TIBSOVO® (ivosidenib) FDA Approval

July 20, 2018

Agios Conference Call Participants

Prepared Remarks

Introduction

- KENDRA ADAMS, Sr. Director, Investor Relations

Opening Remarks

- DAVID SCHENKEIN, M.D., Chief Executive Officer

USPI Review

- CHRIS BOWDEN, M.D., Chief Medical Officer

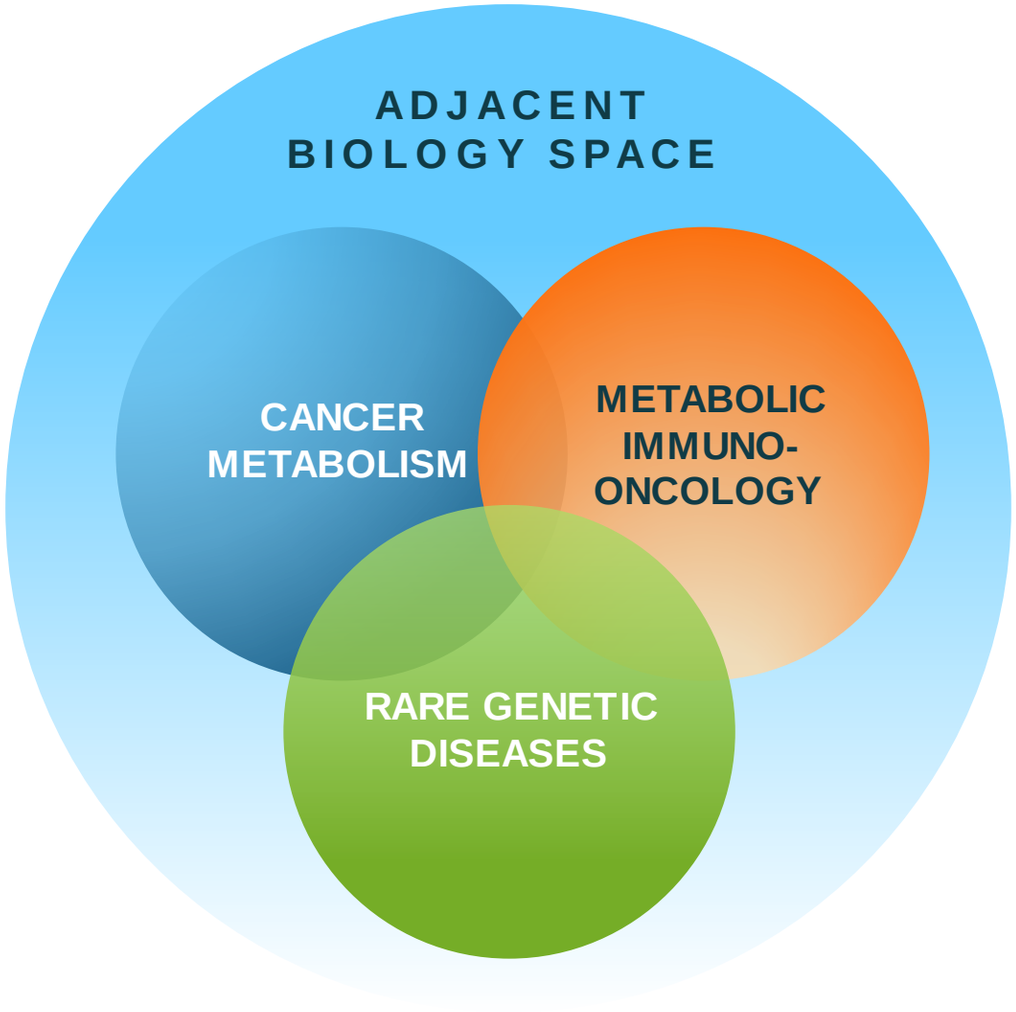
Commercial Launch

- STEVE HOERTER, Chief Commercial Officer

Forward Looking Statements

This presentation and various remarks we make during this presentation contain 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' products, including TIBSOVO® (ivosidenib), and its strategic plans and focus. The words “estimate,” “may,” “milestone,” “potential,” 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 development of any of Agios' product candidates will successfully continue, or 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 and various remarks we make 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 agreements with Celgene and CStone Pharmaceuticals; and general economic and market conditions. These and other risks are described in greater detail under the caption "Risk Factors" included in Agios’ public filings with the Securities and Exchange Commission. Any forward-looking statements contained in this presentation and various remarks we make during this presentation speak only as of the date hereof, and Agios expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Driven By a Clear Vision and Values



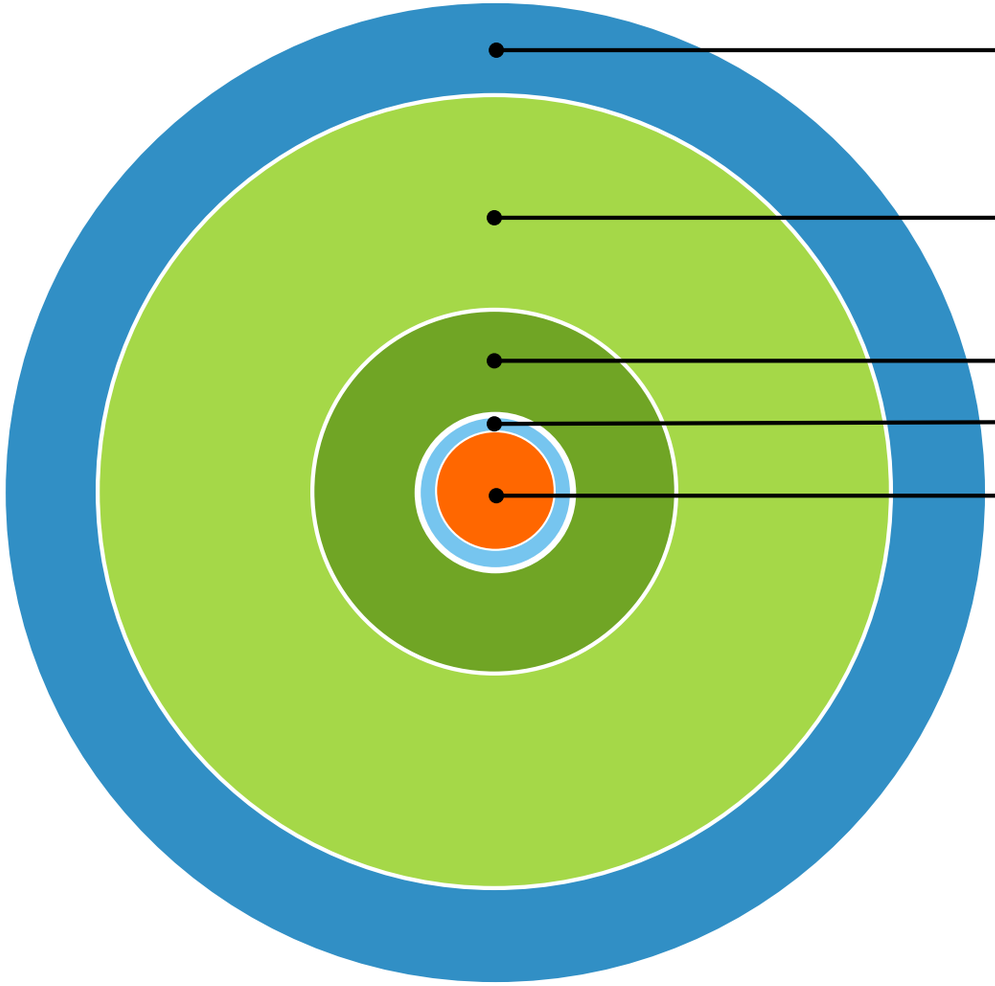
agios

Agios is passionately committed to applying our scientific leadership in the field of cellular metabolism to transform the lives of patients with cancer and rare genetic diseases.

Now Approved in IDH1m Relapsed/Refractory AML

TIBSOVO is indicated for the treatment of adult patients with relapsed or refractory acute myeloid leukemia (AML) with a susceptible isocitrate dehydrogenase-1 (IDH1) mutation as detected by an FDA-approved test.

Building One of the Next Great Pharmaceutical Companies



Biotech startups

Initiated clinical trials

One drug approved

Two drugs approved

Sustainable multiproduct companies

TIBSOVO® U.S. Prescribing Information Review

Chris Bowden, M.D., Chief Medical Officer

TIBSOVO® USPI Highlights*

First-in-class, oral, targeted inhibitor of mutant IDH1 protein

Efficacy Data (n=174)

- CR/CRh statistics
  - Rate: 32.8%
  - Median duration: 8.2 months
  - Median time to best response 2.0 months
- Transfusion independence
  - 37.3% of patients became transfusion independent during any 56-day post-baseline period
  - 59.4% of patients independent at baseline remained independent during any 56-day post-baseline period
- 12% of patients went on to stem cell transplant following TIBSOVO® treatment

Safety Data (n=179)

- The TIBSOVO® label contains a boxed warning for differentiation syndrome, which can be fatal if not treated
  - 19% of patients experienced differentiation syndrome (all Grades)
- QTc interval prolongation and Guillain-Barre Syndrome occurred in patients treated with TIBSOVO®
- Monitor drug-drug interactions with TIBSOVO.
- Most frequent serious adverse reactions (≥5%): differentiation syndrome (10%), leukocytosis (10%) and QT prolongation (7%)
- Median duration of exposure: 3.9 months

* The full prescribing information can be found on our website at agios.com.

Clinical Development of IDHm Inhibitors Spans All Treatment Lines to Become Cornerstone of AML Treatment

INTENSIVE CHEMO (IC)
~60-70% of AML Patients

NON-IC TREATMENT
~30-40% of AML Patients

HOVON 7+3
PHASE 3
PLANNED

BROAD IST
STRATEGY

IC INDUCTION

CONSOLIDATION | **TRANSPLANT**

MAINTENANCE

NON-IC TREATMENT

AGILE
ONGOING

BROAD IST
STRATEGY

RELAPSED / REFRACTORY TREATMENT

IDHIFA® (enasidenib) tablets 100mg • 50mg APPROVED

TIBSOVO® (ivosidenib) tablets APPROVED

BROAD IST
STRATEGY

Source: SEER. Cancer Stat Facts: AML 2015

Multiple Opportunities Across IDHm Hematologic and Solid Cancers Originating from Agios Research Platform

ACUTE MYELOID LEUKEMIA

IDH2m R/R
IDHIFA® (enasidenib) Approved

IDH1m R/R
TIBSOVO® (ivosidenib) Approved

IDH1m Frontline Non-IC
Ivosidenib + Aza Phase 3 (AGILE) Ongoing

IDHm Frontline IC-Eligible
Ivo/Ena + 7+3 Phase 3 Q4 2018 Start

IDHm Frontline Non-IC
Ivo/Ena + Aza Phase 1/2 Ongoing

IDHm Frontline IC-Eligible
Ivo/Ena + 7+3 Phase 1b Ongoing

CHOLANGIOCARCINOMA

IDH1m R/R
Ivosidenib Phase 3 (ClarIDHY) Ongoing

IDH1m R/R
Ivosidenib Phase 1 Enrollment Complete

LOW GRADE GLIOMA

IDH1m
Ivosidenib & AG-881 Perioperative Study Ongoing

IDH1m
Ivosidenib Phase 1 Enrollment Complete

IDH1m
AG-881 Phase 1 Enrollment Complete

OTHER INDICATIONS

MYELODYSPLASTIC SYNDROMES

IDHm R/R Ivosidenib Phase 1 Enrollment Complete

CHONDROSARCOMAS

IDH1m R/R Ivosidenib Phase 1 Enrollment Complete

TIBSOVO® Commercial Launch

Steve Hoerter, Chief Commercial Officer

Strategic Imperatives for the TIBSOVO® Launch

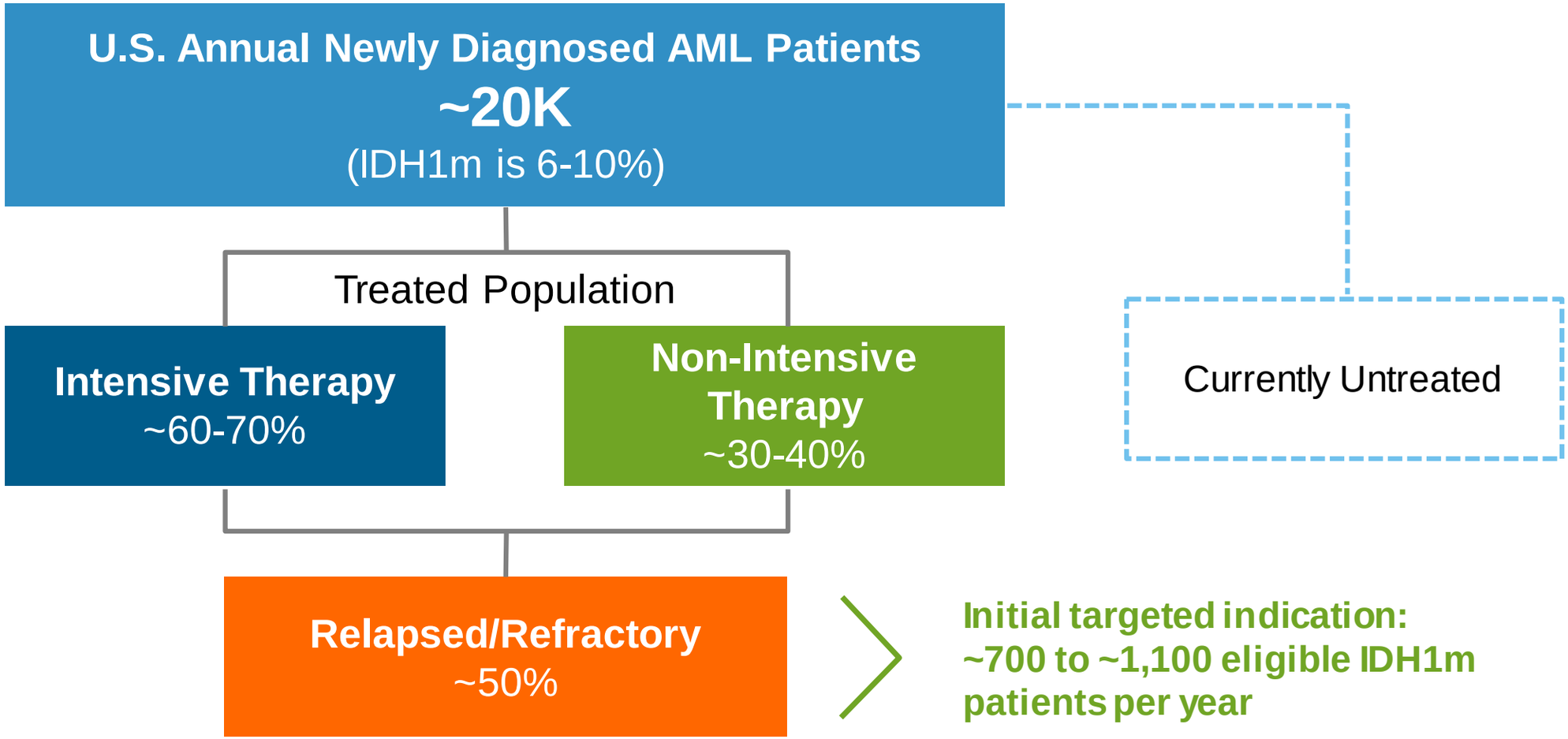
Physicians test for IDH1m

TIBSOVO® is recognized as the best option for IDH1m+ R/R AML

TIBSOVO®
(ivosidenib) tablets

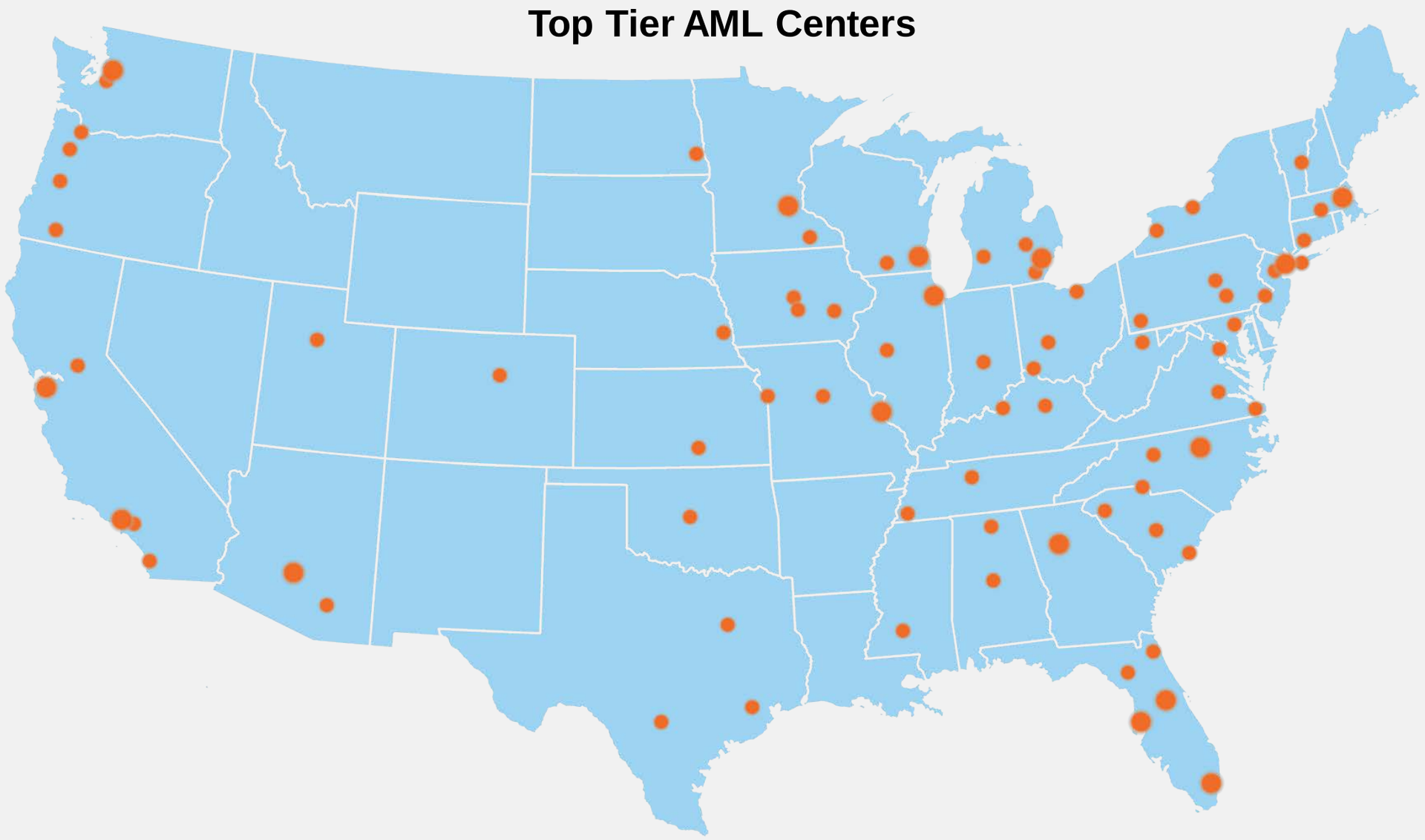
Patients have access to TIBSOVO®

U.S. AML Epidemiology and Treatment Approach – IDH1 Opportunity



Sources: 1. National Cancer Institute. https://seer.cancer.gov/statfacts/html/amyl.html. Accessed December 7, 2017. 2. DiNardo CD, et al. Poster presented at: American Society of Hematology Annual Meeting & Exposition; December 9-12, 2017; Atlanta, GA. 3. Walter RB, et al. *Leukemia*. 2015;29(2):312-320.

Sales Team Deployed to Cover Prescriber Base



Our Approach to Patient Access is Multifaceted

Patient Access

Distribution Channel

Limited specialty pharmacy network

Hospital accounts serviced via specialty distributors

Patient Services

Copay card for commercial patients

Patient Assistance Program

Commercial insurance coverage interruption

Referrals to independent third-parties for additional support

Payer Education

Expert field payer team

Focus on education & payer resources

Educate on disease burden

Address payer concerns

myagios™

Welcome to myAgios™ Patient Support Services

A program that helps with access and financial assistance

Financial Assistance

Network of Specialty Pharmacies and Distributors

Enrolling in myAgios™ Patient Support Services

Q&A