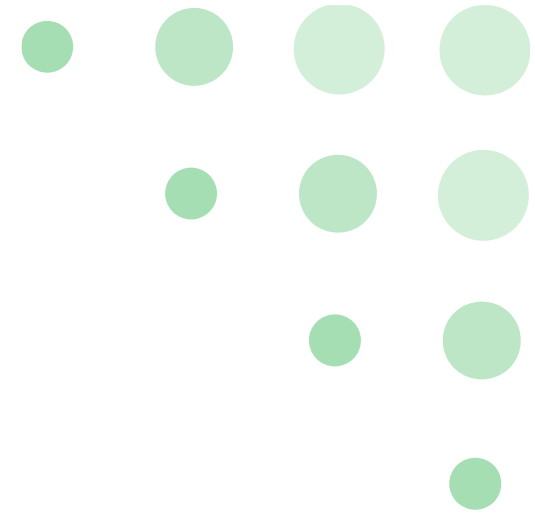


# BCX9930 Data Update

September 30, 2020



# Forward-Looking Statements

BioCryst's presentation may contain forward-looking statements, including statements regarding future results, unaudited and forward-looking financial information and company performance or achievements. These statements are subject to known and unknown risks and uncertainties which may cause our actual results, performance or achievements to be materially different from any future results or performances expressed or implied in this presentation. You should not place undue reliance on the forward-looking statements. For additional information, including important risk factors, please refer to BioCryst's documents filed with the SEC and located at <http://www.sec.gov>.

# Six Major Program Updates Expected in Next 100 Days

Q3 2020

**Data** update from BCX9930 200/400 mg treatment-naïve PNH dose-ranging study (Q3 2020)

Q4 2020

**Data** from part 1 galidesivir COVID-19 trial (Q4 2020)

PDUFA

Dec. 3, 2020

**ORLADEYO approval** in U.S.

**Approval** decision on ORLADEYO JNDA from PMDA (December 2020)

**Data** update from BCX9930 200/400 mg inadequate responder PNH dose-ranging study (Year-end 2020)

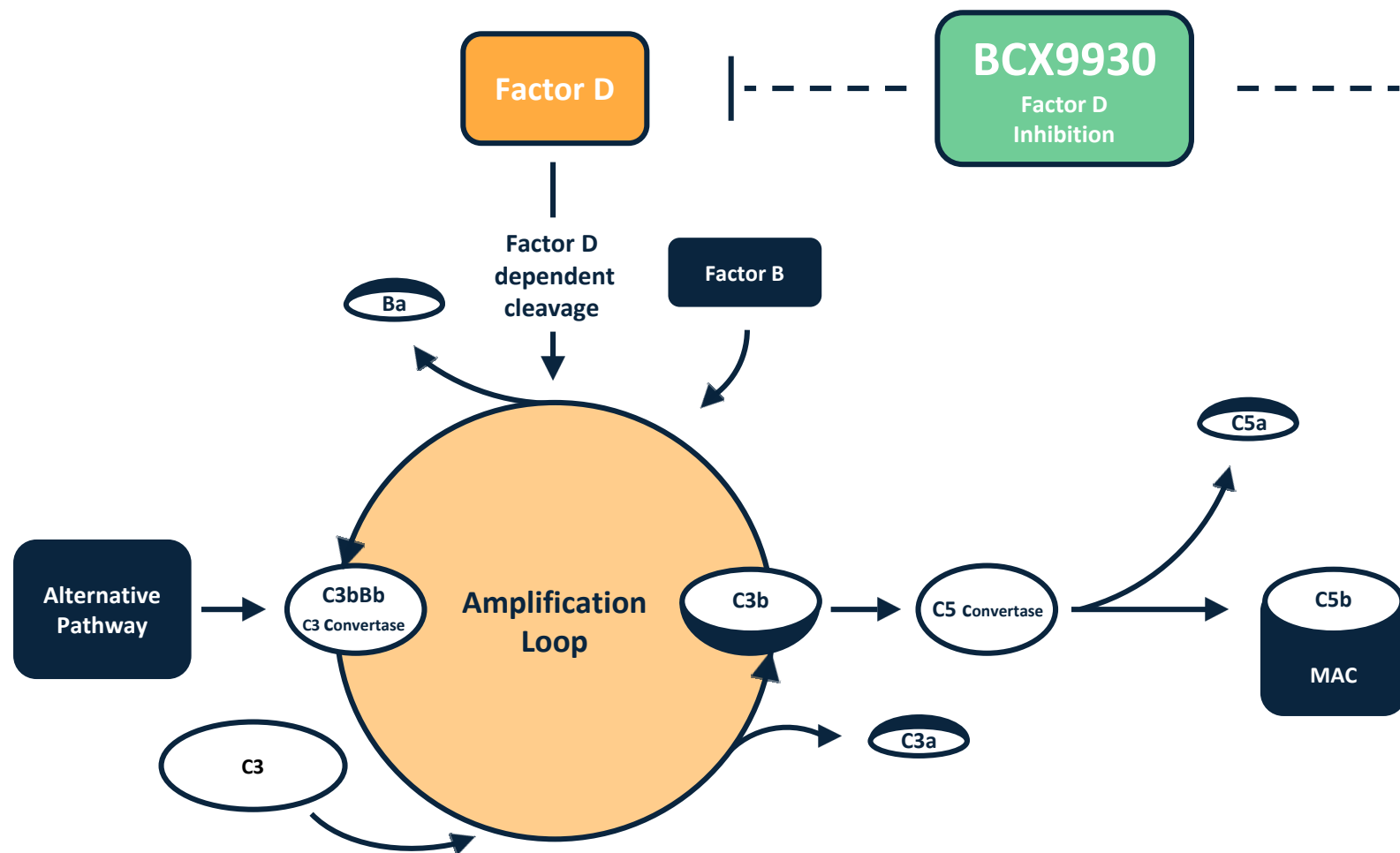
Phase 1 **data** from BCX9250 trial in FOP (Year-end 2020)

2021

100 Days

# Factor D: An Outstanding Drug Target for Complement-mediated Diseases

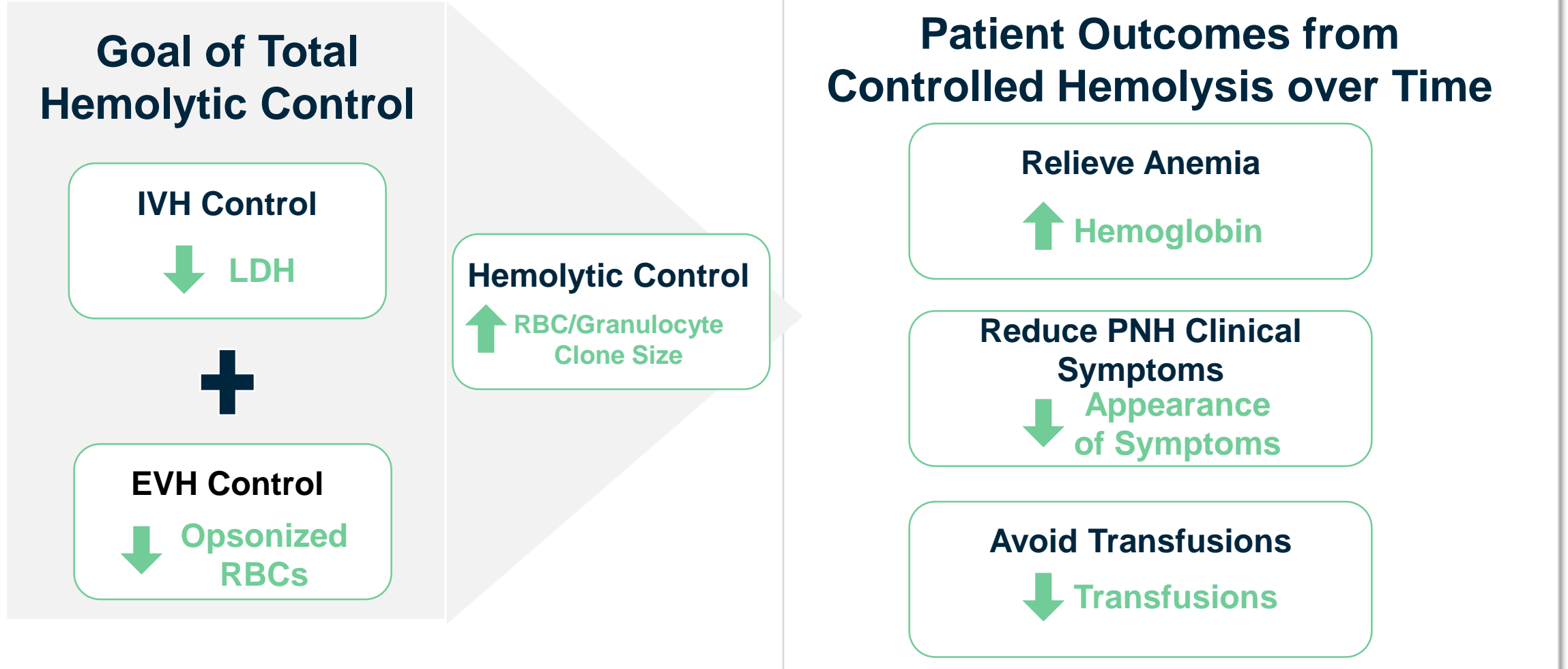
- Factor D is essential to initiate the Alternative Pathway
- Blocking Factor D blocks the Alternative Pathway and all downstream products



## Spectrum of Alternative Pathway Dysregulation Diseases

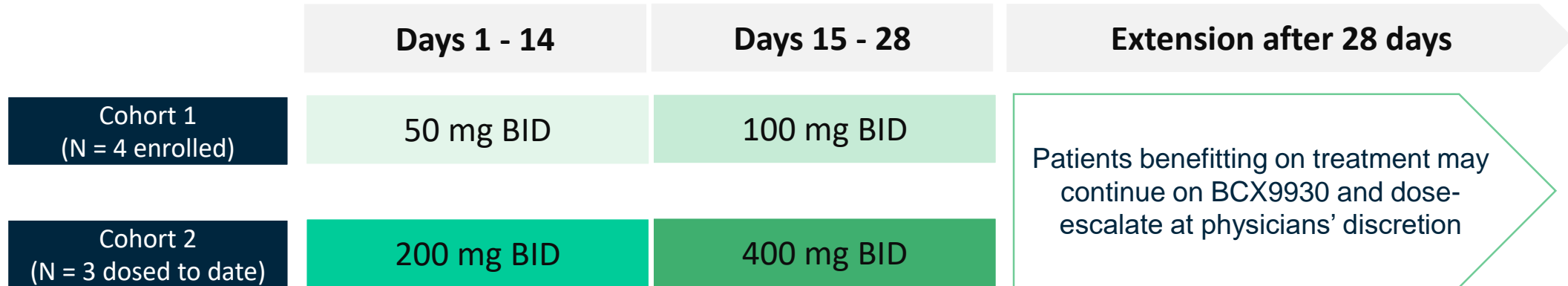
Hematology	Rheumatology
<b>PNH</b> <i>paroxysmal nocturnal hemoglobinuria</i>	<b>ANCA vasculitis</b> <i>antineutrophil cytoplasmic antibody-associated vasculitis</i>
<b>aHUS</b> <i>atypical hemolytic uremic syndrome</i>	<b>Lupus nephritis</b>
	<b>IgAN vasculitis</b>
Nephrology	
<b>C3G</b> <i>glomerulonephritis</i>	
<b>PMN</b> <i>primary membranous nephropathy</i>	
<b>IgAN</b> <i>IgA nephropathy</i>	

# Oral Monotherapy with BCX9930 Offers Advantage of Controlling Both Intravascular (IVH) and Extravascular (EVH) Hemolysis



# PNH Proof of Concept Study Design: BCX9930 as Monotherapy

## BCX9930 Study Design: Patients with PNH who are Naïve to C5-INH Treatments



## Key Eligibility Criteria at Screening: Patients with PNH who are Naïve to C5-INH Treatments

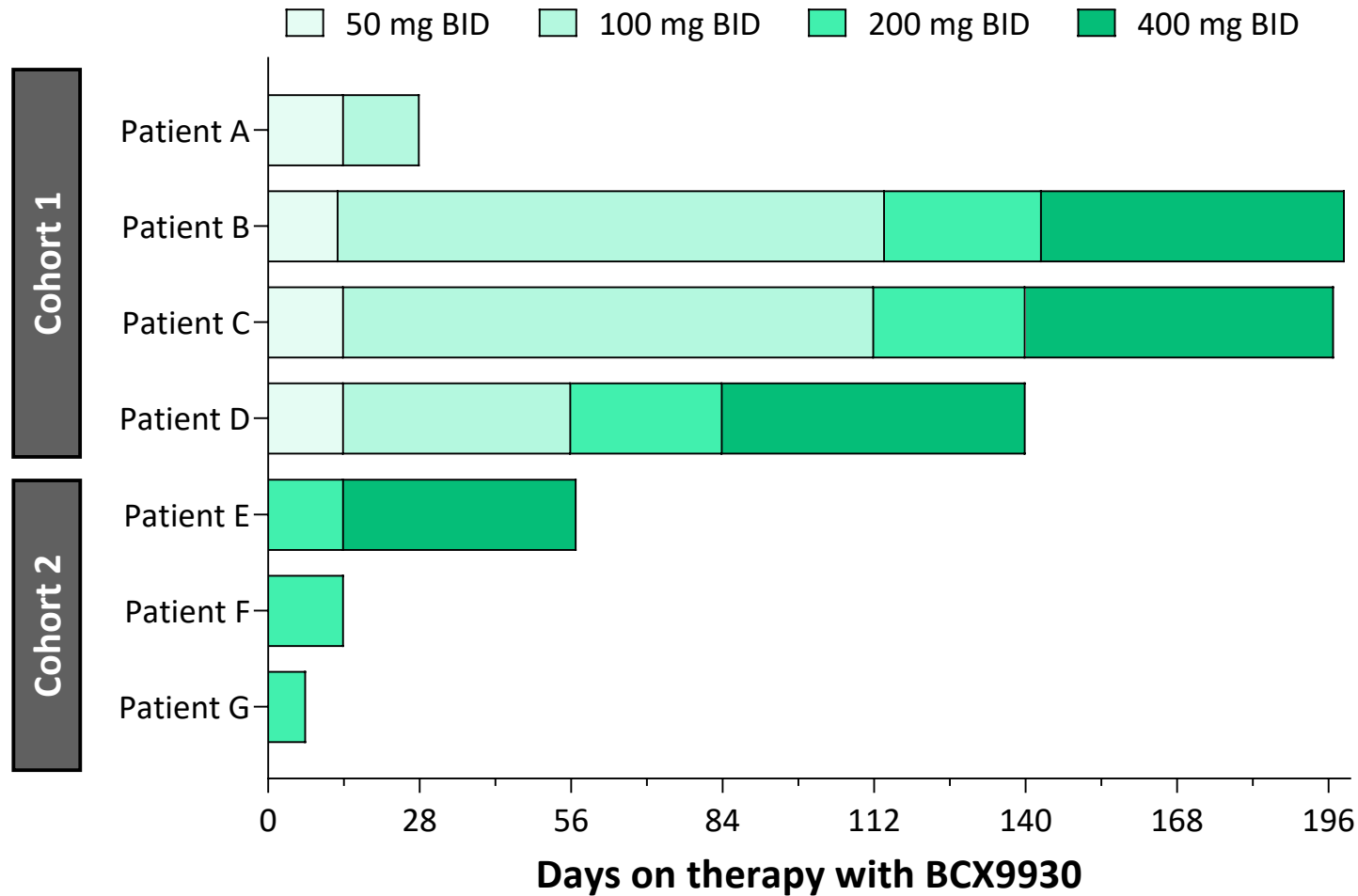
- Hb < 10 g/dL or blood transfusion within the last 12 months
- LDH ≥ 2 x ULN
- PNH clone size > 10%
- Platelet count > 30,000/μL
- Reticulocyte count > 100,000/μL

# Treatment-naïve PNH Patients Had Severe Disease Prior to Treatment

Pre-treatment Characteristics	Cohort 1				Cohort 2		
<i>Sequential Patient # in Cohort</i>	1	2	3	4	1	2	3
<i>Patient Code</i>	A	B	C	D	E	F	G
PNH duration, years	8	4	4	5	2	5	1
Compromised bone marrow function	no	no	yes	no	yes	yes	yes
History of thrombosis, pulmonary HT or PNH renal injury	yes	yes	no	no	no	no	no
Lactate dehydrogenase (LDH), × ULN	9.8	11.0	3.7	6.9	4.2	4.6	3.8
Hemoglobin, g/dL	8.2	7.0	6.0	10.7	6.7	7.6	11.0
Units of RBC transfused in 52 weeks prior to screening	0	13	0	2	12	1	2
Reticulocytes, 10 <sup>3</sup> cells/μL	220	285	130	203	128	115	181
PNH erythrocyte (RBC) clone size, %	89	41	49	49	33	76	48
PNH RBC relative to PNH WBC, %	89	42	53	60	36	78	61

Laboratory values for LDH, reticulocyte count, total bilirubin and PNH erythrocyte clone size are average of available screening and baseline results. HT: hypertension. Hemoglobin is last available value prior to Day 1 of BCX9930 administration. Study is ongoing – preliminary data. Patients highlighted in green shading have progressed through at least 6 weeks of treatment on study at 400 mg BID. Patients with compromised bone marrow function have history of aplastic anemia or intermediate PNH.

# Duration of BCX9930 Treatment in PNH Patients

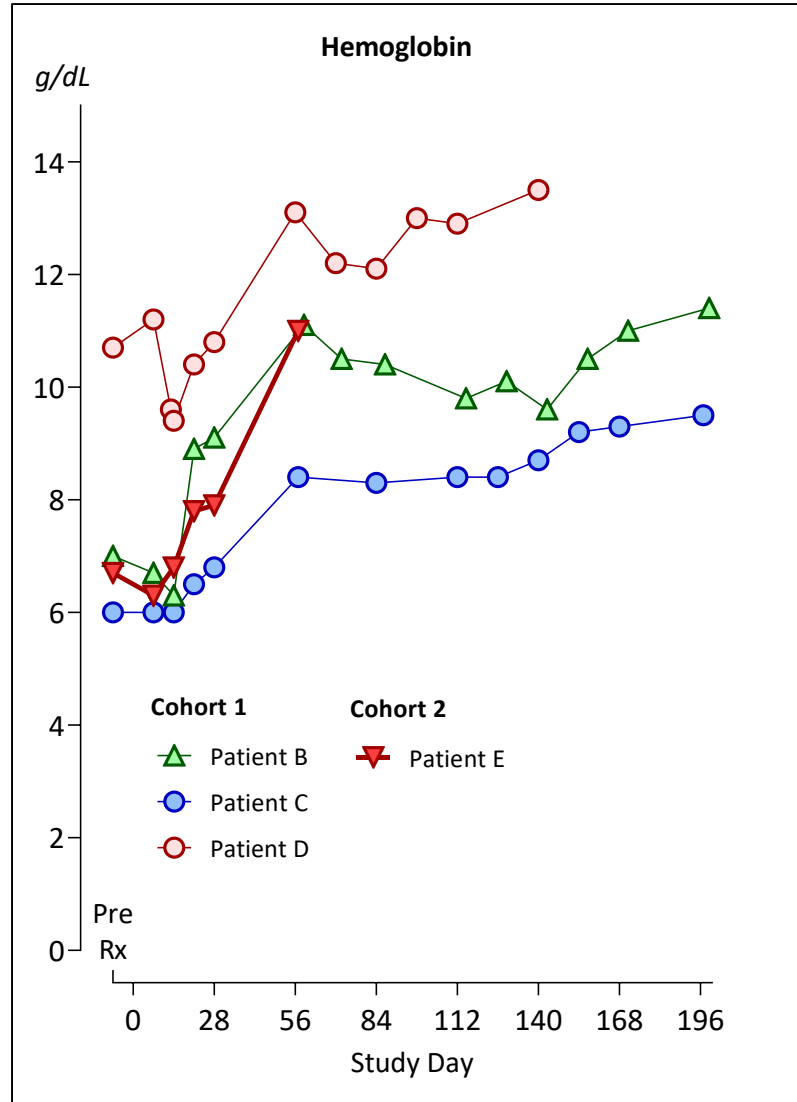


Data update from 4 patients on 400 mg BID an average of 53 days to date

Study is ongoing – preliminary data. Patients B – G remain on treatment in study  
As disclosed in May 2020, Patient A discontinued due to an unrelated SAE



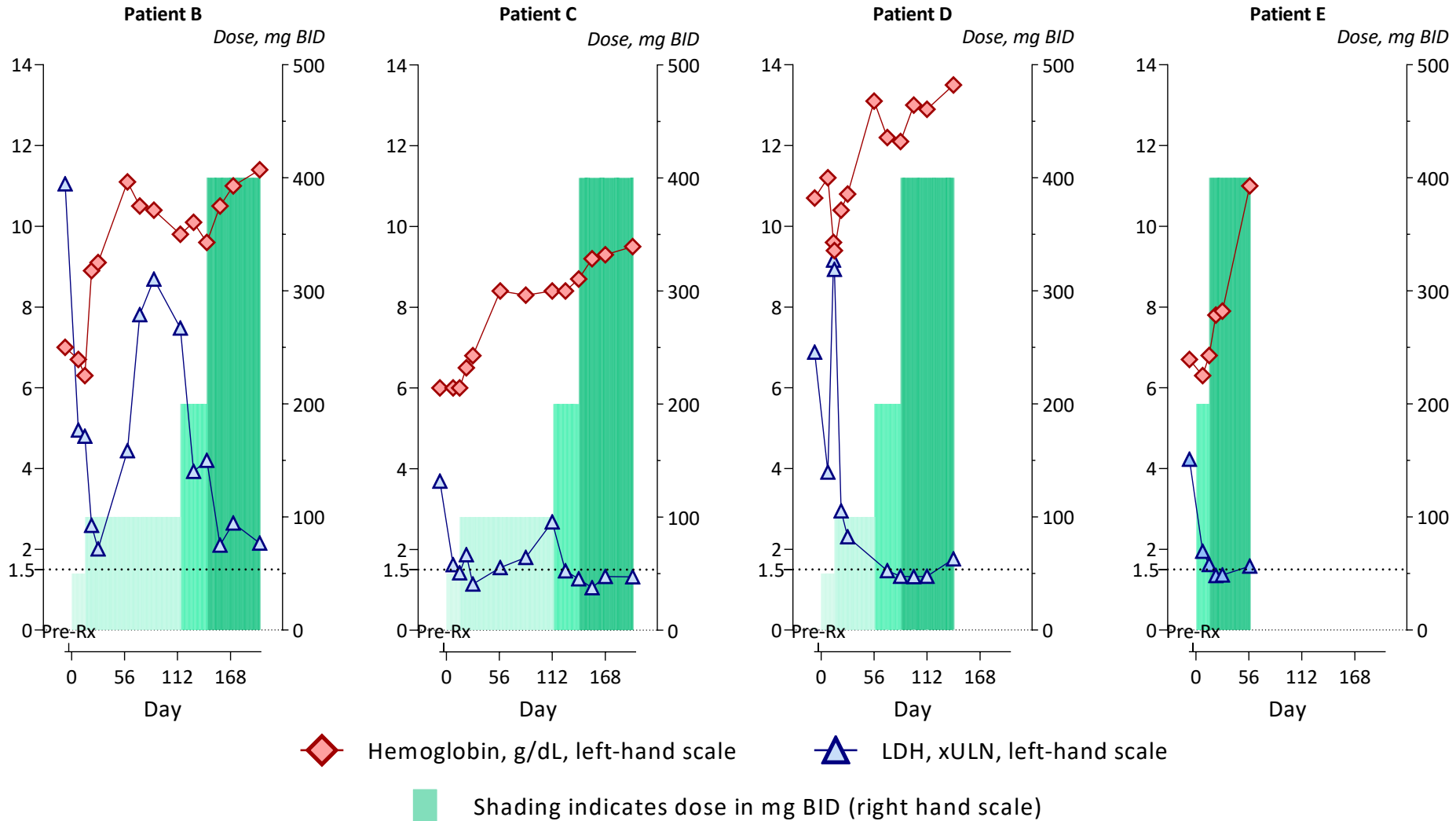
# Meaningful Changes in Key Biomarkers Indicating Control of Hemolysis



Patient	Duration at 400 mg BID	Hemoglobin g/dL		RBC Clone Size % of Granulocyte Clone Size		# of Transfusions @ 200/400 mg
		Pre-Rx	Most Recent	Pre-Rx	Most Recent	
▲ B	56 days	7.0	11.4	42%	100%	0
● C	57 days	6.0	9.5	53%	97%	0
○ D	56 days	10.7	13.5	60%	87%	0
▼ E	43 days	6.7	11.0	36%	92%	0
<b>Mean</b>	<b>53 days</b>	<b>7.6</b>	<b>11.4</b>	<b>48%</b>	<b>94%</b>	<b>0</b>

- Mean increase in Hb from baseline of 3.8 g/dL
- Hb maintained at 400 mg BID without RBC transfusions
- Mean RBC PNH clone size relative to granulocyte clone size increased to 94% from 48% pre-Rx

# BCX9930 Dose-response in Hemoglobin and LDH in PNH Patients



# Hemolysis Biomarkers and Clinical Assessment Support

## Clinical Benefit of BCX9930 as Monotherapy in PNH

### Clinical Data at 400 mg BID

*Dose-dependent and clinically meaningful changes in key disease biomarkers were observed*

- Mean hemoglobin increase from baseline was 3.8 g/dL
- Hb maintained at 400 mg BID without RBC transfusions (4/4)
- Mean RBC PNH clone size relative to granulocyte clone size increased from 48% pre-treatment to 94%, representing near-complete control of hemolysis
- Average LDH < 1.5 x ULN (3 of 4 patients)

*Investigator-assessed clinical benefits*

- All subjects treated assessed as benefiting from BCX9930 and continued on therapy

# BCX9930 has been Safe and Well Tolerated in PNH Patients

## *Overall Safety*

- No discontinuations due to related AEs
- No BCX9930-related serious AEs or safety signals
  - No safety signals in routine monitoring of vital signs, ECGs, or laboratory evaluations of hematology, coagulation, urinalysis, or clinical chemistry

## *Adverse Events*

- The most common drug-related TEAE was mild-moderate headache lasting 1-3 days
- One patient had mild rash that resolved during continued BCX9930 dosing at 100 mg BID
- One patient had mild rash that is resolving during uninterrupted dosing after dose escalation to 400 mg BID
- One unrelated serious AE\*

*Study is ongoing – preliminary data. \*Unrelated SAE previously reported, primary disseminated VZV infection in a non-immune subject taking corticosteroids, fatal.*

# Next Steps for BCX9930 Development



Q3 2020

Q4 2020

2021

**Data update** from BCX9930 200/400 mg treatment-naïve PNH dose-ranging study

**Complete dose-ranging** in C5 inhibitor naïve patients with 500 mg BID

**Meet with regulators** to discuss advanced development program

**Data update** from BCX9930 200/400 mg inadequate responder PNH dose-ranging study by year-end

Begin multiple advanced development **clinical trials** in hematology and nephritis diseases of the alternative pathway

**Goal = Oral Monotherapy in Multiple Complement-mediated Diseases**