Filed by Idera Pharmaceuticals, Inc. pursuant to Rule 425
Under the Securities Act of 1933
And Deemed Filed Pursuant to Rule 14a-12
Under the Securities Exchange Act of 1934
Subject Company: BioCryst Pharmaceuticals, Inc..
Commission File No. of Subject Company: 000-23186

Combining Capabilities to Serve More Patients with Rare Diseases

bio cryst + idera

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the federal securities law. Such statements are based upon current plans, estimates and expectations that are subject to various risks and uncertainties. The inclusion of forward-looking statements should not be regarded as a representation that such plans, estimates and expectations will be achieved. Words such as "anticipate," "expect," "project," "intend," "believe," "may," "will," "should," "plan," "could," "target," "contemplate," "estimate," "predict," "potential" and words and terms of similar substance used in connection with any discussion of future plans, actions or events identify forward-looking statements. All statements, other than historical facts, including statements regarding the expected timing of the closing of the merger; the ability of the parties to complete the merger considering the various closing conditions; the expected benefits of the merger, such as efficiencies, cost savings, tax benefits, enhanced revenues and cash flow, growth potential, market profile and financial strength; the competitive ability and position of the combined company; and any assumptions underlying any of the foregoing, are forward-looking statements. Important factors that could cause actual results to differ materially from Idera's and BioCryst's plans, estimates or expectations could include, but are not limited to: (i) Idera or BioCryst may be unable to obtain stockholder approval as required for the merger; (ii) conditions to the closing of the merger may not be satisfied; (iii) the merger may involve unexpected costs, liabilities or delays; (iv) the effect of the announcement of the merger on the ability of Idera or BioCryst to retain and hire key personnel and maintain relationships with customers, suppliers and others with whom Idera or BioCryst does business, or on Idera's or BioCryst's operating results and business generally; (v) Idera's or BioCryst's respective businesses may suffer as a result of uncertainty surrounding the merger and disruption of management's attention due to the merger; (vi) the outcome of any legal proceedings related to the merger; (vii) Idera or BioCryst may be adversely affected by other economic, business, and/or competitive factors; (viii) the occurrence of any event, change or other circumstances that could give rise to the termination of the merger agreement; (ix) risks that the merger disrupts current plans and operations and the potential difficulties in employee retention as a result of the merger; (x) the risk that Idera or BioCryst may be unable to obtain governmental and regulatory approvals required for the transaction, or that required governmental and regulatory approvals may delay the transaction or result in the imposition of conditions that could reduce the anticipated benefits from the proposed transaction or cause the parties to abandon the proposed transaction; (xi) risks that the anticipated benefits of the merger or other commercial opportunities may otherwise not be fully realized or may take longer to realize than expected; (xii) the impact of legislative, regulatory, competitive and technological changes; (xiii) risks relating to the value of the new holding company shares to be issued in the merger; (xiv) expectations for future clinical trials, the timing and potential outcomes of clinical studies and interactions with regulatory authorities; and (xv) other risks to the consummation of the merger, including the risk that the merger will not be consummated within the expected time period or at all. Additional factors that may affect the future results of Idera and BioCryst are set forth in their respective filings with the SEC, including each of Idera's and BioCryst's most recently filed Annual Report on Form 10-K, subsequent Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the SEC, which are available on the SEC's website at www.sec.gov. See in particular Item 1A of Idera's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 under the heading "Risk Factors" and Item 1A of BioCryst's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 under the heading "Risk Factors." The risks and uncertainties described above and in Idera's most recent Annual Report on Form 10-K and BioCryst's most recent Quarterly Report on Form 10-Q are not exclusive and further information concerning Idera and BioCryst and their respective businesses, including factors that potentially could materially affect their respective businesses, financial condition or operating results, may emerge from time to time. Readers are urged to consider these factors carefully in evaluating these forward-looking statements, and not to place undue reliance on any forward-looking statements. Readers should also carefully review the risk factors described in other documents that Idera and BioCryst file from time to time with the SEC. The forward-looking statements in this press release speak only as of the date of this press release. Except as required by law, Idera and BioCryst assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Additional Information and Where to Find It

In connection with the proposed merger, Idera and BioCryst plan to file with the SEC and mail or otherwise provide to their respective stockholders a joint proxy statement/prospectus regarding the proposed transaction. BEFORE MAKING ANY VOTING DECISION, IDERA'S AND BIOCRYST'S RESPECTIVE STOCKHOLDERS ARE URGED TO READ THE JOINT PROXY STATEMENT/PROSPECTUS IN ITS ENTIRETY WHEN IT BECOMES AVAILABLE AND ANY OTHER DOCUMENTS FILED BY EACH OF IDERA AND BIOCRYST WITH THE SEC IN CONNECTION WITH THE PROPOSED MERGER OR INCORPORATED BY REFERENCE THEREIN BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION AND THE PARTIES TO THE PROPOSED TRANSACTION. Investors and stockholders will be able to obtain a free copy of the joint proxy statement/prospectus and other documents containing important information about Idera and BioCryst, once such documents are filed with the SEC, through the website maintained by the SEC at www.sec.gov. Idera and BioCryst make available free of charge at www.iderapharma.com and www.biocryst.com, respectively (in the "Investors" section), copies of materials they file with, or furnish to, the SEC.

Participants in the Solicitation

This document does not constitute a solicitation of proxy, an offer to purchase or a solicitation of an offer to sell any securities. Idera, BioCryst and their respective directors, executive officers and certain employees and other persons may be deemed to be participants in the solicitation of proxies from the stockholders of Idera and BioCryst in connection with the proposed merger. Security holders may obtain information regarding the names, affiliations and interests of Idera's directors and officers in Idera's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which was filed with the SEC on March 15, 2017, and its definitive proxy statement for the 2017 annual meeting of stockholders, which was filed with the SEC on April 28, 2017. Security holders may obtain information regarding the names, affiliations and interests of BioCryst's directors and officers in BioCryst's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which was filed with the SEC on February 27, 2017, and its definitive proxy statement for the 2017 annual meeting of stockholders, which was filed with the SEC on April 12, 2017. To the extent the holdings of Idera securities by Idera's directors and executive officers or the holdings of BioCryst securities by BioCryst's directors and executive officers have changed since the amounts set forth in Idera's or BioCryst's respective proxy statement for its 2017 annual meeting of stockholders, such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC. Additional information regarding the interests of such individuals in the proposed merger will be included in the joint proxy statement/prospectus relating to the proposed merger when it is filed with the SEC. These documents (when available) may be obtained free of charge from the SEC's website at www.sec.gov, Idera's website at www.iderapharma.com and BioCryst's website at www.biocryst.com.

Combination Creates Substantial Value

- ✓ A **unique player in rare diseases** with scale
- ✓ Diversified **late-stage pipeline**
- ✓ Synergistic potential with best-in-class people, facilities and **commercial know-how in rare diseases**
- ✓ Experienced **development capabilities** across organization
- ✓ Active and complementary **discovery engines**
- ✓ Financial **strength**

Robust Pipeline

- 2 Phase 3 orphan-designated programs with compelling data
- 2 additional Phase 2 rare disease programs
- 9 total rare disease programs
- 4 supporting asset programs

Complementary Leadership

- Proven commercial team; launched 1st prophylactic HAE product
- Extensive clinical development experience

Synergistic Discovery Engines

- Significant experience with 2 distinct engines
- Expands number of rare disease targets

Financial Strength

- ~$243 million net cash balance*
- Opportunities to add cash through partnering and other programs

* Unaudited pro-forma cash balance as of December 31, 2017

Phase 3 Programs Create a Financially Strong Foundation to Support a Robust Rare Disease Pipeline

IMO-2125
PD-1 Refractory Melanoma in Combination with ipilimumab

- Novel agent designed to induce abscopal anti-tumor immune response
- Robust and durable clinical and translational data generated
- Opportunity to improve immuno-oncology outcomes with CPIs across multiple tumor types
- Multi billion dollar opportunity, plus data, driving strategic interest in partnering

Compelling Data driving 2 Phase 3 programs

Strong cash flow opportunities from commercializing and partnering

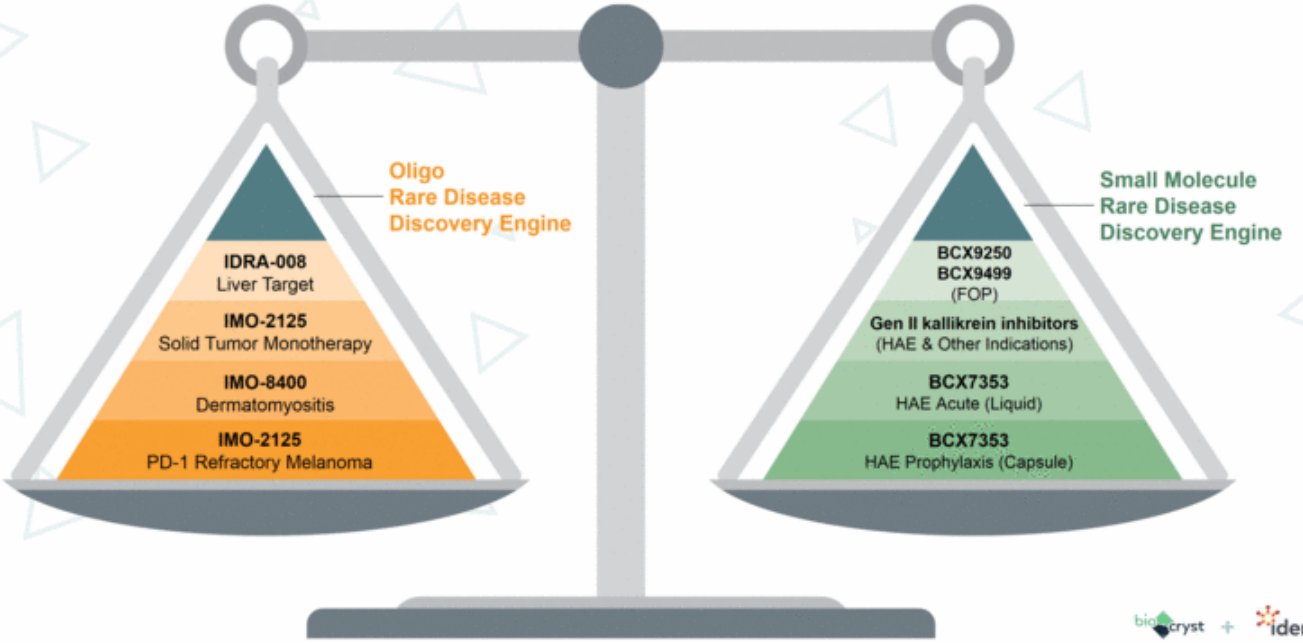
BCX7353
Prophylactic HAE

- Once a day oral (capsule)
- Competitive attack rate reduction 73%
- Safety & tolerability similar to placebo at most effective dose
- $2 billion projected global market opportunity
- Phase 3 ready

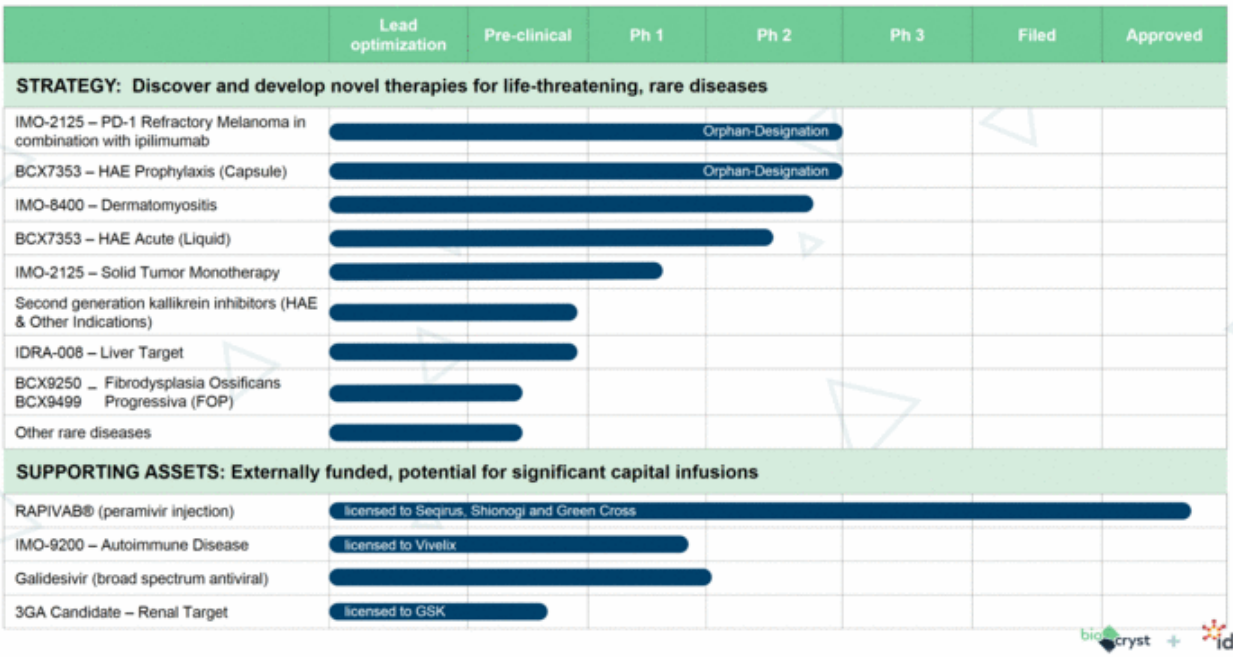
Merger Upside: Maximizing Value and Market Potential

Value Driver		Merger Amplifier
Commercializing BCX7353	→	Idera management HAE launch experience
Investing in commercial launch and ongoing pipeline development	→	Capital from IMO-2125 out licensing opportunities
Expanding market opportunity + diversifying risk	→	BCX7353 and IMO-2125 Phase 3 opportunities in rare disease markets + IMO-2125 in other cancer markets
Building rare disease pipeline	→	Leveraging and combining complementary discovery engines

Maximizing Value, Minimizing Risk, Multiplying Opportunity



Robust Rare-Disease Focused Pipeline



Portfolio of Late-Stage Programs

BCX7353
Prophylactic HAE

- Oral (capsule) Kallikrein Inhibitor for Hereditary Angioedema
- One pill, once a day – fulfilling patient needs
- HAE market expected to exceed $2B in global sales
- Robust quality of life data

IMO-2125
PD-1 Refractory Melanoma in Combination with ipilimumab

- Intratumoral TLR9 Agonist for Rare Cancer Indication – Refractory Melanoma
- Peak year sales estimate > $500 million
- Long-term expansion into I/O addressable and unaddressable tumors

Phase 3 Initiating Q1 2018
(orphan designations)

BCX7353
Acute HAE

- Oral (liquid) Kallikrein Inhibitor for Hereditary Angioedema
- Complementary acute therapy to create an HAE portfolio
- Global acute markets and breakthrough attack therapy

IMO-8400
Dermatomyositis

- Subcutaneous TLR 7,8,9 antagonist therapy for dermatomyositis
- Severely debilitating disease affecting skin and muscle in ~25K patients in the U.S.

Phase 2 Data in 2018

Proven Rare Disease Clinical & Commercial Track Record

CINRYZE C1 inhibitor (human) | Hizentra Immune Globulin Subcutaneous (Human) 20% Liquid | privigen Immune Globulin Intravenous (Human), 10% Liquid | Kcentra Prothrombin Complex Concentrate (Human) | VANCOCIN HCl (vancomycin hydrochloride capsules, USP)

- 1st prophylactic treatment of HAE
- Grew to ~$400M in N.A. annual sales in 5 years

- Multiple global and U.S. rare disease launches
- Led launch for 5 global brands that drive ~70% of CSL's current revenue
- Grew U.S. Hizentra and Privigen sales to >$1B

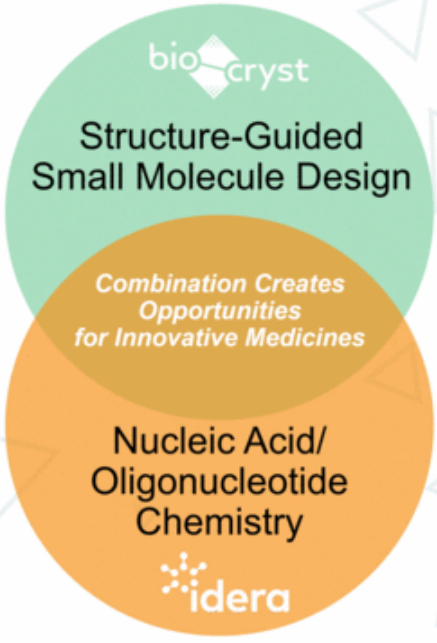
- >245 HAE patients dosed and studied
- CMOs clinical development/launch experience: Aranesp®, Enbrel®, Kineret®, Neulasta®, Sensipar® Taxotere® Bactroban®, Relafen®/ Reliflex® Lovenox®, Celectol®, Augmentin®, Timentin®, Temocillin®.

- Treatment of C. difficile-associated diarrhea (CDAD)
- Grew to ~$300M in annual sales

Vincent Milano	Dan Soland	William Sheridan, MB BS	Joanna Horobin, MB ChB	Lynne Powell	Clayton Fletcher
Chief Executive Officer	Chief Operating Officer	Chief Medical Officer	Chief Medical Officer	Chief Commercial Officer	VP, Strategy/ Bus. Development

Synergistic Discovery Engines

- Extensive experience in both discovery approaches within one organization
- Combining technologies expands ability beyond stand-alone
- Combination therapy of small molecule and oligo may create more effective and potent treatments for rare diseases



Solid Capital Position & Meaningful Operational Synergies

- ~$243 million net cash balance*
  - Capital for continued clinical development beyond next milestone events
  - Commercial launch planning and preparation
  - Additional $20+ million (non-dilutive) procurement contract anticipated in 2018
  - Opportunities to generate non-dilutive capital through non-strategic assets/indications
- Headquarters consolidation to Exton, PA; research center consolidated to Birmingham, AL
- Expense consolidation over time expected to create cost savings and benefits

* Unaudited pro-forma cash balance as of December 31, 2017

2018: Significant Near-Term Value-Building Events

Q1 ▸ **BCX 7353**
Initiate **APEX-2 Ph 3** Pivotal Trial in HAE prophylaxis

Q1 ▸ **IMO-2125**
Initiate **ILLUMINATE 301 Ph 3** Pivotal Trial in PD-1 Refractory Metastatic Melanoma in combination with ipilimumab

Q2 ▸ **IMO-8400**
Data available from **PIONEER Phase 2** Trial in Dermatomyositis

Q2 ▸ **IMO-2125**
ILLUMINATE 204 Phase 2 Trial in PD-1 Refractory Metastatic Melanoma in combination with ipilimumab – **update at ASCO 2018**

▸ **BCX 7353**
Data from **ZENITH-1 Phase 2** Study in Acute HAE

▸ **IMO-2125**
Complete enrollment in **ILLUMINATE 204 Phase 2** Trial in PD-1 Refractory Metastatic Melanoma

▸ **STRATEGIC**
Potential **partnering** and **additional business development activities**

Combining Capabilities to Serve More Patients with Rare Diseases

Extraordinary drug discovery, development and commercialization so patients can have a better quality of life

biocryst + idera

Combination Creates Substantial Value

- ✓ A **unique player in rare diseases** with scale
- ✓ Diversified **late-stage pipeline**
- ✓ Synergistic potential with best-in-class people, facilities and **commercial know-how in rare diseases**
- ✓ Experienced **development capabilities** across organization
- ✓ Active and complementary **discovery engines**
- ✓ Financial **strength**

Combining Capabilities to Serve More Patients with Rare Diseases

bioCryst + idera

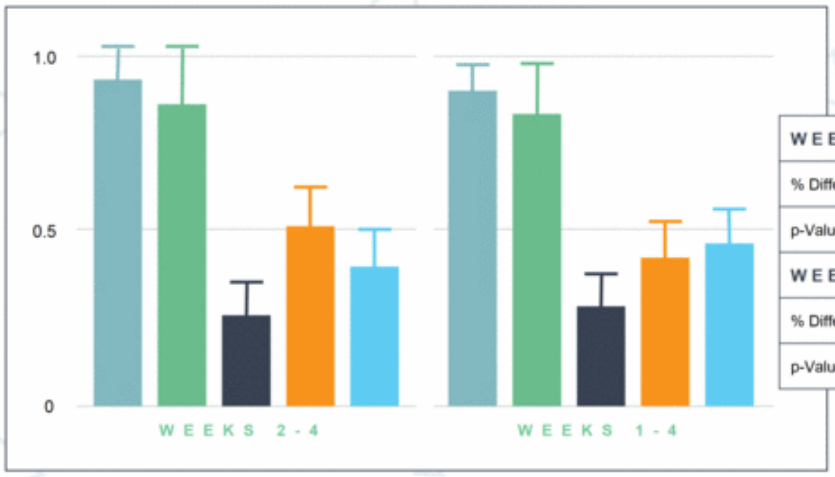
Combination Highlights

Terms	• Stock for stock transaction • Each share of BioCryst to be converted into 0.50 shares of new company stock • Each share of Idera to be converted into 0.20 shares of new company stock
Ownership at Closing	• BioCryst stockholders to own approximately 51.6% of combined company and Idera stockholders to own approximately 48.4% of combined company, each on a fully-diluted basis
Cash Position	• ~$243 million net cash balance* • Opportunities for non-dilutive capital
Board of Directors	• New board comprised of 4 BioCryst directors, 4 Idera directors, and 1 new independent director • Robert Ingram, Chairman of the Board of Directors (current BioCryst Chairman) • Jon Stonehouse, CEO of BioCryst, to join Board • Vincent Milano, CEO of Idera, to join Board
CEO, Headquarters, and Research Center	• Vincent Milano, Chief Executive Officer • Headquarters: Exton, PA • Research Center: Birmingham, AL
Closing Conditions	• Subject to approval of BioCryst and Idera stockholders • Subject to other customary closing conditions
Voting Agreement	• A significant stockholder of each company has agreed to enter into a voting and support agreement and has agreed to vote in favor of the transaction. This stockholder owns ~9% of Idera shares outstanding and ~14% of BioCryst shares outstanding.
Transaction Close	• Expected in second quarter 2018

* Unaudited pro-forma cash balance as of December 31, 2017

APeX-1: Overall Angioedema Attack Rate per Week, PP Population, Weeks 2-4 and 1-4

Attack Rate: LS Mean Attacks/Week



	62.5mg	125mg	250mg	350mg
WEEKS 2-4				
% Difference, Active-PBO	-7%	-73%	-46%	-58%
p-Value	0.715	<0.001	0.006	<0.001
WEEKS 1-4				
% Difference, Active-PBO	-6%	-69%	-53%	-48%
p-Value	0.747	<0.001	<0.001	<0.001

Placebo BCX7353 62.5mg QD BCX7353 125mg QD BCX7353 250mg QD BCX7353 350mg QD

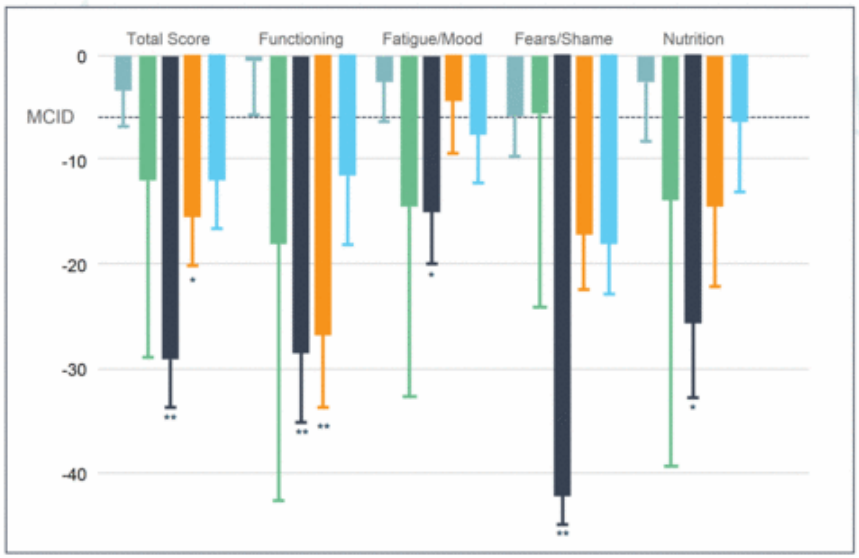
APeX-1: 125 mg Dose Provided Consistent Reductions in Attack Rate

Analysis	n	LS mean[1] Attacks per Week		Difference vs Placebo	Percentage Reduction vs Placebo	p-Value vs Placebo
		BCX7353 125 mg	Placebo			
Confirmed attacks, Weeks 2-4 PP population	13	0.248	0.932	-0.684	73%	<0.001
Confirmed attacks, Weeks 2-4 ITT population	14	0.249	0.937	-0.688	73%	<0.001
Confirmed attacks, Weeks 1-4 PP population	13	0.278	0.895	-0.617	69%	<0.001
Confirmed attacks, Weeks 1-4 ITT population	14	0.270	0.890	-0.619	70%	<0.001
Confirmed attacks requiring treatment, Weeks 2-4 PP population	13	0.221	0.807	-0.585	73%	<0.001
Confirmed attacks requiring treatment, Weeks 2-4 ITT population	14	0.224	0.771	-0.546	71%	0.002
Confirmed attacks requiring treatment, Weeks 1-4 PP population	13	0.221	0.788	-0.567	72%	<0.001
Confirmed attacks requiring treatment, Weeks 1-4 ITT population	14	0.217	0.753	-0.536	71%	<0.001

[1] Least squares mean calculated using an ANCOVA model with qualifying attack rate as covariate

APeX-1: Angioedema Quality of Life (AE-QoL): LS Mean Change from BL at Day 29, PP

QOL Score Improved



Difference in adjusted least square means are shown (Active treatment minus Placebo). ANCOVA Model includes terms of treatment and adjusted qualifying attack rate. Reductions (negative changes from BL) represent improvement in quality of life scores. MCID, minimum clinically important difference, -6 points (*Weller, K. 2016. Allergy 71(8): 1203-1209.)* BCX7353 dose level compared with placebo

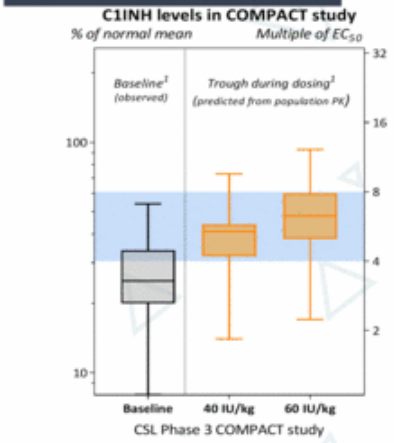
APeX-1: Treatment-Emergent Adverse Event Summary

Category	BCX7353 62.5 mg N = 7	BCX7353 125 mg N = 14	BCX7353 250 mg N = 14	BCX7353 350 mg N = 18	Placebo N = 22
Subjects with any TEAE[1], n (%)	4 (57)	7 (50)	11 (79)	14 (78)	15 (68.2)
Subjects with any Serious AE, n (%)	0	0	1 (7)[2]	0	0
Subjects with Drug-Related Grade 3/4 AE, n (%)	0	0	0	1 (6)	0
Subjects with AE Leading to D/C from Study Drug, n (%)	0	0	0	3 (17)	0
Non-drug-related, n (%)	0	0	0	1 (6)[3]	0
Drug-related, n (%)	0	0	0	2 (11)[4,5]	0

[1] TEAE- treatment-emergent adverse event.
[2] GI infection- investigator assessed as unrelated to study drug. Abdominal symptoms similar to several previous non-HAE-attack episodes occurring over past 3 years resulting in severe vomiting and diarrhea. Pt presented to ER and hospitalized for IV fluids and antiemetics as a precaution. No HAE acute attack meds given. Recovered and discharged the following day. Missed 1 day of dosing due to event.
[3] Pre-existing liver disorder (improved from baseline, but persisting). Previously reported in 1st interim analysis.
[4] n=1 Gastroenteritis with liver disorder (both assessed as related) (elevated ALT 1.9x ULN, GGT 5.4x ULN and ALP 1.6x ULN, with normal AST and bilirubin). Previously reported in 1st interim analysis.
[5] n=1 Vomiting/abdominal cramps. Previously reported in 2nd interim analysis.

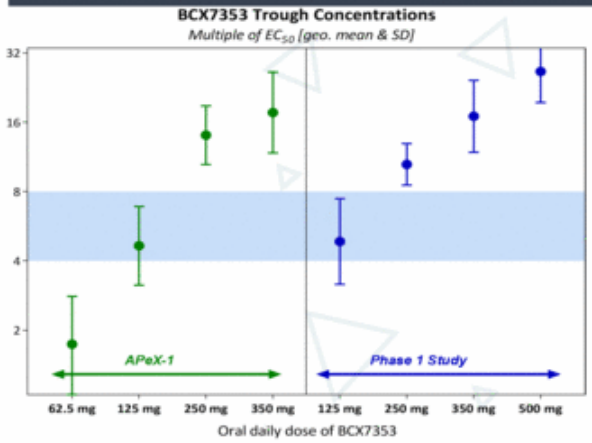
APeX-1: Exposure Comparisons of BCX7353 and SC C1INH

CSL-830 Phase 3 Study



C1INH levels at baseline and after SC dosing with CSL-830[1]

BCX7353 APeX-1 & Phase 1 Study



BCX7353 plasma concentrations at 24 hours post-dose

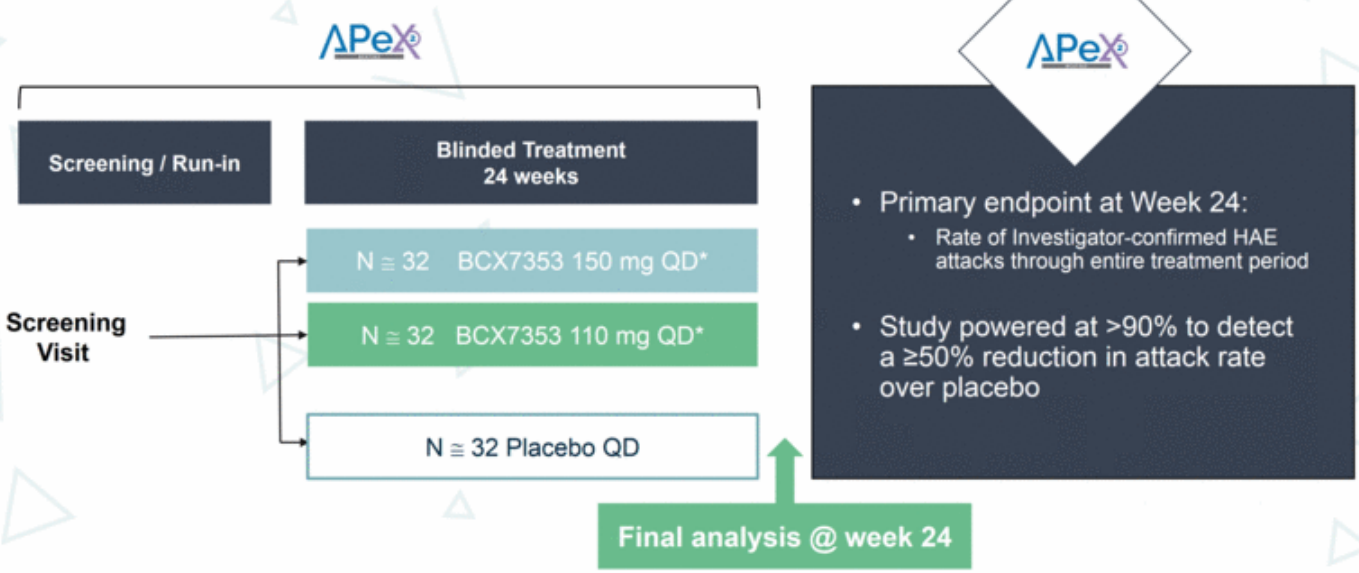
[1] Longhurst, H. et al. N Engl J Med 376, 1131-1140 (2017). Box plots represent median, 25th and 75th percentiles, minimum and maximum values. CSL-830 and BCX7353 data are from distinct clinical trials and no head to head study has been conducted.

Predictable PK Supports 175 mg as Second Dose in Phase 3

Dose, mg QD	% > 4 x EC_{50}		% > 6 x EC_{50}		% > 8 x EC_{50}	
	Predicted	Actual	Predicted	Actual	Predicted	Actual
62.5	--	*0*	--	*0*	--	*0*
125	70	*64*	38	*43*	17	*0*
175	93		80		58	
200	97		88		73	
225	98		93		83	
250	100	*100*	97	*100*	93	*100*

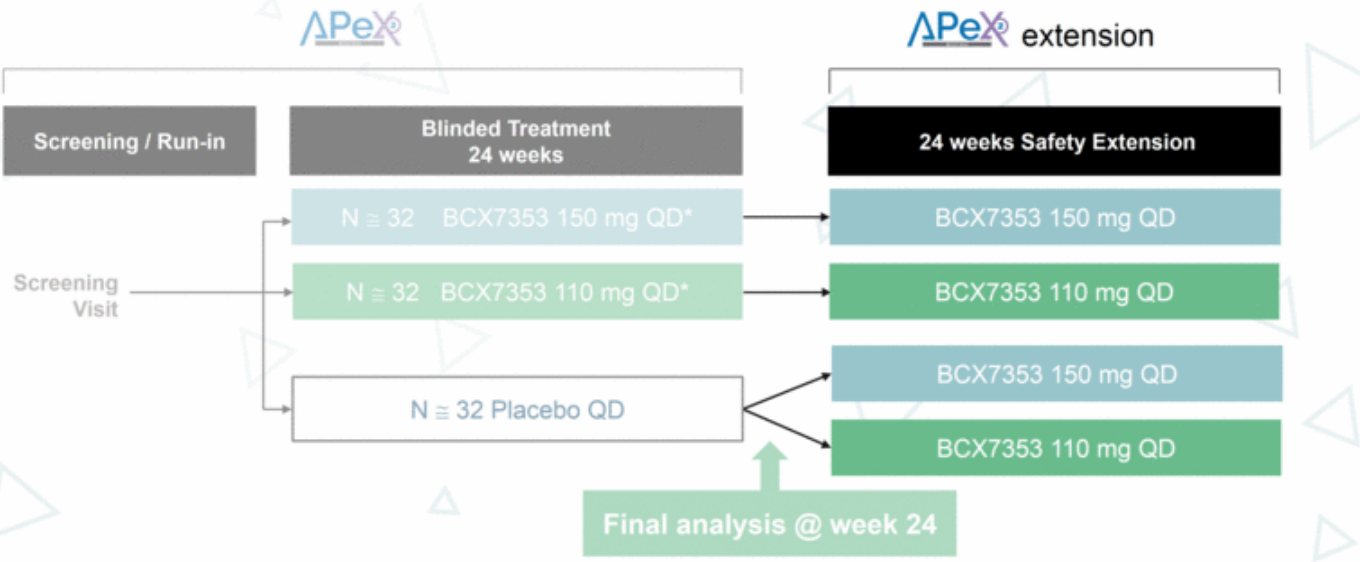
- Given the predictable PK of BCX7353, simulations are helpful in selecting an intermediate dose of BCX7353 to study that is between 125 mg and 250 mg.
- These simulations suggest a relatively small increase in dose above 125 mg should achieve a significant increase in the proportion of subjects achieving trough levels above the therapeutic target.
- These simulations suggest 175 mg dose should maintain trough drug levels > 4 x EC_{50} in > 90% of patients.
- Doses ≥ 200 mg offer little additional increment in proportions achieving target level.

APeX-2: Phase 3 Trial Design



*Doses in Phase 2 APeX-1 were shown as the dihydrochloride salt:
150 mg = 175 mg dihydrochloride salt; 110 mg = 125 mg dihydrochloride salt

APeX-2: Phase 3 Trial Design – Safety Extension



*Doses in Phase 2 APeX-1 were shown as the dihydrochloride salt:
150 mg = 175 mg dihydrochloride salt; 110 mg = 125 mg dihydrochloride salt

APeX-S: Long-term Safety Study Design

48 Weeks Treatment

N ≅ 80 BCX7353 150 mg QD

N ≅ 80 BCX7353 110 mg QD

Analyses as needed for regulatory submissions

- Endpoints:
  - Long term safety of BCX7353
  - Durability of response
  - Quality of Life
- APeX-1 subjects eligible

- Safety database:
  - Up to 100 subjects at each dose level
  - Combination of APeX-2 extension and APeX-S

*Doses in Phase 2 APeX-1 were shown as the dihydrochloride salt:
150 mg = 175 mg dihydrochloride salt; 110 mg = 125 mg dihydrochloride salt

Phase 1/2 Study in Anti-PD-1 Refractory Melanoma

illuminate Oncology Clinical Trials 2125-204

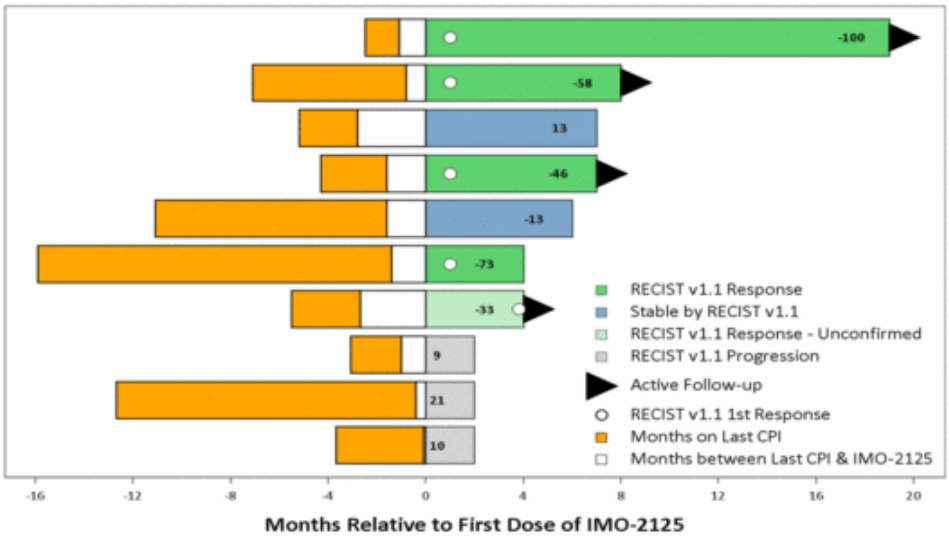
Phase 2 Expansion with Ipilimumab Enrolling

RP2D of IMO-2125 is 8mg

Dose-finding: IMO-2125 + ipilimumab SAFETY ASSESSMENT COMPLETED	Phase 2 IMO-2125 + ipilimumab OPEN
Dose-finding: IMO-2125 + pembrolizumab ONGOING	Phase 2 IMO-2125 + pembrolizumab PLANNED

Dosing:
IMO-2125 is given as a single intratumoral agent week 1,2,3,5,8,11,15,19,23 Ipilimumab and pembrolizumab are administered per label beginning week 2
Deep injections are permitted with interventional radiology guidance
No need for infectious precautions

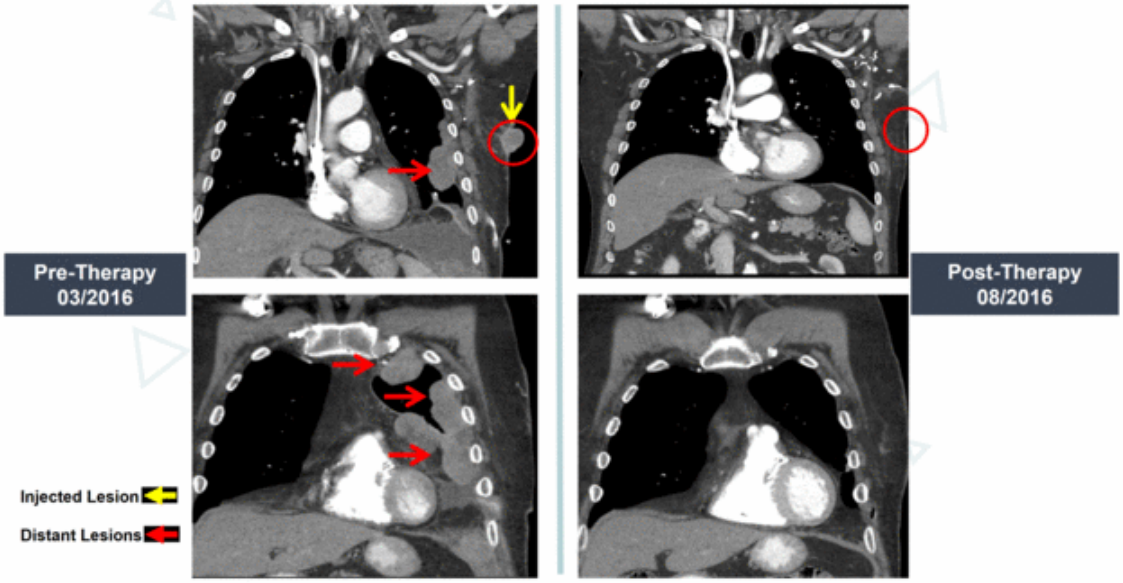
Time on Study: Best RECIST v1.1 Response and Largest Percentage Decrease in Target Lesions (8mg subjects)



Time on study ends at RECIST v1.1 PD (including death & start of anti-cancer therapy) or withdrawal for any reason.
Subjects treated with IMO-2125 8mg + Ipilimumab with at least 1 post-baseline disease evaluation. Some CPI start and stop dates have been imputed.
Data cut-off date: 03NOV2017 Produced on 11DEC2017

Patient 004 Remains a CR since May 2016

illuminate Oncology Clinical Trials 2125-204



Phase 1 Conclusions

illuminate Oncology Clinical Trials 2125-204

- The combination of IMO-2125 with ipilimumab was tolerable at all dose levels studied;
- Dendritic cell activation, detectable within 24 hours of the first IMO-2125 injection, is evidence for target acquisition at the Recommended Phase 2 Dose (8mg);
- IMO-2125 with ipilimumab showed clinical activity at the RP2D of 8mg in anti-PD-1 refractory melanoma;
  - 5 of 10 (50%) responded;
  - 7 of 10 (70%) experiencing disease control; and
  - An additional PR of >1year has been reported at 4mg
- Dose finding for IMO-2125 with pembrolizumab is ongoing, and one partial response (PR) has been seen.

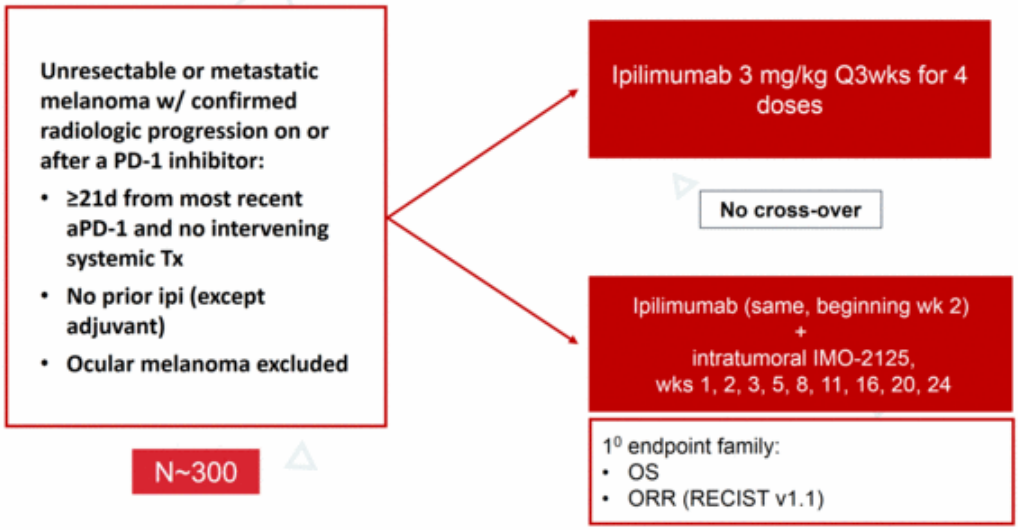
Phase 2 Expansion Update

illuminate Oncology Clinical Trials 2125-204

- Ipilimumab Combination Phase 2 Trial Expansion – Targeting approximately 60 patients with PD-1 refractory metastatic melanoma treated with 8mg
  - 21 patients enrolled
  - 10 Centers (5 sites currently enrolling)
    - MD Anderson, Roswell Park, Vanderbilt, Huntsman, Uni. of Arizona
  - Open label design
    - Allows for periodic data updates
    - Opportunistic engagements with regulatory authorities

Phase 3 Trial Design

illuminate
IMO-2125 Clinical Trials
2125-MEL-301



Phase 3 Readiness (FPFV 1Q18)

illuminate
IMO-2125 Clinical Trials
2125-MEL-301

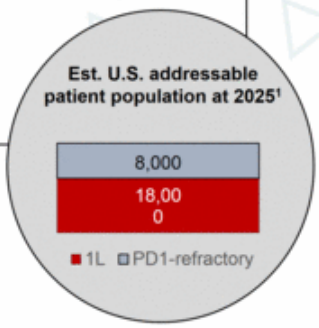
- Agreement with FDA and MHRA on design and path forward for regular and accelerated approval (one study)
- Fast Track Designation Granted by U.S. FDA in Q4 2017
- Global trial (US, Can, EU, Aus)
  - ~300 patients
  - ~70 sites planned
- CMC work on track for 1Q18 start
  - Commercial presentation of IMO-2125 will be used
- Regulatory filings underway
  - Open U.S. IND
  - CTA filings on track

Growth/Partnering Opportunities

INTRODUCE → **EXPAND** → **TRANSFORM**

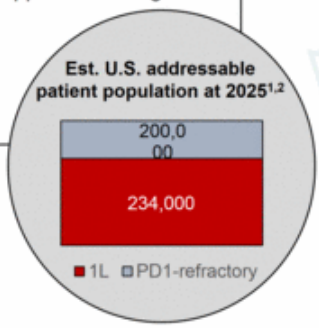
Unresectable metastatic melanoma

- High need in anti-PD1-refractory patients
- Peak year sales estimate > $500 million



Emerging I/O addressable tumors

- Moderate response to cornerstone anti-PD1
- Increasing number of approved settings



"Cold" tumors unaddressable with current I/O

- Significant opportunity in tumors with:
  - Low mutation load
  - Low dendritic cell infiltration
- Bioinformatics research ongoing to identify attractive tumor targets

[1] Proprietary Idera Commercial Research
[2] NSCLC, head and neck, colorectal, bladder and gastric