

Corporate Presentation

January 2025



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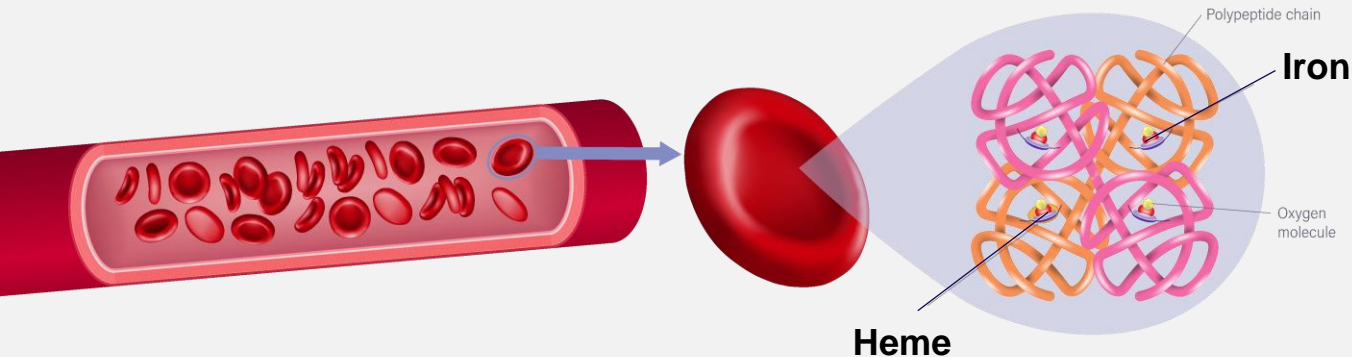
This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, express or implied statements regarding Disc’s expectations with respect to its AURORA Phase 2 and BEACON Phase 2 clinical trials of bitopertin and the results thereof, its Phase 1b/2 clinical trial of DISC-0974 in patients with MF and NDD-CKD patients with anemia, its initial SAD data in its Phase 1 clinical trial of DISC-3405 in healthy volunteers; projected timelines for the initiation and completion of its clinical trials, anticipated timing of release of data, and other clinical activities; and Disc’s belief about operating expenses and that it will have capital to fund Disc well into 2027. The use of words such as, but not limited to, “believe,” “expect,” “estimate,” “project,” “intend,” “future,” “potential,” “continue,” “may,” “might,” “plan,” “will,” “should,” “seek,” “anticipate,” or “could” or the negative of these terms and other similar words or expressions that are intended to identify forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on Disc’s current beliefs, expectations and assumptions regarding the future of Disc’s business, future plans and strategies, clinical results and other future conditions. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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Bitopertin, DISC-0974, and DISC-3405 are investigational agents and are not approved for use as therapies in any jurisdiction worldwide

Targeting Fundamental Pathways of Red Blood Cell Biology using Validated Mechanisms



Iron and heme metabolism are critical pathways in hematology with genetically-validated targets

Key points of intervention across a wide range of diseases

Spectrum of Hematologic Diseases Addressable by Disc Portfolio

Severe Rare (000s)

Moderate Prevalence (100K+)

Widely Prevalent (MMs)

Diamond-Blackfan Anemia

Erythropoietic Porphyrrias

Beta-Thalassemia

Anemia of Myelofibrosis

Myelodysplastic Syndromes

Sickle Cell Disease

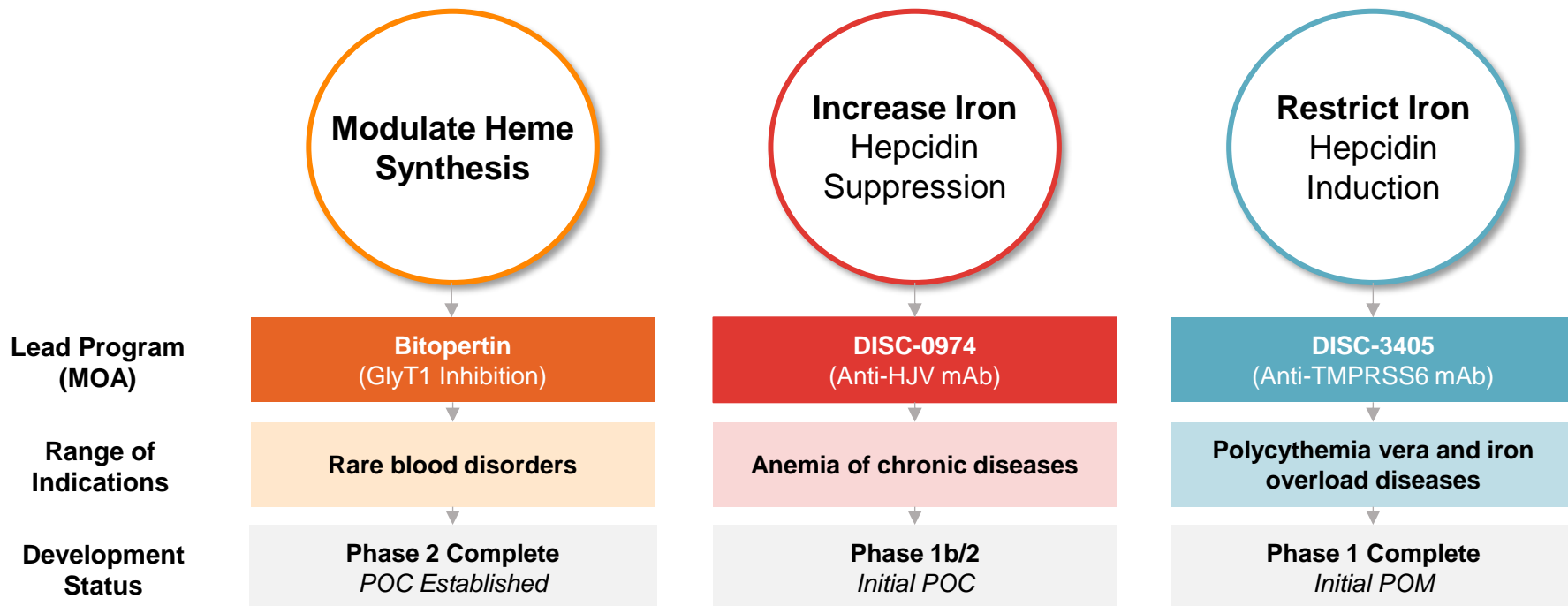
Polycythemia Vera

Hereditary Hemochromatosis

IBD Anemia

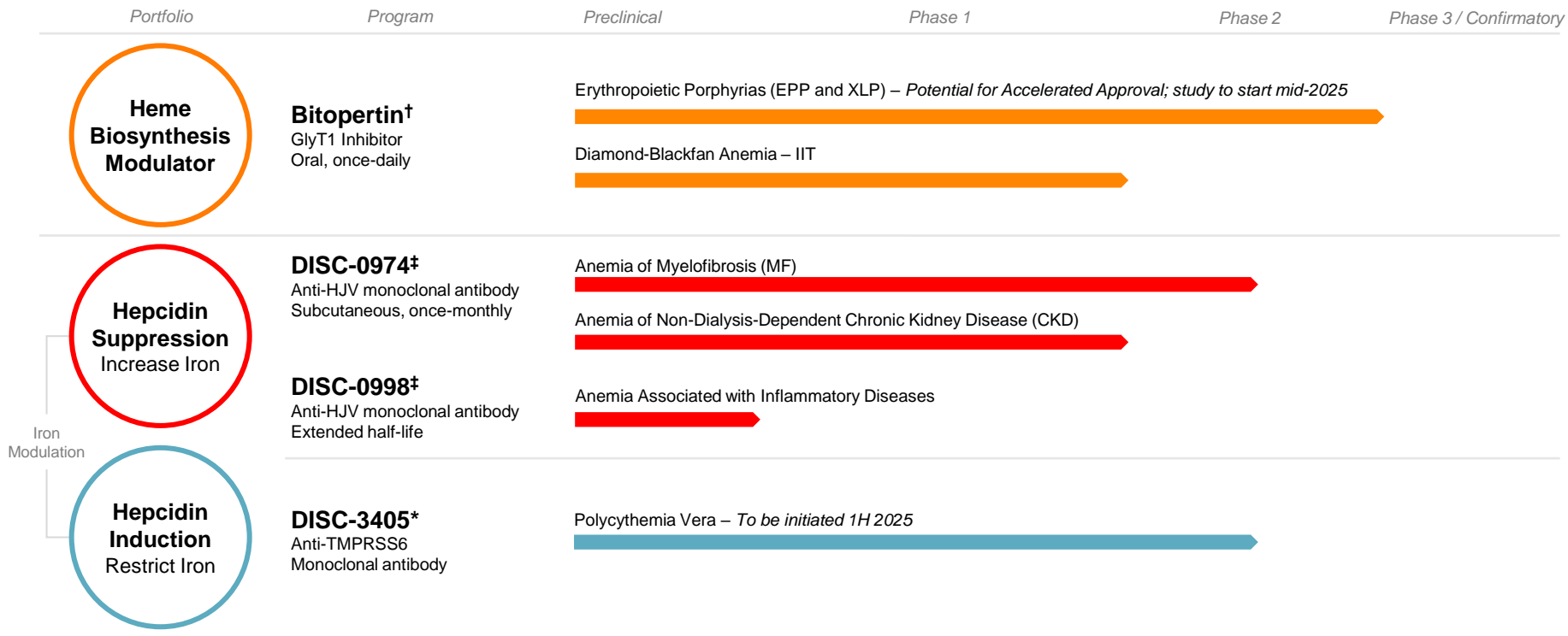
CKD Anemia

By Targeting Heme and Iron, Disc's Portfolio Can Address a Wide Range of Hematologic Disorders



Disc's Hematology-Focused Pipeline




Multiple programs in development with pipeline-in-a-product potential




† Bitopertin in-licensed from Roche; ‡ DISC-0974 and DISC-0998 in-licensed from AbbVie; *DISC-3405 in-licensed from Mabwell (formerly MWTX-003); **IIT with the NIH

Projected Upcoming Milestones and Events

Multiple additional data catalysts anticipated in the next 18 months

Program	Indication	H1 2025	H2 2025	2026
 <p>Bitopertin Heme Synthesis Modulator</p>	Erythropoietic Porphyrias (EPP and XLP)	<ul style="list-style-type: none"> Feedback from Type C Meeting with FDA APOLLO Study Initiation 	<i>Guidance on NDA timing to be provided in Q1 2025</i>	
	Diamond-Blackfan Anemia (DBA)	<ul style="list-style-type: none"> IIT ongoing → 		
 <p>DISC-0974 Hepcidin Suppression</p>	Anemia of Myelofibrosis (MF)		<ul style="list-style-type: none"> Initial Phase 2 Data 	<ul style="list-style-type: none"> Final Phase 2 Data
	Anemia of Chronic Kidney Disease (CKD)		<ul style="list-style-type: none"> Phase 1b Multiple-Dose Data 	<ul style="list-style-type: none"> Phase 2a Initiation Initial Phase 2a Data
 <p>DISC-3405 Hepcidin Induction</p>	Polycythemia Vera	<ul style="list-style-type: none"> Phase 2a Study Initiation 		<ul style="list-style-type: none"> Phase 2a Data

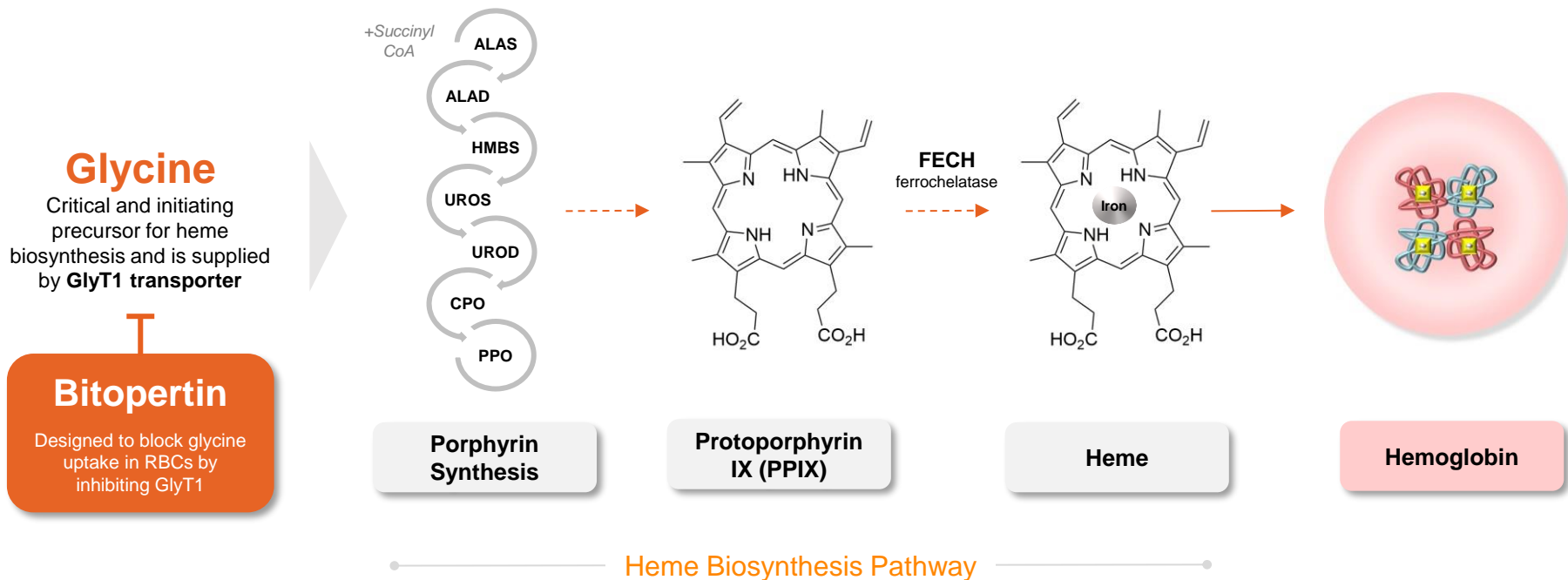
Supported by a strong cash position with runway well into 2027



Bitopertin
GlyT1 Inhibitor
Heme Biosynthesis
Modulation

Bitopertin: Investigational Oral, Selective GlyT1 Inhibitor

In multiple clinical trials by Roche, bitopertin was observed to modulate heme biosynthesis by blocking uptake of glycine in erythrocytes



Erythropoietic Protoporphyrria (EPP)

Rare, debilitating and lifelong condition characterized by extreme pain and damage to skin caused by light

Genetic condition caused by defective heme biosynthesis – deficient enzyme ferrochelatase

- Lifelong and presents in early childhood
- Caused by accumulation of toxic metabolite PPIX
- XLP, mechanistically similar disease, also PPIX-related

Debilitating and potentially life-threatening

- Skin: severe, disabling pain attacks (days), edema, burning
- Hepatobiliary disease: gallstones, liver dysfunction or failure
- Psychosocial well-being (fear, anxiety) and development

No cure or disease-modifying treatment

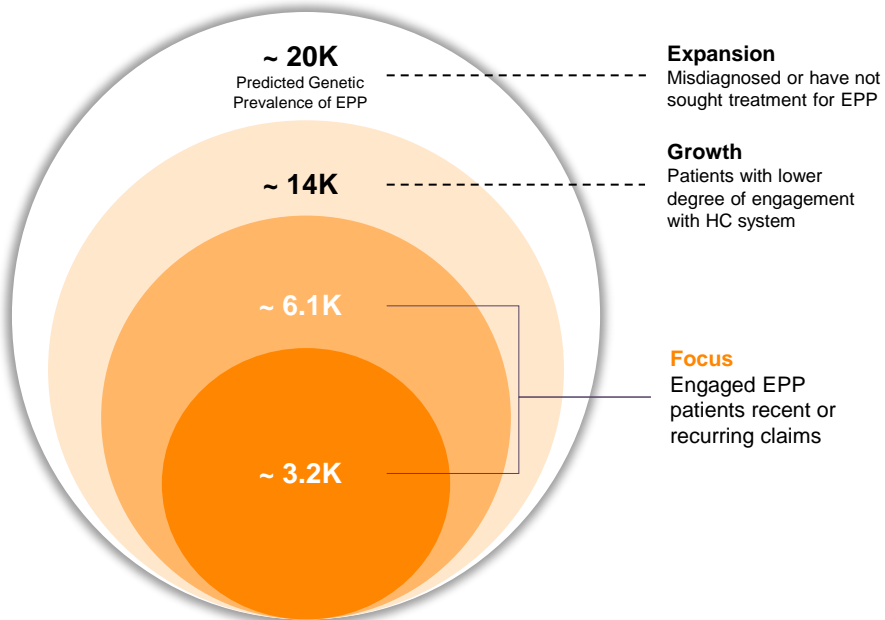
- Avoid sun / light, protective clothing, window tinting, Zn/Ti Oxide
- One FDA-approved agent, afamelanotide, a surgically-implanted tanning agent



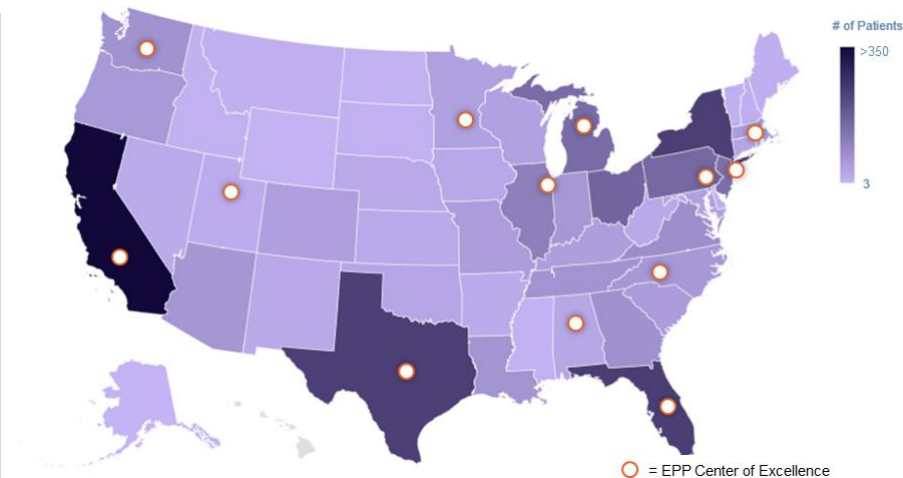
Image sources: Daily Mail Australia (2019); FDA Scientific Workshop on EPP (2016); Buonuomo et al. (2014) Arch Dis Child

The EPP patient population is well-defined and relatively concentrated, enabling an efficient commercial model

Prevalence of EPP Patients in the US

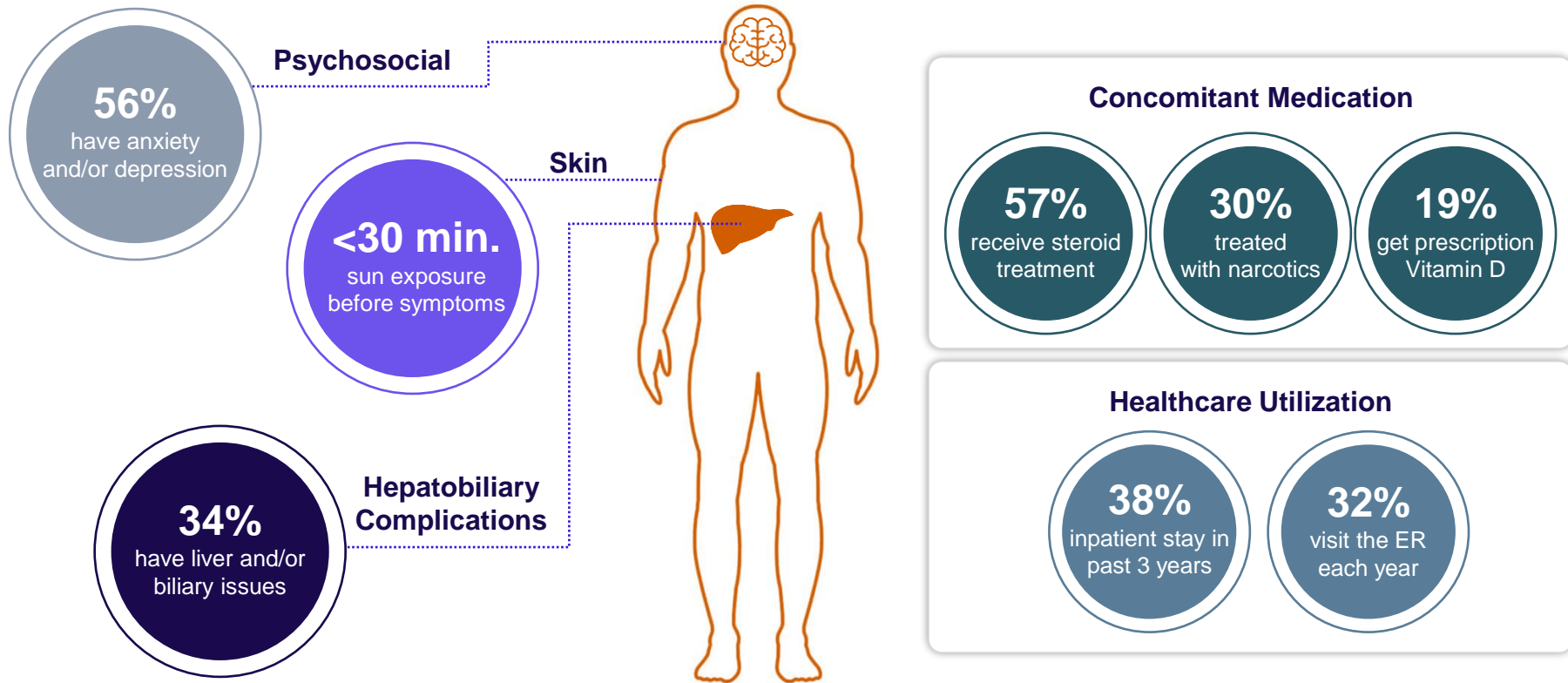


Distribution of EPP Treatment Centers



Concentration of patients in key accounts enables a targeted and efficient field force

Real world data confirm EPP has a significant impact on patients' lives across multiple domains

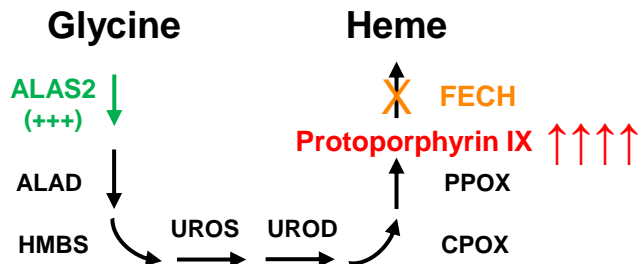


Bitopertin: Potential Disease-Modifying Treatment

Designed to reduce disease-causing PPIX by limiting uptake of glycine into developing erythrocytes

EPP and XLP Patients

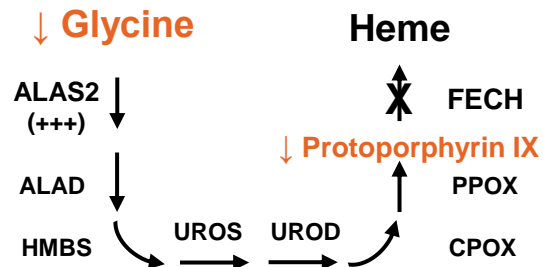
High PPIX Levels



Mutations result in reservoir of pathologically high levels of PPIX

Bitopertin Treatment

Designed to Reduce PPIX Levels



Potential first disease-modifying treatment for EPP and XLP

EPP Development Program

BEACON, AURORA, and HELIOS Studies

BEACON

- > **EPP and XLP**; N = 26 (22 adults, 4 adolescents)
- > **Australia**
- > **Open-label, randomized, 24-week study**

AURORA

- > **EPP**; N = 75 adults
- > **United States**
- > **Double-blind, randomized, placebo-controlled, 17-week study**

HELIOS

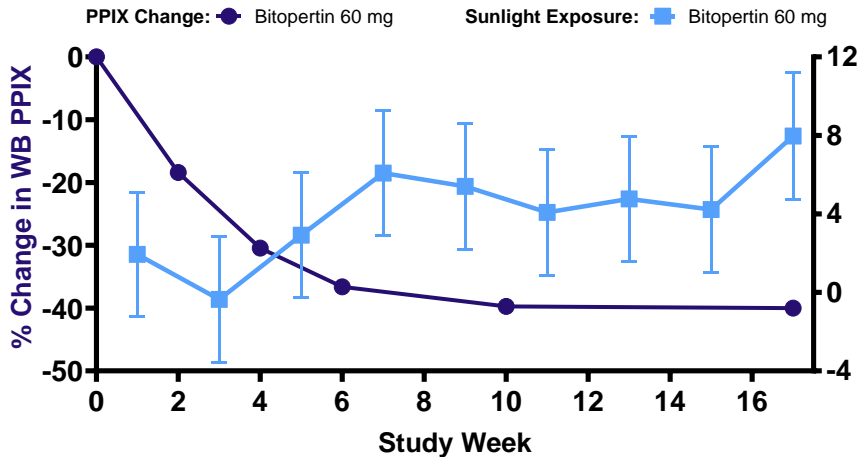
- > **EPP and XLP**; adults and adolescents
- > **US and Australia**
- > **Open-label extension study** (>80% rollover from BEACON and AURORA)

Trial endpoints: Changes in blood PPIX levels, time in daylight without pain, light tolerance, time to prodromal symptom (TTPS), QOL, safety / tolerability

Data availability: Received positive feedback from EOP2 meeting with the FDA opening up a potential pathway to accelerated approval; Update on FDA Type C meeting on confirmatory trial design to be provided in Q1 2025; APOLLO study to begin by mid-2025

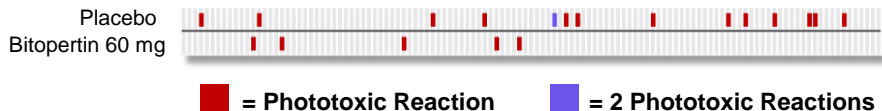
Summary of AURORA Results

Bitopertin 60 mg



Pain-Free Sunlight Exposure (hr)

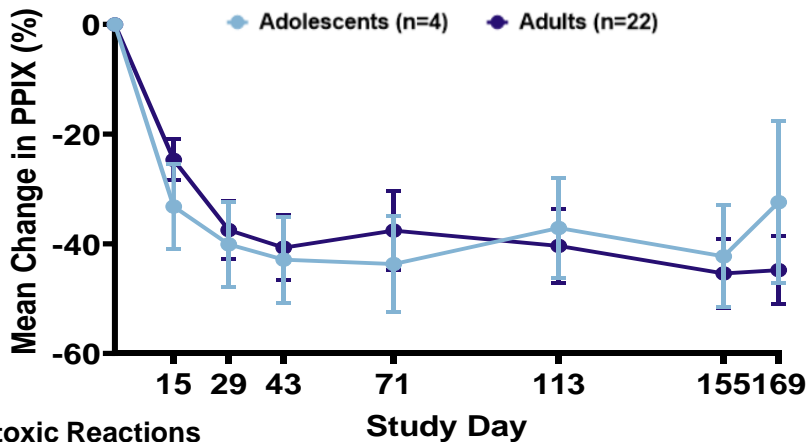
Phototoxic Reactions



- ⊙ **Significant reductions in PPIX**
40% reduction vs baseline
- ⊙ **Time-dependent, improvements in pain-free time in sunlight vs placebo**
2x more light time vs baseline
- ⊙ **Significant 75% reduction in rate of phototoxic reactions vs placebo**
Phototoxic reaction-free in last 60 days
- ⊙ **Significant improvement in PGIC vs placebo**
86% reported EPP was 'much better'
- ⊙ **Clear association between PPIX reduction and clinical endpoints**

Summary of BEACON Results

Consistent with AURORA data, with similar results in adults and adolescents



Phototoxic Reactions



Tertiles of PPIX Change



Light Tolerance Measure (Mean ± SD)	Tertile 3 (-43% to 25%)	Tertile 2 (-53% to -43%)	Tertile 1 (-98% to -53%)
Cumulative total time in sunlight without pain (hr)	145.6 ± 99.5	190.5 ± 111.6	262.1 ± 160.6
Average time in sunlight without pain (hr)	0.86 ± 0.6	1.1 ± 0.7	1.6 ± 1.0
Change from baseline in time to prodrome (min)	85.3 ± 78.8	96.0 ± 109.0	165.5 ± 128.8

⦿ PPIX reduction associated with **significant reduction in phototoxic reactions** from baseline

⦿ PPIX reduction associated with **significant improvement in pain-free time in sunlight**

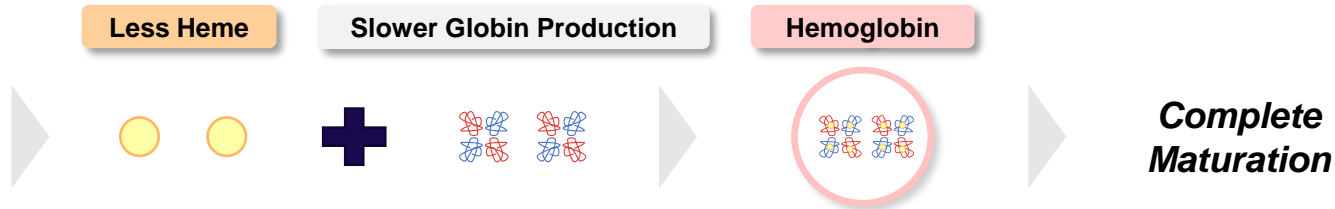
Key Takeaways from Positive End of Phase 2 Meeting

- **Alignment with the FDA on all proposed study parameters**
- **FDA acknowledged that EPP is a serious and potentially life-threatening disease with significant unmet medical need**
- **FDA agreed that average monthly time in sunlight without pain at the end of a 6-month treatment period can be used as a primary endpoint**
- **PPIX reduction may be sufficient as a surrogate endpoint supportive of accelerated approval**
- **Proceeding to APOLLO, a 6-month study with a 60 mg dose of bitopertin in EPP and XLP patients ages 12+, by mid-2025**

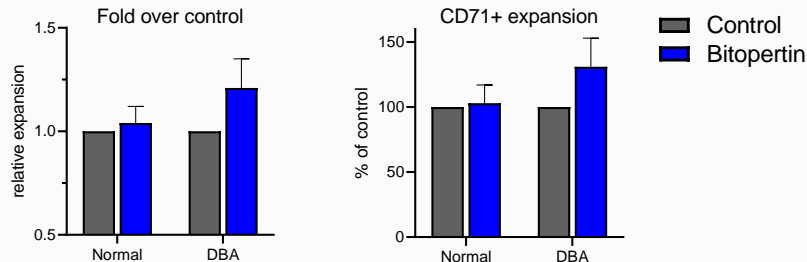
Bitopertin in Diamond Blackfan Anemia

By slowing the influx of glycine, bitopertin lowers heme production, reducing the amount of excess heme and preventing cell death

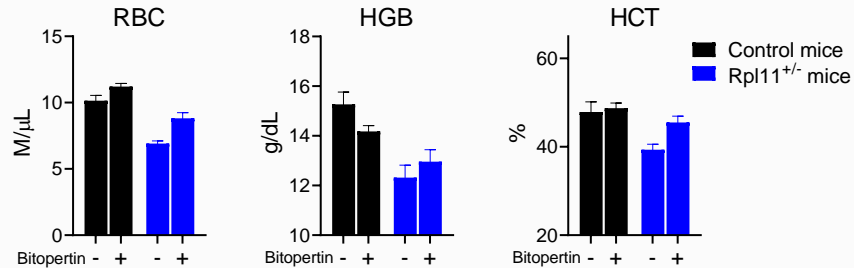
Glycine
Critical and initiating precursor for heme biosynthesis and is supplied by **GlyT1 transporter**



Primary human marrow in erythroid differentiation cultures treated with 10 ng/ml bitopertin for 7 days



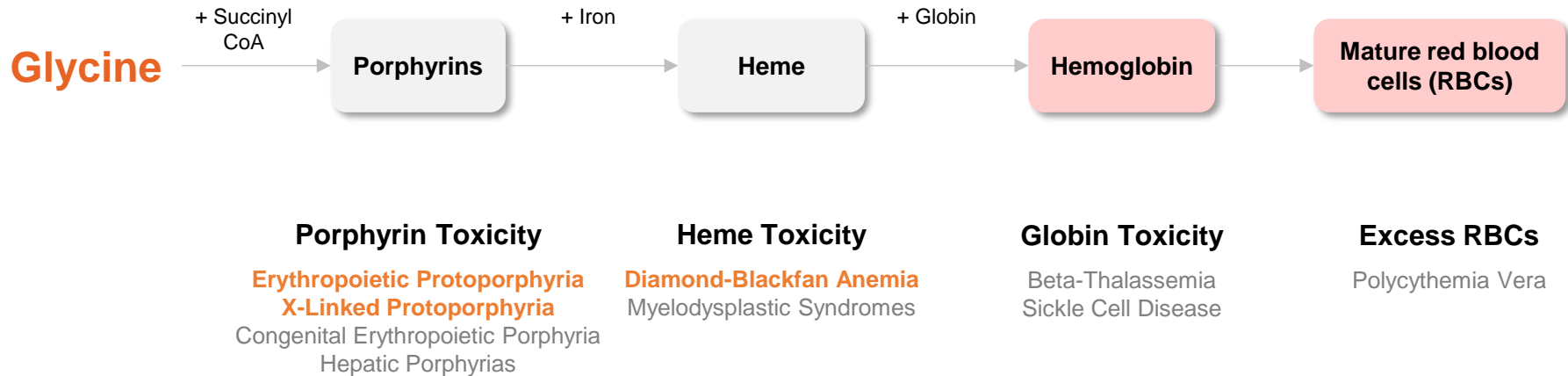
Rpl11 haploinsufficient mice were treated with 100 ppm bitopertin in chow (20 mg/kg/d) for 8 weeks



Phase 2 trial is underway – sponsored by NIH

Multiple Additional Potential Applications of Bitopertin

Inhibiting heme synthesis with bitopertin has potential to address a wide range of hematologic diseases





Hepcidin Modulation

Iron Homeostasis

Iron is Fundamental to RBC Biology

Hepcidin is a regulatory hormone that plays a central role in iron metabolism and homeostasis

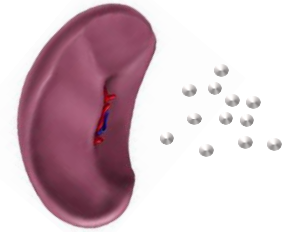
Induced by Inflammation

Hepcidin

Gatekeeper Function: Blocks iron absorption and recycling



GI Tract
Iron Intake



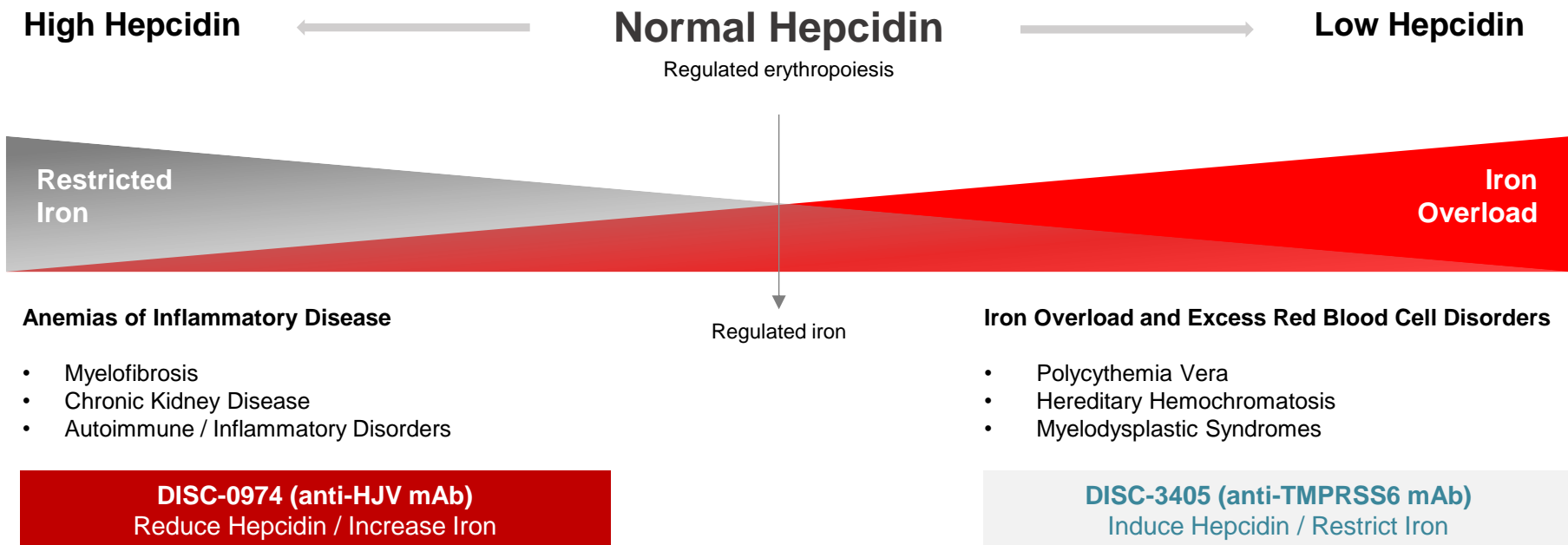
Spleen
Iron Storage



**RBC Production in
Bone Marrow**

Hepcidin is a Therapeutic Target for Diseases

Dysregulated hepcidin drives a wide range of hematologic diseases

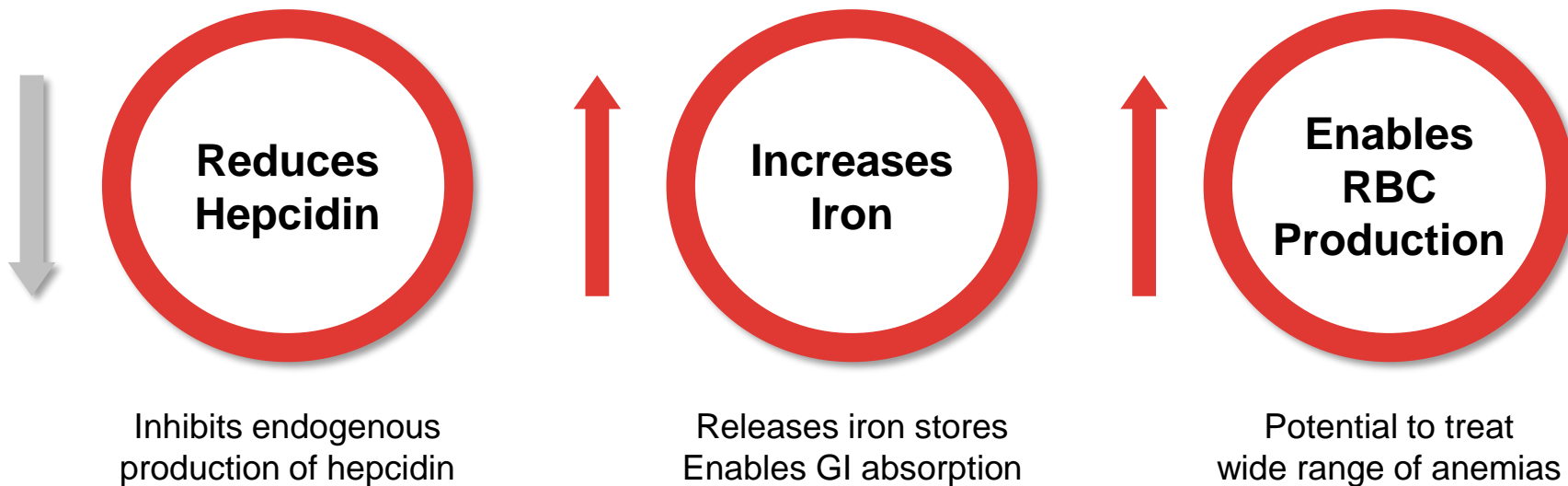




DISC-0974
Anti-HJV mAb
Hepcidin Suppression

DISC-0974: Novel Anti-HJV mAb to Suppress Hepcidin

Designed to enhance iron availability to address a wide range of hematologic disorders



Significant Opportunity in Anemia of Inflammation

Numerous chronic diseases associated with anemia from high hepcidin

Anemia Types	US Prev.	Est. % Anemic
Myelofibrosis (MF)	16-18.5K	87%
Chronic Kidney Disease (CKD)	37 MM	17-50%
Inflammatory Bowel Disease	1.6 MM	25-35%
Anemia of Cancer	17 MM	35-80%
Systemic Lupus Erythematosus	210K	50%

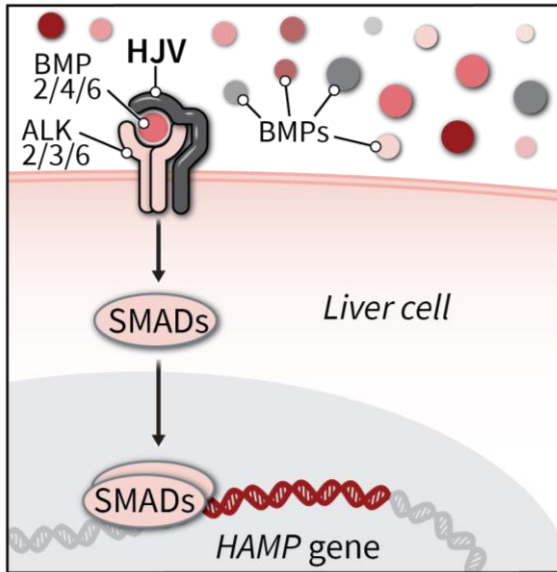
- **Anemia of inflammation** is the 2nd most common form of anemia
- **Estimated 40% of all anemias** are driven by or have an inflammatory component
- **Hepcidin is up-regulated** and correlates with anemia, driven by inflammation

Bold = ongoing Disc trial

Sources: Weiss (2019); Maccio (2014); Tefferi (2012); Lupus Foundation; Stauffer (2014); Filmann (2014); Koutroubakis (2015); Crohn's and Colitis Foundation

Targeting Hemojuvelin (HJV) to Suppress Hepcidin

Critical and specific target for hepcidin expression



Inhibiting Hemojuvelin (HJV) Prevents Hepcidin Expression and Increases Iron

- **Genetic validation** in patients with Juvenile Hemochromatosis (lower hepcidin and elevated iron levels)
 - Loss-of-function mutations in HJV are phenotypically indistinguishable from mutations in *HAMP* (hepcidin) gene
- **Functionally specific** to hepcidin / iron
- **Tissue specific** expression primarily in the liver

Phase 1 SAD Trial in Healthy Volunteers

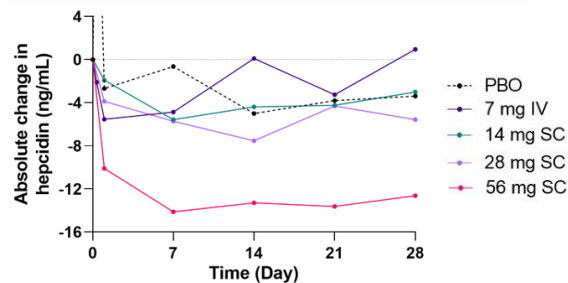
Established proof-of-mechanism based on hepcidin and iron parameters

Trial Design

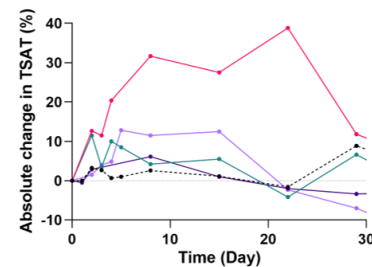
- Single-ascending dose in ≥ 32 healthy volunteers
- Key outcome measures:
 - Safety and PK
 - Hepcidin level, serum iron level, % TSAT
- Dose escalation until TSAT > 40% for at least 2 weeks
- Dose levels: 7 mg dose (IV); 14, 28 and 56 mg doses (SC)

Safety profile was consistent with selective target biology and preclinical studies; no serious or AEs > Grade 1

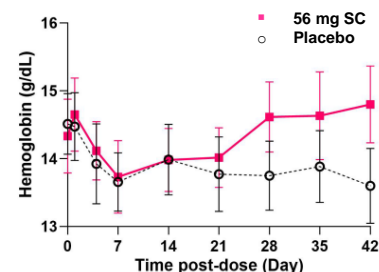
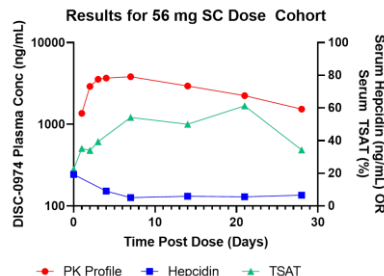
↓ DISC-0974 Reduced Hepcidin Production



↑ DISC-0974 Increased TSAT

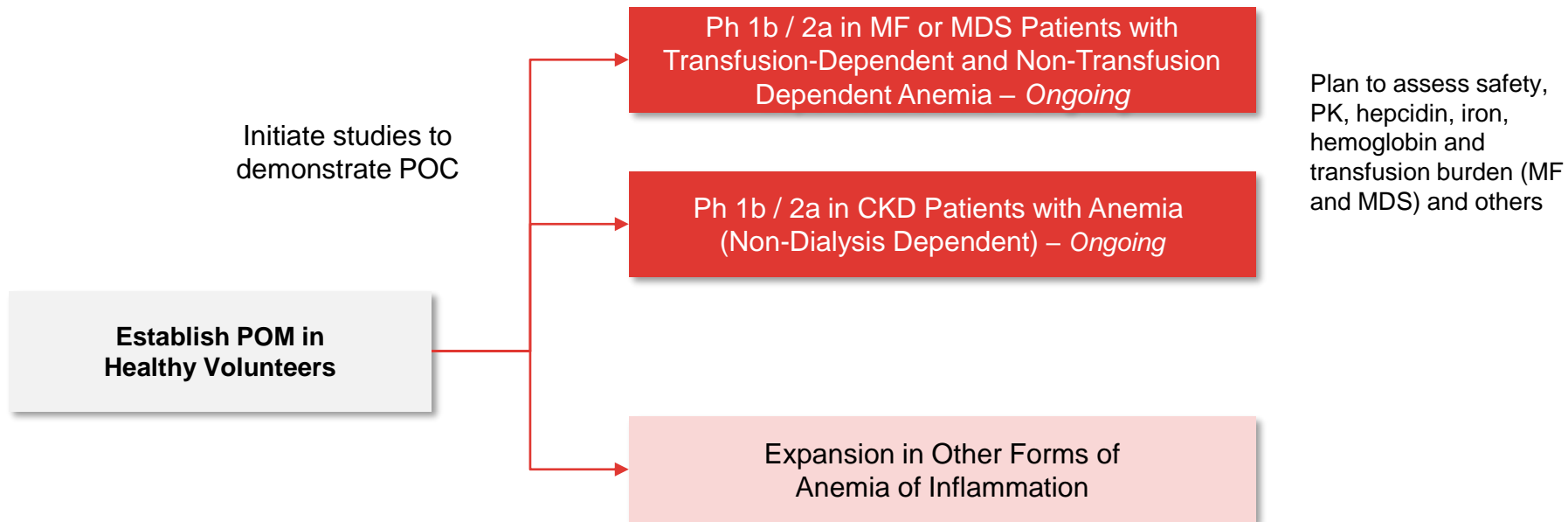


56 mg pharmacodynamic activity improved key clinical parameters (> 1g/dL Hgb)



DISC-0974 Development Strategy

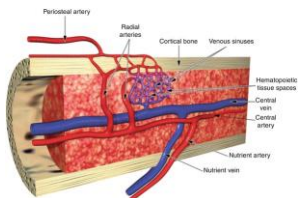
Aim to demonstrate POC in anemia of MF and CKD



Hepcidin is a Key Driver of Myelofibrosis (MF) Anemia

Anemia is severe and prevalent in MF and can limit treatment

Anemia of MF



> Est. # Patients

- 25,000 patients (US)
- ~87% are anemic; severe and require transfusion

> Etiology of Anemia

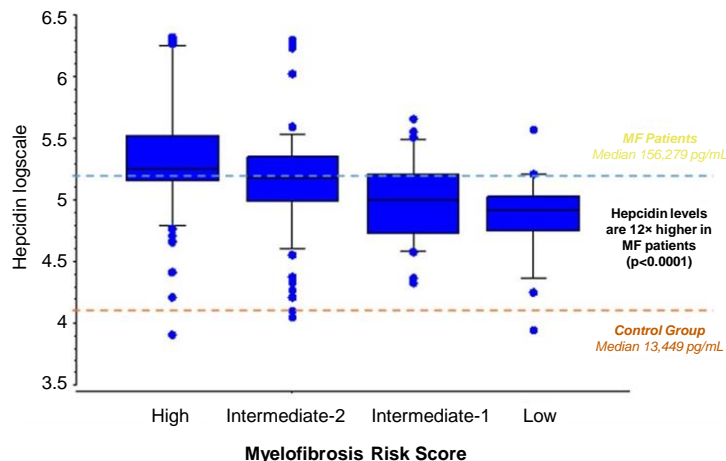
- High hepcidin from inflammation
- JAK inhibitors worsen anemia; loss of marrow function

> Unmet Medical Needs

- Severe and difficult to treat; high transfusion burden
- No approved or effective anemia therapy
- Anemia limits optimal JAK inhibitor treatment

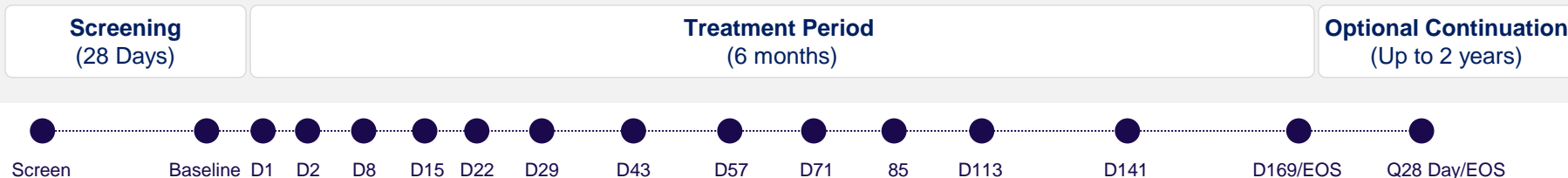
Hepcidin Levels are Elevated in MF

~ 12× higher than control and associated with severity of anemia and transfusion burden



DISC-0974 Anemia of MF Phase 1b

Study overview – enrollment data as of October 17, 2024



	14 mg	28 mg	50 mg	75 mg	100 mg	Overall
Treated, N	1	7	12	9	6	35
Completed study, N (%)	1 (100)	6 (86)	12 (100)	8 (89)	5 (83)	32 (91)
Subjects with early withdrawal (N)*	0	1	0	0	1	2
Participating in continuation, N (%)	0	2 (29)	10 (83)	8 (89)	4 (67)	24 (69)
Concomitant JAK inhibitor, N (%)	0	4 (57)	6 (50)	2 (22)	1 (17)	13 (37)
Baseline hepcidin, median (min, max), ng/mL	48	93 (21, 171)	90 (9, 156)	47 (23, 188)	64 (12, 375)	69 (9, 375)
Baseline hemoglobin, median (min, max), g/dL	8.2	8.4 (6.7, 9.3)	8.4 (5.5, 10)	8.8 (6.7, 9.9)	8.3 (5.5, 9)	8.4 (5.5, 10)

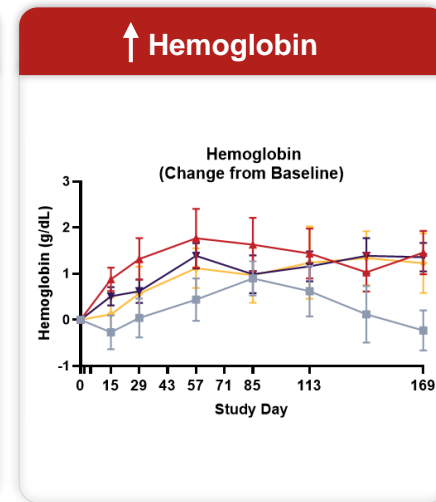
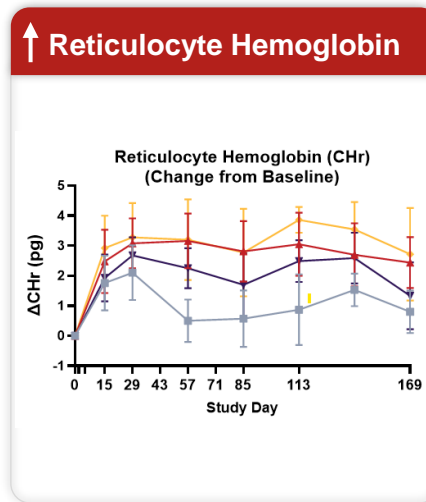
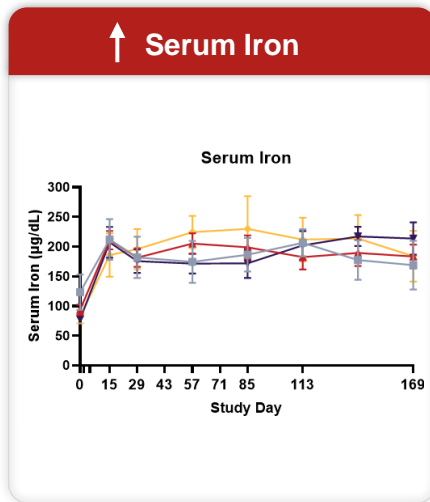
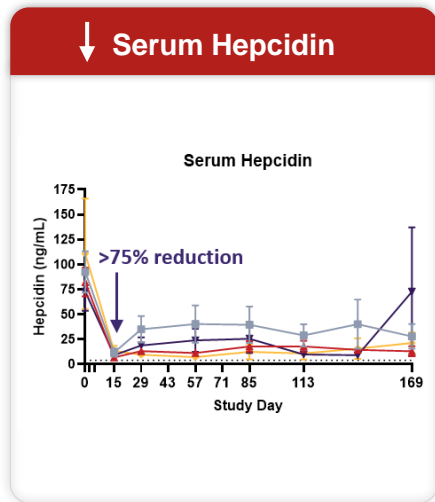
Study Endpoints

Primary: Safety and tolerability; **Secondary:** Hematologic response, pharmacodynamic markers of mechanism engagement

DISC-0974 Anemia of MF Phase 1b Results

Pharmacodynamics

- DISC-0974 demonstrated consistent decreases in hepcidin and increases in serum iron across patients
- Iron mobilization translated to increased reticulocyte hemoglobin and hemoglobin from baseline

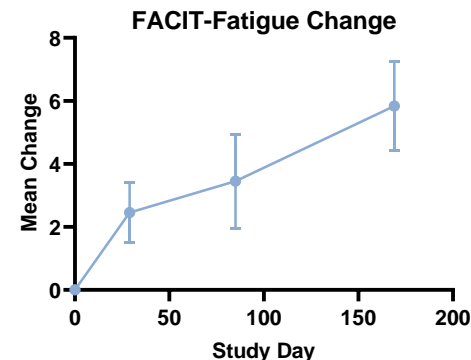
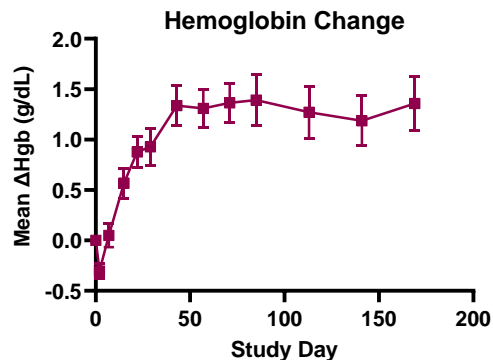
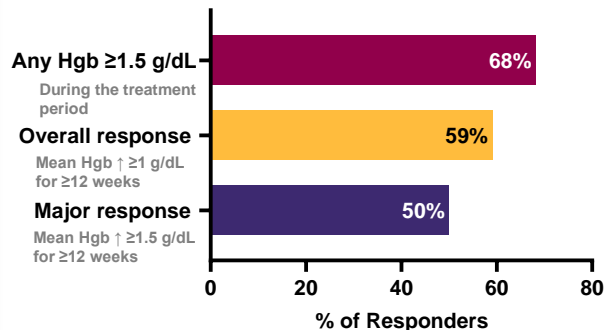


■ 28 mg ■ 50 mg ■ 75 mg ■ 100 mg

DISC-0974 Anemia of MF Phase 1b Results

Hematologic response: nTD participants* (n=22)

68% of nTD¹ participants achieved a Hgb Increase of ≥ 1.5 g/dL during study period;
50% achieved a sustained Hgb response for ≥ 12 weeks



67% of participants (n=9) receiving concomitant JAKi therapy achieved durable response

Response

Mean \pm SD (days)

Time to first Hgb increase for major response

36 \pm 18

Duration of response during treatment period

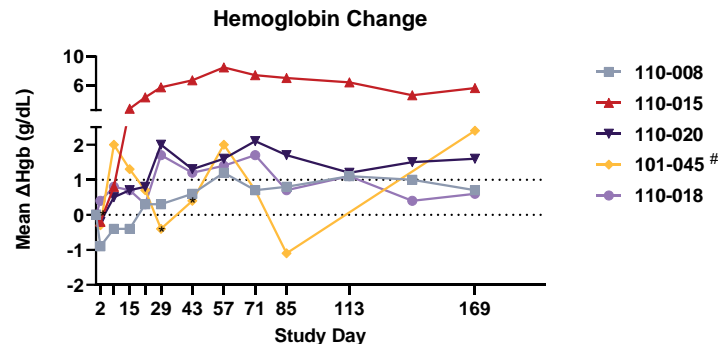
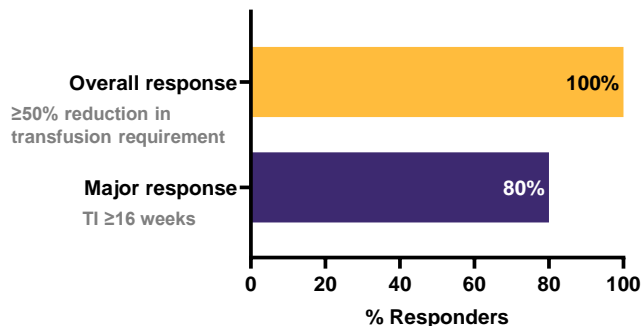
150 \pm 27

17 of 22 nTD participants have received continuation treatment with median response not reached. Follow-up ongoing (maximum 14.7 months).

DISC-0974 Anemia of MF Phase 1b Results

Hematologic response: TD Low participants (n=5)

100% of TD Low¹ participants achieved a $\geq 50\%$ reduction in transfusion requirement;
80% of participants achieved TI-16 weeks[^]



No TD Low participants were receiving concomitant JAKi therapy

*Indicates transfusion; #Indicates patient receiving transfusion during treatment period.

Response

TD Low duration of major response during treatment period

Mean \pm SD (days)

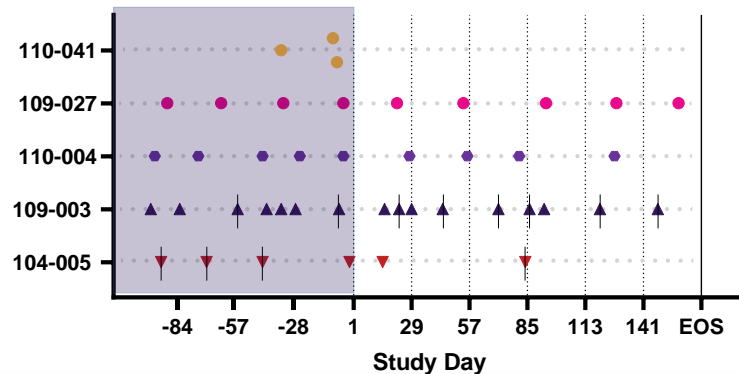
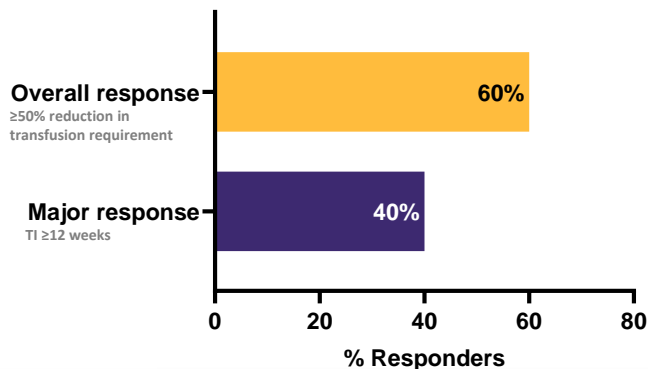
171 \pm 4

5 of 5 TD Low participants have received continuation treatment with median response not reached. Follow-up ongoing (maximum 16.6 months).

DISC-0974 Anemia of MF Phase 1b Results

Hematologic response: TD High participants (n=5)

60% of TD High¹ participants achieved a $\geq 50\%$ reduction in transfusion requirement;
40% of participants achieved TI-12 weeks[^]



50% of participants (n=4) receiving concomitant JAKi therapy achieved $\geq 50\%$ transfusion reduction; 25% achieved TI-12

Response

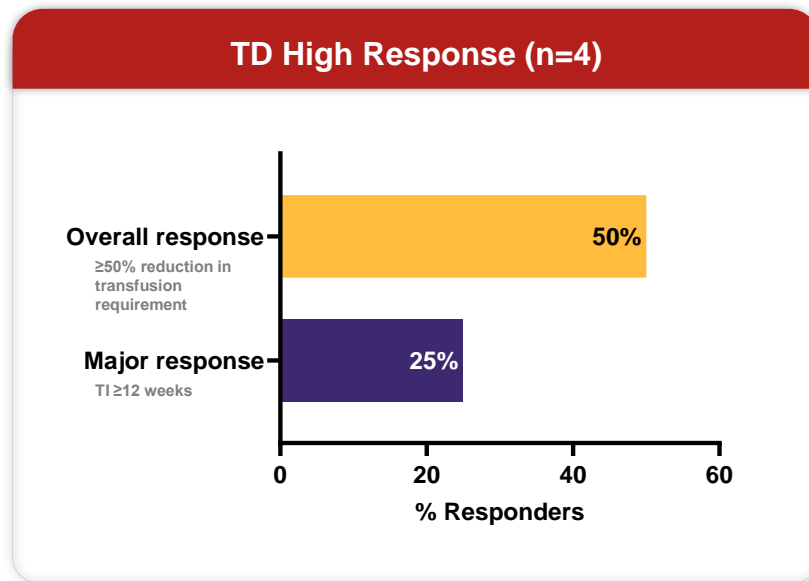
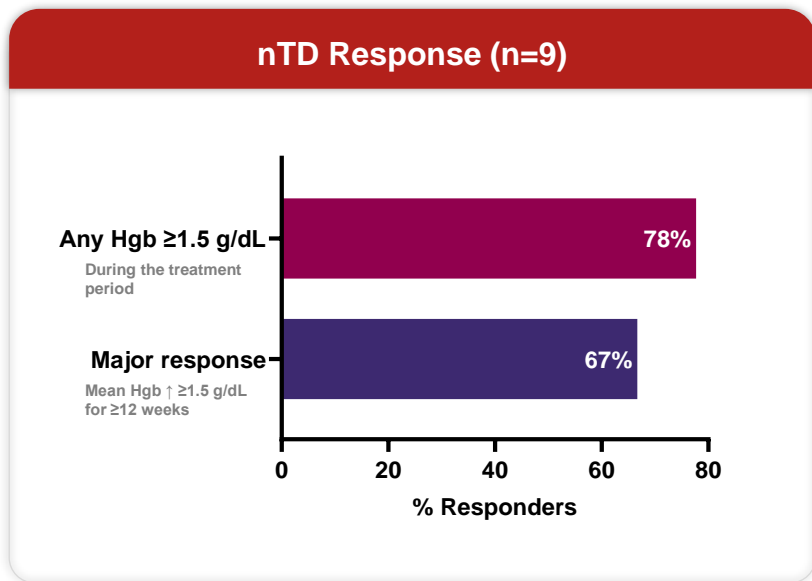
Mean \pm SD (days)

TD High duration of major response during treatment period

127 \pm 60

DISC-0974 Anemia of MF Phase 1b Results

Hematologic response with concomitant JAKi therapy (n=13)



Overall, 54% of participants receiving concomitant JAKi therapy achieved a major hematologic response

DISC-0974 Anemia of MF Phase 1b Results

Safety

Preferred Term	28 mg (n=7)	50 mg (n=12)	75 mg (n=9)	100 mg (n=6)	Overall (n=35)
Any TEAE	6 (85.7)	12 (100)	8 (88.9)	6 (100)	32 (94.1)
Related AE	4 (57.1)	6 (50)	5 (55.6)	1 (16.7)	16 (47.1)
SAE	1 (14.3)	2 (16.7)	0	1 (16.7)	4 (11.8)
Common TEAEs in ≥5 participants					
Diarrhea	3 (42.9)	5 (41.7)	5 (55.6)	1 (16.7)	14 (41.2)
Nausea	2 (28.6)	2 (16.7)	2 (22.2)	2 (33.3)	8 (23.5)
Vomiting	1 (14.3)	2 (16.7)	0	3 (50.0)	6 (17.6)
Constipation	0	4 (33.3)	1 (11.1)	0	5 (14.7)
Fatigue	3 (42.9)	3 (25.0)	1 (11.1)	3 (50.0)	10 (29.4)
Lymphocyte count decreased	1 (14.3)	2 (16.7)	2 (22.2)	1 (16.7)	6 (17.6)
Dizziness	0	2 (16.7)	2 (22.2)	3 (50.0)	7 (20.6)
Headache	1 (14.3)	1 (8.3)	1 (11.1)	2 (33.3)	5 (14.7)
Dyspnea	0	1 (8.3)	2 (22.2)	2 (33.3)	5 (14.7)
Hyperhidrosis	1 (14.3)	1 (8.3)	1 (11.1)	2 (33.3)	5 (14.7)
Anemia	5 (71.4)	4 (33.3)	0	0	9 (26.5)
Hypertension	0	3 (25.0)	3 (33.3)	0	6 (17.6)

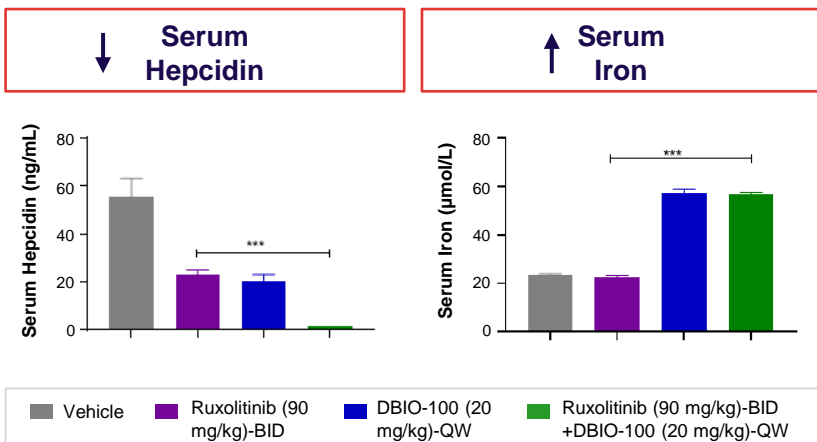
No TEAEs were reported at the 14 mg dose level. Related AEs occurring in ≥2 participants: diarrhea (n=6); SAEs: arthralgia, cellulitis related to cat scratch, cellulitis related to cat bite, and kidney infection; ≥Grade 3 AEs: anemia, lymphocyte count decreased, platelets decreased, cellulitis, kidney infection (same as SAE), muscular weakness, and headache.; Source: ASH DISC-0974 MF Presentation

DISC-0974 Alleviated Ruxolitinib-Induced Anemia in Mice

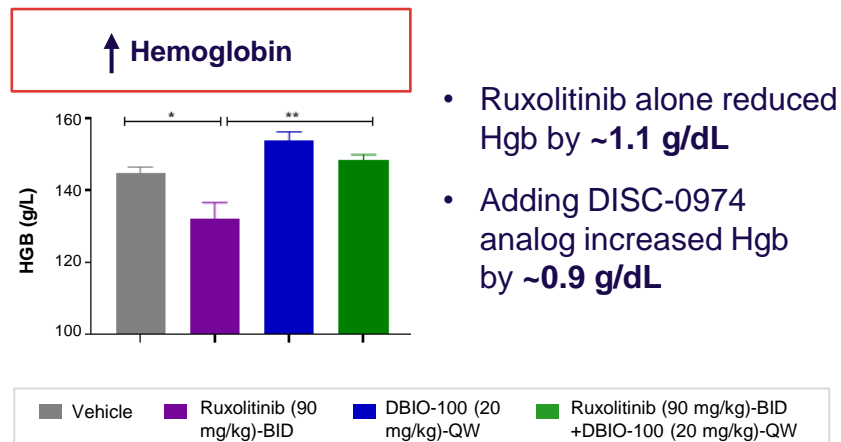
Wild-type mouse model

- ⊗ Treating wild-type mice with ruxolitinib reduced hemoglobin and induced anemia
- ⊗ Adding a mouse analog of DISC-0974 reversed these effects, further decreasing hepcidin, increasing serum iron, and increasing hemoglobin

Target Engagement



Hematologic Improvement



Phase 2 MF Anemia Study Overview

Study Population

- N= ~90 (30 per cohort)
 - 12 patients carried over from Phase 1b*
- Adult patients with MF and anemia
 - Hgb <10 g/dL on ≥ 3 assessments over 12 weeks, or
 - 1 or more PRBC units transfused in 12 weeks
- Severity: DIPSS INT-1/High
- +/- JAK inhibitor permitted

Design



Open-Label,
3 cohorts

nTD: N=30*

TD Low: N=30*

TD High: N=30*

Exploratory
cohort

momelotinib / pacritinib
nTD, TD Low, or TD High; N=10

Flexibility to add exploratory cohorts

Key endpoints:

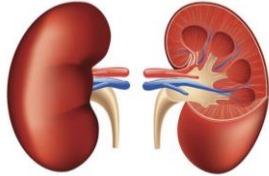
- Anemia response defined by cohort (TI, transfusion burden reduction, Hgb change)
- Iron, hepcidin, hematologic parameters
- FACIT fatigue score

Phase 2 Dosing: 50 mg, SC, q28 days

Hepcidin is a Key Driver of CKD Anemia

Pervasive issue that is currently highly under-treated

Anemia of CKD



> Est. # Patients

- 5 to 6 million anemic NDD-CKD patients in the US alone

> Etiology of Anemia

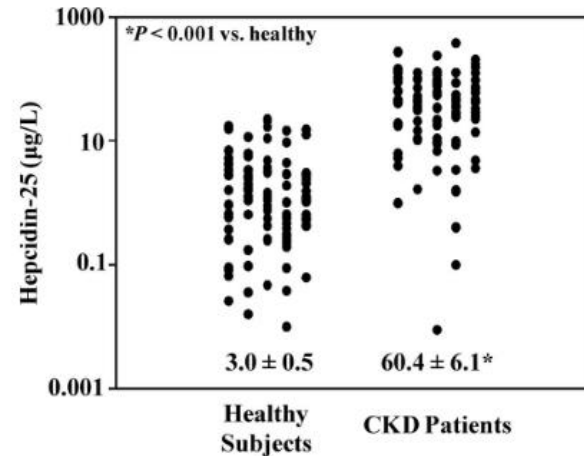
- High hepcidin from inflammation & poor renal clearance
- Compromised erythropoietin production

> Unmet Medical Needs

- Majority patients untreated or under-treated
- ESAs restricted due to safety and black box
- Mean Hb 9.3 g/dL in patients initiating dialysis

Hepcidin Levels Elevated in CKD Patients

~20x higher than healthy subjects and increases with disease severity

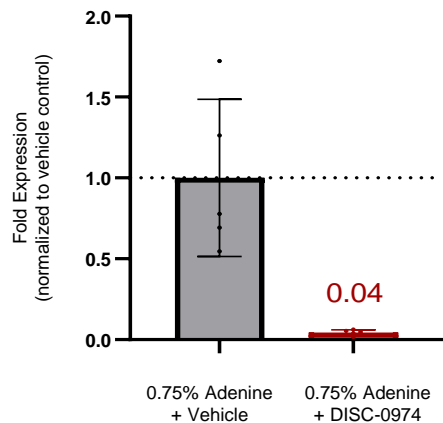


DISC-0974 Improved Anemia in Model of CKD

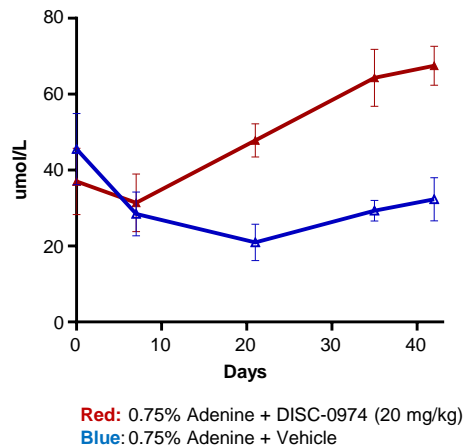
Rat Model of Adenine Diet-Induced CKD



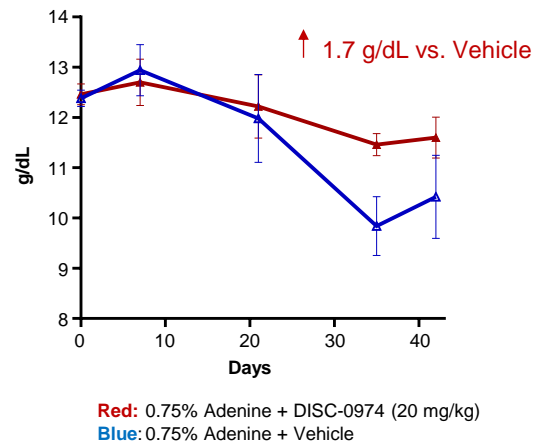
DISC-0974 Reduced
Hepcidin Expression



DISC-0974 Increased
Serum Iron



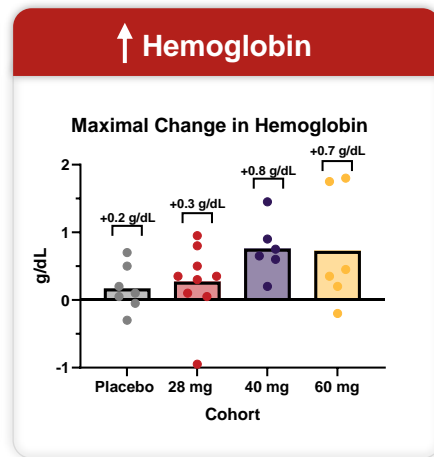
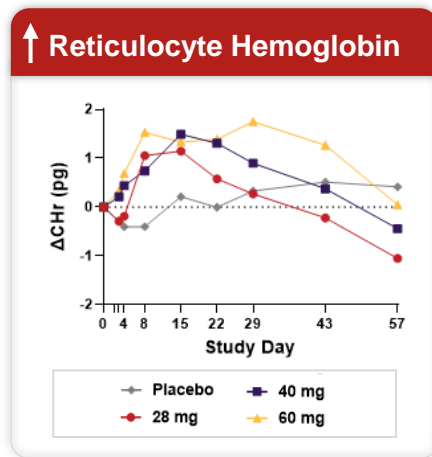
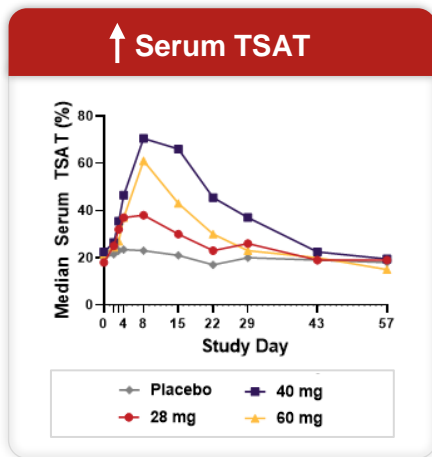
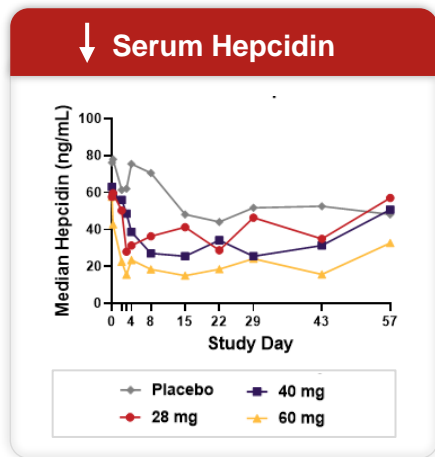
DISC-0974 Increased
Hemoglobin Levels



DISC-0974 Anemia of NDD-CKD: Hepcidin, Iron, and Hgb

28 mg, 40 mg, and 60 mg SAD cohorts

- ⊗ Substantial, durable, dose-dependent reduction in hepcidin and sustained increase in TSAT from baseline
- ⊗ Early and sustained increase in mean reticulocyte hemoglobin across dose groups
- ⊗ Increase in mean hemoglobin from baseline across dose groups, with maximal observed individual increases in hemoglobin up to +0.95 g/dL at 28 mg, +1.5 g/dL at 40 mg, and +1.8 g/dL at 60 mg

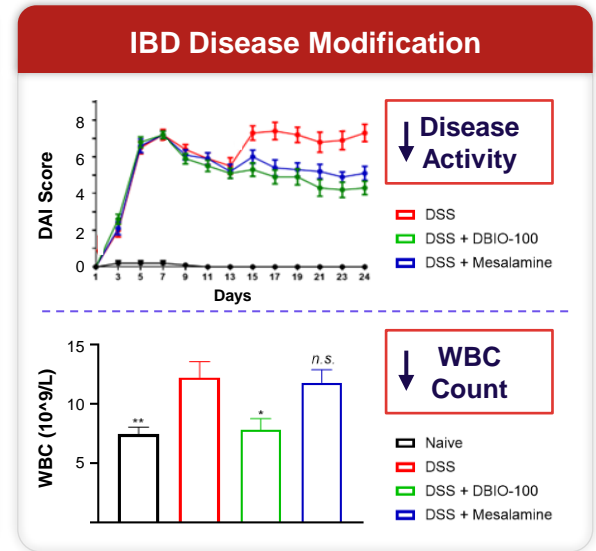
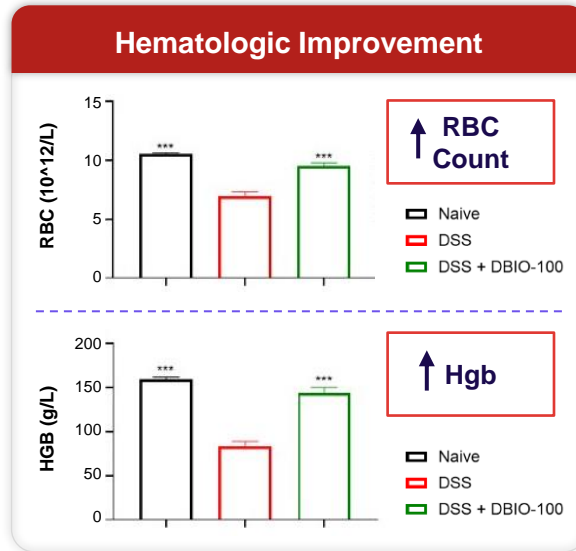
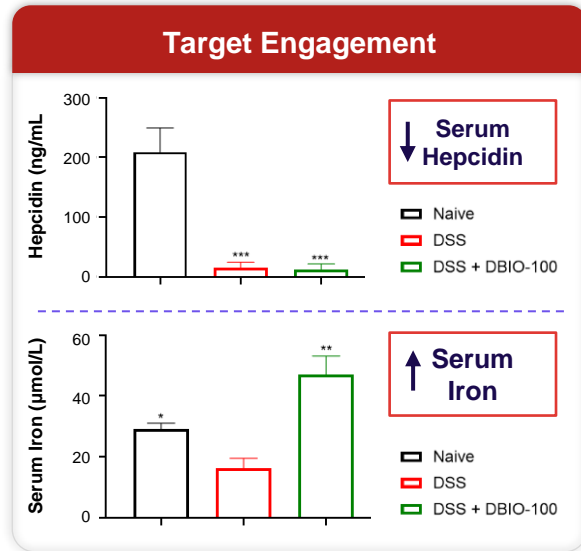


Safety: DISC-0974 demonstrated acceptable safety and tolerability at all evaluated dose levels; the majority of adverse events were deemed not related to DISC-0974, and all adverse events assessed as treatment-related were Grade 1 or 2

DISC-0974 in Other Anemias of Inflammation

Inflammatory bowel disease mouse model

- Mouse analog of DISC-0974 suppressed hepcidin, increased serum iron, and increased hemoglobin in anemic IBD mice
- Treatment also demonstrated disease-modifying and anti-inflammatory effects





DISC-3405
Anti-TMPRSS6 mAb
Hepcidin Induction

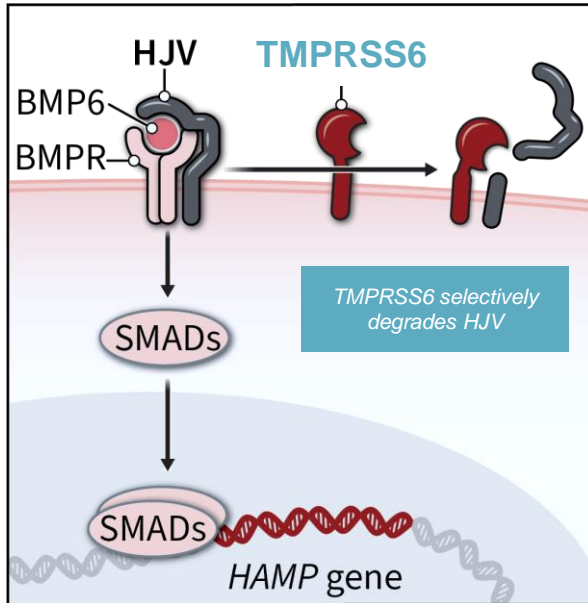
Anti-TMPRSS6 mAb Induces Hepcidin

Designed to limit iron levels with potential to address a wide range of hematologic disorders



Targeting TMPRSS6 to Increase Hepcidin

Potent, specific target controls endogenous hepcidin production



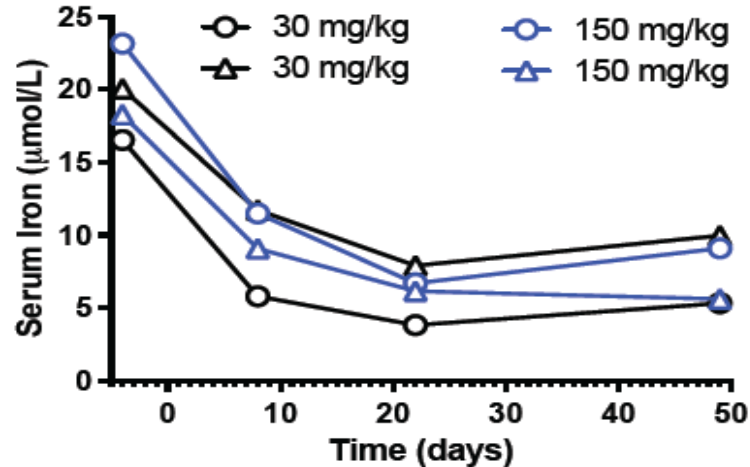
Inhibiting TMPRSS6 with an Antibody Enables Hepcidin Production to Suppress Iron

- **Genetic validation** in patients with IRIDA (Iron-Refractory Iron Deficiency Anemia)
 - LOF TMPRSS6 mutation increases hepcidin and reduces iron availability
- **Functionally specific** to hepcidin / iron
- **Tissue specific** expression primarily in the liver

DISC-3405 Effects in Non-Human Primates

Resulted in deep and sustained suppression of serum iron levels

Single dose of DISC-3405 resulted in ~ 70% suppression of serum iron lasting 3 weeks



- Potent PD effects observed across multiple preclinical studies consistent with TMPRSS6 inhibition
 - Hepcidin: 3-4 fold induction
 - Serum iron: ~60-70% suppression
- DISC-3405 demonstrated excellent safety profile in non-clinical GLP safety studies

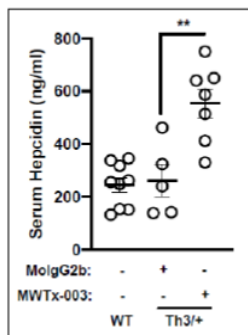
DISC-3405 in Beta Thalassemia and Polycythemia Vera

Significant effects on hallmarks of disease

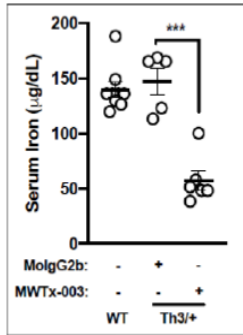
Hbb^{Th3/+} Model of Beta-Thalassemia

Jak2^{V617F} model of Polycythemia Vera

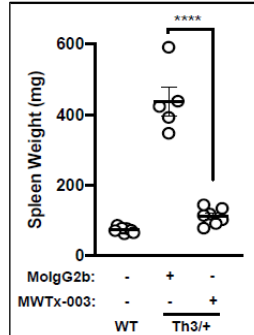
↑ Hepcidin Production



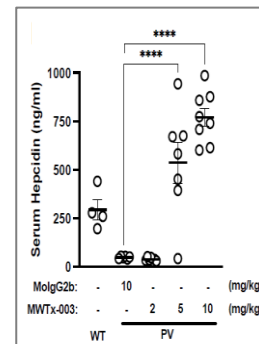
↓ Iron



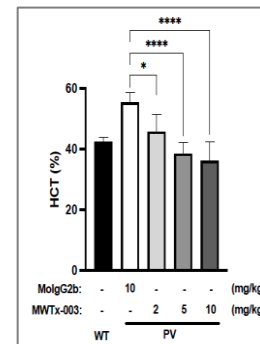
↓ Spleen Weight



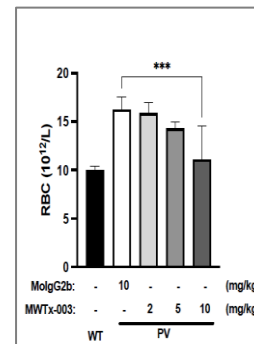
↑ Hepcidin Production



↓ Hematocrit



↓ RBC Production



Iron Restriction in Sickle Cell Disease

Potential for iron restriction through inhibition of Tmprss6 to benefit SCD by reducing HbS concentration

Growing Body of Evidence for Iron Restriction for Disease Modification in Sickle Cell Disease

113.Hemoglobinopathies, Excluding Thalassemia-Basic and Translational Science

Iron Restriction Improves Markers of Disease Severity in the Townes Mouse Model of Sickle Cell Anemia

Nermi Parrow PhD¹, Pierre-Christian Violet PhD^{*2},
Nisha George PhD^{*3}, Faris Ali^{*4}, Shivam Bhanvadia^{*3},
Mark Levine MD^{*2}, Robert E Fleming MD^{4,5}

LETTER TO BLOOD | MARCH 18, 2021

Dietary iron restriction improves markers of disease severity in murine sickle cell anemia

PB2505: THERAPEUTIC PHEBOTOMY INSTANTLY AFFECTS BLOOD PARAMETERS AND VISCOSITY IN SICKLE CELL DISEASE PATIENTS

1112 Iron Deficiency in HbSC Disease Is Associated with Less Sickle Cell Disease-Related Complications – a Rationale for Repetitive Phlebotomy As Disease Modifying Therapy

RED CELLS, IRON, AND ERYTHROPOIESIS | JANUARY 12, 2023

Dietary iron restriction protects against vaso-occlusion and organ damage in murine sickle cell disease

DISC-3405 in a Townes Model

- 3 and 10 mg/kg IP weekly for 8 weeks
- Reduced HbS concentration
- Improved markers of inflammation
- Improved markers of hemolysis

DISC-3405 Development Plans

Phase 1 in healthy volunteers ongoing; aim to advance program into POC studies with focus on polycythemia vera

Phase 1 SAD/MAD in HV
Initiated October 2023

Demonstrate proof-of-mechanism
(hepcidin, iron, hematologic parameters)

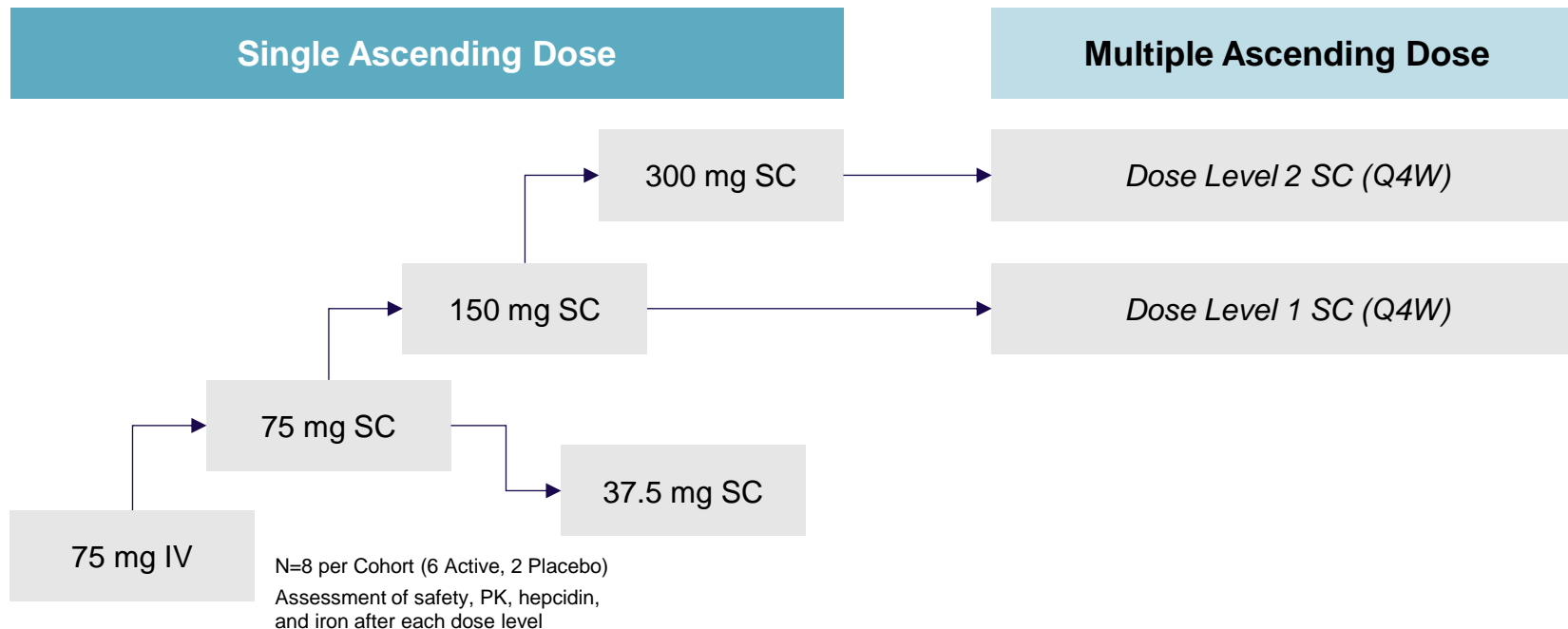
**Phase 2 Proof-of-Concept Study
in Polycythemia Vera**

- Strong proof of therapeutic hypothesis; clarity on regulatory development path
- Assess safety, PK, hepcidin, iron, hematologic parameters; % Hct and requirement for phlebotomy

Additional POC Studies in a Range of Indications

- Hereditary Hemochromatosis
- Beta-Thalassemia
- Myelodysplastic Syndromes
- Sickle Cell Disease

DISC-3405 Phase 1 Healthy Volunteers Study Overview

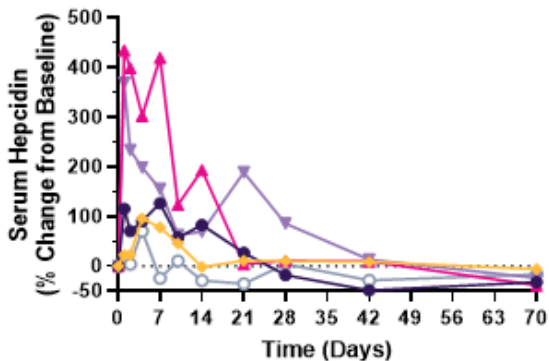


Key Endpoints/Measures: Iron, hepcidin, and other hematologic parameters, safety/tolerability

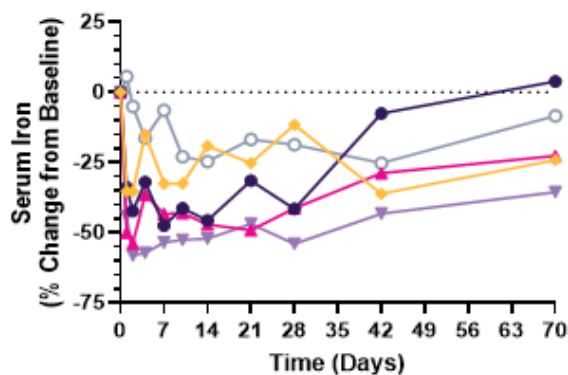
Updated DISC-3405 HV Data: Hepcidin, Iron, and Ferritin

- DISC-3405 produced dose-related increases in serum hepcidin, with corresponding reductions in serum iron across all dose levels
- DISC-3405 resulted in deep reductions in serum iron (ranging from 50-80% from baseline) that were sustained and support a once-monthly SC dosing regimen

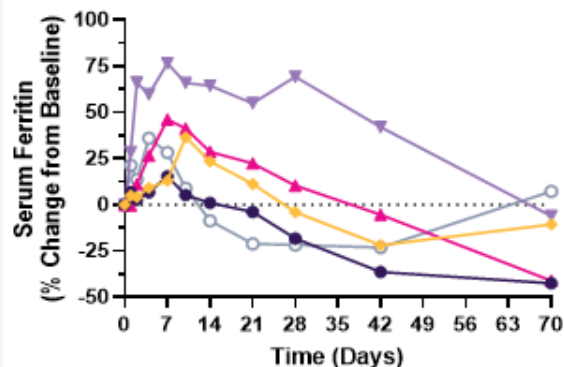
% Change from Baseline: Hepcidin



% Change from Baseline: Iron



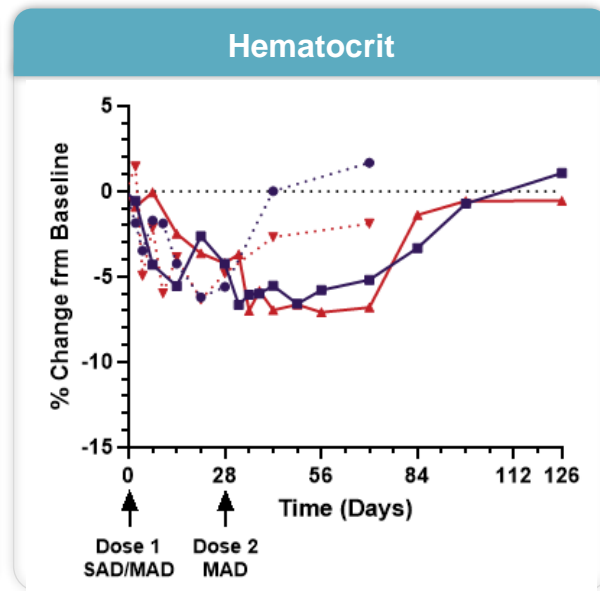
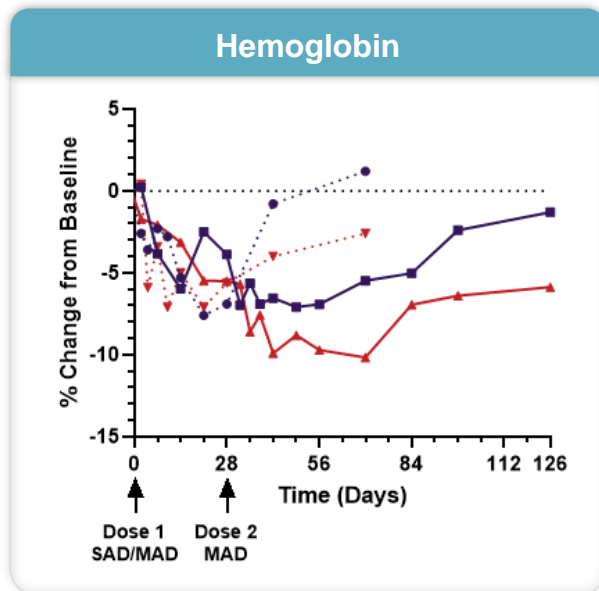
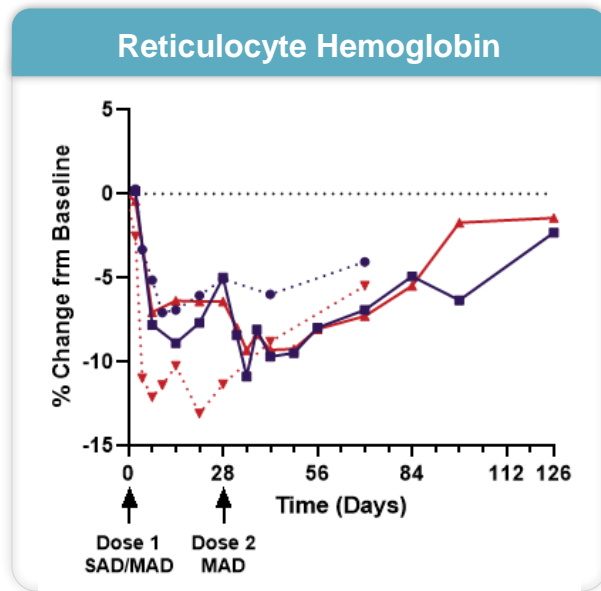
% Change from Baseline: Ferritin



○ Placebo SC ● 37.5 mg SC ● 75 mg SC ● 150 mg SC* ● 300 mg SC

Updated DISC-3405 HV Data: Hematologic Response

- Single and repeat dosing of DISC-3405 demonstrated meaningful reductions in hematologic parameters (reticulocyte hemoglobin, hemoglobin, and hematocrit)



..... 75 SC, SAD —■— 75 SC MAD ▼..... 150 SC SAD* —▲— 150 SC MAD

Disc Continues Strong Growth Trajectory Towards Becoming a Leading Hematology Company

Significant Accomplishments in 2024

Bitopertin

- Positive data across two Phase 2 studies
- Encouraging EOP2 Meeting with path to accelerated approval

DISC-0974

- Updated positive data in anemia of MF
- Phase 2 initiation in anemia of MF
- Positive SAD data in anemia of CKD

DISC-3405

- Positive healthy volunteer data
- Preclinical data in sickle cell disease

Important Catalysts in 2025

- Guidance on Type C meeting with FDA
- Initiation of APOLLO study

- Initial Phase 2 data in anemia of MF
- Phase 1b multiple-dose in anemia of CKD
- Preclinical efforts on additional indications

- Polycythemia vera as first indication
- Preclinical efforts on additional indications

Supported by a strong cash position with runway well into 2027

Thank You

