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In connection with the proposed merger transaction described during this call, Histogenics Corporation and Ocugen, Inc. intend to file relevant materials with the Securities and Exchange Commission (the SEC), including a registration statement on Form S-4 that will contain a prospectus, a proxy statement and an information statement. ***Investors and security holders of Histogenics and Ocugen are urged to read these materials when they become available because they will contain important information about Histogenics, Ocugen and the Merger.*** The proxy statement, prospectus, information statement and other relevant materials (when they become available), and any other documents filed by Histogenics with the SEC, may be obtained free of charge at the SEC web site at www.sec.gov. In addition, investors and security holders may obtain free copies of the documents filed with the SEC by Histogenics by directing a written request to: Histogenics Corporation, c/o Gunderson Dettmer, One Marina Park Drive, Suite 900, Boston, MA 02210, Attention: HSGX Secretary. Investors and security holders are urged to read the proxy statement, prospectus, information statement and other relevant materials when they become available before making any voting or investment decision with respect to the Merger.

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.

Histogenics and its directors and executive officers and Ocugen and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of Histogenics in connection with the proposed transaction. Information regarding the special interests of these directors and executive officers in the Merger will be included in the proxy statement/ prospectus/information statement referred to above. Additional information regarding the directors and executive officers of Histogenics is also included in Histogenics' annual report on Form 10-K for the year ended December 31, 2018 filed with the SEC on March 22, 2019. These documents are available free of charge at the SEC web site (www.sec.gov) and from the Secretary of Histogenics at the address above.

Histogenics Corporation and Ocugen, Inc.
Conference Call
April 8, 2019
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Operator: Adam, you may begin.

Adam Gridley: Good morning everyone. In connection with the proposed merger transaction described during this call, Histogenics Corporation and Ocugen, Inc. intend to file relevant materials with the Securities and Exchange Commission, or the SEC, including a registration statement on Form S-4 that will contain a prospectus, a proxy statement, and an information statement.

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In addition, investors and security holders may obtain free copies of the documents filed with the SEC by Histogenics by directing a written request to Histogenics Corporation, c/o Gunderson Dettmer, 1 Marina Park Drive, Suite 900, Boston, Massachusetts 02210, Attention: HSGX Corporate Secretary.

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Histogenics and its directors and executive officers, and Ocugen and its directors and executive officers, may be deemed to be participants in the solicitation of proxies from the stockholders of Histogenics in connection with the proposed transaction. Information regarding the special interest of these directors and executive officers in the merger will be included in the proxy statement, prospectus, and information statement referred to above. Additional information regarding the directors and executive officers of Histogenics is also included in Histogenics' Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 22, 2019. These documents are available, free of charge, at the SEC website, at www.sec.gov, and from the corporate secretary of Histogenics at the address above.

Operator: Good morning, and welcome to the Histogenics and Ocugen Conference Call. At this time, all participants are in a listen-only mode. A question and answer session for research

analysts and institutional investors will follow the presentation. If anyone should require operator assistance during the conference, please press *0 on your telephone keypad. Please note, this conference is being recorded. I will now turn the conference over to Adam Gridley, President of Histogenics. You may begin.

Adam Gridley: Thank you, operator. I'd like to welcome you to our conference call to discuss the proposed merger between Histogenics and Ocugen. With me today from Ocugen are Ocugen's Chairman and CEO, Dr. Shankar Musunuri, Susan Drexler, Interim CFO, and Kelly Beck, Vice President of Investor Relations.

Earlier this morning the two companies issued a joint press release announcing the proposed merger. We encourage listeners to review the press release, which is available on the Histogenics and Ocugen websites. This call is also being recorded, and a replay will be available on the investor section of the Histogenics website for approximately 45 days.

Before beginning the call, I would like to make the following statement regarding forward-looking statements. Certain statements on this conference call regarding the proposed transaction and other contemplated transactions, including statements relating to satisfaction of the conditions and consummation of the proposed transaction, the expected ownership, management and board of directors of the combined company, the alternatives to the proposed transaction, the plans with respect to capitalization of the combined company, and the anticipated timing and effects of the transaction, including as to value creation and growth opportunities, as well as statements regarding Ocugen's plans for following the transaction, including as to its clinical candidates, preclinical candidates and future studies, constitute forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, and are usually identified by the use of words such as anticipates, believes, estimates, expects, intends, may, plans, projects, seeks, should, will, and variations of such words or similar expressions.

Histogenics intends these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Securities Exchange Act, and are making this statement for purposes of complying with these safe harbor provisions. These forward-looking statements reflect Histogenics' current views about its plans, intentions, expectations, strategies and prospects, which are based on the information currently available to Histogenics and on assumptions Histogenics has made. Although Histogenics believes that its plans, intentions, expectations, strategies and prospects, as reflected in its forward-looking statements are reasonable, Histogenics can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and will be affected by a variety of risks and factors that are beyond Histogenics', Ocugen's, or the combined company's control.

Actual results might differ materially from those projected in the forward-looking statements due to risks and uncertainties, including those risks and uncertainties listed in the joint press release detailing the proposed transaction, which can be found in the news sections of www.ocugen.com and www.histogenics.com and as an exhibit to the Form 8-K Histogenics filed this morning, which is available on www.histogenics.com and www.sec.gov, and those risks and uncertainties detailed in the risk factors section of Histogenics Form 10-K filed with the SEC, as well as other filings Histogenics makes with the SEC from time to time. Many of these factors will determine actual results beyond Histogenics', Ocugen's, or the combined company's ability to control or predict.

To conclude, Histogenics disclaims any obligation to update information contained in these-forward looking statements, whether as a result of new information, future events or otherwise, except as required by law.

So I am pleased to share with you the news today about our planned merger with Ocugen, which will create an exciting Nasdaq-listed clinical-stage company developing a diverse pipeline of novel small molecules, gene therapies and biologics for ocular diseases.

As previously disclosed, in late December 2018, we received feedback from the FDA indicating that another Phase 3 clinical trial would be required for our lead and only clinical candidate, NeoCart. Considering the time and substantial funding required to conduct such a Phase 3 trial, we discontinued the development of NeoCart and initiated a process to evaluate strategic alternatives to maximize value for all of our shareholders. We conducted the process with the assistance of financial and legal advisors and evaluated a full range of potential strategic alternatives, including but not limited to, acquisitions, business combinations, joint ventures, public and private capital raises and recapitalizations, among others. With assistance from our advisors, we contacted a wide variety of strategic parties at both domestic and international orthopedic, regenerative medicine and pharmaceutical companies.

Today, we are pleased to announce our transaction with Ocugen and the potential to realize value in the form of a minimum of 10% of the equity ownership in the combined company. We may also realize up to an additional 5% equity upside for our shareholders if we are able to consummate sales of our assets, including proceeds from the sale of the assets underlying Histogenics' NeoCart product in connection with the closing of the transaction.

The combined company will provide several strong success factors for public biotechnology companies. First, a commitment to treating significant patient diseases with patent protected novel therapeutics in both orphan diseases and large markets. Secondly, Ocugen has a diverse clinical stage pipeline of assets with near term value inflection points. Thirdly, Ocugen has a number of novel preclinical programs, including a compelling gene therapy platform and biologic products. Lastly, they have a strong scientific foundation and an experienced management team.

Ocugen's Chairman, CEO, and Co-Founder, Dr. Shankar Musunuri will now provide background on Ocugen and its pipeline, and recent clinical progress.

Dr. Shankar Musunuri: Thank you, Adam. Good morning everyone. I'm happy to be here today to discuss the planned merger and the compelling value creation opportunity that exists with Ocugen. First, I'd like to say that it has been a pleasure to work with Histogenics and its leadership over the past few weeks. The entire management team and advisors have been strongly focused on creating long term value for shareholders. We are excited to move ahead together, and I'd like to share with you more about our mission, our pipeline programs, and the opportunity to create needed new therapies for the treatment of debilitating eye diseases. Perhaps that will shed some light on what attracted the Histogenics team to Ocugen during their strategic review process.

Ocugen is a clinical-stage biopharmaceutical company whose mission is to develop innovative therapies to address rare and underserved eye diseases.

I founded Ocugen in 2013 along with Dr. Uday Kompella, based on the retinal discoveries in his laboratory at the University of Colorado. We have since expanded our pipeline to also license in a modifier gene therapy platform and small molecules, enabling us to focus on orphan indications. We are headquartered in Malvern, Pennsylvania, where we have built an experienced leadership team.

Through multiple financing rounds as a private company, we have succeeded in attracting investors that are committed to advancing our pipeline rapidly and efficiently, and to bringing patients a new wave of first-in-class ocular treatments.

As I mentioned earlier, we are focused on rare and underserved eye diseases.

We are very excited about our modifier gene therapy platform, which has the potential to treat a variety of inherited retinal diseases with a single gene therapy replacement. Modifier genes, which are called nuclear hormone genes, are believed to play a vital role in regulating many functions within the retina and are able to restore homeostasis to the retina. What this means is that with one nuclear hormone receptor gene, we may have the potential to treat multiple diseases, as opposed to current treatment of replacing one specific defected gene for a single condition. Multiple animal models have shown that expression of NHRs, or nuclear hormone receptor genes, within the retina can stabilize retinal cells and suppress/prevent the development of inherited diseases, demonstrating their modifier function. This technology was developed at the Schepens Eye Institute of Massachusetts Eye and Ear and Harvard Medical School based on the pioneering research of Dr. Neena Haider. We are also closely working with Dr. Sam Jacobson from the University of Pennsylvania for clinical guidance on our first gene therapy program, OCU400.

Our OCU400 program is focused initially on treating patients with NR2E3 mutation-associated retinal degenerative diseases. OCU400 consists of a functional copy of the nuclear hormone receptor gene, NR2E3, delivered to target cells in the retina using an AAV vector. In a mouse model of Nr2e3 mutation, Nr2e3 delivery to retinal cells reversed disease progression and restored retinal histology. Based on preclinical results, we plan to initiate a Phase 1/2a clinical study of OCU400. Once we advance this program through the clinic, we hope to conduct future clinical trials targeting orphan indications including Leber Congenital Amaurosis, Bardet-Biedl Syndrome and Rhodopsin Mutation-Associated Retinal Degeneration.

We are also developing OCU410, utilizing the nuclear hormone receptor gene, RORA, with an AAV delivery platform, for the treatment of dry AMD. This program is still in preclinical development.

Our next program is OCU300 for the treatment of ocular Graft versus Host Disease, or oGVHD for short. oGVHD is a severe chronic autoimmune disease that occurs in up to 60% of

allogeneic bone marrow transplant patients and represents a critical unmet medical need. By 2020, it is expected that there will be 63,000 patients suffering from oGVHD, of which there is no approved FDA treatment. These cancer patients experience severe and debilitating pain and discomfort which significantly diminishes their quality of life and restricts daily activities leading to disability in many cases. For some patients this disease can lead to vision loss and irreparable damage to the ocular surface. OCU300 is brimonidine 0.18% developed in our proprietary OcuNanoE™ nanoemulsion formulation. Our OcuNanoE™ formulation was designed to deliver drugs more efficiently to relevant ocular tissues, provide protection to the ocular surface and potentially increase overall efficacy compared to conventional eye drops.

We recently completed our first Phase 3 clinical trial of OCU310, which is brimonidine 0.2% OcuNanoE™ for the treatment of dry eye disease. Dry eye disease is a chronic disease that can cause long-term damage to the ocular surface. Approximately 35 million patients suffer from dry eye in the US. Only about 16 million of those patients have been diagnosed and less than 1 million are using an approved prescription therapy. We are waiting for a full dataset from this trial and will provide an update once we complete the full analysis.

Our retinal programs are focused on wet AMD and orphan indication of retinitis pigmentosa. Wet AMD, or wetage-related macular degeneration, is a severely sight-threatening disease caused by the abnormal growth and infiltration of new, leaky blood vessels in the retina and is the leading cause of blindness in people over the age of 55 in the US and Europe. It has been estimated that approximately 11 million patients in the US have some form of AMD and about 1.1 million of those patients suffer from Wet AMD. OCU200, our program for wet AMD, is a fusion protein consisting of two naturally occurring molecules, tumstatin and transferrin, that are present normally in retinal tissues. We are the first company focused on a macromolecule to target integrins for ocular diseases. This integrin-targeting based approach has been actively explored in a variety of disease treatments, such as cancer, autoimmune disease, angiogenic and fibrotic treatments. In preclinical studies, OCU200 demonstrated superior efficacy compared to anti-VEGF therapies in reducing choroid neovascularization lesion areas in laser-induced rat and mice CNV models. We believe these results highlight the potential for OCU200 to deliver disease modification to patients with diabetic macular edema and diabetic retinopathy, in addition to wet age-related macular degeneration.

We also have another protein-based biologic, OCU100, in preclinical development, for the treatment of retinitis pigmentosa.

In summary, Ocugen has developed a diversified ophthalmology portfolio with programs in both clinical and preclinical development, which allow us to broaden the patients we serve, focusing on those with retinal diseases that can be treated with our gene therapy platform and biologics and those with ocular surface diseases like oGVHD and dry eye disease. With our drug development expertise, a leading scientific and clinical advisory board, and a strong network of academic collaborations, we believe we can provide patients with novel clinical therapies.

As you can see, I am excited about the potential of our pipeline and value proposition it brings to shareholders. We have clear development paths for these programs and key value-driving inflection points in the years ahead. I look forward to sharing more about our strategy and our progress with shareholders in the months to come.

I will now turn the call over to Susan Drexler, interim CFO of Ocugen, to describe the transaction.

Susan Drexler: Thank you, Shankar. The merger is structured as a stock-for-stock transaction whereby all of Ocugen's outstanding shares of common stock and securities convertible into or exercisable for Ocugen's common stock will be converted into Histogenics common stock and securities convertible into or exercisable for Histogenics common stock. Immediately following the closing of the transaction, the former stockholders of Ocugen will hold approximately 90 percent of the outstanding shares of common stock of the combined company.

Histogenics stockholders of record, as of immediately prior to the effective time of the merger, will retain an ownership interest representing approximately 10 percent of the outstanding shares of common stock of the combined company.

Under certain circumstances further described in the merger agreement, Histogenics may retain an ownership interest of up to an additional 5% based on the amount of cash attributable to Histogenics at the closing of the transaction, which will include, among other items, cash and cash equivalents and the proceeds from potential sales of the assets underlying Histogenics' NeoCart product that would close in connection with the consummation of the merger.

Upon closing of the transaction, Histogenics will be renamed Ocugen, Inc. and will be headquartered in Malvern, Pennsylvania under the leadership of Ocugen's current management team. The management team is comprised of Dr. Shankar Musunuri, Chairman of the Board, CEO and Co-Founder, Susan Drexler, interim Chief Financial Officer, Dr. Dan Jorgensen, Chief Medical Officer, Dr. Rasappa Arumugham, Chief Scientific Officer, Dr. Vijay Tammara, Vice President of Regulatory and Quality and Kelly Beck, Vice President of Investor Relations and Administration. The board of directors of the combined company is expected to be comprised of 7 members.

The combined company is expected to trade on The Nasdaq Capital Market under the new ticker symbol, OCGN. The merger agreement has been unanimously approved by the board of directors of each company. The transaction is expected to close in the second or third quarter of 2019, subject to the approvals by stockholders of each company and other customary closing conditions.

The Histogenics and Ocugen management teams and the companies' respective board of directors believe this proposed merger will provide the best opportunity to our respective shareholders for future value creation.

The combined management teams and advisors intend to file relevant materials with the SEC, including a registration statement on Form S-4 that will contain a prospectus, a proxy statement and an information statement in May 2019. Following the submission of those materials to the SEC, Ocugen management intends to provide a further business update, presentation materials, and another conference call for shareholders.

Now I'll turn it back over to Adam for closing remarks.

Adam Gridley: Thanks, Susan. In closing, I'd like to thank the existing shareholders of Histogenics for their support as we have sought to develop the NeoCart program, evaluated our strategic alternatives and have now entered into an agreement to pursue this opportunity with Ocugen. We share a commitment to treating significant patient diseases with novel therapeutics, and believe the future Ocugen clinical programs and gene therapy platform offers significant potential to meet that commitment. We believe that this merger will provide immediate and long-term value to shareholders, and we look forward to updating you on the progress in the future.

Operator, please open up the line for questions.

Operator: Thank you, sir.

(Operator Instructions)

And our first question will come from Keay Nakae with Chardan. Your line is now open.

Keay Nakae: Yes, thank you. A question for Shankar, what read across, if any, is there from the results of the dry eye study to the ocular GvHD?

Dr. Shankar Musunuri: Could you repeat the question, Keay?

Keay Nakae: Yes, I'm trying to understand in terms of the 310 and 300 compounds both using Nano-E. What would be any potential read across from the results of the dry eye study, once you report those, to how that might predict how the compound might work in GvHD?

Shankar Musunuri: So Keay, with — we have completed the study. Waiting for the full data set, then when we complete a full analysis we'll provide an update at that time. And once again, the two procedures are distinct.

Ocular GvHD patients are homogeneous. If you look at the patient pathology, the disease pathology, it's a homogeneous disease. And dry eye is a very, very broad disease. It's a conglomerate of many sub-diseases.

Keay Nakae: And with respect to the Phase 3 for ocular GvHD, is there a difference in efficacy that you are targeting that you think would be sufficient to allow for FDA approval?

Shankar Musunuri: Yes, our plan. The Phase 3 clinical trial, I mean we are always working in consultation with FDA, and the protocols. And we looked in to the patients in ocular GvHD. It's the primary endpoint we selected for the study in consultation with FDA are very relevant for treatment of these patients.

Keay Nakae: Okay. Well, that's all I have. Thanks.

Operator: Thank you.

(Operator Instructions)

Operator: And this concludes today's Q&A session for today. It is now my pleasure to hand the conference back over to Shankar for any closing comments and remarks.

Dr. Shankar Musunuri: Thanks to everyone for taking the time this morning, we are excited to bring Ocugen into the next phase of its development, both as we advance our clinical programs and transition to a public company. We will work diligently to advance our programs, update the appropriate proxy materials and providing further updates regarding the Ocugen opportunity in the coming months. Thank you.

Operator: Thank you. Ladies and gentlemen, this concludes today's conference. You may disconnect your lines at this time. Thank you for your participation, and have a wonderful day.