Second Quarter 2018 Results Call
Corporate Update & Financial Results

August 7, 2018

Forward-Looking Statements

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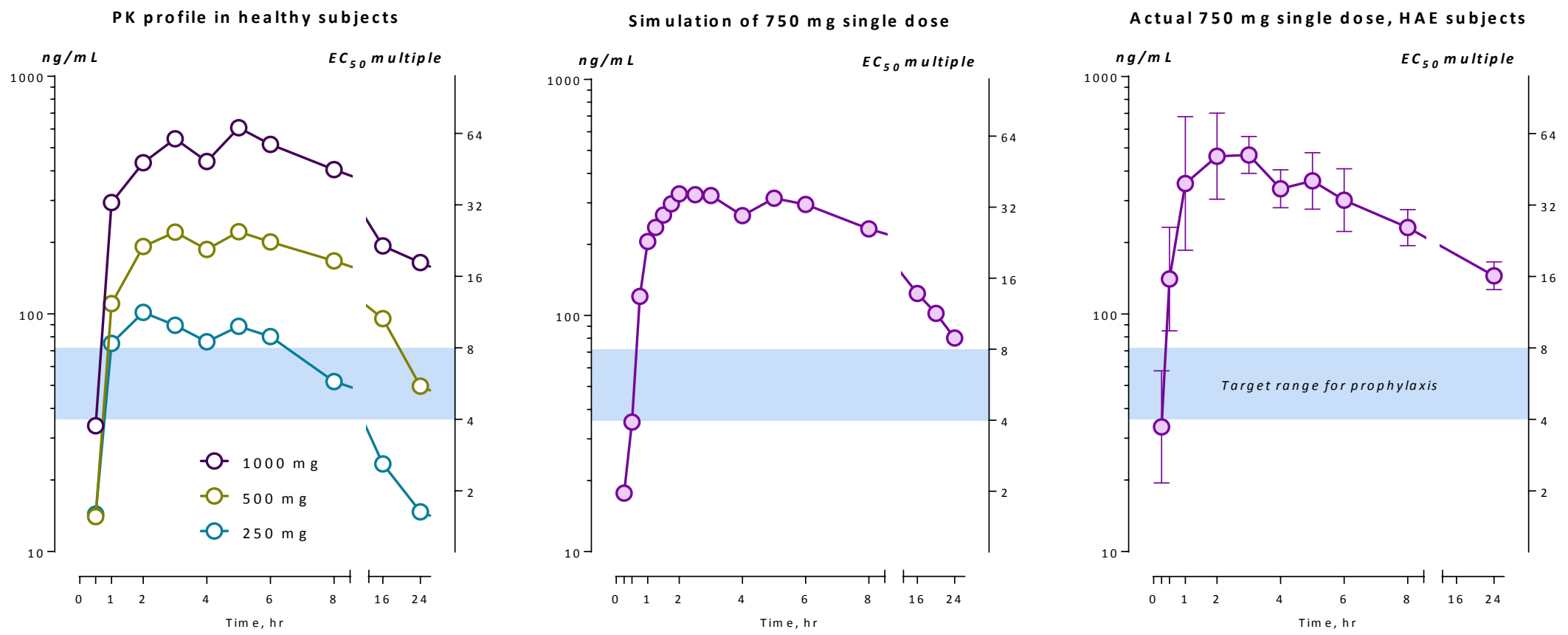
Agenda

- Update on Strategy and Pipeline: Focused on Executing our Strategic Plan
  - Jon Stonehouse – President, Chief Executive Officer
- Clinical Update: ZENITH-1, APeX-2 and APeX-S Trials On-track
  - Dr. Bill Sheridan – Chief Medical Officer
- Commercial Update: Significant Commercial Opportunity
  - Lynne Powell – Chief Commercial Officer
- Financial Update: Strong Financial Position with Cash Runway into 2020
  - Thomas Staab – Chief Financial Officer
- Summary and Q&A

Update on Strategy and Pipeline: Focused on Executing our Strategic Plan

Clinical Update:
ZENITH-1, APeX-2, APeX-S Trials On-track

PK profile of single oral dose of BCX7353 supports evaluation as an acute treatment in HAE



Data shown are means for healthy subjects and simulation and mean (SD) for HAE subjects

Variable design of previous registration trials for acute treatments

Drug *Study*	Cinryze[1] *CHANGE*	Berinert *IMPACT-1*	Kalbitor *EDEMA-3*	Firazyr *FAST-3*	Ruconest *C-1310 Trial*
Years subjects enrolled	2005-2007	2005-2007	2005-2007	2009-2010	2011-2012
Route	IV infusion	IV infusion	SC injection	SC injection	IV infusion
Duration of symptoms prior to Rx	≤ 4 hours	≤ 5 hours	≤ 8 hours	6 to 12 hours	≤ 5 hours
Minimum severity of attack	Moderate	Moderate	Moderate	Moderate	VAS 50mm
Location of treatment	Clinic	Clinic	Clinic	Clinic	Clinic
Duration of observation by HCP	≥ 4 hours	≥ 4 hours	≥ 4 hours	≥ 8 hours	6 hours
Treatment administration	HCP	HCP	HCP	HCP	HCP
Outcome measure	Symptom severity assessed every 15 minutes	Symptom improvement "Taking into account all of the symptoms you experienced with this HAE attack, are you confident that it is starting to improve?"	Symptom score (TOS)	Symptom score (VAS)	Treatment effect questionnaire (TEQ)
Availability of HCP-administered rescue Rx	2nd dose of blinded study drug	2nd dose of blinded study drug	Opiates, antiemetics	icatibant pdC1NH	rhC1INH icatibant pdC1NH ecallantide

[1]Not approved for the treatment of attacks in the US

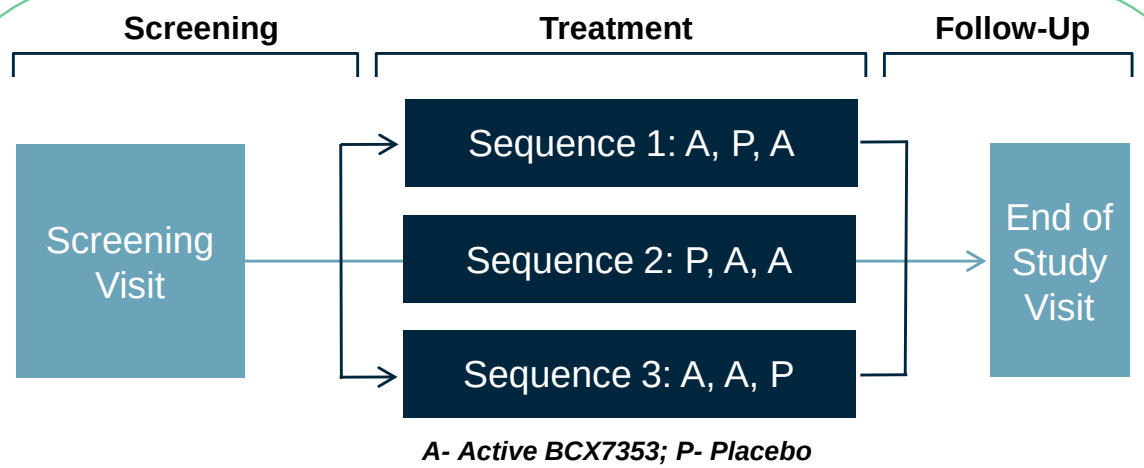
Marketed injectables achieved ~ 16-43% improvement compared with placebo

Trial *Drug, dose*	Subjects Receiving Rescue Therapy or Medical Intervention		% Difference *Active - Placebo*	Proportion meeting 1° endpoint at 4 hours		% Difference Active - Placebo
	Active	Placebo		Active	Placebo	
CHANGE *Cinryze 1000 U IV infusion*[1] *(Shire)*	23/35 (66%)	28/33 (85%)	-19%	21/35 (60%)	14/33 (42%)	18%
IMPACT-1 *Berinert 20 U/kg IV infusion* *(CSL)*	8/43 (19%)	24/42 (57%)	-38%	~86%	~59%	~27%
EDEMA-3 *Kalbitor 30 mg SC injection* *(Shire)*	5/36* (14%)	13/36* (36%)	-22%	~51%	~35%	~16%
FAST-3 *Firazyr 30 mg SC injection* *(Shire)*	3/43* (7%)	18/45* (40%)	-33%	32/43* (74%)	14/45* (31%)	~43%
C-1310 Trial *Ruconest 50 U/kg IV infusion* *(Pharming)*	5/44* (13%)	13/31* (43%)	-30%	~80%	~53%	~27%

[1]Not approved for the treatment of attacks in the US

Numbers cited from peer-reviewed publications except where noted: FDA analysis ; ‡ Not Stated ; ˜ indicates values estimated from published Kaplan-Meier plots*

ZENITH-1 exploratory phase 2 trial aligned with the current guidelines for on-demand treatment[1,2]



A- Active BCX7353; P- Placebo

Trial part	Dose level	N of subjects
Part 1	750 mg	36
Part 2	500 mg	12
Part 3	250 mg	12
Total		*60*

ZENITH-1 protocol instructions

- Subjects are to call the site PI and treat attacks within 1 hour of symptom onset
- Study drug treatment must be approved by telephone by the site PI
- Subjects wait 4 hours if possible before using HAE medicines, if they feel additional treatment is needed

"Whenever possible and allowed by drug-specific summary product characteristics, patients should have the on-demand medicine to treat acute attacks at home and should be trained to self-administer these medicines."[2]

[1]*Zuraw, B. L. et al 2013 J Allergy Clin Immunol Pract **1**(5): 458-467*
[2]*Cicardi, M. et al 2012). Allergy **67**(2): 147-157.*

ZENITH-1 is unique

Drug *Study*	Cinryze[1] *CHANGE*	Berinert *IMPACT-1*	Kalbitor *EDEMA-3*	Firazyr *FAST-3*	Ruconest *C-1310 Trial*	**BCX7353** ***ZENITH-1***
Years subjects enrolled	2005-2007	2005-2007	2005-2007	2009-2010	2011-2012	2017-2018
Route	IV infusion	IV infusion	SC injection	SC injection	IV infusion	PO (liquid)
Duration of symptoms prior to Rx	≤ 4 hours	≤ 5 hours	≤ 8 hours	6 to 12 hours	≤ 4 hours	≤ 1 hour
Location of treatment	Clinic	Clinic	Clinic	Clinic	Clinic	Home
Duration of observation by HCP	≥ 4 hours	≥ 4 hours	≥ 4 hours	≥ 8 hours	6 hours	none
Treatment administration	HCP	HCP	HCP	HCP	HCP	Patient
Availability of self-administered rescue Rx	None	None	None	None	None	icatibant pdC1INH rhC1INH
Availability of HCP-administered rescue Rx	Second dose of blinded study drug	Second dose of blinded study drug	Opiates, antiemetics	icatibant pdC1NH	rhC1INH icatibant pdC1NH ecallantide	icatibant pdC1INH rhC1INH

[1]Not approved for the treatment of attacks in the US

ZENITH-1: Multiple efficacy endpoints to allow selection of primary endpoint for phase 3

Proportion:

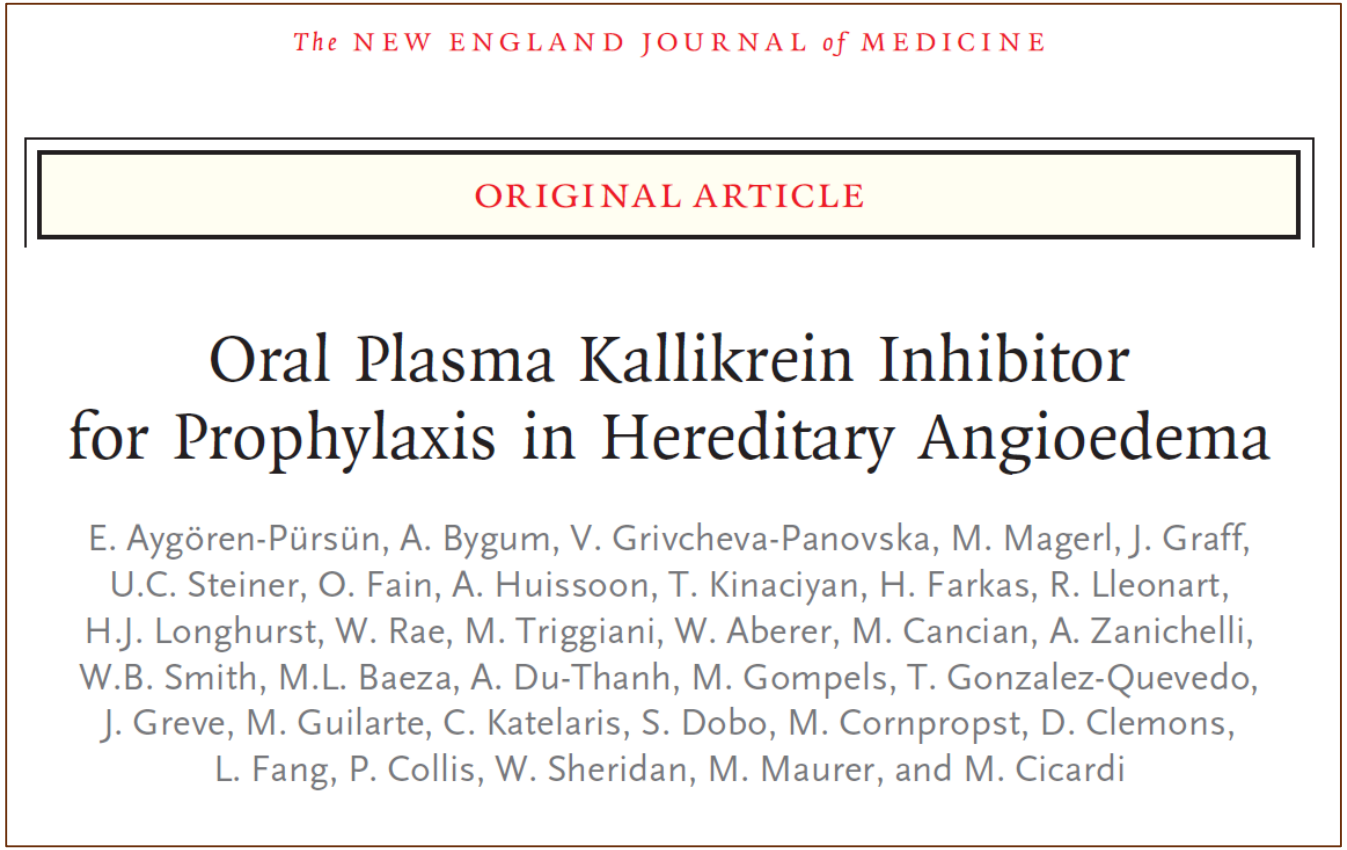
- At 4 hours:
  - Improved or stable 3-symptom composite visual analogue scale (VAS) score
  - Improved or stable symptoms on patient global assessment
  - No or mild symptoms
- At 24 hours: requiring standard of care attack treatment

Time to:

- Use of standard of care acute attack treatment
- Improved or stable symptoms by composite VAS score
- Symptom relief
- Almost complete symptom relief
- Initial symptom relief
- Complete symptom relief

Multiple opportunities for ZENITH-1 to show clinically meaningful endpoint

BCX7353 phase 2 APeX-1 trial published, phase 3 trial well underway



*Aygoren-Pursun, E. et al 2018 N Engl J Med **379**(4): 352-362*

APeX-2

Blinded Treatment
24 weeks

N ≅ 32 BCX7353 150 mg QD*

N ≅ 32 BCX7353 110 mg QD*

N ≅ 32 Placebo QD

Final analysis @ week 24

Commercial Update:
Significant Commercial Opportunity

Significant commercial opportunity

Potential to launch new era of oral therapy for HAE

- Large and growing HAE market opportunity
- Prophylactic treatment will drive market growth with acute remaining important
- In a market of predominately injectable therapies, BioCryst is building a highly differentiated portfolio of oral treatments that patients and providers want

Over $2B global market by launch of BCX7353

Financial Update:
Strong Financial Position with Cash Runway into 2020

Second quarter operating results

(in thousands, except per share amounts)	Q2 2018	Q2 2017	Change Q2 2018 vs Q2 2017
Revenues:			
Royalty revenue	$ 142	$ 489	(71%)
Collaborative and other R&D	12,352	2,610	373%
Total revenues	12,494	3,099	303%
Expenses:			
Research and development	21,010	15,759	33%
General and administrative	9,492	2,834	235%
Royalty	243	22	1005%
Total operating expenses	30,745	18,615	65%
Loss from operations	(18,251)	(15,516)	18%
Interest and other income, net	493	203	143%
Interest expense	(2,195)	(2,094)	5%
Gain on foreign currency derivative	1,507	521	189%
Net loss	$ (18,446)	$ (16,886)	9%
Net loss per share - Basic & Diluted	$ (0.19)	$ (0.21)	(10%)
Net operating cash utilization	$ 18,421	$ 12,209	51%
Weighted average shares outstanding	98,787	80,418	

Cash position & 2018 guidance (in millions)

Cash & investments at December 31, 2017	$159
Cash & investments at June 30, 2018	**$122**
Pro-forma cash & investments at June 30, 2018 [A]	$186
Senior Credit Facility [B]	$30
FY 2018 GUIDANCE(stand-alone, as revised on July 11, 2018)	
Operating cash utilization	**$85 – 105**
Operating expenses [C]	**$90 – 110**

A – Includes proceeds from the July credit facility enhancement and the August public offering.

B – Credit Facility was enhanced in July 2018.

C - Excludes equity-based compensation.

Thank you…
Questions and Answers

August 7, 2018