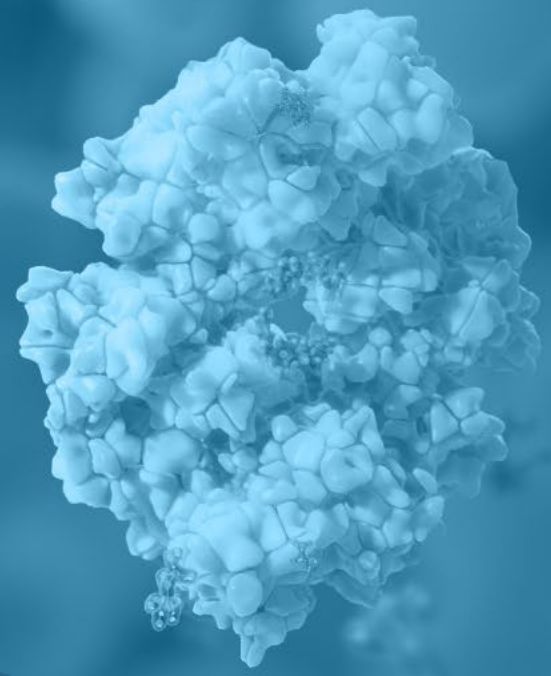
Agios Pharmaceuticals
European Hematology Association (EHA) 2026

13 June 2026



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Forward Looking Statements

This presentation and various remarks we make during this presentation 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), AQVESME™ (mitapivat), tebapivat, AG-236, AG-181 and cevidoplenib; Agios' plans, strategies and expectations for its preclinical, clinical and commercial advancement of its drug development, including mitapivat, tebapivat, AG-236, AG-181 and cevidoplenib; Agios' expectations for the review of marketing applications for mitapivat by regulatory agencies, including the FDA and European Commission; Agios' strategic vision and goals; 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 or cevidoplenib, 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.

Agios Pharmaceuticals – EHA 2026 Agenda

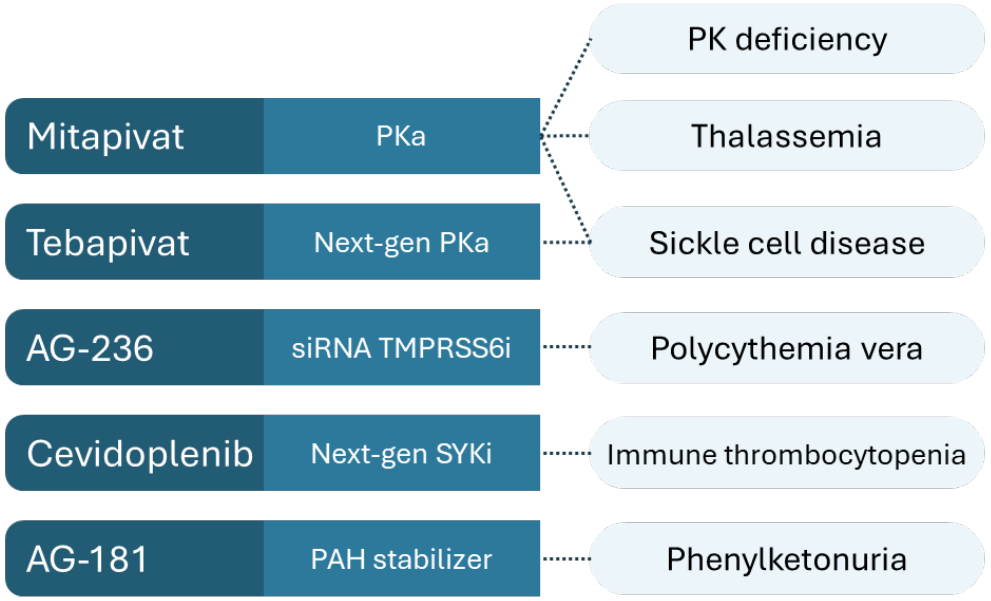
Driving leadership in rare hematology	**Brian Goff**, Chief Executive Officer
Key data presented at EHA 2026	**Sarah Gheuens, M.D., Ph.D.**, Chief Medical Officer and Head of R&D
KOL Fireside Chat – Discussion of RISE UP Phase 3 trial and sickle cell disease treatment landscape	**Ahmar Zaidi, M.D.**, Senior Medical Director, Agios **Alan Anderson, M.D.**, Associate Professor of Pediatrics, USC School of Medicine Greenville, and Director, Comprehensive Lifespan Sickle Cell Disease Program, Prisma Health **Kenneth Ataga, M.D.**, Plough Foundation Endowed Chair in Sickle Cell Disease and Director of the Center for Sickle Cell Disease, University of Tennessee Health Science Center
Unlocking growth in thalassemia and sickle cell disease	**Tsveta Milanova**, Chief Commercial Officer
CEO Closing Remarks and Q&A Session	

Driving leadership in rare hematology

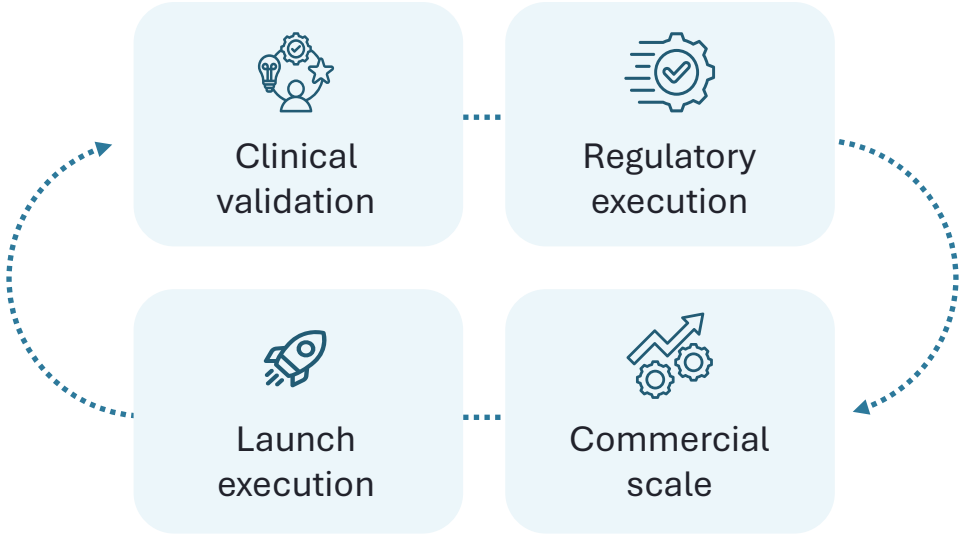
Brian Goff, Chief Executive Officer

Building a broader rare hematology platform with multiple pathways to growth

From single to multi-asset across multiple high-value indications



Proven execution in rare hematology – scaling from biology to commercialization



Catalyst-rich period ahead, with multiple value drivers coming into focus

PKa = pyruvate kinase activator; siRNA = small interfering RNA; TMPRSS6i = transmembrane protease serine 6; SYKi = spleen tyrosine kinase inhibitor; PAH = phenylalanine hydroxylase.

Agios – path to sustainable leadership in rare hematology

Lead and innovate in hemolytic anemias

Mitapivat – foundational PKa – driving near and mid-term value

Tebapivat – next-gen PKa with potential for broader reach in sickle cell disease

Disciplined expansion in adjacent hematology

Diseases with clear biologic drivers, chronic treatment models, overlapping prescriber base

Cevidoplenib – SYKi – ITP

AG-236 – TMPRSS6i – PV

Building from hemolytic anemia leadership into adjacent rare hematology diseases

PKa = pyruvate kinase activator; SYKi = spleen tyrosine kinase inhibitor; ITP = immune thrombocytopenia; TMPRSS6i = transmembrane protease serine 6; PV = polycythemia vera.

Focused disruption across targeted rare disease opportunities

Thalassemia

First medicine and oral approved for broad thalassemia population

AQVESME™/PYRUKYND® approved U.S., EU, KSA, UAE

Sickle Cell Disease

Strong anti-hemolytic profile, addressing key driver of mortality

Mitapivat sNDA filed
Tebapivat Phase 2 data in H2

Immune Thrombocytopenia

Next-gen SYK inhibitor, improved tolerability may drive durability

Cevidoplenib Phase 3 planned for H1 2028

Polycythemia Vera

TMPRSS6i designed for sustained hepcidin control, extended dosing

AG-236 positive Phase 1, plans for further development

Phenylketonuria

Stabilizes PAH enzyme, potential for durable Phe control

AG-181 proof-of-mechanism in PKU patients data H2

EU = European Union; KSA = Kingdom of Saudi Arabia; UAE = United Arab Emirates; sNDA = supplemental new drug application; SYK = spleen tyrosine kinase; TMPRSS6i = transmembrane protease serine 6 inhibitor; PAH = phenylalanine hydroxylase; Phe = phenylalanine; PKU = phenylketonuria.

Phase 1 data demonstrates durable hepcidin control, supports up to every-6-month dosing in polycythemia vera

Treatment need for simple dosing paradigm to ensure durable hepcidin induction and sustained response

Phase 1 HV data unlock advancement to late-stage development

- Clear dose-dependent hepcidin induction
- Sustained activity >57 days across doses observed at interim data cut – underscores stable, long PD effect
- Rapid, sustained biomarker changes (↓ serum iron, ↑ hepcidin) driving consistent Hb reduction
- No dose-limiting toxicities, all AEs Grade 1/2

AG-236 (siRNA TMPRSS6i)

Sustained hepcidin control enables extended dosing interval

Consistent exposure without titration

Early data supports good tolerability

Advancing rapidly to late-stage development following regulatory alignment

Agios data on file.
HV = healthy volunteers; PD = pharmacodynamic; Hb = hemoglobin; AEs = adverse events; siRNA = small interfering RNA; TMPRSS6i = transmembrane protease serine 6 inhibitor.

Key data presented at EHA 2026

Sarah Gheuens, M.D., Ph.D.,
Chief Medical Officer and
Head of R&D

Agios at EHA 2026 – 10 abstract acceptances, with RISE UP Phase 3 selected for plenary session

Redefining the standard of care in thalassemia with AQVESME™ (mitapivat)

- ENERGIZE Phase 3 Open-Label Extension:
  - Long-Term Hemoglobin Improvements in NTD Alpha- or Beta-Thalassemia (Oral; S296)
- Sub-Group Analysis From the ENERGIZE Phase 3 Trial:
  - Efficacy of Mitapivat in Patients With NTD Alpha- or Beta-Thalassemia With Baseline Hemoglobin ≥9.5 g/dL (Poster; PF1281)

Demonstrating clinically meaningful benefit in sickle cell disease with mitapivat

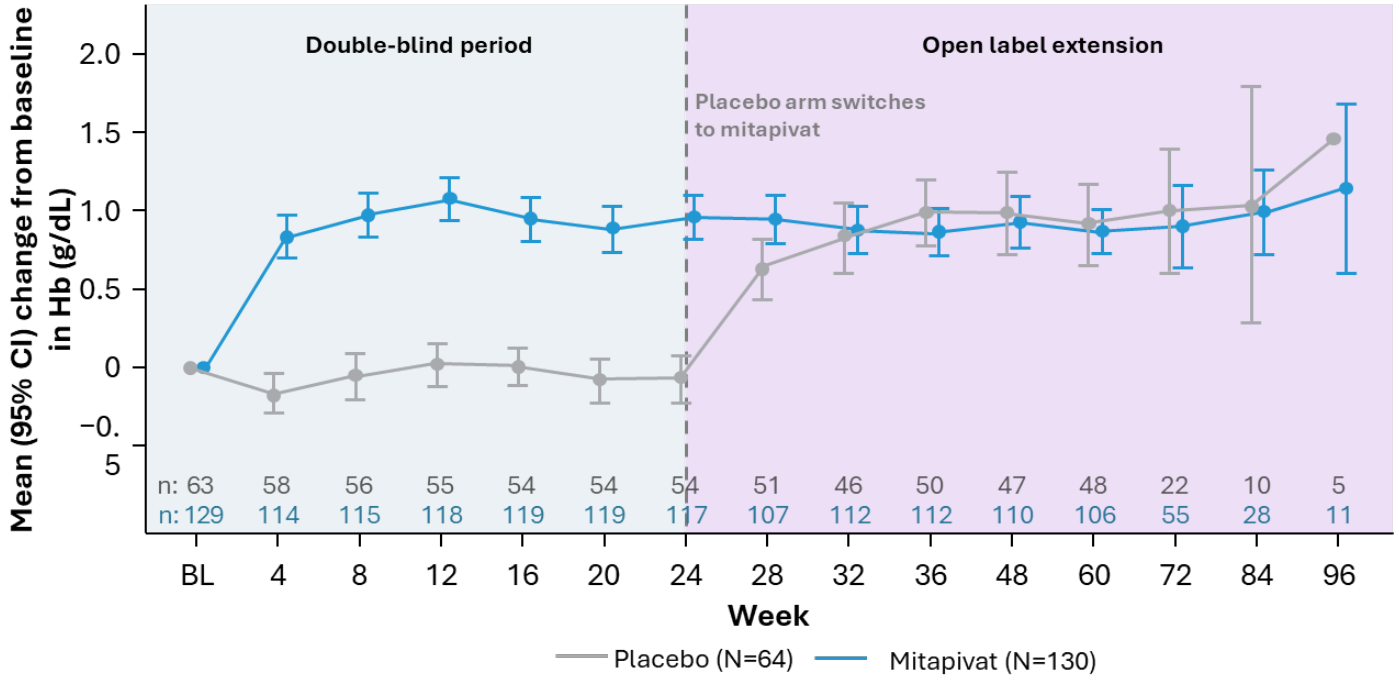
- RISE UP Phase 3 Trial:
  - Efficacy and Safety of Mitapivat in Sickle Cell Disease: Results From the Global, Randomized, Phase 3 RISE UP Trial (Oral Plenary; S102)

Collaborator-led mitapivat trials

- SATISFY Phase 2 Study – Effects of Mitapivat on Iron Burden and Spleen Size in Erythrocyte Membranopathies and Congenital Dyserythropoietic Anemia Type II: 56-Week Follow-Up Results (Oral; S304)

EHA = European Hematology Association; NTD = non-transfusion-dependent.

Long-term mitapivat treatment led to sustained, clinically meaningful hemoglobin improvements in NTD patients

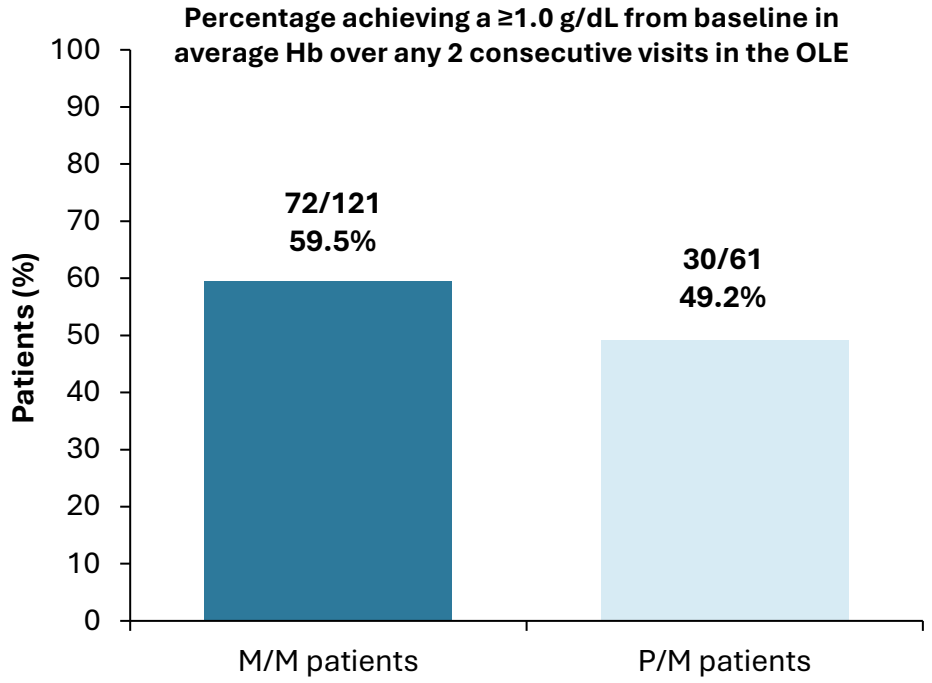


Patients who switched from placebo achieved Hb increases consistent with those observed in the mitapivat arm during the double-blind period

Mean duration of Hb response increased from 17.9 weeks in the double-blind period to 43.6 weeks with continued exposure to mitapivat in the OLE period

BL = baseline; CI = confidence interval; DBP = double-blind period; Hb = hemoglobin; NTD = non-transfusion-dependent; OLE = open-label extension.
Data shown for all patients who received ≥1 dose of study treatment.

Robust proportion of Hb responders in OLE, despite prior treatment in double-blind period



Nearly 60% of patients who continued mitapivat into OLE (M/M) had an increase of ≥1.0 g/dL from baseline in average Hb[1]

Nearly 50% of patients who switched onto mitapivat (P/M) had an increase of ≥1.0 g/dL from baseline in average Hb[1]

~1/3 of prior non-responders achieved an Hb response after continuing mitapivat in the OLE

Among Hb responders (M/M and P/M), mean change from baseline in Hb over the OLE was 1.3 g/dL

Safety profile in open-label extension consistent with earlier data – no new cases of HCI reported

M/M = Patients receiving mitapivat in the double-blind period (DBP) and open-label extension (OLE); P/M = Patients receiving placebo in the DBP and mitapivat in the OLE. 1. OLE Hb response: increase of ≥1.0 g/dL from baseline in average Hb during any 2 consecutive OLE study visits.

Mitapivat demonstrates meaningful benefit in higher baseline Hb (≥9.5 g/dL) NTD thalassemia patients

38.9% of patients treated with mitapivat achieved Hb response[1] vs 0% of patients treated with placebo

1.5 g/dL mean change from baseline in Hb over weeks 12-24 observed in Hb responders[2]

5.1-point improvement in FACIT-Fatigue scores vs placebo +0.8 points[3]

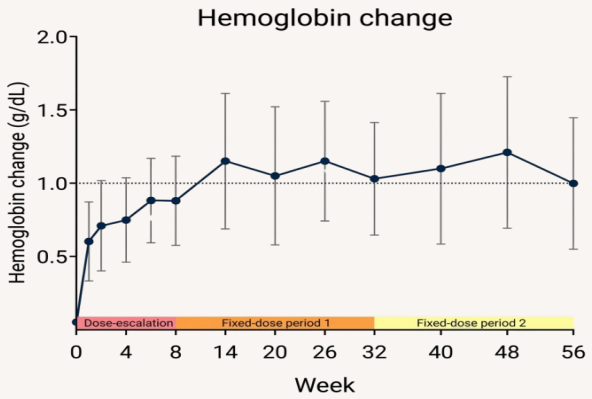
Clinically meaningful Hb response rates, mean increase Hb concentration, and improvement in fatigue

Higher baseline Hb defined as ≥9.5 g/dL.

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; EHA 2026, PF1281.1. Hemoglobin response defined as ≥1 g/dL 2. the change from baseline in average Hb concentration was greater in the mitapivat arm than in the placebo arm as early as Week 4 and through Week 24. (7/18) patients treated with mitapivat achieved Hb response. 3. higher scores indicate improvement in fatigue. NTD = non-transfusion-dependent; Hb = hemoglobin; FACIT = Functional Assessment of Chronic Illness Therapy.

Mitapivat demonstrates sustained benefit across hemoglobin, markers of hemolysis and iron burden

Sustained Hb improvement



48% achieved Hb response[1]
+1.1g/dL mean Hb improvement[2]

Rapid and sustained hemolysis improvements up to Week 56

Reticulocytes ↓**81 x10^9/L**

Bilirubin ↓**1.4 mg/dL**

Suggests direct impact on hemolysis, a key morbidity driver

Reduction in iron burden

- Decrease in ferritin concentrations
- Reduction in liver iron concentration in patients with Hb response

Suggests benefit may extend to downstream effects of chronic hemolysis

Sustained reduction in hemolysis translates into downstream improvements in iron burden, supporting disease-modifying potential

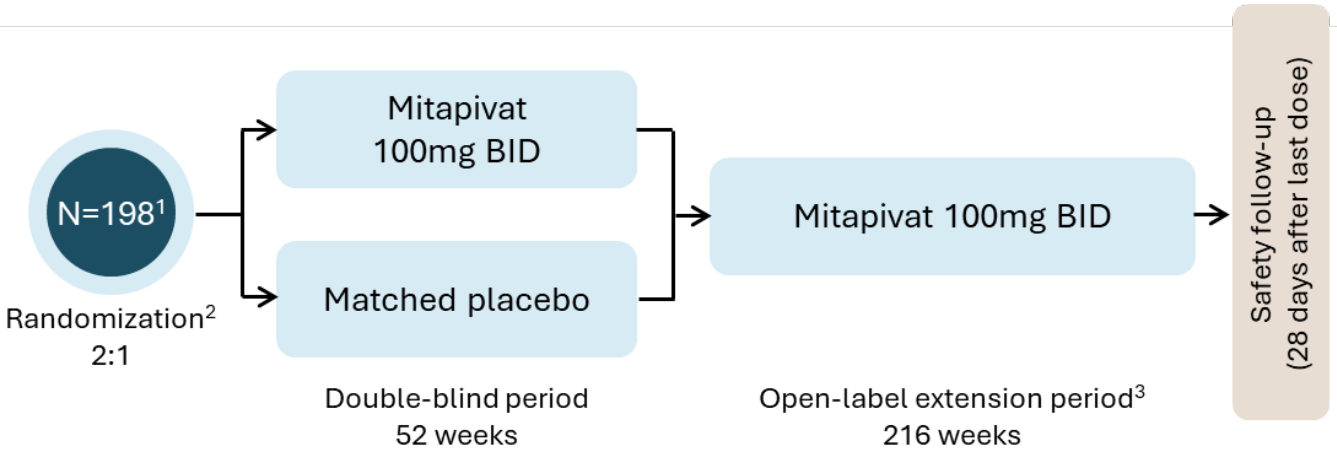
*Error bars represent 95% confidence interval (CI)
1. 48% (10/21) patients achieved hemoglobin (Hb) response, defined as ≥1.0 g/dL, during fixed-dose period sustained at two visits. 2. +1.1 g/dL mean Hb improvement during fixed dose period 2, all with hereditary spherocytosis (95% CI, 0.6 to 1.5, p<0.001).

Phase 3 RISE UP trial – Global, randomized Phase 3 trial

RISE UP

Stratification factors
1. No. of SCPCs in prior 12 months (<5, ≥5)
2. Hydroxyurea use (yes, no)

SCPC inclusion criteria
For inclusion in the study, participants needed to have experienced at least 2 and no more than 10 SCPCs in the 12 months prior to enrollment



Primary endpoints
- Hb response
- Annualized rate of SCPCs

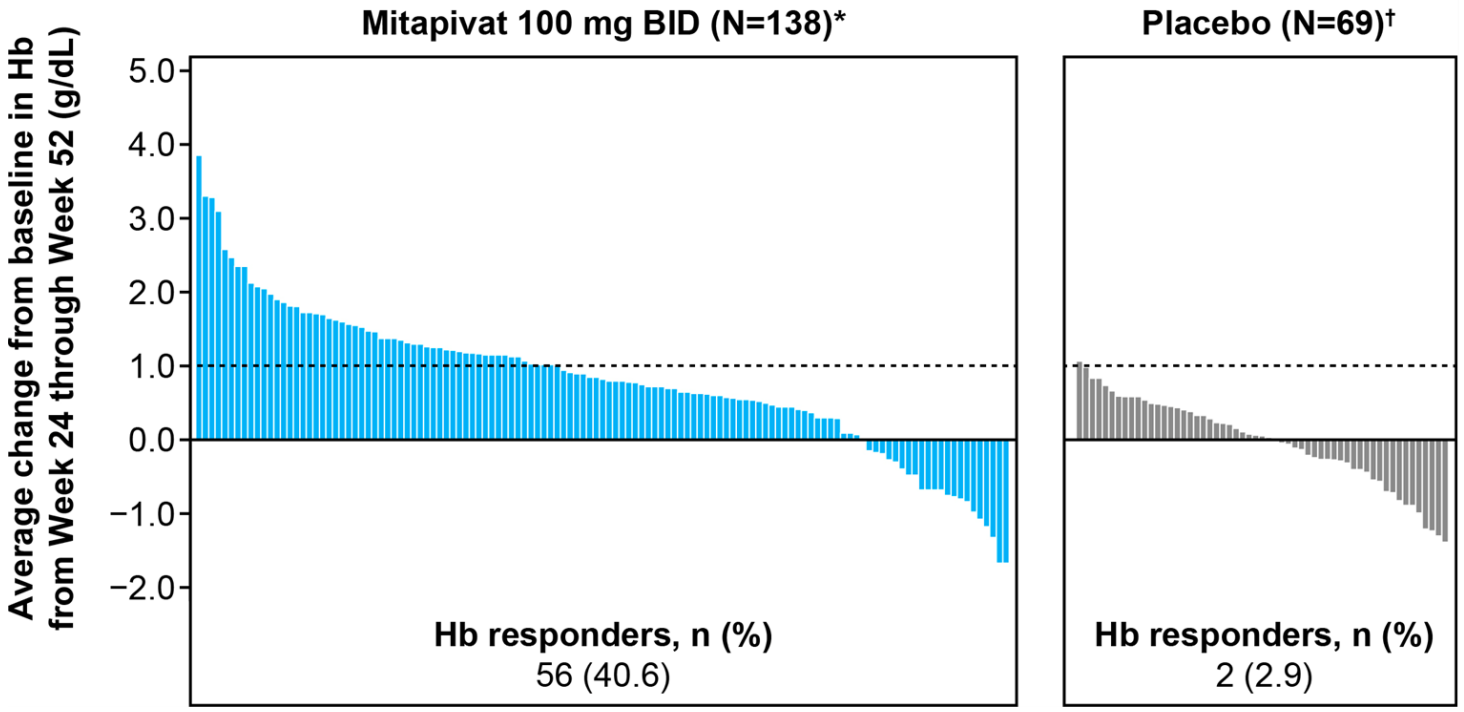
Key secondary endpoints
- Average change in Hb concentration[4]
- Average change in indirect bilirubin[4]
- Average change in PROMIS-Fatigue 13a scores[4]
- Annualized frequency of hospitalizations for SCPC
- Average change in percent reticulocyte[4]

Hb response defined as ≥1.0 g/dL increase in average Hb from Week 24 through Week 52 compared to baseline.
SCPCs defined as: an acute episode of pain that requires medical intervention, acute chest syndrome, priapism, hepatic or splenic sequestration.

1. Actual patients enrolled = 207. 2. Randomization stratified by the number of SCPCs in the prior year (<5, ≥5) and concomitant hydroxyurea use. 3. Patients who complete the double-blind period were eligible to receive mitapivat for an additional 216 weeks in an open-label extension period. 4. Change measured from baseline to average of Week 24 through Week 52.
SCPC = sickle cell pain crisis; Hb = hemoglobin; PROMIS = patient-reported outcome measurement information system.

Mitapivat showed robust, durable anti-hemolytic profile

40.6% hemoglobin response vs 2.9% placebo (p<0.0001); maintained through Week 52



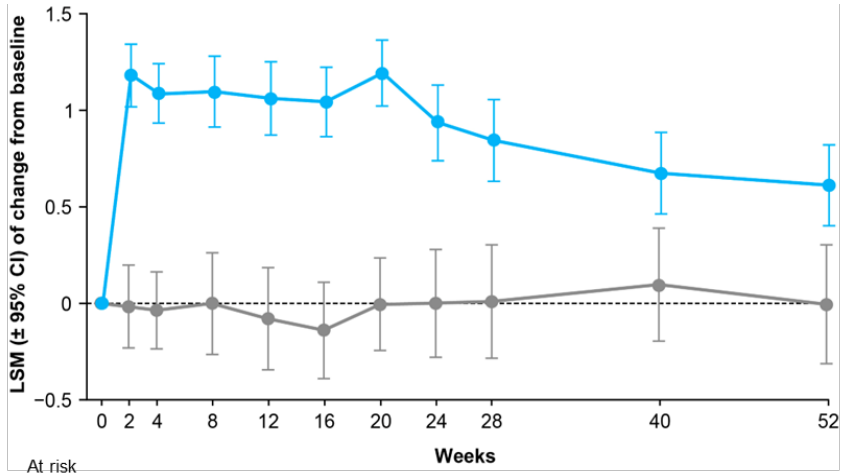
1.6 g/dL mean change from baseline in average Hb concentration from Week 24 to Week 52 among responders in the mitapivat treatment arm

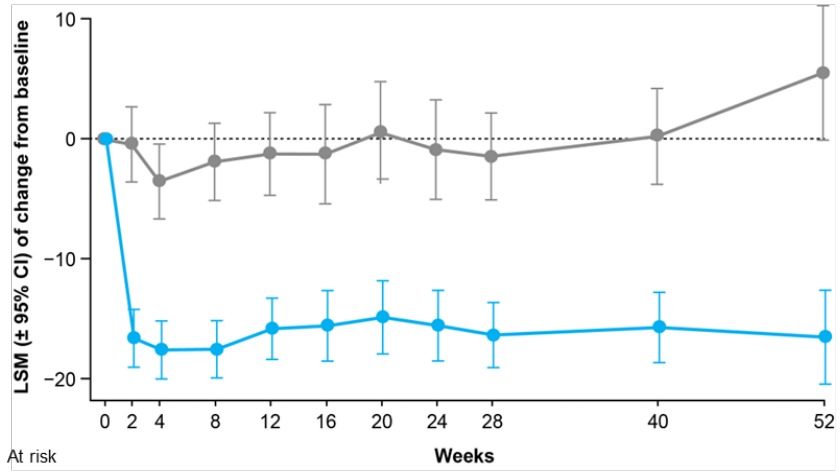
*Includes 13 patients with missing baseline assessments or with <2 assessments from Week 24 through Week 52, not depicted. †Includes 12 patients with missing baseline or with <2 assessments from Week 24 through Week 52, not depicted. BID = twice daily; CI = confidence interval; Hb = hemoglobin; HU = hydroxyurea; SD = standard deviation.

Mitapivat showed robust, durable anti-hemolytic profile

	Mitapivat 100 mg BID N=138	Placebo N=69	LSM difference 2-sided p-value
Hb, LSM (95% CI)*	0.769 (0.599; 0.939)	0.026 (−0.206; 0.258)	0.743 (0.485; 1.001) p<0.0001

	Mitapivat 100 mg BID N=138	Placebo N=69	LSM difference 2-sided p-value
Indirect bilirubin, LSM (95% CI)*	−16.03 (−18.75; −13.31)	0.88 (−2.79; 4.55)	−16.91 (−21.01; −12.81) p<0.0001





Mitapivat 100 mg BID — Placebo

Robust response with durable, multi-endpoint confirmation of anti-hemolytic effect

Hb response defined as ≥1.0 g/dL increase in average Hb from Week 24 through Week 52 compared to baseline.*From Week 24 through Week 52. BID = twice daily; CFB = change from baseline; CI = confidence interval; Hb = hemoglobin; LSM = least squares mean.

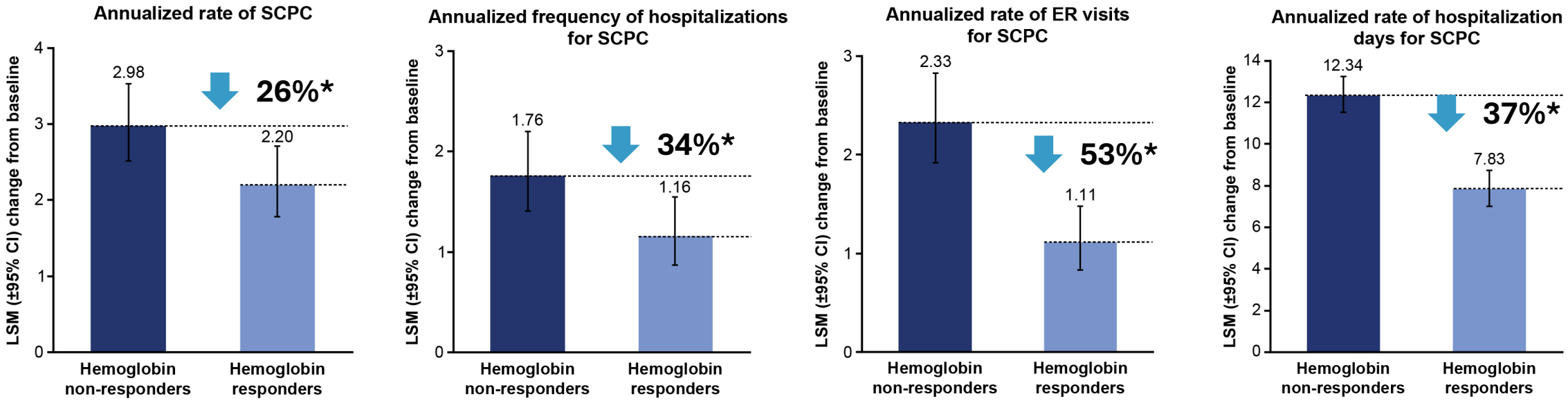
Improvements in hemolysis were accompanied by favorable clinical trends in total trial population

	Mitapivat 100 mg BID N=138	Placebo N=69	Rate reduction or LSM difference (95% CI), mitapivat vs placebo	Two-sided p-value
Primary endpoint				
Hb responders, n (%)	56 (40.6)	2 (2.9)		<0.0001
SCPC, annualized rate (95% CI)	2.62 (2.29; 3.01)	3.05 (2.57; 3.64)	14% (−4.1%; 29.2%)	0.1213
Key secondary endpoints				
PROMIS Fatigue 13a Short Form T-score*	–2.72 (–4.51; –0.93)	–2.25 (–4.60; 0.10)	–0.47 (–2.98; 2.04)	0.7112
Hospitalizations for SCPC, annualized rate (95% CI)	1.56 (1.31; 1.87)	1.81 (1.44; 2.27)	14% (−10.8%; 32.7%)	–†
Percent reticulocytes, LSM (95% CI)*	–2.36 (–3.09; –1.64)	–0.13 (–1.12; 0.85)	−2.2 (−3.3; −1.1)	–†

	Mitapivat 100 mg BID N=138	Placebo N=69	Rate reduction (95% CI), mitapivat vs placebo
Additional endpoints			
ER visits for SCPC, annualized rate (95% CI)	1.79 (1.52 to 2.11)	2.25 (1.83 to 2.77)	21% (0.0 to 36.9%)
Time to first SCPC, weeks, median (95% CI)	23.6 (15.9 to 30.4)	17.3 (12.1 to 32.0)	
Time to second SCPC, weeks, median (95% CI)	52.4 (41.3 to NE)	40.3 (21.1 to NE)	

*Reported as the average change from baseline from Week 24 through Week 52.
†No additional statistical inference was performed beyond PROMIS Fatigue 13a Short Form T-score due to hierarchical testing structure. BID = twice daily; CI = confidence interval; ER = emergency room; Hb = hemoglobin; LSM = least squares mean; NE = not estimable; PROMIS = patient-reported outcomes measurement information system; SCPC = sickle cell pain crises.

Hemoglobin responders[1] saw clinically meaningful improvements on SCPC-related endpoints and fatigue



Clinically meaningful improvement in PROMIS Fatigue T-scores[2]

*95% CI, 6.3 to 42.0%; †95% CI, 34.6 to 65.5%; ‡95% CI, 9.3 to 51.9%. §95% CI, 28.5 to 43.7. ER, emergency room; SCPC, sickle cell pain crises. 1. Hb response defined as ≥1.0 g/dL increase in average Hb from Week 24 through Week 52 compared to baseline. 2. PROMIS Fatigue 13a Short Form T-scores, improvement reflected as reduction in T-scores; Hb responders -5.19 vs placebo -2.55 (minimum within-person change threshold -4.1 points). SCPC = sickle cell pain crises; LSM = least squares mean; CI = confidence interval; ER = emergency room.

Hemoglobin responders[1] reported improvements related to feel and function, including pain and physical function

	Change from baseline (95% CI)		LSM difference of Hb responders vs non-responders
	Hb responder n=56	Hb non-responder n=82	
PROMIS Pain Intensity 1a*	−1.63 (−2.22 to −1.03)	−0.59 (−1.11 to −0.07)	−1.04 (−1.66 to −0.42) ***Favors Hb responders***
ASCQ-Me Pain Impact†	4.09 (2.14 to 6.05)	0.85 (−0.88 to 2.59)	3.24 (1.18 to 5.30) ***Favors Hb responders***
PROMIS Physical Functioning 8a†	5.30 (2.57 to 8.04)	1.79 (−0.60 to 4.19)	3.51 (0.62 to 6.39) ***Favors Hb responders***
ASCQ-Me Sleep Impact†	2.39 (−0.17 to 4.95)	−0.48 (−2.72 to 1.76)	2.87 (0.22 to 5.53) ***Favors Hb responders***
EQ-5D VAS‡	3.27 (−4.21 to 10.74)	−6.77 (−13.27 to −0.27)	10.04 (2.41 to 17.66) ***Favors Hb responders***

1. Hb response defined as ≥1.0 g/dL increase in average Hb from Week 24 through Week 52 compared to baseline. Estimates and 95% CIs are based on the MMRM method which includes change from baseline as the dependent variable, baseline as a covariate, and Hb responder status, visit, Hb responder status-by-visit interaction and randomization stratification factors as fixed factors, and the subject as the random effect. *Scores range from 0 to 10 in which higher scores represent more pain. †Higher T-scores represent healthier status. ‡Scores range from 0 to 100 in which higher scores represent healthier status. ASCQ-Me = adult sickle cell quality of life measurement information system; CI = confidence interval; EQ-5D VAS = EuroQol-5 dimension visual analog scale; Hb = hemoglobin; LSM = least squares mean; MMRM = mixed model for repeated measures; PRO = patient-reported outcomes; PROMIS = patient-reported outcomes measurement information system.

Mitapivat was well tolerated with an acceptable safety profile in patients with sickle cell disease

Patients, n (%)	Mitapivat 100 mg BID N=138	Placebo N=69
Any TEAEs	134 (97.1)	68 (98.6)
Treatment-related TEAEs	42 (30.4)	20 (29.0)
Grade ≥3 TEAEs	46 (33.3)	28 (40.6)
Grade ≥3 treatment-related TEAEs	7 (5.1)	2 (2.9)
Serious TEAEs	28 (20.3)	20 (29.0)
Serious treatment-related TEAEs*	1 (0.7)	0 (0.0)
TEAEs leading to discontinuation of the study drug†	6 (4.3)	2 (2.9)
TEAEs leading to dose reduction	7 (5.1)	0 (0.0)
TEAEs leading to interruption of the study drug	5 (3.6)	1 (1.4)
TEAEs leading to death‡	2 (1.4)	1 (1.4)
Treatment-related TEAEs leading to death	0 (0.0)	0 (0.0)

*Serious treatment-related TEAE in the mitapivat arm: hemolytic anemia (concomitant SCPC and pneumonia).
†Discontinuations: Placebo (2): hemolysis, dengue fever. Mitapivat (6): 5/6 preceded by a dose reduction.
3 not treatment-related: acute polyneuropathy, transaminases increased (acute EBV infection), elevated hepatic enzymes (severe SCPC with multi-organ dysfunction; not preceded by dose reduction).
3 treatment-related: flank pain/pruritis/hepatic cytolysis (LFTs significantly improved near baseline with continued mitapivat use; flank pain primary reason for discontinuation), middle insomnia/fatigue/hot flush/gingivitis, AST increased (multiple concomitant infections and pain events with possible biliary obstruction, negative de-challenge).
‡Deaths: none considered treatment-related. Mitapivat (2): pulmonary hypertension, aspiration. Placebo (1): septic shock.

Mitapivat reduced transfusion burden vs placebo

	Mitapivat 100 mg BID N=138	Placebo N=69
Patients transfused, n (%)	33 (23.9)	28 (40.6)
Relative reduction, mitapivat-placebo	**41.1%**	
Total number of RBC units transfused	97	110
Average RBC units transfused per patient	0.70	1.59
Relative reduction, mitapivat-placebo	**55.9%**	

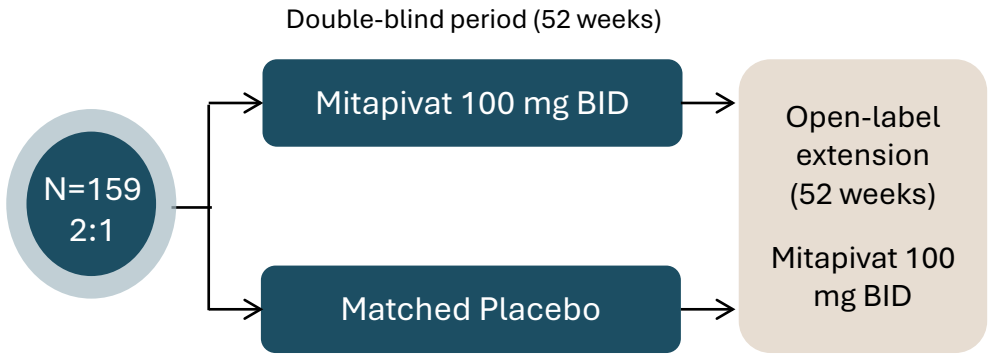
Historical reference: Hydroxyurea[1]

	Hydroxyurea N=152	Placebo N=147
Number of patients transfused	55	79
Percent reduction vs placebo	**30%**	
Number of units of blood transfused	423	670
Percent reduction vs placebo	**37%**	

Clinically meaningful transfusion benefits regardless of concomitant hydroxyurea use

Transfusion benefits were observed in patients regardless of concomitant hydroxyurea. 1. Results from the Multicenter Study of Hydroxyurea in Sickle Cell Anemia, Source: DROXIA USPI. BID = twice daily; RBC = red blood cell.

REIGNITE – Mitapivat confirmatory trial to demonstrate reduction in transfusion burden in sickle cell disease



Primary endpoint: Transfusion-free from Week 4-52

Key secondary endpoints: Number of RBC units transfused from Week 4 through Week 52, average change from baseline in Hb, indirect bilirubin and LDH from week 24 to 52

Exploratory endpoint: annualized rate of SCPC

Confirmatory trial design based on RISE UP Phase 3 trial

- 98% power for primary endpoint and ≥90% power for key secondary endpoints
- Assumed effect size based on the RISE UP Phase 3 trial

Enriched population with measurable clinical burden

- Recent transfusion history (≥1 in prior year)
- Signs/symptoms of hemolysis
- Average Hb 5.5-10.5 g/dL during screening
- Excludes chronic transfusion

Well-designed confirmatory design with assumptions anchored in prior randomized Phase 3 data

BID = twice daily; RBC = red blood cell; LDH = lactate dehydrogenase; SCPC = sickle cell pain crisis; Hb = hemoglobin.

Mitapivat – differentiated anti-hemolytic profile for sickle cell disease based on Phase 2 and Phase 3 RISE UP trial

- **Robust anti-hemolytic profile demonstrated in total trial population**
- **Hemoglobin responders saw clinically meaningful benefits on SCPC-related endpoints, fatigue, and other PROs, including pain**
- **New post-hoc RISE UP analyses show clinically meaningful reduction in transfusion burden**
- **Favorable safety profile in sickle cell disease – mitapivat has generated >1,300 patient-years of data across hemolytic anemias**

SCPC = sickle cell pain crisis; PROs = patient-reported outcomes.

Agios PK activation franchise clinically validated across three hemolytic anemias – >1,300 patient-years data

PK Deficiency

- Phase 3 trials demonstrated Hb improvement and transfusion reduction
- Decreases in iron overload
- Durable reduction in hemolysis
- Long-term safety established

PYRUKYND approved in U.S. and EU

Thalassemia

- Consistent improvements in Hb, hemolysis, and transfusion burden across NTDT and TDT populations
- First medicine to demonstrate PRO benefit in NTDT
- Consistent safety profile observed in long-term data[1]

AQVESME/PYRUKYND approved in U.S., EU, KSA, UAE

Sickle Cell Disease

- Durable improvements in Hb and hemolysis
- Clinically meaningful reduction in transfusion burden
- Hb responders showed clinically meaningful benefit on SCPC-related measures and fatigue
- Favorable safety profile

Mitapivat sNDA filed for accelerated approval in U.S.

Tebapivat, next-gen PKa, Phase 2 data in H2 2026

PK = pyruvate kinase; EU = European Union; Hb = hemoglobin; NTDT = non-transfusion-dependent thalassemia; TDT = transfusion-dependent thalassemia; PRO = patient-reported outcomes; KSA = Kingdom of Saudi Arabia; UAE = United Arab Emirates; SCPC = sickle cell pain crisis; sNDA = supplemental new drug application; PKa = pyruvate kinase activator.

KOL Fireside Chat: RISE UP Phase 3 data presentation at EHA

Panel Moderator

Ahmar Zaidi, M.D.

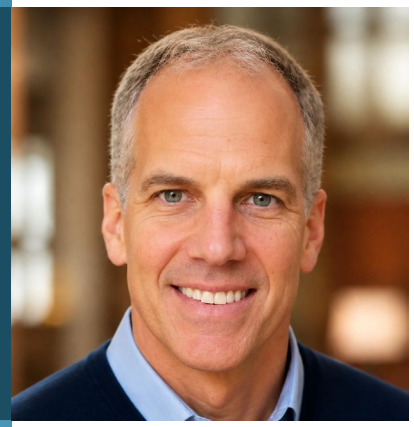
- Senior Medical Director, Agios
- Pediatric Hematologist, formerly at Comprehensive Sickle Cell Center at the Children's Hospital of Michigan

Participating Key Opinion Leader

Kenneth Ataga, M.D.

- Director of the Center for Sickle Cell Disease at the University of Tennessee Health Science Center
- Primary interest in development of drug therapies for sickle cell disease

Participating Key Opinion Leader



Alan Anderson, M.D.

- Associate Professor of Pediatrics at Prisma Health
- Executive Director of Sickle Forward

Unlocking growth in thalassemia and sickle cell disease

Tsveta Milanova, Chief Commercial Officer

Aqvesme™ (mitapivat) tablets 100mg - strong early launch adoption

242 prescriptions[1]
as of March 31st

Key launch considerations for AQVESME in thalassemia

10-12
weeks

REMS onboarding

Average time to treatment initiation 10-12 weeks

Expand prescriber breadth

Broaden prescriber base across community and academic

Evolving Patient Mix

Adoption in NTD patients - ~2/3 of diagnosed adults

1. Reflects prescriptions from REMS certified HCPs, does not include refills; REMS = risk evaluation and mitigation strategy; NTD = non-transfusion-dependent.

EHA 2026 NTD data reinforce AQVESME's durable and broad growth opportunity

Durable benefit with continued treatment

- ~60% of patients remaining on mitapivat in OLE achieved Hb response

Consistent effect after switch to mitapivat

- ~50% of patients switching from placebo achieved Hb response in OLE[1]

Benefit can deepen over time

- ~1/3 of prior non-responders became responders in OLE[2]

Supports earlier use, including NTD patients with higher baseline Hb (≥9.5 g/dL)

Strengthens value proposition in less anemic NTD patients

Supports long-term treatment persistence

New data reinforce durability and broader applicability in NTD, supporting long-term AQVESME growth

1. 49.2% (30/61) of P/M patients had an increase of ≥1g/dL from baseline in average hemoglobin over any 2 consecutive open-label extension study visits. 2. (23/75) patients who did not achieve DBP hemoglobin response with mitapivat were among the M/M patients who met this threshold for hemoglobin improvement in the open-label extension. EHA = European Hematology Association; OLE = open-label extension; Hb = hemoglobin; NTD = non-transfusion-dependent; M/M = Patients receiving mitapivat in the double-blind period and open-label extension; P/M = patients receiving placebo in the double-blind period and mitapivat in the open-label extension.

Compelling sickle cell disease opportunity with mitapivat ~25,000 patients in U.S. treated or in need of new therapy

Potential to expand actively treated with new market entrants

~75,000 diagnosed sickle cell disease patients (≥16 years)

~25,000 actively treated or in need of therapy

Initial launch focused on patients with hemolytic profile

Established anti-hemolytic profile[1]
addressing a core driver of pathophysiology and mortality

Mitapivat has proven clinical profile
potential third indication – >1,300 patient-years of data

Agios platform built to scale in rare hematology
trusted SCD community partner with proven launch execution

1. defined as low or declining hemoglobin levels. SCD = sickle cell disease.

CEO Closing Remarks

Brian Goff, Chief Executive Officer

Agios – consistent recent execution to support leadership in rare hematology

Activated thalassemia market, high-quality launch execution	Patient identification, physician engagement, and execution of novel REMS enabling scalable uptake
Delivered with speed and precision on key regulatory milestones	Rapid progression from topline data to confirmatory trial alignment and sNDA filing
Maintained financial discipline while investing for growth	Operating expense held approximately flat vs prior year with spend aligned to key value inflection points
Expanded pipeline with strategic precision	Cevidoplenib next-generation SYK inhibitor – potential to show improved tolerability and durable PLT responses

REMS = risk evaluation and mitigation strategy; sNDA = supplemental new drug application; SYK = spleen tyrosine kinase; PLT = platelet.

2026 strategic priorities set foundation for long-term growth

Execute high-impact U.S. launch for AQVESME (mitapivat) in thalassemia

Potential to expand PK activation franchise into sickle cell disease

Unlock future value in hematology and other rare disease by advancing early-stage pipeline

Ensure long-term sustainability through disciplined capital allocation and operational efficiency

PK = pyruvate kinase.

Agios – pipeline advancement driving leadership in rare hematology and other rare diseases

Diversified across rare hematology → Beyond hematology

	PK Deficiency	Thalassemia	Sickle Cell Disease	ITP	Polycythemia Vera	PKU
	PYRUKYND	**AQVESME**	**Mitapivat/ Tebapivat**	**Cevidoplenib**	**AG-236**	**AG-181**
Mechanism of action	PK activator	PK activator	PK activator	SYK inhibitor	siRNA TMPRSS6i	PAH stabilizer
Development stage	Approved	Approved	Registration/ Phase 2	Completed Phase 2	Phase 1 HV	Phase 1b in PKU patients
Global indication market value in 2030[1]	Ultra-rare	$1B+	$3B+	$3B+	$1B+	$1B+

Agios' expanding pipeline focused on rare disease markets valued at >$10B by 2030

1. Evaluate Pharma estimated global market value of indication in 2030. PK = pyruvate kinase; SYK = spleen tyrosine kinase; siRNA = small interfering RNA; TMPRSS6i = transmembrane protease serine 6 inhibitor. HV = healthy volunteer; PAH = phenylalanine hydroxylase; PKU = phenylketonuria.

Agios at EHA 2026 – Q&A Session

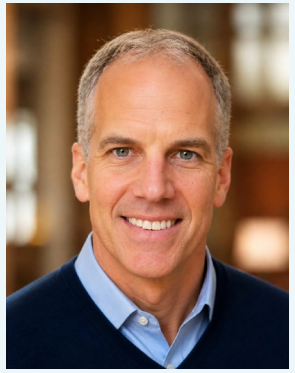
agios

Brian Goff
Chief Executive Officer

Sarah Gheuens, M.D., Ph.D.
Chief Medical Officer, Head of Research & Development

Tsveta Milanova
Chief Commercial Officer

Participating Key Opinion Leaders



Alan Anderson, M.D.
Associate Professor of Pediatrics, USC School of Medicine Greenville, and Director, Comprehensive Lifespan Sickle Cell Disease Program, Prisma Health

Kenneth Ataga, M.D.
Plough Foundation Endowed Chair in Sickle Cell Disease and Director of the Center for Sickle Cell Disease, University of Tennessee Health Science Center

Appendix

Appendix – strong catalyst flow across pipeline in 2026

H1 2026

Sickle Cell Disease
Mitapivat
Pre-sNDA meeting Q1

Lower-Risk MDS
tebapivat
Phase 2b topline data

Clinical activity observed did not meet Agios threshold for further advancement

Polycythemia Vera
AG-236 (TMPRSS6i)
Phase 1 HV topline data

H2 2026

Sickle Cell Disease
tebapivat
Phase 2 topline data

Phenylketonuria
AG-181 (PAH stabilizer)
Phase 1b PoM data

AQVESME (mitapivat) U.S. launch underway in thalassemia

sNDA = supplemental new drug application; MDS = myelodysplastic syndrome; TMPRSS6i = transmembrane protease serine 6 inhibitor; HV = healthy volunteer; PAH = phenylalanine hydroxylase; PoM = proof of mechanism.