# Agios to Present New Data at EHA 2026 Reinforcing the Significant Therapeutic Impact of Mitapivat Across Multiple Rare Hemolytic Anemias

May 12, 2026

- Detailed results from RISE UP Phase 3 trial of mitapivat in sickle cell disease selected for distinguished Plenary Abstracts Session
- Company to host investor conference call and webcast during EHA 2026 on Saturday, June 13, at 9:00 a.m. ET (3:00 p.m. CEST)

**CAMBRIDGE, Mass., May 12, 2026** – Agios Pharmaceuticals, Inc. (Nasdaq: AGIO), a commercial-stage biopharmaceutical company focused on delivering innovative medicines for patients with rare diseases, today announced that new data on mitapivat, an oral pyruvate kinase (PK) activator, will be featured in oral and poster presentations during the 31st European Hematology Association (EHA) Congress (EHA 2026) in Stockholm, Sweden, June 11-14, 2026..

"Our presentations at EHA 2026 build on over a decade of clinical and preclinical research that has consistently demonstrated the transformative potential of mitapivat as a disease-modifying oral medicine for hemolytic anemias, including sickle cell disease and thalassemia," said Sarah Gheuens, M.D., Ph.D., Chief Medical Officer and Head of R&D, Agios. "The plenary session for our RISE UP Phase 3 trial is an important opportunity to present new data showcasing the strong anti-hemolytic profile of mitapivat and its potential to address the urgent need for novel therapeutic options in sickle cell disease. We look forward to sharing these results and engaging with the hematology community as we continue to drive meaningful progress for patients with rare blood diseases."

Select presentations at EHA 2026 will include:

- An oral presentation during the Plenary Abstracts Session on detailed efficacy and safety data from the global 52-week, randomized, double-blind, placebo-controlled RISE UP Phase 3 trial of mitapivat in patients aged 16 years or older with sickle cell disease. Results demonstrate that treatment with mitapivat significantly improved hemoglobin response (a ≥1.0 g/dL increase from baseline in average hemoglobin from Week 24 through Week 52) and reduced markers of hemolysis (red blood cell destruction). Additional analyses, including measures of clinical benefit and patient-reported outcomes that were not previously disclosed in the company's November 2025 topline report, will also be presented. The RISE UP abstract was one of only six selected for this distinguished plenary session from thousands of submissions.

- An oral presentation on long-term data from the ENERGIZE Phase 3 trial of mitapivat in adult patients with non-transfusion-dependent alpha- or beta-thalassemia. Of the 192 patients who received at least one dose of mitapivat or placebo in the double-blind period of ENERGIZE, 95% (n=182) opted to transition into the corresponding open-label extension (OLE) period, during which all patients receive mitapivat. The results show the durability of mitapivat treatment, with clinically meaningful hemoglobin improvements sustained for up to 127 weeks across the double-blind and OLE periods. During the OLE, nearly half (n=30/61) of non-responders who switched from placebo achieved a hemoglobin improvement (a ≥1 g/dL increase from baseline in average hemoglobin during any two consecutive OLE study visits), supporting a consistent treatment effect with mitapivat. Additionally, about one-third (n=23/68) of non-responders who received mitapivat during the double-blind period achieved a hemoglobin improvement during the OLE, suggesting a potential benefit of continued long-term treatment.

    - A related poster will highlight a subset of patients with higher baseline hemoglobin levels (≥9.5 g/dL) in ENERGIZE. Among these patients, 38.9% (n=7/18) in the mitapivat arm achieved a hemoglobin response (a ≥1 g/dL increase from baseline in average hemoglobin from Week 12 through Week 24) in the double-blind period, compared with 0% (n=0/11) in the placebo arm. Additionally, patients in the mitapivat arm showed a 5.1-point improvement in patient-reported fatigue scores compared with 0.8 points among those in the placebo arm, as measured by the least squares mean change from baseline in Functional Assessment of Chronic Illness Therapy (FACIT)-Fatigue from Week 12 to Week 24.
- An oral presentation on the collaborator-led SATISFY Phase 2 trial of mitapivat in 24 patients with one of three rare hemolytic anemias: hereditary spherocytosis, hereditary xerocytosis, or congenital dyserythropoietic anemia type II. Treatment resulted in sustained hemoglobin improvements over 56 weeks. Notably, patients who achieved a hemoglobin response (a ≥1 g/dL increase from baseline in average hemoglobin during at least two consecutive study visits) also showed significant decreases in liver iron content, an important marker of downstream complications in hemolytic anemias.

In total, 10 presentations and publications led by Agios and external collaborators will be shared at EHA 2026.

**EHA 2026 Accepted Abstracts**

| Title | Number | Date/Time | Presenter | Acceptance |
|---|---|---|---|---|
| **Sickle Cell Disease** | | | | |
| Efficacy and Safety of Mitapivat in Sickle Cell Disease: Results From the Global, Randomized, Phase 3 RISE UP Trial | S102 | Saturday, June 13,<br>12:00 - 1:30 p.m. CEST | Biree Andemariam,<br>M.D., University of Connecticut Health | Oral Plenary Session |
| Metabolic Dysregulation of Energy, Arginine Metabolism and Inflammation Associated With Point of Sickling in Patients With Sickle Cell Anemia | PF1264 | Friday, June 12,<br>6:45 - 7:45 p.m. CEST | Amira Idrizovic,<br>Ph.D., Vall d'Hebron Research Institute, Barcelona, Spain | Poster |
| Impaired Function of Pyruvate Kinase Is Associated With Hemolysis-Related Inflammation, Ineffective Erythropoiesis, and Endothelial Dysfunction in Adults With Sickle Cell Anemia | PF1269 | Friday, June 12,<br>6:45 - 7:45 p.m. CEST | Marissa J.M. Traets, M.D., University Medical Center Utrecht, Netherlands | Poster |
| **Thalassemia** | | | | |
| Long-Term Hemoglobin Improvements in Non-Transfusion-Dependent Alpha- or Beta-Thalassemia: Results From the Open-Label Extension of the Ongoing Phase 3 ENERGIZE Trial | S296 | Saturday, June 13,<br>5:15 - 6:30 p.m. CEST | Hanny Al-Samkari, M.D., Mass General Brigham Cancer Institute | Oral |
| Efficacy of Mitapivat in Patients With Non-Transfusion-Dependent Alpha- or Beta-Thalassemia With Baseline Hemoglobin ≥9.5 g/dL: Subgroup Analysis From the Phase 3 ENERGIZE Trial | PF1281 | Friday, June 12,<br>6:45 - 7:45 p.m. CEST | Khaled M. Musallam,<br>M.D., Ph.D., Burjeel Medical City, Abu Dhabi, United Arab Emirates | Poster |
| ENERGIZEKIDS: Mitapivat in Pediatric Patients With Non-Transfusion-Dependent Alpha- or Beta-Thalassemia | PB4160 | N/A | Kathryn Dickerson,<br>M.D., University of Texas Southwestern Medical Center | Publication |
| ENERGIZEKIDS-T: Mitapivat in Pediatric Patients With Transfusion-Dependent Alpha- or Beta-Thalassemia | PB4162 | N/A | Janet Kwiatkowski,<br>M.D., MSCE, Children's Hospital of Philadelphia | Publication |
| **Other** | | | | |
| The Patient Experience of Fatigue in Individuals With Sickle Cell Disease, Thalassemia, and Pyruvate Kinase Deficiency | PB4417 | N/A | Biree Andemariam, M.D., University of Connecticut Health | Publication |
| Effects of Mitapivat on Iron Burden and Spleen Size in Erythrocyte Membranopathies and Congenital Dyserythropoietic Anemia Type II: 56-Week Follow-Up Results From the SATISFY Study | S304 | Thursday, June 11,<br>4:45 - 6:00 p.m. CEST | Thomas Doeven, M.D., University Medical Center Utrecht, Netherlands | Oral |
| Diamond-Blackfan Anemia Syndrome Erythroid Progenitors Display Abnormal Metabolomic Profile | PS1781 | Saturday, June 13,<br>6:45 - 7:45 p.m. CEST | Veronica Riccardi,<br>M.D., University of Verona, Italy | Poster |

Please refer to the EHA 2026 online program for full session details and data presentation listings, and visit the Agios booth (#A1.04) onsite.

**EHA 2026 Investor Event**
Agios will host a conference call and live webcast during the EHA 2026 congress on Saturday, June 13, at 9:00 a.m. ET (3:00 p.m. CEST). The live webcast will be accessible on the Investors section of the company's website (www.agios.com) under the "Events & Presentations" tab. A replay of the webcast will be available on the company's website approximately two hours after the event.

**About Sickle Cell Disease**
Sickle cell disease is a rare, inherited blood disorder caused by the production of abnormal hemoglobin that disrupts the ability of red blood cells to carry oxygen throughout the body. As a result, red blood cells become rigid and sickle-shaped, causing deformation of red blood cell membranes and the premature death of the cells. These effects lead to chronic hemolytic anemia, vaso-occlusion, and a cascade of severe and life-threatening complications, including long-term damage to the lungs, kidneys, and cardiovascular system. Due to its physical toll, sickle cell disease imposes a profound burden on patients and their families, marked by increased healthcare needs and early mortality.

**About the RISE UP Phase 3 Trial Topline Results**
The global RISE UP Phase 3 trial (NCT05031780) is evaluating the efficacy and safety of mitapivat in sickle cell disease patients aged 16 years or older, representative of the global population. The trial consisted of a 52-week, double-blind, randomized, placebo-controlled period, in which 207 participants were randomized 2:1 to receive oral mitapivat (100 mg) twice daily (n=138) or matched-placebo (n=69). Upon completion, participants

could transition into an open-label extension (OLE) period where all receive mitapivat.

To comprehensively evaluate objective measures of hemolysis alongside other clinically relevant outcomes in sickle cell disease, the double-blind period of RISE UP included two primary endpoints – hemoglobin response and annualized rate of sickle cell pain crises – as well as five key secondary endpoints measuring hemoglobin concentration, indirect bilirubin (a biomarker of hemolysis), patient-reported fatigue, hospitalizations for sickle cell pain crises, and percent reticulocyte levels (a biomarker of erythropoiesis).

Mitapivat demonstrated a statistically significant improvement compared to placebo in the study's primary endpoint of hemoglobin response, defined as a ≥1.0 g/dL increase from baseline in average hemoglobin concentration from Week 24 through Week 52. Although mitapivat showed a reduction in the annualized rate of sickle cell pain crises compared with placebo, this primary endpoint did not reach statistical significance.

Patients receiving mitapivat who achieved the hemoglobin response primary endpoint had clinically meaningful improvements in hemoglobin concentration. These patients also experienced other clinically meaningful benefits, including reductions in pain crises and related hospitalizations, along with improvements in fatigue.

The safety profile was consistent with prior mitapivat trials in sickle cell disease. The 52-week double-blind period was completed by 87.0% (n=120/138) of patients in the mitapivat arm and 81.2% (n=56/69) of patients in the placebo arm. All but two of these patients (174/176) opted to enter the ongoing OLE period of the trial.

**About Thalassemia**
Thalassemia is a rare, inherited blood disease that affects the production of hemoglobin, the protein in red blood cells responsible for carrying oxygen throughout the body. The disease is categorized into two main types: alpha-thalassemia and beta-thalassemia, depending on which globin chain of the hemoglobin is affected. By disrupting hemoglobin production, thalassemia reduces the number of circulating red blood cells and shortens their lifespan, which leads to anemia, fatigue, and serious complications.

Some individuals with thalassemia require regular transfusions (classified as transfusion-dependent thalassemia), while others only need them intermittently (classified as non-transfusion-dependent thalassemia). All patients with thalassemia experience a significant disease burden, including comorbidities, reduced quality of life, and shortened life expectancy.

**About ENERGIZE and ENERGIZE-T**
ENERGIZE (NCT04770753) and ENERGIZE-T (NCT04770779) are global, double-blind, placebo-controlled Phase 3 trials evaluating the efficacy and safety of mitapivat in adults with alpha- or beta-thalassemia

The ENERGIZE trial randomized 194 non-transfusion-dependent alpha- or beta-thalassemia patients 2:1 to receive either mitapivat 100 mg twice daily or placebo. The primary endpoint was hemoglobin response, defined as an increase of ≥1.0 g/dL in average hemoglobin concentration from Week 12 through Week 24 compared with baseline. Key secondary endpoints included changes from baseline in average fatigue scores and in average hemoglobin concentration from Week 12 to Week 24. The trial also assessed safety and tolerability.

The ENERGIZE-T trial randomized 258 transfusion-dependent alpha- or beta-thalassemia patients 2:1 to receive either mitapivat 100 mg twice daily or placebo. The primary endpoint was transfusion reduction response, defined as a ≥50% reduction in transfused red blood cell (RBC) units with a reduction of ≥2 units of RBCs transfused in any consecutive 12-week period through Week 48 compared with baseline. Several transfusion reduction measures were included as key secondary endpoints, and achievement of transfusion independence was a secondary endpoint. The trial also assessed safety and tolerability.

For each trial, patients who completed the double-blind period had the option to transition into a corresponding open-label extension (OLE) period, during which all patients receive mitapivat.

Based on results from ENERGIZE and ENERGIZE-T, mitapivat is approved for adults with thalassemia under the brand name AQVESME™ (mitapivat) in the U.S. and as PYRUKYND® (mitapivat) in Saudi Arabia and the United Arab Emirates. A marketing application for PYRUKYND in thalassemia is currently under review by the European Commission.

**About PYRUKYND® (mitapivat)**
**U.S. INDICATION**
PYRUKYND is a pyruvate kinase activator indicated for the treatment of hemolytic anemia in adults with pyruvate kinase (PK) deficiency.

**U.S. IMPORTANT SAFETY INFORMATION**
**Acute Hemolysis:** Acute hemolysis with subsequent anemia has been observed following abrupt interruption or discontinuation of PYRUKYND in a dose-ranging study. Avoid abruptly discontinuing PYRUKYND. Gradually taper the dose of PYRUKYND to discontinue treatment if possible. When discontinuing treatment, monitor patients for signs of acute hemolysis and anemia including jaundice, scleral icterus, dark urine, dizziness, confusion, fatigue, or shortness of breath.

**Hepatocellular Injury in Another Condition:** In patients with another condition treated with mitapivat at a higher dose than that recommended for patients with PK deficiency, liver injury has been observed. These events were characterized by a time to onset within the first 6 months of treatment with peak elevations of alanine aminotransferase of >5x upper limit of normal (ULN) with or without jaundice. All patients discontinued treatment with mitapivat, and these events improved upon treatment discontinuation.

Obtain liver tests prior to the initiation of PYRUKYND and monthly thereafter for the first 6 months and as clinically indicated. Interrupt PYRUKYND if clinically significant increases in liver tests are observed or alanine aminotransferase is >5x ULN. Discontinue PYRUKYND if hepatic injury due to PYRUKYND is suspected.

**Adverse Reactions:** The most common adverse reactions including laboratory abnormalities (≥10%) in patients with PK deficiency were estrone decreased (males), increased urate, back pain, estradiol decreased (males), and arthralgia.

**Drug Interactions:**

- Strong CYP3A Inhibitors and Inducers: Avoid concomitant use.
- Moderate CYP3A Inhibitors: Do not titrate PYRUKYND beyond 20 mg twice daily.
- Moderate CYP3A Inducers: Consider alternatives that are not moderate inducers. If there are no alternatives, adjust PYRUKYND dosage.
- Sensitive CYP3A, CYP2B6, CYP2C Substrates Including Hormonal Contraceptives: Avoid concomitant use with substrates that have narrow therapeutic index.
- UGT1A1 Substrates: Avoid concomitant use with substrates that have narrow therapeutic index.
- P-gp Substrates: Avoid concomitant use with substrates that have narrow therapeutic index.

**Hepatic Impairment:** Avoid use of PYRUKYND in patients with moderate and severe hepatic impairment.

**Please see full Prescribing Information for PYRUKYND.**

**About AQVESME™ (mitapivat)**
**U.S. INDICATION**
AQVESME is indicated for the treatment of anemia in adults with alpha- or beta-thalassemia.

**U.S. IMPORTANT SAFETY INFORMATION**
**BOXED WARNING: HEPATOCELLULAR INJURY**

**AQVESME can cause serious hepatocellular injury. Measure liver laboratory tests (ALT, AST, alkaline phosphatase and total bilirubin with fractionation) at baseline and every 4 weeks for 24 weeks and then as clinically indicated. Avoid use of AQVESME in patients with cirrhosis. Discontinue AQVESME if hepatic injury is suspected.**
**Because of the risk of hepatocellular injury, AQVESME is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the AQVESME REMS.**

**WARNINGS AND PRECAUTIONS**

**Hepatocellular Injury**
AQVESME can cause hepatocellular injury. Avoid use of AQVESME in patients with cirrhosis. In patients with thalassemia treated with AQVESME, liver injury with and without jaundice has been observed within the first 6 months of exposure. Obtain liver tests (including ALT, AST, alkaline phosphatase, total bilirubin with fractionation) prior to the initiation of AQVESME, then every 4 weeks for the first 24 weeks, and as clinically indicated thereafter. Interrupt AQVESME if clinically significant increases in liver tests are observed or alanine aminotransferase is >5 times the upper limit of normal (ULN). Complete a comprehensive evaluation to rule out other causes of liver injury when drug-induced liver injury is suspected. Discontinue AQVESME if hepatocellular injury due to AQVESME is suspected.

Symptoms and signs of early liver injury may mimic those of thalassemia. Advise patients to report new or worsening symptoms of loss of appetite, nausea, right-upper-quadrant abdominal pain, vomiting, scleral icterus, jaundice, or dark urine while on AQVESME treatment.

During the double-blind period, 2 of 301 patients (0.66%) with thalassemia treated with AQVESME experienced adverse reactions suggestive of hepatocellular injury. Three additional patients experienced adverse reactions suggestive of hepatocellular injury during the open-label extension periods after switching from placebo to AQVESME. Of these 5 patients, 2 had serious liver injury requiring hospitalization, including 1 patient who developed jaundice (peak bilirubin 32 mg/dL). Another patient developed jaundice (peak bilirubin 4 mg/dL) without requiring hospitalization. These reactions were characterized by a time to onset within the first 6 months of treatment with peak elevations of alanine aminotransferase of >5×ULN with or without jaundice. All patients discontinued treatment with AQVESME, and these reactions improved upon treatment discontinuation.

**AQVESME REMS**
AQVESME is available only through a restricted program under a REMS called the AQVESME REMS because of the risk of hepatocellular injury.

**Adverse Reactions**
The most common adverse reactions among patients taking AQVESME were headache and insomnia.

**Drug Interactions**

- Strong CYP3A Inhibitors and Inducers: Avoid concomitant use.
- Moderate CYP3A Inhibitors: Avoid concomitant use.
- Moderate CYP3A Inducers: Consider alternatives that are not moderate inducers. If there are no alternatives, see full Prescribing Information for recommended dosage for drug interactions with moderate CYP3A inducers.
- Sensitive CYP3A Substrates, including hormonal contraceptives: Avoid concomitant use with substrates that have narrow therapeutic index.
- CYP2B6, CYP2C, and UGT1A1 Substrates: Monitor patients for efficacy of the substrates with narrow therapeutic index.
- P-gp Substrates: Monitor patients for adverse reactions of the substrates with narrow therapeutic index.

**Hepatic Impairment**
Avoid use of AQVESME in patients with cirrhosis (Child-Pugh Class A, B, or C).

**Please see full Prescribing Information for AQVESME, including Boxed Warning.**

**About Agios: Fueled by Connections to Transform Rare Diseases™**
At Agios, our vision is to redefine the future of rare disease treatment. Fueled by connections, we build trusted partnerships with communities – collaborating to develop and deliver innovative medicines that have the potential to transform lives. With a foundation in hematology, we combine

biological expertise with real-world insights to advance a growing pipeline of rare disease medicines that reflect the priorities of the people we serve. Agios is a commercial-stage biopharmaceutical company headquartered in Cambridge, Massachusetts. To learn more, visit www.agios.com and follow us on LinkedIn and X.

**Available Information about Agios**

To achieve broad dissemination, Agios may disclose information to the public through a variety of disclosure channels including press releases, SEC filings, and public conference calls and webcasts. Some of the information distributed through these disclosure channels may be considered material information. Investors and others should note that Agios plans to use its website (www.agios.com) as a distribution channel to announce and give notice of Agios' upcoming events and presentations (including, but not limited to, presentations at medical or healthcare conferences). Such information, which may be deemed material, will be available on the Investors section of the company's website under the "Events & Presentations" tab. In addition, you may sign up to automatically receive email alerts about Agios' upcoming events and presentations ("Calendar Alerts") by visiting the "Email Alerts" option under the "IR Resources" tab of the Investors section of the company's website and submitting your email address.

**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 PYRUKYND® (mitapivat) and AQVESME™ (mitapivat) and the potential benefits of Agios' strategic plans and focus. The words "anticipate," "expect," "goal," "hope," "milestone," "plan," "potential," "possible," "strategy," "will," "vision," 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, without limitation: risks and uncertainties related to the impact of pandemics or other public health emergencies to Agios' business, operations, strategy, goals and anticipated milestones, including its ongoing and planned research activities, ability to conduct ongoing and planned clinical trials, clinical supply of current or future drug candidates, commercial supply of current or future approved products, and launching, marketing and selling current or future approved products; 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, the EMA or 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 establish and maintain key collaborations; uncertainty regarding any royalty payments related to the sale of its oncology business or any milestone or royalty payments related to its in-licensing of AG-236, and the uncertainty of the timing of any such payments; uncertainty of the results and effectiveness of the use of Agios' cash and cash equivalents; 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 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, except as required by law.

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