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

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**FORM 8-K**

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**CURRENT REPORT**

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

**Date of Report (Date of earliest event reported): February 05, 2024**

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**CORBUS PHARMACEUTICALS HOLDINGS, INC.**

(Exact name of Registrant as Specified in Its Charter)

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**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)

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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	The Nasdaq Capital 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.

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**Item 7.01 Regulation FD Disclosure.**

Corbus Pharmaceuticals Holdings, Inc. updated its presentation used by management to describe its business. A copy of the presentation is furnished as Exhibit 99.1 and incorporated herein by reference.

The information in this Current Report on Form 8-K under Item 7.01, including the information contained in Exhibit 99.1, 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 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 or the Exchange Act, except as shall be expressly set forth by a specific reference in such filing.

**Item 9.01 Financial Statements and Exhibits.**

(d) The following exhibit is furnished with this report:

Exhibit No.	Description
99.1	<a href="#">Investor Presentation</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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**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: February 5, 2024

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

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# Connecting Innovation to Purpose

Corporate Presentation  
February 2, 2024

## 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 presentation. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

All product names, logos, brands and company names are trademarks or registered trademarks of their respective owners. Their use does not imply affiliation or endorsement by these companies.



Next Generation Nectin-4 targeting ADC				
<b>CRB-701</b> Next generation Nectin-4 targeting ADC	Nectin-4 positive solid tumors	CSPC (China)	<b>Dose Escalation</b> Cohorts 1-6 completed Cohort 7 added and recruiting	<b>Dose Confirmation / Expansion</b> Cohort 6 expanding
		Corbus (US + Europe)	<b>Dose Escalation</b> On schedule for FPI Q1 2024 Target end Q2 2024	<b>Dose Confirmation / Expansion</b> Expected to start Q3 2024
Anti-Integrin mAb				
<b>CRB-601</b> Anti- $\alpha$ v $\beta$ 8 mAb (TGF $\beta$ -targeting)	$\alpha$ v $\beta$ 8 enriched solid tumors	IND Cleared in January 2024		
Highly peripherally-restricted CB1R inverse agonist				
<b>CRB-913</b> CB1R inverse agonist	Obesity and related conditions	IND Expected in Q4 2024		



A decorative graphic on the right side of the slide, consisting of a network of interconnected nodes and lines, resembling a molecular or biological structure. The nodes are represented by circles of varying sizes, and the lines are thin and light blue.

# CRB-701

## Next Gen Nectin-4 Targeting ADC

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Designed to offer improved therapeutic index over Padcev®



Ph1 dose escalation ongoing in Nectin-4 tumors with first data release Q1 2024



Emerging clinical data supports differentiated ADC profile



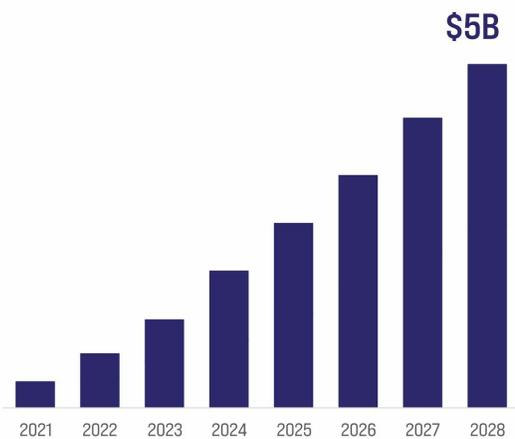
Latest Padcev® Q3 revenues <sup>1</sup>

(dollars in millions)	Three months ended September 30,				Nine months ended September 30,			
	2023	2022	% Change		2023	2022	% Change	
<b>Total Net Product Sales</b>	\$ 571	\$ 428	33	%	\$ 1,583	\$ 1,243	27	%
ADCETRIS	\$ 246	\$ 219	13	%	\$ 751	\$ 601	25	%
<b>PADCEV</b>	<b>\$ 200</b>	<b>\$ 105</b>	<b>89</b>	<b>%</b>	<b>\$ 479</b>	<b>\$ 329</b>	<b>46</b>	<b>%</b>
TUKYSA	\$ 102	\$ 88	16	%	\$ 289	\$ 267	8	%
TIVDAK	\$ 23	\$ 16	40	%	\$ 64	\$ 45	42	%

22<sup>nd</sup> October 2023 <sup>2</sup>

**Groundbreaking EV-302 Trial Significantly Extends Overall Survival and Progression-Free Survival in Patients Treated with PADCEV® (enfortumab vedotin-ejfv) and KEYTRUDA® (pembrolizumab) in First-Line Advanced Bladder Cancer**

PADCEV® Global Projected Revenues in UC/Bladder<sup>3</sup>



# Does tolerability for Padcev® impact clinical adoption?



## PADCEV® Prescribing Information

**HIGHLIGHTS OF PRESCRIBING INFORMATION**

These highlights do not include all the information needed to use PADCEV safely and effectively. See full prescribing information for PADCEV.

**PADCEV® (enfortumab vedotin-ejfv) for injection, for intravenous use** (NDA 201-108-01)

**WARNING: SERIOUS AND LIFE-THREATENING**

- PADCEV may cause severe and fatal autoimmune adverse reactions, including hypoxemia, interstitial pneumonitis (IPN) and pneumonitis, including fatal IPN, and consider alternative treatment for patients with severe IPN or severe adverse reactions.
- Permanently discontinue PADCEV in patients with confirmed IPN or IPN, or Grade 3 or greater COVID-19-like reactions. (See 16.1 and 16.2)

**ADVERSE REACTIONS**

See 6.1 and 6.2 for information on adverse reactions.

**INDICATIONS AND USAGE**

PADCEV is a human monoclonal antibody with antineoplastic activity indicated as:

- a single agent for the treatment of adult patients with locally advanced or metastatic urothelial cancer who:
  - have previously received a programmed death receptor 1 (PD-1) or programmed death ligand 1 (PD-L1) inhibitor and platinum-containing chemotherapy; or
  - are ineligible for platinum-containing chemotherapy and have previously received one or more prior lines of therapy; (1)
- in combination with pembrolizumab for the treatment of adult patients with locally advanced or metastatic urothelial cancer who are not eligible for platinum-containing chemotherapy; (2)

This indication is approved under accelerated approval based on overall response rate and durability of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in the confirmatory trial. (3)

**DOSE AND ADMINISTRATION**

- For intravenous infusion only. Do not administer PADCEV as an intravenous push or bolus. Do not mix with, or administer as an infusion with, other medicinal products. (4)
- The recommended dose of PADCEV as a single agent is 1.25 mg/kg up to a maximum of 150 mg, given intravenously over 90 minutes on Days 1, 8, and 15 of a 28-day cycle with disease progression or unacceptable toxicity. (5, 6)
- The recommended dose of PADCEV in combination with pembrolizumab is 1.25 mg/kg up to a maximum dose of 125 mg given intravenously over 90 minutes on Days 1, 8, and 15 of a 28-day cycle with disease progression or unacceptable toxicity. (5, 6)
- Avoided in patients with moderate or severe hepatic impairment. (7)

**HOW SUPPLIED AND STORAGE**

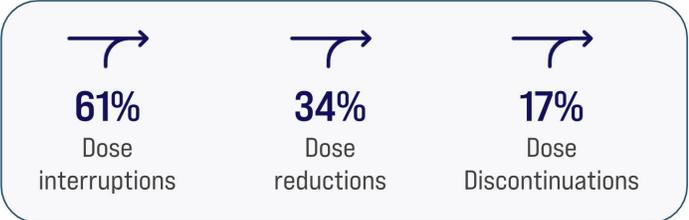
For injection, 150 mg and 300 mg of enfortumab vedotin-ejfv are supplied in a single-dose vial for intravenous use. (8)

Revised: 4/2023



**Duration of Response**  
~5 months

**47%**  
Rate of Serious Adverse Events (SAEs)



EV-301: The safety of PADCEV was evaluated as a single agent in EV-301 in patients with locally advanced or metastatic urothelial cancer (n=296) who received at least one dose of PADCEV 1.25 mg/kg and who were previously treated with a PD-1 or PD-L1 inhibitor and a platinum-based chemotherapy



**A Black Box warning<sup>1</sup>**

**WARNING: SERIOUS SKIN REACTIONS**

- PADCEV can cause severe and fatal cutaneous adverse reactions including Stevens-Johnson syndrome (SJS) and Toxic Epidermal Necrolysis (TEN), which occurred predominantly during the first cycle of treatment, but may occur later.
- Closely monitor patients for skin reactions.
- Immediately withhold PADCEV and consider referral for specialized care for suspected SJS or TEN or severe skin reactions.
- Permanently discontinue PADCEV in patients with confirmed SJS or TEN; or Grade 4 or recurrent Grade 3 skin reactions [see *Dosage and Administration* (2.2), *Warnings and Precautions* (5.1) and *Adverse Reactions* (6.1)].

- **Greater than 25% of PADCEV® discontinuations are linked to peripheral neuropathy<sup>2</sup>**
- **PADCEV + Keytruda patients who experienced neuropathy:**
  - 13% complete resolution
  - 87% patients had residual neuropathy (45% had Grade ≥2)<sup>1</sup>

8

Source(s): 1. PADCEV® Prescribing Information Dec 2023. 2. Rosenberg et al., 2020

**Adverse Events (% of patients)**

	PADCEV® monotherapy <sup>1</sup>		PADCEV® + Keytruda <sup>1</sup>	
	All Grades	≥ Gr 3	All Grades	≥ Gr 3
<b>Skin Reactions</b>	58%	14%	70%	17%
<b>Peripheral Neuropathy</b>	53%	5%	67%	7%

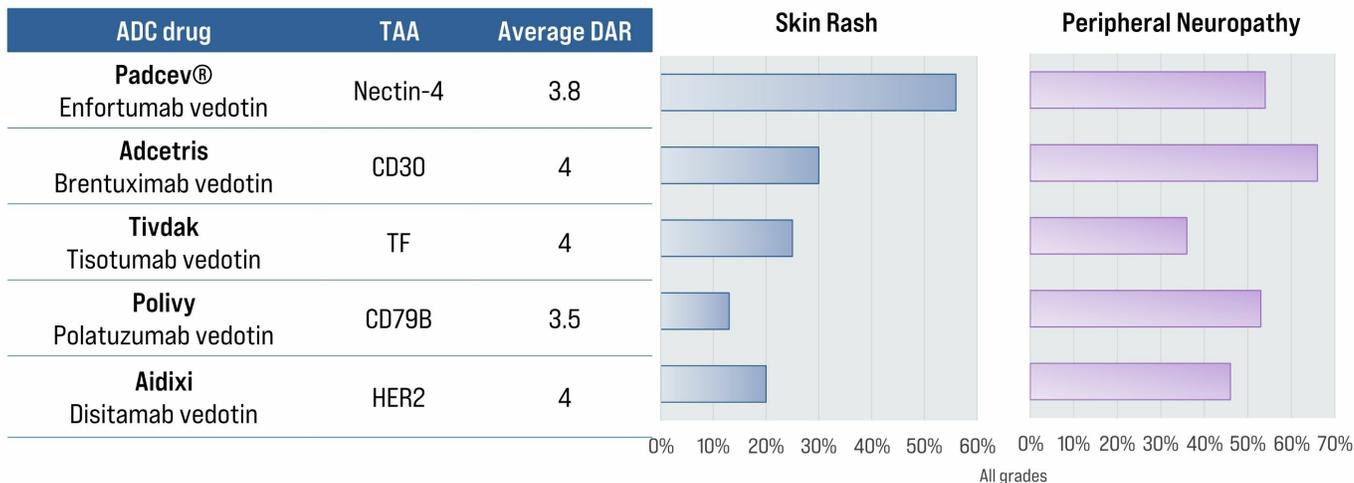
NR = not reported

# Is the 2<sup>nd</sup> generation Seagen linker the cause?



Similar dose limiting toxicities seen across divergent ADCs that share same constellation of 'linker + payload'

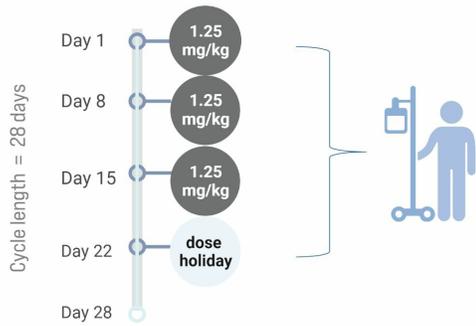
## *Val-Cit linker + vedotin (MMAE) payload*



9 Padcev Val-Cit linker + payload = mc-VC-PABC = Maleimidocaproyl-L-valine-L-citrulline-p-aminobenzyl alcohol p-nitrophenyl carbonate  
 Source(s): 1. Fu et al., Science, 2023 doi: 10.1016/j.isci.2023.107778. Padcev® Prescribing information, Adcetris® Prescribing Information, Tivdak® Prescribing Information, Polivy® Prescribing Information, Shi et al., 2022  
<https://doi.org/10.1080/10717544.2022.2069883> Aidixi® <https://www.adcreview.com/drugmap/disitamab-vedotin>



### Monotherapy Padcev®



6 months of therapy =  
~ 54 hours of total clinic time / patient

### Real-world use, dose intensity, and adherence to Padcev®

Metric	Result (N = 416)
<b>EV use</b>	
Number of cycles (median, IQR)	5 (2,8)
<b>EV dose intensity</b>	
Treatments per patient month (mean [SD])	2.6 [0.6]
Dosing frequency; treatments per cycle (mean [SD])	2.4 [0.5]
Dose (mean, mg/kg [SD])	1.1 [0.2]
Change in average dose (mg) from baseline (%)	-9.6 [20.2] %
<b>EV treatment adherence</b>	
Received on average > 2 treatments per cycle (%)	58.8 [34.4] %



Limitation	Padcev®	BT8009	9MW-2821
Upper dose limit	1.25 mg/kg <sup>1</sup>	5 mg/m <sup>2</sup> <sup>4</sup>	1.25 mg/kg <sup>3</sup>
Schedule	D1, D8, D15 /28 days	Q1W	D1, D8, D15 /28 days
≥ Grade 3 AE rate	51% (n=155) <sup>2</sup>	65% (n=20) <sup>6</sup>	35% (n=85) <sup>3</sup>
Peripheral Neuropathy	38%	30%	17%
Skin reactions	25%	10%	18%
Neutropenia (Gr 3)	5% <sup>3</sup>	10% <sup>#</sup>	19%
Dose reduction	34%	16%	3.5%
Dose interruptions	64%	24%	28%

11 1 Rosenberg, et al., "EV-101 JCO, 2020 Apr 1; 38(10): 1041-1049, 2. Powles et al., EV-3012021, 3. Zhang et al., ESMO 2023, 4 Rigby et al., 2023, 6 Bicycle corporate deck Nov 2023\_# - combined frequency of Grade 3 neutropenia/ low neutrophil count



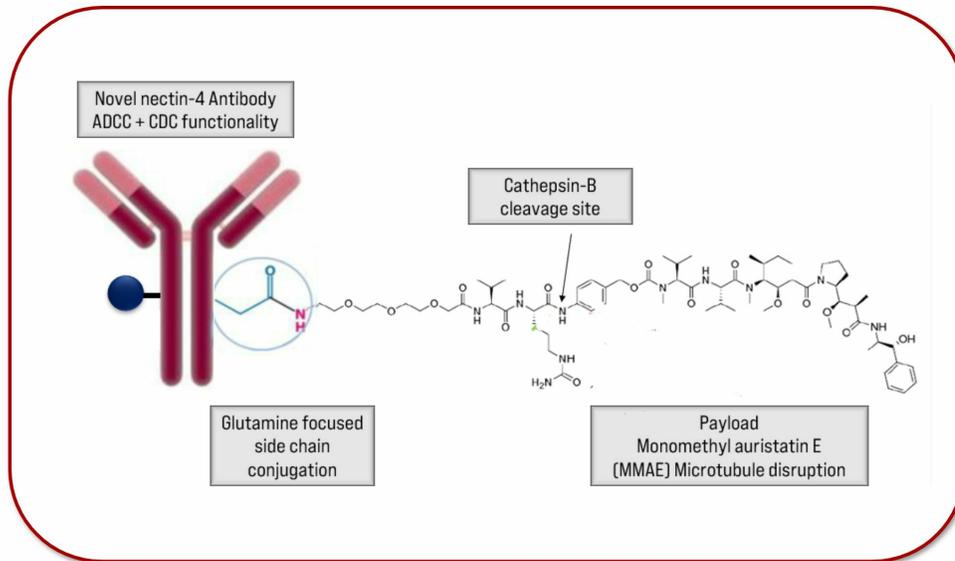
**Toxicity:** 3<sup>rd</sup> gen ADC with stable linker → Reduce free circulating MMAE



**Compliance:** Extend ADC half-life → Reduce dosing frequency



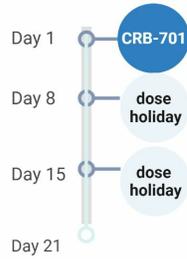
**Efficacy:** Lower DAR + longer half-life → Dose higher than Padcev®



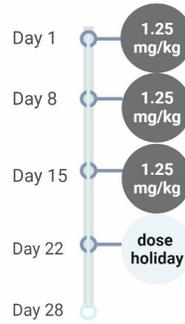


## Clinical cycle comparison

### CRB-701



### Padcev®



Patient / physician  
convenience

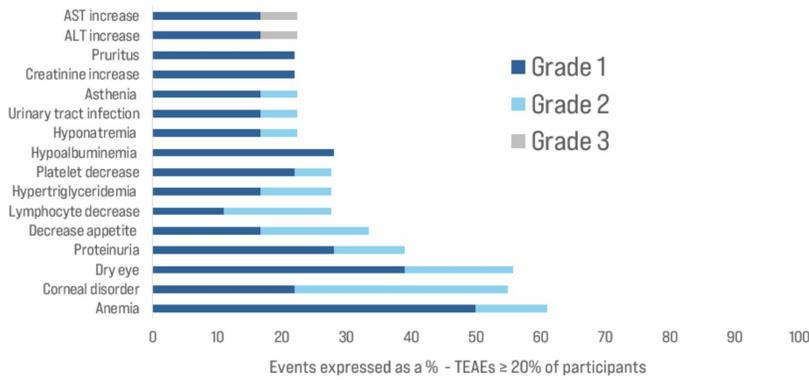
Combination flexibility



<p><b>KEY ELIGIBILITY</b></p> <p>Age <math>\geq</math>18 years Advanced urothelial carcinoma or Nectin-4 positive Advanced solid tumors ECOG 0-1 Adequate organ function No uncontrolled diabetes No active CNS metastasis</p>	<p><b>ESCALATION DESIGN</b></p> <p>Bayesian Optimal Interval (BOIN) design with accelerated titration at DL-1 IV Q3W over a 21-day cycle</p> <p>0.2 mg/kg 0.6 mg/kg 1.2 mg/kg 1.8 mg/kg 2.7 mg/kg 3.6 mg/kg 4.5mg/kg (recruiting)</p>	<p><b>KEY END POINTS</b></p> <ul style="list-style-type: none"><li>• Safety / tolerability</li><li>• Pharmacokinetics</li><li>• Anti tumor activity</li></ul> <p><b>NEXT STEPS</b></p> <ul style="list-style-type: none"><li>• Continue escalation</li><li>• PK expansion at 3.6mg/kg</li><li>• MTD or RP2D</li><li>• Specific expansion</li></ul>
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Characteristic	Value	Characteristic	Value
Median Age (Range)	58 (35-76)	Primary tumor type	n=18
Sex (M/F)	5/13	Urothelial	7
ECOG PS of 1	18 (100%)	Cervical	6
Weight in kg (Range)	55 (36-84)	Breast	4
Prior therapy (Range)	5 (1-10)	TNBC	3 of 4
Creatine Cl <60 μmol/L	7 (39%)	CRC	1
Visceral metastasis	15 (83%)	HbA1C levels ≤ 6.5%	18 (100%)



Dose Modifications (n=18)	Value
Discontinuations	0
Reductions	0
Interruptions	1 (5.5%)

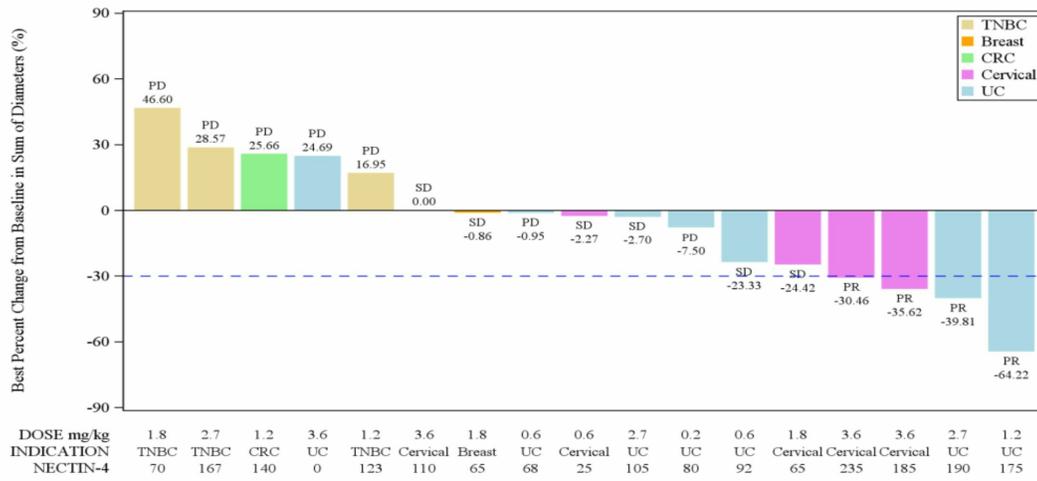
- SYS6002 (CRB-701) was well tolerated with mainly grade 1 or 2 AEs
- No DLTs or Grade 4 or 5 AEs have been observed to-date
- Anemia and eye related adverse events were the most common treatment emergent AEs (TEAE)
- Four subjects reported 7 SAEs, 3 of which were considered probably related to SYS6002 (CRB-701)
  - Two Grade 3 SAEs (ILD and pulmonary infection) were reported in a single participant
  - 1 Grade 3 (ALT increase) reported in a separate participant
- To-date no cases of skin rash or peripheral neuropathy have been observed



21 Day PK	Comparison	% ADC		% Free MMAE	
		C <sub>max</sub>	AUC <sub>21d</sub>	C <sub>max</sub>	AUC <sub>21d</sub>
Enfortumab vedotin (EV) 1.25 mg/kg Q1W x3	EV benchmark	100%	100%	100%	100%
SYS6002 (CRB-701) 1.2 mg/kg Q3W	Matched ADC dose	79%	106%	33%	29%
SYS6002 (CRB-701) 2.7 mg/kg Q3W	Matched MMAE dose	177%	183%	79%	68%

- After single IV infusion of SYS6002 (CRB-701), the exposure of TAb, ADC and MMAE generally increased in a dose proportional manner
- Clearance and volume of distribution were similar across doses
- The half-lives of TAb, ADC and MMAE were 4-6 days, 4-5 days and 5-10 days, respectively
- No obvious accumulation was observed on C3D1
- Time to peak concentration of MMAE was about 3-7 days
- When compared to EV exposures SYS6002 (CRB-701) consistently demonstrates lower free MMAE

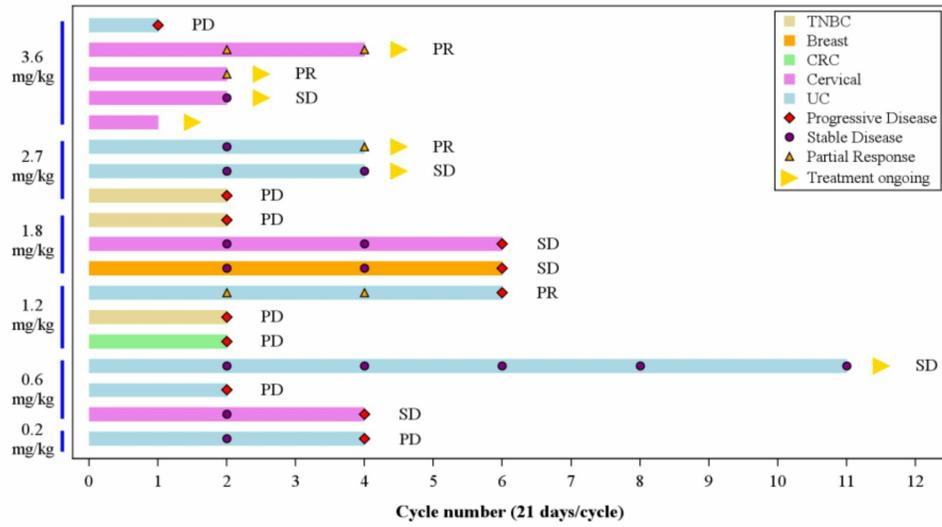
# Phase 1 Dose Escalation - Disease Response



Disease response in 3.6 mg/kg and 2.7 mg/kg doses:

ORR 43%

DCR 71%



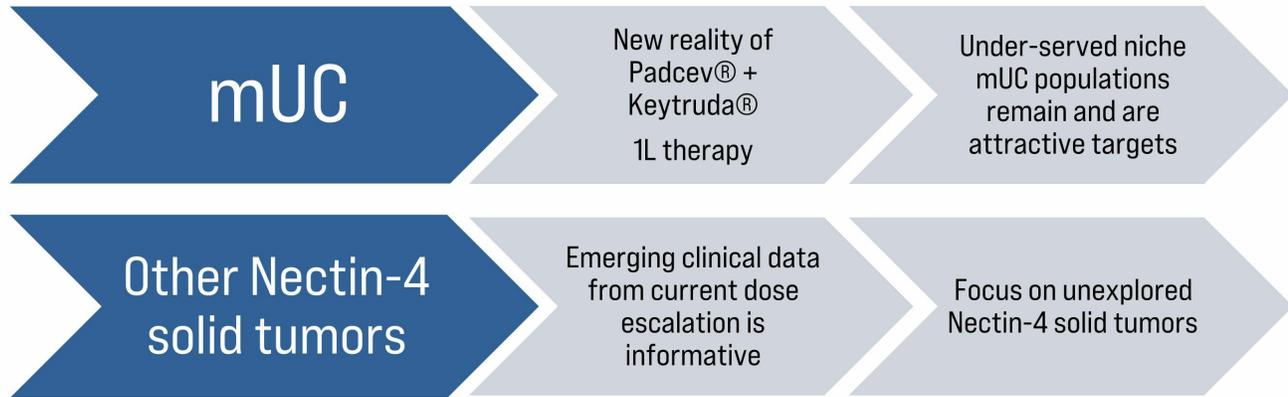
Note: Of the 4 PRs reported; 2 PRs are confirmed and 2 remain unconfirmed

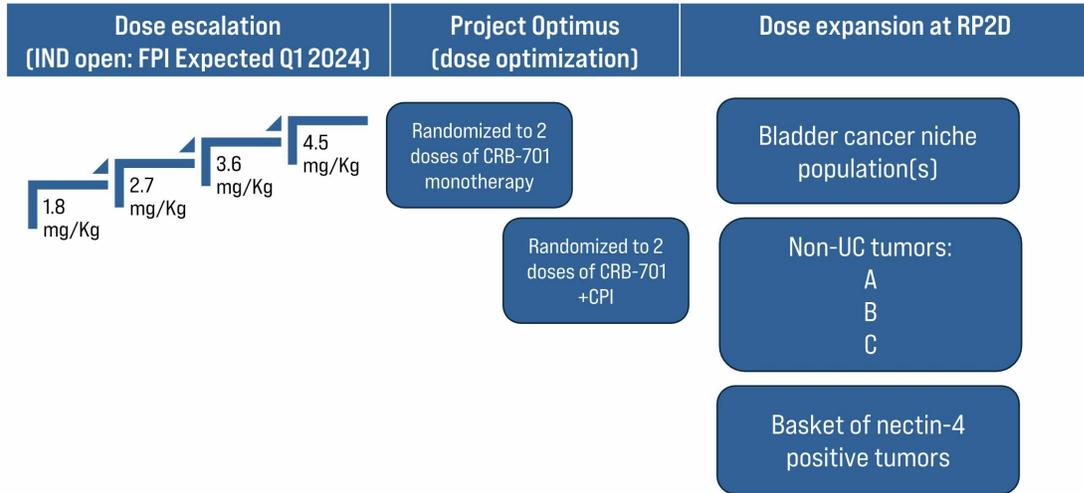


Predicted therapeutically relevant doses in Ph 1 study	Seven patients treated at 2.7mg/kg and 3.6 mg/kg on Q3W schedule
Objective Response Rate	43% - 3 out of 7 patients with PR's (2 unconfirmed)
Disease Control Rate	71% - 5 out of 7 patients
Tumor shrinkage across all nectin-4 positive mUC and cervical patients in study	9 out of 10 patients
Dose for first observed SD	0.6 mg/Kg
Dose for first observed PR	1.2 mg/Kg
Longest observed response duration to-date	11 cycles (still ongoing)
Participants still on CRB-701	7/18 (38%)
First expansion dose chosen	3.6 mg/Kg (cohort 6)

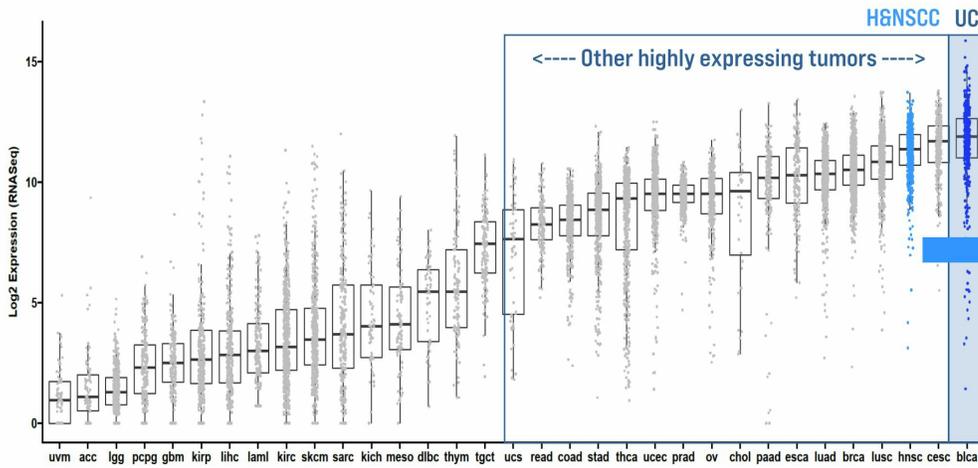


Proprietary insights are driving indication selection for CRB-701





# Validation of Nectin-4 as a Tumor Associated Antigen beyond mUC



Elevated Nectin-4 expression: urothelial, breast, ovarian, cervical, colorectal, rectal, esophageal, gastric, lung, thyroid, prostate, cholangiocarcinoma, pancreatic cancer, testicular cancer



**H&NSCC**

Parameter	Patients (N=46)
Confirmed ORR	11 (23.9%)
CR	1 (2.2%)
PR	10 (21.7%)
SD	15 (32.6%)
mPFS	3.94 months

2023 **ASCO**  
ANNUAL MEETING

# Clinical Status: Non-clinical / Clinical Development plan



Updated planning  
Nov 2023

## Non-clinical

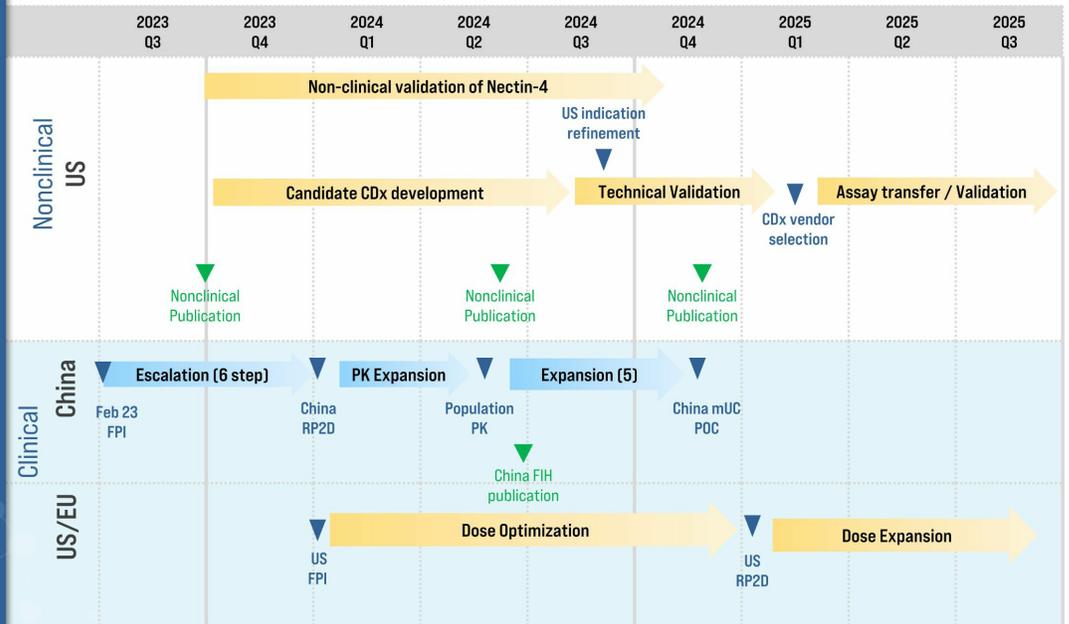
1. Clinical differentiation
2. Translational validation
3. CDx development

## Clinical

1. Exploring doses beyond PADCEV®
2. Dose escalation complete Q4 2024
3. CRB-701 bridging Q1 2024
4. PK/safety /E modeling



## CRB-701 Development Timeline





Emerging clinical safety and potential for superior therapeutic index



Dose expansion has started (China); dose escalation in US Q-1 2024



3<sup>rd</sup> generation ADC with improved linker stability-reduces MMAE in circulation



# **CRB-913: oral cannabinoid type-1 inverse agonist for superior incretin therapy in obesity**



NASDAQ: CRBP • CorbusPharma.com • @CorbusPharma



## But...

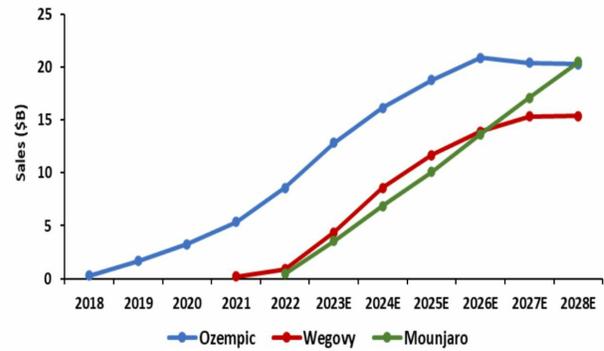
Muscle loss

Tolerability

Accessibility

→ Long-term compliance is ~ 27%

Sales (2018-2022) and sales estimates (2023-2028) for Ozempic, Wegovy, and Mounjaro reflect significant uptake and expectations





**Muscle loss:** Degree of weight loss → Quality of weight loss



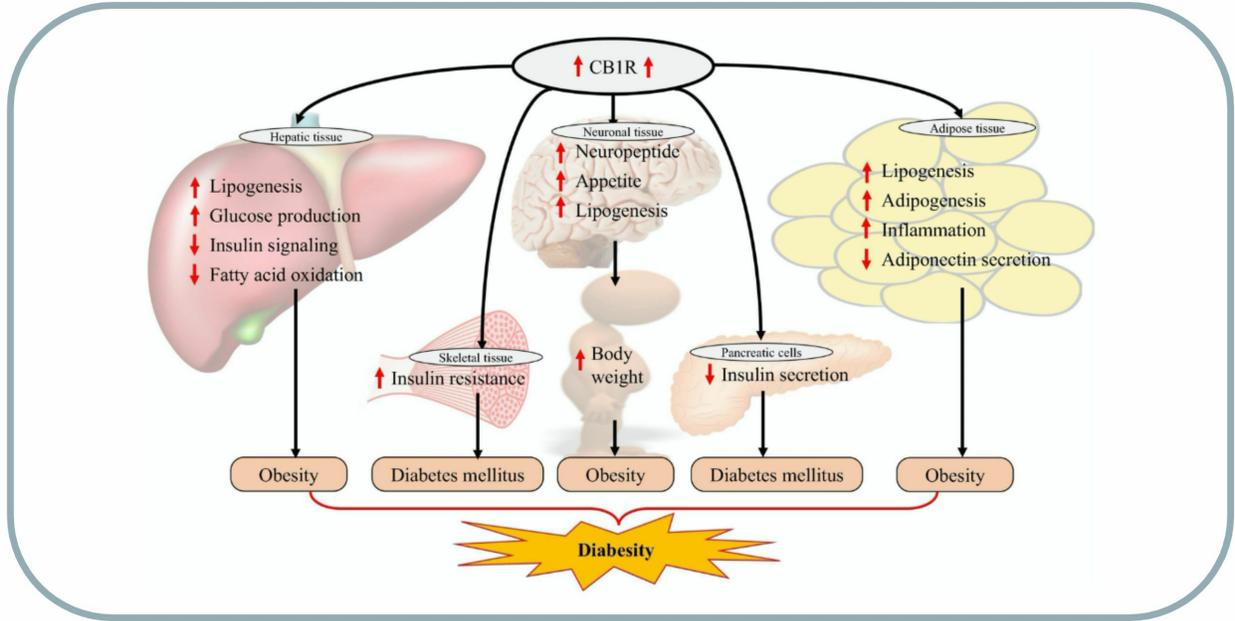
**Tolerability:** Single MOA → Multiple orthogonal MOAs



**Accessibility:** Injectables → Oral small molecules



**CB1 inverse agonism:  
The return of a clinically-validated obesity drug class**



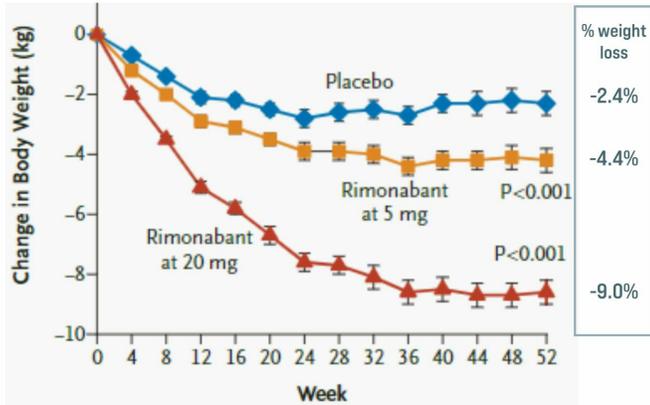
# The CB1 MOA is clinically validated in obesity: data from 1<sup>st</sup> gen drugs



**SANOFI**  
**Rimonabant<sup>1</sup>**

RIO-Lipids Phase 3 study  
Placebo (n=342);

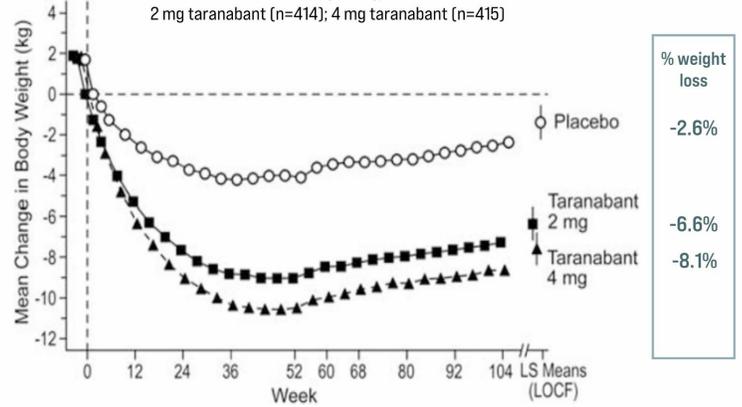
5 mg rimonabant (n=345); 20 mg rimonabant (n=346)



**MERCK**  
**Taranabant<sup>2</sup>**

Completed Phase 3 studies (2 and 4 mg) (2 yr)  
Placebo (n=417);

2 mg taranabant (n=414); 4 mg taranabant (n=415)



Phase 3 RIO study DEXA-scanned subgroup (n=146)

	Total body mass	Total fat mass	Fat mass/body mass	Lean mass
Rimonabant vs. placebo	↓	↓	↓	Unchanged

Body composition was measured with body DEXA in a subset of patients in RIO Lipids. Decreases in the rimonabant 20 mg group relative to placebo were observed in the total body mass ( $p < 0.001$ ), the total body fat mass ( $p = 0.001$ ) and the fat mass/total body mass ratio ( $p = 0.007$ ). There was no statistically significant difference between the 20 mg and the placebo groups in lean mass loss between groups.

Rimonabant NDA (page 21)



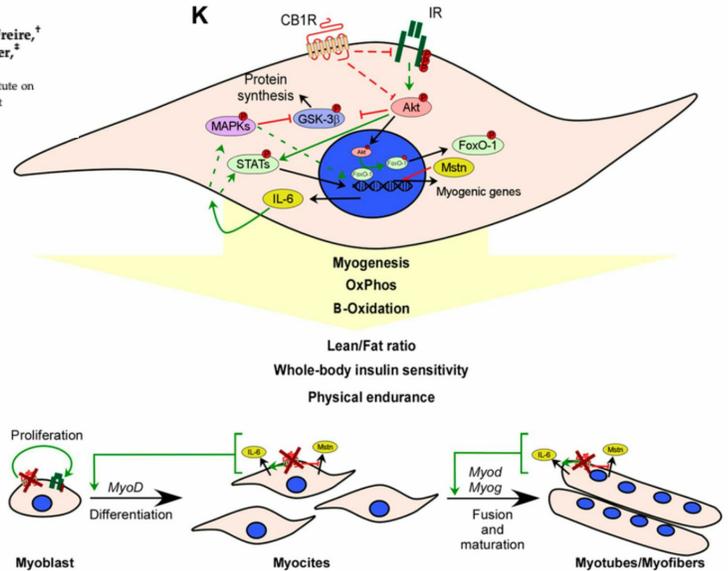
**Muscle cannabinoid 1 receptor regulates Il-6 and myostatin expression, governing physical performance and whole-body metabolism**

Isabel González-Mariscal,<sup>\*,1</sup> Rodrigo A. Montoro,<sup>\*</sup> Jennifer F. O'Connell,<sup>\*</sup> Yoo Kim,<sup>\*</sup> Marta Gonzalez-Freire,<sup>†</sup> Qing-Rong Liu,<sup>\*</sup> Irene Alfaras,<sup>‡</sup> Olga D. Carlson,<sup>\*</sup> Elin Lehmann,<sup>‡</sup> Yongqing Zhang,<sup>‡</sup> Kevin G. Becker,<sup>‡</sup> Stéphan Hardivillé,<sup>§</sup> Paritosh Chosh,<sup>\*</sup> and Josephine M. Egan<sup>\*,2</sup>  
<sup>\*</sup>Laboratory of Clinical Investigation, <sup>†</sup>Translational Gerontology Branch, and <sup>‡</sup>Laboratory of Genetics and Genomics, National Institute on Aging, National Institutes of Health, Bethesda, Maryland, USA; and <sup>§</sup>Unité de Recherche 8576-Unité de Glycobiologie Structurale et Fonctionnelle (UCSF), Centre National de la Recherche (CNRS), Université Lille, Lille, France

**Key finding:**

Muscle-CB1 KO mice...

- Increase in muscle mass and strength
- Increase in biomarkers of muscle growth
- Increase in mitochondrial metabolism
- Increase in energy expenditure
- Increase in calorie consumption w/o weight gain
- Increase in fat metabolism
- Enhanced insulin sensitivity in muscle tissue
- Reduction in body fat content
- Reduction in sleep





## 1<sup>st</sup> gen (2000-2007)

- Designed to target the brain with high BBB penetration → FDA rejection due to safety concerns (2007)

 Rimonabant

 Otenabant

 Bristol Myers Squibb<sup>®</sup> Ibipinabant

 MERCK Taranabant

## Next gen (2020 onwards)

- Designed to be peripherally restricted with minimal BBB penetration → avoid safety issues



INV-202

 CORBUS  
PHARMACEUTICALS

CRB-913

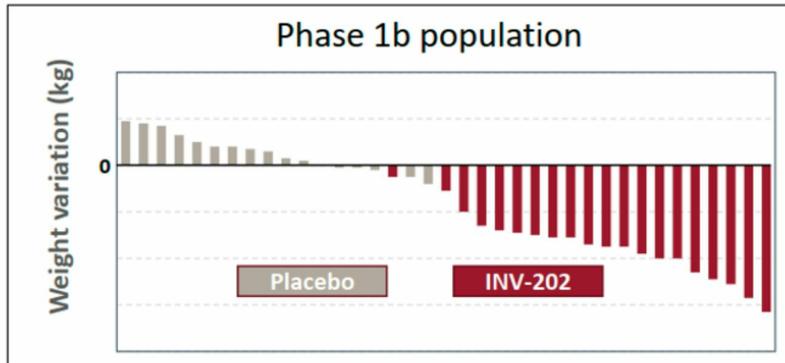


BIOTECH

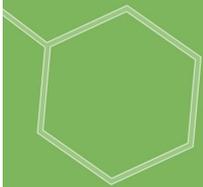
STAT+

## Novo acquires Inversago for up to \$1 billion, spotlighting troubled weight loss approach

Aug. 10, 2023



1. Single-dose INV-202 (25mg QD)
2. N = 37
3. Adults with metabolic syndrome
4. Weight loss: -3.50 kg (INV-202) vs +0.55Kg (placebo)



# CRB-913: oral CB1 inverse agonist for combination therapy with incretins

OBESITY SYMPOSIUM  
Obesity Biology and Integrated Physiology

Obesity THE OBESITY SOCIETY WILEY  
A Research Journal

**Novel cannabinoid receptor 1 inverse agonist CRB-913 enhances efficacy of tirzepatide, semaglutide, and liraglutide in the diet-induced obesity mouse model**

Marshall Morningstar | Andrew Kolodziej | Suzie Ferreira | Tracy Blumen | Rachael Brake | Yuval Cohen

Nov. 2023



## Design goals:



Best-in-class peripheral restriction



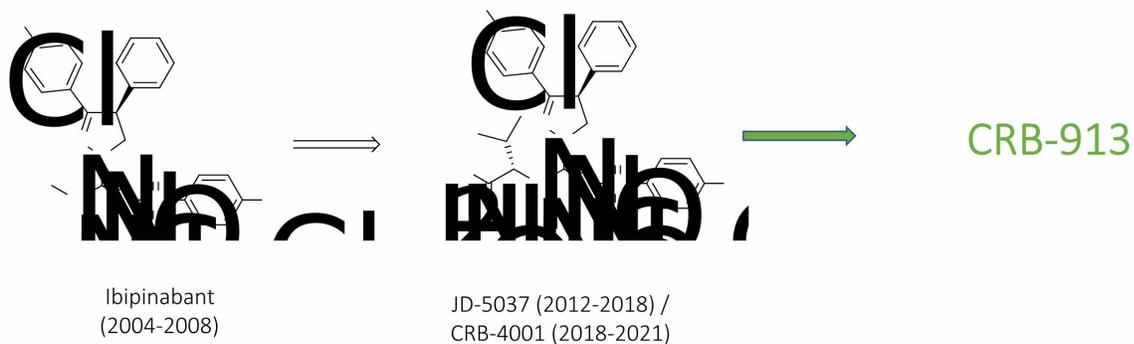
Protect lean mass (muscle)



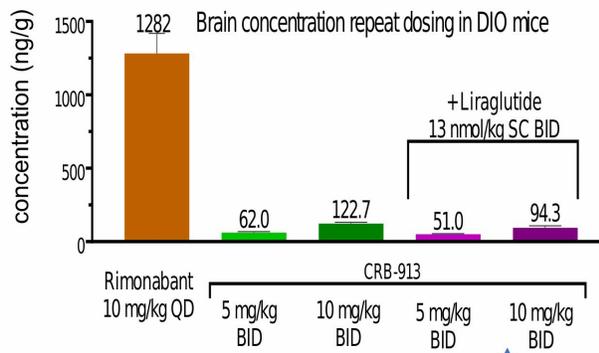
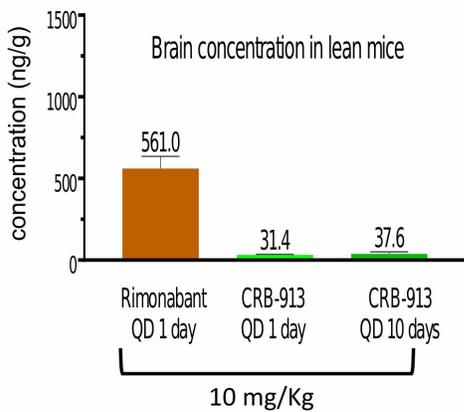
Retain 1<sup>st</sup> gen efficacy



Enhance efficacy of incretin analogs



- Completed Phase IIb (Solvay/BMS)
- Small, lipid soluble molecule
- High BBB penetration
- Oral
- CRB-4001 (JD5037) licensed from Jenrin in 2018
- Extensive pre-IND studies carried out
- PK didn't support TPP
- Oral
- New IP published –patent coverage through 2043
- PK profile optimized for TPP
- Favorable multi-species bioavailability (>50%)
- Lower mfg. cost vs. Incretins
- Oral



Co-administration with incretin analog does not affect brain penetration for CRB-913

Source(s): Morningstar et al 2023



Brain concentration (ng/g)			
single acute dose	CRB-913 (lean mice)	INV-202 (lean mice)	Rimonabant (lean mice)
10 mg/Kg	26*	319**	561*

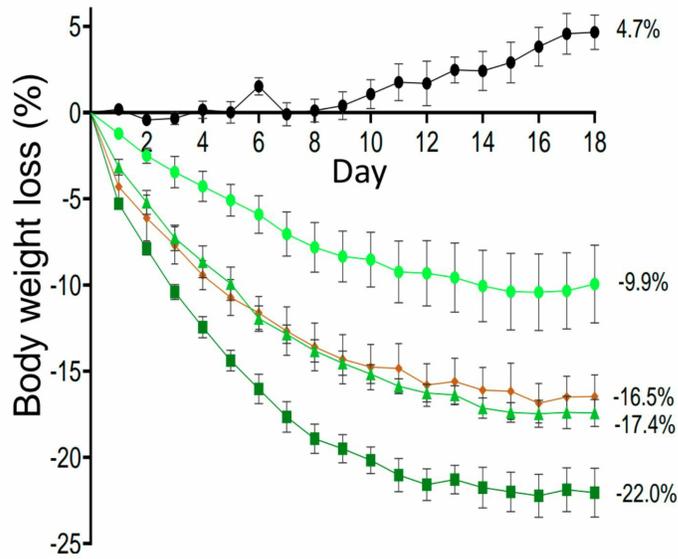


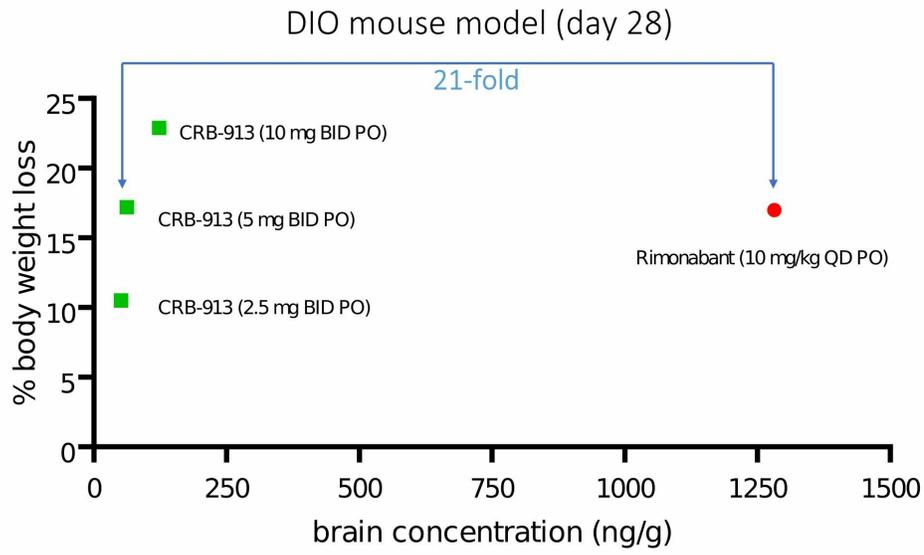
1:12



1:21

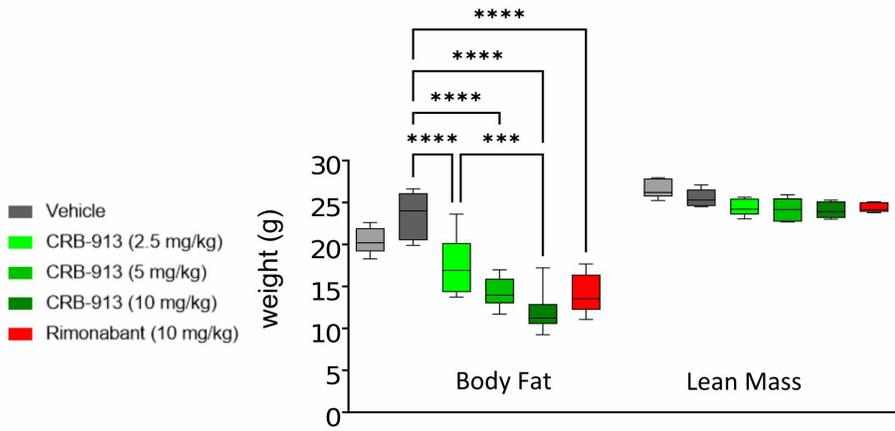
# CRB-913: similar weight loss vs. rimonabant at same daily doses in DIO mice





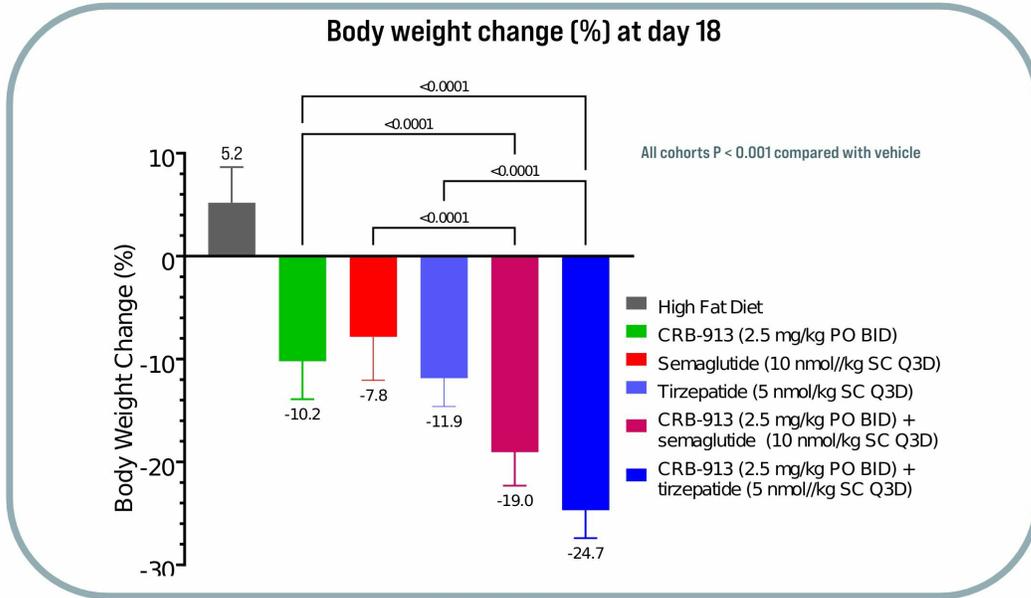
- DIO mouse model with C57BL6/N mice (n=10) fed a continuous high fat diet for 22 weeks prior and during 28 days of treatment
- Brain collected 1 h post final dose ( $C_{max}$ )

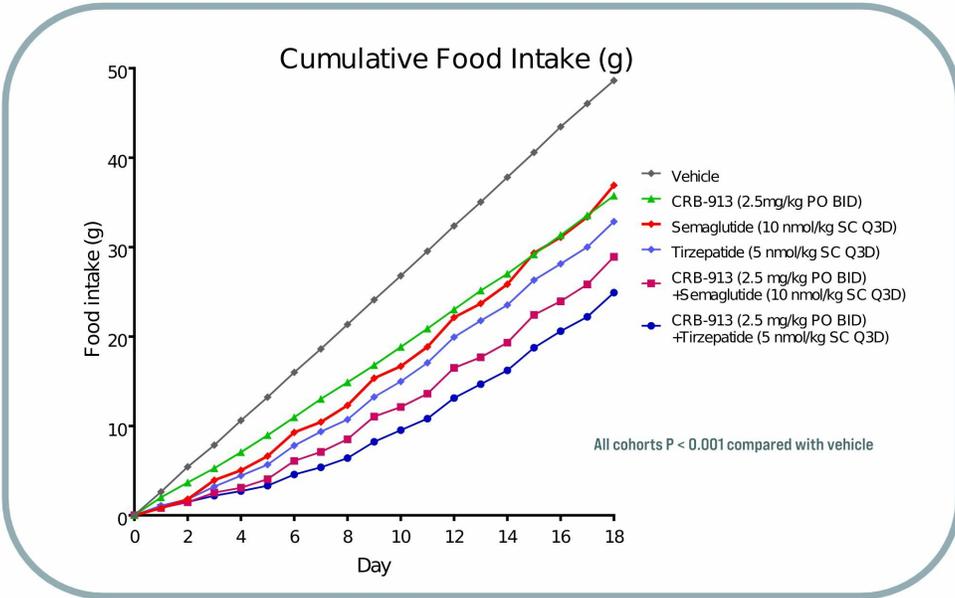
Source(s): Company data on file.



- DIO mouse model with C57BL6/J mice (n=10) fed a continuous high fat diet for 22 weeks prior
- Body fat by MRI determined on Day 20

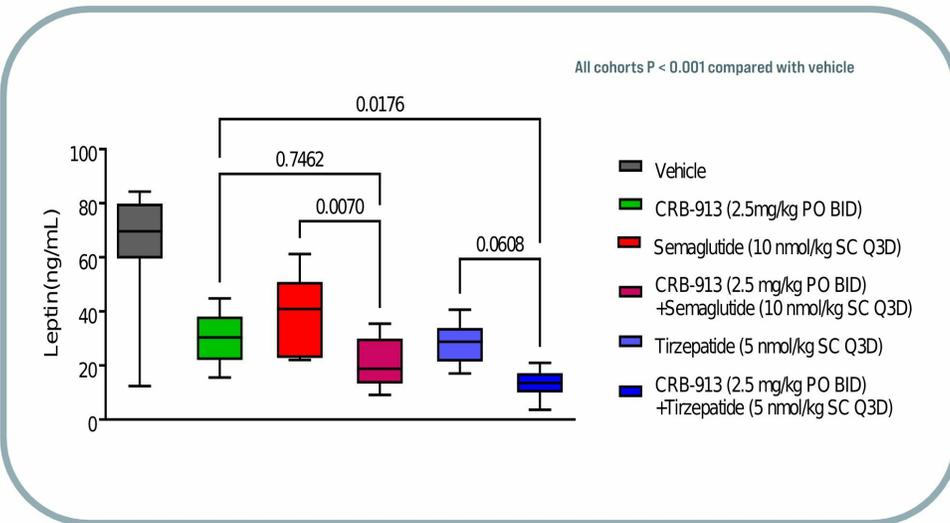
Source(s): Morningstar et al 2023





**Food Consumption**

- CRB-913, semaglutide and tirzepatide each results in food intake reductions
- Significant further reductions in food consumption when CRB-913 is combined with semaglutide or tirzepatide (p=0.001)



## The Role of Leptin

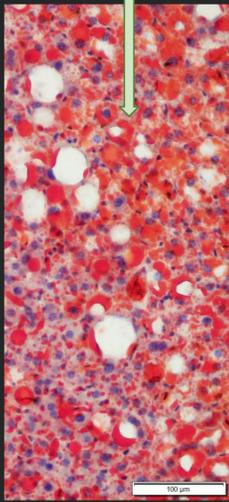
- The hormone leptin regulates food intake
- Normally, leptin signals satiety (feeling “full”)
- In obesity, resistance to leptin develops and hunger persists despite high leptin levels (“leptinemia”)
- A reduction in leptin levels is believed to be important for weight loss<sup>1</sup>

- DIO mouse model with C57BL6/J mice (n=10) fed a continuous high fat diet for 22 weeks prior
- Leptin measured at Day 28 of treatment

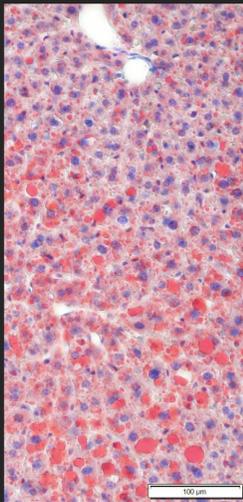
# CRB-913 reduces liver fat alone and in combination with semaglutide or tirzepatide



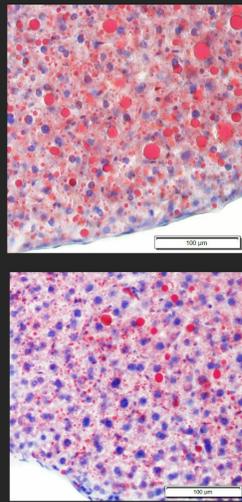
Liver fat



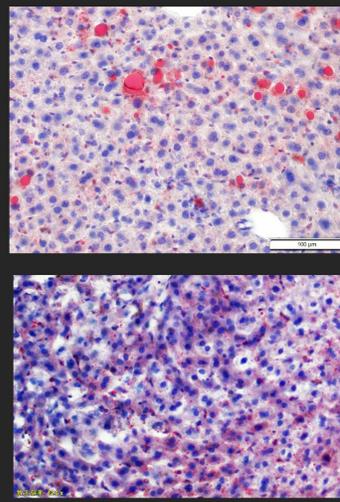
vehicle



CRB-913  
(2.5 mg/kg)



tirzepatide  
(5 nmol/kg)



CRB-913 (2.5 mg/kg) +  
semaglutide (10 nmol/kg)

CRB-913 (2.5 mg/kg) +  
tirzepatide (5 nmol/kg)

48

\*liver oil red stain

Source(s): Company data on file.



## Potential clinical applications:



Incretin analog therapy insensitive/intolerant/high-risk patients



Combination with oral incretin agonists →enhance efficacy OR improve tolerability



“Induction/maintenance” model: maintain weight loss post incretin analog therapy



Best-in-class peripheral restriction



Protect lean mass (muscle)

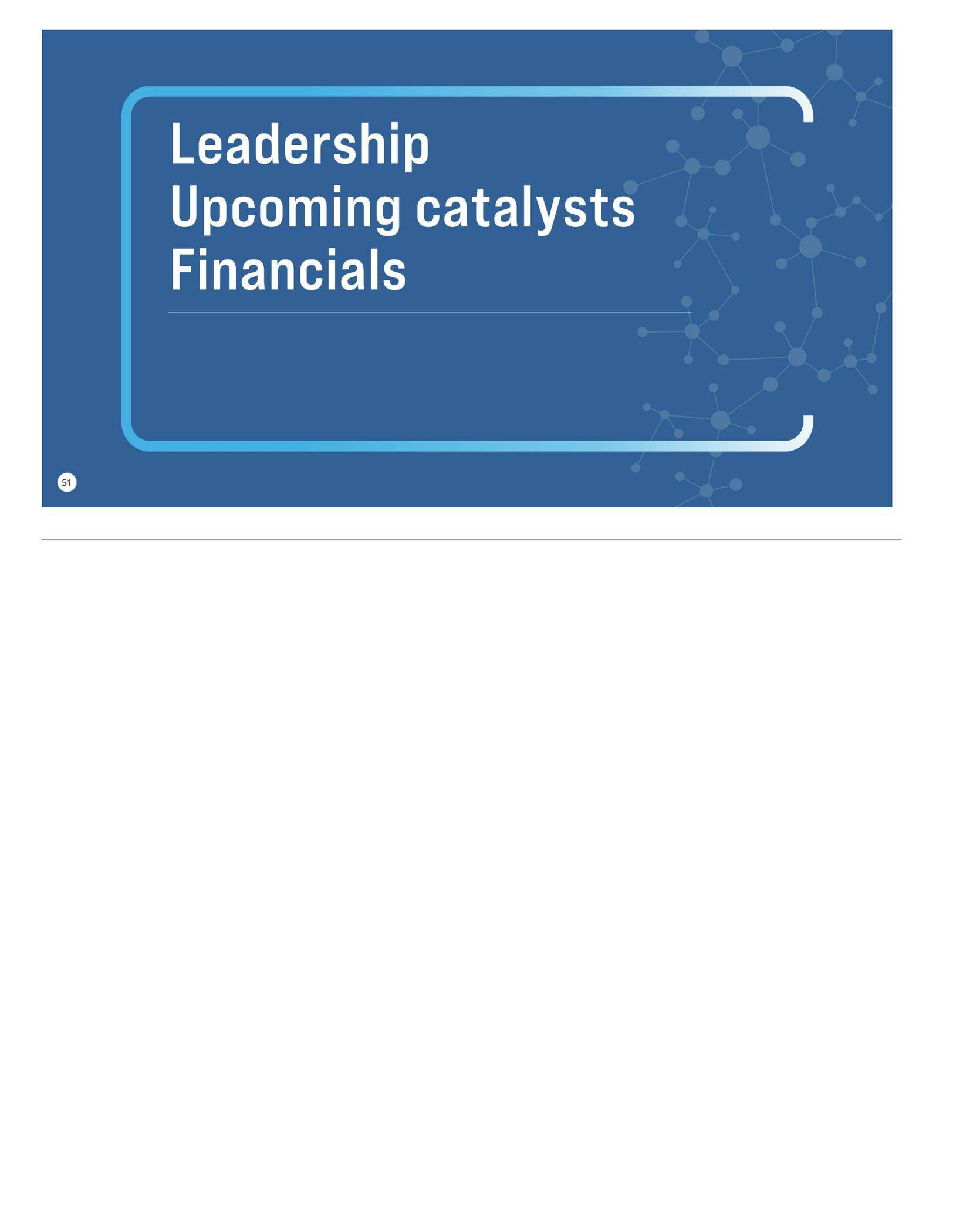


Retain 1<sup>st</sup> gen efficacy



Enhance efficacy of incretin analogs





# Leadership Upcoming catalysts Financials

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**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.



**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.



**Anne Altmeyer, PhD, MBA, MPH**  
Director

20 years of experience advancing oncology R&D programs and leading impactful corporate development transactions; currently President & CEO of Tigenix.



**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 Akari Therapeutics. (NASDAQ: AKTX)



**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.



**Yong (Ben) Ben, MD, MBA**  
Director

25 years of oncology R&D experience across industry and academia. Held two industry CMO positions, most recently at BeiGene (BGNE).

# Potential 2023 - 2024 Catalysts



					Expected		
2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
<b>CRB - 701</b> Nectin-4 targeting ADC	FPI (China) ✓				US/EU - FPI	RP2D (China) US - End escalation US CDx partnership	US RP2D
		CRB-701 nonclinical AACR-NCI-EORTC ✓			ASCO-GU (China) ✓ Dose escalation	ASCO (China) escalation / expansion	Non-clinical update ESMO Clinical
<b>CRB - 601</b> αvβ8 mAb			IND ✓		FPI		
	TGFβ Summit ✓	AACR ✓ NYAS ✓	SITC ✓			AACR-NCI-EORTC	ESMO FIH Clinical

Clinical milestone

Conference presentation PK = Pharmacokinetics CDx = Companion Diagnostic RP2D = Recommended Phase 2 Dose FPI = First Patient In



## Focus on developing precision oncology + differentiated assets



Clinically developing a next generation Nectin-4 targeting ADC



Expecting to move CRB-913 into clinic with IND in H2 2024



Advancing anti- $\alpha v \beta 8$  integrin program into clinic-IND cleared

**CRBP**  
Ticker

**\$127 Million**

Cash and investments as of Feb 2, 2024 and  
10.3M Common Shares Outstanding  
(11.1M Fully-Diluted Shares)



## Appendix

A decorative graphic on the right side of the slide, consisting of a network of interconnected nodes and lines, resembling a molecular structure or a network diagram. The nodes are represented by small circles of varying sizes, and the lines are thin and light green.

**CRB-601**

Potential “best-in-class”  
 $\alpha v \beta 8$  mAb

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Novel mechanism to target TGF $\beta$  in the tumor microenvironment



Focus on adopting a precision-targeted approach



Large opportunity potential if POC is validated

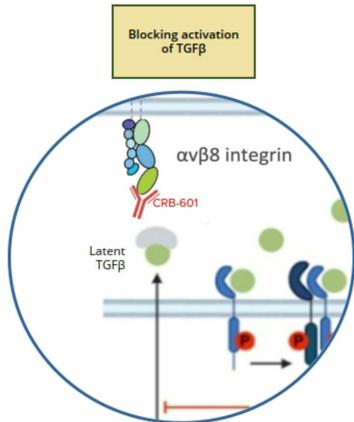


# Targeting the integrin $\alpha\beta 8$ represents a novel approach to regulating TGF $\beta$

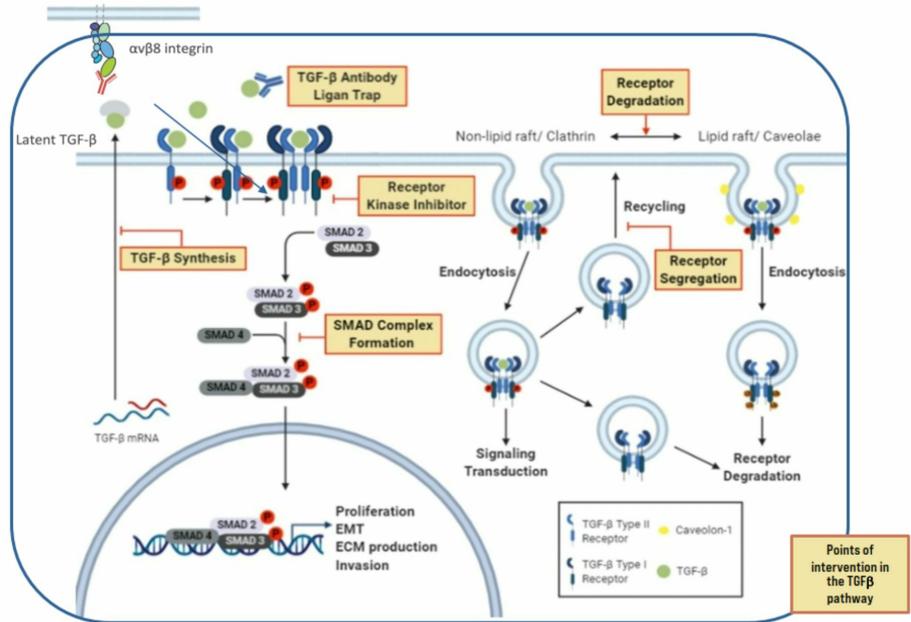


## Novel point of therapeutic intervention

Blocking the  $\alpha\beta 8$  activation of TGF $\beta$  in the local tumor microenvironment



CRB-601 binds at the interface between latent TGF $\beta$  and  $\alpha\beta 8$



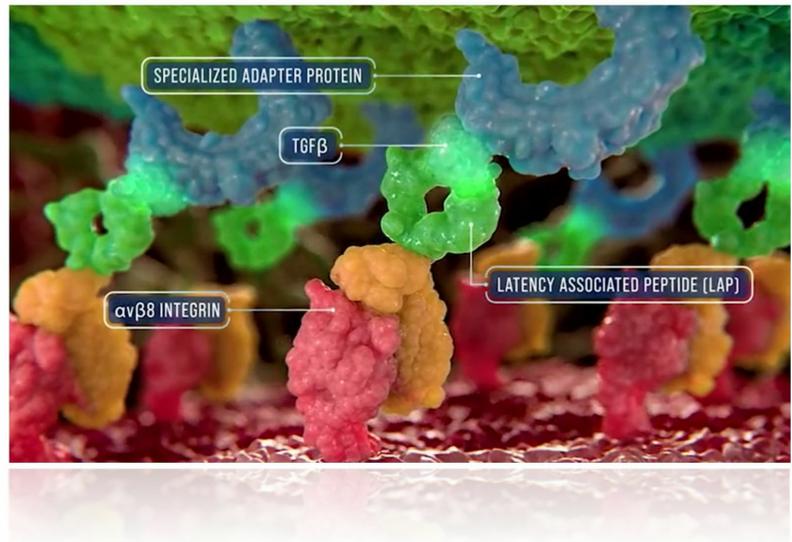
CRB-601 is targeting latent -TGF $\beta$  by blocking the integrin  $\alpha$ v $\beta$ 8



The integrin  $\alpha$ v $\beta$ 8 is expressed in the tumor microenvironment (TME)

Latent-TGF $\beta$  is also expressed in the TME

CRB-601 is a blocking antibody preventing the interaction of these two proteins

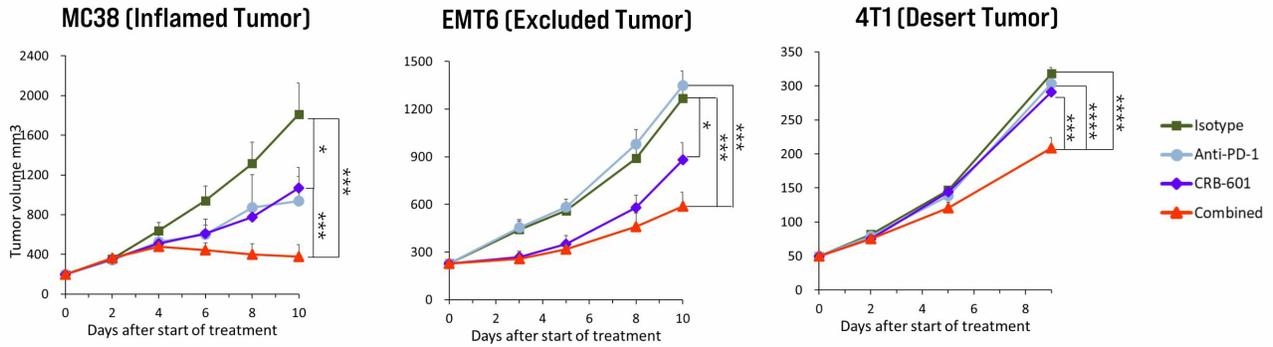


# mAbs targeting TGFβ activation are advancing clinically



	CRB-601	PF-06940434	SRK-181	ABBV-151	R66440
<b>MOA</b>	αvβ8	αvβ8	L-TGFβ	GARP (TGFβ1)	L-TGFβ
<b>Clinical Stage</b>	IND in Q4 2023	Phase 1/2	Phase 1	Phase 2	Phase 1
<b>Indications</b>	Solid Tumors	Solid Tumors	Solid Tumors	HCC Updated 11/23	Solid Tumors
<b>Type</b>	Monoclonal Antibody	Monoclonal Antibody	Monoclonal Antibody	Monoclonal Antibody	Monoclonal Antibody
<b>ROA</b>	IV	IV	IV	IV	IV

# CRB-601 enhances anti-PD-1 therapy in checkpoint inhibition sensitive and resistant murine tumor models



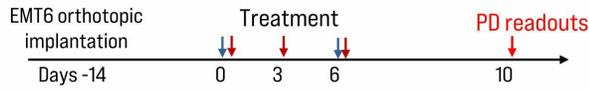
## Checkpoint blockade sensitivity



% TGI	MC38	EMT6	4T1
Anti-PD-1	54	-8	6
CRB-601	46	37	10
Combo	89	65	41

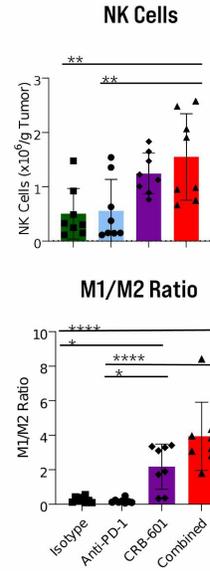
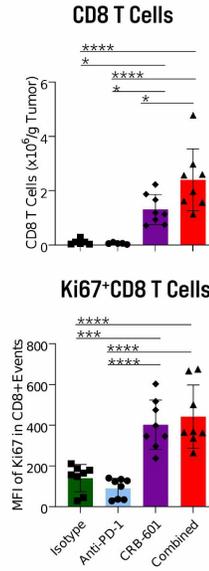
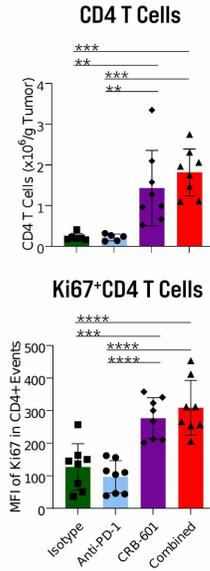
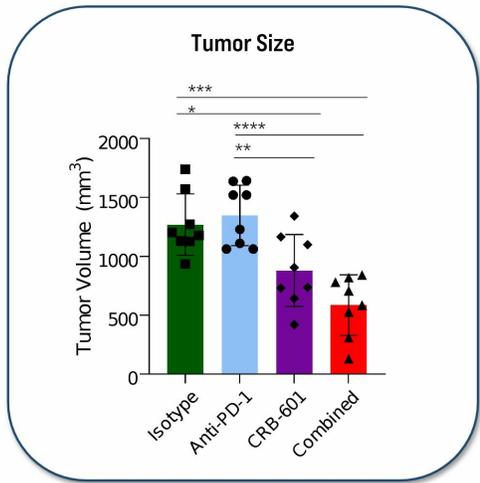
**CRB-601: 10 mg/kg BIW**  
**Anti-PD-1: 10 mg/kg BIW**  
**10 animals / group**  
**Animals randomized at 50-80 mm<sup>3</sup>**  
**Comparisons across arms**  
 \* $p < 0.05$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.0001$

# Blockade of $\alpha\beta 8$ in combination with anti-PD-1 increased TIL populations in immune excluded EMT6 tumors

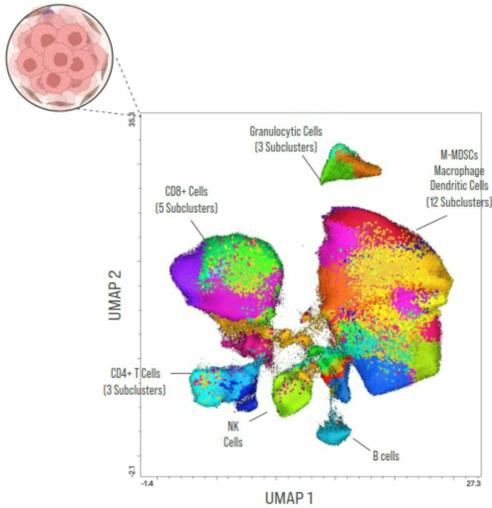


↓ CRB-601, 30 mg/kg, IP  
↓ Anti-PD-1, 10 mg/kg, IP

Tumor volume = 200 mm<sup>3</sup>  
(when treatment initiated)

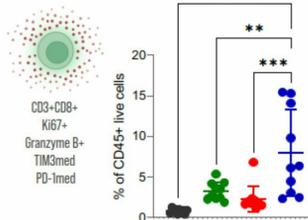


63 \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; \*\*\*\* $p < 0.0001$   
Source(s): Corbus data on file

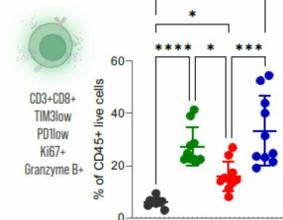


- 22 antibody flow cytometry panel
- 1.25 million live CD45+ cells analyzed
- 31 immune clusters from high dimensional flow analysis
- Sample processing (1) Downsample (2) UMAP (3) X-Sift (4) Euclid (5) Cluster Explorer
- Animals have undergone 10 days of treatment.

**Cytotoxic Effector CD8 T Cells**

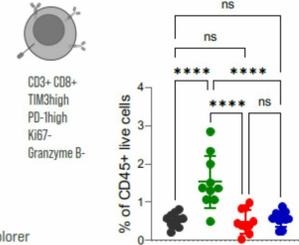


**Intermediate Exhausted CD8 T cells**

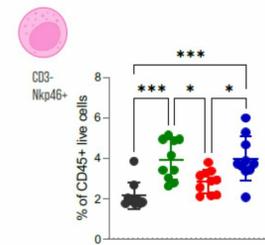


- Isotype
- PD-1
- CRB-601
- Combination

**Terminally Exhausted CD8 T cells**



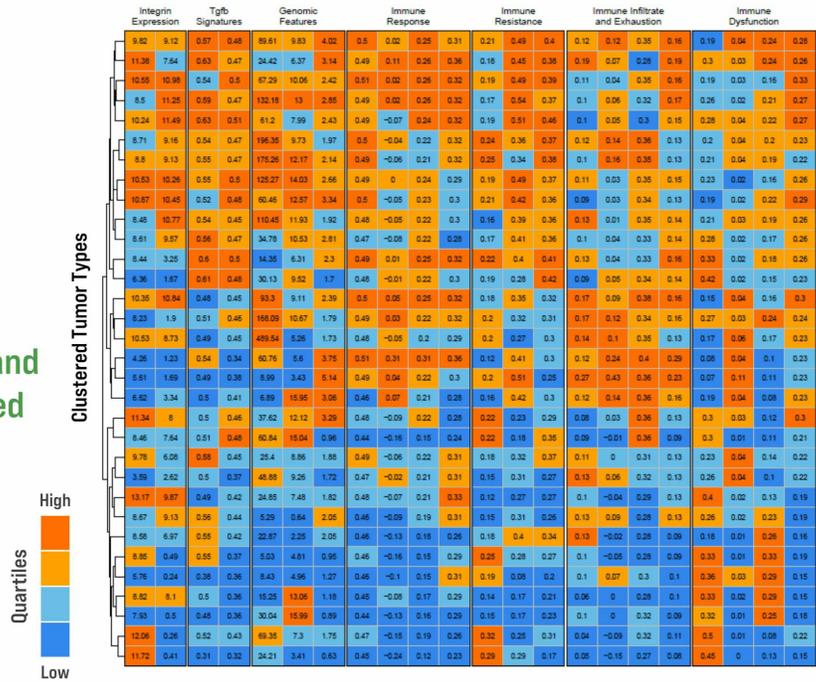
**Natural Killer Cells**





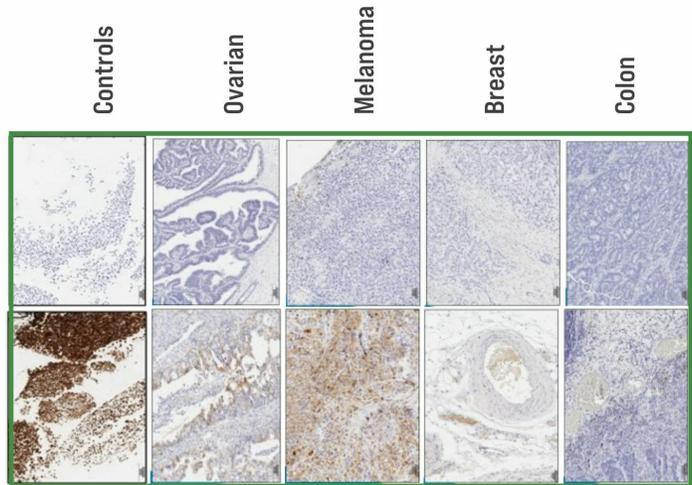
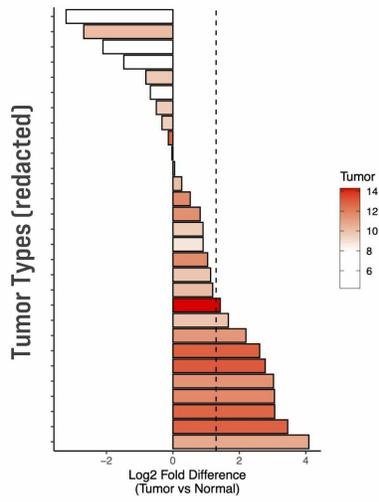
A multi-parametric, immune-focused algorithm has refined indications for CRB-601

The combination of immune features and gene expression profiles have identified 9 indications for clinical priority





Prioritization of indications with differential gene expression vs. normal tissues will emphasize focus on the tumor potential of  $\alpha v\beta 8$



Development of a NEW patient enrichment biomarker will assist in enriching for responses and addressing the right immune resistant patient population with CRB-601



- IND cleared in January 2024
- FPI expected H1-2024
- Non-clinical validation of a potential patient selection biomarker in 2023
- Dose escalation and confirmation will be the focus through 2024