UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

CURRENT REPORT
Pursuant to Section 13 OR 15 (d)
of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): October 3, 2019

OCUGEN, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction of Incorporation) **001-36751** (Commission File Number)

04-3522315 (I.R.S. Employer Identification Number)

5 Great Valley Parkway, Suite 160 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 x

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. o

Item 7.01 Regulation FD Disclosure

Attached as Exhibit 99.1 and furnished for purposes of Regulation FD is a presentation that Ocugen, Inc. will post on its website on October 3, 2019 and may use from time to time in presentations or discussions with investors, analysts and other parties.

The information in this Item 7.01 (including Exhibit 99.1) is being furnished solely to satisfy the requirements of Regulation FD and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that Section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

Item 9.01 Financial Statements and Exhibits

The following exhibits are being filed herewith:

(d) Exhibits

Exhibit No.	Document			
99.1	Ocugen, Inc. Presentation			
	2			

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: October 3, 2019

OCUGEN, INC.

By:

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

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Developing Innovative
Therapies to Address Rare
and Underserved Eye Diseases

NASDAQ: OCGN

Corporate Deck



Forward Looking Statement

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this presentation, including statements regarding our business strategy, future results of operations and financial position, prospective products, product approvals, research and development costs, timing and likelihood of success, estimated market size or growth, and plans and objectives of management for future operations, are forward-looking statements. When used in this presentation, the words "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements involve known and unknown risks, uncertainties and other factors, including those risks set forth in the Company's filings with the Securities and Exchange Commission, which are available at www.sec.gov, that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements are based on our management's beliefs and assumptions and on information available to management as of the date of this presentation. Our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

This presentation includes estimates by us of statistical data relating to market size and growth and other estimated data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. This presentation also includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.





Company Highlights

- Nasdaq-listed company as of September 30, 2019
- Robust IP portfolio with 31 issued U.S. and foreign patents and 29 U.S. and foreign patent applications
- Strategic Partnership with CanSinoBIO for OCU400 Gene Therapy Co-Development & Manufacturing



SMALL MOLECULE PHASE 3 RARE DISEASE ASSET
OCU300 for ocular Graft Versus Host Disease (oGVHD)
Orphan Drug Designation

MODIFIER GENE THERAPY PLATFORM

OCU400 for Inherited Retinal Diseases – Orphan Drug Designations (*NR2E3* and *CEP290* Mutation-Associated Retinal Diseases) **OCU410** Dry AMD

NOVEL BIOLOGIC THERAPIES FOR RETINAL DISEASES

OCU200 for Wet AMD, Diabetic Macular Edema, Diabetic Retinopathy
OCU100 for Retinitis Pigmentosa





Experienced Leadership Team

- Diverse experience in large pharma, signature biotech, and small companies
- Track record of success
- Brings large and small company learnings to Ocugen



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









Sanjay Subramanian, MBA Chief Financial Officer









Daniel Jorgensen, MD, MPH, MBA Chief Medical Officer









Kelly Beck, MBA

Vice President, Investor Relations & Administration









Rasappa Arumugham, PhD Chief Scientific Officer









Vijay Tammara, PhD Vice President, Regulatory & Quality













Pipeline of Diversified Assets

9	Indication		Preclinical	Phase 1	Phase 2	Phase 3	
OCULAR SURFACE DISEASE (small molecule)							
OCU300	oGVHD	Orphan US					
MODIFIER GENE THERAPY PLATFORM							
	NR2E3 Mutation-Associated Retinal Degeneration	Orphan US					
OCU400 NRZE3-AAV	CEP290 Mutation-Associated Retinal Degeneration	Orphan US					
	Rhodopsin Mutation- Associated Retinal Degeneration						
OCU410 RORAMV	Dry AMD						
RETINAL DISEASES (novel biologics)							
	Wet AMD						
OCU200 Turnstatin- Transferrin	Diabetic Macular Edema						
	Diabetic Retinopathy						
OCU100 LEDGF 1-326	Retinitis Pigmentosa	Orphan US & EU					





OCU300 for oGVHD: Unmet Need for Patients with Rare Ocular Diseases

Ocular Graft vs Host Disease (oGVHD)

- Autoimmune disease that occurs in allogeneic bone marrow transplant patients
 - Donor derived leukocytes attack recipient ocular tissue
- Patients encounter dry, tearless eyes, vision issues, severe pain, discomfort, and potential ocular scarring
- May lead to significant vision loss and irreparable ocular surface damage
- Significantly diminishes quality of life and restricts daily activities

~60% of chronic graft vs. host disease patients will develop oGVHD

~63,000 patients in the US by 2020



Ocugen is the **first and only company to receive orphan drug designation** from FDA
for treatment of oGVHD



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First Phase 3 Study With Orphan Drug Designation

Indication: Treatment of ocular discomfort and ocular redness in patients with oGVHD

- · Randomized, Double-Masked, Placebo-Controlled, Phase 3 Study
- · 84-day study
- Key inclusion criteria: diagnosis of 'definite' oGVHD using the International Chronic Ocular GVHD Consensus Group revised diagnostic criteria (Ogawa, 2013)

Primary endpoints include:

 <u>Symptom:</u> Ocular discomfort based on Visual Analog Scale (VAS)

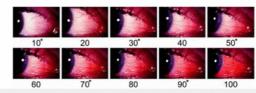
On a scale from 0-10, what was the intensity of your Ocular Discomfort, at its worst, over the past 24 hours?





2:1 randomization (OCU300 n=40; Placebo n=20)

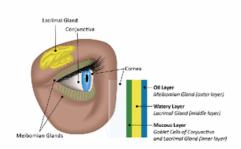
 <u>Sign:</u> Ocular redness based on Validated Bulbar Redness (VBR) Score



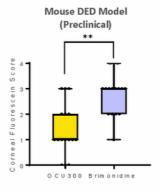




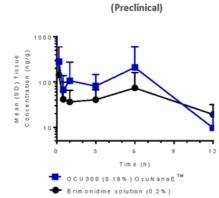
OcuNanoE[™] Formulation Drug Delivery System Increases OCU300 Concentration in Lacrimal Gland



Drug distribution to lacrimal gland from traditional eye drops is low relative to other target tissues



- OCU300 = Brimonidine (0.18%) OcuNanoE™
- Brimonidine = Commercial 0.2% solution
- Figure shows median, interquartile range & min/max fluorescein score
- **p<0.01



Brimonidine Level in Lacrimal Gland

OcuNanoE™ increases brimonidine in lacrimal gland and improves overall efficacy of OCU300





OCU300 has Compelling Value Proposition



- Spend 3 months in hospital after receiving bone marrow transplant
- Most exhibit symptoms while still under hematologist/ oncologist care
- On multiple prescription therapies; hematologist options today limited and suboptimal (artificial tears or approved dry eye products)



- Hematologists/Oncologists are first prescribers, then referred to specialized ophthalmologists
- Hematologists looking for approved therapy; no knowledge of off-label options
- Off-label usage primarily occurs when no approved therapy exists; longterm risks associated with tolerability and damage to ocular tissues
- Therapies need to address ocular discomfort (pain) and redness – unmet need



- · No approved therapy
- Seek to establish ICD-10 diagnostic code
- Analysis supports premium pricing
- Opportunities to partner for commercialization



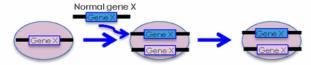
- Potential to be first approved product in US market
- First and only company to receive Orphan Drug Designation from FDA for oGVHD
- Advances in hematopoietic cell transplantation leading to increasing number of transplant survivors





Modifier Gene Therapy Has a Broader Impact

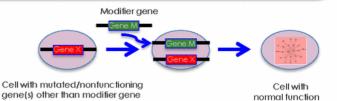
Gene Augmentation: Transfer functional version of a non-functional gene into the target cells.



Cell with mutated/ nonfunctioning gene X

- 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

Modifier Gene Therapy: Introduce a functional gene to modify the expression of many genes, gene-networks and reset homeostasis.



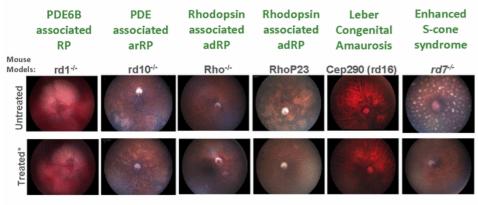
- Novel approach that targets nuclear hormone genes (NHRs), which regulate multiple functions within the retina
- Smoother regulatory pathway due to ability to target multiple diseases with one product
- Ability to recoup development costs over multiple therapeutic indications

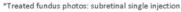


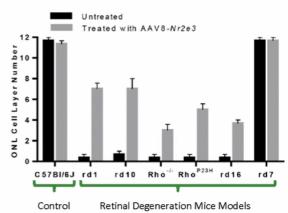


OCU400 Rescues Vision Loss in Multiple Retinal Diseases

Human Disease:







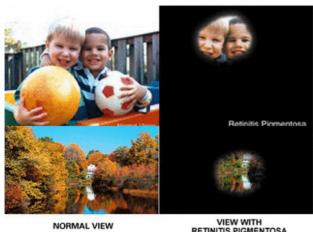
^rd16 is another name for CEP290 model rd7 is NR2E3 mutation

In multiple mouse models, Treatment Rescues Disease after onset

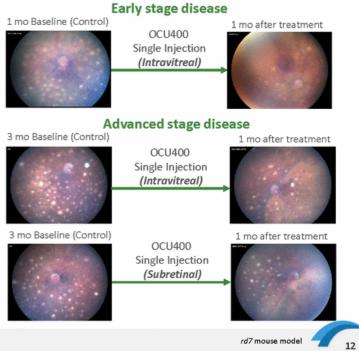




OCU400: Orphan Drug Designation NR2E3 Mutation-Associated Retinal Degeneration









OCU400 Gene Therapy Manufacturing: Strategic Partnership with CanSinoBIO

CanSinoBIO



- Publicly-listed on Hong Kong exchange (6185.HK)
- Biotech Company with market cap of approximately \$1B
- · State-of-the-art facilities with world class team

CanSinoBIO to perform CMC development & manufacturing of clinical supplies

- · CanSinBIO responsible for all associated costs
- · Option for commercial manufacturing agreement

CanSinoBIO has rights to develop, manufacture and commercialize OCU400 for Greater China market

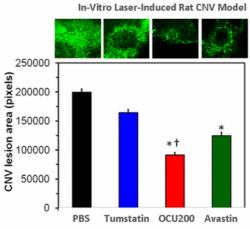
Partnership paves a path for Ocugen to advance OCU400 into the clinic with significantly reduced capital and resources



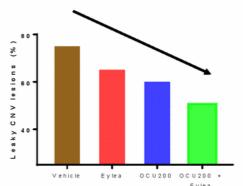


Lead Biologic OCU200: Tumstatin-Transferrin Fusion Protein Offering Benefits Beyond Anti-VEGF

- Selectively works on active endothelial cells
- Activates native antiangiogenic response
- Targeting element enhances effective concentration
- Pro-apoptotic and antioxidative
- ✓ Inhibits new blood vessel formulation
- ✓ Reduces damage to retina



 $^{\bullet}$ indicates p<0.05 when compared to PBS and/or turnstatin treatment. † indicates p<0.05 when compared to bevadzumab; CNV lesions measured on day 14 after treatment. In-Vivo Laser-Induced Mouse CNV Model



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

OCU200 Demonstrated Superior Efficacy with Potentially Fewer Injections in Head-to-Head Studies



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Summary of Near-Term Milestones

OCU300 ocular GVHD (small molecule)	OCU400 (NR2E3-AAV) Retinal Degenerative Diseases (gene therapy)	OCU200 Wet AMD, DME, DR (novel biologic)				
 Dec 2018: First Patient Dosed 1H2020: Sample Size re-estimation 2H2020: Estimated Topline Results of First Study 	 ✓ Feb 2019: Pre-IND Meeting ✓ Feb 2019: ODD for NR2E3 Mutation-Associated Retinal Diseases ✓ Aug 2019: ODD for CEP290 Mutation-Associated Retinal Diseases ✓ Sept 2019: CanSinoBIO Co-Development & Manufacturing Partnership • 2019-2020: Continue IND-Enabling Studies • 2021: Target Phase 1/2a Clinical Trial 	 2019-2020: Continue IND-Enabling Studies 2021: Target Phase 1/2a Clinical Trial 				
Note: Check mark (✓) denotes completed milestone. All other milestones are anticipated future milestones.						





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