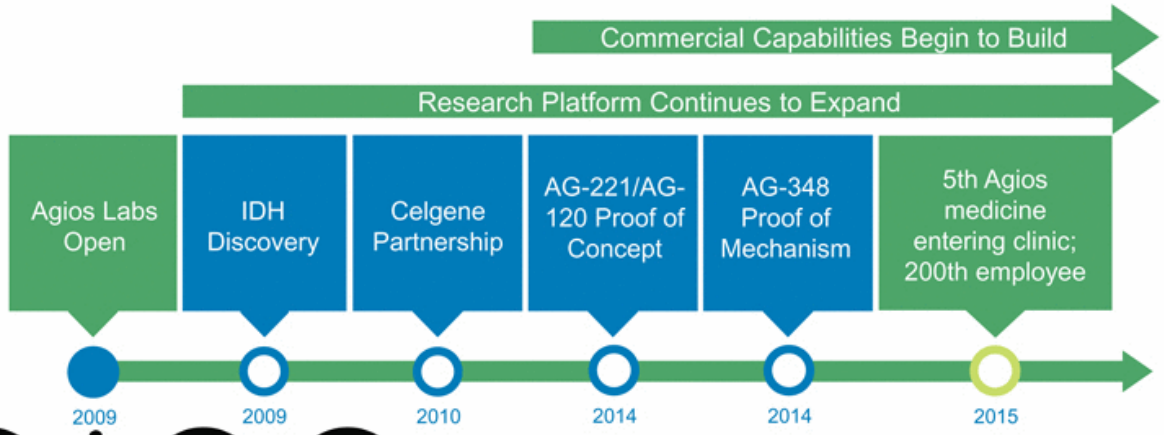
VISION

Agios is passionately committed to the fundamental transformation of patients' lives through scientific leadership in the field of cancer metabolism and rare genetic disorders of metabolism

Making a Difference for Patients & Building Long-Term Value



Building a Great Sustainable Biopharmaceutical Company



agios

Agios 2015

Five clinical stage investigational medicines with possibility to help a large number of genetically identified patients

Two investigational medicines accelerating towards approval and commercialization

A robust and novel pre-clinical pipeline in both cancer and RGDs

A organization preparing for commercialization

A passion to help patients and follow great science

Key Updates

Advancing the IDHm inhibitors to market as quickly and broadly as possible

- Design and initiation of AG-221 AML Phase 3 trial (IDHENTIFY)
- Design of combination trial with “7 + 3”
- Design of combination trial with azacitidine

Driving the PK activator program

- 5th Agios molecule entering clinical development (AG-519)

Expanding research

- Preclinical data to support potential new indications for PK activators
- Metabolic vulnerabilities as emerging cancer focus area

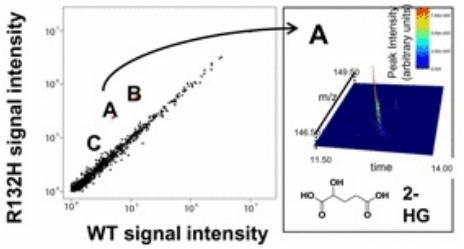
What's Possible: Our Science

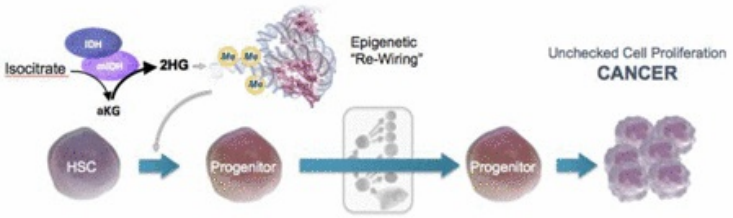
agios

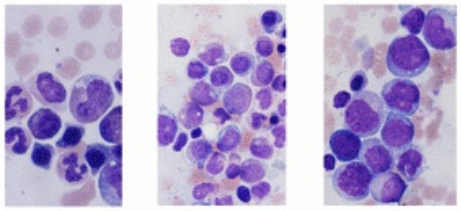
Find the Source of the Problem and Correct It

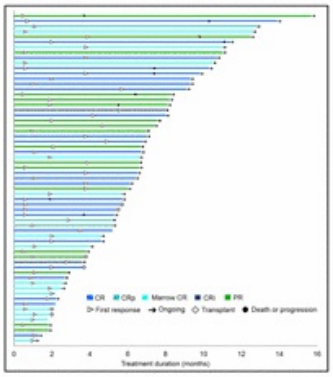
- Discovering novel unprecedented targets
- Tackling tough chemistry with allosteric inhibitors and activators
- Requiring a predictive marker prior to development candidate selection
- Exploiting intersection of several key fields: metabolism, genomics, epigenetics and immunology
- Setting a high bar and rewarding answers

Find the Source of the Problem and Correct It

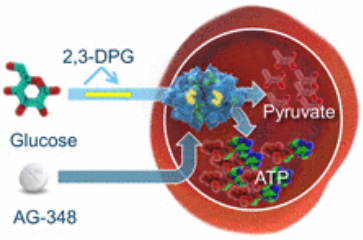


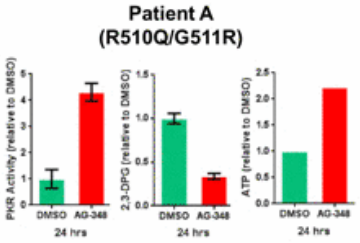


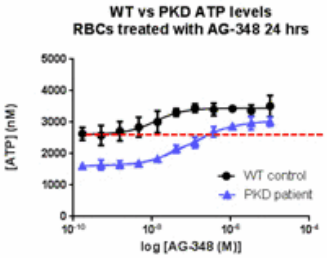


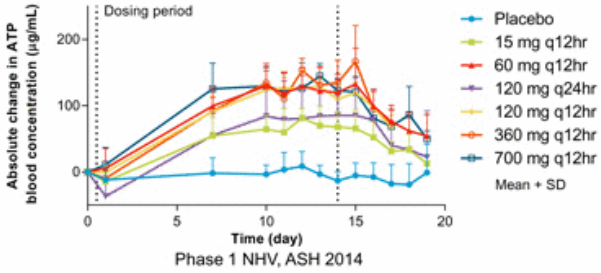


Find the Source of the Problem and Correct It







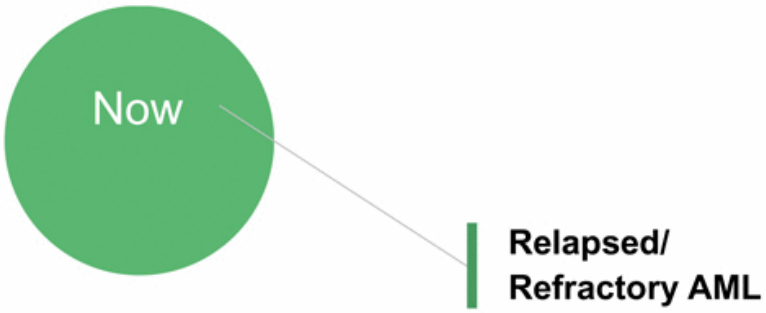


Phase 1 NHV, ASH 2014

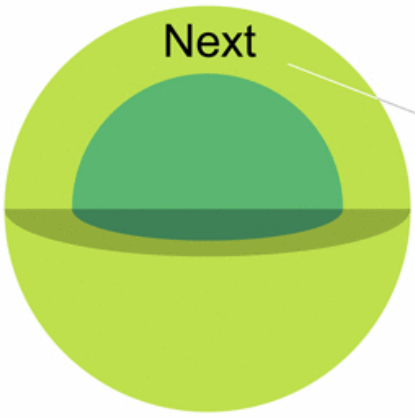
What's Possible: For Patients

agios

What's Possible for IDHm Patients

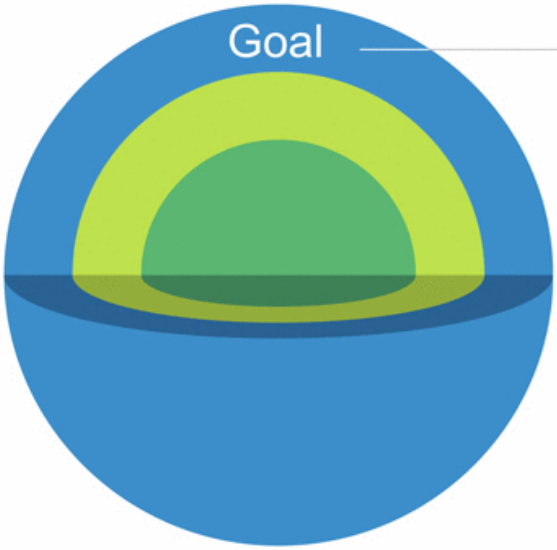


What's Possible for IDHm Patients



Frontline AML
Combination trials
Maintenance
MDS
Other hematologic malignancies

What's Possible for IDHm Patients



All IDHm patients screened and treated with an IDHm inhibitor for the entire course of their disease

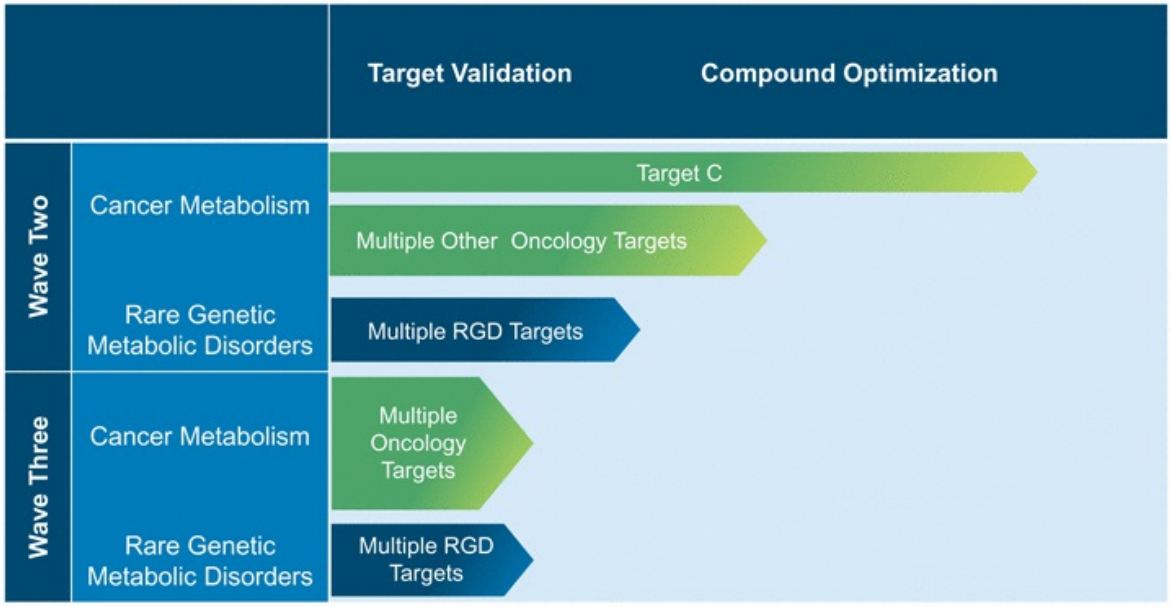
Exploration of PK Activation in Other Hemolytic Anemias

Disease	Molecular Lesion	Red Cell Characteristics
Normal physiology	None	Biconcave 
Pyruvate kinase deficiency	PKR mutations	Echinocyte 
Sickle cell disease	HbS mutation	Sickled 
Beta-thalassemia	Beta-globin loss of function	Microcytic 
Hereditary spherocytosis	Mutations in spectrin, ankyrin, protein 4.2	Spherocyte 

Novel First-in-Class Clinical Portfolio

Candidate	Indication	Early Stage Clinical Development	Late Stage Clinical Development	Primary Commercial Rights
AG-221 (IDH2m inhibitor)	**R/R AML**	Phase 3		Agios U.S. Co-promotion and royalty
	R/R AML	Phase 1 Dose Escalation → Expansion → 5th Cohort		
	Frontline AML	Phase 1b Combinations (Q4'15)		
	Frontline AML	Phase 1/2 Combinations (Q1'16)		
	MDS/Heme Malig	Phase 1 Expansion		
	Solid Tumors	Phase 1 Dose Escalation		
AG-120 (IDH1m inhibitor)	**R/R AML**	Phase 3 (1H'16)		U.S. Rights: agios; EX-U.S. Rights: Celgene
	R/R AML	Dose Escalation → Expansion Cohort		
	MDS/Heme Malig	Phase 1 Expansion		
	Frontline AML	Phase 1b Combinations (Q4'15)		
	Frontline AML	Phase 1/2 Combinations (Q1'16)		
	Solid Tumors	Phase 1 Dose Escalation		
AG-881 (pan-IDHm inhibitor)	**R/R AML**	Phase 1 Dose Escalation		Joint Worldwide Collaboration: agios, Celgene
	Solid Tumors	Phase 1 Dose Escalation		
AG-348 (PK (R) Activator)	**PK Deficiency**	Phase 2 DRIVE PK		agios
AG-519 (PK (R) Activator)	**PK Deficiency**	Phase 1 (Q1 2016)		agios

Novel First-in-Class Research Portfolio



Today's Agenda

Time	Speaker
8:30 - 9:00 am	Registration and breakfast
9:00 - 9:20 am	Opening Remarks – What's Possible at Agios **(David Schenkein)**
IDH Program	
9:20 - 9:40am	AG-221/AG-120 and Hematologic Malignancies **(Courtney DiNardo - MD Anderson)**
9:40 - 10:00am	Clinical and Regulatory Overview **(Chris Bowden)**
10:00 - 10:45am	IDH-Mutant Solid Tumor Background (**Sam Agresta and Tim Cloughesy - UCLA)**
10:45 - 10:55am	Q&A and Break
PKR & Research Programs	
10:55 - 11:10am	What We Know About PK Deficiency (**Ann Barbier)**
11:10 - 11:25am	PKD Clinical and Regulatory Overview (**Chris Bowden)**
11:25– 11:50am	Research Update (**Scott Biller)**
11:50am - 12:00pm	Q&A
12:00pm - 1:00pm	Buffet lunch

What You'll Come Away with Today

- Confident that we are leading the way in the disruptive field of dysregulated metabolism
- Clear that we are building world class clinical development and commercial capabilities on the foundation of our innovative research expertise
- Enthusiastic in your commitment to help us build a great biopharmaceutical company
- Passionate in our common mission of changing the lives of patients and creating significant shareholder value

IDHm Inhibitors and Hematologic Malignancies

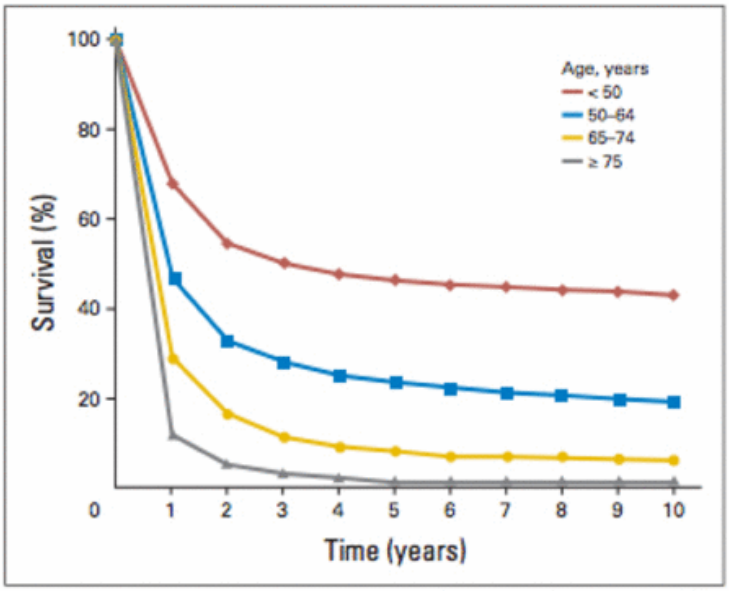
October 16, 2015

Courtney DiNardo, M.D.
University of Texas MD Anderson Cancer Center,
Houston, TX, USA

AML Is a Devastating Blood Cancer

- Most common leukemia in adults
- Rapid growth of abnormal white blood cells interfere with normal blood cell production
- Few treatment options, with no improvements in decades
- 5-year survival rate is 20-25%
- Median age at diagnosis 68-72 years
- Many cannot tolerate standard of care chemotherapy or transplant

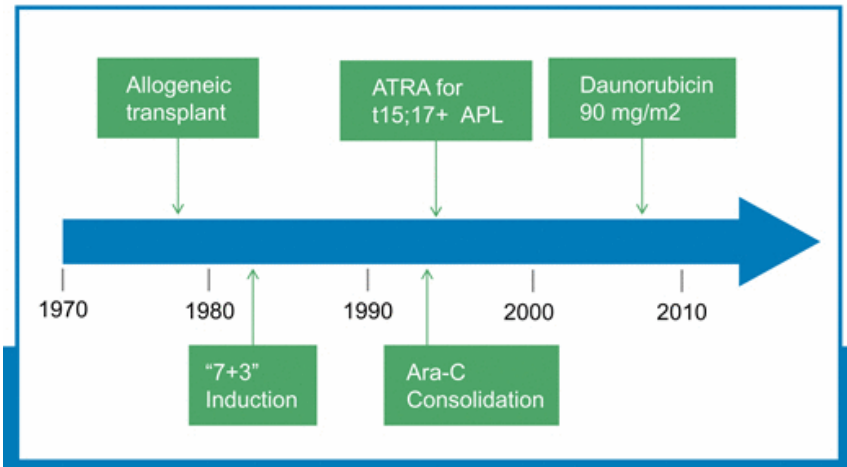
Relative survival by time & age of AML based on SEER



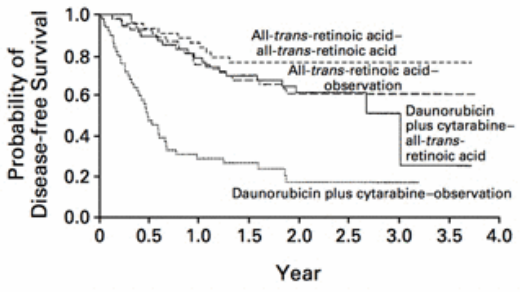
Klepin, et al, JCO, 32, 2014

Siegel R, et. al. CA Cancer J Clin. 2012 Jan-Feb;62(1):10-29.

Few Advances in AML in Decades



Acute Promyelocytic Leukemia (APL)

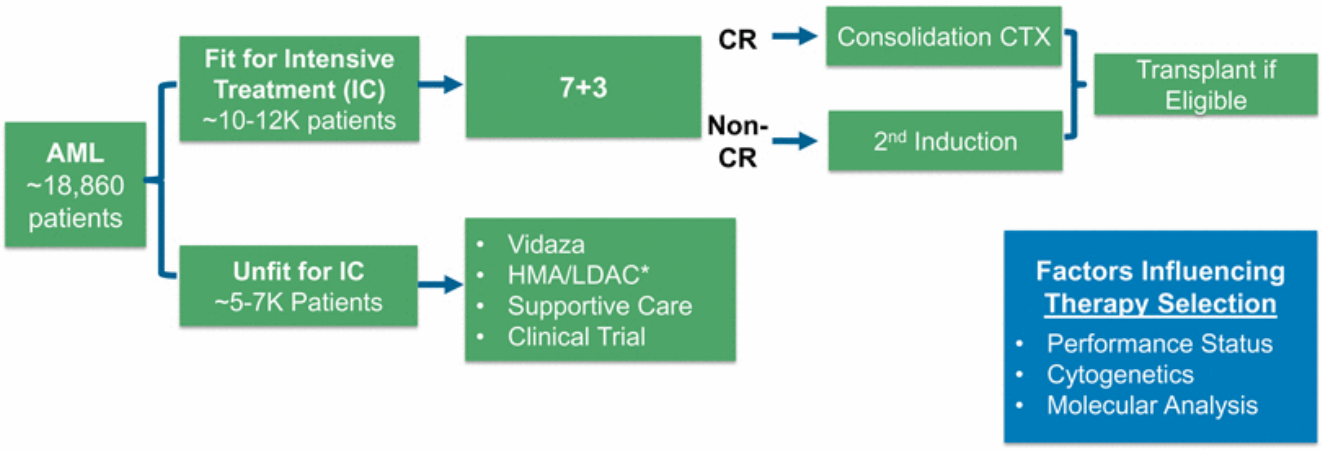


All-trans retinoic acid (ATRA) induces terminal differentiation of APL cells, leading to cures when combined with other therapies

Thomas ED, N Engl J Med. 1979 Mayer, N Engl J Med. 1994, Fernandez H,N Engl J Med, 2009

Tallman M, N Engl J Med. 1997.

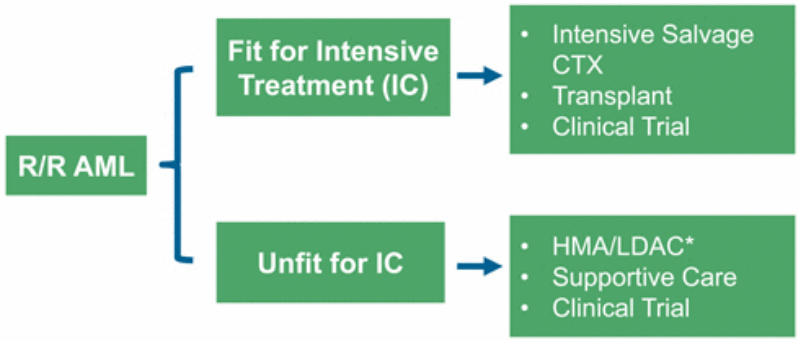
Treatment Options for Newly Diagnosed AML



CTX= Chemotherapy
HMA= Hypomethylating Agent
LDAC=Low dose Cytarabine

Thol F, Blood. 2015.

Limited Treatment Options for Relapsed/Refractory (R/R) AML



Factors Influencing Therapy Selection

- Performance Status
- Cytogenetics
- Molecular Analysis

CTX = Chemotherapy
HMA = Hypomethylating Agent
LDAC = Low Dose Cytarabine

Thol F, Blood. 2015

Limited Treatment Options for Relapsed/Refractory (R/R) AML

IDHENTIFY is a Global Phase 3 Study

R/R AML

Factors Influencing Therapy Selection

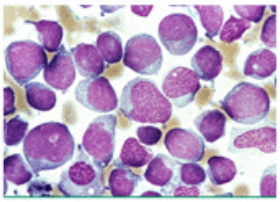
- Performance Status
- Cytogenetics
- Molecular Analysis

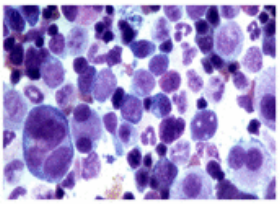
CTX = Chemotherapy
HMA = Hypomethylating Agent
LDAC = Low Dose Cytarabine

Thol F, Blood. 2015

Mutations in IDH Occur Frequently in AML and MDS

- IDH1m and IDH2m occur frequently in AML and MDS and are associated with a poor prognosis
- 2-HG acts as a competitive inhibitor of α-KG, which includes DNA and histone modifying enzymes and prolyl hydroxylases involved in collagen metabolism and hypoxia control



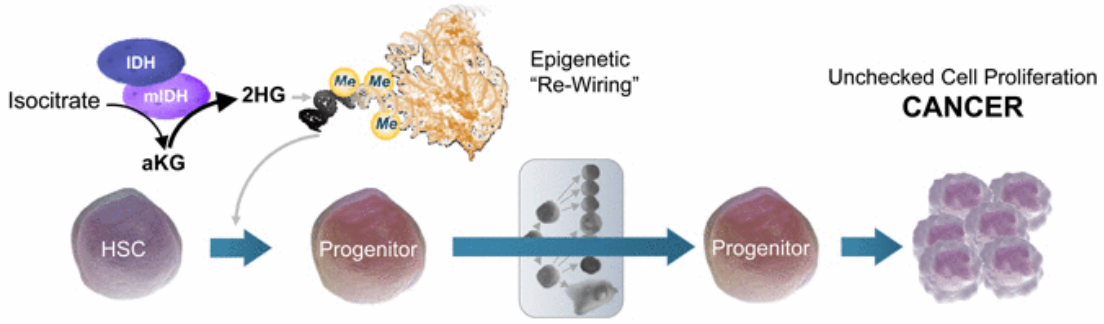


	AML	MDS
	Bone marrow	Bone marrow
Incidence (cases/year US)	18K	15K
Prevalence (US)	25K	>60K
IDH1m frequency	6-10%	3%
IDH2m frequency	9-13%	3-6%
Treatment Options	Chemotherapy Transplant	Chemotherapy Transplant
5-year overall survival	20-25%	~30%

Images: David S. Rosenthal, M.D
Multiple sources including market research SEER

IDH Mutations Lead to Unchecked Proliferation

- Mutations in IDH1 and IDH2 confer neomorphic activity
- Increased levels of 2-HG affect epigenetic control of the cell
- Inhibiting mutant IDH1 and IDH2 promotes maturation



First-in-Class, Oral, Potent, Selective, Reversible Inhibitors

AG-221 is an inhibitor of mutant IDH2

Study AG-221 Design

- Single-arm, open-label dose escalation and expansion

Participants

- Patients with IDH2 mutation-positive hematologic malignancies, including R/R AML, MDS and untreated AML

Treatment

- Single agent AG-221 once (QD) or twice (BID) daily in continuous 28-day cycles

Primary Assessment

- Objective responses are assessed by investigators using International Working Group AML and MDS criteria

AG-120 is an inhibitor of mutant IDH1

Study AG-120 Design

- Single-arm, open-label dose escalation and expansion

Participants

- Patients with IDH1 mutation-positive hematologic malignancies, including R/R AML, MDS and untreated AML

Treatment

- Single agent AG-120 QD or BID daily in continuous 28-day cycles

Primary Assessment

- Objective responses are assessed by investigators using International Working Group AML and MDS criteria

Patients Are Heavily Pre-Treated in Both Studies

AG-221 Demographics

	All patients N=177	R/R AML n=124
Age in years, median (range)	69 (22–90)	67 (22–90)
ECOG performance status, n (%)		
0	43 (24)	30 (24)
1	93 (53)	65 (52)
2	35 (20)	27 (22)
No. of prior regimens, median (range)	**2 (0-11)**	**2 (1-11)**
Prior Transplant, n %	**21 12%**	**16 13%**

AG-120 Demographics

	All patients N=57
Age in years, median (range)	68 (38–89)
ECOG performance status, n	
0	14
1	31
2	12
No. of prior chemotherapy regimens, median (range)	**2 (0–5)**
Prior Transplant, n %	**12 21%**
Abnormal cytogenetics at study entry, %	**78 %**

Data Presented at EHA, 6/13/15

AG-221 and AG-120 Demonstrate Favorable Safety Profiles

AG-221 Safety Summary	AG-120 Safety Summary
• Therapy has been well tolerated up to 450 mg QD – MTD not reached – Recommended dose for expansion is 100 mg PO QD • 30-day all-cause mortality of 4.5%; 60-day, 11.3% • Isolated increases in indirect bilirubin observed	• Therapy has been well tolerated up to 800 mg QD – MTD not reached – Recommended dose for expansion is 500 mg PO QD • Two DLTs observed – One grade 3 QT prolongation at 800 mg QD – One grade 3 rash at 1200 mg QD • Grade 2-3 QT prolongation observed

Data Presented at EHA, 6/13/15

Traditional Response Criteria May Overlook Certain Aspects of Clinical Benefit

Modified IWG Criteria	Blasts	Platelets		Absolute Neutrophil Count (ANC)
Marrow CR	< 5%	No recovery		No recovery
CR	< 5%	> 100K		>1,000
CRi/CRp	<5%	> 100K	**OR**	> 1,000
Partial Remission	50% decrease to 5-25%	> 100K		> 1,000
Stable Disease	Doesn't meet PR criteria	-		-

Cheson et al, J Clin Oncol 17:1244, 1999

AG-221 Single-Agent Response Rates of 30-50% in Phase 1

	R/R AML n=111	Untreated AML n=22	MDS n=14	Other n=10	Total N=157
CR, n (%)	20 **(18.0)**	3 **(13.6)**	2 **(14.3)**	1 **(10.0)**	26 **(16.6)**
CRp, n	1	—	1	1	3
PR, n	16	2	—	—	18
mCR, n	8	1	4	1	14
CRi, n	1	1	—	—	2
SD, n	49	7	4	7	67
PD, n	7	5	2	—	14
NE, n	9	3	1	—	13
ORR, n (%)	46 **(41.4)**	7 **(31.8)**	7 **(50.0)**	3 **(30.0)**	63 **(40.1)**

Data Presented at EHA, 6/13/15

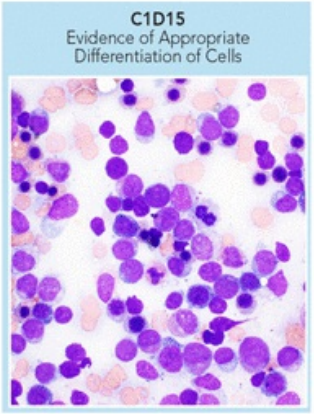
Similar Magnitude of Response for AG-120

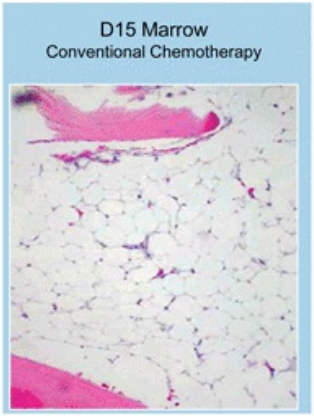
	Cohorts 1 + 2 ≤300 mg/day n=8	Cohort 3 500 mg QD n=22	Cohort 4 800 mg QD n=15	Cohort 5 1200 mg QD n=7	Total N=52
CR, n	2	3	1	2	8
CRp, n	—	—	—	1	1
PR, n	—	1	3	—	4
Marrow CR, n	—	3	—	—	3
SD, n	5	13	7	2	27
PD, n	1	2	4	1	8
NE, n	—	—	—	1	1
ORR, n (%)	2/8 (**25**)	7/22 (**32**)	4/15 (**27**)	3/7 (**43**)	16/52 (**31**)

Data Presented at EHA, 6/13/15

IDHm Inhibitor Response Fundamentally Different from Chemotherapy

Maturation of mutated cells in response to IDHm treatment through the first cycle



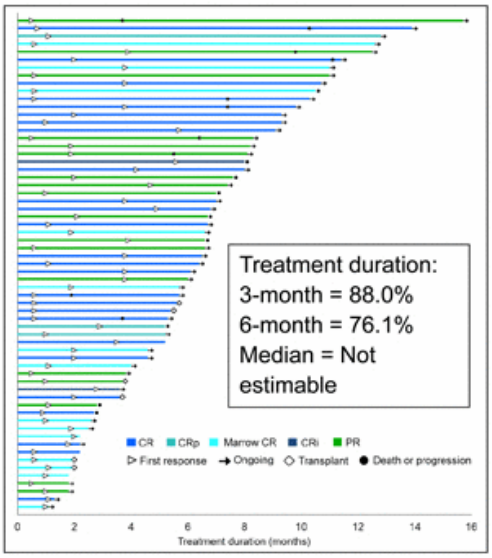


Biopsy post conventional chemotherapy shows an empty marrow

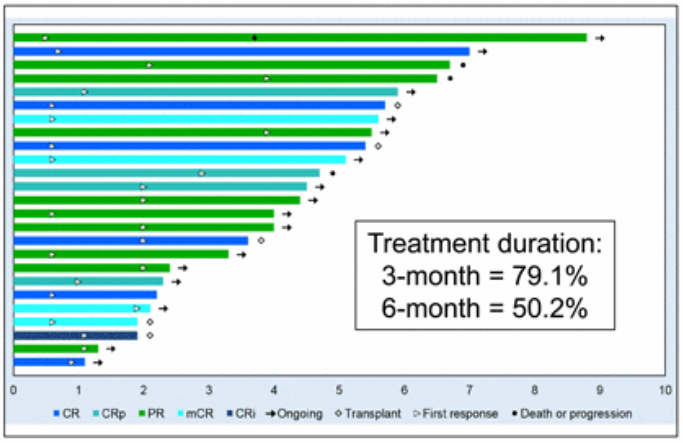
Image: Min Xu M.D.
Data Presented at AACR, 4/2014

Durable Responses Associated with Both AG-221 and AG-120

AG-221



AG-120



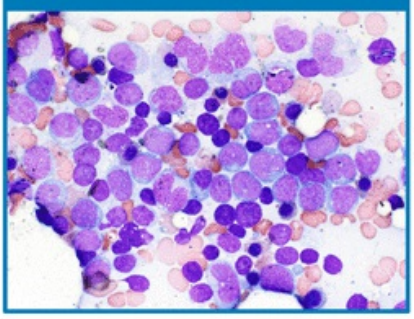
Data Presented at EHA, 6/13/15

Rethinking Clinical Benefit for IDHm Inhibitors in AML

Patient with Partial Response Shows Recovery of Platelet and Neutrophil Counts

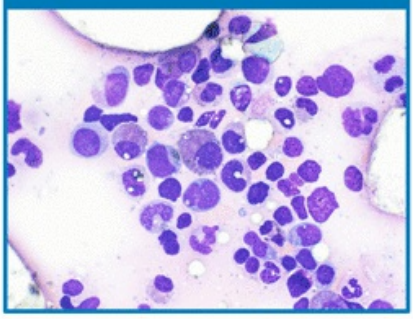
- Response to AG-221 appears to be fundamentally different compared to cytotoxic chemotherapy
- Partial responses convert to complete remission and/or remain as best response over time

Screening 44% Blasts



Hgb	Platelets	ANC
10.9	**29**	**0.1**

Cycle 2, Day 1 12% Blasts



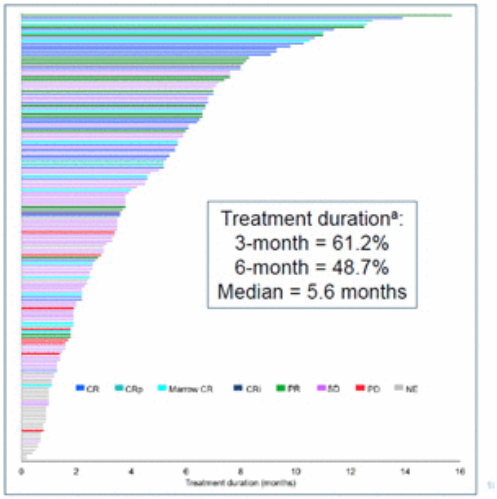
Hgb	Platelets	ANC
11.2	**106**	**1.3**

Data Presented at ASH 2014

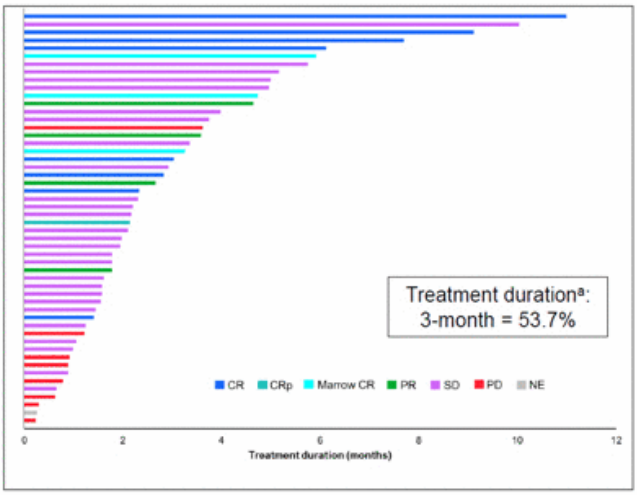
Rethinking Clinical Benefit for IDHm Inhibitors in AML

Patients with Stable Disease Staying on Treatment Up to 10+ Months

AG-221



AG-120

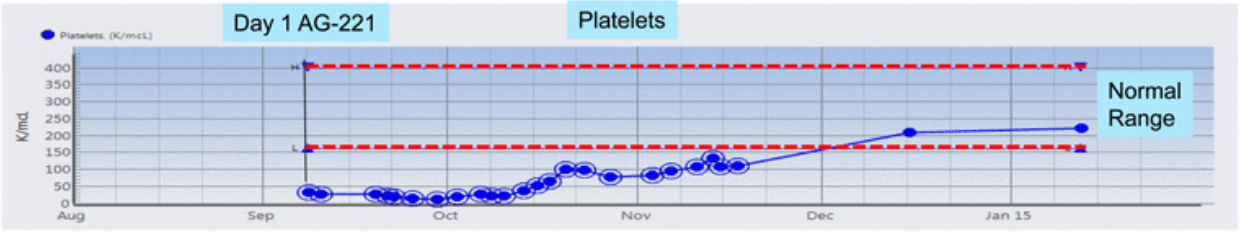


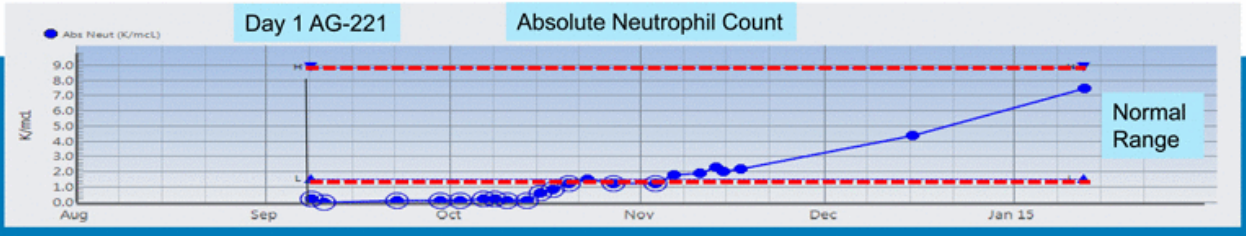
Data Presented at EHA, 6/13/15

Treatment duration estimated using Kaplan-Meier method

Rethinking Clinical Benefit for IDHm Inhibitors in AML

Potential Benefit Associated with Stable Disease for a Patient Treated with AG-221



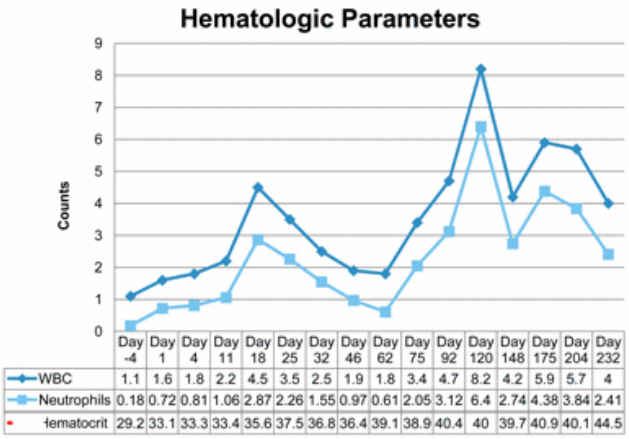


Blast count remains elevated with recovery of platelets and neutrophils for 4+ months of stable disease

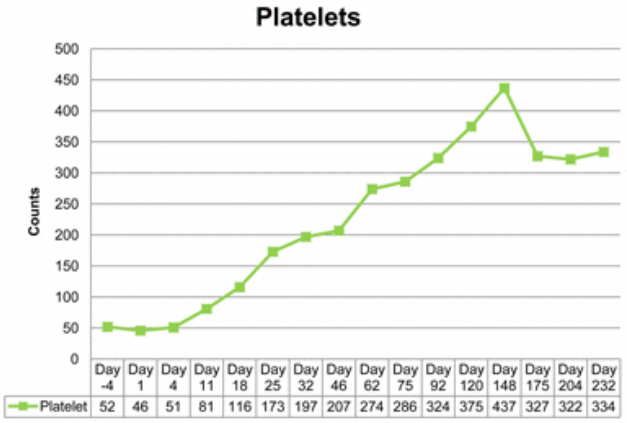
Data from Clinical Investigator on AG-221 Study

Hematologic Recovery in Patient with High Risk Myelodysplastic Syndromes (MDS)

Improvement in hematologic parameters and platelet count on AG-221



	Day -4	Day 1	Day 4	Day 11	Day 18	Day 25	Day 32	Day 46	Day 62	Day 75	Day 92	Day 120	Day 148	Day 175	Day 204	Day 232
WBC	1.1	1.6	1.8	2.2	4.5	3.5	2.5	1.9	1.8	3.4	4.7	8.2	4.2	5.9	5.7	4
Neutrophils	0.18	0.72	0.81	1.06	2.87	2.26	1.55	0.97	0.61	2.05	3.12	6.4	2.74	4.38	3.84	2.41
Hematocrit	29.2	33.1	33.3	33.4	35.6	37.5	36.8	36.4	39.1	38.9	40.4	40	39.7	40.9	40.1	44.5



	Day -4	Day 1	Day 4	Day 11	Day 18	Day 25	Day 32	Day 46	Day 62	Day 75	Day 92	Day 120	Day 148	Day 175	Day 204	Day 232
Platelet	52	46	51	81	116	173	197	207	274	286	324	375	437	327	322	334

Data from Clinical Investigator on AG-221 Study

Key Takeaways

- IDHm inhibitors work by a unique mechanism entirely different from conventional chemotherapy
- Treatment with oral drugs AG-221 and AG-120 is well-tolerated
- AG-221 and AG-120 show clear activity as single agents
  - Durable complete remissions
  - Durable non-CR responses
  - Prolonged stable disease

IDHm targeted differentiation treatment has demonstrated clinical benefit in AML Phase 1 studies

Bringing AG-221 and AG-120 To Patients

Clinical and Regulatory Overview

October 16, 2015

Chris Bowden, M.D.
Chief Medical Officer

Phase 1 Program Rapidly Defined Single-Agent Profile for IDHm Inhibitors in R/R AML

Phase 1 expansion cohorts designed to demonstrate compelling clinical benefit with registration quality data

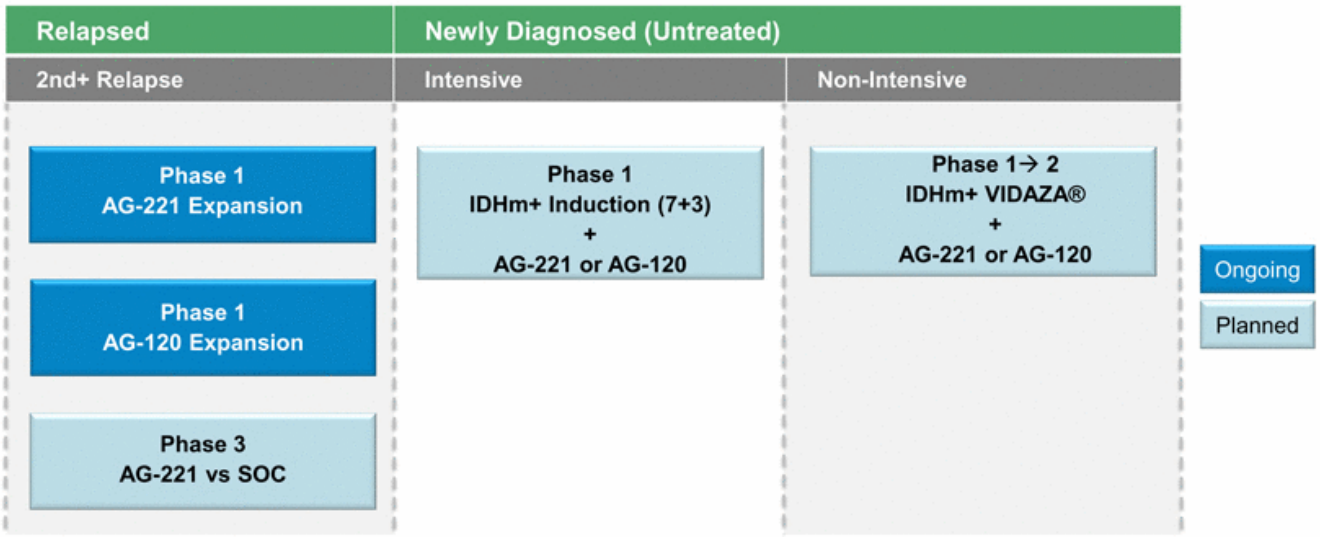
Efficacy
- Complete Remissions
- Partial Remissions

Safety
- Adverse Events
- Discontinuations

Healthcare Utilization
- Transfusions
- Infections

Our goal is to make AG-221 and AG-120 available as quickly as possible

Development Program Targets Multiple Lines of Treatment from R/R to Frontline AML



Phase 3 for AG-120 also planned for 1H16

“IDHENTIFY” Trial

A Phase 3, multicenter, open-label, randomized study comparing the efficacy and safety of AG-221 (CC-90007) vs. conventional care regimens in older patients with late stage Acute Myeloid Leukemia harboring an IDH2 mutation

agios

IDHENTIFY: Global Phase 3 Study to Evaluate the Efficacy of AG-221 in R/R AML

KEY INCLUSION

- **≥ 60 years**
- **IDH2+**
- **R/R AML after 2nd/3rd line**

STRATIFIED BY

- Prior intensive therapy
- Prior refractory
- Prior HSCT

1:1 Randomization

AG-221/CC-90007

- Starting 100 mg QD
- AG-221 + BSC
- 28 day cycles

COMPARATOR

- Best Supportive Care (BSC)
- VIDAZA® + BSC
- Low dose Ara-C + BSC
- Intermediate Dose Ara -C + BSC

1° ENDPOINT

- OS

KEY 2° ENDPOINTS

- EFS
- ORR
- Duration of response
- 1-yr survival
- CR rate
- Safety

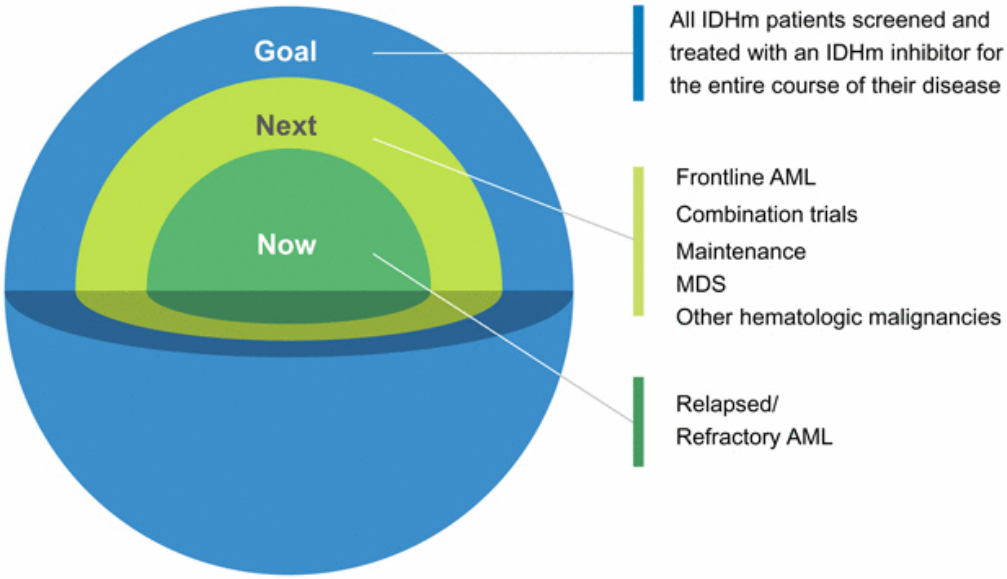
- **280 patients**
- **No crossover**

IDHENTIFY Is a Global Phase 3 Study

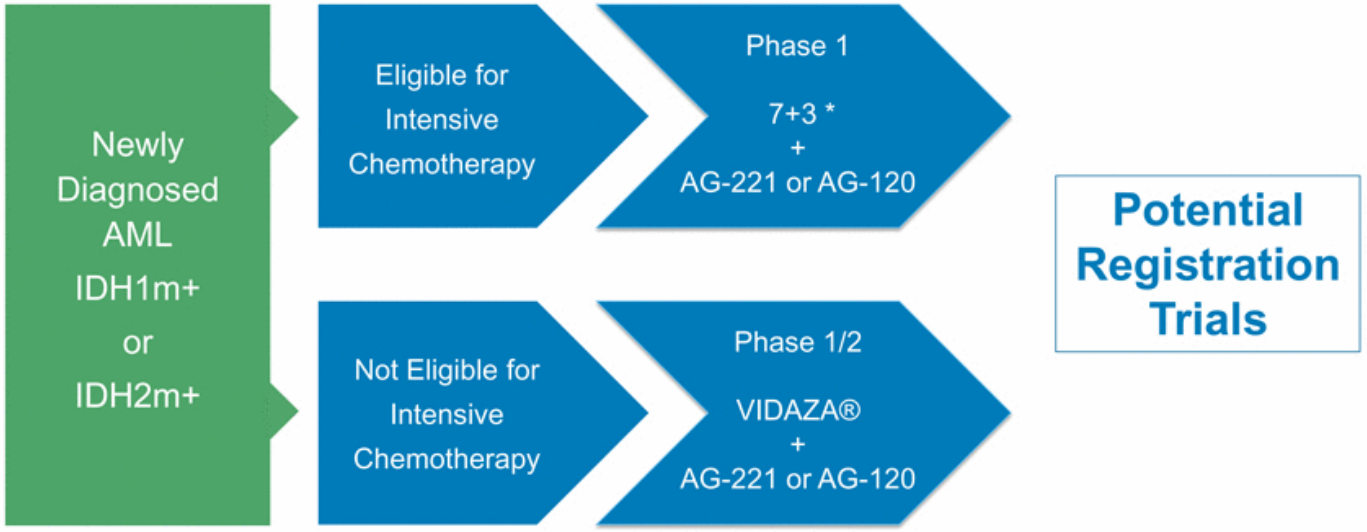
~130 sites will participate

What's Possible for IDHm Patients

A Roadmap for Speed and Breadth

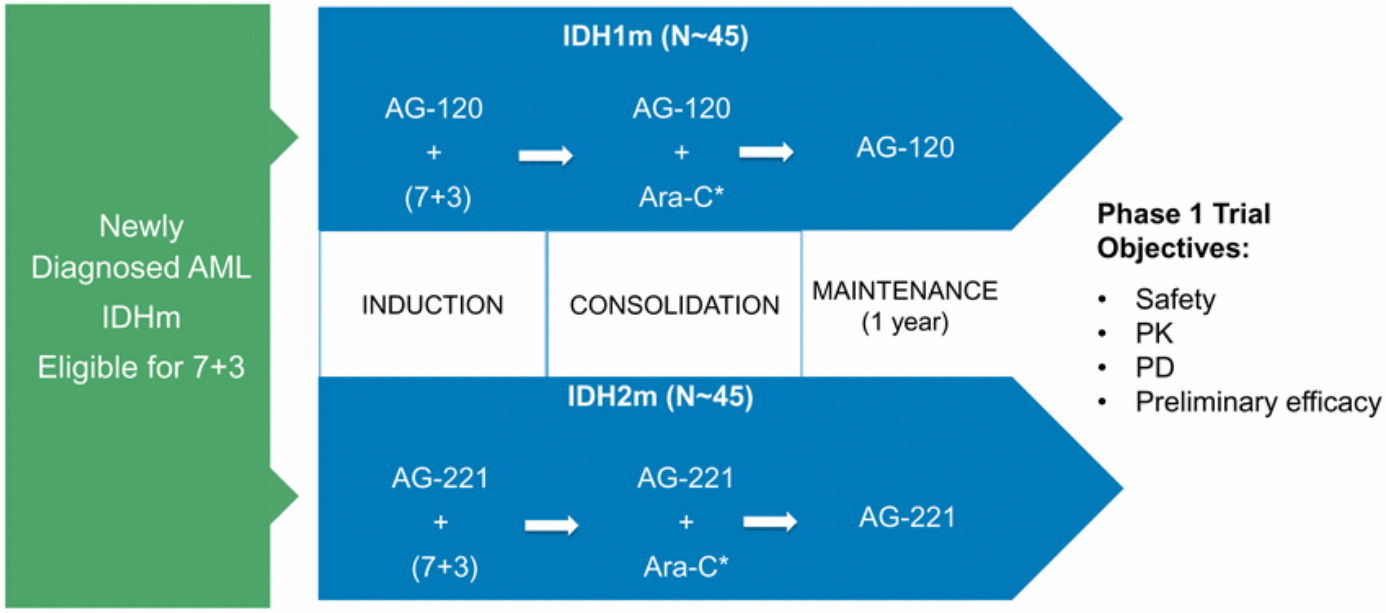


Frontline Therapy: Novel Clinical Development Strategies



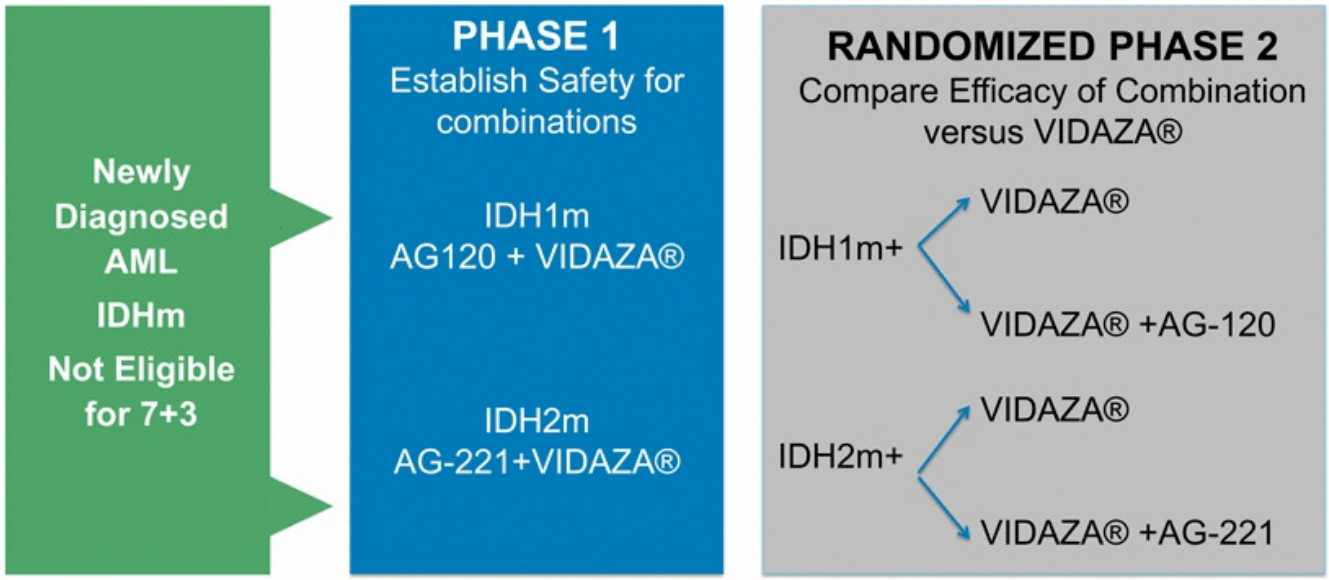
*7+3-Ara-C (Days 1-7), Daunorubicin or Idarubicin (D1-3)

Intensive Eligible Patients: Adding IDHm Inhibitors to Standard of Care



*Ara-C or Mitoxantrone/Etoposide

Non-Intensive Patients: Adding IDHm Inhibitors to Standard of Care



Primary endpoint is ORR
Efficient transition to Phase 2

MDS Is a New Development Horizon

- Clinical development strategies for MDS are being evaluated
- VIDAZA® one of few approved agents
- High-risk MDS after failure of hypomethylating agent remains an area of high unmet medical need
- Also potential in low-risk population (role for oral drug)

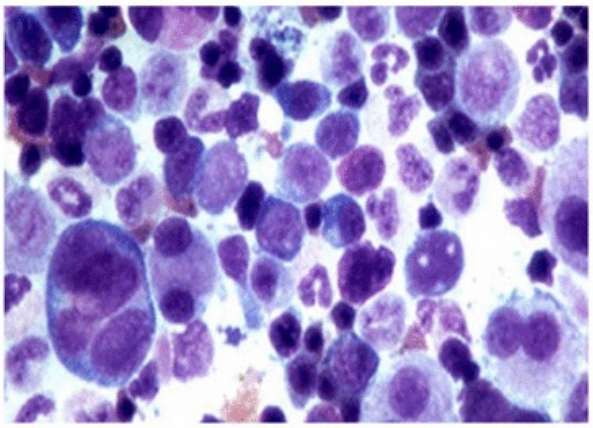


Image: David S. Rosenthal, M.D.

What's Next at ASH

- Seven abstracts accepted (four for AG-221 and AG-120)
- New data from dose escalation and expansion cohorts
- New molecular data

Key Takeaways

- R/R AML expansion cohorts in full operational mode
- Broadening AML clinical development program into frontline
- Novel trial design goals
  - Bringing IDH1m and IDH2m patients into the same protocol
  - Efficiently transition from Phase 1 to Phase 2
- IDHm inhibitors have the potential for a paradigm shift in the treatment of AML

IDH Development in Solid Tumors

October 16, 2015

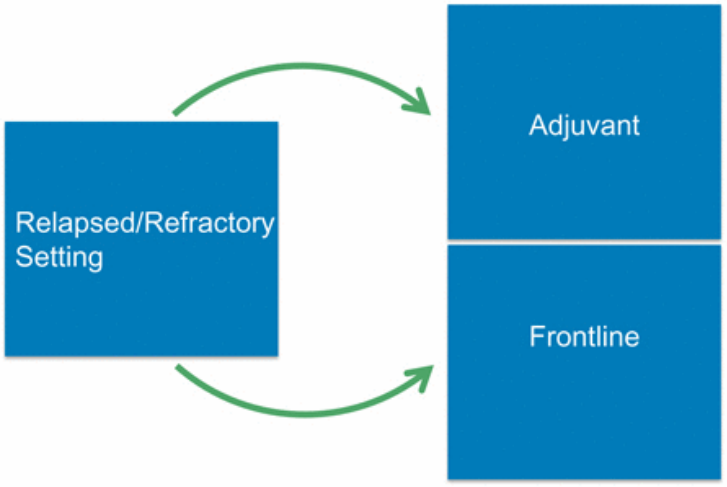
Sam Agresta, M.D., Agios
Tim Cloughesy, M.D., UCLA

Key Takeaways for Solid Tumors

- Significant opportunity to develop targeted therapies across IDHm solid tumors
- Uncharted development area with new biology and potential for differentiation treatment approach
- High prevalence IDHm solid tumors are difficult-to-treat diseases with surgery as the only effective treatment
- Three Phase 1 studies ongoing: AG-120, AG-221 and AG-881
  - First AG-120 data to be presented in November at AACR-NCI-EORTC

Changing the Natural History of IDHm Solid Tumors

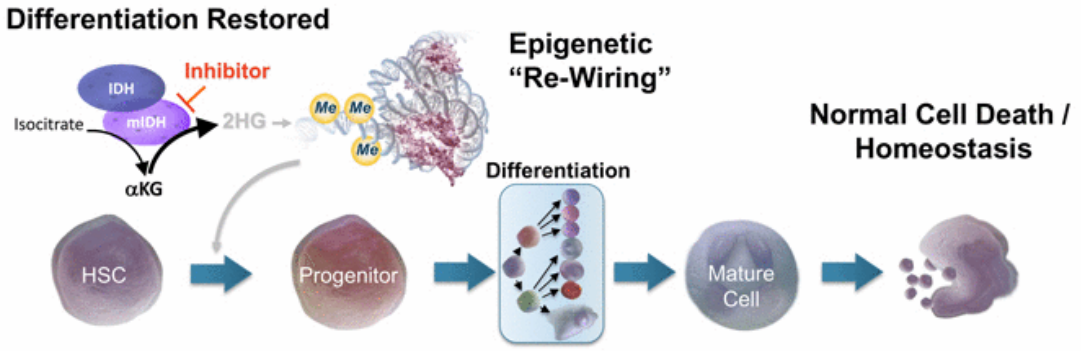
Our vision is to develop a foundational therapy used through multiple stages of any IDHm tumor where POC is established



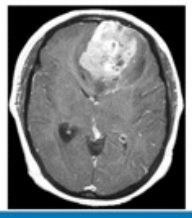
Post-resection to prevent recurrence → potential cure

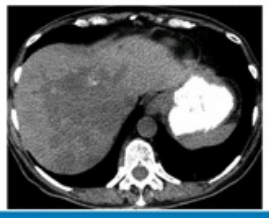
Suppress driver mutation as monotherapy or in combination with other agents → improve survival

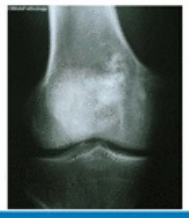
Understanding the Role of Differentiation Therapy in Solid Tumors



Goal is to Explore AG-120 and AG-221 in IDHm Solid Tumors







	Glioma	Intrahepatic Cholangiocarcinoma (IHCC)	Chondrosarcoma
	Low grade and 2^{ary} GBM	Bile ducts	Cartilage
Incidence (cases/year U.S.)	5K	2K – 4K	700-1000
Prevalence (U.S.)	24K	5K	--
IDH1m frequency	68-74%	11-24%	40-52%
IDH2m frequency	3-5%	2-6%	6-11%
Treatment options	Surgery, XRT Chemotherapy	Surgery, Chemotherapy Liver transplantation	Surgery, XRT Chemotherapy
5-year O/S	~32– 68%*	~9%	~10-90%

Other solid tumor types include colon, melanoma, lung, ovarian.
Multiple sources, including market research and SEER. Estimates will continue to evolve with additional future data
**excludes primary GBM*

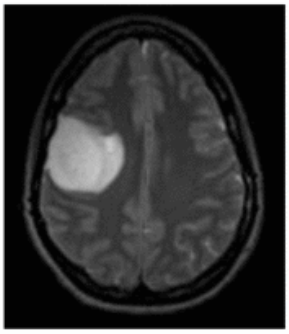
Glioma

Tim Cloughesy M.D., UCLA

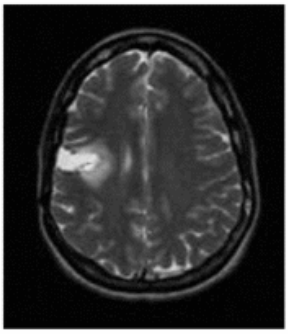
agios

Glioma Is a Devastating CNS Neoplasm

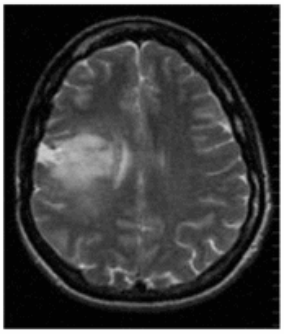
Patient with an IDH1m right temporal lobe low-grade glioma (LGG)



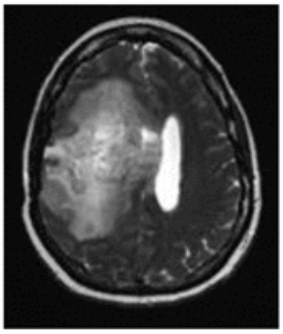
34 year old
Treated with surgery followed by radiation



37 years old
Stable disease, observation

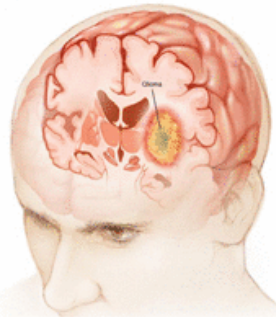


39 years old
Progressive disease. Attempts to control disease with multiple chemotherapies

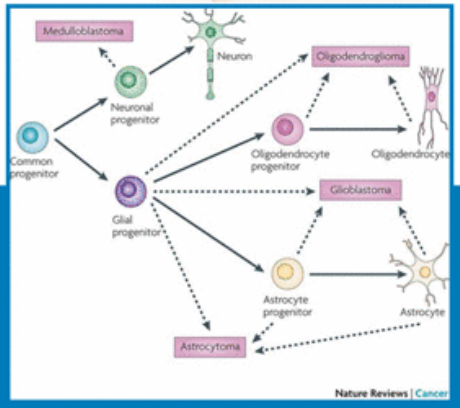


41 years old
2015
1 month before death

Glioma: Primary CNS Neoplasms



- Multiple neuroglial cells (eg., astrocytes, oligodendrocytes)
- Varying degrees of tumor aggressiveness
  - Slower growing: LGG are WHO Grades 1 and 2
  - Rapidly progressive: High-grade glioma (HGG) are WHO Grades 3 and 4
- About 23,000 cases of expected in U.S. (2015)

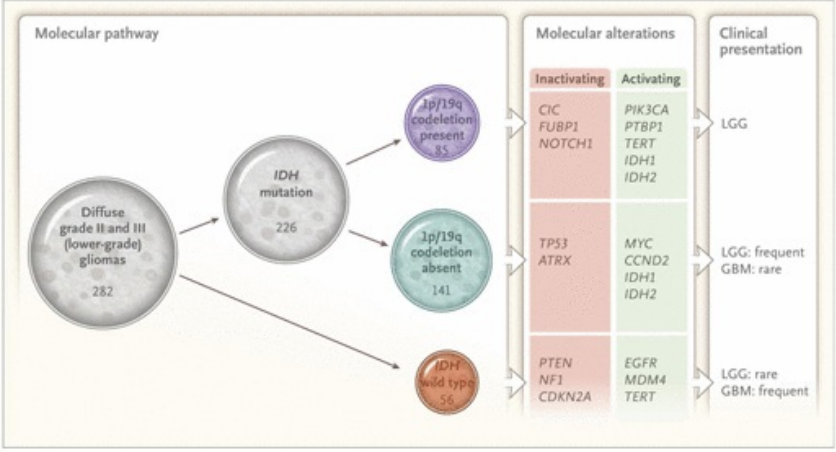


- Common symptoms include memory disturbance, sensory impairment, neurologic deficits and seizures
- Long-term prognosis is poor: 5-year survival rate of 33%
- Median survival:12–15 months for glioblastoma and 2-5 years for anaplastic glioma

Source: UpToDate; *Nature Reviews Cancer* **10**, 319-331 (May 2010) ; Cancer Manag Res. 2014 Mar 24;6:149-70

IDHm Glioma Is a Distinct Disease

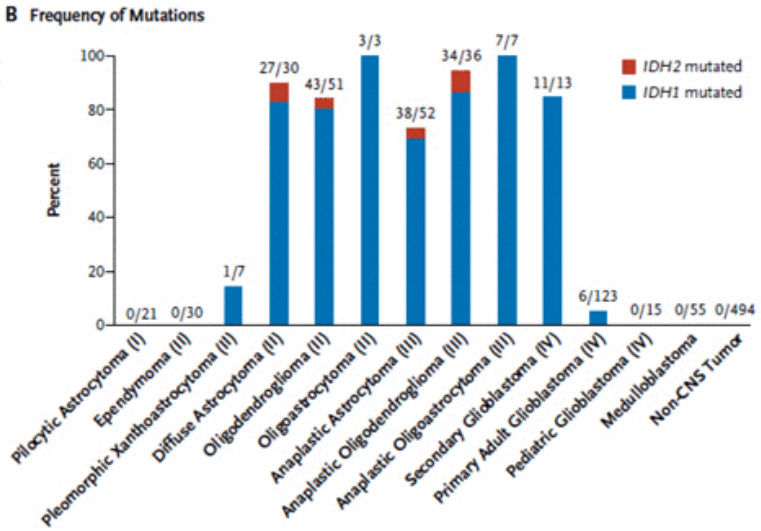
- Discovered in GBM samples in 2008
- Different genetic/ epigenetic profile as compared to IDH wild type



The Cancer Genome Atlas Research Network. N Engl J Med 2015;372:2481-2498

IDHm Is Common in Low-Grade (II and III) Glioma

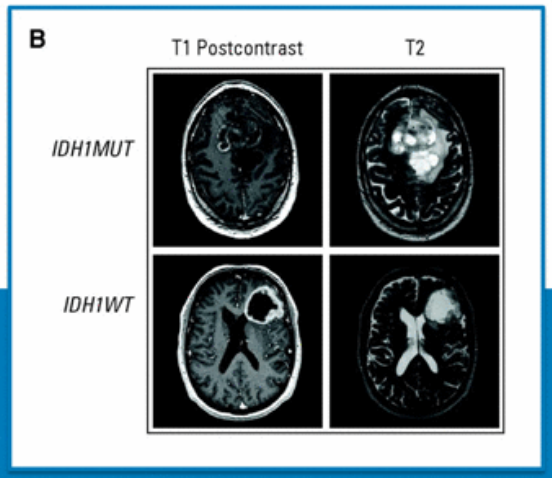
- IDH1m highly prevalent:
  - 5% primary GBM
  - 83% secondary GBM
  - **60-80% of low-grade diffuse glioma**
  - IDH2m are uncommon

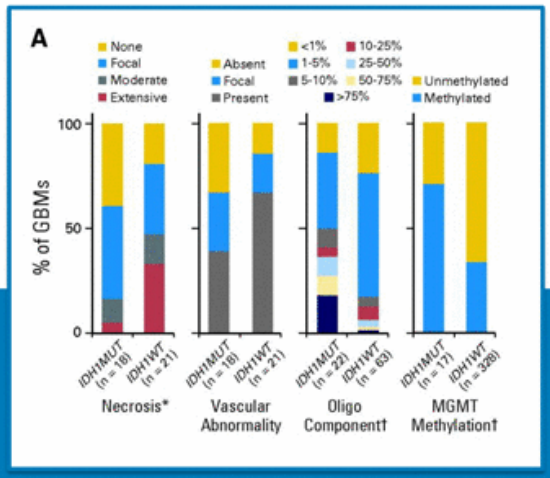


Yan et al. N Engl J Med. (2009) 360(8): 765–773.

IDH1m GBMs Have Distinct MRI Appearance and Pathology

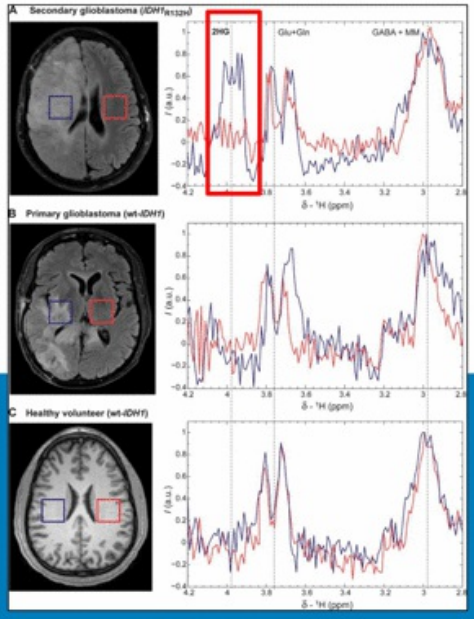
Conventional imaging and interpretation of pathology is different for IDHm CNS disease





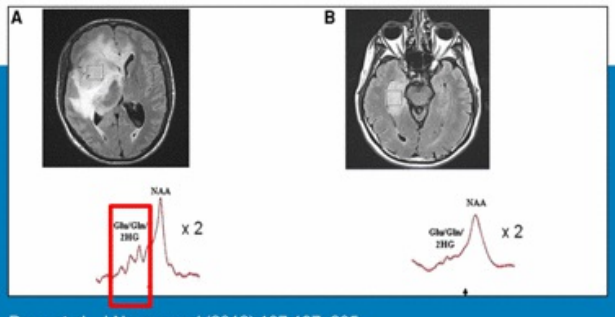
Lai et al. J Clin Oncol (2011) 29:4482-4490

Non-Invasive *in vivo* Detection of 2-HG by MR Spectroscopy



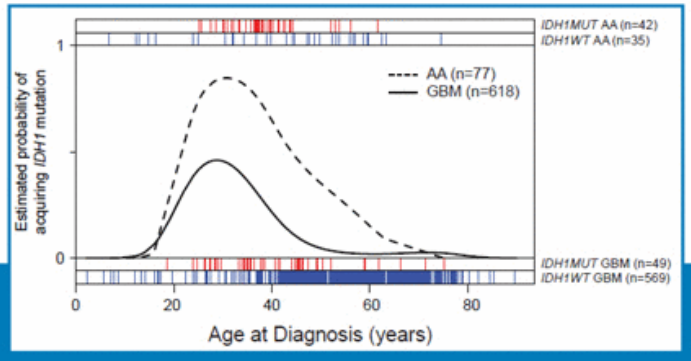
Andronesi *et al., Sci Transl Med* (2012);4:116

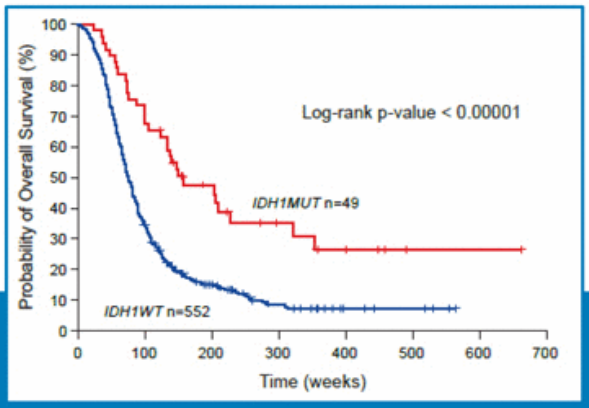
MR Spectroscopy may serve as an adjunct to conventional imaging modalities to understand response in IDHm glioma



Pope et al. J Neurooncol (2012) 107:197–205

IDHm Positive Glioma Manifests in Younger Patients with Longer Survival

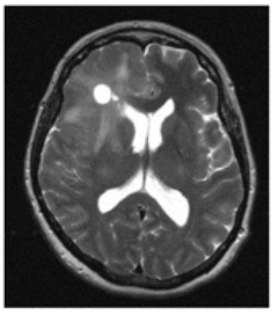




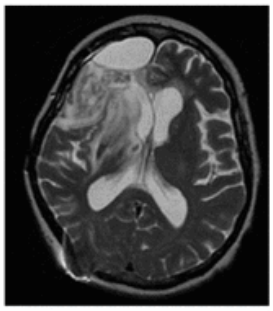
Lai et al. J Clin Oncol (2011) 29:4482-4490

Radiation and Chemotherapy Prolong Survival but with High Morbidity and Functional Decline

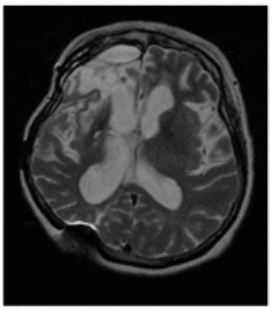
Patient with a IDH1m right frontal lobe Anaplastic Astrocytoma



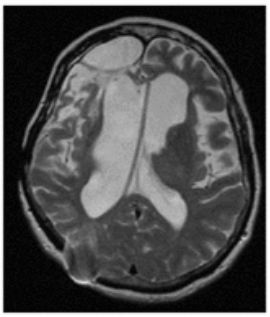
45 year old (2003)



46 years old

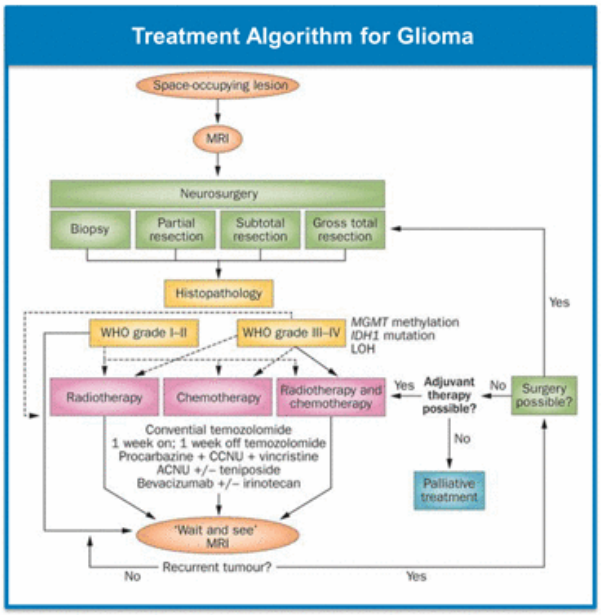


50 year old



57 years old (2015)

Surgical Resection Is Mainstay of Treatment Followed by Radiation and/or Chemotherapy



- Newly diagnosed
  - Surgical intervention
  - Treatment post-surgery depends on grade
    - Observation alone
    - Chemotherapy
    - Radiation (RT)
    - Chemotherapy plus RT
- Limited effective treatment options for progressive disease

Nat Rev Neurol. 2013 Mar;9(3):141-51.

Key Takeaways: Glioma

- IDHm glioma is a distinct disease where IDHm is an early event → potential driver
- Conventional imaging modalities are inadequate to assess treatment activity
- Surgery is the mainstay of treatment for LGG
  - Chemotherapy plus radiation for HGG
- Limited treatment options for recurrent/progressive disease
- IDHm inhibitors should be fully explored as potential new therapeutic option

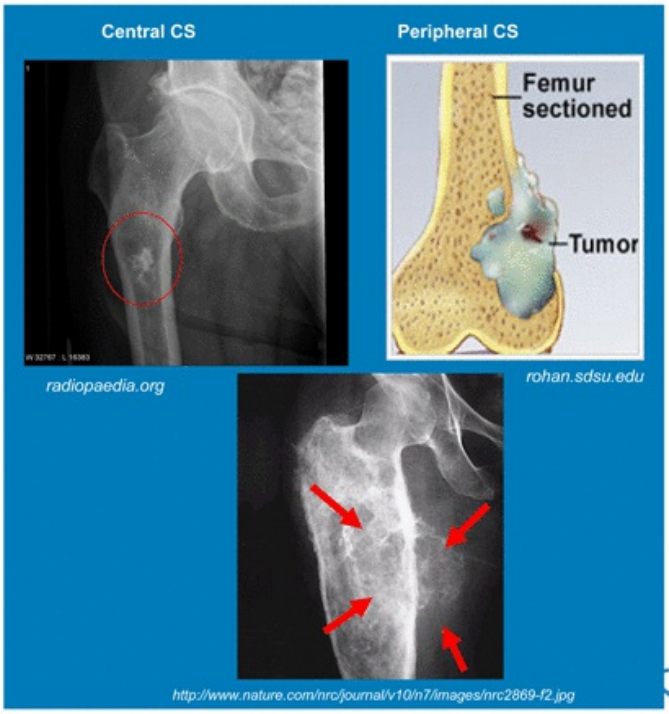
Chondrosarcoma

October 16, 2015

Sam Agresta, M.D.

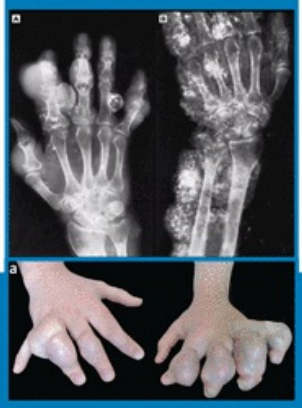
Chondrosarcoma (CS) Is a Rare and Potentially Deadly Disease

- Heterogeneous group of cancers that arise from cartilage in the bone and joint
- 3rd most common type of bone cancer
  - 700-1000 diagnosed per year in the U.S.
- IDH1/2 mutations occur in 40-50% of central chondrosarcomas
- Prognosis: Based on disease burden
  - Curative potential with surgery, local disease
  - Low 5-year survival for metastatic disease

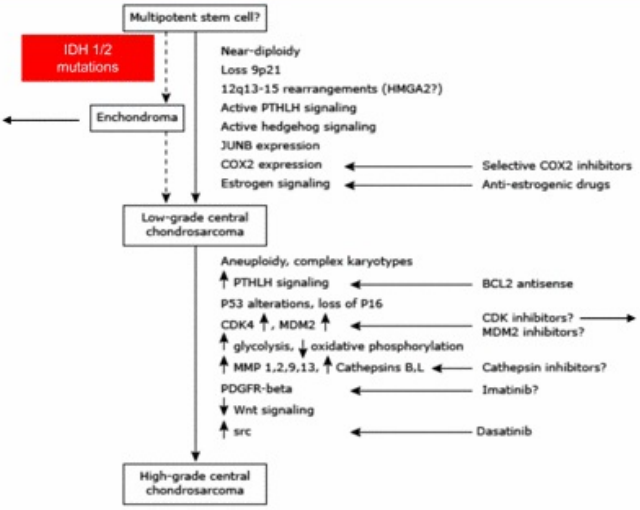


IDHm Occur Early in the Transformation Process

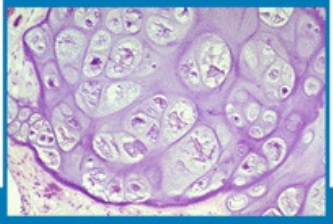
Maffucci Syndrome



Proposed multistep genetic model for central chondrosarcoma development and candidates for targeted treatment



Chondrosarcoma

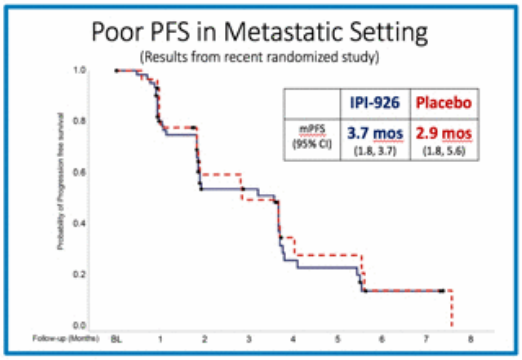


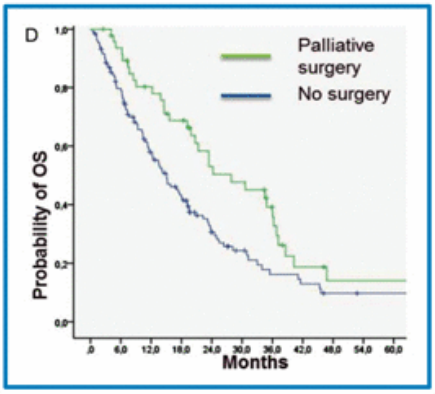
19 Amary MF. Nature Genetics, 2011

Modified Bovée J,. Lancet Oncology 2006.

Surgery Is Only Curative Option for Chondrosarcoma

- Surgery is the mainstay of treatment
  - Complete surgical resection curative, but not possible in advanced disease
- Radiation is not effective
- Chemotherapy is of limited benefit
  - Primarily used in neoadjuvant setting to convert nonresectable to resectable
- Treatment for metastatic disease is mainly palliative

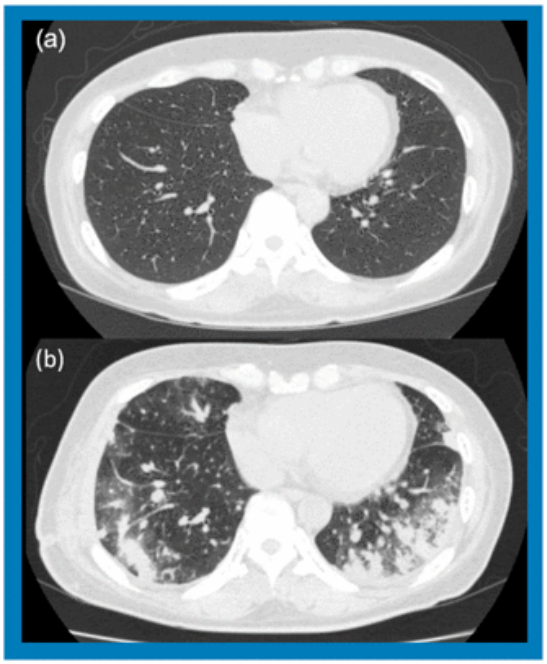




1st graph: Italiano A, Annals of Oncology 2013; 2nd graph: Wagner 2013 CTOS Presentation

Chondrosarcoma Typically Metastasizes to the Lungs

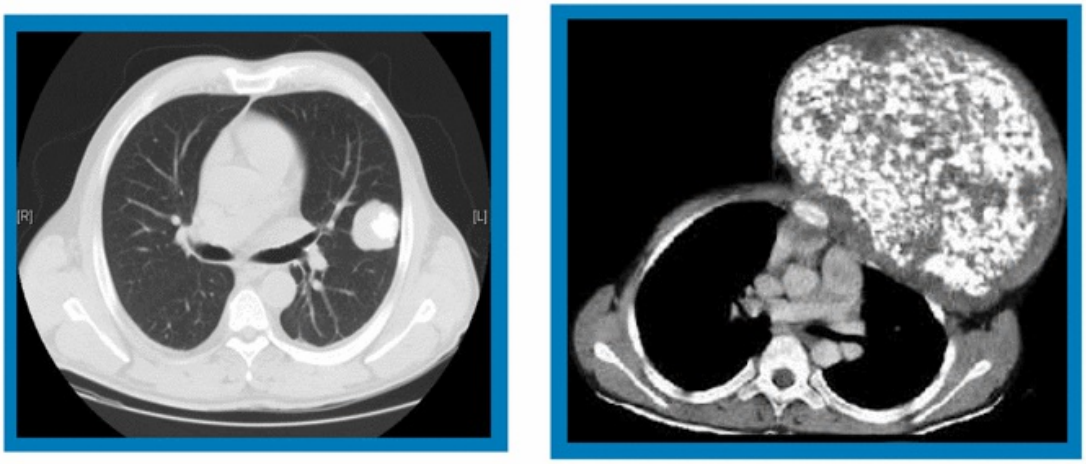
- Surgery and radiation are palliative
- Clinical trials preferred option
- Chemotherapy resistant
  - Single agent ifosphamide or methotrexate, or doxorubicin plus cisplatin are used
- No therapies have demonstrated efficacy



Source: Emori et al. World Journal of Surgical Oncology 2011, 9:50 http://www.wjso.com/content/9/1/50 (16 May 2011)

Conventional Response Assessments Are Inadequate for Chondrosarcoma

Residual calcification after chemotherapy poses challenges to conventional response assessment



Source: radiopaedia.org

agios

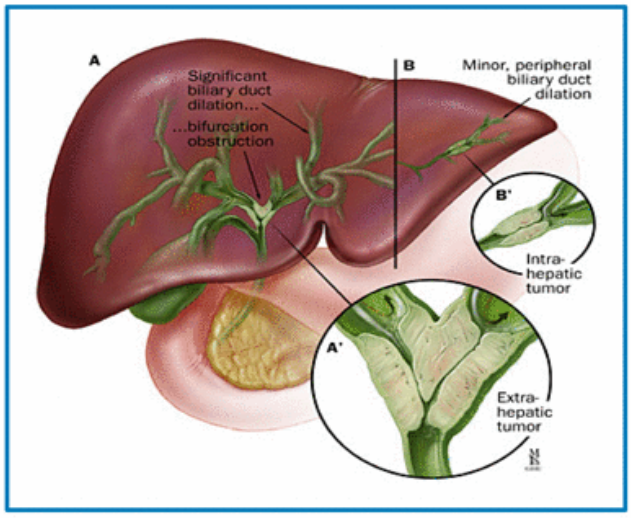
Intrahepatic Cholangiocarcinoma

October 16, 2015

Sam Agresta, M.D.

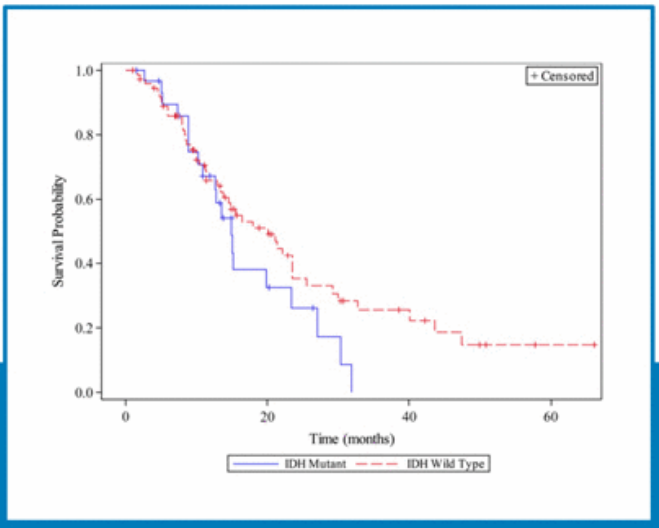
Cholangiocarcinoma Is a Rare Cancer of the Bile Duct and Liver

- 2,000-4,000 new cases per year (U.S.)
- 50% of cases occur within the liver (intrahepatic cholangiocarcinoma, IHCC)
  - Prognosis: Worse for IHCC than other biliary tract tumors
  - Incidence of IHCC is increasing due to cirrhosis, alcoholic liver disease and hepatitis C
- Typically presents with advanced disease
  - Pain, weight loss, fever, elevated liver enzymes
- Poor 5-year survival
  - 15-30% for local disease
  - 2% for metastatic disease



IDH Mutations Are Common in IHCC

- IDH1/2 mutations present in approximately 25% of IHCCs
  - Not present in extrahepatic CC or gallbladder cancers
  - Majority of mutations are IDH1
- IDH mutations do not affect prognosis

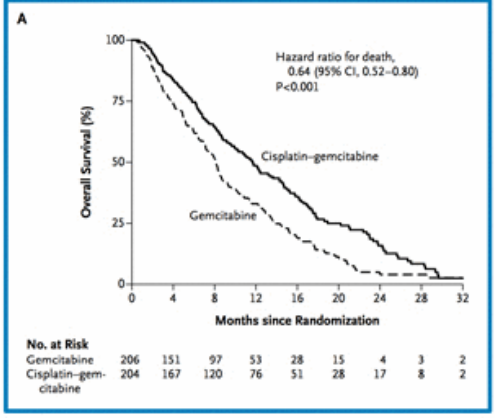


Zhu A, Oncologist, 2015

Options for Metastatic Cholangiocarcinoma Are Limited Gemcitabine-Based Regimens

- Surgery possibility curative, if not metastatic
  - IHCC has the lowest resectability rates (due to late presentation)
  - Five-year OS post-resection: 14-40%
  - Majority of patients recur despite complete resection
- Cisplatin plus gemcitabine standard of care for newly diagnosed metastatic disease

Randomized, Frontline Phase 2 study including 86 patients comparing cisplatin plus gemcitabine with gemcitabine alone in patients with previously untreated locally advanced or metastatic biliary tract cancer

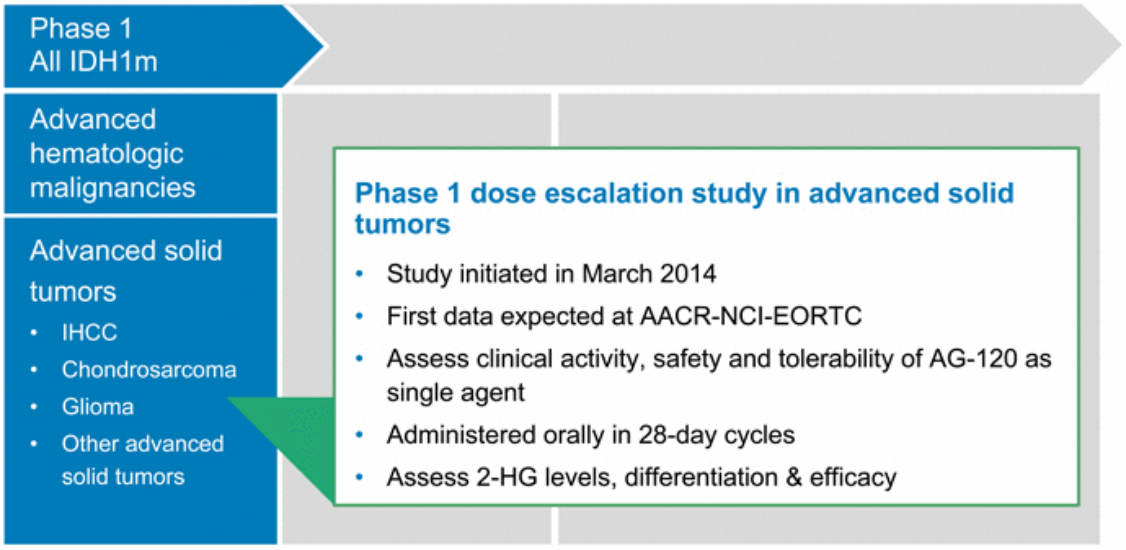


Valle J. N Engl J Med. 2010.

Key Takeaways: Chondrosarcoma & IHCC

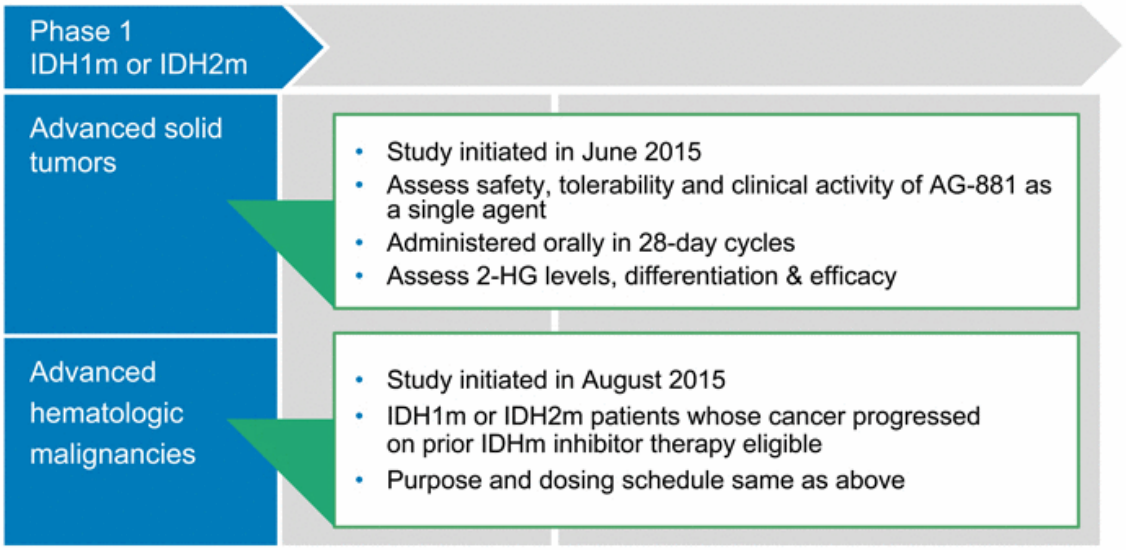
- Current treatments are inadequate
- Surgery is the only chance for cure for localized disease
- Surgery, radiation and chemotherapy are palliative for metastatic disease
- IDHm commonly occurs in these diseases
- IDHm inhibitors should be fully explored as potential new therapeutic option

AG-120: Current Development Status in Advanced Solid Tumors



AG-881: Brain Penetrant, Pan-IDHm Inhibitor

Now in Clinical Development, Two Phase 1 Studies Initiated



Potential for IDHm Inhibitors in Solid Tumors

- Committed to exploring IDHm inhibition in solid tumors
- No precedent for solid tumor differentiation therapy exists today
- LGG, IHCC and chondrosarcoma have poor treatment options and limited drug development precedent
- Initial dose-escalation AG-120 data across multiple solid tumors to be presented at AACR-NCI-EORTC (Nov. 5-9)

What We Know About PK Deficiency

October 16, 2015

Ann Barbier, M.D., Ph.D.
VP, Clinical Development, Rare Genetic Diseases

Little Support for Patients and Caregivers

- No formal, organized PK deficiency patient advocacy group to date
  - Informal network of patients and caregivers are engaged online and via social media
- Agios is organizing U.S. and EU patient ad boards for direct engagement and opportunity to listen/understand

If I say I'm tired, people think I need more sleep. . .I have fatigue so intense that it wakes me up at night. How do you get someone to understand that?!

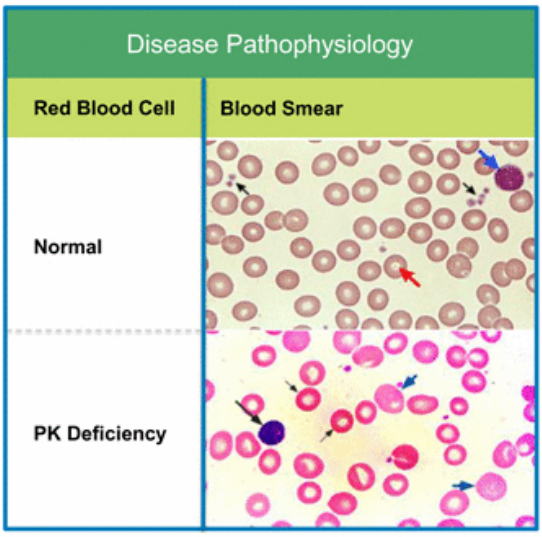
Think of a day when you are sick with a cold. That is me on my best day.

Pyruvate Kinase (PK) Deficiency: What We Know Today

Disease Overview	
Description	• Rare genetic disease often presenting at birth as neonatal jaundice • ~2400 diagnosed in US and EU5*
Etiology	• Caused by mutations in PK-LR gene coding for Erythrocyte Pyruvate Kinase
Clinical Presentation	• Lifelong hemolytic anemia and associated morbidities
Diagnosis	• PKR enzyme activity and genetic testing

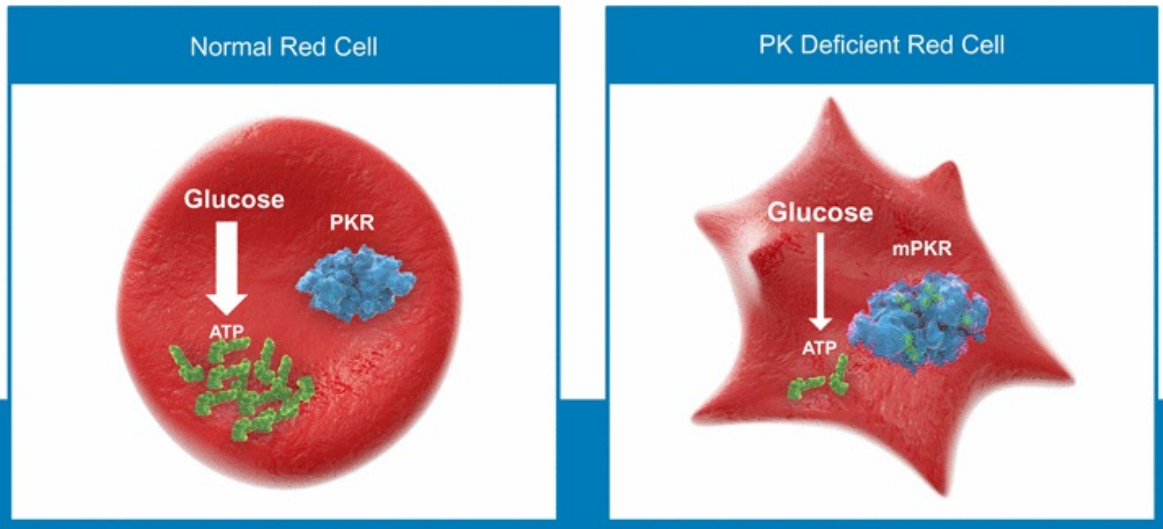
* Based on genetic data and diagnosis rate

Disease Pathophysiology



Source: Zanella. Blood Rev. 2007; 21(4):217;, Blood and Bone Marrow Pathology; Wintrobe's Clinical Hematology; Physician Interviews; Market Research.

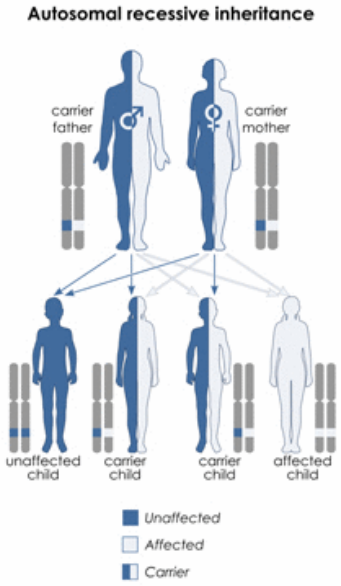
Red Blood Cells Are Dependent on Glycolysis for ATP Generation



- PKR is a crucial step in the maintenance of red blood cell energy levels
- PKR mutations lead to low pyruvate kinase activity and ATP levels
- Low ATP levels result in decreased red cell life span, hemolysis and anemia

PK Deficiency Is a Severe, Inherited Disease

- Autosomal recessive inheritance
  - Most affected individuals are compound heterozygous for two different mutant alleles
  - More than 200 different causative mutations have been identified
  - AG-348 activates a wide variety of mutant PKR enzymes
- Still understanding link between mutation and disease severity



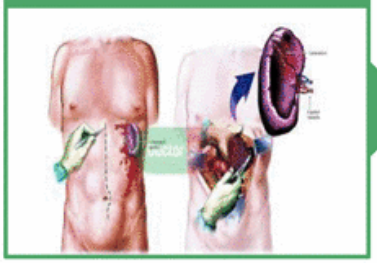
Source: Grace, 2015

Disease Progression from Infants to Adults Showcases Lifetime of Burden

Infants

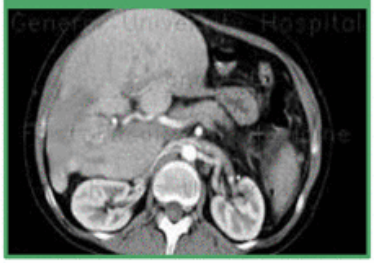
Jaundice, severe anemia, exchange transfusions

Toddlers, Children



Splenectomy, increased infection risk, antibiotic prophylaxis

Adults

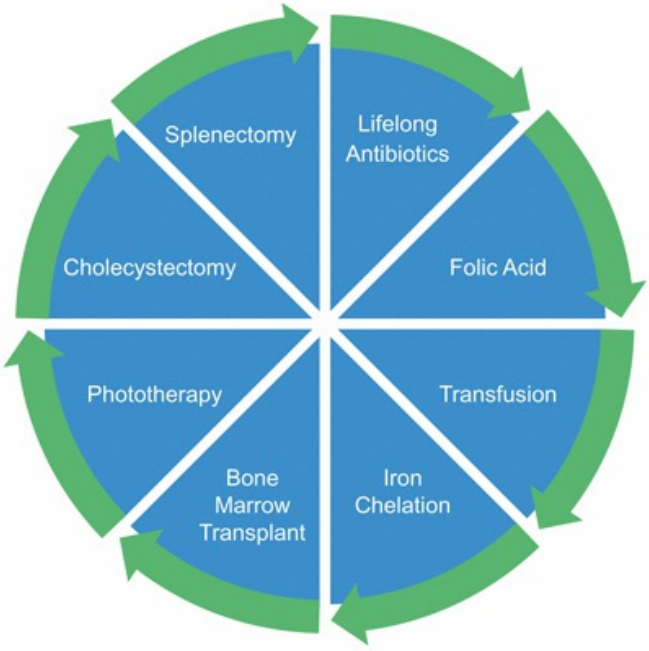


Iron overload leading to liver cirrhosis, cardiac and endocrine issues

Hemoglobin Is a Key Parameter Measuring Severity of Anemia in a Variety of Diseases

	g/dL
Healthy range (male)	13-17
Healthy range (female)	12-15
Anemia of chronic disease	9.5-10.5
Paroxysmal nocturnal hemoglobinuria	5.8-10.1
Thalassemia intermedia	7-10
Thalassemia major	< 7
PK deficiency	
Mild	>10
Moderate	~8-10
Severe	~6-8

Current Therapies are Supportive Only



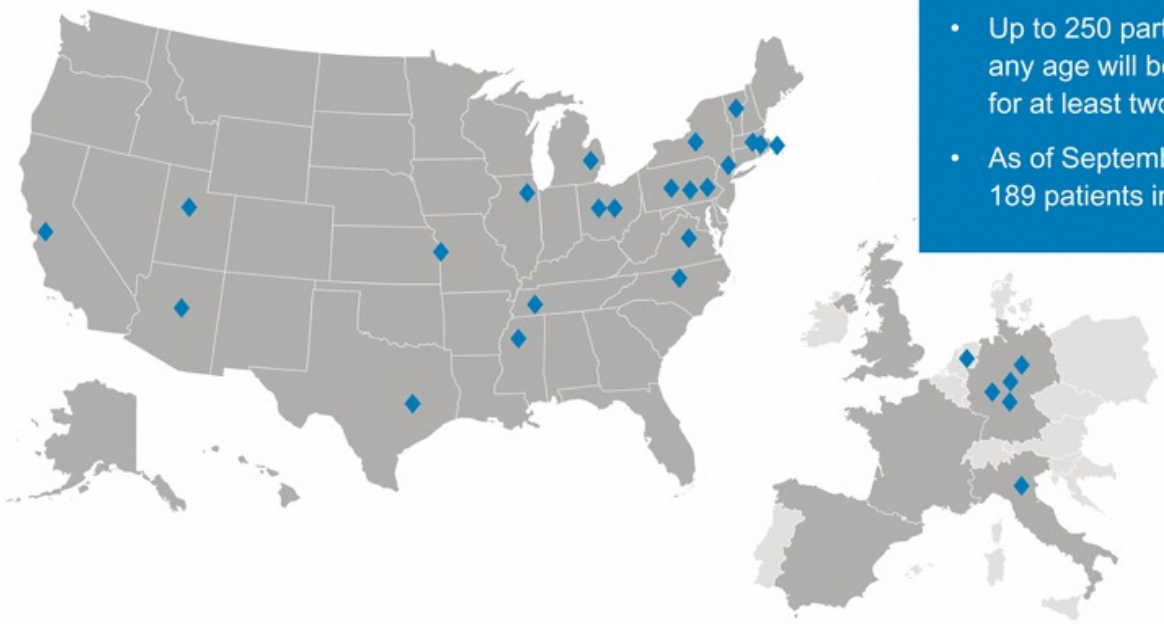
Natural History Study Designed to Inform Development

First data presented in June 2015 at EHA

Key objectives:

- Understanding the disease, including range of symptoms and complications:
  - Transfusion burden
  - Patient reported outcome measures
  - Incidence and timing of splenectomy
  - Prevalence and treatment of iron overload
  - Prevalence of co-morbidities
- Identifying patients and treatment centers
- Capturing retrospective/prospective clinical data, QoL measures and genetic diagnostic information

Natural History Study Enrolling Patients at Treatment Centers Globally



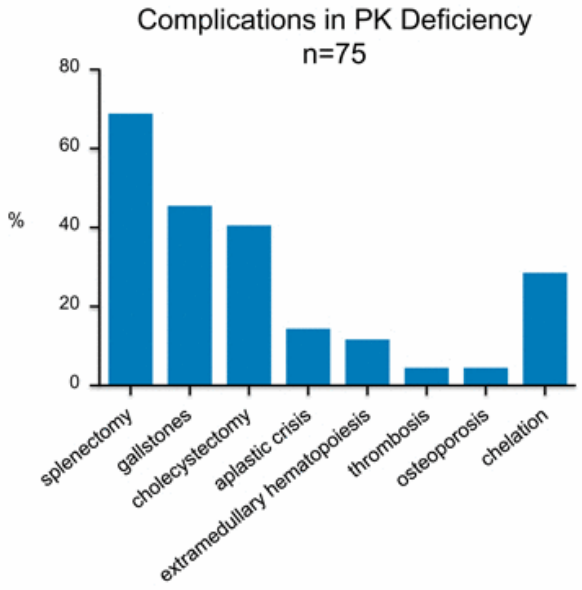
- Up to 250 participants of any age will be followed for at least two years
- As of September 2015: 189 patients in 27 sites

PK Deficiency is a Serious Disease with Varied, Frequent Complications

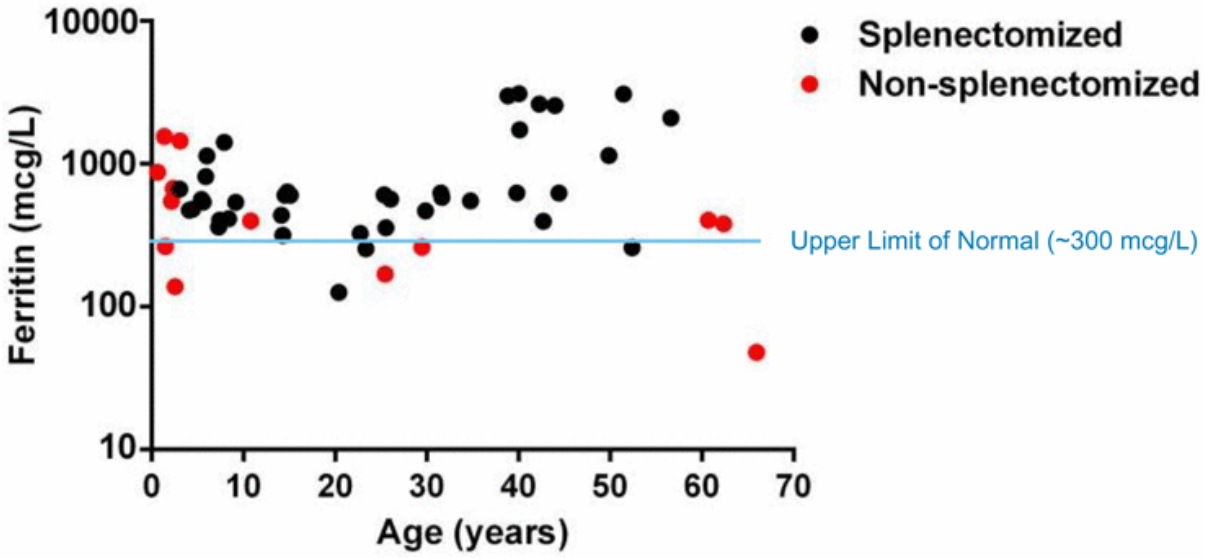
Baseline and retrospective data from 75 NHS patients
Source : R. Grace, poster EHA 2015

Gallstones and cholecystectomy frequent

Aplastic crises and thrombosis are rare, but potentially serious



Iron Overload Common in PK Deficiency Patients Across Severity Groups



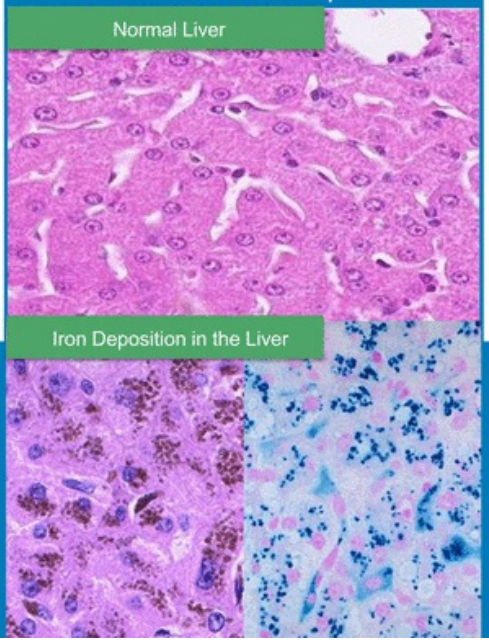
Source : R. Grace, poster EHA 2015

Iron Overload Impacts Mortality

Symptoms of iron overload

- Cardiac arrhythmias and cardiomyopathy
- Liver cirrhosis
- Testicular atrophy
- Diabetes
- Hepatomegaly
- Arthritis
- Bronze skin
- Memory loss
- Vertigo

Liver Pathology
Normal vs. Iron Deposits



Takeaways for PK Deficiency

Key Learnings to Date

- PK deficiency is a severe, rare hemolytic anemia
- Clinical spectrum ranges from mild to life-limiting
- Emerging picture of disease severity
- Current treatments are
  - Of limited efficacy
  - Often burdensome
  - Supportive only
- Next data from the natural history study to be presented at ASH
- PK activation has the potential to be the first disease-altering therapy

Key Questions for the Future

- What predicts severity?
- What is the long-term natural history of the disease?
- What insights can we get into the patient population?
- What are the key complications and their impact on patients and caregivers?

Driving Forward Our PKR Activators:

Clinical and Regulatory Overview

October 16, 2015

Chris Bowden, M.D.
Chief Medical Officer

AG-348 Phase 1 Clinical Development in Healthy Volunteers

Completed Studies

Single Ascending Dose
Multiple Ascending Dose

Objectives

- ✓ Short-term safety
- ✓ Pharmacokinetics
- ✓ Pharmacodynamics
- ✓ Proof of mechanism

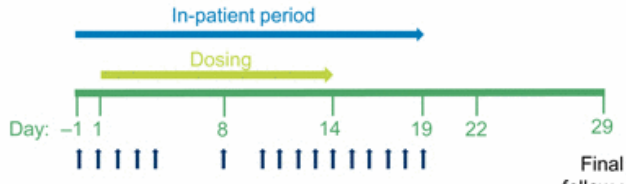
Healthy volunteer studies provide important guidance for longer trials in people with PK deficiency

Multiple Ascending Dose Study Design

MAD: Establish the safety and tolerability and PD effects of AG-348

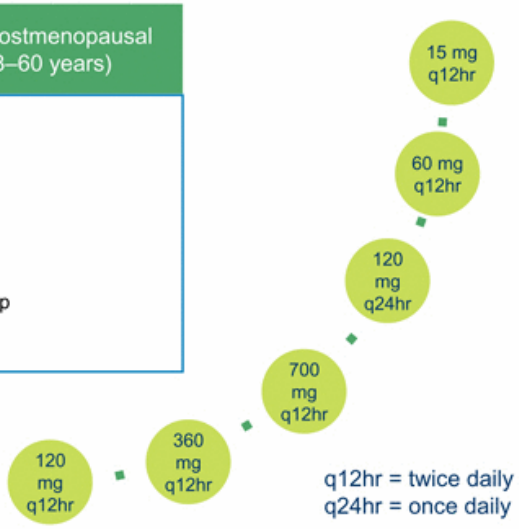
Randomized, double-blind, placebo controlled study with 14 days of continuous dosing

Healthy men and postmenopausal women (age 18–60 years)



n=8 per cohort
AG-348 → n=6
Placebo → n=2

Single ascending dose safety data informed dose selection for the MAD



PK/PD = pharmacokinetic/pharmacodynamic

NCT02149966

AG-348 Well Tolerated Across a Range of Dose Levels

- 14 day safety data provide a range of doses for consideration in patient studies
- Drug-related events were Grade 1 and 2; one Grade 3 event at 700mg q12h (increased LFTs – DLT)

AE, n (%)	Placebo n=12	15–360 mg q12hr n=30	700 mg q12hr n=6
Any AE	4 (33)	10 (33)	6 (100)
Most common treatment-related AEs (≥2 subjects):			
Nausea	—	—	5 (83)
Headache	1 (8)	1 (3)	4 (67)
Vomiting	1 (8)	—	3 (50)
Feeling hot	1 (8)	—	3 (50)
Decreased appetite	—	2 (7)	1 (17)
Restlessness	—	—	3 (50)
Fatigue	—	—	2 (33)
Dizziness	1 (8)	—	2 (33)
Hyperhidrosis	1 (8)	—	2 (33)
Drug eruption	—	2 (7)	—
Abdominal discomfort	2 (17)	—	—

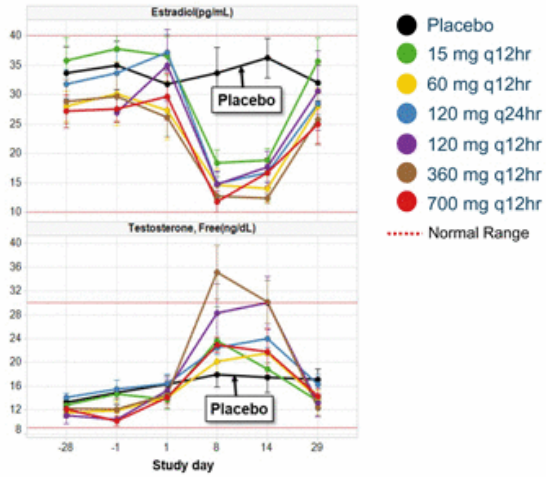
AEs were graded using National Cancer Institute Common Terminology Criteria, version 4.03

Data Presented at EHA, 6/13/15

Hormone Changes Seen with MAD Study: Reversible Aromatase Inhibition

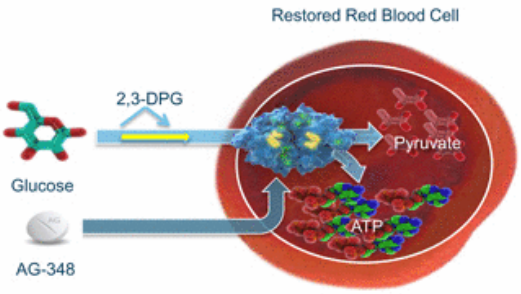
- Changes in serum androgens and estrogens were observed
- Most changes remained within normal reference ranges for age and sex
- Levels recovered to baseline
- Endocrine/physiologic significance to be evaluated in Phase 2 study

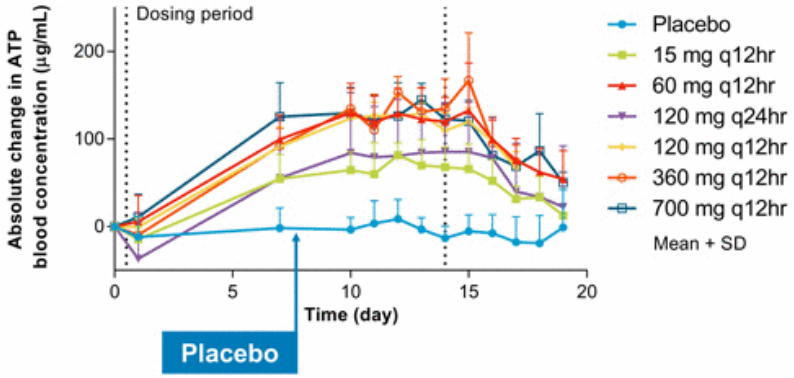
Mean levels of serum estradiol and free testosterone in male subjects



Data Presented at EHA, 6/13/15

AG-348 Increases ATP Levels Across a Range of Doses



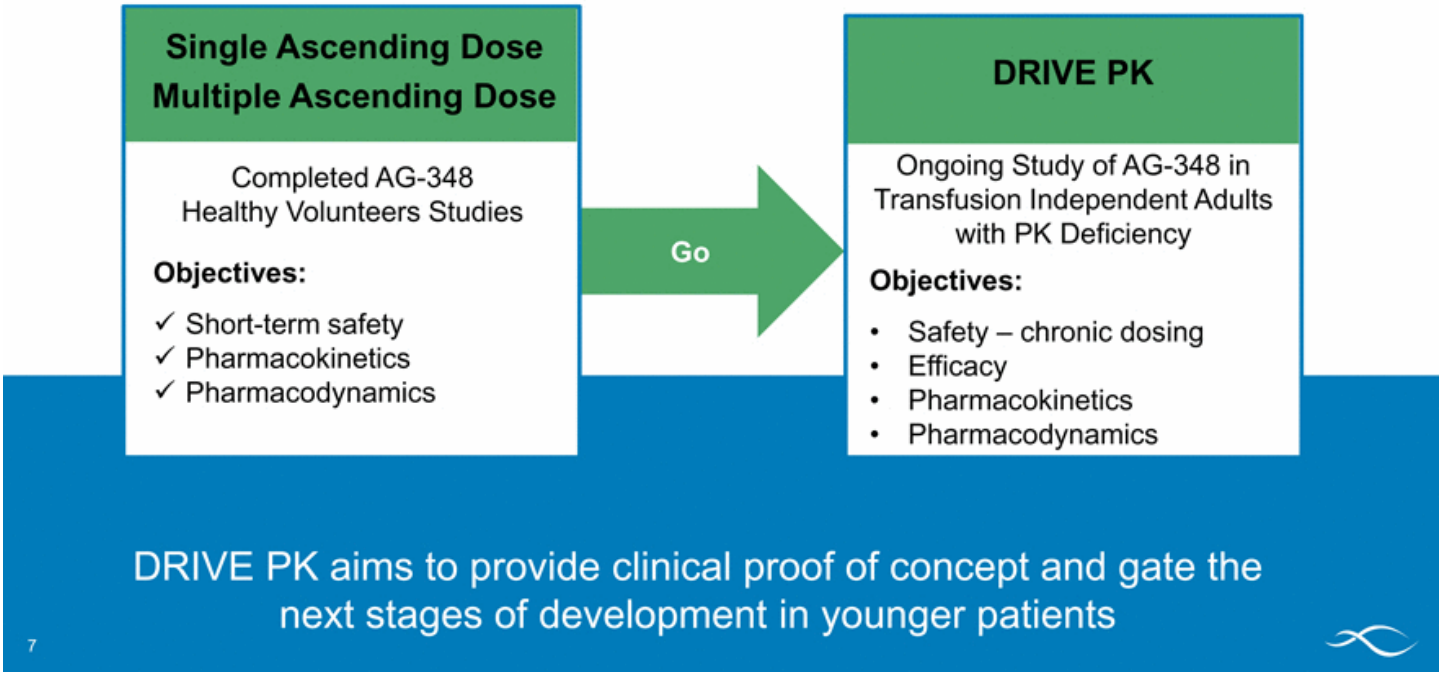


- A ~50% increase of ATP from baseline was observed with >60 mg AG-348 q12hr
- Levels remained elevated through 120hr after the final dose

Day 0 = Baseline value. Day 14 is the final day of dosing

Data Presented at EHA, 6/13/15

AG-348 Clinical Development: Phase 2 DRIVE PK Study



DRIVE PK aims to provide clinical proof of concept and gate the next stages of development in younger patients

Global Phase 2 DRIVE PK Study Open and Enrolling

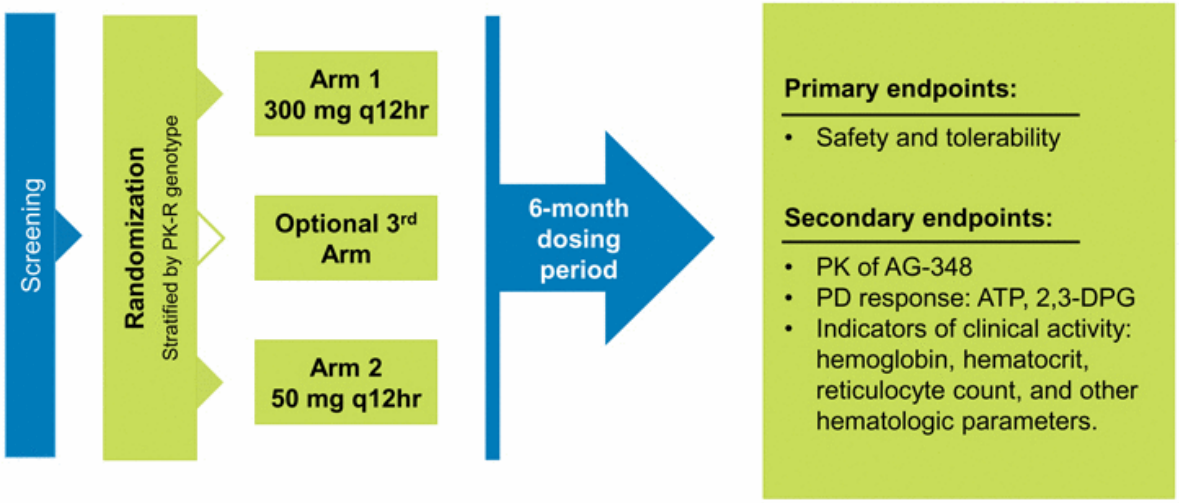
DRIVEPK

Transfusion-independent PK-deficient adults n=25 in each arm

Global Phase 2 DRIVE PK Study Open and Enrolling

DRIVEPK

Transfusion-independent PK-deficient adults n=25 in each arm



Primary endpoints:

- Safety and tolerability

Secondary endpoints:

- PK of AG-348
- PD response: ATP, 2,3-DPG
- Indicators of clinical activity: hemoglobin, hematocrit, reticulocyte count, and other hematologic parameters.

Follow-on PKR Activator AG-519

- AG-519 is a potent, highly selective and orally bioavailable PKR activator
- Differentiated chemical structure versus AG-348
- No activity against the aromatase enzyme
- AG-519 has similar activity in vitro, in vivo and ex vivo (patient samples) relative to AG-348
- Clinical studies planned to initiate in 1Q 2016

AG-519 Healthy Volunteer Study to Open in 1Q 2016

One protocol, two steps, healthy volunteers

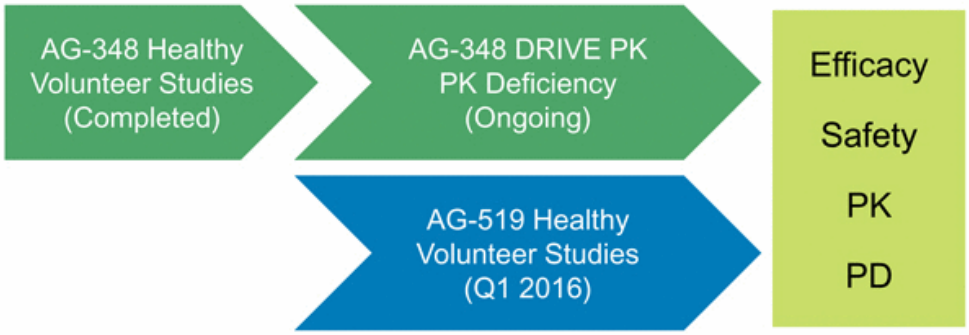
- **Step 1**: SD (single dose) – MD (multiple dose)
- **Step 2**: Bioavailability with food effect

Step 1: Integrated SD-MD

- 4 dose-ascending cohorts: 8 subjects per cohort (n=32)
- Placebo controlled (6A, 2 P)

Step 2 : Bioavailability and Food Effect Study

AG-519 Provides Optionality for Clinical Development



Pivotal Trials:

- Adults
- Adolescents
- Children

Clinical data from AG-519 and AG-348 trials will determine late stage development path

Takeaways: PK Deficiency Clinical Development

Key Learnings to Date

- AG-348 activates PKR in humans
- AG-348 set the path for DRIVE PK, which is on track and enrolling
- AG-519 increases flexibility in the clinic with multiple assets with the potential to target multiple indications

Key Questions for the Future

- How is long-term activation of PKR tolerated?
- How do PKR mutations impact efficacy?
- What are the effects of PKR activation on other measures of clinical benefit?
  - Iron deposition
  - Hemolysis
- What are the best approaches to capture outcomes most important to patients?

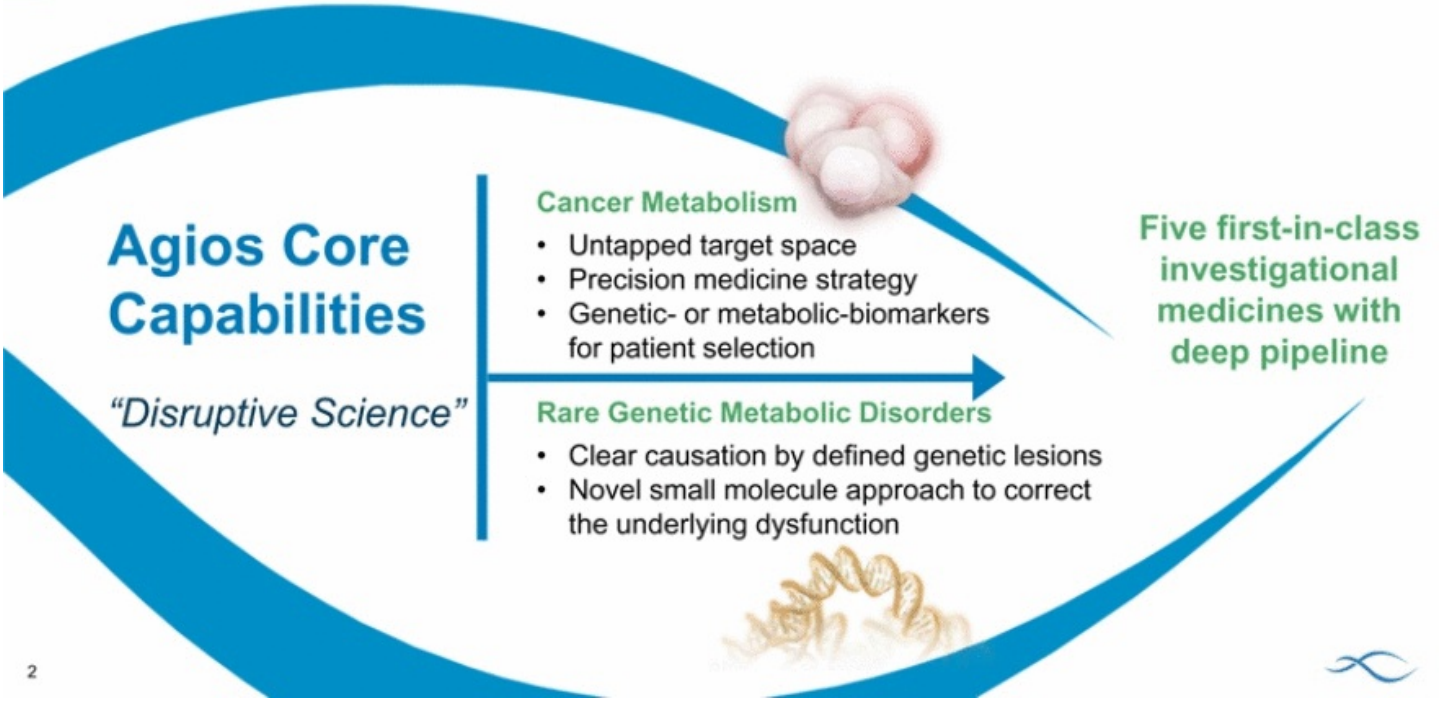
agios

Agios Discovery Strategies

October 16, 2015

Scott A. Biller, Ph.D.
Chief Scientific Officer

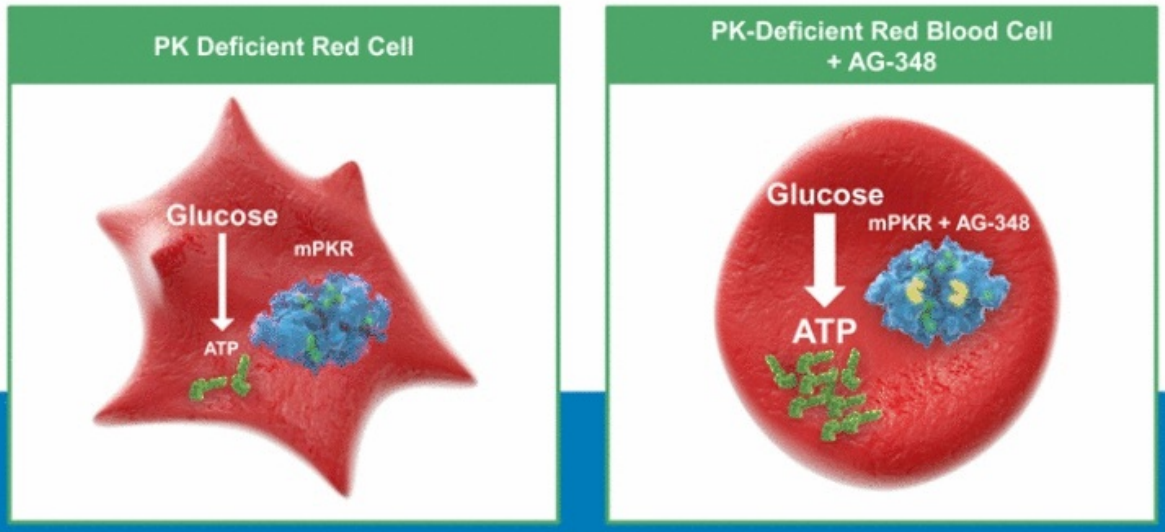
Leveraging Our Scientific Competencies: "The Engine"



What You'll Hear Today

- New therapeutic opportunities for PK activators in other hemolytic anemias
- A precision medicine strategy catalyzes progress in our oncology portfolio
- Potential for extending of our platform to other therapeutic opportunities

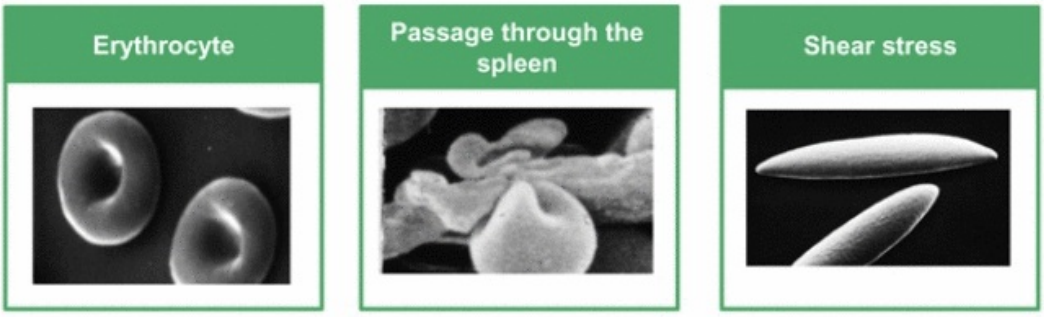
What's Possible for PK Activators



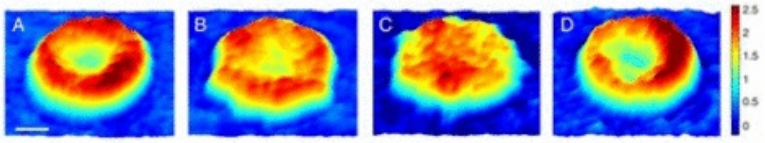
- Red cells require high energy demand to maintain membrane integrity throughout their 120 day life cycle
- Low ATP → fragile cell membranes → hemolysis
- Agios PKR activators increase ATP in WT red blood cells, providing opportunities in other hemolytic anemias

What's Possible for PK Activators

Erythrocytes must undergo severe changes in membrane structure, a process that requires adequate ATP supply



ATP is required to maintain membrane integrity and the biconcave shape



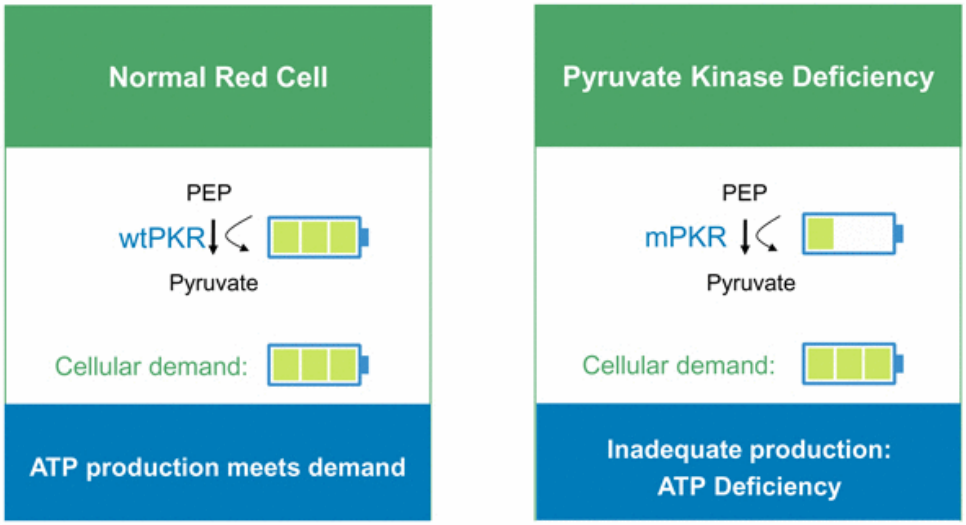
No stimulus | ATP depletion (-nucleotides) | ATP depletion (-glucose) | ATP restoration (+glucose)

Image source: Mohandas and Gallagher, Blood, 2008 Diffraction phase microscopy from Park et al., PNAS, 2010

Molecular Lesions in Red Cell Proteins Cause Hemolytic Anemia in Broad Range of Disorders

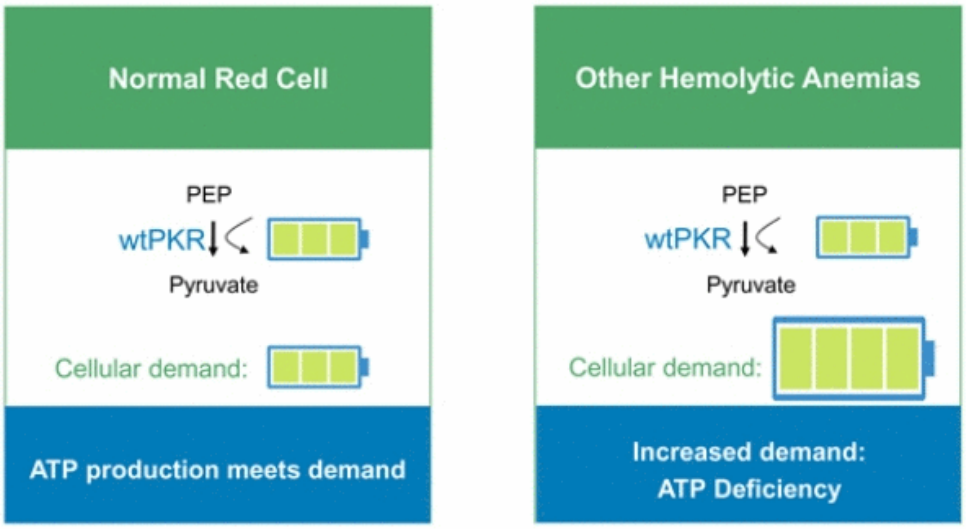
Disease	Molecular Lesion	Red Cell Characteristics
Normal physiology	None	Biconcave 
Pyruvate kinase deficiency	PKR mutations	Echinocytic 
Sickle cell disease	HbS mutation	Sickled 
Beta-thalassemia	Beta-globin loss of function	Microcytic 
Hereditary spherocytosis	Mutations in spectrin, ankyrin, protein 4.2	Spherocytic 

Disruptions to Red Cell Membrane Can Result in Greater ATP Demand to Maintain Cell Fitness



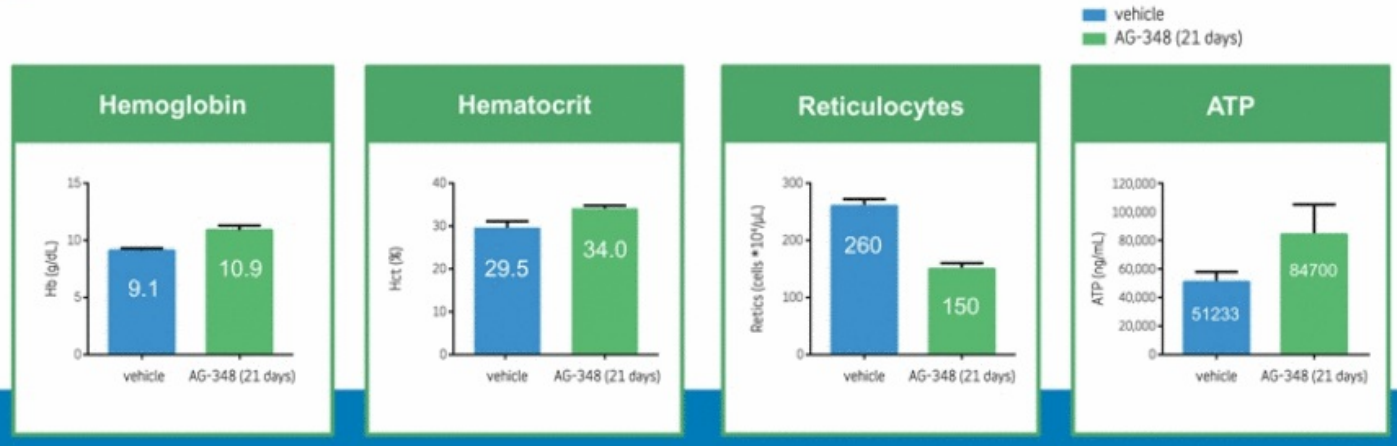
PKR activators in PK deficiency: Activation of mutant PKR to increase ATP and improve red cell fitness, thereby ameliorating hemolytic anemia.

Disruptions to Red Cell Membrane Can Result in Greater ATP Demand to Maintain Cell Fitness



PKR activators in other hemolytic anemias: Activation of WT PKR increases ATP and may enhance red cell fitness by improving membrane integrity

AG-348 Improves Red Cell Parameters in a Beta-thalassemia Mouse Model



- AG-348 increases Hb by 1.8 g/dL and reduces reticulocyte count by 40% after 21 days of oral treatment in th3/+ beta-thalassemia mouse model
- These effects are comparable to those found with other clinically effective agents in similar mouse models

Source: Lucia de Franceschi, University of Verona

Evolving Portfolio in Cancer Metabolism

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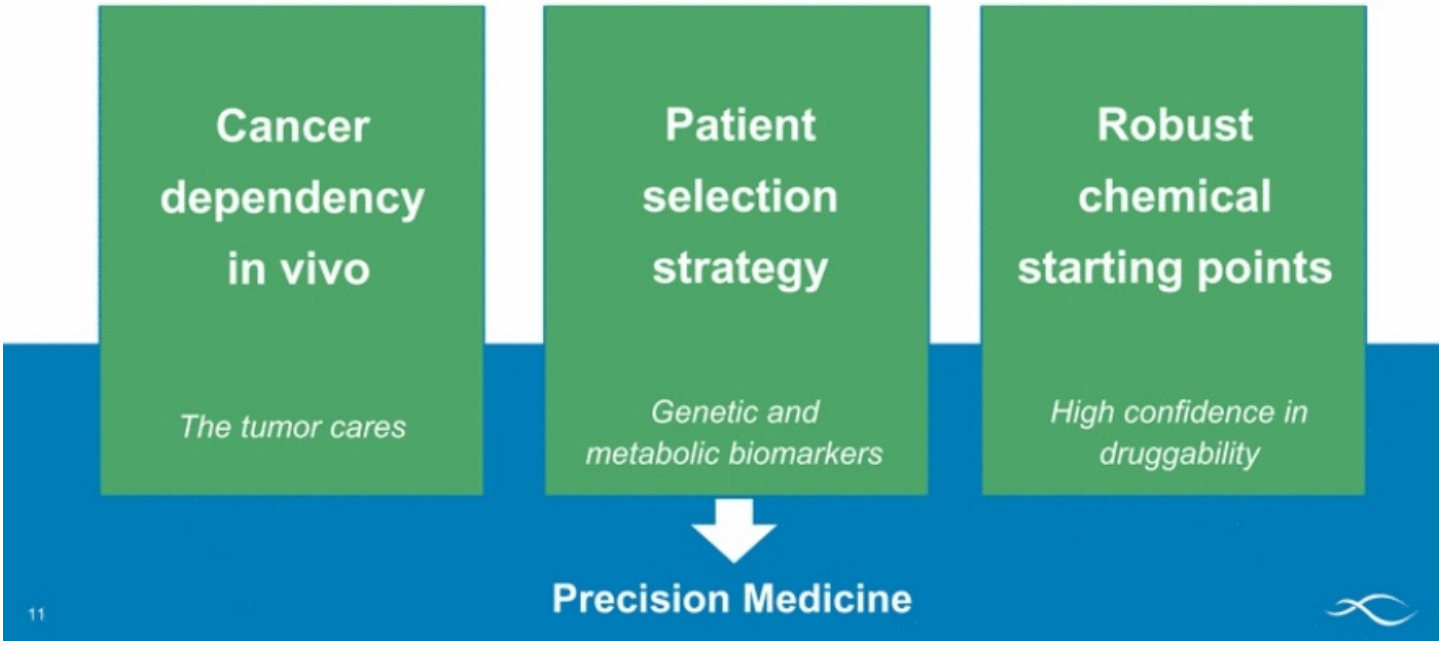
High Bar for Novel Targets Leads to Higher Probability of Success

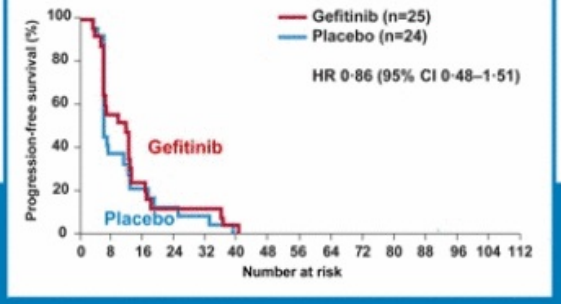
Requirements for oncology drug discovery programs:



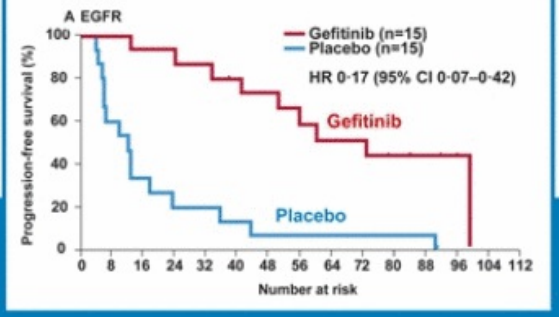
Driving Precision Medicine Approaches in Cancer Metabolism

A precision medicine strategy increases the probability of success while maximizing patient benefit

EGFR WT NSCLC Patients



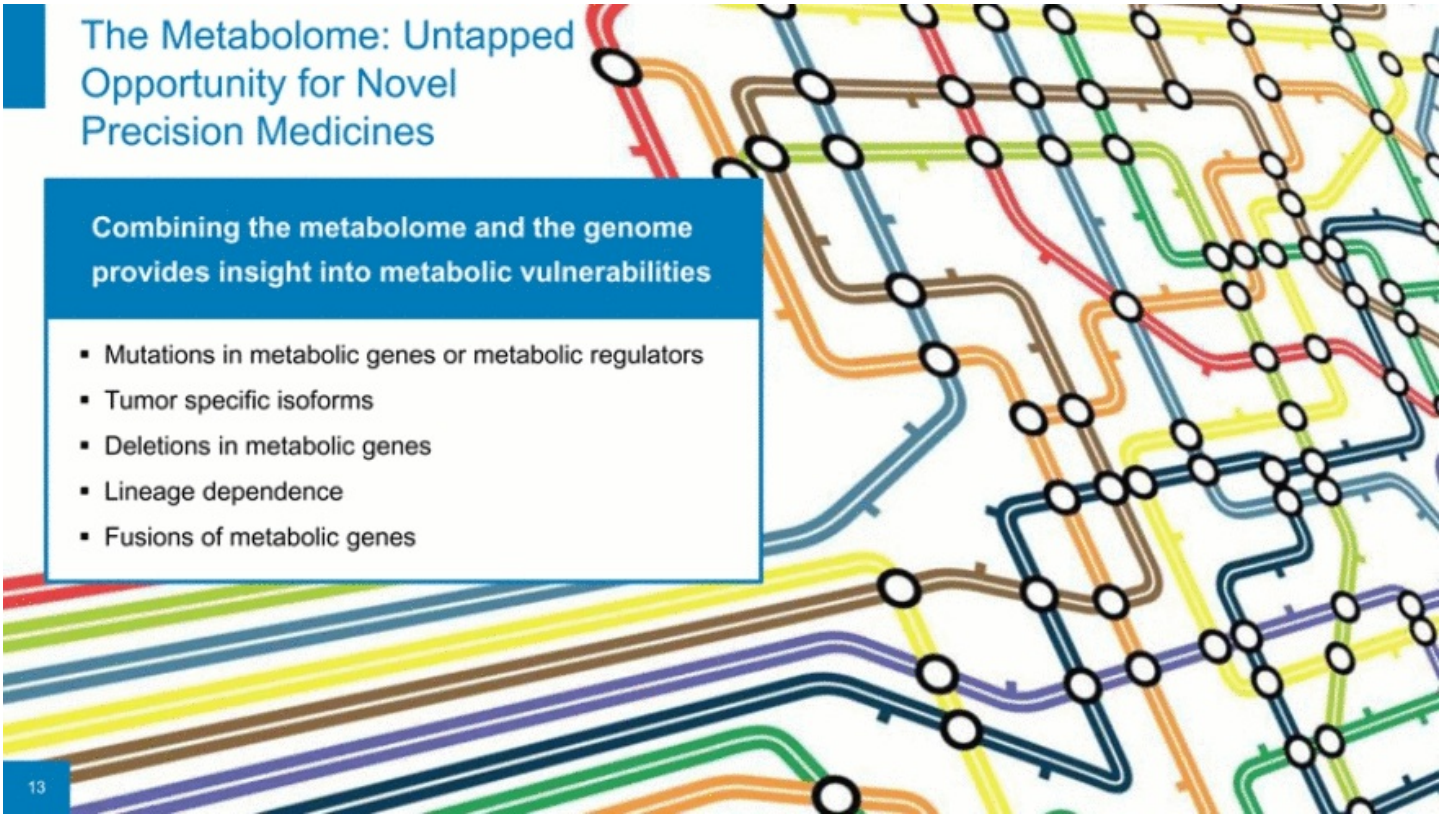
EGFR Mutant NSCLC Patients



Our mutant IDH effort exemplifies Agios' precision medicine strategy of targeting genetically defined metabolic vulnerabilities

Image source: Zhang, et al, Lancet Oncology, 2012

The Metabolome: Untapped Opportunity for Novel Precision Medicines



Combining the metabolome and the genome provides insight into metabolic vulnerabilities

- Mutations in metabolic genes or metabolic regulators
- Tumor specific isoforms
- Deletions in metabolic genes
- Lineage dependence
- Fusions of metabolic genes

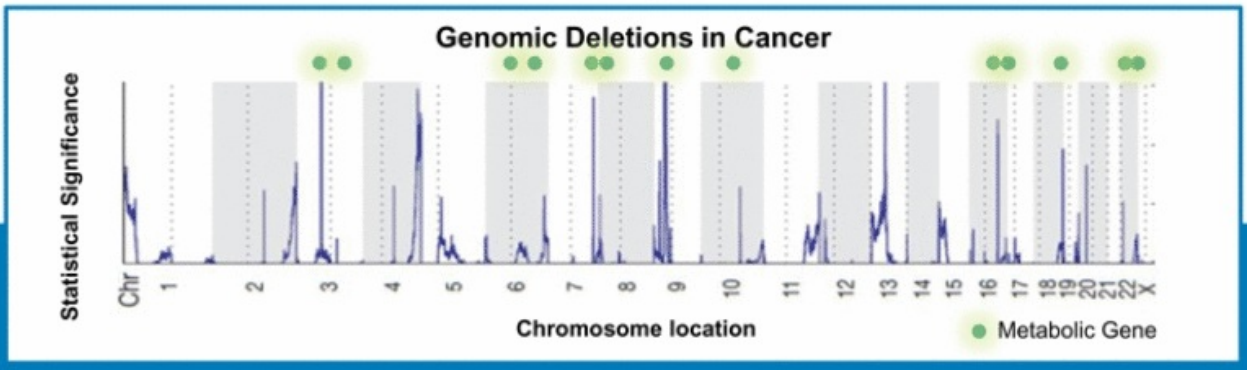
The Metabolome: Untapped Opportunity for Novel Precision Medicines

Combining the metabolome and the genome provides insight into metabolic vulnerabilities

- Mutations in metabolic genes or metabolic regulators
- Tumor specific isoforms
- **Deletions in metabolic genes**
- Lineage dependence
- Fusions of metabolic genes

Identifying Opportunities to Drug Cancers with Deletions in Metabolic Genes

- Metabolic genes are frequently deleted across the cancer genome, and occur across different tumor types
- Deletions induce metabolic vulnerabilities that are specific to the tumor, and are not present in normal tissues



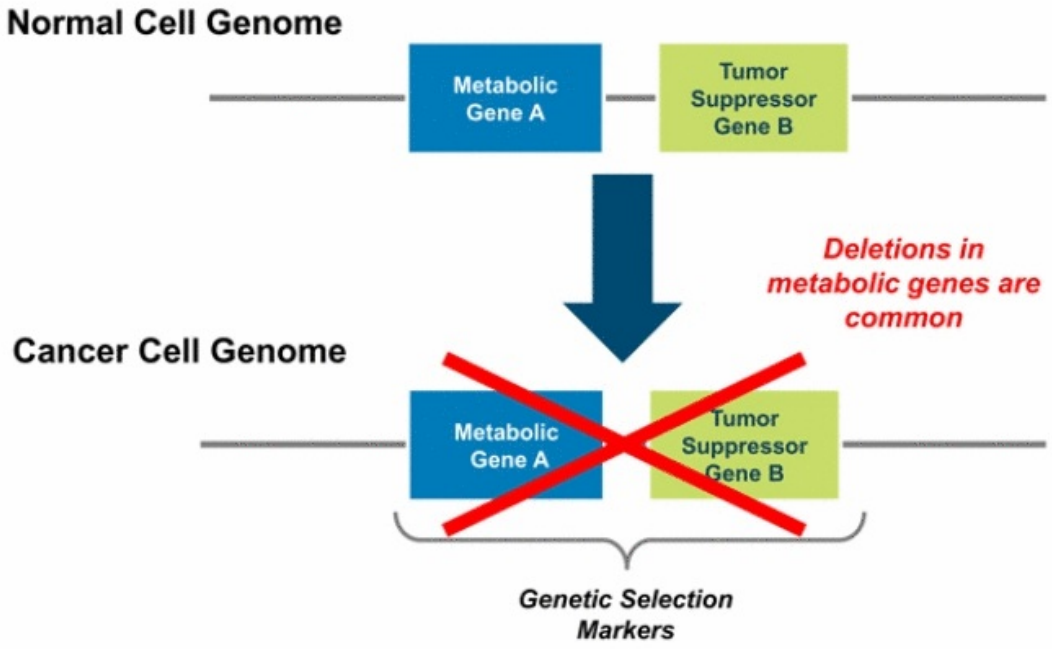
- Metabolic genes frequently deleted in cancer include:
  - Bona fide metabolic tumor suppressors genes
  - 'Passenger deletions': metabolic genes adjacent to critical tumor suppressors
- Requires deep understanding of metabolic pathways and their regulation

Image based on: Beroukhim, et al, Nature, 2010

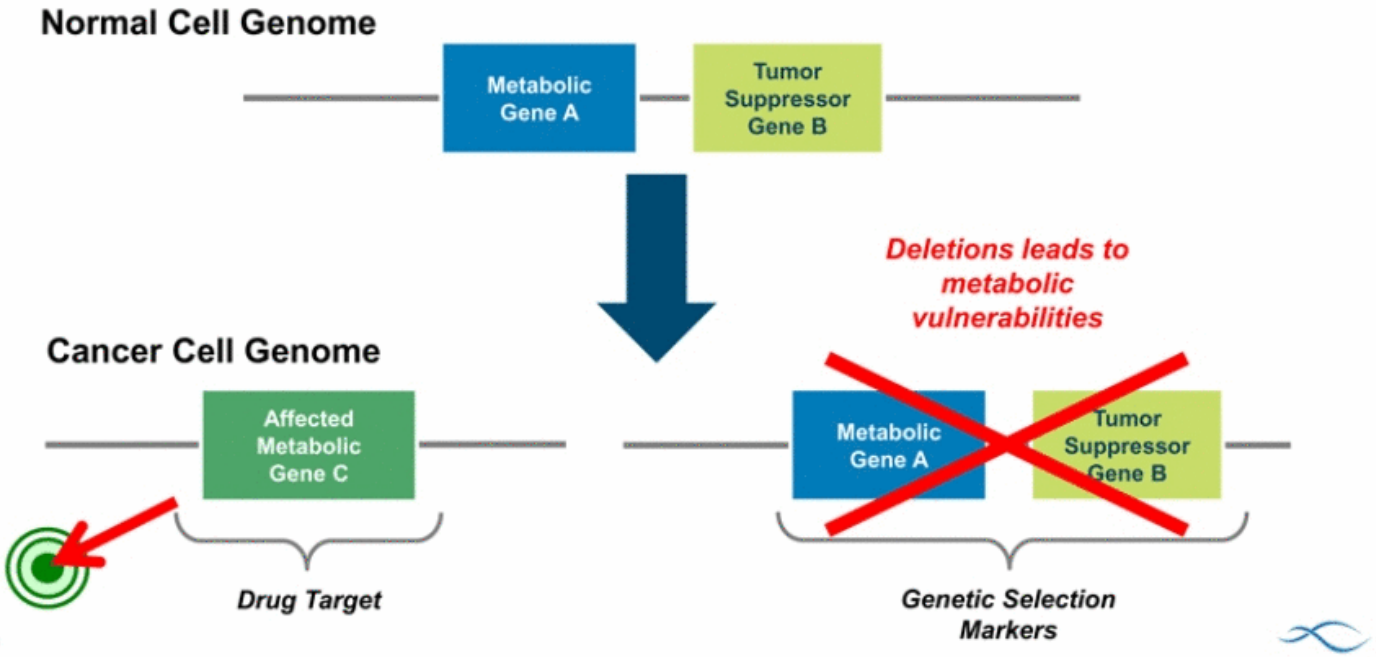
Leveraging the Cancer Genome for Patient Selection: Metabolic Vulnerability Due to Gene Deletion

Normal Cell Genome

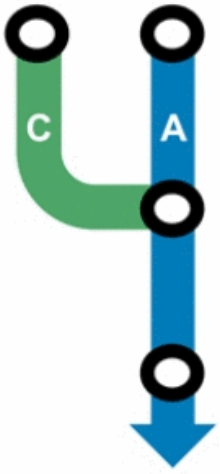
Leveraging the Cancer Genome for Patient Selection: Metabolic Vulnerability Due to Gene Deletion



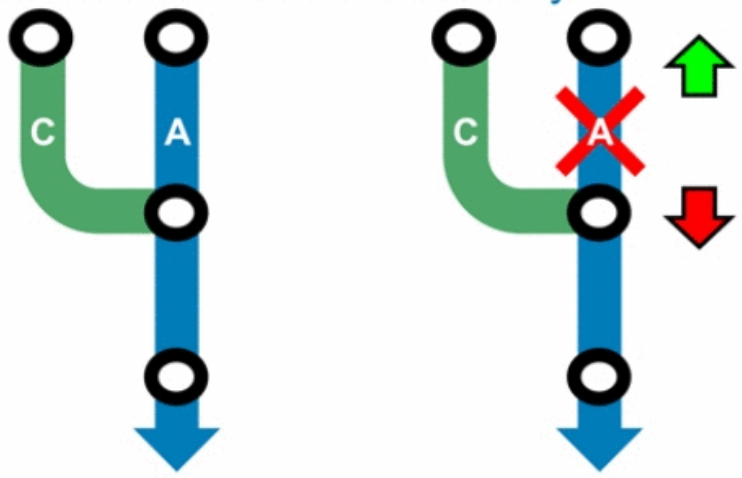
Leveraging the Cancer Genome for Patient Selection: Metabolic Vulnerability Due to Gene Deletion



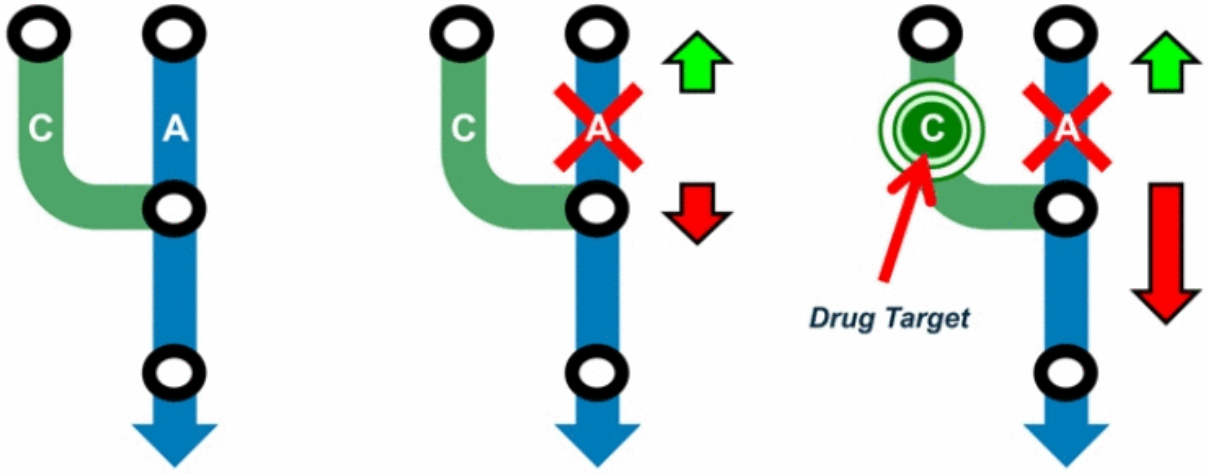
From the Genome to the Metabolome: Deleted Gene in Tumor Induces Metabolic Vulnerability



From the Genome to the Metabolome: Deleted Gene in Tumor Induces Metabolic Vulnerability



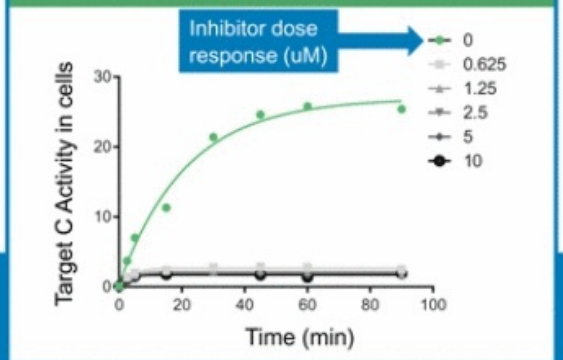
From the Genome to the Metabolome: Deleted Gene in Tumor Provides Patient Selection Marker



- Deleted gene in tumor:
  1. Induces metabolic vulnerability
  2. Provides patient selection marker
- Absence of deletion in normal tissue provides therapeutic window

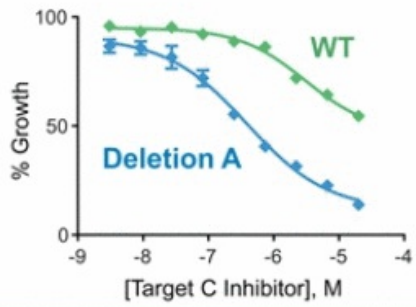
Metabolic Vulnerability Due to Deletion Creates Sensitivity to Inhibitors of Novel Target

Time Course for Metabolic Flux Through Target C



Potent inhibitors of Target C dramatically inhibit the flux of metabolites through the protein

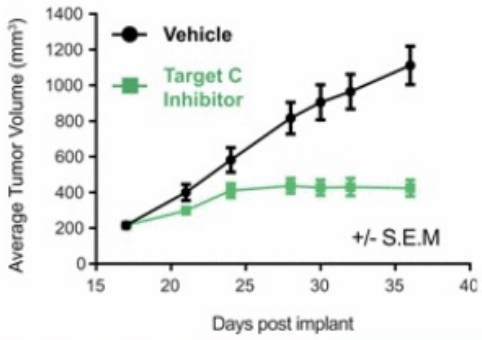
Dose Response for Growth in WT vs Deleted Tumor Cells



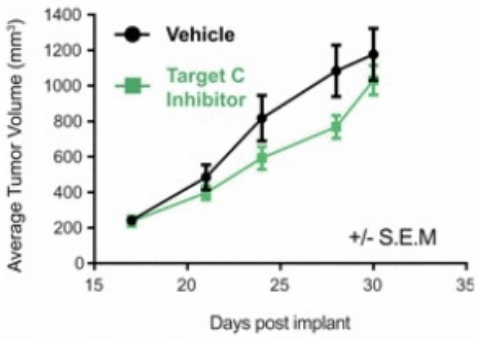
Inhibitors of Target C have a selective anti-growth effect in cells with Deletion A relative to WT cells

Novel Inhibitors Selectively Block Growth of Tumors with Deletion In Vivo

'Deletion A' Tumor Xenograft Model



WT Tumor Xenograft Model

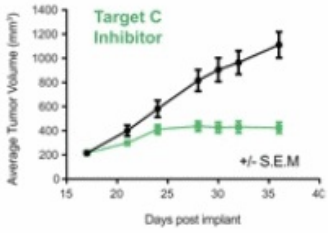


- Inhibitors of Target C are only active in tumors where Gene A is deleted
- Agios inhibitors of Target C are potent and orally bioavailable

High Bar for Novel Targets Leads to Higher Probability of Success

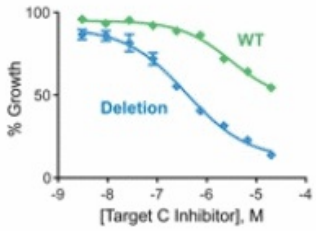
Requirements for oncology drug discovery programs:

Cancer dependency in vivo



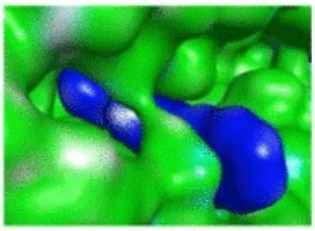
Oral efficacy with inhibitors of Target C

Patient selection strategy



Genomic deletion of Gene A

Robust chemical starting points

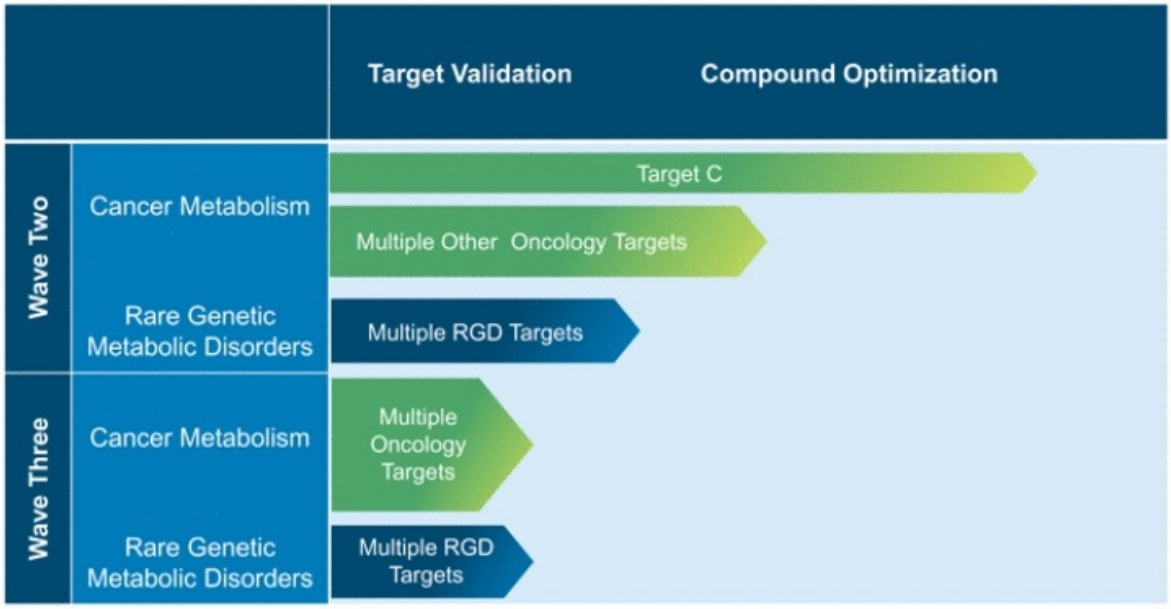


Identified first-in-class inhibitors of Target C

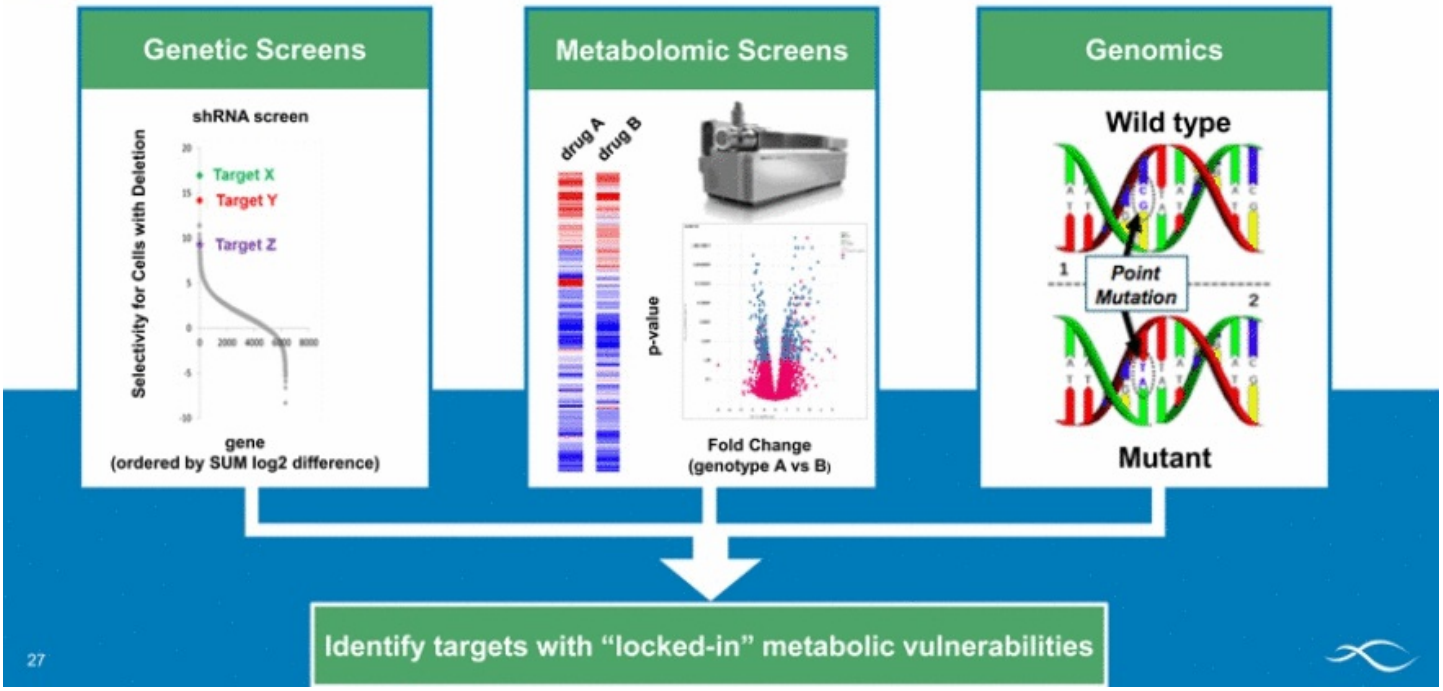
Precision Medicine

Novel First-in-Class Research Portfolio

Novel First-in-Class Research Portfolio



Integrated Approach to Metabolic Target Discovery

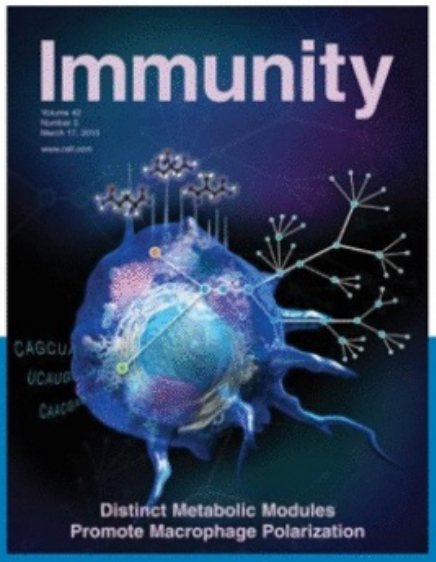


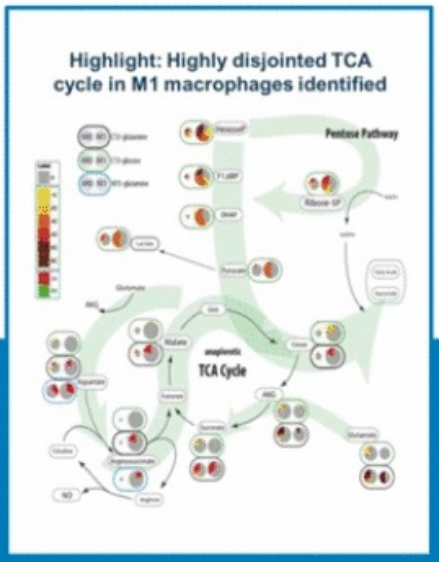
Agios Expertise Applied to the Immunology Setting

Published in the journal Immunity (2015)

Agios – Washington University St. Louis Collaboration

Integration of metabolomics and gene expression profiles revealed key metabolic pathways required for macrophage polarization





A. Jha et al, Immunity 2015

Key Takeaways: Drug Discovery Strategy

- Precision medicine strategy increases the probability of technical success while maximizing patient benefit
- Marrying the genome and metabolome enables a portfolio of novel precision medicine targets
- PK activators may have utility in other hemolytic anemias, with promising results for beta-thalassemia intermedia
- Deletions of metabolic genes in tumors provides exciting new therapeutic opportunities with high therapeutic windows
- Science and toolkit provide opportunities in other disease areas

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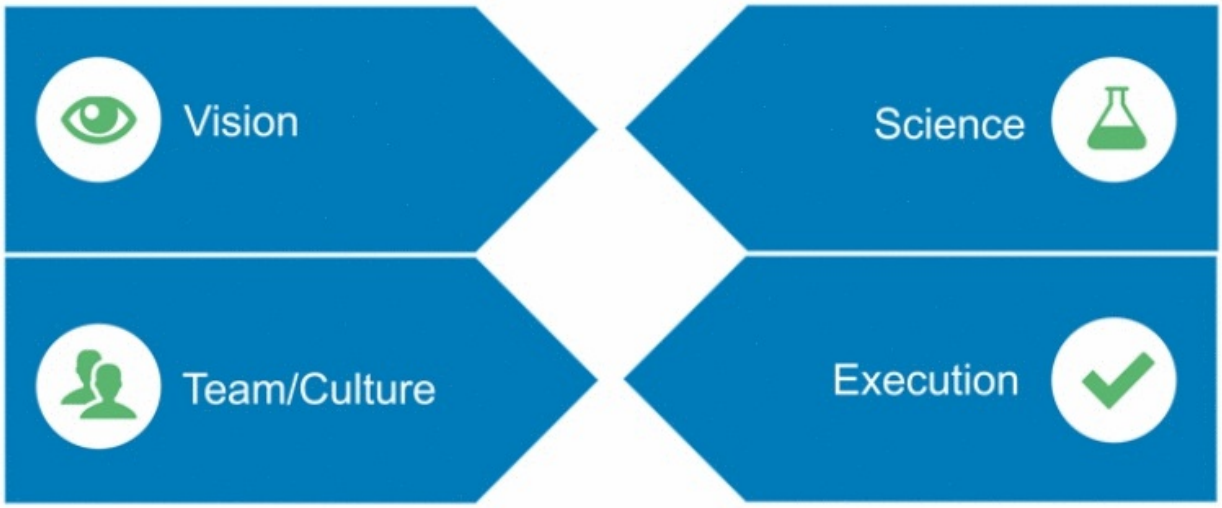
Closing Remarks

October 16, 2015

David Schenkein, M.D.
Chief Executive Officer

Making a Difference for Patients & Building Long-Term Value



Key Updates

Advancing the IDHm inhibitors to market as quickly and broadly as possible

- Design and initiation of AG-221 AML Phase 3 trial (IDHENTIFY)
- Design of combination trial with “7 + 3”
- Design of combination trial with azacitidine

Driving the PK activator program

- 5th Agios molecule entering clinical development (AG-519)

Expanding research

- Preclinical data to support potential new indications for PK activators
- Metabolic vulnerabilities as emerging cancer focus area

What We Hope You Came Away with Today

- Confident that we are leading the way in the disruptive field of dysregulated metabolism
- Clear that we are building world class clinical development and commercial capabilities on the foundation of our innovative research expertise
- Enthusiastic in your commitment to help us build a great biopharmaceutical company
- Passionate in our common mission of changing the lives of patients and creating significant shareholder value

Q&A

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Exhibit 99.2

Agios Outlines Key Clinical Development & Research Strategies

- Phase 3 Study of AG-221 in Relapsed/Refractory IDH2 Mutant Acute Myeloid Leukemia (IDHENTIFY) Initiated -

- Frontline Combination Development Strategy for AG-221 and AG-120 Announced -

- Second Pyruvate Kinase-R Activator AG-519 Entering Clinical Development -

- Company to Webcast Today's R&D Day -

Cambridge, Mass. – October 16, 2015 – Agios Pharmaceuticals (NASDAQ:AGIO) announced its clinical development strategy for the company's lead cancer metabolism and rare genetic metabolic disorders programs, along with insights into emerging research at its R&D Day today.

"With our lead IDH programs progressing through Phase 1 expansion cohorts and the initiation of the Phase 3 AG-221 study with our collaboration partner Celgene, we are moving closer to our goal of providing people with advanced AML with transformational new medicines as quickly as possible," said David Schenkein, M.D., chief executive officer at Agios. "We will share our long-term vision for these programs at today's R&D Day, as we hope to one day provide benefit to every patient diagnosed with an IDH mutant-positive cancer."

"At our core, Agios is a research-driven organization, and I'm proud that our scientists have discovered AG-519, a novel PK activator, which represents our fifth new investigational medicine in just seven years. We continue to conduct research that we believe will enable us to make important advances for patients," Dr. Schenkein continued.

IDH Program Updates

In clinical studies to date, AG-221 and AG-120, which target mutated IDH2 and IDH1, respectively, have demonstrated positive clinical single-agent activity with durable complete and partial responses and manageable safety profiles in patients with AML. Together with our collaboration partner Celgene, Agios remains committed to bringing AG-221 and AG-120 to patients as quickly and efficiently as possible by leveraging a clinical development strategy that maximizes both speed and breadth.

Agios today announced clinical development updates for AG-221 and AG-120 in AML, including:

- Initiation of the AG-221 Phase 3 Study: The IDHENTIFY study of AG-221 is a Phase 3, international, multi-center, open-label, randomized clinical trial designed to compare the efficacy and safety of AG-221 versus conventional care regimens in patients 60 years or older with IDH2 mutant-positive AML that is refractory to or relapsed after second- or third-line therapy. Additional details can be found below and on www.clinicaltrials.gov. This study is being conducted by Celgene.

- Novel design of the AG-221 and AG-120 Frontline Trials in AML:
  - For Newly Diagnosed AML Patients Eligible for Intensive Chemotherapy: A Phase 1b combination study of either AG-221 or AG-120 with standard induction (7+3, Ara-C and idarubicin/daunorubicin) and consolidation (Ara-C, or mitoxantrone with etoposide) chemotherapy is planned for initiation by the end of 2015.
  - For Newly Diagnosed AML Patients Not Eligible for Intensive Chemotherapy: A Phase 1/2 combination study of either AG-221 or AG-120 with VIDAZA® (azacitidine) is planned for initiation in the first quarter of 2016. This study has a Phase 1 component to determine the safety of the combinations, followed by a Phase 2 randomized component evaluating the safety and clinical activity of each investigational combination versus single-agent VIDAZA® using a primary endpoint of overall response rate.
- ASH Data Presentations: New data from the ongoing Phase 1 dose-escalation and expansion studies of AG-221 and AG-120 in advanced hematologic malignancies have been accepted for presentation at the American Society of Hematology (ASH) Annual Meeting and Exhibition taking place December 5-8, 2015 in Orlando.
- EORTC-NCI-AACR Data Presentation: The first data from the ongoing Phase 1 trial of AG-120 in advanced IDH1-mutant positive solid tumors have been accepted for oral presentation at EORTC-NCI-AACR International Conference on Molecular Targets and Cancer Therapeutics taking place November 5-9, 2015 in Boston.

Pyruvate Kinase (PK) Deficiency Program Updates

Agios is pioneering the development of its small molecule enzyme activators in PK deficiency, a rare genetic metabolic disorder with no disease-altering therapies.

- AG-348: AG-348, a first-in-class orally available, potent, selective small molecule activator of pyruvate kinase-R (PKR), is on track and enrolling in DRIVE PK, a global Phase 2, open-label safety and efficacy trial in adult, transfusion-independent patients with PK deficiency.
- AG-519: Agios announced today the development of its second PKR activator, AG-519. This program provides clinical development optionality for our PK activator portfolio and potentially opportunities in other hemolytic anemias where PK activation may be therapeutic. The development plan for AG-519 includes a placebo-controlled Phase 1 study in healthy volunteers, which is planned for the first quarter of 2016. This study will be an integrated single ascending dose (SAD) and multiple ascending dose (MAD) trial.

Research Program Updates

Agios has advanced and led the emerging field of cancer metabolism with its novel IDH1 and IDH2 programs, demonstrating significant potential benefit for AML patients whose cancers carry these mutations. Agios' work in IDH exemplifies the company's strategy of targeting metabolic vulnerabilities. The company continues to discover novel metabolic targets that meet a high bar for future development. Today at its R&D day, Agios will describe:

- Its precision medicine strategy to discover novel cancer metabolism targets.

- Novel research approach to rare genetic diseases using allosteric modulation to correct the underlying dysfunction in metabolic pathways.
- The potential for PKR activators to provide clinical benefit in other indications, such as beta-thalassemia.

Webcast

A live webcast of the company's R&D Day will begin today at 9:00 a.m. ET and can be accessed under "Events & Presentations" in the Investors and Media section of the company's website at www.agios.com. A replay of the webcast will be archived on the Agios website for 30 days following the presentation.

About the IDHENTIFY Phase 3 Study of AG-221

The Phase 3, international, multicenter, open-label, randomized clinical trial is designed to compare the efficacy and safety of AG-221 versus conventional care regiments in subjects 60 years or older with IDH2 mutant-positive AML refractory to or relapsed after second- or third-line therapy. Patients will be randomly assigned to receive either AG-221, 100 mg orally once a day for 28 days, or one of the conventional care regiments. The conventional treatment options include best supportive care only, azacitidine, low-dose cytarabine or intermediate-dose cytarabine. The primary endpoint of the trial is overall survival. The study is expected to enroll approximately 280 patients and is being conducted by Celgene. Please refer to www.clinicaltrials.gov for additional clinical trial details.

About Acute Myelogenous Leukemia (AML)

AML, a cancer of blood and bone marrow characterized by rapid disease progression, is the most common acute leukemia affecting adults. Undifferentiated blast cells proliferate in the bone marrow rather than mature into normal blood cells. AML incidence significantly increases with age, and according to the American Cancer Society, the median age of onset is 66. Less than 10 percent of U.S. AML patients are eligible for bone marrow transplant and the vast majority of patients do not respond to chemotherapy and progress to relapsed/refractory AML. The five-year survival rate for AML is approximately 20 to 25 percent. IDH1 and IDH2 mutations are present in about 15 to 23 percent of AML cases.

About AG-348 and PK Deficiency

PKD is a rare inherited disease resulting from mutations in the PKR enzyme that result in hemolytic anemia, which is the accelerated destruction of red blood cells. The mutations in the PKR enzymes cause a deficit in cellular energy within the red blood cell, as evidenced by a decline in the energy metabolite ATP and a build-up of the metabolite 2,3-DPG. Agios scientists

have previously reported that AG-348 is a potent activator of the wild-type and mutated PKR enzymes, resulting in restoration of ATP levels and a decrease in 2,3-DPG levels in patient blood *ex vivo*. The current standard of care for PK deficiency is supportive, including blood transfusions, splenectomy, chelation therapy to address iron overload and/or interventions for other treatment- and disease-related morbidities. Currently, there is no approved therapy to treat the underlying cause of PKD. AG-348, a first-in-class orally available, potent, selective small molecule activator of PKR, was discovered by Agios scientists, and the company retains worldwide development and commercialization rights.

About Agios

Agios is focused on discovering and developing novel investigational medicines to treat cancer and rare genetic disorders of metabolism through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class investigational medicines in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit the company's website at www.agios.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those regarding the potential benefits of Agios' product candidates targeting IDH1/IDH2 or pyruvate kinase-R mutations, including AG-221, AG-120, AG-881, AG-348 and AG-519; its plans and timelines for the clinical development of AG-221, AG-120, AG-348 and AG-519; its plans regarding future data presentations; and the benefit of its strategic plans and focus. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "potential," "hope," "could," "would" 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 numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from Agios' current expectations and beliefs. For example, there can be no guarantee that any product candidate Agios is developing will successfully commence or complete necessary preclinical and clinical development phases, or that development of any of Agios' product candidates will successfully continue. There can be no guarantee that any positive developments in Agios' business will result in stock price appreciation. Management's expectations and, therefore, any forward-looking statements in this press release could also be affected by risks and uncertainties relating to a number of other important factors, including: Agios' results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; 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; Agios' ability to obtain and maintain requisite regulatory approvals and to enroll patients in its planned clinical trials; 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 maintain key collaborations, such as its agreement with Celgene; and general economic and market conditions. These and other risks are described in greater detail under the caption "Risk Factors" included in Agios' Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, and other filings that Agios may make with the Securities and Exchange Commission in the future. Any forward-looking statements contained in this press release 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.

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