Filed by Histogenics Corporation pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 14a-6 under the Securities Exchange Act of 1934

Subject Company: Histogenics Corporation (SEC File No. 001-36751) Commission File No. for the Related Registration Statement: 333-232147

The following voicemails were used beginning September 4, 2019 by Innisfree M&A Incorporated, the proxy solicitor for Histogenics Corporation ("Histogenics") in connection with the merger contemplated by that certain adopt that certain Agreement and Plan of Merger and Reorganization, dated as of April 5, 2019, as amended (the "Merger Agreement"), by and among the Company, its wholly-owned subsidiary, Restore Merger Sub, Inc. ("Merger Sub") and Ocugen, Inc. ("Ocugen"), which provides for the merger (the "Merger") of Merger Sub with and into Ocugen:

Version 1:

Hello, this is Adam Gridley, President of Histogenics. I am calling our shareholders to ask that you vote your shares to support the merger of Histogenics with Ocugen, an exciting clinical-stage biopharmaceutical company. The voting deadline is quickly approaching, so please vote your shares today FOR all proposals on the Histogenics proxy card. Failure to vote your shares puts Histogenics at risk of being liquidated, with everyone losing most of their investment. Please don't let that happen! You can vote by calling 1-877-687-1875. We look forward to receiving your vote. Thank you!

Version 2:

Hello, this is Adam Gridley, President of Histogenics. I am calling Histogenics shareholders to ask you to vote your shares to approve the merger of Histogenics with Ocugen. If we do not receive the necessary votes, we cannot complete the merger and Histogenics will likely liquidate, which could cause all shareholders to lose most of the value of their investment. You can help prevent this loss by voting your shares FOR all proposals on the Histogenics proxy card. Time is short so please vote today by calling 1-877-687-1875. Thank you!

Version 3:

Hello, this is Adam Gridley, President of Histogenics. I am calling Histogenics shareholders to ask you to vote your shares to approve the merger of Histogenics with Ocugen. The merger will support the development of innovative therapies to address rare and underserved eye diseases. But, if we do not receive the necessary votes, we cannot complete the merger. You can help by voting your shares FOR all proposals on the Histogenics proxy card. The voting deadline is just days away, so please vote today by calling 1-877-687-1875. Thank you!

Additional Information about the Merger and Where to Find It

In connection with the proposed Merger, Histogenics has filed with the Securities and Exchange Commission (the "SEC") a registration statement on Form S-4 that contains a prospectus/proxy statement/information statement and other relevant documents concerning the proposed business combination. The registration statement on Form S-4 was declared effective by the SEC on August 6, 2019. Histogenics mailed the prospectus/proxy statement/information statement to its stockholders beginning on or around August 12, 2019. *Investors and security holders of Histogenics and Ocugen are*

urged to read the definitive proxy statement/prospectus/information statement and other materials filed or that will be filed with the SEC because they contain or will contain important information about Histogenics, Ocugen and the Merger. The proxy statement/prospectus/information statement and other relevant materials, 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.

No Offer or Solicitation

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 in connection with the proposed Merger shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Participants in the Solicitation

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 proposed Merger are included in the definitive proxy statement/prospectus 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. These documents are available free of charge at the SEC web site (www.sec.gov) and from the Secretary of Histogenics at the address described above.

Forward-Looking Statements

This Press Release contains forward-looking statements based upon Histogenics' current expectations. Forward-looking statements involve risks and uncertainties, and include, but are not limited to, statements about the structure, timing and completion of the proposed Merger, the financing contemplated to occur prior to the Merger and the sale of certain assets of Histogenics' following the Merger; expectations regarding Nasdaq's delisting and hearing processes, Histogenics' prospects to regain compliance with Nasdaq's continuing listing standards and remain listed on The Nasdaq Capital Market; the combined company's listing on Nasdaq after closing of the proposed Merger; expectations regarding the ownership structure of the combined company, including potential dilution resulting from the financing contemplated to occur prior to the Merger or any future debt or equity financings; the expected executive officers and directors of the combined company; the combined company's expected cash position at the closing of the proposed Merger; the future operations of the combined company; the nature, strategy and focus of the combined company; the development and commercial potential and potential benefits of any product candidates of the combined company; the executive and board structure of the combined company; the location of the combined company's corporate headquarters; anticipated preclinical and clinical drug development activities and related timelines, including the expected timing for data and other clinical and preclinical results; Ocugen having sufficient resources to advance its pipeline; the expected charges and related cash expenditures that Histogenics expects to incur; and other statements that are not historical fact. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation: (i) the risk that the conditions to the closing of the proposed Merger are not satisfi

including the failure to timely obtain stockholder approval for the transaction, if at all; (ii) uncertainties as to the timing of the consummation of the proposed Merger and the ability of each of Histogenics and Ocugen to consummate the proposed Merger and the financing contemplated to occur prior to the Merger; (iii) risks related to Histogenics ability to manage its operating expenses and its expenses associated with the proposed Merger pending closing; (iv) risks related to the failure or delay in obtaining required approvals from any governmental or quasi-governmental entity necessary to consummate the proposed Merger; (v) the risk that as a result of the financing contemplated to occur prior to the Merger, Histogenics stockholders and Ocugen stockholders could own less of the combined company than is currently anticipated; (vi) risks related to the market price of Histogenics common stock relative to the exchange ratio; (vii) unexpected costs, charges or expenses resulting from the transaction; (viii) potential adverse reactions or changes to business relationships resulting from the announcement or completion of the proposed Merger or the financing contemplated to occur prior to the Merger; (ix) the uncertainties associated with the clinical development and regulatory approval of Ocugen's product candidates, including potential delays in the commencement, enrollment and completion of clinical trials; (x) risks related to the inability of the combined company to obtain sufficient additional capital to continue to advance these product candidates and its preclinical programs; (xi) uncertainties in obtaining successful clinical results for product candidates and unexpected costs that may result therefrom; (xii) risks related to the failure to realize any value from product candidates and preclinical programs being developed and anticipated to be developed in light of inherent risks and difficulties involved in successfully bringing product candidates to market; (xiii) risks associated with the possible failure to realize certain anticipated benefits of the proposed Merger or the financing contemplated to occur prior to the Merger, including with respect to future financial and operating results; and (xiv) risks related to unanticipated charges not currently contemplated that may occur as a result of Histogenics' prior workforce reductions, including that the workforce reduction charges, costs and expenditures may be greater than currently anticipated. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties. These and other risks and uncertainties are more fully described in periodic filings with the SEC, including the factors described in the section entitled "Risk Factors" in Histogenics' Annual Report on Form 10-K for the year ended December 31, 2018 and Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, each as filed with the SEC, and in other filings that Histogenics makes and will make with the SEC in connection with the proposed Merger, including the proxy statement/prospectus/information statement described above under "Where You Can Find More Information." You should not place undue reliance on these forward-looking statements, which are made only as of the date hereof or as of the dates indicated in the forward-looking statements. Histogenics expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in its expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.