

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 08, 2022

CORBUS PHARMACEUTICALS HOLDINGS, INC.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-37348
(Commission File Number)

46-4348039
(IRS Employer
Identification No.)

500 River Ridge Drive
Norwood, Massachusetts
(Address of Principal Executive Offices)

02062
(Zip Code)

Registrant's Telephone Number, Including Area Code: (617) 963-0100

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	CRBP	NASDAQ Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure.

Corbus Pharmaceuticals Holdings, Inc. (the "Company") issued a press release on April 8, 2022, in regards to the Company's presentation of first preclinical data for CRB-601 at the American Association for Cancer Research (AACR) Annual Meeting. A copy of the press release is attached hereto as Exhibit 99.1. A copy of the poster being presented at the meeting is attached hereto as Exhibit 99.2.

The information in this Current Report on Form 8-K under Item 7.01, including the information contained in Exhibits 99.1 and 99.2, is being furnished to the Securities and Exchange Commission, and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by a specific reference in such filing.

Item 8.01 Other Events.

The Company is using the slides attached hereto as Exhibit 99.3 to this Current Report on Form 8-K in connection with management presentations to describe its business.

Item 9.01 Financial Statements and Exhibits.

(d)	<u>Exhibit No.</u>	<u>Description</u>
	99.1	Press Release, dated April 8, 2022.
	99.2	AARC Poster
	99.3	Investor Presentation
	104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

Date: April 11, 2022

By: */s/ Yuval Cohen*
Name: Yuval Cohen
Title: Chief Executive Officer

Corbus Presents First Preclinical Data for CRB-601 at the American Association for Cancer Research (AACR) Annual Meeting

Norwood, MA, April 8, 2022 (GLOBE NEWSWIRE) -- Corbus Pharmaceuticals Holdings, Inc. (NASDAQ: CRBP) ("Corbus" or the "Company"), an immunology company, announced today the first preclinical data for CRB-601 are being presented in a poster at the American Association for Cancer Research (AACR) Annual Meeting being held from April 8-13, 2022, in New Orleans, LA. CRB-601 is a potent and selective α v β 8 integrin monoclonal antibody designed to block the activation of TGF β in the local tumor microenvironment. TGF β is thought to be the only ligand of the α v β 8 integrin. Inhibiting its ability to bind to α v β 8 could therefore play an important role in the regulation of this pleiotropic cytokine. The *in vitro* preclinical data presented demonstrate the high affinity of CRB-601 for α v β 8 and the resulting effect on TGF β . The data also show significant inhibition of tumor growth in a syngeneic model of colon cancer (MC38) by CRB-601, both as a single agent and in combination with anti PD-1 treatment. These effects are supported by the coincident increase in CD8-positive T cells in the tumor microenvironment.

"The increase of tumor infiltration by T-cells stimulated by CRB-601 is quite exciting. The effects of CRB-601 are consistent with the proposed mechanism of blocking TGF β activation, which can potentially enable an anti-tumor immune response and be an effective adjunct to immune checkpoint therapies. We are excited to bring this mechanism of action to the clinic and define the potential benefit it could bring to patients," commented Rachael Brake, Ph.D., Chief Scientific Officer of Corbus.

Corbus is currently developing CRB-601 as a potential treatment for solid tumor cancers, and the program is advancing toward an IND submission in the first half of 2023.

The AACR poster is available on the Company's website at: www.corbuspharma.com/AACRposter

Additionally, Corbus has published an updated Corporate Presentation providing an overview of the Company's full portfolio on its website at: ir.corbuspharma.com/presentations

About Corbus

Corbus is an immunology company committed to connecting innovation to our purpose of improving lives by developing new medicines that target the nexus between the immune system and cancer. Corbus' current pipeline includes anti-integrin monoclonal antibodies that block activation of TGF β and small molecules that activate or inhibit the endocannabinoid system. Corbus is headquartered in Norwood, Massachusetts. For more information on Corbus, visit corbuspharma.com. Connect with us on [Twitter](#), [LinkedIn](#) and [Facebook](#).

Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and Private Securities Litigation Reform Act, as amended, including those relating to the Company's restructuring, trial results, product development, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statement that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential," "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors, including the potential impact of the recent COVID-19 pandemic and the potential impact of sustained social distancing efforts, on our operations, clinical development plans and timelines, which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

INVESTOR CONTACT:

Brian Walsh
VP, Corporate Development
brian.walsh@corbuspharma.com



Abstract
 TGF β is a secreted protein produced by multiple lineages of leukocytes and tumors that promotes cancer progression primarily via the suppression of both the innate and adaptive immune systems. This makes TGF β a promising immunotherapeutic target in cancer. It is ubiquitously expressed in a latent (LTGF β) form and LTGF β has been shown to promote an immune suppressive phenotype within the tumor microenvironment (TME). Integrin $\alpha v \beta 8$ specifically binds to LTGF β . This interaction is essential for the activation of LTGF β -mediated signals in a variety of immune cell types. Interestingly, it has been recently shown that integrin $\alpha v \beta 8$ -mediated TGF β activation can act directly through LTGF β and does not require the release of active TGF β (2). Inhibition of integrin $\alpha v \beta 8$ -mediated TGF β activation has been shown to block immunosuppressive regulatory T cell differentiation and enhance the recruitment of cytotoxic T cells into the tumor microenvironment (3, 4). Here, we demonstrate by Surface Plasmon Resonance (SPR) that our clinical candidate CRB-601, a monoclonal antibody selective inhibitor of integrin $\alpha v \beta 8$, has a high affinity and specificity for the integrin $\alpha v \beta 8$ complex. Additionally, we evaluated the anti-tumoral properties of its murine compatible version, mCRB-601, as a monotherapy, as well as in combination with anti-PD-1 therapy in an MC38 syngeneic mouse tumor model. Findings from this study highlight the importance of integrin $\alpha v \beta 8$ blockade to modulate the immune landscape within the tumor and to enhance response to immune checkpoint therapy.

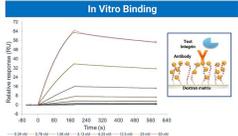


Figure 1. SPR Binding Assay. Integrin binding of CRB-601 and its murine compatible version, mCRB-601, was assessed at 37°C. mCRB-601 was immobilized on an anti-CD5 sensor chip, and integrins (0.39-50 nM for $\alpha v \beta 8$ and 200 nM for others) were injected at a flow rate of 30 μ l/min for a contact time of 180 s and dissociation time of 600 s. Data were fit (grey lines) to a 1:1 antibody:ligand binding model to determine k_a , k_d and K_D .

Table 1. Surface Plasmon Resonance Binding Affinities (K_D , nM) to Human $\alpha v \beta 8$ and Murine $\alpha v \beta 8$ Integrins

Antibody	$\alpha v \beta 8$	$\alpha 4 \beta 1$	$\alpha 5 \beta 1$	$\alpha 6 \beta 1$	$\alpha 6 \beta 2$	$\alpha 6 \beta 3$
CRB-601	>200	>200	>200	>200	1.4	1.4
mCRB-601	ND	ND	ND	10.2	10.8	

Background
 Figure 1: TGF β is held in an inactive state in association with latency associated peptide (LAP) and is presented on cell surfaces by latent transforming growth factor β binding proteins (e.g. LTBR1, GARP). Upon binding of the LAP-TGF β complex to the $\alpha v \beta 8$ integrin, TGF β is now capable of activating the TGF β receptor and the associated SMAD signaling pathway, leading to expression of TGF β target genes. CRB-601 was specifically designed to bind at the TGF β activation site on $\alpha v \beta 8$ (cryo-EM inset), thereby blocking $\alpha v \beta 8$ -dependent activation (1).

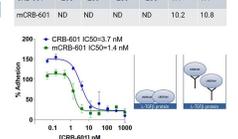


Figure 2. LTGF β Protein Binding Assay. The ability of CRB-601 and mCRB-601 to block binding of LTGF β to $\alpha v \beta 8$ was measured in a cell-based competition assay. LTGF β was immobilized on a polystyrene plate and incubated with LN229 cells expressing $\alpha v \beta 8$ and increasing concentrations of CRB-601 for 30 mins at 37°C. Bound LN229 cells were quantified by Crystal Violet. Data were fit to a parameter displacement curve to determine IC_{50} .

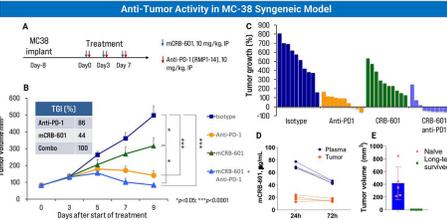


Figure 4. $\alpha v \beta 8$ blocking antibody mCRB-601 inhibits MC38 tumor growth and augments the efficacy of anti-PD-1 immunotherapy. Experimental scheme: C57BL/6 mice were inoculated subcutaneously (sc) with 0.3x10⁶ MC38 murine colon carcinoma cells. When tumors reached 82 \pm 4 mm³ (mean \pm SEM), mice were randomized and treated by intraperitoneal injection (i.p.) per treatment) with 10 mg/kg isotype control, anti-mouse PD-1 mAb (BMP1-14), mCRB-601 or combination of mCRB-601 and anti-mouse PD-1 mAb on days 1, 3, and 7. **A**: Tumor growth curves and tumor growth inhibition (TGI%). **B**: Change in tumor volume compared to baseline, individual mice. **C**: Biodistribution of mCRB-601 in plasma and tumor at 24 and 72 h post i.p. injection of 10 mg/kg CRB-601. **D**: Tumor re-challenge in MC38 tumor-free mice 82 days after initiation of mCRB-601 and anti-PD-1 combination treatment, and in naive C57BL/6 control mice. Mice (n=5/gp) were inoculated sc with 0.3 x 10⁶ MC38 cells, and followed for 300 days. Tumors did not grow in mice previously treated with the mCRB-601 and anti-PD-1 mAb combination. All p values are calculated by one-way ANOVA followed by Tukey's multiple-comparison test. *p < 0.05, **p < 0.0001.

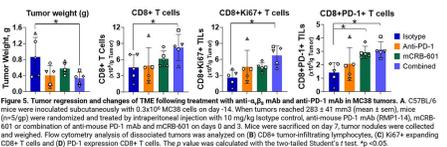


Figure 5. Tumor regression and changes of TME following treatment with anti- $\alpha v \beta 8$ mAb and anti-PD-1 mAb in MC38 tumors. A: C57BL/6 mice were inoculated subcutaneously with 0.3x10⁶ MC38 cells on day -14. When tumors reached 82 \pm 41 mm³ (mean \pm SEM), mice (n=5/gp) were randomized and treated by intraperitoneal injection with 10 mg/kg isotype control, anti-mouse PD-1 mAb (BMP1-14), mCRB-601 or combination of anti-mouse PD-1 mAb and mCRB-601 on days 1, 3 and 7. Mice were sacrificed on day 7, tumor nodules were collected and weighed. Flow cytometry analysis of dissociated tumors was analyzed on (B) CD8⁺ tumor-infiltrating lymphocytes, (C) Ki67⁺ expanding CD8⁺ T cells and (D) PD-1⁺ expression CD8⁺ T cells. The p value was calculated with the two-tailed Student's t test. *p < 0.05.

Conclusions
 • CRB-601 exhibits high affinity (low nM) to human and murine $\alpha v \beta 8$ and high selectivity with no appreciable binding to other RGD-binding integrin proteins.
 • mCRB-601 significantly inhibits MC38 tumor growth as a single agent and enhances the efficacy of anti-PD-1 immunotherapy.
 • The combination of mCRB-601 and anti-PD-1 therapy protected mice from tumor rechallenge.
 • CRB-601 is a potent and selective integrin $\alpha v \beta 8$ blocking monoclonal antibody that enhances the activity of immune checkpoint inhibitors in vivo and holds promise as a potential combination partner for immunotherapy.
 • Investigational New Drug (IND) enabling studies are currently underway.

References
 1. Moriathasan S, et al. (2016) TGF- β attenuates tumour response to PD-1 blockade by contributing to exclusion of T cells. Nature 544: 544-548.
 2. Campbell ML, et al. (2020) Cymo-EM reveals integrin-mediated TGF- β activation without release from latent TGF- β . Cell 180, 480-501.
 3. Takakura N, et al. (2018) Integrin $\alpha v \beta 8$ -expressing cells evade host immunity by regulating TGF- β activation in immune cells. J Clin Invest. In press 128991.
 4. Seed B, et al. (2012) A tumor-specific mechanism of T_H2 enrichment mediated by the integrin $\alpha v \beta 8$. Sci Immunol. 6, ea08558.

Disclosures and Acknowledgements
 • This study was sponsored by Corbus Pharmaceuticals, Inc. Authors DW, EH and AK are employees and/or shareholders of Corbus Pharmaceuticals.
 • We thank Dr. Steven Nishimura and colleagues for scientific advice and development of the BMP1-14 antibody.
 • CRB-601 is an investigational, pre-clinical stage candidate that has not entered clinical testing and is not approved by the FDA for any indication.



Connecting Innovation to Purpose

Corporate Presentation
April 2022

NASDAQ: CRBP • CorbusPharma.com • @CorbusPharma

Forward-Looking Statements

This presentation contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and Private Securities Litigation Reform Act, as amended, including those relating to the Company's restructuring, trial results, product development, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statements that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions. These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential," "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors, including the potential impact of the recent COVID-19 pandemic and the potential impact of sustained social distancing efforts, on our operations, clinical development plans and timelines, which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.



Norwood, MA (Boston area)

Immunology company focused on developing novel therapeutics through distinct platforms:

Internal Development Focus	External Partnering Programs
Immuno-Oncology (IO) Portfolio <ul style="list-style-type: none"> • Anti-Integrins targeting the TGFβ axis • Expanding IO pipeline through business development 	Endocannabinoid Portfolio <ul style="list-style-type: none"> • CB1 Inverse Agonist • CB2 Agonist (Lenabasum)

NASDAQ: CRBP

3

CB1 = cannabinoid receptor type 1
 CB2 = cannabinoid receptor type 2
 TGFβ = transforming growth factor β

Growing a diversified pipeline



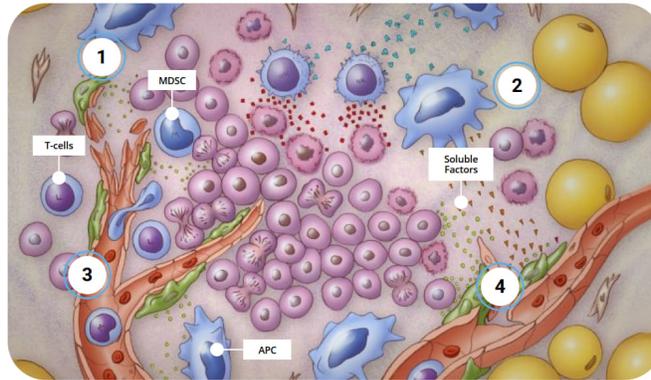
Compound	Indications	Preclinical	Phase 1	Phase 2	Phase 3
Anti-Integrin Portfolio					
CRB-601 Anti-αvβ8 mAb	Solid Tumors				
CRB-602 Anti-αvβ6/αvβ8 mAb	Solid Tumors / Fibrosis				
Endocannabinoid Portfolio					
Lenabasum CB2 Agonist	Dermatomyositis / Lupus				
CRB-913 CB1 Inverse Agonist	Obesity / Metabolism				

4



Mechanisms of Action in Focus

- 1 Suppressors of Immune Surveillance
- 2 Immune suppressive Soluble factors/enzymes
- 3 Dysregulation of T-cell check points
- 4 Ineffective antigen presentation



Seeking to bring in other assets with the potential to be first or best-in-class

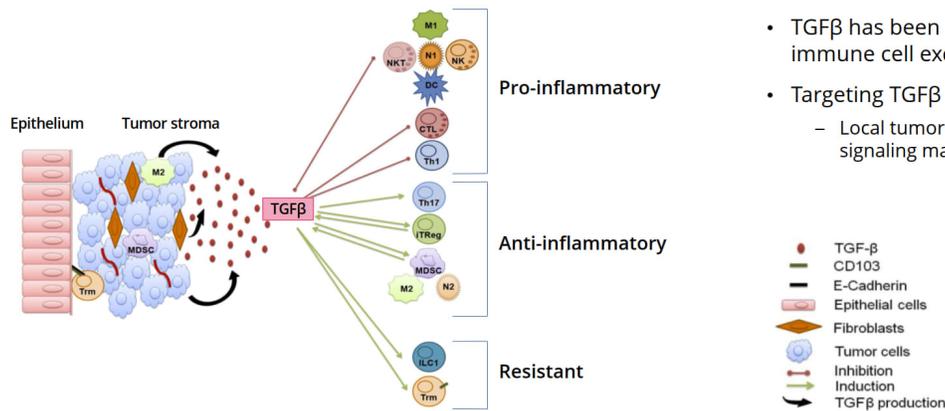
5 Source: <https://www.mdanderson.org/cancerwise/what-is-the-tumor-microenvironment-3-things-to-know.h00-159460056.html>

INTERNAL DEVELOPMENT FOCUS

Immuno-Oncology Portfolio

Innovative control of the TGF β axis

6



- TGFβ has been associated with immune cell exclusion in cancer
- Targeting TGFβ has been challenging
 - Local tumor versus systemic signaling may be key

7 Source: Dahmani A, Delisle JS. TGF-β in T Cell Biology: Implications for Cancer Immunotherapy. *Cancers (Basel)*. 2018;10(6):194. Published 2018 Jun 11. doi:10.3390/cancers10060194

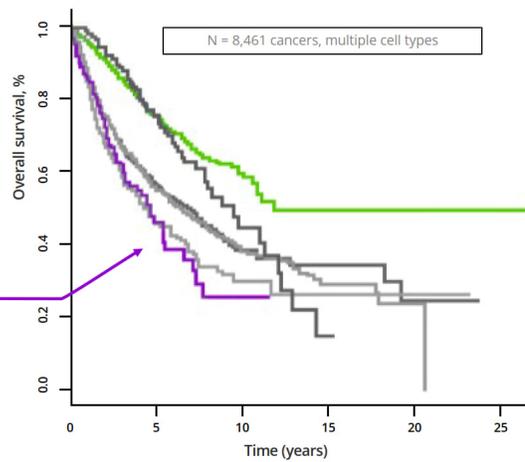
TGFβ predicts poor clinical outcomes in a subset of cancer patients



Immunogenomic subtypes in cancer

- C1 WOUND HEALING
- C2 INF-γ DOMINANT
- C3 INFLAMMATORY
- C4 LYMPHOCYTE DEPLETED
- C5 IMMUNOLOGICALLY QUIET
- C6 TGFβ DOMINANT

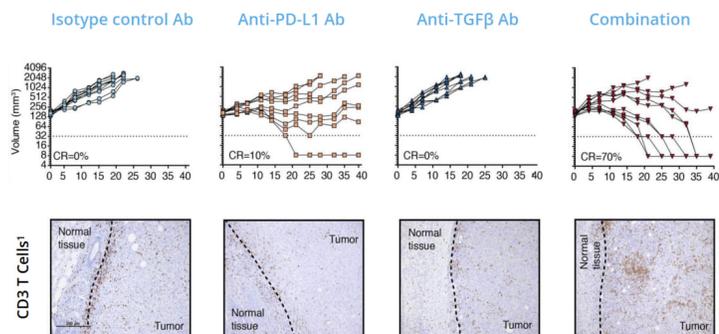
TGFβ predominance gene signature



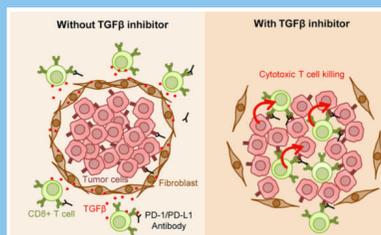
Gene expression, immune cell quantification & network mapping
 • 33 different cancer types / 8,000+ tumors

8 Source: Thorsson, et al. The Immune Landscape of Cancer. *Immunity*. 2018; 48:817

Successfully blocking TGFβ overcomes immune exclusion



Stromal TGFβ signaling is a determinant of immuno-exclusion²



- An increase in CD3 immune cell infiltration is associated with the anti-PD-L1 and anti-TGFβ antibody combination
- Effective therapeutic targeting of TGFβ could be achieved via CRB-601 targeting the αβ8 integrin

9

Sources: 1. Mariathasan, et al., Nature, 2018; 554:547. 2. Ganesh & Massagué, Immunity 2018; 626-628.

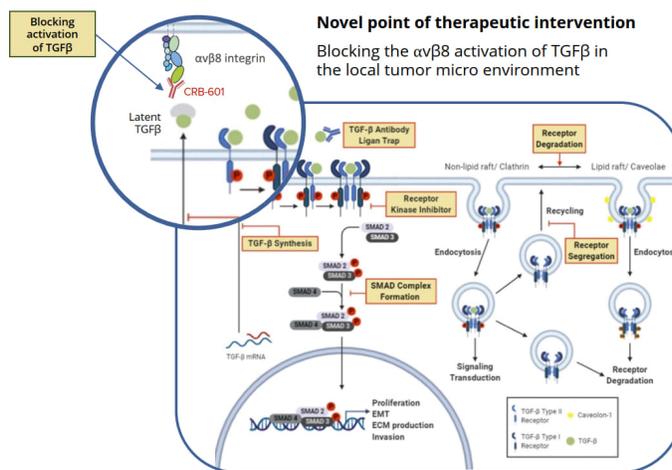
Targeting the integrin αβ8 represents a novel approach to regulating TGFβ



Recent experience with TGFβ¹

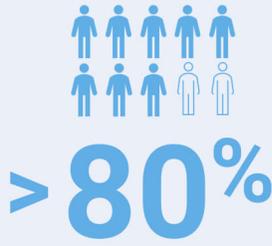
TGFβ pathway	Investigational Compound	Modality
Anti sense TGFβ2	Trabedersen	Anti sense oligo
αβ3/5 Integrin inhibitor	Cilengitide	αβ3/5 mAb
TGFβRI blockade	LY3022859	mAb
TGFβ ligand Trap	Fresolimumab	mAb
TGFβ ligand Trap + PD-1	Bintrafusp alfa	Bifunctional fusion protein
TGFβR Kinase inhibitor	Galunisertib	small molecule

TGFβ Pathway and Point of Therapeutic Intervention²



10

Sources: 1. Reviewed in Teixeira., 2020. 2. Huang et al., 2021. Recent progress in TGFβ inhibitors for cancer therapy.



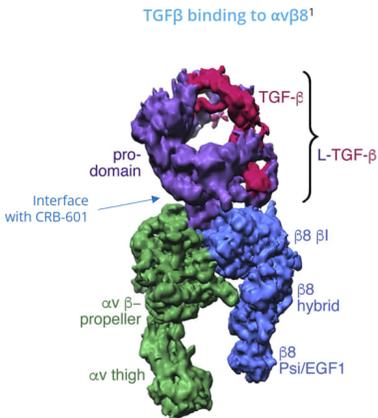
> 80% of metastatic cancer patients do not respond to **Immune Checkpoint Inhibitors**¹

	New Approaches to Targeting TGFβ ²	
	Phase (Disclosed Indication)	Target
	IND H1-2023 Solid Tumors	αvβ8
	Phase 1 Solid Tumors	αvβ8
	Phase 1 Solid Tumors	GARP
	Preclinical	αvβ8
	Preclinical	αvβ8

Monoclonal Antibody
 Small Molecule

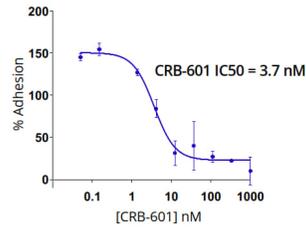
11 Sources: 1. Haslam A, Prasad V. Estimation of the Percentage of US Patients With Cancer Who Are Eligible for and Respond to Checkpoint Inhibitor Immunotherapy Drugs. JAMA Netw Open. 2019;2(5):e192535. doi:10.1001/jamanetworkopen.2019.2535 2. Company Data on file.

CRB-601 demonstrates low nano-molar binding and high selectivity to αvβ8



L-TGFβ Protein Binding Assay²

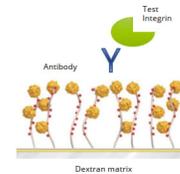
The ability of CRB-601 to block the binding of L-TGFβ to αvβ8 was measured in a cell-based competition assay.



Surface Plasmon Resonance Binding Affinities²

(Kd, nM) to Human αvβx and Murine αvβ8 Integrins

ANTIBODY	αvβ1	αvβ3	αvβ5	αvβ6	αvβ8	μαvβ8
CRB-601 (nM units)	> 200	> 200	> 200	> 200	1.4	1.4



12 Sources: 1. Campbell, et al. Cryo-EM Reveals Integrin-Mediated TGF-β Activation without Release from Latent TGF-β. Cell. 2020; 180:491-493. 2. Company data on file.

CRB-601 has single agent activity and demonstrates combination benefit with anti-PD1 in an immune non-responsive model

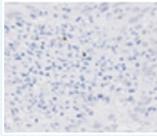
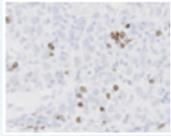


EMT6¹

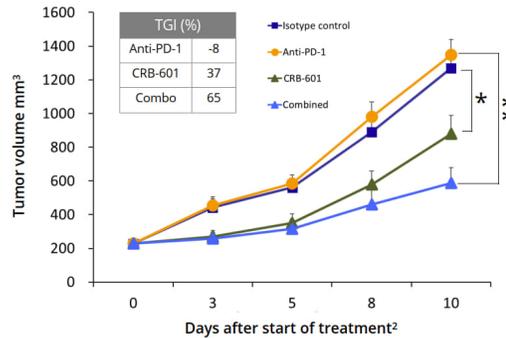
An immune non-responsive syngeneic breast cancer tumor model

Invasive margin

Tumor core



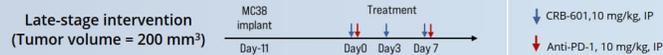
CD3+ staining in EMT6 untreated tumors



*p < 0.05 two-tailed Student's t test.
**p < 0.0001 two-tailed Student's t test.

13 Sources: 1. Yu JW, Bhattacharya S, Yanamandra N, et al. Tumor-immune profiling of murine syngeneic tumor models as a framework to guide mechanistic studies and predict therapy response in distinct tumor microenvironments. PLoS One. 2018;13(11):e0206223. Published 2018 Nov 2. doi:10.1371/journal.pone.0206223 2. Company Data on File.

CRB-601 continues to demonstrate combination benefit with anti-PD1 in an immune responsive mode¹

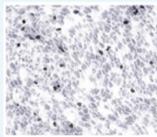
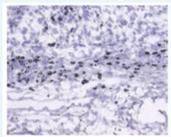


MC38²

An immune responsive syngeneic colon cancer tumor model

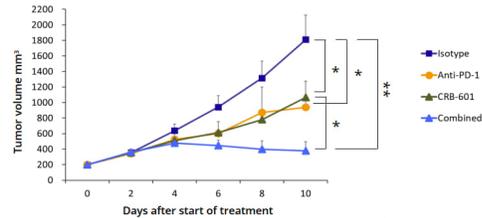
Invasive margin

Tumor core



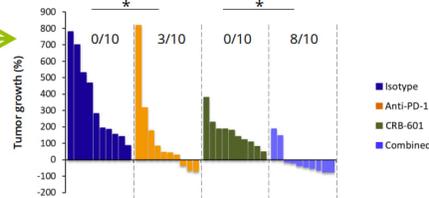
CD3+ staining in an untreated MC38 tumor

TGI (%)	
Anti-PD-1	54
CRB-601	46
Combo	89



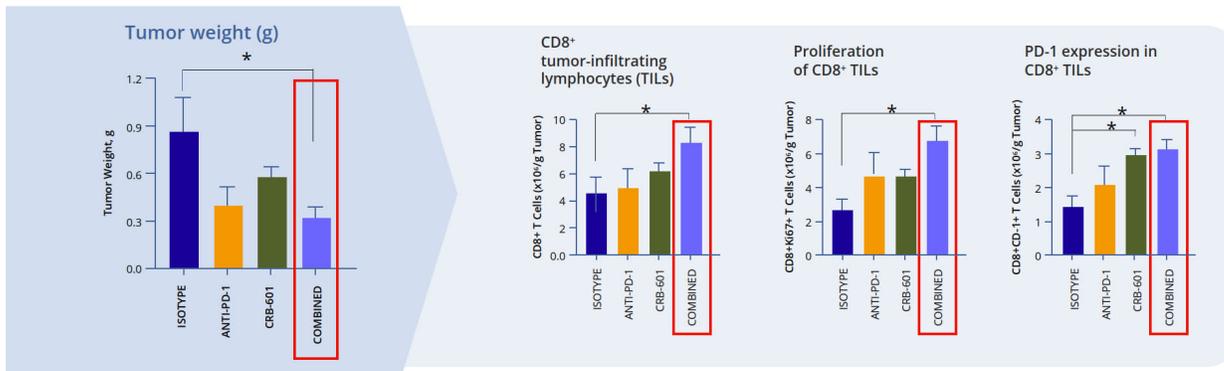
*p < 0.05;
**p < 0.0001 two-tailed Student's t test.

Change in tumor volume compared to baseline



14 Sources: 1. Company Data on File. 2. Selby MJ, Engelhardt JJ, Johnston RJ, et al. Preclinical Development of Ipilimumab and Nivolumab Combination Immunotherapy: Mouse Tumor Models, In Vitro Functional Studies, and Cynomolgus Macaque Toxicology [published correction appears in PLoS One. 2016 Nov 18;11(11):e0167251]. PLoS One. 2016;11(9):e0161779. Published 2016 Sep 9. doi:10.1371/journal.pone.0161779

Tumor reduction by CRB-601 correlates to CD8+ T cell infiltration and proliferation within TME



*p < 0.05 two-tailed Student's t test.

The combination stimulates an influx of CD8+ tumor-infiltrating lymphocytes and associated activation within the TME

15

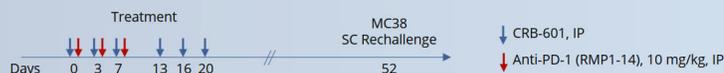
Source: Company Data on File.

Note: Tumor PD conducted when tumors were at 300 mm³, (n = 5) per group, samples collected on day 7 post-treatment.

CRB-601 + anti-PD1 is associated with tumor-specific immune memory

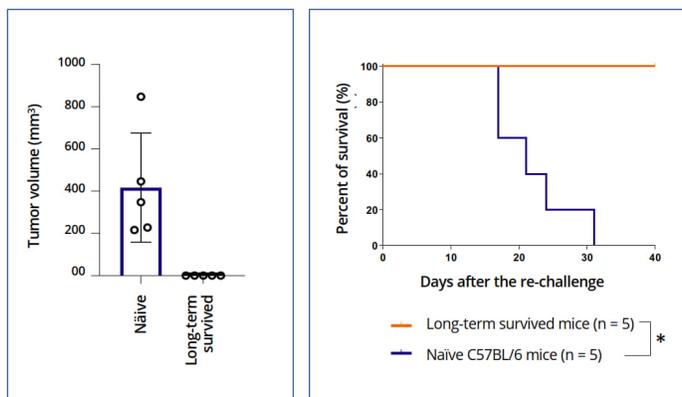


Day-8 MC38 SC implantation



Surviving MC38 tumor bearing mice treated with CRB-601 + anti-PD1 were re-challenged with MC38 tumors and compared to treatment naïve mice

- Rechallenge 50+ days after treatment initiation
- Regrowth was monitored for 30 days



*p < 0.05, log-rank test

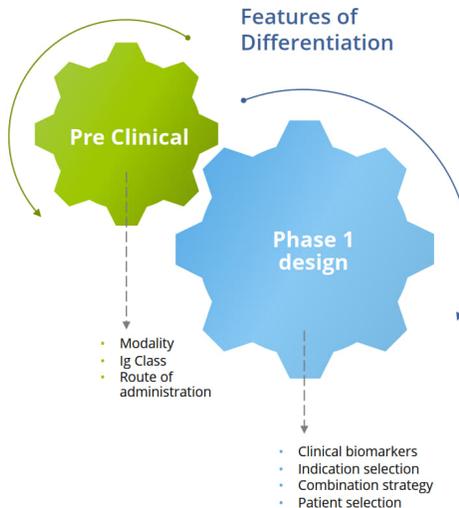
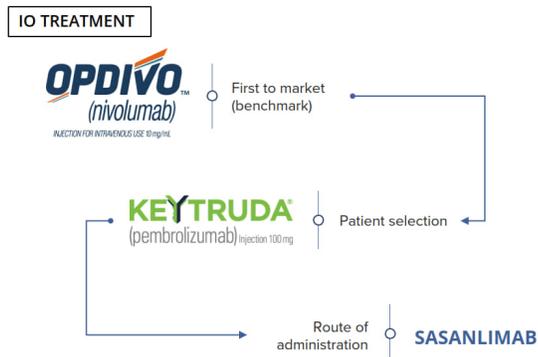
16

Source: Company data on file.

Corbus may have significant opportunities to differentiate the development of CRB-601



Example:
Strategic differentiation in PD-1 therapy

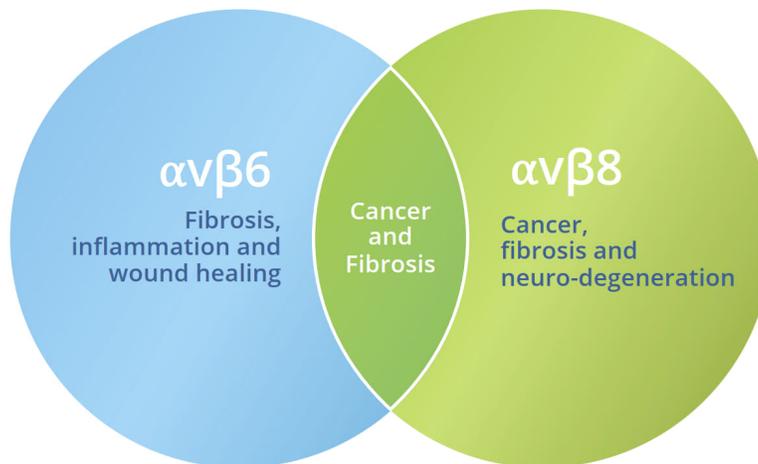


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CRB-602 is a unique asset and may provide potential therapeutic benefit in fibrotic diseases and fibrotic cancers



- CRB-602 is the only monoclonal antibody in development with dual specificity for both $\alpha v \beta 6$ and $\alpha v \beta 8$
- A rational approach to treating fibrotic diseases, e.g. IPF and/or highly fibrotic cancers



IPF = idiopathic pulmonary fibrosis

Sources: 1. Sheppard D. Epithelial-mesenchymal interactions in fibrosis and repair. Transforming growth factor- β activation by epithelial cells and fibroblasts. *Ann Am Thorac Soc.* 2015;12 Suppl 1(Suppl 1):S21-S23. doi:10.1513/AnnalsATS.201406-245MG 2. Seed RI, Kobayashi K, Ito S, et al. A tumor-specific mechanism of Treg enrichment mediated by the integrin $\alpha v \beta 8$. *Sci Immunol.* 2021;6(57):eabf0558. doi:10.1126/sciimmunol.abf0558 3. Stockis J, Liénart S, Colau D, et al. Blocking immunosuppression by human Tregs in vivo with antibodies targeting integrin $\alpha v \beta 8$. *Proc Natl Acad Sci U S A.* 2017;114(47):E10161-E10168. doi:10.1073/pnas.1710680114 4. Dodagatta-Manni E, Ma HY, Liang B, et al. Integrin $\alpha v \beta 8$ on T cells suppresses anti-tumor immunity in multiple models and is a promising target for tumor immunotherapy. *Cell Rep.* 2021;36(1):109309. doi:10.1016/j.celrep.2021.109309

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CRB-913: 2nd Generation CB1 Inverse Agonist for Metabolic Diseases

Exploring Potential Partnership Opportunities

19

Obesity is a global epidemic creating significant societal burden with need for improvement on top of standard of care (incretin analogues, e.g. GLP-1)

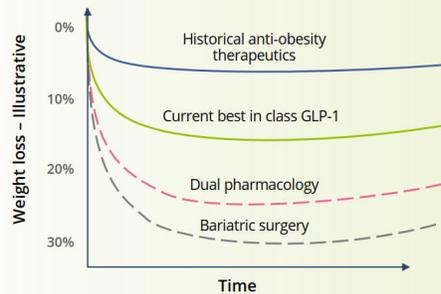


41%
of worldwide adults projected to be obese by end of decade (50% US)

\$2T
annual global medical costs associated with obesity (direct & indirect)

\$10B+
obesity drug category by 2027

Dual-pharmacology holds great promise as a potential treatment option in obesity



20

Source: McKinsey Global Institute, Overcoming Obesity: An initial economic analysis, Global Data.



Innovation

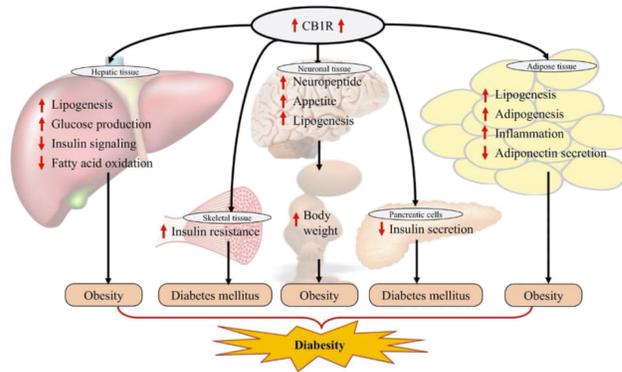
- Rationally designed to achieve markedly reduced brain exposure to address psychiatric side effects with 1st generation CB1 inverse agonists
 - Potential to augment effects of GLP-1R agonists in diabetes and obesity
 - Combination of CB1 and emerging standard of care could provide promise to improve the existing therapeutic index

MOA

- Reduces appetite, food intake, lipogenesis, dyslipidemia, inflammation and leptin regulation
- Increases insulin sensitivity and secretion

Potential Indications

- Obesity
- Diabetes
- Diabetic nephropathy
- NASH



Source: Deeba, et al. Targeting the endocannabinoid system in diabetes: Fact or fiction?, Drug Discovery Today, 2021; in press:2.

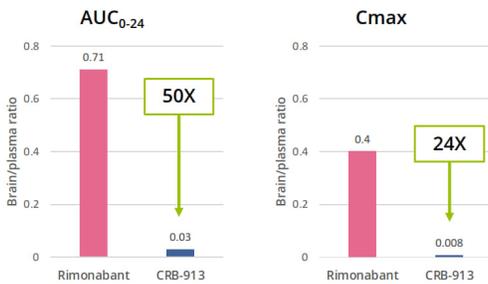
21

CRB-913: a differentiated CB1 inverse agonist inducing weight loss in combination with semaglutide and tirzepatide

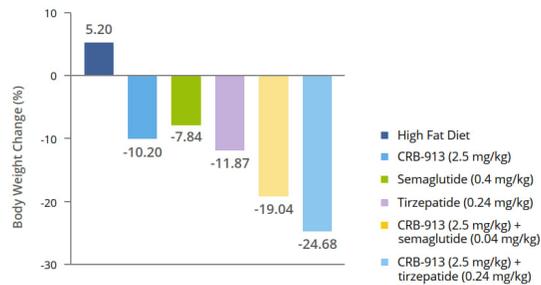


Diet Induced Obesity (DIO) Mouse Model

CRB-913 demonstrates a markedly reduced brain exposure vs. Rimonabant



CRB-913 reduces weight both as single agent and in combination (Day 18)



Combination of CB1 and emerging standard of care could provide promise to improve the existing therapeutic index

In the DIO mouse model, mice (n = 10) were fed a continuous high fat diet for 22 weeks during 28 days of treatment.

22

Source: Company data on file.

Lenabasum: A Late-stage CB2 Agonist for Autoimmune Diseases

Exploring Potential Partnership Opportunities

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Lenabasum is a late-stage clinical asset that presents significant opportunity



OPPORTUNITY

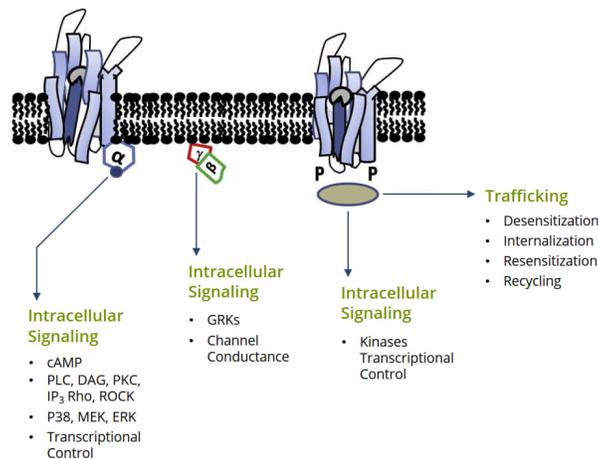
- First in class CB2 agonist
- Capable of combining with existing SoC due to Non-immunosuppressive profile
- Large safety database
- Clinical signals indicating potential for trial refinement in DM, SSc, and CF

On-going Opportunity in Ph2 SLE - read-out due in H1 2022

NIH Study funded by NIH

Primary Endpoint:

- Mean 7-day average maximum daily pain numerical rating score (NRS) at 12 weeks, n = 101



LEGEND

- CB Receptor
- Phosphorylation Site
- Ligand
- GDP
- beta-Arrestin
- G-Protein Complex

24

Source: Howlett, et al. CB 1 and CB 2 Receptor Pharmacology, Advances in Pharmacology, 2017;80:192.

Lenabasum effects on skin in DM presents an opportunity for future trial enrichment



Dermatomyositis (DM) is a heterogeneous rare disease characterized by a distinctive skin rash and muscle weakness²



DETERMINE Phase 3 Trial in adults with active classic dermatomyositis or amyopathic/hypomyopathic dermatomyositis

- International, Double-blind, Randomized, Placebo-controlled study

Primary Endpoints Total Improvement Score (TIS) at Week 28*, lenabasum BID vs. placebo (n = 175)

- Key Secondary Endpoints**
- Change in CDASI activity score
 - Proportion of subjects who achieve Definition of Improvement (DOI)
 - Change in Investigator Global Assessment (IGA) scale of skin activity

Clinical PoC¹ Lenabasum Phase 2 in amyopathic (skin predominant) DM



CDASI measures the extent of cutaneous disease in patients with DM

Week 0 DBPC CDASI activity score mean (SD) = 33.3 (9.74) for lenabasum and 35.8 (7.77) for placebo. P* = 0.09, p = 0.05, p = 0.28, p = 0.04, for lenabasum vs. placebo at Weeks 4, 8, 12, and 16, respectively MMRM, 2-sided

In a post hoc analysis of amyopathic patients (n=19)[†], who were treated with lenabasum 20 mg across the duration of therapy, a nominal improvement in CDASI was demonstrated (p = 0.0166)

Sources: 1. Company Data on File 2. Goldman LA, Katz SI, Gilchrist BA, Paller AS, Leffell DJ, Wolff K: Fitzpatrick's Dermatology in General Medicine, 8th Edition: www.accessmedicine.com

Note: *The timing of the primary efficacy endpoint was changed from Week 52 to Week 28 following developments in competitive landscape with studies that were shorter than one year using the same efficacy endpoint as DETERMINE. [†]Defined as patients with no muscle weakness, MMT-8 = 150

Management Team



Yuval Cohen, PhD
Chief Executive Officer, Director

Corbus co-founder and Chief Executive Officer since 2014. Previously the President and co-founder of Celsus Therapeutics from 2005



Sean Moran, CPA, MBA
Chief Financial Officer

Corbus co-founder and Chief Financial Officer since 2014. Prior senior financial management experience in emerging biotech and medical device companies.



Craig Millian, MBA
Chief Operating Officer

Experience leading commercial organizations and building successful brands at multiple biopharma companies



Rachael Brake, PhD
Chief Scientific Officer

Expert in developing and executing innovative drug discovery and clinical development oncology programs at several leading pharmaceutical companies



Christina Bertsch
Head of Human Resources

Accomplished senior human resource executive providing strategic HR consulting services to both large and small businesses across a variety of industries



Amb. Alan Holmer Ret.
Chairman of the Board

More than two decades of public service in Washington, D.C. including Special Envoy to China; Former CEO of PhRMA



Avery W. (Chip) Catlin
Director

More than 25 years of senior financial leadership experience in life science companies; Former CFO and Secretary of Celldex Therapeutics



Yuval Cohen, PhD
Chief Executive Officer, Director

Corbus co-founder and Chief Executive Officer since 2014. Previously the President and co-founder of Celsus Therapeutics from 2005



Rachelle Jacques
Director

More than 25-year professional career, experience in U.S. and global biopharmaceutical commercial leadership, including multiple high-profile product launches in rare diseases; CEO of Enzyvant Therapeutics



John K. Jenkins, MD
Director

Distinguished 25-year career serving at the U.S. FDA, including 15 years of senior leadership in CDER and OND



Pete Salzmann, MD, MBA
Director

20 years of industry experience and currently serves as Chief Executive Officer of Immunovant (NASDAQ: IMVT), a biopharmaceutical company focused on developing therapies for patients with autoimmune diseases

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Investment Summary

Focus on developing novel immuno-oncology therapeutics for serious cancers



Advancing lead $\alpha\beta 8$ integrin program to IND submission in H1-2023



Engaging in business development activities to expand immuno-oncology pipeline



Pursuing partnership opportunities for endocannabinoid-based programs

Sufficient capital to fund operations through the first quarter of 2024

CRBP
Ticker

\$98.3 Million

Cash and investments as of December 31, 2021
125.2M Common Shares Outstanding
(145.2 M Fully Diluted)

28



