

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 expe subject to various risks and uncertainties. The inclusion of forward-looking statements should not be regarded as a representation that such plans, estimates and expectation achieved. Words such as "anticipate," "expect," "project," "intend," "believe," "may," "will," "should," "fplan," "could," "target," "contemplate," "estimate," "predict," "protential" 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 f 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 expecte merger, such as efficiencies, cost savings, tax benefits, enhanced revenues and cash flow, growth potential, market profile and financial strength; the competitive ability and combined company; and any assumptions underlying any of the foregoing, are forward-looking statements. Important factors that could cause actual results to differ material 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 me 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 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 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 mana 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, a 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 or 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 regulator 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 a 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 op otherwise not be fully realized or may take longer to realize than expected; (xiii) the impact of legislative, regulatory, competitive and technological changes; (xiii) risks relating 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 w 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. Addit 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 Rej 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. Sec 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 or 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 10most recent Quarterly Report on Form 10-Q are not exclusive and further information concerning Idera and BioCryst and their respective businesses, including factors that pr 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 € 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 docu 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 I 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/pr regarding the proposed transaction. BEFORE MAKING ANY VOTING DECISION, IDERA'S AND BIOCRYST'S RESPECTIVE STOCKHOLDERS ARE URGED TO READ T PROXY STATEMENT/PROSPECTUS IN ITS ENTIRETY WHEN IT BECOMES AVAILABLE AND ANY OTHER DOCUMENTS FILED BY EACH OF IDERA AND BIOCRYS SEC IN CONNECTION WITH THE PROPOSED MERGER OR INCORPORATED BY REFERENCE THEREIN BECAUSE THEY WILL CONTAIN IMPORTANT INFORMAT THE PROPOSED TRANSACTION AND THE PARTIES TO THE PROPOSED TRANSACTION. Investors and stockholders will be able to obtain a free copy of the joint prox statement/prospectus and other documents containing important information about Idera and BioCryst, once such documents are filed with the SEC, through the website ma 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 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, 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 p 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. 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 February 27, 2017, and its definitive proxy statement for the 2017 annual meeting of stockholders, which was EC 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 a 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 con 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 include 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 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 ar commercial know-how in rare diseases
- ✓ Experienced development capabilities across organizat
- ✓ Active and potentially complementary discovery engines
- √ Financial strength





Patient-Centric Rare Disease Culture and Approach



Robust Pipeline

- 2 Phase 3 orphandesignated programs with compelling data
- 2 additional Phase 2 rare disease programs
- 9 total rare disease programs
- 5 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 Str

- ~\$243 million r balance*
- Opportunities t cash through partnering and programs





 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
BioCryst stockholders to own 51.6% of new company; Idera stockholders to own 48.4%
 ~\$243 million net cash balance* Opportunities for non-dilutive capital
 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
 Vincent Milano, Chief Executive Officer Headquarters: Exton, PA Research Center: Birmingham, AL
 Subject to approval of BioCryst and Idera stockholders Subject to other customary closing conditions and expiration of HSR waiting period
 A significant stockholder of each company has agreed to enter into a voting and support agreement a favor of the transaction. This stockholder owns ~9% of Idera shares outstanding and ~14% of BioCry

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



Diversified Rare-Disease Focused Pipeline



Robust 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

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 Dermatomyo

- Subcutaneous 1 7,8,9 therapy fo dermatomyositis
- Severely debilitation disease affecting and muscle in ~ patients in the L

Phase 3 Initiating Q1 2018 (orphan designations)

Phase 2 Data in 2018

For detailed information on all development programs, view each company's most recent investor presentation on their IR websites



Proven Rare Disease Commercial Track Record











- 1st prophylactic treatment of hereditary angioedema (HAE)
- Grew to ~\$400M in N.A. annual sales in 5 years from launch
- Multiple global and U.S. rare disease product launches
- Led launches for 5 global brands that drive @70% of CSL's current revenue
- Grew U.S. Hizentra and Privigen sales to >\$1B
- Treatment of C. difficile-associate diarrhea (CDAD)
- Grew to ~\$300M annual sales prio generic competiti

Vincent Milano

Chief Executive Officer

Dan Soland

Chief Operating Officer

Lynne Powell

Chief Commercial Officer

Clayton Fletch

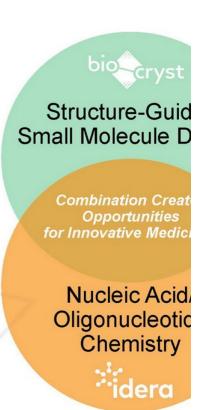
VP. Strategy/ Bus. Developme





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 Synergie

- ◆ ~\$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/indi
- Headquarters consolidation to Exton, PA; research center consolidate 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 Catalysts

- 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
- Q4 IMO-2125

 Complete enrollment in ILLUMINATE 204

 Phase 2 Trial in PD-1 Refractory Metastatic

 Melanoma

► BCX 7353

Data from **ZENITH-1 Phase 2** Study HAE

► IMO-2125

Ongoing data updates from ILLUMIN.
Phase 2 Trial in PD-1 Refractory Meta
Melanoma in combination with ipilimu

- Next planned update ASCO 201
- Potential additional business develor 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









Combination Creates Substantial Value

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

