Cantor Global Healthcare Conference

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Chief Business Officer

October 4, 2019

Forward-Looking Statements

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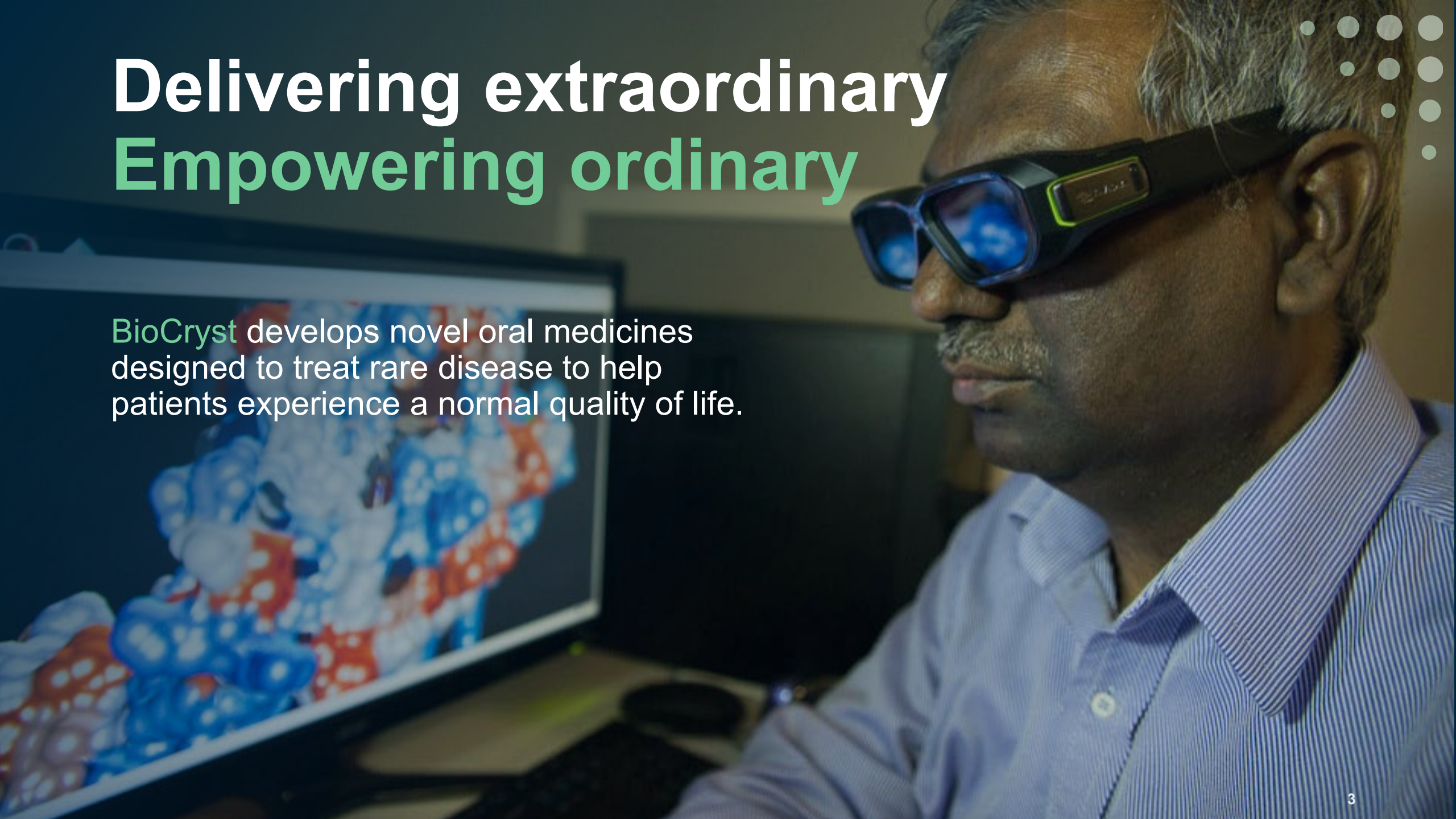
Delivering extraordinary
Empowering ordinary



BioCryst develops novel oral medicines designed to treat rare disease to help patients experience a normal quality of life.

Robust Pipeline Through In-house Innovation

	Lead Optimization	Pre-clinical	Phase 1	Phase 2	Phase 3	Filed	Approved
STRATEGY: Develop oral therapies for life-threatening, rare diseases							
BCX7353 – Oral Capsule (Prophylactic HAE)							
BCX7353 – Oral Formulation (Acute HAE)							
BCX9930 – Oral Factor D Inhibitor (Complement-Mediated Diseases)							
BCX9250 (FOP)							
SUPPORTING ASSETS: Externally funded, potential for capital infusions							
RAPIVAB® (peramivir injection)*							
Galidesivir (Broad spectrum antiviral) I.V.							

*Licensed to Seqirus, Shionogi and Green Cross

$35 Million RAPIVAB® Contract for Strategic National Stockpile

- $34.7 million contract for procurement of up to 50,000 doses over a five-year period
- Will supply the Strategic National Stockpile
- Provides non-dilutive capital to advance pipeline
- New order = $14 million addition to balance sheet in Q4 2019

BioCryst HAE Prophylactic Program (BCX7353)

Successful Readout of APeX-2 Enables Regulatory Submissions Starting in 4Q 2019

- Clinically meaningful attack rate reduction ($p<0.001$) on primary endpoint
- Consistent dose response across endpoints
- Responder analysis shows significant reduction in attack rate in a large proportion of patients:
  - 50% of patients had ≥70% reduction in attack rate ($p=0.002$)
  - 23% of patients had ≥ 90% reduction in attack rate ($p=0.073$)
- Excellent safety and tolerability profile
- New treatment option (oral) meeting significant unmet medical need

Development of Global Commercial Launch Plan Actively Underway

- Tremendous excitement about data from physicians and patients
- Completing market and payor research to refine go-to-market strategy
- Building commercial organization and filling critical roles to support launch
- FDA submission on track for 4Q 2019; EMA and PMDA in 1Q 2020

Global HAE sales exceeded $2 billion in 2018

Market growth continues with shift toward prophylaxis

BioCryst Oral Factor D Inhibitor (BCX9930)

Over $10 Billion Global Market Opportunity

Significant pipeline potential for a differentiated oral complement inhibitor

*The only marketed complement inhibitor in 2018 is **IV-infused***

1

*2018 **sales from 3 indications,** 55% ex-US**

$3.6 billion

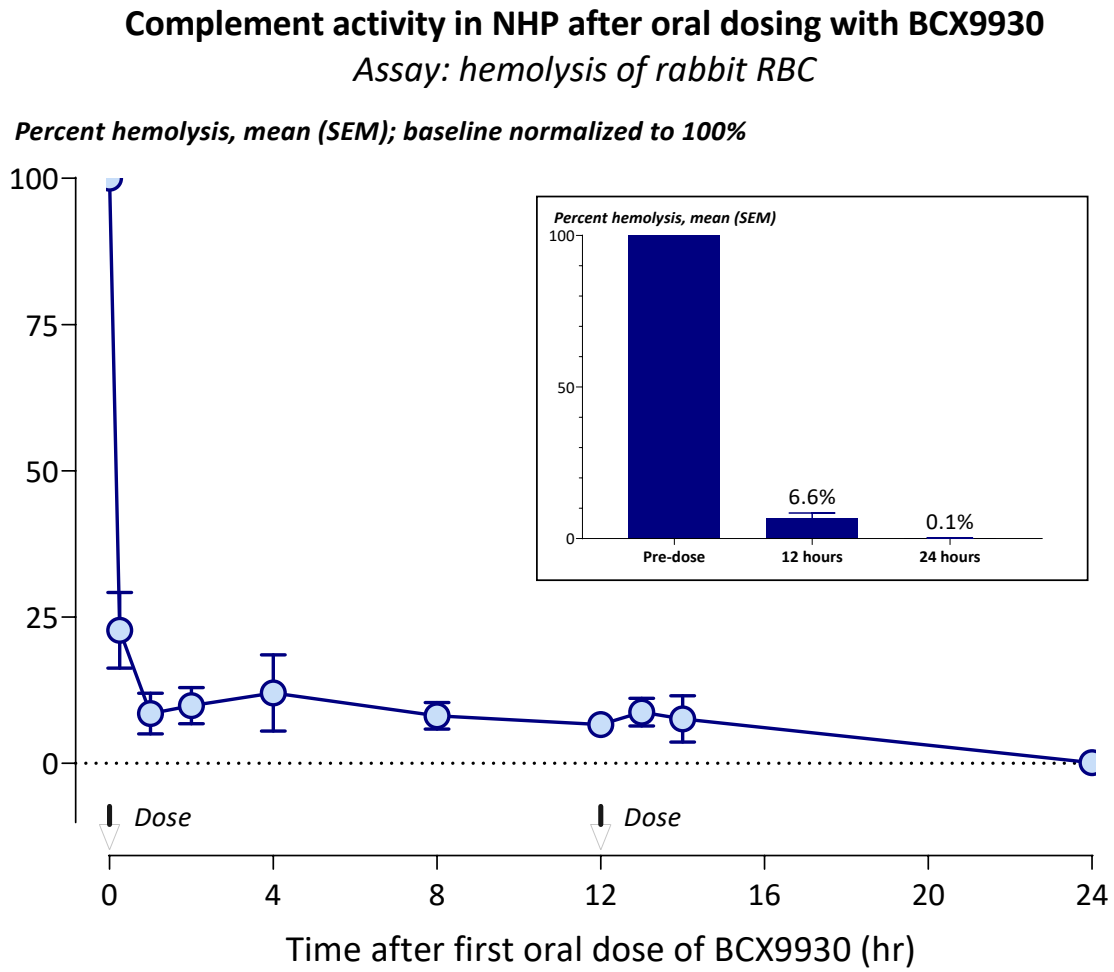
Orphan indications,** each with >$1B potential sales

7+

* SOLIRIS® (eculizumab) 2018 sales in paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), and generalized myasthenia gravis (gMG) reported 2/4/19

** Additional potential orphan indications for complement inhibitors include, but are not limited to, neuromyelitis optica (NMO), ANCA-associated vasculitis (AAV), C3 glomerulonephritis (C3G), IgA nephropathy (IgAN), warm autoimmune hemolytic anemia (wAIHA), focal segmental glomerulosclerosis (FSGS), and cold agglutinin disease (CAD)

BCX9930 Inhibits Complement-Mediated Hemolysis in Standard Ex-Vivo Assay After Oral Dosing in NHP



- Hemolysis of rabbit RBC by serum is a very well-established assay, originally developed to detect complement deficiency
- After oral dosing of NHPs with BCX9930, >99.9% suppression of complement-mediated hemolysis was observed
- Drug exposure (AUC0-24) in this experiment was a fraction of the NOAEL
- BCX9930 is approximately 50% less potent on NHP compared with human Factor D

BioCryst Corporate Update

Cash Position & 2019 Guidance (in Millions)

Cash & investments at December 31, 2018	$128
Cash & investments at June 30, 2019	**$98**
Senior Credit Facility [A]	$50
FY 2019 GUIDANCE	
Operating cash utilization	**$105 – 130**
Operating expenses [B]	**$120 – 145**

A - Credit Facility was modified in February 2019 to provide an additional $20 upon closing and the ability to draw an additional $50 of milestone-based tranches.

B - Excludes equity-based compensation.

BioCryst Continues Executing to Support Multiple Upcoming Milestones

Accomplished to date

- ✓ Successfully completed APeX-2 for Prophylactic HAE; extension phase on-going
- ✓ Initiated HAE prophy open-label study (APeX-S) and Japan registration (APeX-J) studies
- ✓ Initiated BCX9930 Phase 1 Study
- ✓ Readout Phase 2 trial results from ZENITH-1 study in Acute HAE

2H 2019

- ❑ FDA submission of BCX7353 for Prophylactic HAE
- ❑ BCX9930 Phase 1 data
- ❑ Initiate Phase 1 study for BCX9250 in FOP

2020

- ❑ EMA and PMDA submissions of BCX7353 for HAE Prophylaxis
- ❑ BCX9930 POC in PNH
- ❑ Initiation of Phase 3 for HAE Acute
- ❑ Launch of BCX7353 for HAE Prophylaxis

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