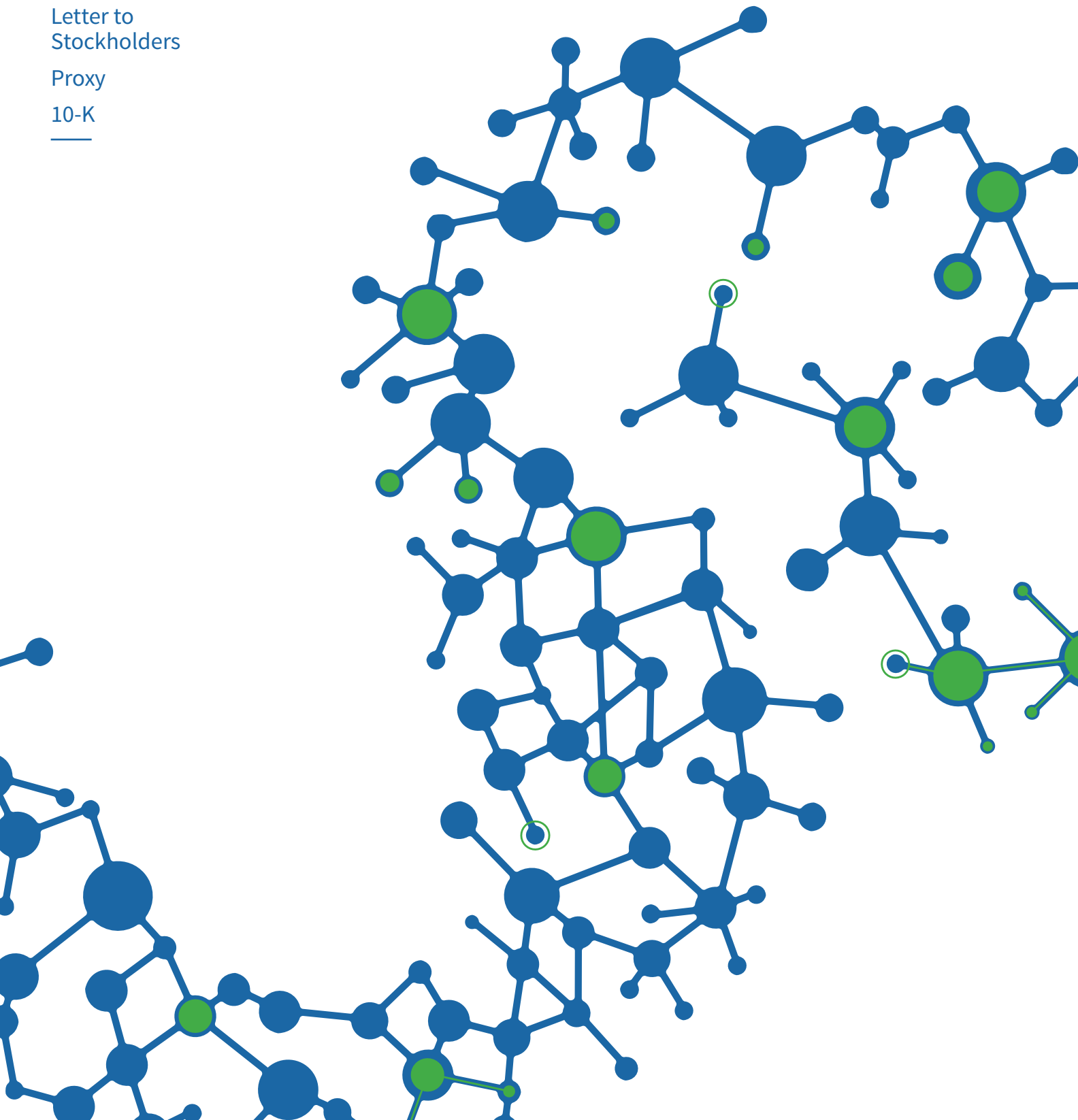
geron

2018 ANNUAL REPORT

Letter to Stockholders

Proxy

10-K



Dear Geron Stockholder,

Today, with 100% global rights to imetelstat, Geron is planning to advance the imetelstat program into late-stage development by beginning a Phase 3 clinical trial by mid-year 2019. Imetelstat is our unique first-in-class telomerase inhibitor, which has demonstrated broad clinical activity in three separate hematologic myeloid malignancies: essential thrombocythemia, Intermediate-2 or High-risk myelofibrosis (MF) relapsed/refractory to janus kinase (JAK) inhibitors, and lower risk myelodysplastic syndromes (MDS).

In December 2018, compelling data from 38 patients were presented at the American Society of Hematology (ASH) Annual Meeting from the Phase 2 portion of IMerge in lower risk MDS, which supports further development of imetelstat. All 38 patients were transfusion dependent with Low or Intermediate-1 risk, non-del(5q) MDS who had relapsed after or were refractory to treatment with an erythropoiesis stimulating agent and naïve to treatment with a hypomethylating agent (HMA) or lenalidomide. The median baseline transfusion burden was eight units of red blood cells given within an eight-week period of time, representing a patient population with a high transfusion burden.

The ASH presentation reported that 37% (14/38) of patients experienced transfusion independence lasting at least eight weeks, which compares favorably to both HMAs and lenalidomide with historical rates of 17% and 27%, respectively. Another important observation was that 70% (10/14) of those patients who achieved 8-week transfusion independence subsequently converted to durable, 24-week transfusion independence. Overall, the entire cohort of 38 patients in the study had a 68% mean reduction in transfusion burden compared to their pre-imetelstat treatment baseline. Based on our market research, physicians value such meaningful reductions in transfusion burden because of the reduction in costs and improvements in quality of life associated with reducing transfusions to this degree. In conclusion, the efficacy results from the Phase 2 portion of IMerge presented at ASH showed potential clinical benefit, including in patients with high transfusion burden, and suggest that imetelstat may have an important role to play in lower risk MDS.

In addition to the Phase 2 portion of IMerge data presented at ASH, data were also presented for imetelstat in relapsed/refractory MF from the Phase 2 IMbark clinical trial. The presentation reported that median overall survival (OS) for the 9.4 mg/kg dosing arm in the IMbark trial was 29.9 months in a poor-prognosis, relapsed/refractory patient population where there are currently no approved treatments today. Other observational studies of similar patient populations at academic medical centers published in medical literature have reported median OS ranges of approximately 14 to 16 months after failure of or discontinuation of ruxolitinib, which is the only approved treatment available for Intermediate-2 or High-risk MF patients. Overall, the data from IMbark presented at ASH encourage us to consider further exploration of the potential use of imetelstat in MF patients who are relapsed/refractory to JAK inhibitors.

We expect 2019 to be a pivotal year for Geron as we prepare for Phase 3 development. Currently, we are diligently managing the transfer of the investigational new drug (IND) sponsorship for imetelstat back to Geron, which is on track to take place by the end of the second quarter. Once the IND transfer has been completed, we plan to commence screening and enrollment for the Phase 3 portion of the IMerge clinical trial for imetelstat in lower risk MDS by mid-year 2019. Based upon our current assumptions for enrollment, patient treatment, and follow up, we estimate topline results from the Phase 3 portion of IMerge to be available by mid-year 2022.

Another objective in 2019 is to outline our decision regarding the potential for late-stage development of imetelstat in MF by the end of the third quarter. While the data from the Phase 2 IMbark clinical trial presented at ASH in December suggest a meaningful survival outcome in relapsed/refractory MF patients, the clinical development path is not as straight forward as lower risk MDS. Our decision whether to continue late-stage development in MF will be influenced by our assessment of what would likely be required to achieve clinical and regulatory success, including the cost and duration of any potential clinical trials. To inform this assessment, we will conduct discussions with key opinion leaders over the coming months, and we expect discussions with regulatory authorities to begin after the IND has transferred back to Geron.

To ensure the continued advancement of the imetelstat development program, we established a key organizational 2019 objective to strategically build a robust development team with hematology-oncology expertise. We believe that having strong in-house hematology-oncology expertise will enhance our ability to execute our clinical development activities in MDS and MF, as well as maximize imetelstat's potential value through future exploration of additional indications.

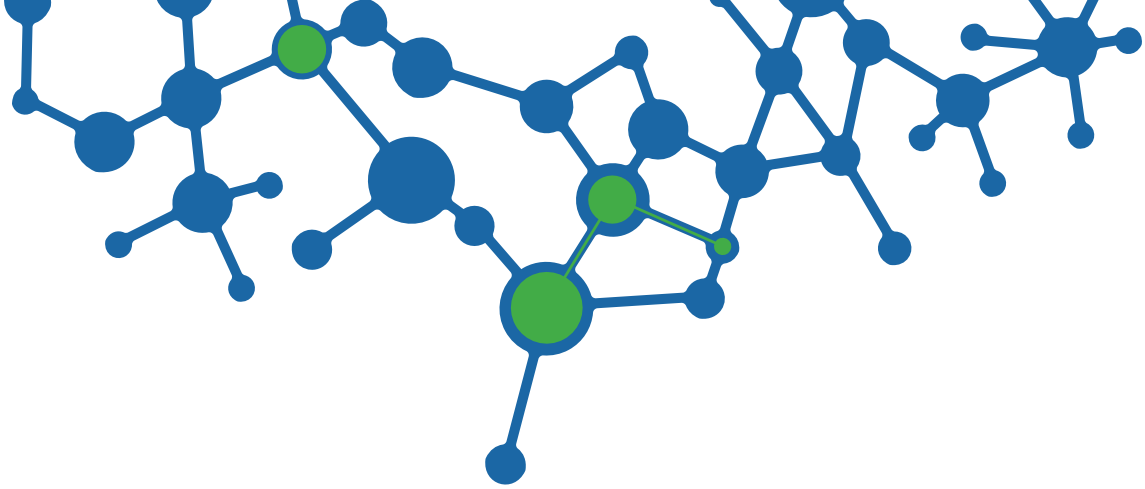
At the end of January, we welcomed Aleksandra Rizo, M.D., Ph.D., as our new Chief Medical Officer who will lead imetelstat's clinical development strategy. Complementing Dr. Rizo's capabilities, we have hired highly experienced professionals in critical functional areas of clinical science, clinical operations, drug safety, quality and translational research to support not only the imetelstat program, but also other potential assets as we further our plans to build a hematology-oncology franchise in the future.

In summary, we look forward to 2019 being a pivotal year for the future of both imetelstat and Geron. We believe we are firmly on a path to create value for patients and stockholders alike. Thank you for your continued support.

Sincerely,

John A. Scarlett, M.D.
Chairman and Chief Executive Officer

For important information regarding the use of forward-looking statements in this letter to stockholders, please refer to the inside back cover of this annual report.



Use of Forward-Looking Statements

Except for statements of historical fact, the statements contained in this annual report and letter to stockholders are forward-looking statements made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. These include, without limitation, statements regarding the expectations, plans, timelines and prospects for imetelstat and Geron, including without limitation, that: (i) the imetelstat IND is on track to transfer from Janssen to Geron by the end of the second quarter of 2019; (ii) Geron plans to commence screening and enrollment of the Phase 3 portion of IMerge by mid-year 2019; (iii) Geron expects top-line results for the Phase 3 portion of IMerge by mid-year 2022; (iv) Geron will outline a decision regarding late-stage development in myelofibrosis by the end of the third quarter 2019; (v) imetelstat has potential clinical benefit and may have a role to play in lower risk MDS; (vi) overall survival data from the Phase 2 IMbark clinical trial suggest a meaningful survival outcome in relapsed/refractory MF patients; and (vii) other statements that are not historical facts, constitute forward-looking statements. These statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. These risks and uncertainties, include, without limitation, whether: (i) contingencies delay or prevent both the start of the Phase 3 portion of IMerge by mid-year 2019 and top-line results by mid-year 2022; (ii) regulatory authorities permit the further development of imetelstat for MF or MDS on a timely basis, or at all; (iii) there is a delay in Geron's decision regarding future development of imetelstat for myelofibrosis; (iv) any circumstances arise that prevent a timely transition of the IND and imetelstat program from Janssen; (v) imetelstat demonstrates that it is safe and efficacious; (vi) any future efficacy or safety results may cause the benefit-risk profile of imetelstat to become unacceptable; (vii) Geron's patents protect the commercial opportunity of imetelstat; and (viii) Geron can obtain sufficient funding to support further development of imetelstat. Additional information and factors that could cause actual results to differ materially from those in the forward-looking statements are contained in Geron's periodic reports filed with the Securities and Exchange Commission under the heading "Risk Factors," including Geron's annual report on Form 10-K for the year ended December 31, 2018. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made, and the facts and assumptions underlying the forward-looking statements may change. Except as required by law, Geron disclaims any obligation to update these forward-looking statements to reflect future information, events or circumstances.

CORPORATE INFORMATION

Board of Directors

John A. Scarlett, M.D.
Chairman of the Board

Dawn C. Bir

Daniel M. Bradbury

Karin Eastham

V. Bryan Lawlis, Ph.D.

Susan M. Molineaux, Ph.D.

Elizabeth G. O'Farrell

Robert J. Spiegel, M.D., FACP

Officers

John A. Scarlett, M.D.
Chairman of the Board, President and Chief Executive Officer

Olivia K. Bloom
Executive Vice President, Finance, Chief Financial Officer and Treasurer

Melissa A. Kelly Behrs
Executive Vice President and Chief Business Officer

Andrew J. Grethlein, Ph.D.
Executive Vice President and Chief Operating Officer

Aleksandra Rizo, M.D., Ph.D.
Executive Vice President and Chief Medical Officer

Stephen N. Rosenfield, J.D.
Executive Vice President, Chief Legal Officer and Corporate Secretary

Investor Relations

Suzanne Messere
investor@geron.com - email

CG Capital
(877) 889-1972 - tel

Transfer Agent & Registrar

Computershare
P.O. Box 505000
Louisville, KY 40233
(800) 962-4284 - tel

Independent Auditors

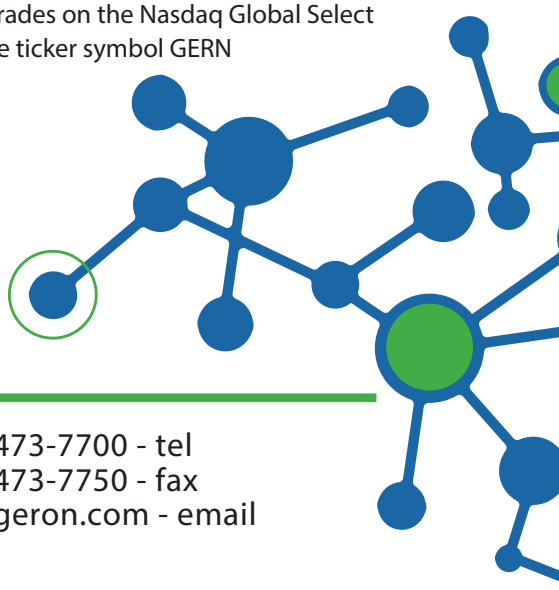
Ernst & Young LLP
275 Shoreline Drive
Suite 600
Redwood City, CA 94065

Legal Counsel

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304

Stock Listing

Geron Corporation
common stock trades on the Nasdaq Global Select Market under the ticker symbol GERN



geron

Geron Corporation
149 Commonwealth Drive
Menlo Park, CA 94025
www.geron.com

(650) 473-7700 - tel
(650) 473-7750 - fax
info@geron.com - email