**Filed Pursuant to Rule 424(b)(5)**
**Registration No. 333-249982**

**PROSPECTUS SUPPLEMENT**
**(To Prospectus dated November 18, 2020)**

# 6,000,000 Shares


# Common Stock

We are offering 6,000,000 shares of our common stock. Our common stock is listed on the Nasdaq Capital Market under the symbol "AVEO." The last reported sale price for our common stock on March 23, 2021 was $8.69 per share.

**This investment involves risk. See "Risk Factors" beginning on page S-11 and in filings with the Securities and Exchange Commission that are incorporated by reference in this prospectus supplement.**

| | Per Share | Total |
|---|---|---|
| Public offering price | $8.00 | $ 48,000,000 |
| Underwriting discounts and commissions(1) | $0.48 | $ 2,880,000 |
| Proceeds, before expenses, to AVEO Pharmaceuticals, Inc. | $7.52 | $ 45,120,000 |

(1) See "Underwriting" beginning on page S-23 for additional information regarding total underwriter compensation, including expenses for which we have agreed to reimburse the underwriters.

We have granted the underwriters an option to purchase up to an additional 900,000 shares of our common stock at the public offering price, less the underwriting discounts and commissions, for a period of 30 days following the date of this prospectus supplement. If the underwriters exercise in full their option, the total underwriting discounts and commissions payable by us will be $3,312,000, and the total proceeds to us, before expenses, will be $51,888,000.

**Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The underwriters expect to deliver the shares to investors on or about March 26, 2021.

***Joint Bookrunning Managers***

**SVB Leerink** **Stifel**

***Lead Manager***

**Baird**

***Co-Managers***

**H.C. Wainwright & Co.** **JonesTrading**

**Prospectus Supplement dated March 23, 2021**

## TABLE OF CONTENTS

## ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this common stock offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference herein. We have not authorized, and the underwriters have not authorized, anyone to provide you with information that is different. The information contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference herein, is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation by Reference” in this prospectus supplement and in the accompanying prospectus.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

## PROSPECTUS SUPPLEMENT SUMMARY

*This summary does not contain all of the information that you should consider before investing in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision. In addition, please read the "Risk Factors" section of this prospectus supplement beginning on page S-11 and the risk factors contained in our Annual Report on Form 10-K for the year ended December 31, 2020.*

### Overview

We are an oncology-focused biopharmaceutical company committed to delivering medicines that provide a better life for cancer patients. Our strategy is to focus our resources toward the development and commercialization of our product candidates in North America, while leveraging partnerships to support development and commercialization in other geographies.

On March 10, 2021, the U.S. Food and Drug Administration, or FDA, approved FOTIVDA in the United States for the treatment of adult patients with relapsed or refractory advanced renal cell carcinoma following two or more prior systemic therapies. FOTIVDA is an oral, next-generation vascular endothelial growth factor receptor, or VEGFR, tyrosine kinase inhibitor, or TKI. The approval of FOTIVDA is based on our pivotal phase 3 randomized, controlled, multi-center, open-label clinical trial comparing tivozanib to an approved therapy, Nexavar® (sorafenib), in renal cell carcinoma, or RCC, patients whose disease had relapsed or become refractory to two or three prior systemic therapies, which we refer to as the TIVO-3 trial. The approval is also supported by three additional trials in RCC and includes safety data from over 1,000 clinical trial subjects.

FOTIVDA is commercially available in the United States as of March 22, 2021.

FOTIVDA is also approved and commercialized through our development partner EUSA Pharma (UK) Limited, or EUSA, in the United Kingdom, Germany, Spain and certain other countries in their territory, for the treatment of adult patients with advanced RCC who are VEGFR pathway inhibitor-naïve and are either untreated or who have failed prior therapy with interferon alpha (IFN-a) or interleukin-2 (IL-2).

Based on FOTIVDA's demonstrated anti-tumor activity, tolerability profile and reduction of regulatory T-cell production, we are studying FOTIVDA in combination with immune checkpoint inhibitors for the treatment of RCC and hepatocellular carcinoma, or HCC, in phase 2 clinical trials. We recently announced our entry into a collaboration with Bristol Myers Squibb, or BMS, to conduct a phase 3 study of FOTIVDA in combination with OPDIVO® (nivolumab), BMS's anti-PD-1 therapy, in patients with advanced relapsed or refractory RCC following prior immunotherapy exposure.

Our pipeline of product candidates includes ficlatuzumab, a potent humanized immunoglobulin G1, or IgG1, monoclonal antibody that targets hepatocyte growth factor, or HGF. We previously reported promising early clinical data on ficlatuzumab in squamous cell carcinoma of the head and neck, or HNSCC, pancreatic cancer and acute myeloid leukemia, or AML. We are currently conducting a randomized phase 2 confirmatory study of ficlatuzumab for the potential treatment of HNSCC and expect to receive topline data in the middle of 2021.

Our pipeline of product candidates also includes worldwide rights to AV-380, a potent humanized IgG1 monoclonal antibody that targets growth differentiation factor 15, or GDF15. In December 2020, the FDA accepted our investigational new drug application, or IND, for AV-380 for the potential treatment of cancer cachexia, and we have initiated a phase 1 clinical trial in healthy subjects.

Our earlier-stage pipeline under development includes AV-203 and AV-353, both as potential oncology treatments. AV-203 is a potent humanized IgG1 monoclonal antibody that targets ErbB3 (also known as HER3) to which we expect to regain worldwide rights in September 2021. AV-353 is a potent IgG1 monoclonal antibody that targets the Notch 3 pathway.

**Tivozanib**

Tivozanib was approved by the FDA for marketing and sale in the United States in March 2021 and is sold under the brand name FOTIVDA for the treatment of adult patients with relapsed or refractory advanced RCC following two or more prior systemic therapies.

Tivozanib is a potent, selective inhibitor of VEGFRs 1, 2, and 3 with a long half-life designed to improve efficacy and tolerability. FOTIVDA has been shown to significantly reduce regulatory T-cell production in preclinical models. Tivozanib has been investigated in several tumor types, including renal cell, hepatocellular, colorectal, breast and ovarian cancers. We are currently executing studies with tivozanib both as a single agent and in combination with immune checkpoint inhibitors for the treatment of RCC and HCC.

We have exclusive rights to develop and commercialize tivozanib in oncology in all countries outside of Asia and the Middle East under a license from Kyowa Kirin Co., Ltd. (formerly Kirin Brewery Co., Ltd.), or KKC. We have sublicensed to EUSA the right to develop and commercialize tivozanib in our licensed territories outside of North America, including Europe (excluding Russia, Ukraine and the Commonwealth of Independent States), Latin America (excluding Mexico), Africa and Australasia. The EUSA sublicense excludes non-oncologic diseases or conditions of the eye. On August 1, 2019, KKC repurchased the non-oncology rights to tivozanib in our territory, excluding the rights that we sublicensed to EUSA. In September 2020, KKC initiated a phase 1 study of KHK4951, the reformulated tivozanib, in healthy volunteers and patients with wet age-related macular degeneration, or Wet AMD.

***Commercialization of Tivozanib in Relapsed or Refractory Advanced RCC in the United States***

In March 2020, we submitted an NDA to the FDA based on our TIVO-3 trial and supported by data from three additional trials, including the TIVO-1 trial comparing tivozanib to sorafenib in first-line RCC, and two phase 2 trials, Study 902, the open-label, crossover clinical study of tivozanib for patients who progressed on sorafenib in the TIVO-1 trial, and Study 201, a placebo-controlled study in first-line RCC. On March 10, 2021, the FDA approved FOTIVDA in the United States for the treatment of adult patients with relapsed or refractory RCC following two or more prior systemic therapies.

We believe there is significant commercial opportunity for FOTIVDA in the United States. We estimate that the current U.S. market for relapsed or refractory RCC therapy is approximately $1.0 billion, including $700 million in the second line and $300 million in the third and fourth lines. We estimate that there are over 16,000 new first-line metastatic RCC patients per year, with approximately 10,000 RCC patients progressing to third and fourth line therapy per year, with nearly half of these later line patients remaining untreated. As the TIVO-3 study is the first positive phase 3 study in RCC patients whose disease had relapsed or become refractory to two or three prior systemic therapies as well as the first phase 3 study in RCC to investigate a predefined subpopulation of patients who received prior immunotherapy, a predominant standard of care for earlier lines of therapy, we believe that FOTIVDA could become a standard of care in this relapsed or refractory setting. In a survey of healthcare professionals that we conducted in September 2020, 83% of respondents indicated that they would prescribe FOTIVDA to RCC patients within six months of its commercial availability and 30% of respondents indicated that the approval of FOTIVDA would likely result in their increasing treatment rates in the eligible patient population that is not actively receiving treatment in the post-second line relapsed/refractory setting. In addition, we believe that FOTIVDA has the potential to expand the duration of treatment for RCC patients in these later

lines of therapy, as we estimate that the average duration of VEGF treatment for RCC patients in third line or later therapy is less than four months whereas patients receiving tivozanib in our TIVO-3 trial remained on therapy for an average of one year.

During 2020 and early 2021, in preparation for the commercial launch of FOTIVDA in the United States, we built our commercial infrastructure including our sales, marketing, market access and medical affairs teams and distribution capabilities. In light of the restrictions necessitated by the COVID-19 pandemic, we designed our strategic commercial approach to be optimized for remote as well as in-person customer engagement capabilities and expanded our digital marketing strategies. On March 22, 2021, we announced the commercial availability of FOTIVDA in the United States ahead of our previous guidance of March 31, 2021.

***Commercialization of Tivozanib in RCC Outside the United States***

*First-Line Approval and Commercial Launch of FOTIVDA in Europe*: In August 2017, the European Commission granted marketing authorization to EUSA for tivozanib in all 28 countries of the European Union, or the EU, (which included the United Kingdom at that time), Norway and Iceland based on the data from our active comparator-controlled supportive phase 3 trial, which we refer to as the TIVO-1 trial, comparing tivozanib to sorafenib (Nexavar®) in first-line RCC. EUSA has received reimbursement approval for and commercially launched FOTIVDA in Germany, the United Kingdom and Spain as well as in some additional EU countries, exclusive of France and Italy. EUSA is working to secure reimbursement approval in and commercially launch FOTIVDA in additional European countries. Tivozanib is sold under the brand name FOTIVDA, and is approved for the first-line treatment of adult patients with RCC and for those who are VEGFR and mTOR pathway inhibitor-naïve following disease progression after one prior treatment with cytokine therapy for RCC.

In the updated Clinical Practice Guidelines for the diagnosis, treatment and follow-up of RCC by the European Society for Medical Oncology, or ESMO, published in February 2019, tivozanib has been added as a first-line treatment for patients with good or intermediate risk and as a second-line treatment for patients following first-line TKIs.

*First-Line Approval in New Zealand and South Africa*: In July 2019, the New Zealand Medicines and Medical Devices Safety Authority approved FOTIVDA for the first-line treatment of adult patients with RCC and for adult patients who are VEGFR and mTOR pathway inhibitor-naïve following disease progression after one prior treatment with cytokine therapy for RCC. In September 2020, the South African Health Products Regulatory Authority approved FOTIVDA for the first-line treatment of adult patients with advanced RCC and for adult patients who are VEGFR and mTOR pathway inhibitor-naïve following disease progression after one prior treatment with cytokine therapy for advanced RCC.

***Clinical Development of Tivozanib in RCC***

*Third-Line and Fourth-Line Phase 3 Trial (TIVO-3)*: Our TIVO-3 trial is the first positive phase 3 study in RCC patients whose disease had relapsed or become refractory to two or three prior systemic therapies to meet its primary endpoint, as well as the first phase 3 study in RCC to systemically investigate a predefined subpopulation of patients who received prior checkpoint inhibitor therapy, a predominant standard of care for earlier lines of therapy. Key data from our TIVO-3 trial include the following:

- Tivozanib demonstrated a 44% improvement in median progression-free survival, or PFS, the primary endpoint, with a median PFS in the tivozanib arm of 5.6 months compared with 3.9 months in the sorafenib arm, and 27% reduction in risk of progression or death compared to sorafenib (hazard ratio (HR)=0.73, p=0.0165).
- Overall response rate, or ORR, for patients receiving tivozanib was 18% compared to 8% for patients receiving sorafenib (p=0.017).

- Median duration of response in patients receiving tivozanib was not reached (95% confidence interval (CI): 9.8, not reached (NR)) and in patients receiving sorafenib was 5.7 months (95% CI: 5.6, NR).
- The final overall survival, or OS, hazard ratio was 0.97 (p=0.82), and the final median OS was 16.4 months for tivozanib and 19.2 months for sorafenib. The final OS hazard ratio of 0.97 was similar to those observed in other phase 3 studies in RCC comparing a prior FDA-approved VEGFR TKI to another VEGFR TKI.
- Tivozanib also demonstrated a statistically significant improvement in median PFS for the prespecified subgroup of patients (approximately 26% of patients) who received prior checkpoint inhibitor therapy, with a hazard ratio of 0.55 (p=0.028), a 45% reduction in risk of progression or death compared to sorafenib and a median PFS in the tivozanib arm of 7.3 months compared with 5.1 months in the sorafenib arm. The ORR for patients in this subgroup receiving tivozanib was 24.4% compared to 7% receiving sorafenib. The final OS hazard ratio for this subgroup was 0.84 (HR < 1 favors tivozanib). Tivozanib also demonstrated a statistically significant improvement in median PFS for the prespecified subgroup of patients (approximately 45% of patients) who received two TKIs in earlier lines of treatment, with a hazard ratio of 0.57 (p=0.003), a 43% reduction in risk of progression or death compared to sorafenib and a median PFS in the tivozanib arm of 5.5 months compared with 3.7 months in the sorafenib arm. The ORR for patients in this subgroup receiving tivozanib was 15% compared to 8% receiving sorafenib. The final OS hazard ratio for this subgroup was 0.99.
- Tivozanib was generally better tolerated than sorafenib with fewer dose reductions and interruptions due to adverse events. In the tivozanib arm, 46% of patients experienced Grade 3 or higher adverse events compared to 55% of patients in the sorafenib arm. Infrequent but severe adverse events reported in greater number in the tivozanib arm were thrombotic events similar to those observed in previous tivozanib studies. The most common adverse events in patients receiving tivozanib was fatigue and asthenia, adverse events known to reflect effective VEGF pathway inhibition, which has shown a correlation with better PFS outcomes.

*RCC PD-1 Phase 1b/2 Combination Trial with OPDIVO® (TiNivo)*: In March 2017, we initiated enrollment in a phase 1b/2 clinical trial of tivozanib in combination with OPDIVO (nivolumab), BMS's anti-PD-1 therapy, in the first-line and the second-line treatment of RCC, which we refer to as the TiNivo trial. The TiNivo trial enrolled a total of 28 patients. The phase 1b portion of the TiNivo trial enrolled six patients and demonstrated that the combination of tivozanib and nivolumab was able to be dosed at the full dose and schedule of single agent tivozanib, with no dose limiting toxicities observed.

The phase 2 portion of the trial, which enrolled an additional 22 patients split evenly between treatment naïve and previously treated patients, was designed to assess the safety, tolerability and anti-tumor activity of the full dose and schedule of the combination of tivozanib and nivolumab as established in the phase 1b portion of the study. On September 30, 2019, we presented final results at the ESMO 2019 Congress. The final results showed that the combination required few dose reductions and showed additive or synergistic activity with nivolumab for ORR and PFS in both treatment naïve and previously treated patients with RCC with no apparent difference in activity despite the different line of treatment. The overall median PFS for the 25 patients receiving the full 1.5 mg dose was 18.9 months. The median PFS for the twelve previously untreated patients was 18.5 months and the median PFS for the thirteen previously treated patients had not yet been achieved as of the final data cut-off date of August 27, 2019. An ORR was observed in 14 patients (56%) (complete response plus partial response), including one treatment naïve patient (4%) achieving a complete response, and a disease control rate (complete response plus partial response plus stable disease) was observed in 24 patients (96%). Of the two patients (8%) who received prior PD-1 therapy, one achieved a partial response and the other achieved stable disease. Treatment-related Grade 3/4 adverse events occurred in 80% of patients, the most common of which was hypertension, and only 17% of patients required a dose reduction.

In November 2020, we announced that previously reported results from the TiNivo trial were published in Annals of Oncology in an article titled "TiNivo: Safety and Efficacy of Tivozanib-Nivolumab Combination Therapy in Patients with Metastatic Renal Cell Carcinoma".

*RCC PD-1 Phase 3 Combination Trial with OPDIVO® (TiNivo-2)*: On March 12, 2021, following the FDA's approval of FOTIVDA, we announced our plans to advance our trials of the combination of tivozanib and nivolumab in RCC pursuant to a clinical trial collaboration and supply agreement with BMS to evaluate FOTIVDA in combination with OPDIVO (nivolumab) in a randomized, open-label, controlled phase 3 TiNivo-2 trial in approximately 326 patients with advanced relapsed or refractory RCC following prior immunotherapy exposure. The TiNivo-2 trial's primary endpoint will assess PFS, with key secondary endpoints to include overall survival, overall response rate and duration of response, and safety. The study design was submitted to the FDA for review and we expect feedback from the FDA regarding the study design in the second quarter of 2021.

***Clinical Development of Tivozanib in HCC***

*HCC PD-L1 Combination Trial with IMFINZI® (DEDUCTIVE)*: In September 2019, we opened enrollment in an open-label, multi-center, randomized phase 1b/2 clinical trial of tivozanib in combination with IMFINZI (durvalumab), a human monoclonal antibody directed against programmed death-ligand 1, or PD-L1, as a first-line treatment for patients with advanced, unresectable HCC who have not received prior systemic therapy, which we refer to as the DEDUCTIVE trial. Pursuant to the clinical supply agreement that we entered into with a wholly-owned subsidiary of AstraZeneca PLC, or AstraZeneca, in December 2018, we serve as the study sponsor and each party contributes the clinical supply of its study drug.

A total of seven patients with advanced or metastatic HCC were enrolled in the phase 1b portion of the study, which was designed to determine the recommended phase 2 dose and assess preliminary safety and efficacy of the tivozanib/durvalumab combination. The DEDUCTIVE trial progressed to phase 2 following the successful completion of the phase 1b portion of the trial, where the combination of tivozanib and durvalumab demonstrated a 29% partial response (PR) rate and 71% disease control rate (PR + stable disease), which was similar to what was observed in the bevacizumab and atezolizumab combination trial in a similar disease setting. We anticipate completion of enrollment in the ongoing phase 2 portion of the study, which is expected to enroll up to an additional 30 subjects, in 2021. The primary outcome measure of the DEDUCTIVE trial is incidence of treatment emergent adverse events and the secondary outcome measures include ORR, PFS and OS. In January 2021, we presented preliminary results from the phase 1b portion of the DEDUCTIVE trial in a poster session at the 2021 American Society of Clinical Oncology Gastrointestinal, or ASCO GI, Cancers Symposium.

*NCCN-AVEO Phase 1b/2 Trial*. In February 2020, final results from a multicenter, investigator-sponsored phase 1b/2 clinical trial of tivozanib in previously untreated patients with advanced, unresectable HCC were published in the British Journal of Cancer under the title, "A Multicentre Phase 1b/2 Study of Tivozanib in Patients with Advanced Inoperable Hepatocellular Carcinoma." The trial was designed to evaluate the safety and efficacy of tivozanib in advanced HCC, and enrolled a total of 27 patients at three trial sites. In the phase 1b portion, no dose-limiting toxicities were seen in cycle one in patients treated with 1.0 mg tivozanib, and tivozanib at 1.0 mg daily was selected for the phase 2 expansion portion of the trial. The phase 2 trial's primary endpoint of median PFS and 24-week PFS probability were 24 weeks and 58%, respectively. Of 19 evaluable patients in the trial, a partial response was seen in 4 of 19 patients (21%) and stable disease in 8 of 19 patients (42%), for a disease control rate of 63%. Median OS was 9.0 months. A significant decrease in soluble plasma VEGFR-2 was also observed, suggesting adequate target engagement. There were no significant changes in hepatitis B or hepatitis C viral load during study treatment and adverse events were consistent with those observed in previous tivozanib trials.

***Clinical Development of Tivozanib in Ovarian Cancer***

On June 1, 2019, Dr. Wendy Swetzig at Northwestern University Feinberg School of Medicine presented data at the 2019 ASCO Annual Meeting from an investigator-sponsored phase 2 clinical trial of tivozanib in patients with recurrent, platinum-resistant ovarian cancer, including fallopian tube or primary peritoneal cancer. The trial was one of several studies funded by a grant we provided to the National Comprehensive Cancer Network. The trial was designed to measure the safety and activity of tivozanib in ovarian cancer and enrolled a total of 31 patients, 30 of which were treated with tivozanib. With four patients showing a partial response and twelve patients with stable disease, the clinical benefit rate (partial response + stable disease) was reported to be 53.3%. The trial concluded that tivozanib is active in patients with recurrent ovarian cancer, without substantial toxicity.

**Ficlatuzumab**

Ficlatuzumab is a potent humanized IgG1 monoclonal antibody that blocks cMET receptor, or cMET, signaling by binding HGF, the natural ligand of cMET, which is believed to trigger many activities that are involved in cancer development and metastasis. We have seen promising results for ficlatuzumab as a potential treatment of HNSCC, pancreatic cancer and AML in early clinical trials. The estimated number of annual new cases of head and neck cancer, pancreatic cancer and AML in the United States is 53,260, 57,600 and 19,940, respectively (American Cancer Society, Cancer Facts & Figures 2020). In September 2020, we made the decision to fund additional clinical manufacturing of ficlatuzumab to enable a potential registrational phase 3 clinical trial in HNSCC after final results from the open-label, randomized phase 2 study are available, as well as to enable additional potential development in pancreatic cancer and AML. In September 2020, we regained full global rights to ficlatuzumab, as a result of our former development partner Biodesix, Inc., or Biodesix, exercising its Opt-Out rights under the Biodesix Agreement, each as defined below.

*Development in HNSCC*. We and our previous partner, Biodesix, funded an investigator-sponsored phase 1 clinical trial of ficlatuzumab in combination with ERBITUX® (cetuximab) in patients with cetuximab-resistant, metastatic HNSCC. In June 2017, preliminary results from the phase 1 trial were presented at the 2017 ASCO Annual Meeting demonstrating activity with an overall response rate of 17% (two partial responses out of twelve patients), a disease control rate of 67% and prolonged PFS and OS compared to historical controls of cetuximab alone. In the fourth quarter of 2020, we completed enrollment in a randomized, phase 2, multicenter, investigator-initiated trial designed to evaluate ficlatuzumab alone or ficlatuzumab and cetuximab. We expect to receive top line data from the Phase 2 HNSCC Trial in the middle of 2021, and we expect to announce a phase 3 clinical trial decision for ficlatuzumab in that timeframe. We have initiated manufacturing of the clinical supply for this potential phase 3 clinical trial.

*Development in pancreatic cancer*. We and our previous partner, Biodesix, funded an investigator-sponsored phase 1b/2 clinical trial of ficlatuzumab in combination with nab-paclitaxel and gemcitabine in previously untreated metastatic pancreatic ductal cancer, or PDAC. The trial was designed to determine maximum tolerated dose of ficlatuzumab when combined with gemcitabine and nab-paclitaxel. Secondary outcome measures include response rate and PFS. A total of 24 patients enrolled in the trial and the average number of 28-day treatment cycles received was 7.5 (range 1-15), with three patients remaining on active treatment at the end of the trial. In January 2020, results from the phase 1b portion of the trial were presented at the 2020 ASCO GI Cancers Symposium. The combination showed a 29% partial response rate and a 92% disease control rate (partial response and stable disease), which was promising relative to data observed for gemcitabine and nab-paclitaxel alone. Treatment with this regimen was associated with significant hypoalbuminemia and edema, and therefore a follow-up safety study is under consideration to evaluate ficlatuzumab in combination with an alternate cytotoxic regimen.

*Development in AML*. We and our previous partner, Biodesix, have also funded an investigator-sponsored phase 1b/2 clinical trial of ficlatuzumab in combination with cytarabine in AML, which we refer to as the CyFi-1 trial, which showed a favorable complete response rate in the 18 primary refractory AML patients enrolled in the trial and an acceptable tolerability profile. Based on the encouraging findings from the CyFi-1 trial, we designed a randomized phase 2 clinical trial evaluating ficlatuzumab in combination with high-dose cytarabine versus high-dose cytarabine alone in patients with AML, which we referred to as the CyFi-2 trial. However, in March 2020, we discontinued the CyFi-2 trial prior to the initiation of patient enrollment due to the urgent shift in priorities among clinical trial sites toward efforts to combat the COVID-19 pandemic, which had impacted the trial enrollment timeline and the feasibility of completing the study within the shelf-life of the current ficlatuzumab clinical trial drug supply.

We continue to evaluate additional opportunities for the further clinical development of ficlatuzumab. The expansion of the ficlatuzumab clinical program, beyond what we are currently committed to, will require additional manufacturing efforts and costs.

**AV-380**

AV-380 is a potent humanized IgG1 monoclonal antibody that targets GDF15, which is associated with cachexia and has been linked to immunosuppression in the tumor microenvironment. We are developing AV-380 for the potential treatment or prevention of cachexia. Cachexia is defined as a multi-factorial syndrome of involuntary weight loss characterized by an ongoing loss of skeletal muscle mass (with or without loss of fat mass) that cannot be fully reversed by conventional nutritional support and leads to progressive functional impairment. It is estimated that cachexia affects approximately 9 million individuals in North America, Europe and Japan (J Cachexia Sarcopenia Muscle 2010). Cachexia is associated with various cancers, and it is estimated that approximately 50% of all cancer patients suffer from cachexia and 30% of all cancer patients die due to cachexia (World J Gastrointest Oncol 2015; J Cachexia Sarcopenia Muscle 2010). We believe AV-380 has the potential to address a significant unmet need. Cachexia also affects patients with chronic kidney disease, congestive heart failure, chronic obstructive pulmonary disease, anorexia nervosa, AIDS and other diseases.

We believe that AV-380 represents a unique approach to treating cachexia because it has been demonstrated in preclinical studies to address key underlying mechanisms of the syndrome. Our research suggests that greater than 70% of cancer patients have increased GDF15 expression, starting at the pre-cachectic stage. If GDF15 inhibitors such as AV-380 are proven clinically successful, we believe there is a significant market opportunity with potential application in multiple tumor types in combination with multiple anti-cancer treatment standards. In addition to our patents and patent applications covering our proprietary AV-380 antibody program, we have in-licensed certain patents and patent applications from St. Vincent's Hospital Sydney Limited in Sydney, Australia, which we refer to as St. Vincent's. We have milestone and royalty payment obligations under our license agreement with St. Vincent's.

In December 2020, the FDA accepted our IND filing for AV-380 for the potential treatment of cancer cachexia and, in the first quarter of 2021, we initiated a phase 1 clinical trial in healthy subjects.

**AV-203**

AV-203 is a potent humanized IgG1 monoclonal antibody that targets ErbB3 (also known as HER3). In March 2016, we entered into a collaboration and license agreement with CANbridge Life Sciences Ltd., or CANbridge, which we refer to as the CANbridge Agreement, under which we granted CANbridge the exclusive right to develop, manufacture and commercialize AV-203 in all countries outside of North America. In August 2018, the National Medical Products Administration (formerly the China Food and Drug Administration) approved an IND application filed by CANbridge for development in esophageal squamous cell carcinoma, but a clinical trial was never initiated.

In March 2021, CANbridge exercised its right to terminate for convenience the CANbridge Agreement. Under the terms of the CANbridge Agreement, we expect the transfer of the AV-203 program to be complete in September 2021 and, at that time, we will regain worldwide rights to the AV-203 program.

**AV-353**

AV-353 is a potent IgG1 monoclonal antibody that targets the Notch 3 pathway. The Notch 3 pathway is important in cell-to-cell communication involving gene regulation mechanisms that control multiple cell differentiation processes during the entire life cycle. Scientific literature has implicated the Notch 3 receptor pathway in multiple diseases, including cancer, cardiovascular diseases, such as pulmonary arterial hypertension, and neurodegenerative conditions. AV-353 is being studied by collaborators at the Mayo Clinic in pre-clinical models of triple negative breast cancer.

**Risks Associated with Our Business**

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus supplement immediately following this prospectus supplement summary and in our Annual Report on Form 10-K for the year ended December 31, 2020, which are incorporated by reference herein. These risks include the following:

- We have incurred significant operating losses, anticipate that we will continue to incur significant operating expenses for the foreseeable future and may never generate significant revenue or achieve or sustain profitability.
- We may require substantial additional funding to advance our pipeline of clinical stage assets, and if we are unable to obtain this necessary capital when needed, we could be forced to delay, limit, reduce or terminate our research, product development or commercialization efforts.
- We have only recently transitioned from a development stage biopharmaceutical company to a commercial and clinical development stage biopharmaceutical company, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- We depend heavily on the success of our product, FOTIVDA, and on our clinical stage assets, including tivozanib (in other indications), ficlatuzumab and AV-380. If we are unable to complete the clinical development of, obtain marketing approval for or successfully commercialize our product candidates, our business will be materially harmed.
- If we or our collaborators experience delays or difficulties in the enrollment of patients in clinical trials, receipt of necessary regulatory approvals could be delayed or prevented.
- If clinical trials of any product candidates that we, or any collaborators, may develop fail to satisfactorily demonstrate safety and efficacy to the FDA and other regulators, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates.
- We face substantial competition from existing approved products, and our competitors may also discover, develop or commercialize new competing products before, or more successfully, than we do.
- Adverse events or undesirable side effects caused by, or other unexpected properties of, product candidates that we develop may be identified during development and could delay or prevent their marketing approval or limit their use.
- We rely in part on third parties to produce our preclinical and clinical product candidate supplies and to conduct clinical trials of our internally-developed product candidates, and those third parties may not perform satisfactorily, including by failing to deliver supplies on time or to meet deadlines for the completion of such trials, research or testing.

- We rely on our licensee EUSA, over whom we have little control, for the sales, marketing and distribution efforts associated with the commercialization of FOTIVDA in certain European countries and any failure by EUSA to devote the necessary resources and attention to market and sell FOTIVDA effectively and successfully may materially impact our ability to generate revenue.
- We may not be successful in establishing or maintaining strategic partnerships to further the development of our therapeutic programs. Additionally, if any of our current or future strategic partners fails to perform its obligations or terminates the partnership, the development and commercialization of the product candidates under such agreement could be delayed or terminated and, such failures or terminations could have a material adverse effect on our operations and business.
- We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our product candidates, or the scope of our patent protection could be insufficiently broad, which could result in competition and a decrease in the potential market share for our product candidates.

**Our Corporate Information**

We were incorporated under the laws of the State of Delaware on October 19, 2001 as GenPath Pharmaceuticals, Inc. and changed our name to AVEO Pharmaceuticals, Inc. on March 1, 2005. Our principal executive offices are located at 30 Winter Street, Boston, Massachusetts 02108, and our telephone number is (857) 400-0101. Our internet website is www.aveooncology.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus supplement and the accompanying prospectus, and you should not consider it part of this prospectus supplement and the accompanying prospectus. Our website address is included in this document as an inactive textual reference only. Unless the context otherwise requires, references in this prospectus to “AVEO,” “the Company,” “we,” “us,” and “our” refer to AVEO Pharmaceuticals, Inc. and our subsidiaries.

The trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

**THE OFFERING**

| | |
|---|---|
| Common stock offered by us | 6,000,000 shares. |
| Common stock to be outstanding immediately after this offering | 32,882,696 shares (or 33,782,696 if the underwriters exercise in full their option to purchase additional shares). |
| Option to purchase additional shares | The underwriters have an option for a period of 30 days to purchase up to 900,000 additional shares of our common stock. |
| Use of proceeds | We intend to use the net proceeds from this offering for working capital and general corporate purposes, including to support commercialization activities relating to FOTIVDA® (tivozanib) and to advance our pipeline. See "Use of Proceeds" on page S-16 of this prospectus supplement for more information. |
| Risk factors | See "Risk Factors" beginning on page S-11 and the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock. |
| Nasdaq Capital Market symbol | "AVEO" |

The number of shares of our common stock to be outstanding after this offering is based on 26,882,696 shares of our common stock outstanding as of December 31, 2020. The number of shares of our common stock to be outstanding as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 1,796,690 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2020, at a weighted-average exercise price of $11.05 per share;
- 1,683,933 shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2020, and issued in connection with a private placement financing in May 2016, which we refer to as the PIPE Warrants, at an exercise price of $10.00 per share;
- 2,500,000 shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2020 and issued in connection with a public offering in April 2019, which we refer to as the Offering Warrants, at an exercise price of $12.50 per share, of which 247,391 shares were issued upon exercise of such warrants following December 31, 2020 and through March 19, 2021 for aggregate proceeds of $3.1 million;
- 330,688 shares of common stock issued and sold following December 31, 2020 and through March 19, 2021 under our "at-the-market" sales agreement with SVB Leerink LLC for aggregate net proceeds of $3.4 million;
- 1,563,282 shares of common stock reserved as of December 31, 2020, for future issuance under our 2019 Equity Incentive Plan; and
- 23,859 shares of common stock reserved as of December 31, 2020, for future issuance under our 2010 employee stock purchase plan.

## RISK FACTORS

*An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks described below and those discussed under the captions entitled "Risk Factor Summary" and "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2020, and any subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus supplement and the accompanying prospectus, together with other information in this prospectus supplement, the accompanying prospectus, the information and documents incorporated by reference herein and therein , and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.*

### Risks Related to This Offering

***We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.***

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses, and these financial losses could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. We may invest the net proceeds from this offering, pending their use, in a manner that does not produce income or that loses value.

***If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.***

The assumed public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after giving effect to this offering. If you purchase common stock in this offering, you will incur an immediate and substantial dilution of $5.56 per share, after giving effect to the sale by us of shares in this offering at the public offering price of $8.00 per share. The exercise of outstanding stock options and warrants may result in further dilution of your investment. See the section entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

***If you purchase shares of common stock in this offering, you may also experience future dilution as a result of future equity offerings.***

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by any investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by any investors in this offering.

***Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.***

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of our current debt financing arrangements preclude, and the terms of any future debt agreements may preclude, us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

***Our executive officers, directors and principal stockholders, if they choose to act together, have the ability to significantly influence matters submitted to stockholders for approval.***

Upon the closing of this offering, the number of shares beneficially owned by our executive officers, directors and principal stockholders and their respective affiliates who owned more than 5% of our outstanding shares of common stock before this offering, will, in the aggregate, beneficially own shares representing approximately 22.5% of our outstanding capital stock, excluding any shares that may be purchased by such persons in this offering. As a result, if these stockholders were to choose to act together, they would be able to significantly influence matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets.

This concentration of voting power may:

- delay, defer or prevent a change in control;
- entrench our management and the board of directors; or
- delay or prevent a merger, consolidation, takeover or other business combination involving us on terms that other stockholders may desire.

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Any statement contained in this prospectus supplement, the accompanying prospectus or in the documents we incorporate by reference herein or therein other than a statement of historical fact, may be a forward-looking statement, including statements regarding our and our collaborators' future discovery, development and commercialization efforts, our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management. In some cases, you can identify forward-looking statements by such terms as "anticipate," "believe," "could," "estimate," "expect," "forecast," "intend," "may," "might," "plan," "project," "should," "target," "will," "would" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements may include, but are not limited to, statements about:

- our plans to launch and commercialize FOTIVDA;
- our plans to develop our clinical stage assets and commercialize our product candidates;
- our manufacturing, marketing and sales capabilities and strategy;
- the rate and degree of market acceptance and clinical utility of our products;
- the initiation, timing, progress and results of future clinical trials, and our development programs;
- our ability to secure new collaborations, maintain existing collaborations or obtain additional funding;
- our intellectual property position;
- the potential of ficlatuzumab, AV-380 or other product candidates that we in-license, or may elect to in-license, or may acquire in the future;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- our competitive position;
- developments and projections relating to our competitors and our industry;
- impacts resulting from the COVID-19 pandemic and responsive actions relating thereto;
- our estimates of the period in which we anticipate that existing cash, cash equivalents and investments will enable us to fund our current and planned operations;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing; and
- our intended use of proceeds from this offering.

Our actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors. If any of the following risks occur, our business, financial condition and results of operations and future growth prospects could be materially affected, and the actual outcomes of matters as to which forward-looking statements are made in this prospectus supplement, the accompanying prospectus or the document incorporated by reference herein or therein could be materially different from those anticipated in such forward-looking statements.

- We have incurred significant operating losses, anticipate that we will continue to incur significant operating expenses for the foreseeable future and may never generate significant revenue or achieve or sustain profitability.
- We may require substantial additional funding to advance our pipeline of clinical stage assets, and if we are unable to obtain this necessary capital when needed, we could be forced to delay, limit, reduce or terminate our research, product development or commercialization efforts.

- We have only recently transitioned from a development stage biopharmaceutical company to a commercial and clinical development stage biopharmaceutical company, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- We depend heavily on the success of our product, FOTIVDA, and on our clinical stage assets, including tivozanib (in other indications), ficlatuzumab and AV-380. If we are unable to complete the clinical development of, obtain marketing approval for or successfully commercialize our product candidates, our business will be materially harmed.
- If we or our collaborators experience delays or difficulties in the enrollment of patients in clinical trials, receipt of necessary regulatory approvals could be delayed or prevented.
- If clinical trials of any product candidates that we, or any collaborators, may develop fail to satisfactorily demonstrate safety and efficacy to the FDA and other regulators, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates.
- We face substantial competition from existing approved products and our competitors may also discover, develop or commercialize new competing products before, or more successfully, than we do.
- Adverse events or undesirable side effects caused by, or other unexpected properties of, product candidates that we develop may be identified during development and could delay or prevent their marketing approval or limit their use.
- We rely in part on third parties to produce our preclinical and clinical product candidate supplies and to conduct clinical trials of our internally-developed product candidates, and those third parties may not perform satisfactorily, including by failing to deliver supplies on time or to meet deadlines for the completion of such trials, research or testing.
- We rely on our licensee EUSA, over whom we have little control, for the sales, marketing and distribution efforts associated with the commercialization of FOTIVDA in certain European countries and any failure by EUSA to devote the necessary resources and attention to market and sell FOTIVDA effectively and successfully may materially impact our ability to generate revenue.
- We may not be successful in establishing or maintaining strategic partnerships to further the development of our therapeutic programs. Additionally, if any of our current or future strategic partners fails to perform its obligations or terminates the partnership, the development and commercialization of the product candidates under such agreement could be delayed or terminated and, such failures or terminations could have a material adverse effect on our operations and business.
- We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our product candidates, or the scope of our patent protection could be insufficiently broad, which could result in competition and a decrease in the potential market share for our product candidates.
- We are also subject to the risks discussed (i) under the heading “Risk Factors” beginning on page S-11 of this prospectus supplement, (ii) in the sections titled “Risk Factor Summary” and “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the U.S. Securities and Exchange Commission, or the SEC, and (iii) in other filings we make with the SEC from time to time.

You should consider these factors and the other cautionary statements made in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein as being applicable to all related forward-looking statements wherever they appear in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference. While we may elect to update forward-looking statements wherever they appear in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein or therein, we do not assume, and specifically disclaim, any obligation to do so, whether as a result of new information, future events or otherwise, unless required by law.

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein include statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. All of the market data used in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. We believe that the information from these industry publications, surveys and studies is reliable. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of important factors, including those described in the sections titled “Risk Factor Summary” and “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2020. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

## USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of 6,000,000 shares of our common stock in this offering will be approximately $44.8 million after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares in full, we estimate that our net proceeds will be approximately $51.6 million after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for working capital and general corporate purposes, including to support commercialization activities relating to FOTIVDA® (tivozanib) and to advance our pipeline.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from our and our strategic partners' clinical trials of our product candidates, as well as any additional collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We intend to invest the proceeds, pending their use as described above, in short-term, interest-bearing, investment-grade securities.

## CAPITALIZATION

The following table sets forth our consolidated cash, cash equivalents and marketable securities and capitalization as of December 31, 2020, as follows:

- on an actual basis; and
- on an as adjusted basis to give effect to our issuance and sale of 6,000,000 shares of our common stock in this offering at the public offering price of $8.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the following table together with "Description of Capital Stock" beginning on page 15 of the accompanying prospectus, and our consolidated financial statements and related notes to those statements and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2020, which is incorporated by reference in this prospectus supplement.

| (in thousands, except per share data) | As of December 31, 2020 | |
|---|---|---|
| | Actual | As Adjusted |
| Cash, cash equivalents and marketable securities | $ 61,761 | $ 106,586 |
| Loans payable, net of current portion and discount | $ 12,716 | $ 12,716 |
| Stockholders' equity | | |
| Preferred stock, par value $0.001 per share; 5,000 shares authorized; no shares issued or outstanding, actual and as adjusted | $ — | $ — |
| Common stock, par value $0.001 per share; 50,000 shares authorized; 26,883 shares issued and outstanding, actual; 32,883 shares issued and outstanding, as adjusted | $ 27 | $ 33 |
| Additional paid-in capital | $ 656,472 | $ 701,291 |
| Accumulated deficit | $ (621,205) | $ (621,205) |
| Total stockholders' equity | $ 35,294 | $ 80,119 |
| Total capitalization | $ 48,010 | $ 92,835 |

The foregoing table does not include:

- 1,796,690 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2020, at a weighted-average exercise price of $11.05 per share;
- 1,683,933 shares of common stock issuable upon exercise of the PIPE Warrants outstanding as of December 31, 2020, at an exercise price of $10.00 per share;
- 2,500,000 shares of common stock issuable upon exercise of the Offering Warrants outstanding as of December 31, 2020, at an exercise price of $12.50 per share, of which 247,391 shares were issued upon exercise of such warrants following December 31, 2020 and through March 19, 2021 for aggregate proceeds of $3.1 million;
- 330,688 shares of common stock issued and sold following December 31, 2020 and through March 19, 2021 under our "at-the-market" sales agreement with SVB Leerink LLC for aggregate net proceeds of $3.4 million;
- 1,563,282 shares of common stock reserved as of December 31, 2020, for future issuance under our 2019 Equity Incentive Plan; and
- 23,859 shares of common stock reserved as of December 31, 2020, for future issuance under our 2010 employee stock purchase plan.

## DILUTION

If you purchase our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by subtracting our total liabilities from our total tangible assets and dividing the difference by the number of outstanding shares of our common stock.

Our net tangible book value at December 31, 2020, was approximately $35.3 million or approximately $1.31 per share, based on 26,882,696 shares of our common stock then outstanding. After giving effect to the sale of 6,000,000 shares of common stock at the public offering price of $8.00 per share, less the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value at December 31, 2020, would be approximately $80.1 million, or approximately $2.44 per share. This represents an immediate increase in net tangible book value of $1.13 per share to existing stockholders and an immediate dilution of $5.56 per share to investors in this offering.

The following table illustrates this dilution on a per share basis:

| | | |
|---|---|---|
| Public offering price per share | | $8.00 |
| Net tangible book value per share as of December 31, 2020 | $1.31 | |
| Increase in net tangible book value per share attributable to new investors | 1.13 | |
| As adjusted net tangible book value per share as of December 31, 2020, after giving effect to this offering | | 2.44 |
| Dilution in net tangible book value per share to new investors | | $5.56 |

If the underwriters exercise in full their option to purchase 900,000 additional shares of common stock, less the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value at December 31, 2020, after giving effect to this offering would be approximately $86.9 million, or approximately $2.57 per share, representing an increase in net tangible book value of $1.26 per share to existing stockholders and immediate dilution in net tangible book value of $5.43 per share to investors purchasing our common stock in this offering at the assumed public offering price.

The calculations in the foregoing table do not include, as of December 31, 2020:

- 1,796,690 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2020, at a weighted-average exercise price of $11.05 per share;
- 1,683,933 shares of common stock issuable upon exercise of the PIPE Warrants outstanding as of December 31, 2020, at an exercise price of $10.00 per share;
- 2,500,000 shares of common stock issuable upon exercise of the Offering Warrants outstanding as of December 31, 2020, at an exercise price of $12.50 per share, of which 247,391 shares were issued upon exercise of such warrants following December 31, 2020 and through March 19, 2021 for aggregate proceeds of $3.1 million;
- 330,688 shares of common stock issued and sold following December 31, 2020 and through March 19, 2021 under our “at-the-market” sales agreement with SVB Leerink LLC for aggregate net proceeds of $3.4 million;
- 1,563,282 shares of common stock reserved as of December 31, 2020, for future issuance under our 2019 Equity Incentive Plan; and
- 23,859 shares of common stock reserved as of December 31, 2020, for future issuance under our 2010 employee stock purchase plan.

To the extent that any of our outstanding options or warrants are exercised, we grant additional options or other awards under our equity incentive plans or issue additional warrants, or we issue additional shares of common stock in the future, there may be further dilution to new public investors.

## MATERIAL U.S. TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a discussion of material U.S. federal income and estate tax considerations relating to the purchase, ownership and disposition of our common stock by a non-U.S. holder. For purposes of this discussion, the term "non-U.S. holder" means a beneficial owner (other than a partnership or other entity or arrangement treated as a pass-through entity for U.S. federal income tax purposes) of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons has authority to control all substantial decisions of the trust or if the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury Regulations.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus supplement and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus supplement. In addition, we have not requested a ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will not challenge one or more of the tax consequences described in this prospectus supplement.

This discussion addresses only non-U.S. holders that hold shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address the alternative minimum tax, the Medicare tax on net investment income, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt organizations and governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- controlled foreign corporations;
- passive foreign investment companies;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- accrual-method taxpayers subject to special tax accounting rules under Section 451(b) of the Code;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment; and
- certain U.S. expatriates.

In addition, this discussion does not address the tax treatment of partnerships or other entities or arrangements treated as pass-through entities or persons who hold their common stock through partnerships or other entities or arrangements that are pass-through entities for U.S. federal income tax purposes. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the purchase, ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

**Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our common stock.**

### Distributions on our Common Stock

We do not expect to make cash dividends to holders of our common stock in the foreseeable future. If we pay distributions on our common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Disposition of Common Stock."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence. A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide us and/or our paying agent with a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income is taxed on a net income basis at the same U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

### Gain on Disposition of Common Stock

A non-U.S. holder generally will not be subject to U.S. federal income tax on gain recognized on a disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the same U.S. federal income tax rates applicable to United States persons (as defined in the Code), and if the non-U.S. holder is a foreign corporation, the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty, may also apply;

- the non-U.S. holder is a non-resident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S.-source capital losses of the non-U.S. holder, if any, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation" unless our common stock is regularly traded on an established securities market and the non-U.S. holder held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. If we are determined to be a U.S. real property holding corporation and the foregoing exception does not apply, then the non-U.S. holder generally will be taxed on its net gain derived from the disposition at the U.S. federal income tax rates applicable to United States persons (as defined in the Code). Generally, a corporation is a "U.S. real property holding corporation" if the fair market value of its "U.S. real property interests" equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rule described above.

**Information Reporting and Backup Withholding**

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Generally, a non-U.S. holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under the heading "Distributions on our Common Stock," will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Rather, any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

**FATCA**

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, generally impose a 30% withholding tax on dividends on, or gross proceeds from the sale or other disposition of, our common stock if paid to a foreign entity unless: (i) if the foreign entity is a "foreign financial institution," the
foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain of its U.S. investors, or (iii) the foreign entity is otherwise excepted under FATCA.

Withholding under FATCA generally applies to payments of dividends on our common stock. While withholding under FATCA may apply to payments of gross proceeds from a sale or other disposition of our common stock, under proposed U.S. Treasury Regulations, withholding on payments of gross proceeds is not required. Although such regulations are not final, applicable withholding agents may rely on the proposed regulations until final regulations are issued.

If withholding under FATCA is required on any payment related to our common stock, investors not otherwise subject to withholding (or that otherwise would be entitled to a reduced rate of withholding) on such payment may be required to seek a refund or credit from the IRS. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock and the entities through which they hold our common stock.

**U.S. Federal Estate Tax**

Common stock owned or treated as owned by an individual who is a non-U.S. holder (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

**The preceding discussion of material U.S. federal tax considerations is for prospective investors' information only. It is not tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.**

## UNDERWRITING

SVB Leerink LLC and Stifel, Nicolaus & Company, Incorporated are acting as representatives of each of the underwriters named below and as joint bookrunning managers for this offering. Subject to the terms and conditions set forth in the underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

| Underwriter | Number of Shares |
|---|---|
| SVB Leerink LLC | 2,850,000 |
| Stifel, Nicolaus & Company, Incorporated | 2,250,000 |
| Robert W. Baird & Co. | 480,000 |
| H.C. Wainwright & Co. | 300,000 |
| JonesTrading Institutional Services LLC | 120,000 |
| Total | 6,000,000 |

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of the shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

### Discounts and Commissions

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of $0.288 per share. After the initial offering of the shares, the public offering price, concession or any other term of this offering may be changed by the representatives.

The following table shows the initial public offering price, underwriting discounts and commissions and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares of our common stock.

| | | Total | |
|---|---|---|---|
| | Per Share | Without Option | With Option |
| Public offering price | $ 8.00 | $48,000,000 | $55,200,000 |
| Underwriting discounts and commissions | $ 0.48 | $ 2,880,000 | $ 3,312,000 |
| Proceeds, before expenses, to us | $ 7.52 | $45,120,000 | $51,888,000 |

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $295,000. We also have agreed to reimburse the underwriters for up to $25,000 for their FINRA counsel fee. In accordance with FINRA Rule 5110, this reimbursed fee is deemed underwriting compensation for this offering.

**Option to Purchase Additional Shares**

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to 900,000 additional shares at the public offering price, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to the conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

**No Sales of Similar Securities**

We, our executive officers and our directors have agreed not to sell or transfer any common stock or securities convertible into or exchangeable or exercisable for common stock, for 90 days after the date of this prospectus supplement without first obtaining the written consent of SVB Leerink LLC and Stifel, Nicolaus & Company, Incorporated on behalf of the underwriters. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell or contract to sell any common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right or warrant for the sale of any common stock;
- otherwise dispose of or transfer any common stock;
- request or demand that we file a registration statement related to the common stock; or
- enter into any swap or other agreement or any transaction that transfers, in whole or in part, the economic consequence of ownership of any common stock, whether any such swap, agreement or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

The lock-up provisions apply to common stock and to securities convertible into or exchangeable or exercisable for common stock. They also apply to common stock owned now or acquired later by the person executing the lock-up agreement or for which the person executing the lock-up agreement later acquires the power of disposition.

**Nasdaq Capital Market Listing**

Our common stock is listed on the Nasdaq Capital Market under the symbol "AVEO."

**Price Stabilization, Short Positions and Penalty Bids**

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with this offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in this offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares granted to them under

the underwriting agreement described above. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the closing of this offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Capital Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

**Electronic Distribution**

In connection with this offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

**Other Relationships**

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Some of the underwriters and certain of their affiliates may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us and our affiliates, for which they may in the future receive customary fees, commissions and expenses. Silicon Valley Bank, an affiliate of SVB Leerink LLC, has a commercial banking relationship with us, for which it receives customary fees and commissions. We have an at the market equity offering program with SVB Leerink LLC pursuant to a Sales Agreement, dated February 16, 2018, as amended on November 9, 2020.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

**Selling Restrictions**

***European Economic Area***

In relation to each Member State of the European Economic Area (each, a "Relevant State"), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

A. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

B. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters for any such offer; or

C. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

*provided* that no such offer of shares shall require us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129, as amended.

The above selling restriction is in addition to any other selling restrictions set out below.

***Notice to Prospective Investors in the United Kingdom***

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the FSMA,

*provided* that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

***Notice to Prospective Investors in Canada***

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

## LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. Cooley LLP, New York, New York, is counsel for the underwriters in connection with this offering.

## EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2020, and the effectiveness of our internal control over financial reporting as of December 31, 2020, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.aveooncology.com. Our website is not a part of this prospectus supplement and is not incorporated by reference in this prospectus.

This prospectus supplement is part of a registration statement we filed with the SEC. This prospectus supplement and the accompanying prospectus omit some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus supplement and in the accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

## INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus supplement and the accompanying prospectus are continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus supplement and the accompanying prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or the accompanying prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus supplement and the accompanying prospectus incorporate by reference the documents listed below (File No. 001-34655) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (in each case, other than those documents or the portions of those documents not deemed to be filed), until the offering of the securities under the registration statement is terminated or completed:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 filed on March 16, 2021;

- The information included in our definitive proxy statement on Schedule 14A for the 2020 Annual Meeting of Stockholders, filed on April 28, 2020, to the extent incorporated by reference into Part III of the Annual Report on Form 10-K for the fiscal year ended December 31, 2019;
- Current Reports on Form 8-K filed on January 12, 2021 (as amended on February 8, 2021), January 22, 2021, January 29, 2021, February 2, 2021, March 10, 2021 and March 15, 2021; and
- The description of our common stock contained in our registration statement on Form 8-A filed on March 9, 2010, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

AVEO Pharmaceuticals, Inc.
30 Winter Street
Boston, Massachusetts 02108
Attention: Investor Relations
Telephone: (857) 400-0101

Table of Contents

**PROSPECTUS**

# $300,000,000

## Common Stock

## Preferred Stock

## Debt Securities

## Warrants

## Units

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We may offer and sell securities from time to time in one or more offerings of up to $300,000,000 in aggregate offering price. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

Our common stock is listed on The Nasdaq Capital Market under the symbol AVEO.

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**Investing in these securities involves significant risks. See "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.**

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. We urge you to read the entire prospectus, any amendments or supplements, any free writing prospectuses, and any documents incorporated by reference carefully before you make your investment decision.

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**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

**The date of this prospectus is November 18, 2020**

## TABLE OF CONTENTS

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the "SEC," utilizing a "shelf" registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings for an aggregate initial offering price of up to $300,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading "Where You Can Find More Information" beginning on page 2 of this prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or such accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to "AVEO," "the Company," "we," "us" and "our" refer, collectively, to AVEO Pharmaceuticals, Inc., a Delaware corporation, and our subsidiaries.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at http://www.aveooncology.com/. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

## INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-34655) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) between the date of the initial registration statement and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2019, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our definitive proxy statement for the 2020 Annual Meeting of Stockholders;
- Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2020, June 30, 2020 and September 30, 2020;
- Current Reports on Form 8-K filed on January 6, 2020, February 13, 2020, February 19, 2020, May 27, 2020, May 29, 2020 (Item 8.01 only), June 1, 2020, June 10, 2020, June 15, 2020 (Item 8.01 only), June 17, 2020 and September 8, 2020; and
- The description of our common stock contained in our Registration Statement on Form 8-A filed on March 9, 2010, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

AVEO Pharmaceuticals, Inc.
30 Winter Street
Boston, Massachusetts 02108
Attn: Investor Relations
(857) 400-0101

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. These statements are based on current expectations, estimates, forecasts and projections about the industry in which we operate and the beliefs and assumptions of our management. Words such as “expects,” “anticipates,” “targets,” “goals,” “projects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “continues,” and “may” and variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections regarding our future operating results and financial position, our business strategy, our prospects and other objectives of our operations are forward-looking statements. You are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions, including risks related to the impact of the COVID-19 pandemic on our clinical trials and other business operations as well as those inherent in pharmaceutical research and development, such as adverse results in our clinical development activities, our ability to obtain any necessary financing to conduct our planned activities, decisions made by the U.S. Food and Drug Administration and other regulatory authorities with respect to the development and commercialization of our drug candidates, our ability to obtain, maintain and enforce intellectual property rights for our drug candidates, our dependence on our existing and future strategic partners, and other risk factors that are referenced in the section of any accompanying prospectus supplement entitled “Risk Factors.” You should also carefully review the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

## ABOUT AVEO PHARMACEUTICALS, INC.

### Company Overview

We are an oncology-focused biopharmaceutical company committed to delivering medicines that provide a better life for cancer patients. Our strategy is to focus our resources toward development and commercialization of our product candidates in North America while leveraging partnerships to support development and commercialization in other geographies. Our lead candidate is tivozanib (FOTIVDA®), a vascular endothelial growth factor receptor tyrosine kinase inhibitor. FOTIVDA® is approved through our development partner EUSA Pharma (UK) Limited in the European Union, the United Kingdom, Norway, New Zealand and Iceland for the first-line treatment of adult patients with advanced renal cell carcinoma. We are working to develop and commercialize tivozanib in North America as a treatment for renal cell carcinoma and hepatocellular carcinoma. We are also studying tivozanib in combination with immune checkpoint inhibitors for the treatment of renal cell carcinoma and hepatocellular carcinoma in phase 2 clinical trials. We have previously reported promising early clinical data on ficlatuzumab, a hepatocyte growth factor inhibitory antibody, in squamous cell carcinoma of the head and neck, acute myeloid leukemia and pancreatic cancer. Our earlier stage pipeline under development includes AV-203, an anti-ErbB3 monoclonal antibody, as a potential oncology treatment; AV-380, a humanized IgG1 inhibitory monoclonal antibody targeting growth differentiation factor 15, a divergent member of the TGF-ß family, for the potential treatment of cancer cachexia; and AV-353, which targets the Notch 3 pathway, as a potential oncology treatment.

### Company Information

We were incorporated in Delaware on October 19, 2001 as GenPath Pharmaceuticals, Inc. and changed our name to AVEO Pharmaceuticals, Inc. on March 1, 2005. Our principal executive offices are located at 30 Winter Street, Boston, Massachusetts 02108, and our telephone number is (857) 400-0101. Our website address is www.aveooncology.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

## USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include working capital and capital expenditures; research and development expenses, including clinical trial costs; general and administrative expenses; repayment and refinancing of debt; commercialization expenses; and potential business development opportunities. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

## DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. When we refer to "we," "our," "us," "AVEO," and "the Company" in this section, we mean AVEO Pharmaceuticals, Inc., excluding, unless the context otherwise requires or as otherwise expressly stated, our subsidiaries.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. The senior indenture and the subordinated indenture are referred to individually as an indenture and together as the indentures and the senior trustee and the subordinated trustee are referred to individually as a trustee and together as the trustees. This section summarizes some of the provisions of the indentures and is qualified in its entirety by the specific text of the indentures, including definitions of terms used in the indentures. Wherever we refer to particular sections of, or defined terms in, the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

Neither indenture will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

### General

The senior debt securities will constitute our unsecured and unsubordinated general obligations and will rank equally in right of payment with our other unsecured and unsubordinated obligations. The subordinated debt securities will constitute our unsecured and subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading "—Certain Terms of the Subordinated Debt Securities—Subordination." The debt securities will be structurally subordinated to all existing and future indebtedness and other liabilities of our subsidiaries unless such subsidiaries expressly guarantee such debt securities.

The debt securities will be our unsecured obligations. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities of any series being offered, including the following terms:

- the title and type of the debt securities;
- whether the debt securities will be senior or subordinated debt securities, and, with respect to any subordinated debt securities the terms on which they are subordinated;
- the initial aggregate principal amount of the debt securities;

- the price or prices at which we will sell the debt securities;
- the maturity date or dates of the debt securities and the right, if any, to extend such date or dates;
- the rate or rates, if any, at which the debt securities will bear interest, or the method of determining such rate or rates;
- the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the method of determination of such dates;
- the right, if any, to extend the interest payment periods and the duration of that extension;
- the manner of paying principal and interest and the place or places where principal and interest will be payable;
- provisions for a sinking fund, purchase fund or other analogous fund, if any;
- any redemption dates, prices, obligations and restrictions on the debt securities;
- the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable;
- any conversion or exchange features of the debt securities;
- whether the debt securities will be subject to the defeasance provisions in the indenture;
- whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions;
- whether the debt securities will be guaranteed as to payment or performance;
- any special tax implications of the debt securities;
- any events of defaults or covenants in addition to or in lieu of those set forth in the indenture; and
- any other material terms of the debt securities.

When we refer to “principal” in this section with reference to the debt securities, we are also referring to “premium, if any.”

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par which are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

**Certain Terms of the Senior Debt Securities**

*Covenants.* Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries' property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

*Consolidation, Merger and Sale of Assets.* Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust;
- the successor entity assumes our obligations on the senior debt securities and under the senior indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- we have delivered to the senior trustee an officer's certificate and an opinion of counsel, each stating that the consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture, comply with the senior indenture and all conditions precedent provided for in the senior indenture relating to such transaction have been complied with.

The restrictions described in the bullets above do not apply (1) to our consolidation with or merging into one of our affiliates, if our board of directors determines in good faith that the purpose of the consolidation or merger is principally to change our state of incorporation or our form of organization to another form or (2) if we merge with or into a single direct or indirect wholly-owned subsidiary of ours.

The surviving business entity will succeed to, and be substituted for, us under the senior indenture and the senior debt securities and, except in the case of a lease, we shall be released from all obligations under the senior indenture and the senior debt securities.

*No Protection in the Event of a Change in Control.* Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

*Events of Default.* Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture with respect to senior debt securities of each series:

- failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 30 days (or such other period as may be specified for such series);
- failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period);
- default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series;
- certain events of bankruptcy or insolvency, whether or not voluntary; and
- any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

The default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs and is continuing, the entire principal amount of and accrued interest on each series of senior debt securities then outstanding shall automatically become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive a continuing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities (other than any such default in payment resulting solely from an acceleration of the senior debt securities) or in respect of a covenant or provision of the senior indenture which cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto.

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

- the holder gives the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default;
- the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense;
- the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security of any affected series to receive payment of the principal of and interest on such senior debt security in accordance with the terms of such debt security, or to bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

*Satisfaction and Discharge*. We can satisfy and discharge our obligations to holders of any series of debt securities if:

- we have paid or caused to be paid the principal of and interest on all senior debt securities of such series (with certain limited exceptions) when due and payable; or
- we deliver to the senior trustee for cancellation all senior debt securities of such series theretofore authenticated under the senior indenture (with certain limited exceptions); or
- all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year under arrangements satisfactory to the senior trustee) and we deposit in trust an amount of cash or a combination of cash and U.S. government or U.S. government agency obligations (or in the case of senior debt securities denominated in a foreign currency, foreign government securities or foreign government agency securities) sufficient to make interest, principal and any other payments on the debt securities of that series on their various due dates;

and if, in any such case, we also pay or cause to be paid all other sums payable under the senior indenture, as and when the same shall be due and payable and we deliver to the senior trustee an officer’s certificate and an opinion of counsel, each stating that these conditions have been satisfied.

Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or

bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us. Purchasers of the debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

*Defeasance.* Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and covenant defeasance will apply to any series of debt securities issued under the indentures.

*Legal Defeasance*. We can legally release ourselves from any payment or other obligations on the debt securities of any series, called "legal defeasance", if certain conditions are met, including the following:

- We deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series cash or a combination of cash and U.S. government or U.S. government agency obligations (or, in the case of senior debt securities denominated in a foreign currency, foreign government or foreign government agency obligations) that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.
- There is a change in current U.S. federal income tax law or a U.S. Internal Revenue Service ruling that lets us make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due. Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us.
- We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

*Covenant Defeasance*. Without any change in current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the debt securities, called "covenant defeasance". In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

- We must deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series cash or a combination of cash and U.S. government or U.S. government agency obligations (or, in the case of senior debt securities denominated in a foreign currency, foreign government or foreign government agency obligations) that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.
- We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due.

If we accomplish covenant defeasance, you could still look to us for repayment of the debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

*Modification and Waiver.* We and the trustee may amend or supplement the senior indenture or the senior debt securities of any series without the consent of any holder:

- to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;
- to evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture or to otherwise comply with the covenant relating to mergers, consolidations and sales of assets;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the senior indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default;
- to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement;
- to provide for or add guarantors with respect to the senior debt securities of any series;
- to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture;
- to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;
- to add to, change or eliminate any of the provisions of the senior indenture in respect of one or more series of senior debt securities, provided that any such addition, change or elimination shall (a) neither (1) apply to any senior debt security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (2) modify the rights of the holder of any such senior debt security with respect to such provision or (b) become effective only when there is no senior debt security described in clause (a)(1) outstanding;
- to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding; or
- to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of each series affected by the amendment or modification (voting as separate series); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

- extends the final maturity of any senior debt securities of such series;
- reduces the principal amount of any senior debt securities of such series;
- reduces the rate, or extends the time for payment of, interest on any senior debt securities of such series;
- reduces the amount payable upon the redemption of any senior debt securities of such series;
- changes the currency of payment of principal of or interest on any senior debt securities of such series;

- reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy;
- waives a continuing default in the payment of principal of or interest on the senior debt securities (other than any such default in payment resulting solely from an acceleration of the senior debt securities);
- changes the provisions relating to the waiver of past defaults or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor;
- modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification;
- adversely affects the right to convert or exchange senior debt securities into common stock or other property in accordance with the terms of the senior debt securities; or
- reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or modifies, amends or waives certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

*No Personal Liability of Incorporators, Stockholders, Officers, Directors.* The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

*Concerning the Trustee.* The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

*Unclaimed Funds.* All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two

years after the date upon which such amounts became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

*Governing Law.* The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

**Certain Terms of the Subordinated Debt Securities**

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

*Subordination.* The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term “senior indebtedness” of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

- all of the indebtedness of that person for money borrowed;
- all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;
- all of the lease obligations that are capitalized on the books of that person in accordance with generally accepted accounting principles;
- all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and
- all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated indenture.

## DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is intended as a summary only and therefore is not a complete description of our capital stock. This description is based upon, and is qualified by reference to, our restated certificate of incorporation, as amended, or our certificate of incorporation, our second amended and restated by-laws, or our by-laws, and applicable provisions of Delaware corporate law, or the DGCL. You should read our certificate of incorporation, certificate of amendment to our certificate of incorporation and by-laws, which are filed as exhibits to the registration statement of which this prospectus forms a part, for the provisions that are important to you.

Our authorized capital stock consists of 50,000,000 shares of common stock and 5,000,000 shares of preferred stock.

### Common Stock

*Annual Meeting.* Annual meetings of our stockholders are held on the date designated in accordance with our by-laws. Written notice must be mailed to each stockholder entitled to vote not less than ten nor more than 60 days before the date of the meeting. The presence in person or by proxy of the holders of record of a majority in voting power of our issued and outstanding shares entitled to vote at such meeting constitutes a quorum for the transaction of business at meetings of the stockholders. Special meetings of the stockholders, unless otherwise prescribed by statute or by our certificate of incorporation, may be called for any purpose or purposes, by the chairman of our board of directors, our board of directors, or our chief executive officer. Except as may be otherwise provided by applicable law, our certificate of incorporation or our by-laws, all elections, other than elections of directors, and all other questions shall be decided by the affirmative vote of the holders of a majority in voting power of the shares of our stock which are present in person or by proxy and voting affirmatively or negatively on such matter. Except as may be provided by applicable law, our certificate of incorporation or our by-laws, each director shall be elected by the vote of the plurality of the votes cast by the stockholders entitled to vote with respect to that director's election at any meeting for the election of directors at which a quorum is present.

*Voting Rights*. Each holder of common stock is entitled to one vote for each share held of record on all matters to be voted upon by stockholders.

*Dividends*. Subject to the rights, powers and preferences of any outstanding preferred stock, and except as provided by law or in our certificate of incorporation, dividends may be declared and paid or set aside for payment on the common stock out of legally available assets or funds when and as declared by the board of directors.

*Liquidation, Dissolution and Winding Up*. Subject to the rights, powers and preferences of any outstanding preferred stock, in the event of our liquidation, dissolution or winding up, our net assets will be distributed pro rata to the holders of our common stock.

*Other Rights*. Holders of the common stock have no right to:

- convert the stock into any other security;
- have the stock redeemed;
- purchase additional stock; or
- maintain their proportionate ownership interest.

The common stock does not have cumulative voting rights. Holders of shares of the common stock are not required to make additional capital contributions. Outstanding shares of common stock are non-assessable. Holders of shares of the common stock are not, and will not be, subject to any liability as stockholders.

*Transfer Agent and Registrar*. Computershare Trust Company, N.A. is transfer agent and registrar for the common stock.

Our common stock is traded on the Nasdaq Capital Market under the symbol “AVEO”.

**Preferred Stock**

We are authorized to issue “blank check” preferred stock, which may be issued in one or more series upon authorization of our board of directors. Our board of directors is authorized to fix the designations, powers, preferences and the relative, participating, optional or other special rights and any qualifications, limitations and restrictions of the shares of each series of preferred stock. The authorized shares of our preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. Under our certificate of incorporation, the number of shares of authorized preferred stock may be increased or decreased (but not below the number of shares outstanding) by the affirmative vote of the holders of a majority of the voting power of the capital stock entitled to vote thereon, voting as a single class. If the approval of our stockholders is not required for the issuance of shares of our preferred stock, our board may determine not to seek stockholder approval. The specific terms of any series of preferred stock offered pursuant to this prospectus will be described in the prospectus supplement relating to that series of preferred stock.

A series of our preferred stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue preferred shares based upon its judgment as to the best interests of our stockholders. Our directors, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt through which an acquirer may be able to change the composition of our board of directors, including a tender offer or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of the stock.

The preferred stock has the terms described below unless otherwise provided in the prospectus supplement relating to a particular series of preferred stock. You should read the prospectus supplement relating to the particular series of preferred stock being offered for specific terms, including:

- the designation and stated value per share of the preferred stock and the number of shares offered;
- the amount of liquidation preference per share;
- the price at which the preferred stock will be issued;
- the dividend rate, or method of calculation of dividends, the dates on which dividends will be payable, whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will commence to accumulate;
- any redemption or sinking fund provisions;
- if other than the currency of the United States, the currency or currencies including composite currencies in which the preferred stock is denominated and/or in which payments will or may be payable;
- any conversion provisions; and
- any other rights, preferences, privileges, limitations and restrictions on the preferred stock.

The preferred stock will, when issued, be fully paid and non-assessable. Unless otherwise specified in the prospectus supplement, each series of preferred stock will rank equally as to dividends and liquidation rights in all respects with each other series of preferred stock. The rights of holders of shares of each series of preferred stock will be subordinate to those of our general creditors.

We may, at our option, with respect to any series of preferred stock, elect to offer fractional interests in shares of preferred stock, and provide for the issuance of depositary receipts representing depositary shares, each of which will represent a fractional interest in a share of the series of preferred stock. The fractional interest will be specified in the prospectus supplement relating to a particular series of preferred stock.

*Rank*. Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up of our affairs, rank:

- senior to our common stock and to all equity securities ranking junior to such preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs;
- on a parity with all equity securities issued by us, the terms of which specifically provide that such equity securities rank on a parity with the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs; and
- junior to all equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs.

The term “equity securities” does not include convertible debt securities.

*Dividends*. Holders of the preferred stock of each series will be entitled to receive, when, as and if declared by our board of directors, cash dividends at such rates and on such dates described in the prospectus supplement. Different series of preferred stock may be entitled to dividends at different rates or based on different methods of calculation. The dividend rate may be fixed or variable or both. Dividends will be payable to the holders of record as they appear on our stock books on record dates fixed by our board of directors, as specified in the applicable prospectus supplement.

Dividends on any series of preferred stock may be cumulative or noncumulative, as described in the applicable prospectus supplement. If our board of directors does not declare a dividend payable on a dividend payment date on any series of noncumulative preferred stock, then the holders of that noncumulative preferred stock will have no right to receive a dividend for that dividend payment date, and we will have no obligation to pay the dividend accrued for that period, whether or not dividends on that series are declared payable on any future dividend payment dates. Dividends on any series of cumulative preferred stock will accrue from the date we initially issue shares of such series or such other date specified in the applicable prospectus supplement.

No dividends may be declared or paid or funds set apart for the payment of any dividends on any parity securities unless full dividends have been paid or set apart for payment on the preferred stock. If full dividends are not paid, the preferred stock will share dividends pro rata with the parity securities.

No dividends may be declared or paid or funds set apart for the payment of dividends on any junior securities unless full dividends for all dividend periods terminating on or prior to the date of the declaration or payment will have been paid or declared and a sum sufficient for the payment set apart for payment on the preferred stock.

*Liquidation Preference*. Upon any voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before we make any distribution or payment to the holders of any common stock or any other class or series of our capital stock ranking junior to the preferred stock in the distribution of assets upon any liquidation, dissolution or winding up of our affairs, the holders of each series of preferred stock shall be entitled to receive out of assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference per share set forth in the prospectus supplement, plus any accrued and unpaid dividends thereon. Such dividends will not include any accumulation in respect of unpaid noncumulative dividends for prior dividend periods. Unless otherwise specified in the prospectus supplement, after payment of

the full amount of their liquidating distributions, the holders of preferred stock will have no right or claim to any of our remaining assets. Upon any such voluntary or involuntary liquidation, dissolution or winding up, if our available assets are insufficient to pay the amount of the liquidating distributions on all outstanding preferred stock and the corresponding amounts payable on all other classes or series of our capital stock ranking on parity with the preferred stock and all other such classes or series of shares of capital stock ranking on parity with the preferred stock in the distribution of assets, then the holders of the preferred stock and all other such classes or series of capital stock will share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be entitled.

Upon any such liquidation, dissolution or winding up and if we have made liquidating distributions in full to all holders of preferred stock, we will distribute our remaining assets among the holders of any other classes or series of capital stock ranking junior to the preferred stock according to their respective rights and preferences and, in each case, according to their respective number of shares. For such purposes, our consolidation or merger with or into any other corporation, trust or entity, or the sale, lease or conveyance of all or substantially all of our property or assets will not be deemed to constitute a liquidation, dissolution or winding up of our affairs.

*Redemption*. If so provided in the applicable prospectus supplement, the preferred stock will be subject to mandatory redemption or redemption at our option, as a whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such prospectus supplement.

The prospectus supplement relating to a series of preferred stock that is subject to mandatory redemption will specify the number of shares of preferred stock that shall be redeemed by us in each year commencing after a date to be specified, at a redemption price per share to be specified, together with an amount equal to all accrued and unpaid dividends thereon to the date of redemption. Unless the shares have a cumulative dividend, such accrued dividends will not include any accumulation in respect of unpaid dividends for prior dividend periods. We may pay the redemption price in cash or other property, as specified in the applicable prospectus supplement. If the redemption price for preferred stock of any series is payable only from the net proceeds of the issuance of shares of our capital stock, the terms of such preferred stock may provide that, if no such shares of our capital stock shall have been issued or to the extent the net proceeds from any issuance are insufficient to pay in full the aggregate redemption price then due, such preferred stock shall automatically and mandatorily be converted into the applicable shares of our capital stock pursuant to conversion provisions specified in the applicable prospectus supplement. Notwithstanding the foregoing, we will not redeem any preferred stock of a series unless:

- if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on the preferred stock for all past dividend periods and the then current dividend period; or
- if such series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends for the then current dividend period.

In addition, we will not acquire any preferred stock of a series unless:

- if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on all outstanding shares of such series of preferred stock for all past dividend periods and the then current dividend period; or
- if that series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends on the preferred stock of such series for the then current dividend period.

However, at any time we may purchase or acquire preferred stock of that series (1) pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding preferred stock of such series or (2) by

conversion into or exchange for shares of our capital stock ranking junior to the preferred stock of such series as to dividends and upon liquidation.

If fewer than all of the outstanding shares of preferred stock of any series are to be redeemed, we will determine the number of shares that may be redeemed pro rata from the holders of record of such shares in proportion to the number of such shares held or for which redemption is requested by such holder or by any other equitable manner that we determine. Such determination will reflect adjustments to avoid redemption of fractional shares.

Unless otherwise specified in the prospectus supplement, we will mail notice of redemption at least 30 days but not more than 60 days before the redemption date to each holder of record of preferred stock to be redeemed at the address shown on our stock transfer books. Each notice shall state:

- the redemption date;
- the number of shares and series of preferred stock to be redeemed;
- the redemption price;
- the place or places where certificates for such preferred stock are to be surrendered for payment of the redemption price;
- that dividends on the shares to be redeemed will cease to accrue on such redemption date;
- the date on which the holder's conversion rights, if any, as to such shares shall terminate; and
- the specific number of shares to be redeemed from each such holder if fewer than all the shares of any series are to be redeemed.

If notice of redemption has been given and we have set aside the funds necessary for such redemption in trust for the benefit of the holders of any shares called for redemption, then from and after the redemption date, dividends will cease to accrue on such shares, and all rights of the holders of such shares will terminate, except the right to receive the redemption price.

*Voting Rights*. Holders of preferred stock will not have any voting rights, except as required by law or as indicated in the applicable prospectus supplement.

Unless otherwise provided for under the terms of any series of preferred stock, no consent or vote of the holders of shares of preferred stock or any series thereof shall be required for any amendment to our certificate of incorporation that would increase the number of authorized shares of preferred stock or the number of authorized shares of any series thereof or decrease the number of authorized shares of preferred stock or the number of authorized shares of any series thereof (but not below the number of authorized shares of preferred stock or such series, as the case may be, then outstanding).

*Conversion Rights*. The terms and conditions, if any, upon which any series of preferred stock is convertible into our common stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include the number of shares of common stock into which the shares of preferred stock are convertible, the conversion price, rate or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at our option or at the option of the holders of the preferred stock, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption.

*Transfer Agent and Registrar*. The transfer agent and registrar for the preferred stock will be set forth in the applicable prospectus supplement.

**Effects of Authorized by Unissued Stock**

Authorized but unissued shares of our common stock and preferred stock are available for future issuance without shareholder approval, subject to any limitations imposed by the listing standards of the Nasdaq Capital

Market. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefits. The existence of authorized but unissued and unreserved common stock and preferred stock could make more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that such holder will receive dividend payments and payments upon liquidation.

**Provisions of Our Certificate of Incorporation and By-laws and Delaware Law That May Have Anti-Takeover Effects**

*Board of Directors*. We do not have a classified board of directors. All of our directors are elected annually. The number of directors comprising our board of directors is fixed from time to time by the board of directors.

*Removal of Directors by Stockholders*. Members of our board of directors may be removed from office at any time with or without cause by the affirmative vote of the holders of a majority of the outstanding shares entitled to vote at an election of directors.

*Stockholder Nomination of Directors*. Our by-laws provide that a stockholder must notify us in writing of any stockholder nomination of a director not earlier than the close of business on the 120th day, and not later than the close of business on the 90th day prior to the first anniversary of the preceding year's annual meeting; provided, that, in the case of the annual meeting of stockholders, if the date of the annual meeting is more than 20 days before or more than 60 days after such anniversary date, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the 120th day prior to the date of such annual meeting and not later than the close of business on the later of (x) the 90th day prior to such annual meeting and (y) the 10th day following the day on which public announcement of the date of such annual meeting is first made by us. Our by-laws also provide that, subject to certain limitations, if a stockholder (or a qualified representative of the stockholder) does not appear at a meeting of stockholders to present a nomination, such nomination shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by us.

*No Action By Written Consent*. Our certificate of incorporation and our by-laws provide that our stockholders may not act by written consent and may only act at duly called meetings of stockholders.

*Delaware Business Combination Statute*. Section 203 of the General Corporation Law of the State of Delaware, which we refer to as the DGCL, is applicable to us. Section 203 of the DGCL restricts some types of transactions and business combinations between a corporation and a 15% stockholder. A 15% stockholder is generally considered by Section 203 to be a person owning 15% or more of the corporation's outstanding voting stock. Section 203 refers to a 15% stockholder as an "interested stockholder." Section 203 restricts these transactions for a period of three years from the date the stockholder acquires 15% or more of our outstanding voting stock. With some exceptions, unless the transaction is approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation, Section 203 prohibits significant business transactions such as:

- a merger with, disposition of significant assets to or receipt of disproportionate financial benefits by the interested stockholder, and
- any other transaction that would increase the interested stockholder's proportionate ownership of any class or series of our capital stock.

The shares held by the interested stockholder are not counted as outstanding when calculating the two-thirds of the outstanding voting stock needed for approval.

The prohibition against these transactions does not apply if:

- prior to the time that any stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction in which such stockholder acquired 15% or more of our outstanding voting stock, or
- the interested stockholder owns at least 85% of our outstanding voting stock as a result of a transaction in which such stockholder acquired 15% or more of our outstanding voting stock. Shares held by persons who are both directors and officers or by some types of employee stock plans are not counted as outstanding when making this calculation.

*Super-Majority Voting.* The DGCL provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or by-laws, unless a corporation's certificate of incorporation or by-laws, as the case may be, require a greater percentage. Our by-laws may be amended or repealed by a majority vote of our board of directors or the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation described in this paragraph.

**Directors' Liability**

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the DGCL. Our certificate of incorporation provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of their duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for voting or assenting to unlawful payments of dividends or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act or failure to act, or any cause of action, suit or claim that would accrue or arise prior to any amendment or repeal or addition of an inconsistent provision. If the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the DGCL.

## DESCRIPTION OF WARRANTS

We may issue warrants to purchase common stock, preferred stock or debt securities. We may offer warrants separately or together with one or more additional warrants, common stock, preferred stock or debt securities, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the accompanying prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the preferred stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, preferred stock or common stock will be separately transferable;
- the number of shares of common stock or preferred stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

## DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities that may be offered under this prospectus, in any combination. The following, together with the additional information we may include in the applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms summarized below will apply generally to any units we may offer, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately at any time, or at any time before a specified date.

Any applicable prospectus supplement will describe:

- the material terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any material provisions relating to the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any material provisions of the governing unit agreement that differ from those described above.

## FORMS OF SECURITIES

Each debt security, unit and warrant will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Unless the applicable prospectus supplement provides otherwise, certificated securities in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the debt securities, units or warrants represented by these global securities. The depositary maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

### Global Securities

We may issue the debt securities, units and warrants in the form of one or more fully registered global securities that will be deposited with a depositary or its nominee identified in the applicable prospectus supplement and registered in the name of that depositary or nominee. In those cases, one or more global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a global security may not be transferred except as a whole by and among the depositary for the global security, the nominees of the depositary or any successors of the depositary or those nominees.

If not described below, any specific terms of the depositary arrangement with respect to any securities to be represented by a global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in global securities.

So long as the depositary, or its nominee, is the registered owner of a global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the global security for all purposes under the applicable indenture, warrant agreement or unit agreement. Except as described below, owners of beneficial interests in a global security will not be entitled to have the securities represented by the global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture, unit agreement or warrant agreement. Accordingly, each person owning a beneficial interest in a global security must rely on the procedures of the depositary for that global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture, unit agreement or warrant agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a global security desires to give or take any action that a holder is entitled to give or take

under the applicable indenture, unit agreement or warrant agreement, the depositary for the global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities, and any payments to holders with respect to warrants or units, represented by a global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the global security. None of us, or any trustee, warrant agent, unit agent or other agent of ours, or any agent of any trustee, warrant agent or unit agent will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a global security, upon receipt of any payment to holders of principal, premium, interest or other distribution of underlying securities or other property on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of the securities represented by a global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the global security that had been held by the depositary. Any securities issued in definitive form in exchange for a global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the global security that had been held by the depositary.

## PLAN OF DISTRIBUTION

We may sell securities:

- through underwriters;
- through dealers;
- through agents;
- directly to purchasers; or
- through a combination of any of these methods of sale.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act, and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price and the proceeds we will receive from the sale of the securities;
- any discounts and commissions to be allowed or re-allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or re-allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Remarketing firms, agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallot in connection with the offering, creating a short position for their own accounts. In addition, to cover overallotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise or the securities are sold by us to an underwriter in a firm commitment underwritten offering. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

## LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, the validity of the securities in respect of which this prospectus is being delivered will be passed upon by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts.

## EXPERTS

The consolidated financial statements of AVEO Pharmaceuticals, Inc. appearing in AVEO Pharmaceuticals, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2019 and the effectiveness of AVEO Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2019 have been audited by Ernst & Young LLP, an independent registered public accounting firm, as set forth in its reports thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about AVEO Pharmaceuticals, Inc.'s ability to continue as a going concern as described in Note 1 to the consolidated financial statements), and incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

**6,000,000 Shares**


**Common Stock**

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**PROSPECTUS SUPPLEMENT**

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*Joint Bookrunning Managers*

**SVB Leerink**

**Stifel**

*Lead Manager*

**Baird**

*Co-Managers*

**H.C. Wainwright & Co.**

**JonesTrading**

**March 23, 2021**