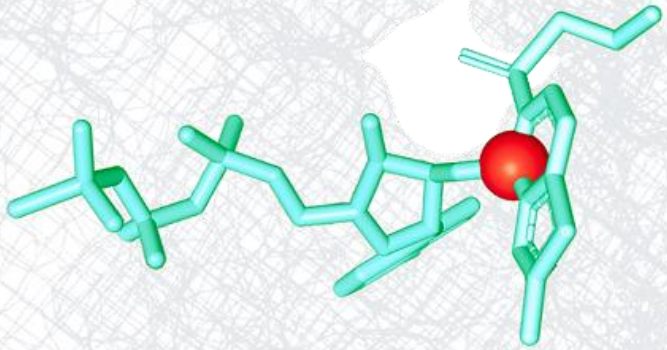
AN2 Therapeutics

INVESTOR OVERVIEW



NOVEMBER 2026

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “believe,” “estimate,” “predict,” “potential” or “continue,” or the negative of these terms or other similar expressions. Forward-looking statements expressed or implied in this presentation include, but are not limited to, statements regarding: the potential of the Company’s boron chemistry platform and advancement of the Company’s development programs; potential for epetraborole to treat polycythemia vera; expectations regarding the Company’s clinical trials, including initiation, enrollment, conduct, the timing of data and related announcements, and continued regulatory clearance to proceed; market size and potential; the predictivity of data; and other statements that are not historical fact. These statements are based on AN2’s current estimates, expectations, plans, objectives and intentions, are not guarantees of future performance, and inherently involve significant risks and uncertainties.

Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, but are not limited to, risks and uncertainties related to: AN2’s ability to implement its plans for its internal boron chemistry platform and pipeline programs; timely enrollment of patients in AN2’s clinical trials and investigator-initiated clinical trials; inability to maintain regulatory clearance to conduct trials; AN2’s ability to procure sufficient supply of its product candidates for its clinical trials; the potential for results from clinical trials to differ from preclinical, early clinical, preliminary or expected results, or results from different patient populations; the ability of particular preclinical models in non-human species to predict safety and efficacy in humans; significant adverse events, toxicities or other undesirable side effects associated with AN2’s product candidates; the significant uncertainty associated with AN2’s product candidates ever receiving any regulatory approvals; AN2’s ability to obtain, maintain or protect intellectual property rights related to its current and future product candidates; implementation of AN2’s strategic plans for its business and product candidates; the sufficiency of AN2’s capital resources and need for additional capital to achieve the goals set forth in the presentation; global macroeconomic conditions and global conflicts and other risks, including those described under the heading “Risk Factors” in AN2’s Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and other reports filed with the U.S. Securities and Exchange Commission (SEC). These filings, when made, are available on the investor relations section of AN2’s website at www.an2therapeutics.com and on the SEC’s website at www.sec.gov.

This presentation also contains estimates relating to market size and potential and timelines for clinical trials. These estimates involve a number of assumptions and limitations, and are subject to risks and uncertainties.

Forward-looking statements contained in this presentation are made as of this date, and AN2 undertakes no duty to update such information except as required under applicable law.

AN2 Therapeutics

Unlocking Boron's Promise for Patients

Clinical-stage pipeline

Three Phase 2 studies

Focused on acute needs

Polycythemia vera
novel oral

***M. abscessus* (NTM)**
no FDA-approved drugs

Chagas disease
no FDA-approved drugs for adults

Near-term catalysts

Polycythemia vera
Phase 2 enrollment 4Q26

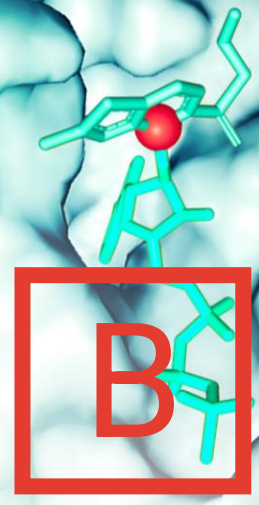
M. Abscessus (NTM)
Enrolling

Chagas disease
Phase 2 startup activities underway

Boron-driven innovation

Oncology
PI3Kα and ENPP1 programs

Hypophosphatasia
AN2-504661 selected as development compound



AN2 BORON PLATFORM

Binding modes or targets not possible with carbon-based chemistry

Validated chemical space with multiple FDA-approved drugs

Pipeline

Oral boron chemistry applied across four therapeutic areas

Program	Candidate	Target	Preclinical	Phase 1	Phase 2
Hematology / Oncology					
Polycythemia vera	Epetraborole	Globin synthesis			
Oncology		PI3Kα			
Oncology	AN2-503321	ENPP1			
Infectious Diseases					
Chagas disease	AN2-502998	CPSF3			
M. abscessus lung disease	Epetraborole	LeuRS	IIT		
Bone Disorders					
Hypophosphatasia	AN2-504661	ENPP1			
Global Health					
Melioidosis	Epetraborole	LeuRS			
Tuberculosis		CPSF3	Gates Foundation	GSK	

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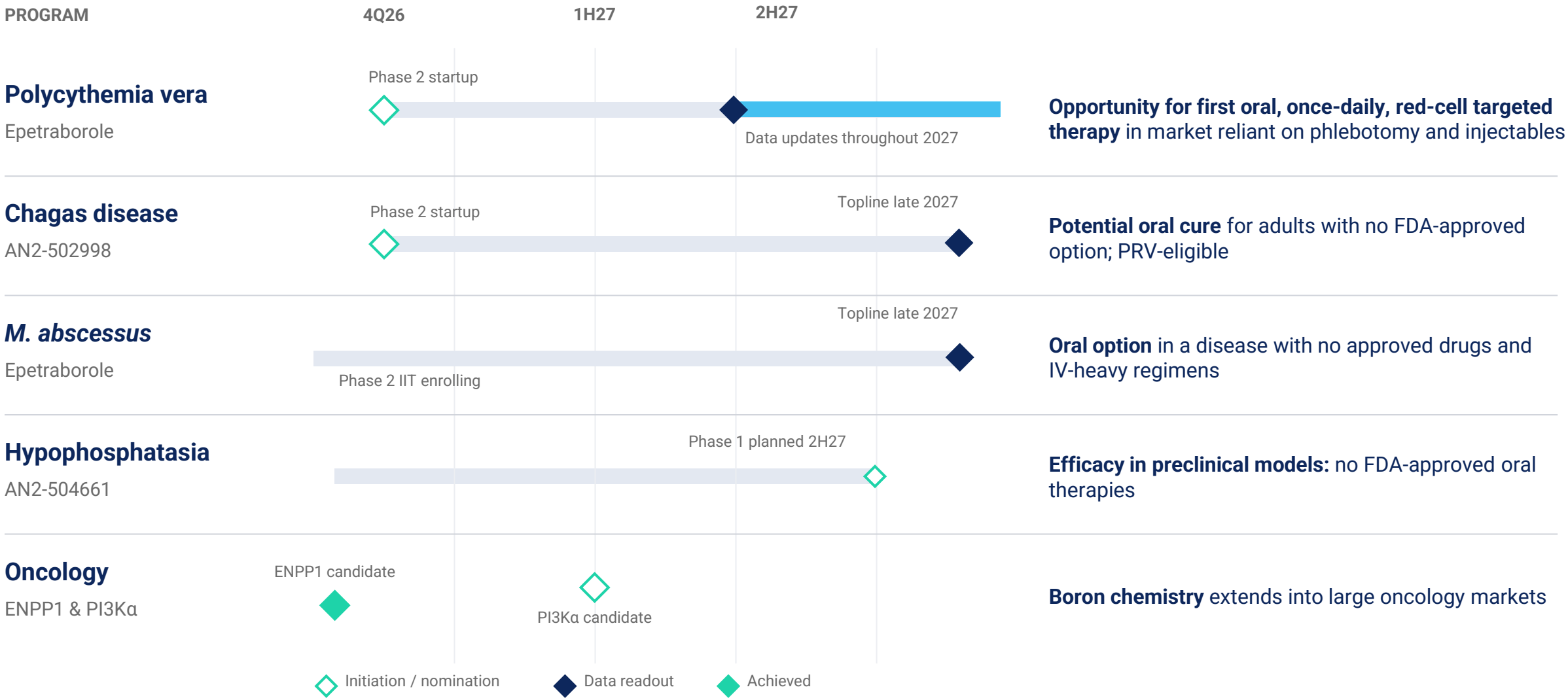
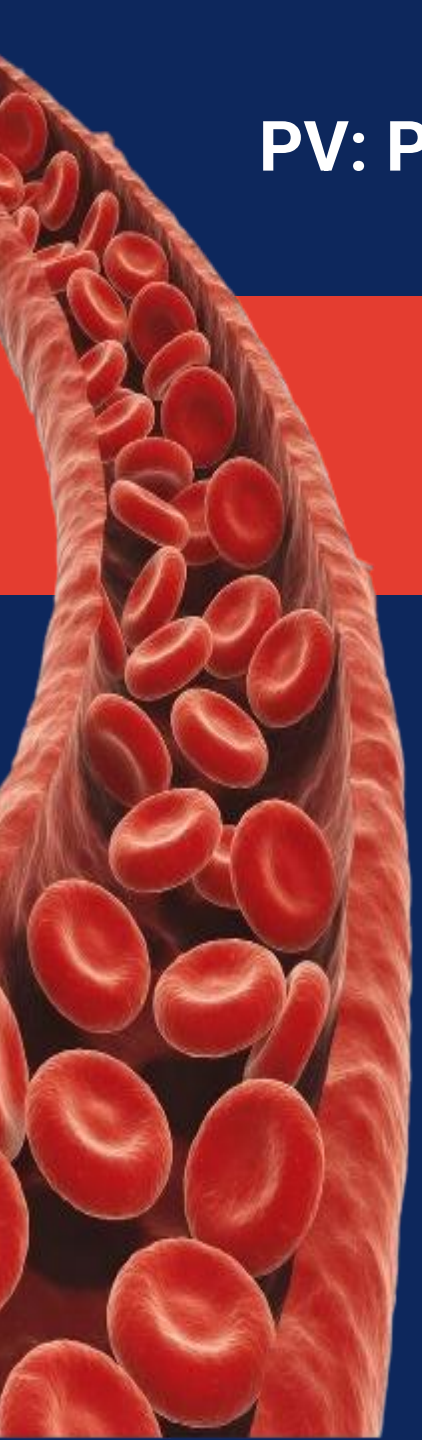
IIT = investigator-initiated trial; globin synthesis represents presumed MOA in PV

Multiple potential value-inflection points ahead



Anticipated timing; subject to change. PRV = priority review voucher; IIT = investigator-initiated trial

PV: Potential oral red-cell targeting agent via a novel MOA



Investigational Program Summary

Candidate	Status	Route	Patients	Differentiation	Enabling data
Epetraborole	Phase 2	Oral	~155,000 (U.S.)	Oral, red-cell targeting	Clinical and preclinical data

Potential once-daily oral administration

Data from prior preclinical and clinical studies in non-PV patients indicated potential for consistent, dose-dependent, and reversible hematocrit reductions

Potential for red-cell selectivity, novel MOA, without additional cytotoxicity, pan-myelosuppression, or drug-drug interactions, with flexible titration

Near-term data readouts

- Periodic data throughout 2027
- Objective endpoints allow for Phase 2 data readouts during open-label phase (HCT, phlebotomy avoidance, tolerability)

A red-cell-driven disorder with unmet medical needs

Goals of Treatment

- ✓ Control hematocrit w/o phlebotomy dependence
- ✓ Alleviate symptoms
- ✓ Reduce thrombotic risks

without

- ✗ Cytopenias
- ✗ Thrombocytosis
- ✗ Anemia

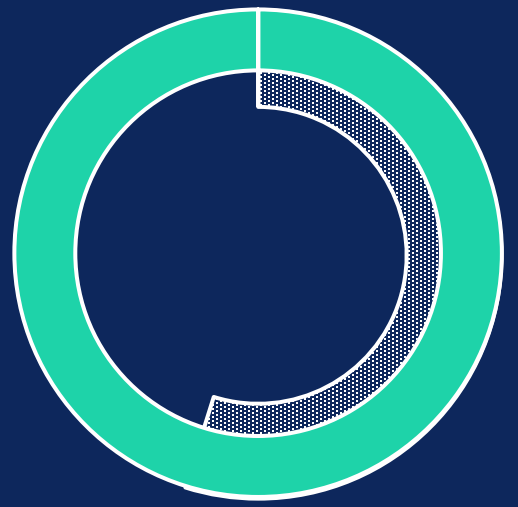
PV biology

- **Overproduction of red cells** caused by aberrant JAK signaling in the bone marrow
- Elevated red cell mass drives **persistent hematocrit elevation**, increased blood viscosity, PV-related symptoms, and heightened thrombotic risk

Treatments

- **Phlebotomy and low-dose aspirin**, yet seesaw effect often observed, requiring frequent intervention, with difficulty maintaining consistent hematocrit control
- **Cytoreductive therapies** (e.g., hydroxyurea, interferons) involve toxicities and broad myelosuppression and/or injectable administration (interferons, hepcidin-targeting agents)

U.S. Prevalence



- Total cases: ~155,000
- Uncontrolled HCT: ~>50%

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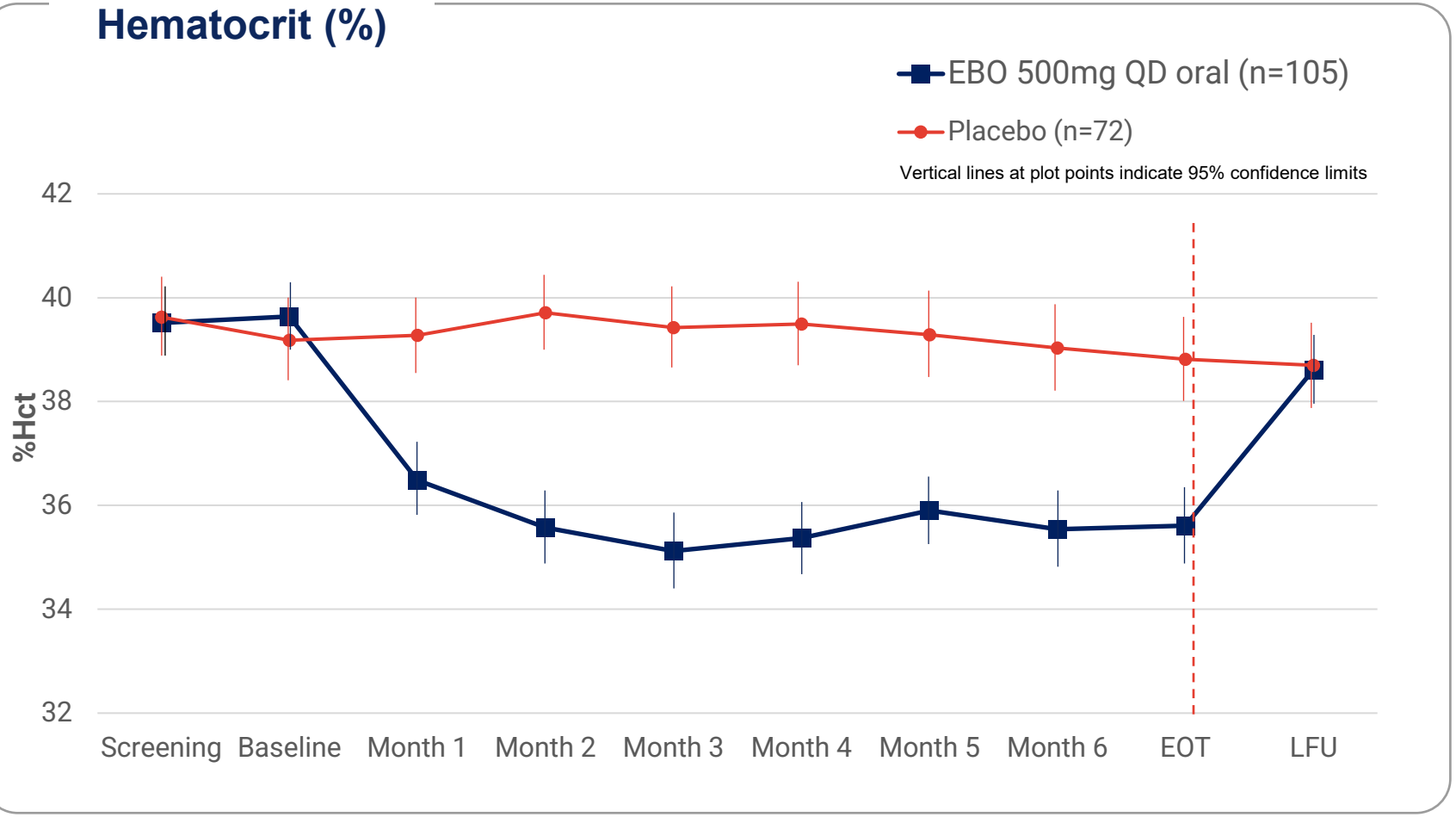
Prevalence and rate of uncontrolled disease are estimates. Grunwald MR, et al. *Clin Lymphoma Myeloma Leuk.* 2020; 20(4):219-225; Gerds AT, et al. *J Blood Med.* 2026; Mehta J, Wang H, Iqbal SU, Mesa R. Epidemiology of myeloproliferative neoplasms in the United States. *Leuk Lymphoma.* 2014;55(3):595-600

Early and sustained hematocrit reductions in Phase 2/3 NTM study (n=177)

Hematocrit reductions observed throughout epetraborole treatment

Phase 2/3 NTM trial



Sustained, stable HCT reduction

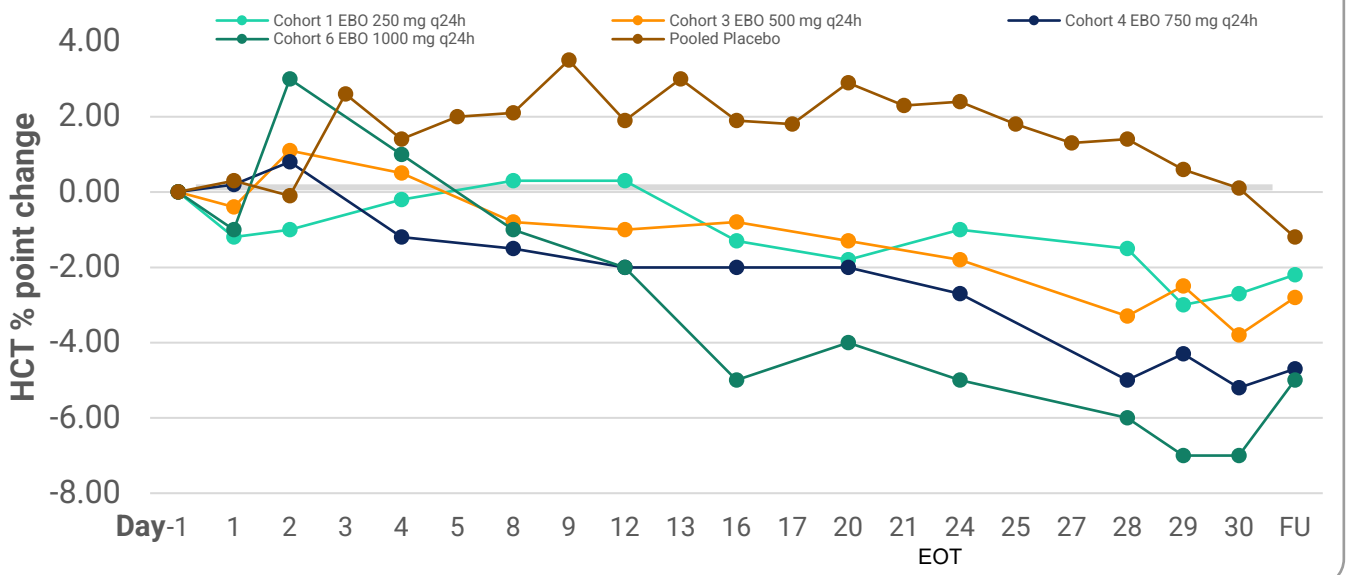
- HCT reductions were reversible upon treatment discontinuation, with no evidence of lasting marrow suppression
- Reductions in HCT occurred without broad myelosuppression or disruption of other hematologic lineages

Source: Company data on file

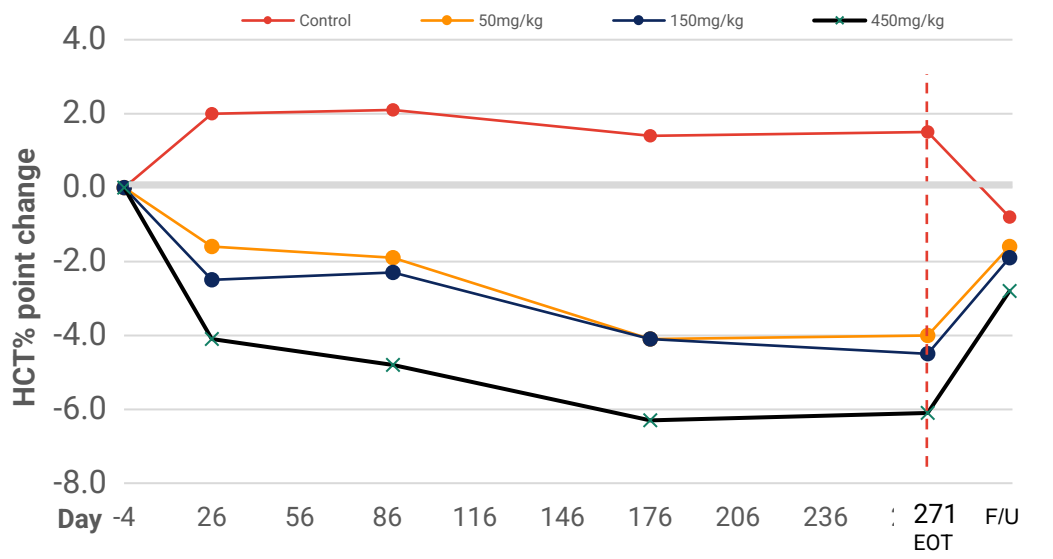
Trial replicated data in long-term NHP studies and healthy volunteers

Durable, reversible HCT reduction across epetraborole preclinical and clinical studies

Phase 1



Nonhuman primates



- Phase 1 data: Baseline-adjusted change
- Shows dose-related, stable, early HCT effect, with greater magnitude at higher dose level
- Stabilized during dosing and trended back toward baseline after discontinuation, consistent with a reversible pharmacologic effect

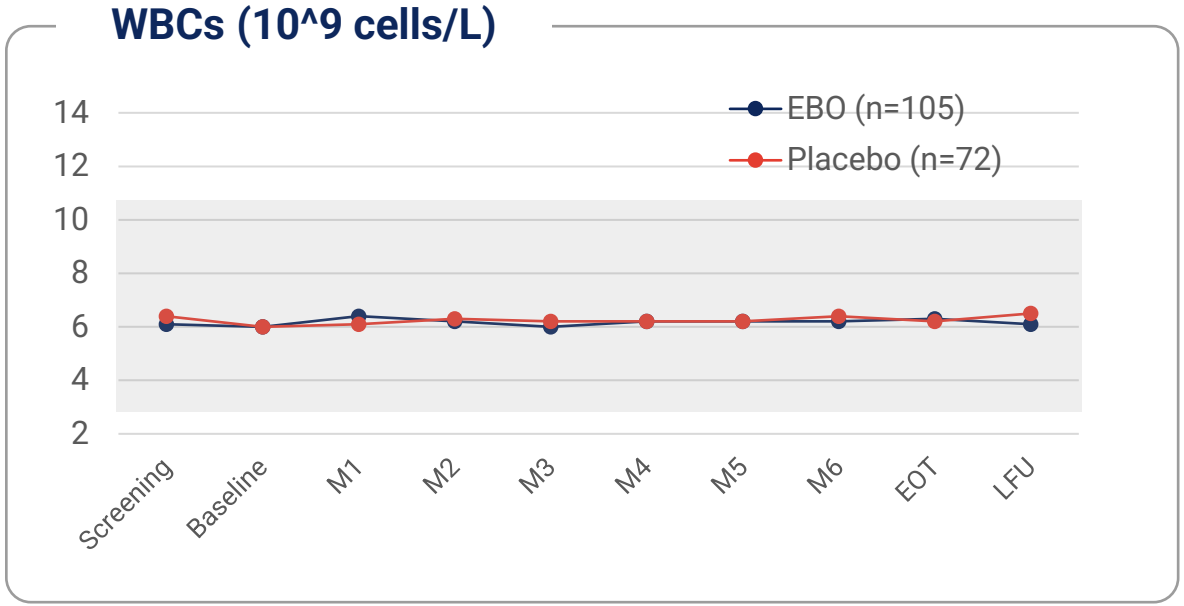
- Phase 1 followed NHP study, which showed similar trends in HCT reduction and reversibility, with stable effect observed over full 9 months of study

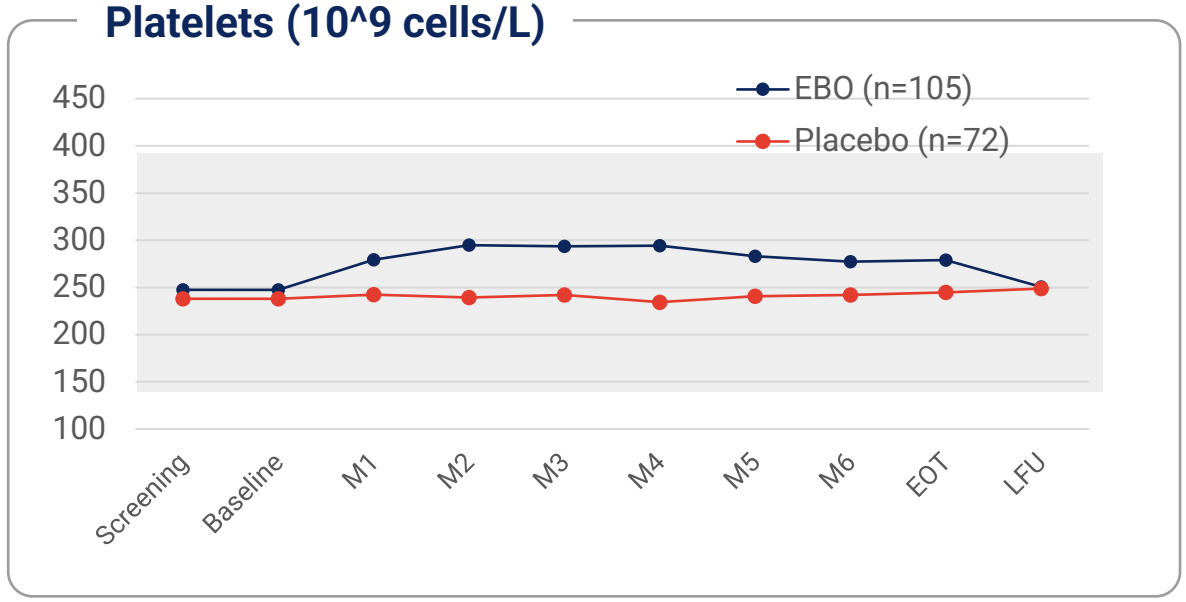
Source: Company data on file

Potential for selective red-cell effect and preserved WBCs and platelets

Data consistent with erythroid-lineage selectivity rather than generalized cytoreduction

In prior trials, platelet and WBC counts remained stable and within normal ranges, with no evidence of broad myelosuppression



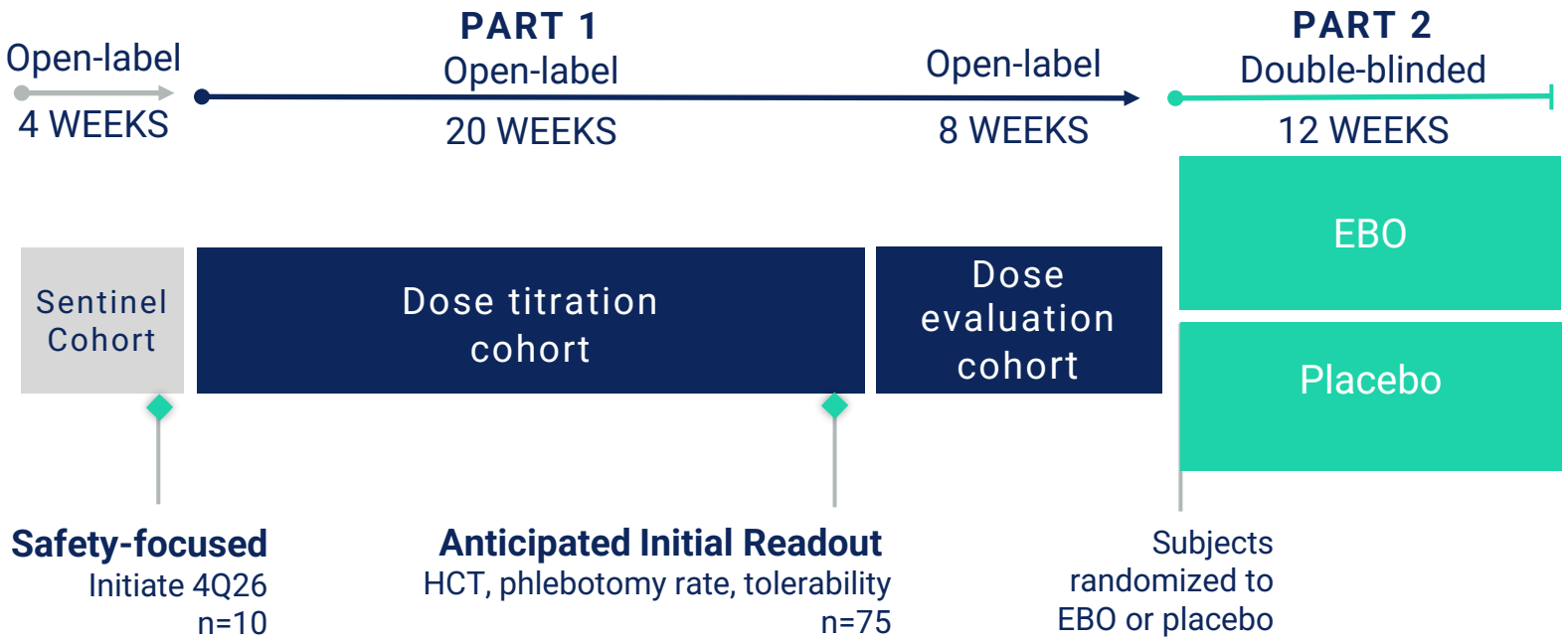


Source: Company data on file

Normal range

Global Phase 2 enrollment starts 4Q/2026 with data expected throughout 2027

Regulatory clearance in all planned jurisdictions (U.S., AUS, and India)



MAJOR OUTCOME MEASURES

1. Percent of patients maintaining "clinical success" defined as
   - had HCT control
   - did not undergo therapeutics phlebotomy after Week 4
   - completed the 12-week regimen
2. PBO-controlled changes in PROMIS, mMPN-SAF patient diary, and PGIC
3. Changes in standard hematological variables, plus EPO, WBV, serum hepcidin, serum iron, ferritin, TSAT, %HbA and % HbF
4. JAK2V617F allele burden will be measured to evaluate whether selective modulation of erythropoiesis influences clonal dynamics
5. Open-label extension (not shown) will collect longer-term response and durability data

M. abscessus: no approved therapies, high mortality

Epetraborole | Phase 2 investigator-initiated trial

Epetraborole | oral LeuRS inhibitor

PHASE 2 IIT

PATIENTS AND BURDEN

~50K
patients in U.S., Europe, Japan

0
FDA-approved drugs

20%
5-year mortality

TODAY

- ✕ Off-label regimens of 2–3 IV drugs
- ✕ Significant toxicities
- ✕ Persistent infection, lung damage
- ✕ Limited durable cure rates

AN2 TARGET/POTENTIAL PROFILE

- ✓ **Once-daily oral**
- ✓ **Durable culture conversion**
- ✓ **Novel MOA for combination regimens**
- ✓ **Favorable safety to date**

STATUS & MILESTONES

Phase 2 IIT enrolling
84 patients; investigator-initiated

Topline data
Late 2027

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IIT = investigator-initiated trial; MOA = mechanism of action. Prevalence, standard-of-care and mortality data as cited in the full investor deck.

Chagas disease: silent, heart-damaging parasite

AN2-502998 | Phase 2-startup activities underway

AN2-502998 | oral CPSF3 inhibitor

PHASE 2

PATIENTS AND BURDEN

~300K
patients in the U.S.

~200K
Canada, Europe, Japan

0
FDA-approved drugs for adults

TODAY

- ✕ Approved for children only (U.S.)
- ✕ 40–120 days of treatment
- ✕ ~80% adverse events; ~15% stop
- ✕ Silent progression to cardiac disease

AN2 TARGET/POTENTIAL PROFILE

- ✓ **Curative for chronic Chagas**
- ✓ **Oral; 28-day course**
- ✓ **Well tolerated (as observed in Phase 1)**
- ✓ **Durable parasite elimination (as observed in NHPs)**

STATUS & MILESTONES

Phase 2 start-up underway

Topline data
Late 2027

NHP = nonhuman primate; PRV = priority review voucher. Prevalence, standard-of-care and safety data as cited in the full investor deck.

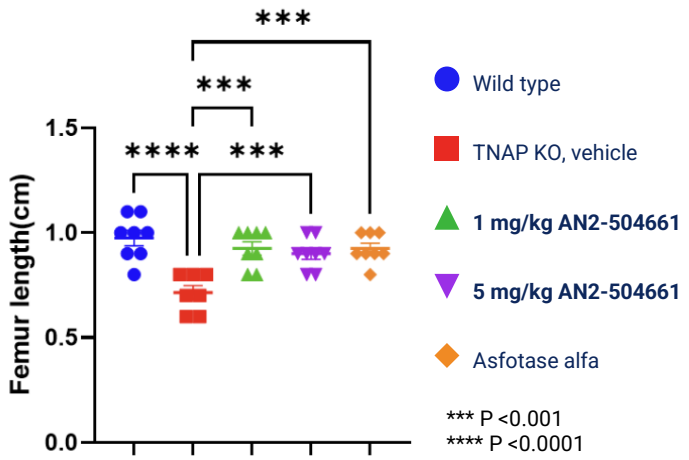
Early-stage boron programs in hypophosphatasia and oncology

Hypophosphatasia

CANDIDATE

AN2-504661 | oral ENPP1 inhibitor

TNAP-KO MOUSE MODEL: FEMUR LENGTH (CM)



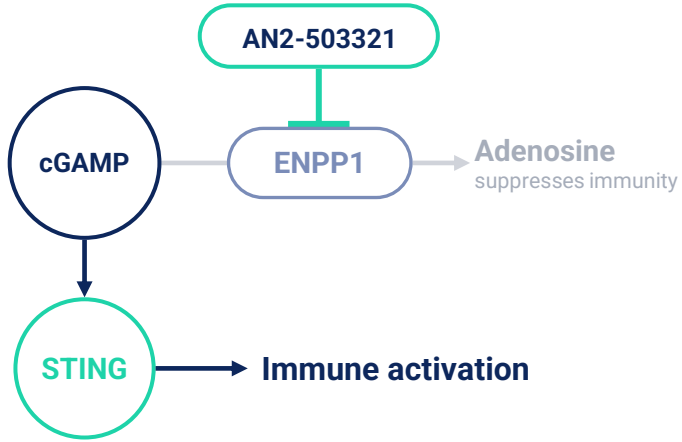
Next: **Phase 1 planned 2H27**

ENPP1 oncology

CANDIDATE

AN2-503321 | oral ENPP1 inhibitor

MECHANISM: BLOCKING ENPP1 KEEPS cGAMP ACTIVE, TURNS "COLD" TUMORS "HOT"



Next: **IND-enabling studies planned**

PI3Kα oncology

LEAD OPT

THE OPPORTUNITY: TRUE PAN-MUTANT, WT-SPARING

	1st gen Non-selective	2nd gen Mutant-selective	3rd gen AN2 target profile
Spares wild type (no hyperglycemia)	✗	✓	✓
Kinase mutants (e.g., H1047R)	✓	✓	✓
Helical mutants (e.g., E545K)	✓	✗	✓

Next: **Candidate selection ongoing**

Advancement to Phase 1 subject to outcome of preclinical studies and regulatory clearance.

Multiple potential value-inflections ahead

PHASE 2 DATA READOUTS

2027

Polycythemia vera

Potential proof-of-concept data for a once-daily oral in a market dominated by phlebotomy and injectables

Anticipated late 2027

M. abscessus lung disease

Randomized Phase 2 data in life-threatening lung infection where no therapy is approved

Chagas disease

Phase 2 data to address life-threatening parasite with no approved therapy for large U.S. population

PIPELINE EXPANSION

2H 2027

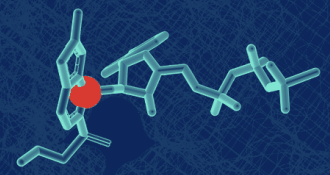
Hypophosphatasia

Phase 1 planned with potential for early read on key surrogate (PPi)

2027

PI3Kα oncology

Candidate selection in a large, validated oncology market



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PPi = inorganic pyrophosphate

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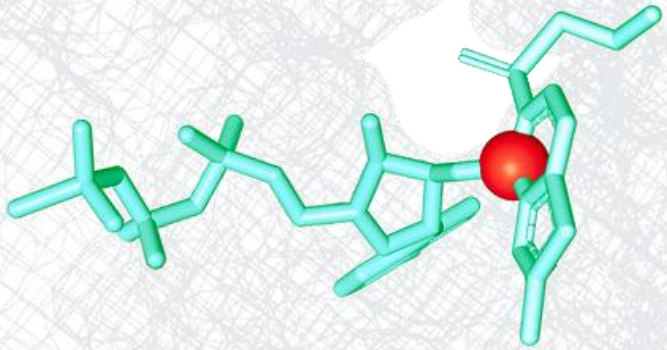
Unlocking Boron's Promise for Patients



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