UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 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): **January 6, 2022**

OCUGEN, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**001-36751**	**04-3522315**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

263 Great Valley Parkway
Malvern, Pennsylvania 19355
(484) 328-4701
(Addresses, including zip code, and telephone numbers, including area code, of principal executive offices)

N/A
(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 (see General Instruction A.2. below):

☐ 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, $0.01 par value per share	OCGN	The Nasdaq Stock Market LLC (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. ☐

Item 8.01 Other Events.

Attached as Exhibit 99.1 hereto and incorporated herein by reference is a presentation that Ocugen, Inc. will post on its website on January 6, 2022 and may use from time to time in presentations or discussions with investors, analysts, and other parties.

Item 9.01 Financial Statements and Exhibits.

The following exhibits are being filed herewith:

(d) Exhibits

Exhibit No.	Document
99.1	Ocugen, Inc. Presentation.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURE

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

Date: January 6, 2022

OCUGEN, INC.

By: /s/ Shankar Musunuri
Name: Shankar Musunuri
Title: Chief Executive Officer and Chairman


ocugen™
Taking Science to New Heights for Patients
January 2022
NASDAQ: OCGN

Forward Looking Statement

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995, which are subject to risks and uncertainties. We may, in some cases, use terms such as "predicts," "believes," "potential," "proposed," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Such forward-looking statements include information about qualitative assessments of available data, potential benefits, expectations for clinical trials, and anticipated timing of clinical trial readouts and regulatory submissions. This information involves risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Risks and uncertainties include, among other things, the uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for clinical trials, regulatory submission dates, regulatory approval dates and/or launch dates, including the risk that such dates are not met due to impacts from the ongoing COVID-19 pandemic, as well as risks associated with preliminary and interim data, including the possibility of unfavorable new clinical trial data and further analyses of existing clinical trial data; the risk that the results of in-vitro studies will not be duplicated in human clinical trials; the risk that clinical trial data are subject to differing interpretations and assessments, including during the peer review/publication process, in the scientific community generally, and by regulatory authorities; whether and when data from Bharat Biotech's clinical trials will be published in scientific journal publications and, if so, when and with what modifications; whether the data and results from preclinical and clinical studies of COVAXIN™, which have been conducted by Bharat Biotech in India, will be accepted by the U.S. Food and Drug Administration ("FDA") or otherwise sufficient to support our Emergency Use Authorization ("EUA") or Investigational New Drug applications ("IND"), as applicable; whether the FDA will accept our IND submissions without any changes, or if we are required to submit additional information to the FDA in support of our IND submissions, the extent and significance of any such changes; the size, scope, timing and outcome of any additional trials or studies that we may be required to conduct to support an EUA or Biologics License Application ("BLA") for COVAXIN™, including our planned phase 3 clinical trial for which we have submitted an IND to the FDA; whether the U.S. Food and Drug Administration ("FDA") will authorize COVAXIN™ for administration as a vaccine for pediatric uses against COVID-19 pursuant to the EUA we submitted with the FDA and the timing and scope of any such authorization; any additional chemistry, manufacturing, and controls information that we may be required to submit; the timing of our BLA filing; whether and when a BLA for COVAXIN™ will be submitted to the FDA; whether and when a BLA may be approved by the FDA, whether a New Drug Submission application may be approved by Health Canada, and whether the additional information that we provide to Health Canada will be sufficient to support an approval by Health Canada and any delays associated therewith; the authorizations or approvals will depend on myriad factors, including making a determination as to whether the vaccine candidate's benefits outweigh its known risks and determination of the vaccine candidate's efficacy and, if authorized or approved, whether it will be commercially successful; whether developments with respect to the COVID-19 pandemic will affect the regulatory pathway available for vaccines in the United States, Canada, or other jurisdictions; manufacturing capabilities, manufacturing capacity, and supply restrictions, including whether sufficient doses of COVAXIN™ can be manufactured or supplied within our projected time periods; market demand for COVAXIN™ in the United States or Canada; decisions by the FDA or Health Canada impacting labeling, manufacturing processes, safety, and/or other matters that could affect the availability or commercial potential of COVAXIN™ in the United States or Canada, including development of products or therapies by other companies. These and other risks and uncertainties are more fully described in our periodic filings with the Securities and Exchange Commission ("SEC"), including the risk factors described in the section entitled "Risk Factors" in the quarterly and annual reports that we file with the SEC. Any forward-looking statements that we make in this presentation speak only as of the date of this presentation. Except as required by law, we assume no obligation to update forward-looking statements contained in presentation whether as a result of new information, future events, or otherwise, after the date of this presentation.

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Ocugen: A Diversified Portfolio Designed to Serve Unmet Needs

Vaccine development with a COVID-19 vaccine candidate.

Modifier gene therapies designed to cure multiple rare and broad diseases with one product.

Novel biologic treatment targeting diabetic macular edema, diabetic retinopathy, and wet age-related macular degeneration

An integrated capability to bring innovations to the market

Research | Clinical Development | Manufacturing | Medical | Regulatory | Commercial

Strong balance sheet

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Pipeline Overview

	Asset/Program	Indication	Phase
Vaccine	COVAXIN™ (BBV152) Whole-Virion Inactivated Vaccine	COVID-19	Adult-Phase 3* Peds-Phase 2/3*
Modifier Gene Therapy Platform	OCU400 *** AAV-hNR2E3	Gene mutation-associated retinal degeneration**	
		NR2E3 Mutation	Phase 1/2
		RHO Mutation	Phase 1/2
		CEP290 Mutation	To be submitted
		PDE6B Mutation	To be submitted
	OCU410 AAV-hRORA	Dry Age-Related Macular Degeneration (Dry AMD)**	Preclinical
Novel Biologic	OCU200 Transferrin – Tumstatin	Diabetic Macular Edema	Preclinical
		Diabetic Retinopathy	Preclinical
		Wet Age-Related Macular Degeneration (Wet AMD)	Preclinical

* Bharat Biotech-sponsored clinical trial

** No approved therapies exist
https://www.aao.org/eye-health/diseases/retinitis-pigmentosa-treatment | https://www.aao.org/eye-health/diseases/amd-treatment

*** Orphan designation in the US
Broad orphan medicinal product designation in the EU for the treatment of both retinitis pigmentosa (RP) and Leber Congenital amaurosis (LCA)

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COVAXIN™ (BBV152)

A Whole-Virion Inactivated COVID-19 Vaccine Candidate
Licensed from Bharat Biotech (BBIL) for the US and Canadian Markets

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Forward Momentum for COVAXIN™ (BBV152)

01

Results of Phase 3 clinical trial for COVAXIN™ published in *The Lancet;*

Emergency Use Authorization submitted to FDA for pediatric (2-18) indication for the prevention of COVID-19

02

IND filed with FDA for Phase 3 bridging study in support of a BLA submission;

WHO grants COVAXIN™ Emergency Use Listing, broadening global portfolio of COVID-19 options;

Health Canada regulatory process ongoing with deficiencies noted and responses being prepared

03

Manufacturing partner selected;

Tech transfer from Bharat Biotech in progress;

Targeting 100M doses/year

Product Profile

Whole virion inactivated SARS-CoV-2 (NIV-2020-770) Antigen concentration & Adjuvant: 6µg + Algel–IMDG(TLR7/8)

Image for illustrative purposes only

Proposed indication

Prevention of COVID-19 caused by SARS-CoV-2

Target population

Pediatric: 2-18 years of age

Adult: 18 years of age and older

Dose Level and Regimen

0.5mL per dose suspension 2 Doses: Day 0 & Day 28

Presentation

Ten doses per vial

Potential Shelf Life

Approximately two years at 2°- 8°C and three months at room temp (25°C)

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Why COVAXIN™ (BBV152)?

Designed to augment our North American arsenal of vaccines against COVID-19

DESIGNED FOR BROAD SPECTRUM IMMUNE RESPONSE

01

- Data suggest both humoral & cellular responses generated against multiple viral proteins
- Data support that the vaccine induces a Th1 response (cell-mediated immunity) which can be vital for durable protection

RESULTS AGAINST OVERALL, SEVERE AND DELTA VARIANT

02

- Only vaccine with Phase 3 clinical trial data suggesting broad protection against variants of concern

KNOWN SAFETY PROFILE

03

- Phase 3 adverse event profile similar to placebo
- Technology platform used to produce Polio, Influenza and Rabies vaccines

TRANSPORTATION AND STORAGE EASE

04

- 10 dose vial that can be stored and shipped at 2°-8° C, with a 2-year shelf life and 3-month stability at room temperature

Image for illustrative purposes only

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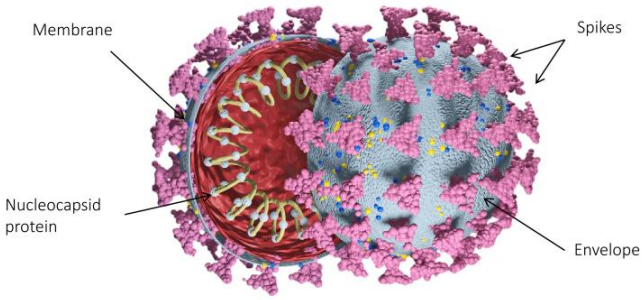
Why COVAXIN™ (BBV152)? Broad Spectrum Response



Research suggests COVAXIN™ elicits a strong IgG responses against spike protein, receptor-binding domain, and the nucleocapsid protein of SARS-CoV-2 along with strong cellular responses

Current mRNA and adenovirus-based vaccines only elicit responses against the spike protein

Why COVAXIN™ (BBV152)? The Only COVID-19 Vaccine Candidate with Clinical Results Against Delta Variant

77.8%	Overall efficacy	Adverse Events COVAXIN™ Arm	12.4%
93.4%	Efficacy vs severe disease	Adverse Events Placebo Arm	
65.2%	Efficacy vs B.1.617.2 (Delta)	Serious Adverse Events	<0.5%

- n = 25,800 participants
- Participants recruited between November 2020 and January 2021 across 25 sites
- Two doses, 28 days apart

Source: Ella, Reddy, Blackwelder, Potdar, Yadav, Sarangi et al. (2021) Efficacy, safety, and lot-to-lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): interim results of a randomised, double-blind, controlled, phase 3 trial; *The Lancet*. Advanced online publication. https://doi.org/10.1016/S0140-6736(21)02000-6 Accessed November 11, 2021

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Summary of Efficacy and Safety Results from Phase 3 Clinical Trial

Parameter	Cases			Vaccine efficacy (95% CI)
	BBV152	Placebo	Total	
Symptomatic	24	106	130	77.8% (65.2 – 86.4)
Severe	1	15	16	93.4% (57.1 – 99.8)
Asymptomatic	13	33	46	63.6% (29.0 – 82.4)

Adverse Events	BBV152 (n=12879)		Placebo (n=12874)		Total (n=25753)	
	m	n (%)	m	n (%)	m	n (%)
All adverse events	2930	1597 (12.40)	3029	1597 (12.41)	5959	3194 (12.40)
Unsolicited adverse events	981	489 (3.80)	1309	609 (4.73)	2290	1098 (4.26)
All serious adverse events	40	39 (0.30)	66	60 (0.47)	106	99 (0.38)

1

Primary endpoint: Preventing symptomatic COVID-19 occurring at least 14 days after second dose

2

Secondary endpoint: Efficacy in subgroups based on age (18 – 59 years; ≥60 years)

Source: Ella, Reddy, Blackwelder, Potdar, Yadav, Sarangi et al. (2021) Efficacy, safety, and lot-to-lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): interim results of a randomised, double-blind, controlled, phase 3 trial; *The Lancet*. Advanced online publication. https://doi.org/10.1016/S0140-6736(21)02000-6 Accessed November 11, 2021

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COVAXIN™ (BBV152) Pediatric Trial Data Summary

Immunobridging determines equivalency of protection based on antibody seroconversion. These data suggest the broad protective effect seen in adults after 2 doses is equal to protective antibody effect in children.

92%	Seroconversion to Wild-Type Neutralizing
94%	Seroconversion to S1 IgG
90%	Seroconversion to RBD IgG
92%	Seroconversion to NP IgG

Adverse Events COVAXIN™ Solicited Local**	49%
Adverse Events COVAXIN™ Solicited Systemic**	19%
Serious Adverse Events*	0%

- n = 525 participants completed
- Participants recruited between May 26th 2021 and July 10th 2021 from 5 sites
- Two doses, 28 days apart

*SAEs characterized as hospitalizations, myocarditis, pericarditis, Guillan-Barré Syndrome, thrombosis, anaphylactic reactions
**AEs included site pain, redness, swelling, stiffness, tenderness, body pains, fatigue, headache - mostly mild and resolving within 24 hours

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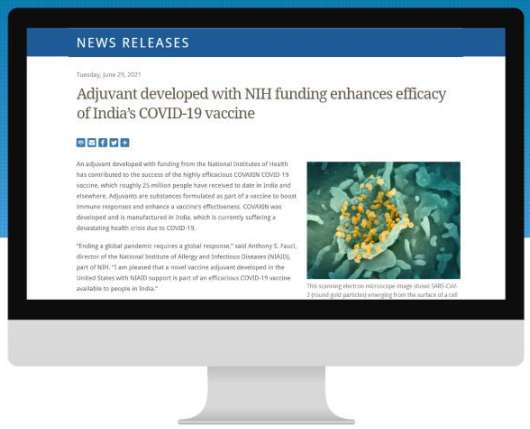
Source: Vadrevu K, Reddy S, Jogdand H, et al. Immunogenicity and safety of an inactivated SARS-CoV-2 vaccine (BBV152) in children from 2 to 18 years of age: an open-label, age-de-escalation phase 2/3 study; https://www.medrxiv.org/content/10.1101/2021.12.28.21268468v1

The Role of the Adjuvant in COVAXIN™ (BBV152)



Source: National Institutes of Health; June 29, 2021; https://www.nih.gov/news-events/news-releases/adjuvant-developed-nih-funding-enhances-efficacy-indias-covid-19-vaccine; accessed July 12, 2021

Expert commentary suggests adjuvant provides additional enhancement to elicit immune responses supporting broad protection

Adjuvantation helps to optimise COVID-19 vaccine candidate

Overall, AIgel-IMDG-adjuvanted BBV152 was safe, immunogenic, and able to induce Th1-biased T-cell responses, and could therefore be a potentially superior vaccine over the alum-adjuvanted inactivated COVID-19 vaccines.

Source: Adjuvantation helps to optimize COVID-19 vaccine candidate; Jing-Xin, L. Feng-Cai, Z. Lancet Infect Dis 2021; Published Online March 8, 2021; https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00094-3/fulltext; accessed Sept 7, 2021

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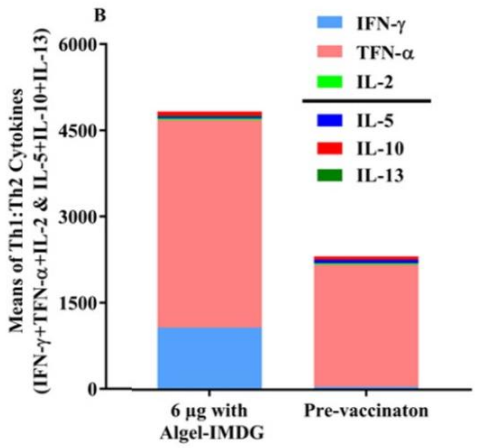
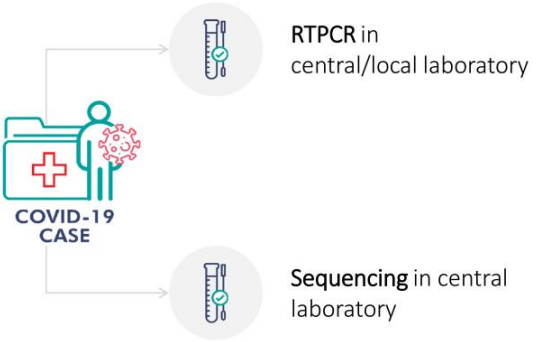
Data Suggest Th1 Mediated Response Boosted by Novel Adjuvant



Induction of Th1 cell mediated immunity as measured by IFN-γ, IL-2, TNF-α

Source: *Lancet Infect Dis* 2021; 21: 950–61 Published Online March 8, 2021 https://doi.org/10.1016/S1473-3099(21)00070-0

COVAXIN™ (BBV152) Phase 3 Trial: 90% of Infections by Variants



N=85 Swab Samples Genome Sequenced in Central Lab

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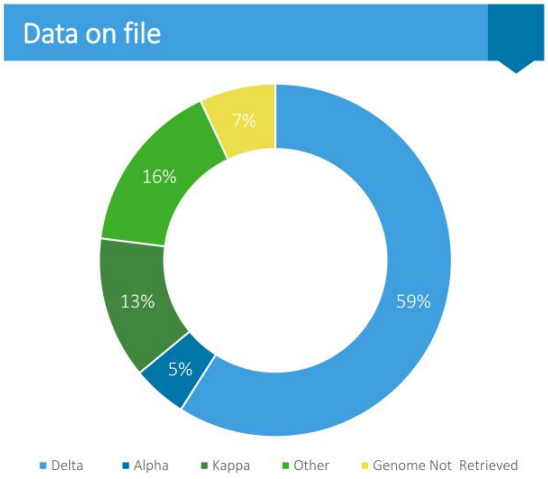

COVAXIN™ (BBV152) Efficacy Against Variants in Phase 3 Trial

Variants (VOC/VOI)	Total number of cases n/N	BBV152 n/N	Placebo n/N	Vaccine efficacy % (CI)*
B.1.617.2 (Delta)	**50/16973**	**13/8471**	**37/8502**	**65.2 (33.1 – 83.0)**
B.1.617.1 (Kappa)	11/16973	1/8471	10/8502	90.1 (30.4 – 99.8)
B.1.1.7 (Alpha)	4/16973	1/8471	3/8502	--
Other	14/16973	3/8471	11/8502	73.0 (-2.2 – 95.2)
Completed genome not retrieved	6/16973	0/8471	6/8502	--
All variant related severe COVID-19	4/16973	0/8471	4/8502	--

Data include per protocol population only. Efficacy estimates were only reported for at least 10 symptomatic cases. In those participants who met the definition for symptomatic COVID-19 and were PCR positive an additional nasopharyngeal swab for genotyping was collected. Other pangolin lineages detected include D614G (n=7), B.1.36 (n = 3), B.1.1.419 (n = 1), B. 1.153 (n = 1), B. 1. 351 and B.1.618 (n = 1 each in placebo). The > 1 lower bound of 95%CI for mean ratio indicates a statistical significance. In breakthrough symptomatic Delta variant infections, the viral load in the vaccine arm was significantly lower than the placebo arm.

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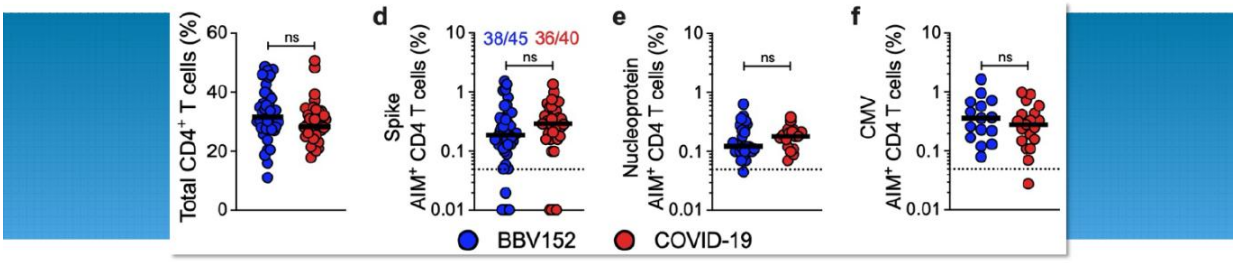
Source: Lancet Infect Dis 2021; 21: 950–61 Published Online March 8, 2021 https://doi.org/10.1016/S1473-3099(21)00070-0

Data shows COVAXIN™ produces a robust immune memory against multiple targets comparable to those following natural COVID-19 infection



- 71 vaccinated subjects and 73 subjects naturally-infected with COVID-19 were tested for cellular immune memory to SARS-CoV-2, variants of concern
- COVAXIN™ induced robust immune memory in T and B cells to SARS-CoV-2 and VOCs which persisted at least 6 months after vaccination
- Level of vaccine-induced spike and nucleoprotein antibodies titers demonstrated to be comparable to natural infection
- Immune memory against conserved nucleoprotein may provide an added advantage over spike-only responses

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Source: Rajesh V, Asgar A, Anupama R, Someshwar N, et al. Inactivated virus vaccine BBV152/Covaxin elicits robust cellular immune memory to SARS-CoV-2 and variants of concern; https://www.medrxiv.org/content/10.1101/2021.11.14.21266294v1 Accessed December 16, 2021

COVAXIN™ (BBV152) May Help Reduce *Transmission Rate* from Breakthrough Infections

~150-fold reduction in viral load in nasopharyngeal swabs of COVAXIN™ vaccinated individual compared to placebo

Similar virus nasopharyngeal swabs load in unvaccinated or Pfizer- or Moderna-vaccinated

Ct values	All cases	BBV152	Placebo mean	Mean ratio of BBV152/ Placebo (95% CI)
B.1.617.2 (Delta) – E gene	20.11	25.55	18.20	1.42 (1.28, 1.57)
B.1.617.2 (Delta) – ORF gene	22.97	28.29	21.09	1.35 (1.24, 1.46)

Source: Ella, Reddy, Blackwelder, Potdar, Yadav, Sarangi et al. (2021) Efficacy, safety, and lot-to-lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): interim results of a randomised, double-blind, controlled, phase 3 trial; *The Lancet*. Advanced online publication. https://doi.org/10.1016/S0140-6736(21)02000-6 Accessed November 11, 2021

Extensive Publication Portfolio of the COVAXIN™ (BBV152) Clinical Development Journey

Publications found at ocugen.com

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MODIFIER GENE THERAPY PLATFORM

Breakthrough technology designed to address many rare diseases
as well as complex diseases that affect millions

Forward Momentum for OCU400/OCU410

01

IND accepted by FDA for clinical trials studying **OCU400** for the treatment of retinitis pigmentosa resulting from genetic mutations of NR2E3 and RHO

02

Successfully completed manufacturing at commercial scale (200L) at CanSinoBio to support OCU400 clinical studies

03

Expanded manufacturing agreement with CanSinoBio to include support for **OCU410**

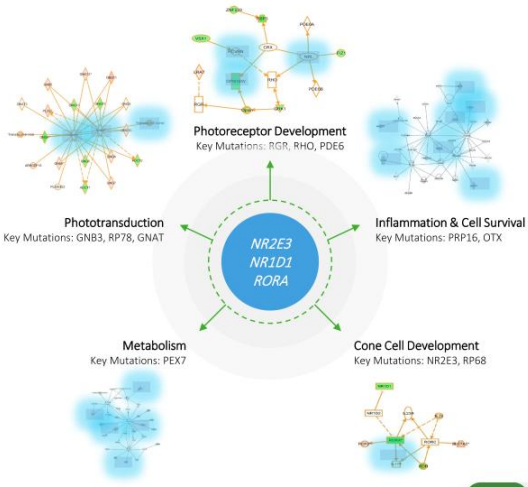
Our Focus: Nuclear Hormone Receptor Genes (NHRs)

WHY?

NHRs are modulators of retinal development & function, acting as "master genes" in the retina

Molecular reset of key transcription factors and associated gene networks – retinal homeostasis

Gene modifier concept including, its impact on clinical phenotypes, is well known in other disease areas, such as cystic fibrosis and spinal muscular atrophy



*References:
https://pubmed.ncbi.nlm.nih.gov/28556246/ | https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409218/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4339951/ | https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183526

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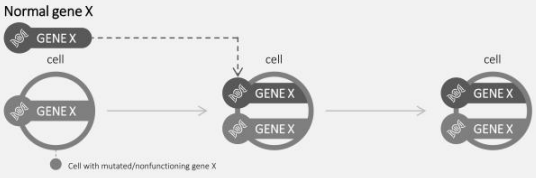
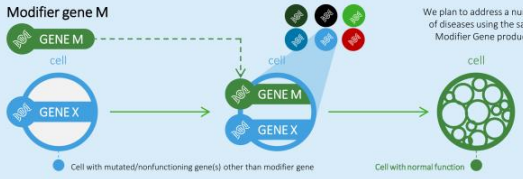
Our Vision: Modifier Gene Therapy vs Traditional Gene Augmentation

Gene Augmentation: Transfer functional version of a non-functional gene into the target cells.



Modifier Gene Therapy: Designed to introduce a functional gene to modify the expression of many genes, gene-networks and regulate basic biological processes in retina



Traditional Gene Therapy

ONE Disease

- Traditional approach that targets one individual gene mutation at a time
- Regulatory pathway focused on specific product for one disease
- Longer time to recoup development costs

OCU400

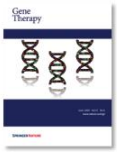
- *NR2E3* Mutation-Associated Retinal Disease
- Rhodopsin Mutation-Associated Retinal Disease
- *CEP290* Mutation-Associated Retinal Disease
- *PDE6B* Mutation-Associated Retinal Disease

Broad Spectrum Therapy for RP

- Novel approach that targets nuclear hormone genes (NHRs), which regulate multiple functions within the retina
- Smoother regulatory pathway due to ability to target multiple diseases with one product
- Ability to recoup development costs over multiple therapeutic indications

Our Proof of Principle: Published in Nature Gene Therapy

- Efficacy results shown in 5 unique mouse models of RP
- Technology developed at Harvard Medical School, Dr. Neena Haider's Lab
- Study suggests potency of modifier gene therapy to elicit broad-spectrum therapeutic benefits in early and advanced stages of RP
- Results suggest evidence of vision rescue in Early & Advanced Stages of disease



Important milestone for development of therapy; demonstrated proof of principle

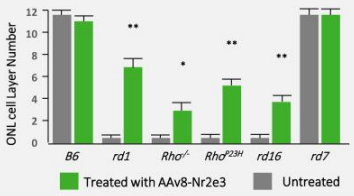
Protection elicited in multiple animal models of degeneration caused by different mutations

Potential to represent first broad-spectrum therapy and to provide rescue even after disease onset

nature research
https://www.nature.com/articles/s41434-020-0134-z

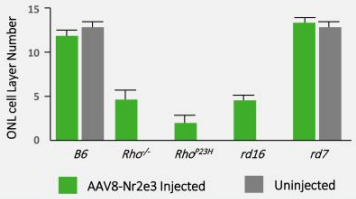
Data Show How OCU400 Stops Disease Progression and Rescues Vision in Both Early and Advanced Stages

Early-Stage Rescue



- P0 single subretinal injection, evaluation 3-4 months post injection
- *rd1* evaluated one-month post injection

Advanced Stage Rescue



- P21 subretinal injection, evaluation 2–3 months post injection
- Restored outer nuclear layer (ONL) photoreceptors morphology in *rd7*
- ONL cell layer change in *rd7* model doesn't progress until 4-5 mos. of age

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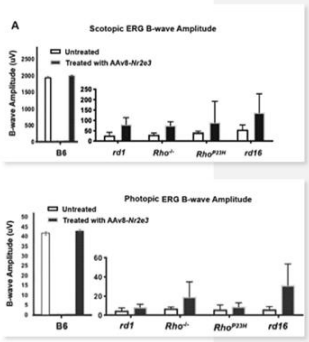
nature research

https://www.nature.com/articles/s41434-020-0134-z

OCU400 Demonstrates Improved Vision Signals in Retina



Electroretinogram (ERG) Response Reveals Rescue under Both Scotopic (dim-lit) as well as Photopic (well-lit) Conditions

ERG response:
P0 single subretinal injection, evaluation 3-4 months post injection

How these data matter:

Human vision is enabled by three primary modes

Scotopic vision

Monochromatic vision in very low light, which functions primarily due to rod cells in the eye

Photopic vision

Vision under well-lit conditions, which provides for color perception and functions primarily due to cone cells in the eye

Mesopic vision

A combination of photopic vision and scotopic vision in low lighting, which functions due to a combination of rod and cone cells in the eye

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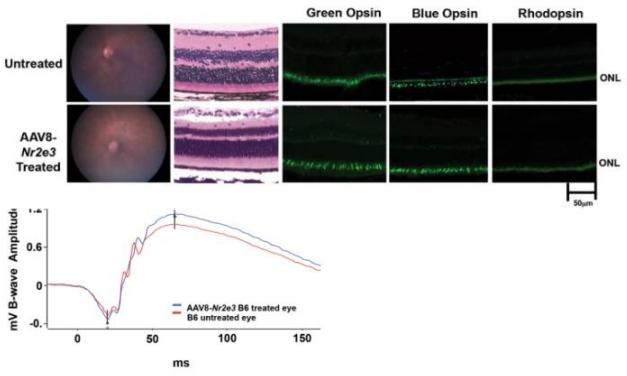
nature research
https://www.nature.com/articles/s41434-020-0134-z

OCU400 Demonstrated Safety in Mouse Model

Study results confirm overexpression of *Nr2e3* by subretinal AAV8-*Nr2e3* injection is not detrimental to retina creating no off-target effects



nature research
https://www.nature.com/articles/s41434-020-0134-z

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OCU400 – Clinical and Regulatory Strategy

Planned timeline

OCU400 – Competitive Overview

Features	OCU400	Traditional Gene Therapy	Cell Therapy
	ocugen	Roche, HORAMA, Biogen, MEIRAGTX, agtc, NOVARTIS, Allergan, SANOFI	astellas, jCyte, ReNeuron
One product for many IRDs (including broad RP indication)	✓	✗	✓ Limited
Technology established in the ocular disease space	✓	✓	✗
POC data in RP models with different genetic mutations	✓	✗	✗
Expected long-term outcome	Potentially longer benefit due to promotion of homeostasis	Potentially limited due to loss of retinal cells over time	Not established
Target Patient Population	Large	Small (specific to mutation)	Variable
Developmental cost	Low (economies of scale)	High (No economies of scale)	High

Potential Competitors pursuing treatment of RP with Traditional Gene Therapy

Potential Competitors pursuing treatment of RP with Cell Therapy

OCU410 (AAV-RORA): Dry Age-Related Macular Degeneration

We believe OCU410 has the potential to address this disease through its multi-factor approach

Normal Retina

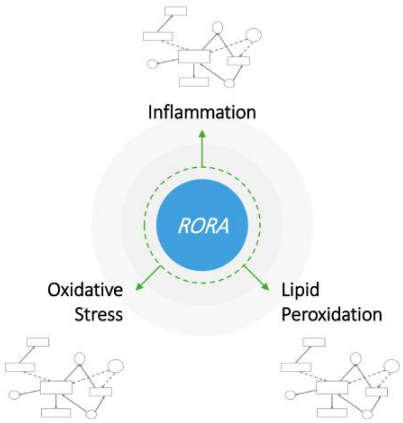
Dry AMD

Dry AMD

- Leads to irreversible blindness due to degeneration of the retina
- ~9-10M patients in the U.S.
- Currently no approved treatment for Dry AMD

Contributing Factors

- Aging
- Genetics
- Environmental Factors



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References
https://www.brightfocus.org/macular/article/age-related-macular-facts-figures
https://www.uniprot.org/uniprot/P35398#function
https://pubmed.ncbi.nlm.nih.gov/21998696/
https://pubmed.ncbi.nlm.nih.gov/19786043/

OCU200

Novel biologic for treating Diabetic Macular Edema (DME), Diabetic Retinopathy (DR) and Wet Age-Related Macular Degeneration (Wet AMD)

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OCU200: Potential to Treat DME, DR & Wet AMD

OCU200 Provides Hope to ALL patients with DME, DR or Wet AMD

DME	DR	Wet AMD
~0.7m	~7.7m	~1.1m
patients in the US*	patients in the US*	patients in the US*

~50% of Patients DO NOT Respond to Anti-VEGF/Corticosteroids Therapies

- **OCU200 is a Transferrin-Tumstatin Fusion Protein**
  - Tumstatin: Multiple MOAs for treatment and prevention of macular degeneration and neovascularization
  - Transferrin: Targets the site of action and improves uptake (better target engagement)
- Integrin Targeting provides hope to these patients who are non-responders to current therapies
- Distinct MOA through targeting Integrin pathways can potentially also help reduce number of injections for patients who do respond to Anti-VEGF & corticosteroids therapies
- Significant global market potential

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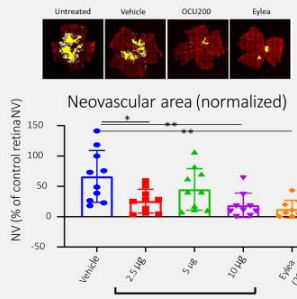
(*) https://www.gene.com/stories/retinal-diseases-fact-sheet
https://www.brightfocus.org/macular/article/age-related-macular-facts-figures

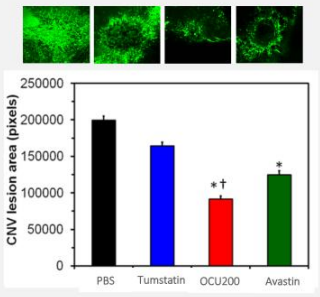
OCU200 Demonstrated Superior Efficacy Compared to Existing Anti-VEGF Therapies

DME/DR
Oxygen-Induced Retinopathy (OIR) Mouse Model



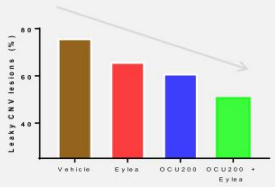
Effect of OCU200 intravitreal treatments on Neovascularization (NV). Data are presented as mean± SD. Filled circles represent data points from individual eyes
* P < 0.05, ** P < 0.01 (n = 9-10 eyes per group)

Wet AMD
In-Vivo Laser-Induced Rat CNV Model



* indicates p<0.05 when compared to PBS and/or tumstatin treatment
† indicates p<0.05 when compared to Avastin; CNV lesions measured on day 14 after treatment

Wet AMD
In-Vivo Laser-Induced Mouse CNV Model



Data expressed as percentage of CNV lesions on Day 10 after treatment. Laser induction & treatment start on Day 0

Leadership and Scientific Advisors

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Leadership Team

Shankar Musunuri, PhD, MBA
Chairman, CEO and Co-Founder

Sanjay Subramanian, MBA
CFO and Head of Corporate Development

Bruce D. Forrest, MB, BS, MD, MBA
Acting CMO

J.P. Gabriel
SVP, Technical Operations

Vijay Tammara, PhD
VP, Regulatory Operations

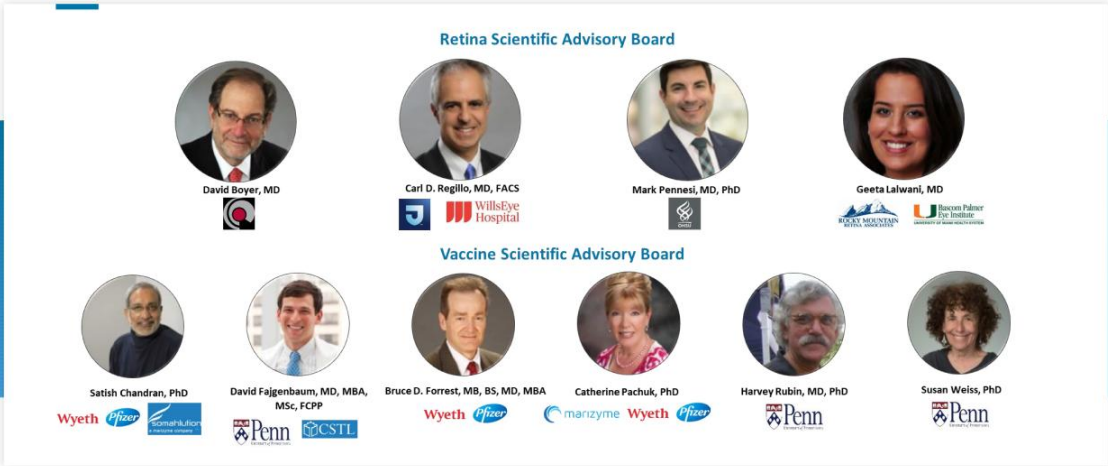
Michael Shine, MBA
SVP, Commercial

Arun Upadhyay, PhD
SVP, Head of Research & Development

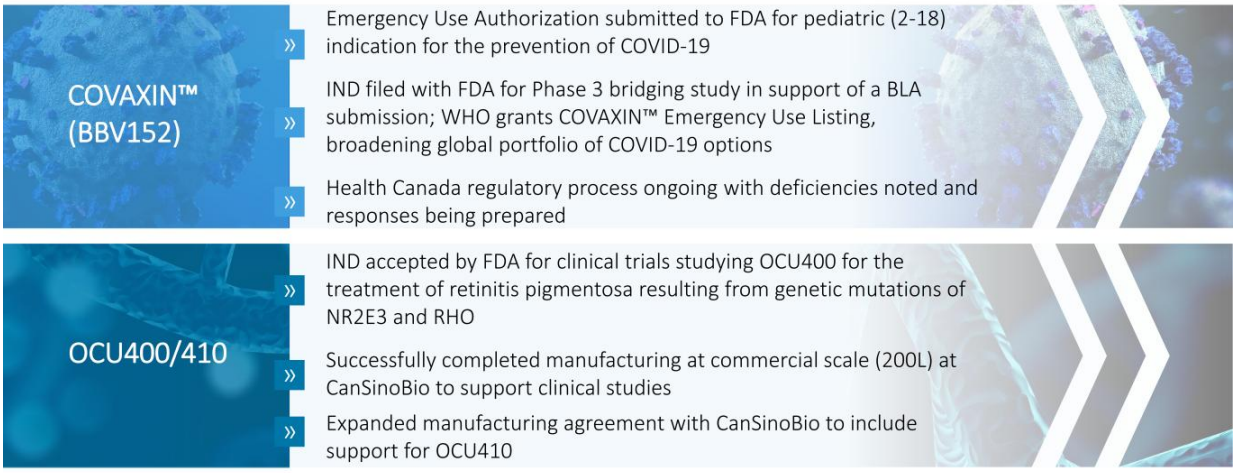
Jessica Crespo, CPA
Corporate Controller and Treasurer

Zara Gaudioso, SHRM-CP
Head of Human Resources and Chief of Staff

Scientific Advisory Boards



Forward Momentum for Ocugen

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Taking Science to New Heights for Patients
January 2022
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