SECURITIES & EXCHANGE COMMISSION EDGAR FILING

Hepion Pharmaceuticals, Inc.

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Registration No.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Hepion Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**46-2783806**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

399 Thornall Street, First Floor
Edison, New Jersey 08837
(Address of principal executive offices) (Zip Code)

2013 Equity Incentive Plan, as amended
(Full title of the plans)

Robert Foster
Chief Executive Officer
399 Thornall Street, First Floor
Edison, NJ 08837
(Name and address of agent for service)

(732) 902-4000
(Telephone number, including area code, of agent for service)

With a copy to:
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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ❑	Accelerated filer ❑	Non-accelerated filer x	Smaller reporting company x Emerging growth company ❑

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ❑

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	**Amount to be Registered (1)**	**Proposed Maximum Offering Price Per Share**	**Proposed Maximum Aggregate Offering Price**	**Amount of Registration Fee**
Common Stock, $0.0001 par value	1,477,000	$ 2.41(2)	$ 3,559,570	$ 389
Common Stock, $0.0001 par value to be issued under the 2013 Equity Incentive Plan	985,764	$ 2.34(3)	$ 2,306,688	$ 252
TOTAL	2,462,764		**$** 5,866,258	**$** 641

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Registrant's 2013 Equity Incentive Plan, as amended (the "Plan"), by reason of any stock dividend, stock split, recapitalization or other similar transaction that increases the number of the outstanding shares of the Registrant's common stock.

(2) Estimated in accordance with Rule 457(h) solely for the purpose of calculating the registration fee. The price of $2.41 per share represents the weighted average of the exercise prices for outstanding options as of January 14, 2021 under the Plan.

(3) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) of the Securities Act of 1933, as amended, using the last sale price reported on The Nasdaq Capital Market on January 14, 2021.

EXPLANATORY NOTE

This Registration Statement contains two parts. The first part contains a reoffer prospectus pursuant to Form S-3 (in accordance with Section C of the General Instructions to the Form S-8), which covers reoffers and resales of "restricted securities" and/or "control securities" (as such terms are defined in Section C of the General Instructions to Form S-8). This reoffer prospectus relates to offers and resales by directors and executive officers of shares of common stock, par value $0.0001 per share, issuable upon the exercise of options granted by Hepion Pharmaceuticals, Inc. (the "Company") pursuant to the Company's 2013 Equity Incentive Plan, as amended (the "Plan"). This reoffer prospectus may be used by the selling stockholders for reoffers and resales on a continuous or delayed basis in the future of up to 1,477,000 shares of common stock issued pursuant to the Plan.

The second part of this Registration Statement contains information required in the Registration Statement pursuant to Part II of Form S-8 pursuant to which the Company is registering an additional 985,764 shares of common stock authorized for issuance under the Plan.

A registration statement on Form S-8 (File No. 333-203867) was filed with the Securities and Exchange Commission (the "SEC") on May 4, 2015 , covering the registration of 11,607 shares of common stock authorized for issuance under the Plan. In addition, a registration statement on Form S-8 (File No. 333-215662) was filed with the SEC on January 23, 2017 covering the registration of an additional 2,143 shares of common stock under the Plan. Furthermore, a registration statement on Form S-8 (File No. 333-234278) was filed with the SEC on October 21, 2019 covering the registration of an additional 26,786 shares of common stock. Pursuant to such Instruction E, the contents of the registration statements on Forms S-8 (File No. 333-203867), (File No. 333-215662) and (File No. 333-234278) are incorporated herein by reference except for Item 8, Exhibits, with respect to which the Exhibit Index immediately preceding the exhibits attached hereto is incorporated herein by reference. The current registration of 2,462,764 shares will increase the number of shares of common stock registered under the Plan from 37,236 shares to 2,500,000 shares.

REOFFER PROSPECTUS

1,477,000 Shares of Common Stock

This reoffer prospectus relates to 1,477,000 shares of our common stock, par value $0.0001 per share, that may be reoffered or resold from time to time by certain selling stockholders described in this reoffer prospectus, who are executive officers and directors and that are issuable upon exercise of options granted pursuant to our 2013 Equity Incentive Plan, as amended (the "Plan").

The selling stockholders may sell the shares of our common stock from time to time as they may determine through public or private transactions or through other means described in the section entitled "Plan of Distribution" at prevailing market prices on The Nasdaq Capital Market, at prices different than prevailing market prices, or at privately negotiated prices. The selling stockholders may sell the shares of our common stock directly, or may sell them through brokers or dealers. The selling stockholders are not required to sell any shares of our common stock and there is no assurance that any of the selling stockholders will sell any or all of the shares of our common stock covered by this reoffer prospectus.

We will not receive any of the proceeds from the sale of these shares of our common stock by the selling stockholders. Upon exercise of the options, however, we will receive proceeds from the exercise of such options. We have agreed to pay all expenses relating to registering these shares of our common stock. The selling stockholders will pay any brokerage commissions and/or similar charges incurred in connection with the sale of these shares of our common stock.

Our common stock is currently listed on The Nasdaq Capital Market, or Nasdaq, under the symbol "HEPA." On January 14, 2021, the last sale price of our Common Stock reported on Nasdaq was $2.34 per share.

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 13 of this reoffer prospectus, and under similar headings in the documents that are incorporated by reference into this reoffer prospectus and the accompanying prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION ("THE SEC") NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES, OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS REOFFER PROSPECTUS AND THE ACCOMPANYING PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this reoffer prospectus is January 15, 2021.

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REOFFER PROSPECTUS

ABOUT THIS REOFFER PROSPECTUS

This reoffer prospectus is part of a registration statement that we filed with the SEC. Before you invest, you should carefully read this reoffer prospectus, all information incorporated by reference herein and the additional information described under “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.” These documents contain information you should consider when making your investment decision. To the extent that any statement that we make in this reoffer prospectus is inconsistent with statements made in any documents incorporated by reference, the statements made in this reoffer prospectus will be deemed to modify or supersede those made in such documents incorporated by reference; however, if any statement in one of these documents is inconsistent with a statement in another document having a later date and that is incorporated by reference herein, the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to the registration statement or to any document that is incorporated by reference in this reoffer prospectus 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 or incorporated by reference in this reoffer prospectus and the documents incorporated by reference herein. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this reoffer prospectus, the documents incorporated by reference herein and any free writing prospectus we provide you is accurate only as of the date on those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this reoffer prospectus, including the documents incorporated by reference herein, when making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections of this reoffer prospectus entitled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.” The distribution of this reoffer 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 reoffer prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this reoffer prospectus outside the U.S. This reoffer prospectus does 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 reoffer prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise indicated, information contained in this reoffer prospectus or the documents incorporated by reference herein concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” in this reoffer prospectus, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, as filed with the SEC on May 14, 2020, as amended on June 15, 2020, and as amended by our Quarterly Reports on Form 10-Q, which are incorporated by reference into this reoffer prospectus. These and other important factors could cause our future performance to differ materially from our assumptions and estimates. See the section of this reoffer prospectus entitled “Cautionary Note Regarding Forward-Looking Statements.”

All trademarks, trade names and service marks appearing in this reoffer prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this reoffer prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

REOFFER PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus and the accompanying prospectus carefully, including

the "Risk Factors" section contained in this prospectus and our consolidated financial statements and the related notes and the other documents incorporated by reference into this prospectus and in the accompanying prospectus. Unless we have indicated otherwise or the context otherwise requires, references in this prospectus or the documents incorporated by reference herein and therein to the "Company," "we," "us" and "our" refer to Hepion Pharmaceuticals, Inc. and its subsidiaries.

Business Overview

We are a biopharmaceutical company headquartered in Edison, New Jersey, focused on the development of pleiotropic drug therapy for treatment of chronic liver disease. This therapeutic approach targets fibrosis and hepatocellular carcinoma ("HCC") associated with non-alcoholic steatohepatitis ("NASH"), viral hepatitis, and other liver diseases. Our cyclophilin inhibitor, CRV431, is being developed to offer benefits to address these multiple complex pathologies. CRV431 is a cyclophilin inhibitor that targets multiple biochemical pathways involved in the progression of liver disease. Preclinical studies with CRV431 in NASH models demonstrated consistent reductions in liver inflammation, fibrosis, and cancerous tumors. CRV431 additionally shows antiviral activity towards hepatitis B, C, and D viruses which also trigger liver disease.

We have completed a Phase 1 program with CRV431 demonstrating safety, tolerability, and pharmacokinetics ("PK"). Our program consisted of three different clinical trials with CRV431, administered orally once daily, that included: 1) a Single Ascending Dose ("SAD") study; 2) a Multiple Ascending Dose ("MAD") study; and 3) a Drug-Drug Interaction ("DDI") study. The SAD, MAD, and DDI studies were comprised of 32, 25, and 18 healthy subjects, respectively. Additionally, in the SAD study, 8 of the 32 subjects received placebo (24 received CRV431).

CRV431 appeared to be well-tolerated in the Phase 1 program, and there were no serious adverse effects ("SAEs"). The few adverse effects ("AEs") observed were mild to moderate and mostly unrelated to study drug. The PK profile of each subject was characterized and CRV431 blood exposures were similar to those needed to elicit efficacy in the preclinical studies.

We are currently conducting a Phase 2a study in NASH patients with fibrosis scores of F2 and F3. The first dosing cohort of 75 mg CRV431 once daily orally is underway.

NASH is the form of liver disease that is triggered by what has come to be known as the "Western diet," characterized especially by high-fat, high-sugar, and processed foods. Among the effects of a prolonged Western diet is fat accumulation in liver cells (steatosis) which is described as non-alcoholic fatty liver disease ("NAFLD") and can predispose cells to injury. NAFLD may evolve into NASH when the fatty liver begins to progress through stages of cell injury, inflammation, fibrosis, and carcinogenesis. People who develop NASH often have additional predisposing conditions such as diabetes and hypertension, but the exact biochemical events that trigger and maintain the progression are not well known. Many people in the early stages of disease do not have significant symptoms and therefore do not know that they have it. NASH becomes evident and a major concern when the liver becomes fibrotic and puts the individual at increased risk of developing cirrhosis and other complications. Individuals with advanced liver fibrosis have significantly higher risk of developing liver cancer, although cancer may also arise in some patients before significant hepatitis or fibrosis. NASH is increasing worldwide at an alarming rate due to the spread of the Western diet, obesity, and other related conditions. Approximately 4-5% of the global population is estimated to have NASH, and that proportion is higher in the USA. It is predicted that NASH will become the leading reason for individuals requiring a liver transplant in the USA as early as 2020. Considering the serious outcomes linked to advancing NASH, the economic and social burden of the disease is enormous. There are no simple blood tests to diagnose or track the progression of NASH, and no drugs are approved to specifically treat the disease.

HCC is the major type of liver cancer, accounting for 85-90% of all cases. NASH, hepatitis virus infection, and alcohol consumption all are major causes of HCC. Globally, over 700,000 people die each year from liver cancer which is second only to lung cancer among all cancer-related deaths. The high mortality is due to the fact that only around half of all people who develop HCC (in developed countries) receive the diagnosis early enough to have an opportunity for therapeutic intervention. Additionally, recurrence rates are high, and current treatment options remain limited.

HCC is a type of cancer in which the tissue microenvironment plays a major role in its development. In most cases HCC is preceded by significant, long-term damage to liver cells, inflammation and fibrosis. One-third of people with cirrhosis, a very advanced stage of liver disease, will eventually progress to HCC. The chronic injury to the liver leads to many genetic mutations that eventually lead to transformation of cells and formation of tumors. The noxious tissue microenvironment also promotes cancer by altering the function of immune cells and endothelial cells which form tumor-supporting blood vessels. These various events underscore the importance of halting liver injury and scarring as early and effectively as possible to prevent cancer development.

Viral hepatitis may be linked to one or more viruses including hepatitis A, B, C, D, or E. Hepatitis B virus ("HBV") is one of many hepatitis viruses that selectively infect human liver cells and can establish persistent infections under certain conditions. Chronic infections, especially by HBV, HCV, and HDV, cause progressive liver inflammation, fibrosis, cirrhosis, and cancer. Collectively, these infections represent one of the 3 major triggers of progressive liver disease (NAFLD/NASH and alcohol being the others).

An HBV vaccine is available that, if administered *prior to* HBV infection, assists the body in neutralizing the virus and blocking infection. However, vaccination is not efficacious for people who are already infected with HBV, and the vaccine has not been historically available to everyone. As a result, an estimated 240 million people worldwide have chronic HBV infection. Anti-HBV medications are used widely by chronically infected individuals but usually are only effective in decreasing viral replication and viremia (virus in the blood), and NOT in eradicating HBV from the liver. This is because HBV, unlike HCV, has evolved clever ways of persisting in liver cells and evading the immune system. Thus, despite vaccines and anti-viral medications, chronic HBV infection remains a huge global health problem. Chronic HBV infection is the leading cause of hepatocellular carcinoma, which kills around 350,000 people per year. A similar number of people die each year from cirrhosis and other complications arising from HBV.

We are developing CRV431 as our lead molecule. CRV431 is a cyclophilin inhibitor that targets specific isomerases that play an important role in protein folding in health and in disease. To date, *in vitro* and/or *in vivo* studies have demonstrated reductions in HBV DNA, HBsAg, HBeAg, inhibition of virus uptake (NTCP transport inhibition), and stimulation of innate immunity. Importantly, *in vivo* studies in a NASH model of fibrosis and HCC have repeatedly demonstrated CRV431 reduces fibrosis scores and overall liver tumor burden. Hence, CRV431 is a pleiotropic molecule that may not only treat liver disease but may also serve to reduce important risk factors (e.g., HBV) for developing the disease.

CRV431

CRV431 is a novel drug candidate designed to target a class of proteins called cyclophilins, of which there are many isoforms. Cyclophilins play a role in health and in the pathogenesis of certain diseases and are known as peptidyl prolyl isomerases. The isomerase activity plays an important role in several biological

processes including, for example, folding of proteins to confer certain 3-dimensional configurations. Additionally, specific host cyclophilins (e.g., cyclophilin A, B, C, D) play a role in the pathogenesis of many diseases, including liver disease and viral hepatitis.

Cyclophilins are pleiotropic enzymes that play a role in injury and steatosis through mechanisms including cell death occurring through mitochondrial pore permeability (cyclophilin D). Inhibition of cyclophilin D, therefore, may play an important role in protection from cell death. Cyclophilin A binding to CD147 is known to play a role in inflammation, cyclophilin B plays a role in fibrosis through collagen production, and cyclophilins also play a role in cirrhosis and cancer (e.g., cell proliferation and metastasis). Cyclophilin inhibition with CRV431, therefore, may play an important role in reducing liver disease.

To date, we have completed eight separate preclinical animal efficacy studies of CRV431 to assess antifibrotic activity. Each of these eight studies were conducted by independent laboratory collaborations at The Scripps Research Institute (San Diego, CA), SMC Corporation (Tokyo, Japan), and Physiogenex S.A.S. (France), Each of these studies demonstrated consistent and significant reductions in fibrosis in mice and rats. CRV431 was also tested in Precision Cut Liver Slices and in Precision Cut Lung Slices in *ex plants* from human donors. Again, CRV431 demonstrated an antifibrotic effect that was consistent with the animal study findings. These studies provide support of advancing CRV431 into clinical trials for NASH, and potentially additional indications where fibrosis plays a role.

Important risk factors for development of liver disease include viral hepatitis (HBV, HCV, HDV), alcohol, and non-alcoholic fatty liver disease and the more aggressive form called non-alcoholic steatohepatitis. The life cycle of certain viruses, including for example, HBV, HIV, and hepatitis C virus (“HCV”) infections are dependent on host proteins (cyclophilins) for the role they play in the virus life cycle and propagation of the virus. CRV431 has been developed to inhibit the role of host cyclophilins and therefore interfere in viral propagation. CRV431 does not directly target the virus and, as such, should be less susceptible to drug resistance, borne from viral mutations.

Data in various cell lines of either transfected or infected HBV demonstrates nanomolar efficacy (EC50 values) and micromolar toxicity (CC50 values). The selective index (“SI”), therefore, is wide and suggests that CRV431 presents a viable clinical drug candidate for the treatment of viral infections, including HBV. Additional testing in a transgenic mouse model of HBV indicated that CRV431 reduced HBV DNA in the liver and HBsAg in serum. CRV431 is orally active and appears to be well tolerated.

On May 10, 2018, we submitted an Investigational New Drug Application (“IND”) to the U.S. Food and Drug Administration (“FDA”) to support initiation of our CRV431 HBV clinical development program in the United States and received approval in June 2018. We completed the first segment of our Phase 1 clinical activities for CRV431 in October 2018 wherein we reached a major clinical milestone of positive data from a Phase I trial of CRV431 in humans. This achievement triggered the first milestone payment, as stated in the Merger Agreement for the acquisition of Ciclofilin Pharmaceuticals, Inc. (“Ciclofilin”) and we paid a related milestone payment of approximately $346,000 to Aurinia Pharmaceuticals, Inc. ("Aurinia") and $654,000 to the former Ciclofilin shareholders along with the issuance of 1,439 shares of our common stock with a fair value of $55,398, representing 2.5% of our issued and outstanding common stock as of June, 2016, to the former Ciclofilin shareholders. Our CEO is a former Ciclofilin shareholder and received approximately $274,000 and 603 shares of common stock and Petrus Wijngaard, a director of our company, received $2,805 and 6 shares of common stock.

Additional milestone payments could potentially be payable to the former Ciclofilin shareholders pursuant to the Ciclofilin Merger Agreement as follows: (i) upon receipt of Phase II positive data from a proof of concept clinical trial of CRV431 in humans - 4,317 shares of common stock and $3,000,000, (ii) upon initiation of a Phase III trial of CRV431 - $5,000,000, and (iii) upon acceptance by the FDA of a new drug application for CRV431 - $8,000,000 . In addition, on February 14, 2014, Ciclofilin had entered into a Purchase and Sale Agreement to acquire Aurinia’s entire interest in CRV431. This agreement contains future milestone payments payable by us based on clinical and marketing milestones of up to CAD $2.45 million. The milestone payments payable to the former Ciclofilin shareholders will be subject to offset by certain of the clinical and marketing milestone payments payable to Aurinia as follows: (a) the payments to the former Ciclofilin shareholders pursuant to (ii) above would be offset by payment to Aurinia of CAD $450,000, and (b) the payments to the former Ciclofilin shareholders pursuant to (iii) above would be subject to offset by payment to Aurinia of up to CAD $2,000,000. In addition to the above clinical and milestone payments, the Aurinia Agreement provides for the following additional contingent payment obligations: (x) a royalty of 2.5% on net sales of CRV431 which is uncapped, (y) a royalty of 5% on license revenue from CRV431 and (z) a payment equal to 30% of the proceeds from a Liquidity Event (as defined in the Purchase and Sale Agreement) with respect to Ciclofilin, of which approximately $150,000 plus interest will be paid to Aurinia upon the closing of this offering. The maximum obligation under both (y) and (z) is CAD $5,000,000.

On June 17, 2019, we submitted an IND to the FDA to support initiation of our CRV431 NASH clinical development program in the United States and received approval in July 2019. We completed dosing of CRV431 in our MAD clinical trial in September, 2020.

On December 2, 2020 we announced the results from a translational research study in which our lead drug candidate, CRV431, decreased formation of a novel class of human blood platelets, called ‘procoagulant platelets.’ High levels of procoagulant platelets have been associated with transient ischemic attack and stroke. Patients with advanced liver disease often have coagulopathy disorders, diabetes, and dyslipidemia, and may develop hemorrhagic and ischemic diseases including stroke. For example, patients with nonalcoholic fatty liver disease (“NAFLD”) and NASH have an increased risk for ischemic stroke, which accounts for 87% of strokes in the United States and is the second leading cause of death globally. Additionally, patients with NAFLD may experience more severe stroke which may require more aggressive management of liver disease.[4] Nonclinical studies have reported that cyclophilins, the enzymes inhibited by CRV431, contribute to platelet activities, which prompted us to undertake the present *in vitro* study to examine the effects of CRV431 on platelets. Human blood platelets were collected from 8 human donors and experimentally activated with collagen and thrombin to simulate the propagation phase of blood clotting. Treatment with CRV431 at pharmacologically relevant concentrations decreased membrane exposure of phosphatidylserine, a marker of procoagulant platelets, by up to 49% (mean 29% reduction; $p<0.001$). Importantly, CRV431 seemingly had no significant effect on platelet aggregation.

On December 10, 2020 we announced that, in addition to completing patient dosing in the 75 mg CRV431 cohort of its Phase 2a ‘AMBITION' clinical trial, we have dosed the first NASH patient in the 225 mg CRV431 dosing cohort. The open-label Phase 2a ‘AMBITION' study is designed to assess safety, tolerability, pharmacokinetics and biomarker analyses for early assessments of efficacy of 75 mg and 225 mg CRV431, administered orally to F2 and F3 NASH patients (n=18/dosing group), once daily for 28 days. We will also conduct Fibroscans and examine a multitude of candidate biomarkers of NASH resolution and CRV431 efficacy including Pro-C3, Enhanced Liver Fibrosis (ELF) markers, collagens, matrix metalloproteinases, transcriptomics, liver transaminases, and full-scale lipidomic and genomic signatures. Identification of biomarkers will be facilitated by our proprietary, machine-learning platform, AI-POWR™.

On December 22, 2020, we announced that the U.S. Food and Drug Administration ("FDA") has accepted our investigational new drug ("IND") application for CRV431, a novel cyclophilin inhibitor for the treatment of COVID-19. On July 7, 2020, we announced a potential two-pronged strategy to treat COVID-19. First, preclinical cell culture experiments demonstrated CRV431 decreased SARS-CoV-1 production of infectious virus. Second, in a non-viral, acute lung injury model, CRV431 demonstrated attenuated lung inflammation and damage similar to or better than dexamethasone, including reductions in neutrophils and IL-6. This property may be beneficial to patients suffering longer term consequences of COVID-19 infection, including acute respiratory distress syndrome ("ARDS"). Importantly, COVID-19 patients developing ARDS have a higher mortality rate. Taken together, this dual mode of action suggested that CRV431 may offer an opportunity to treat both the viral infection as well as lung injury in COVID-19.

Artificial Intelligence ("AI")

We have created a proprietary AI called, "AI-POWR™" to optimize the outcomes of our current clinical programs and to potentially identify novel indications for CRV431 and possibly identify new targets and new drug molecules to broaden our pipeline.

AI-POWR™ is our acronym for **A**rtificial **I**ntelligence - **P**recision Medicine; **O**mics that include genomics, proteomics, metabolomics, transcriptomics, and lipidomics; **W**orld database access; and **R**esponse and clinical outcomes. AI-POWR™ allows for the selection of novel drug targets, biomarkers, and appropriate patient populations. AI-POWR™ is used to identify responders from big data sources using our multi-omics approach, while modelling inputs and scenarios to increase response rates. The components of AI-POWR™ include access to publicly available databases, and in-house genomic and multi-omic big data, processed via machine learning algorithms. We believe AI outputs will allow for improved response outcomes through enhanced patient selection, biomarker selection and drug target selection. We believe AI outputs will help identify responders *a priori* and reduce the need for large sample sizes through study design enrichment.

We intend to use AI-POWR™ to help identify which patients will best respond to CRV431 for treatment of NASH patients, currently in a Phase 2a clinical trial. It is anticipated that applying this proprietary platform to our drug development program will ultimately save time, resources and money. In so doing, we believe that AI-POWR™ is a risk-mitigation strategy that should reap benefits all the way through from clinical trials to commercialization.

We believe that NASH is a very heterogenous disease and we need to have a better understanding of interactions between changes to proteins, genes, lipids, and metabolites, to name a few, induced by both drugs and disease. All of this is further complicated by variable drug concentrations, patient traits and temporal factors. AI-POWR™ is designed to address many of these typical challenges, as we believe we can use our proprietary platform to shorten development timelines and increase the delta between placebo and treatment groups. AI-POWR™ will be used to drive our ongoing Phase 2a NASH program and identify additional potential indications for CRV431 to expand our footprint in the cyclophilin inhibition therapeutic space.

Risk Factor Summary

An investment in our securities is subject to numerous risks and uncertainties, including those highlighted and incorporated by reference in the section entitled "Risk Factors" immediately following this prospectus summary. The following is a summary of some of the principal risks related to an investment in our Company.

- Our product candidate, CRV431, is in the early stages of clinical development and its commercial viability remains subject to the successful outcome of current and future clinical trials, regulatory approvals and the risks generally inherent in the development of pharmaceutical product candidates. If we are unable to successfully advance or develop or partner our product candidate, we may be delayed or precluded further development or regulatory approval.

- A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business and operations. While there has not been a significant impact to date, the Company cannot estimate the length or gravity of the impact of the COVID-19 outbreak at this time, but if the pandemic continues, it may have a material adverse effect on the Company's results of future operations, financial position, liquidity, and capital resources, and those of the third parties on which the Company relies in fiscal year 2020.

- We have incurred losses since inception, anticipate that we will incur continued losses for the foreseeable future indicating the possibility that we may not be able to operate in the future.

- We will require substantial additional funding which may not be available to us on acceptable terms, or at all. If we fail to raise the necessary additional capital, we may be unable to complete the development and commercialization of our product candidate, or continue our development programs.

- If we fail to comply with the continued listing requirements of The Nasdaq Capital Market, our common stock may be delisted and the price of our common stock and our ability to access the capital markets could be negatively impacted.

- Our product candidate and any future product candidates may exhibit undesirable side effects when used alone or in combination with other approved pharmaceutical products or investigational new drugs, which may delay or preclude further development or regulatory approval, or limit their use if approved.

- If the results of preclinical studies or clinical trials for our product candidate, including those that are subject to existing or future license or collaboration agreements, are unfavorable or delayed, we could be delayed or precluded from the further development or commercialization of our product candidate, which could materially harm our business.

- Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

- Our approach to the discovery and development of product candidates based on AI-POWR™ is novel and unproven, and we do not know whether we will be able to develop any products of commercial value.

- AI-POWR™ may fail to help us discover and develop additional potential product candidates .

- The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidate, our business will be substantially harmed.

- We currently have no sales and marketing organization. If we are unable to establish a direct sales force in the United States to promote our products, the commercial opportunity for our products may be diminished.

- We may not be able to manufacture our product candidate in commercial quantities, which would prevent us from commercializing our product candidate.

- Our product candidate, if approved for sale, may not gain acceptance among physicians, patients and the medical community, thereby limiting our potential to generate revenues.

Corporate History and Information

We were incorporated in Delaware on May 15, 2013 for the purpose of holding certain FV-100 assets of Synergy Pharmaceuticals Inc. ("Synergy"). We were a majority-owned subsidiary of Synergy until February 18, 2014, the date Synergy completed the spinout of our shares of common stock. On July 18, 2019, we filed a certificate of amendment to our certificate of incorporation to change our name from "ContraVir Pharmaceuticals, Inc." to "Hepion Pharmaceuticals, Inc." The name change became effective as of July 18, 2019.

Our principal executive offices are located at 399 Thornall Street, First Floor, Edison, New Jersey 08837. Our telephone number is (732) 902-4000 and our website address is *www.hepionpharma.com*. The information on our website is not a part of, and should not be construed as being incorporated by reference into, this reoffer prospectus.

THE OFFERING

The following is a brief summary of certain terms of this offering.

Common Stock offered by the selling stockholders	1,477,000.
Securities being offered by the Company	None.
Use of proceeds	We will not receive any proceeds from the sale or other disposition of the shares of common stock offered by this reoffer prospectus. All of the proceeds from the sale or other disposition of the shares of common stock offered by this reoffer prospectus will be received by the Selling Stockholders selling such shares. Upon exercise of the options, we will receive proceeds from the exercise of such options which we intend to use for research and development and general corporate purposes.
Risk factors	Investing in our common stock involves a high degree of risk. Please read the information contained in and incorporated by reference under the heading "Risk Factors" on page 13 of this reoffer prospectus and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.
The Nasdaq Capital Market symbol	"HEPA."

RISK FACTORS

Investing in our common stock involves risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. You should also consider the risks, uncertainties and assumptions discussed under the heading "Risk Factors" included in our most recent Annual Report on Form 10-K, as revised or supplemented by our most recent Quarterly Report on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations 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. Please also read carefully the section below entitled "Cautionary Note Regarding Forward-Looking Statements."

Risks Related to This Offering and Our Common Stock

You may experience future dilution as a result of future equity offerings.

In order 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 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 investors in this offering.

We have not paid dividends in the past and have no immediate plans to pay dividends.

We plan to reinvest all of our earnings, to the extent we have earnings, in order to further develop our product candidate and to cover operating costs. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on our common stock.

If we fail to comply with the continued listing requirements of The Nasdaq Capital Market, our common stock may be delisted and the price of our common stock and our ability to access the capital markets could be negatively impacted.

A delisting of our common stock from The Nasdaq Capital Market could materially reduce the liquidity of our common stock and result in a corresponding material reduction in the price of our common stock. In addition, delisting could harm our ability to raise capital through alternative financing sources on terms acceptable to us, or at all, and may result in the potential loss of confidence by investors, employees and fewer business development opportunities.

A large number of shares sold by selling stockholders in this offering may be resold in the market following this offering, which may depress the market price of our common stock.

A large number of shares sold by selling stockholders in this offering may be resold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following the sale by the selling stockholders could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common stock and sellers remain willing to sell the shares. All of the shares of common stock sold by the selling stockholders in this offering will be freely tradable without restriction or further registration under the Securities Act.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This reoffer prospectus and the documents we incorporate by reference in this reoffer prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (“Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and may involve material risks, assumptions and uncertainties. Statements that are not purely historical should be considered forward-looking statements. Often they can be identified by the use of forward-looking words and phrases, such as “may,” “will,” “believe,” “anticipate,” “expect,” “should,” “optimistic” or “continue,” “estimate,” “intend,” “plan,” “would,” “could,” “guidance,” “potential,” “opportunity,” “project,” “forecast,” “confident,” “projections,” “schedule,” “designed,” “future” and the like. These forward-looking statements reflect our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements are subject to a number of risks, uncertainties and assumptions described under the section entitled “Risk Factors.”

These statements are not guarantees of future performance and involve risks and uncertainties that are difficult to predict or are beyond our control. A number of important factors could cause actual outcomes and results to differ materially from those expressed in these forward-looking statements. Consequently, readers should not place undue reliance on such forward-looking statements. In addition, these forward-looking statements relate to the date on which they are made.

The forward-looking statements reflect our current expectations and are based on information currently available to us and on assumptions we believe to be reasonable. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause our actual results, activities, performance or achievements to be materially different from that expressed or implied by such forward-looking statements. Some of the risks, uncertainties, and other factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, but are not limited to:

- Market conditions;
- Our capital position;
- The impact of COVID-19 on our operations;
- Our ability to compete with larger, better financed pharmaceutical companies;
- Our uncertainty of developing marketable products;
- Our ability to develop and commercialize our products;
- Our ability to obtain regulatory approvals;
- Our ability to maintain and protect intellectual property rights;
- The inability to raise additional future financing and lack of financial and other resources;
- Our ability to control product development costs;
- We may not be able to attract and retain key employees;
- We may not be able to compete effectively;
- We may not be able to enter into new strategic collaborations;

- Changes in government regulation affecting product candidates could increase our development costs;

- Our involvement in patent and other intellectual property litigation could be expensive and could divert management's attention;
- The possibility that there will be no market acceptance for our products; and
- Changes in third-party reimbursement policies could adversely affect potential future sales of any of our products that are approved for marketing.

Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Other than as required by law, we do not assume any obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise.

You should also read the matters described in "Risk Factors" and the other cautionary statements made in this reoffer prospectus and the documents incorporated by reference into this reoffer prospectus. The forward-looking statements in this reoffer prospectus and the documents incorporated by reference into this reoffer prospectus may not prove to be accurate and therefore you are encouraged not to place undue reliance on forward-looking statements. You should read this reoffer prospectus and the documents incorporated by reference into this reoffer prospectus completely.

This reoffer prospectus and the documents incorporated by reference into this reoffer prospectus also include estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

USE OF PROCEEDS

The selling stockholders will receive all of the proceeds from the sale or other disposition of the shares of our common stock covered by this reoffer prospectus. We are not selling any securities under this reoffer prospectus and will not receive any proceeds from the sale or other disposition of the shares of our common stock covered by this reoffer prospectus. Upon exercise of the options, we will receive proceeds from the exercise of such options which we intend to use for research and development and general corporate purposes.

SELLING STOCKHOLDERS

This reoffer prospectus covers the reoffer and resale by the selling stockholders or their transferees, pledgees, assignees, distributees, donees or other successors-in-interest, of an aggregate of up to 1,477,000 shares of our common stock that were previously acquired by the grant of options to purchase shares of our common stock pursuant to the Plan.

The following table sets forth, as of January 12, 2021, certain information regarding certain of the selling stockholders, the shares of our common stock that may be reoffered and resold by them pursuant to this reoffer prospectus, and other shares of our common stock beneficially owned by them. Each of the selling stockholders has voting and investment control power over his or her shares. Although a person's name is included in the table below, neither that person nor we are making an admission that the named person is our "affiliate."

The selling stockholders may offer shares of our common stock under this reoffer prospectus on a continuous or delayed basis, and may elect to sell none, some or all of the shares set forth below. This reoffer prospectus does not constitute a commitment by the selling stockholders to sell all or any of the stated number of their shares, and the actual number of shares offered and sold will be determined from time to time by each selling stockholder at his or her sole discretion. However, for the purposes of the table below, we have assumed that, after the completion of this offering, all shares offered by this reoffer prospectus have been sold and are no longer held by the selling stockholders. In addition, a selling stockholder may have sold, transferred or otherwise disposed of all or a portion of such selling stockholder's shares since the date of the information in the following table.

Information concerning the selling stockholders may change from time to time and changed information will be presented in a supplement to this reoffer prospectus if and when required. If, subsequent to the date of this reoffer prospectus, we grant additional shares to the selling stockholders or to other affiliates under the Plan, we may supplement this reoffer prospectus to reflect such additional shares to the selling stockholders and/or the names of such affiliates and the amounts of shares to be reoffered by them.

The percentages appearing in the column entitled "Shares of Common Stock to be Beneficially Owned Upon Completion of the Offering" are based on 32,025,153 shares of common stock outstanding as of January 12, 2021. The actual number of shares beneficially owned prior to and after the offering is subject to adjustment and could be materially less or more than the estimated amount indicated depending upon factors, which we cannot predict at this time.

The selling stockholders are not required to sell any shares of our common stock and there is no assurance that any of the selling stockholders will sell any or all of the shares of our common stock covered by this reoffer prospectus. We are not aware of any agreements, arrangements or understandings with respect to the sale or other disposition of any of the shares covered hereby.

Selling Stockholders	Shares of Common Stock Beneficially Owned Before this Offering (1)		Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus (2)	Shares of Common Stock to be Beneficially Owned Upon Completion of this Offering (3)	
	Number	Percentage	Number	Number	Percentage
Robert Foster	28,671 (4)	*	592,000 (5)	28,671	*
John Cavan	7,103 (6)	*	375,000 (7)	7,103	*
Gary S. Jacob	14,967 (8)	*	90,000 (9)	14,967	*
John Brancaccio	8,361(10)	*	90,000 (11)	8,361	*
Arnold Lippa	1,233(12)	*	90,000 (13)	1,233	*
Timothy Block	1,276(14)	*	90,000 (15)	1,276	*
Thomas Adams	1,051(16)	*	90,000 (17)	1,051	*
Petris Wijngaard	20,000(18)	*	60,000 (19)	20,000	*

* Represents beneficial ownership of less than 1%.

(1) In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to stock options, or other derivative securities held by that person that are exercisable, vested or convertible as of January 12, 2021 or that will become exercisable, vested or convertible within 60 days after January 12, 2021, but we did not deem these shares outstanding for the purpose of computing the percentage ownership of any other person.

(2) The numbers of shares of common stock reflect all shares of common stock acquired or issuable to a person pursuant to applicable grants previously made under the Plan irrespective of whether such grants are exercisable, vested or convertible as of January 12, 2021 or will become exercisable, vested or convertible within 60 days after January 12, 2021.

(3) In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person following the offering, we deemed to be outstanding all shares of common stock then subject to stock options, restricted stock units or other derivative securities held by that person that are vested, exercisable or convertible as of January 12, 2021 or that would become vested, exercisable or convertible within 60 days after January 12, 2021, but we did not deem these shares of common stock outstanding for the purpose of computing the percentage ownership of any other person. We further presumed that the person sold all shares of common stock eligible to be resold in this offering irrespective of any applicable vesting, exercisability or conversion limitations, but retained ownership of all other shares of common stock beneficially owned as of January 12, 2021.

(4) Represents (i) 25,259 shares of common stock and (ii) options to purchase up to 3,412 shares of common stock. Excludes options to purchase 588,588 shares of common stock.

(5) Represents options to purchase up to 592,000 shares of common stock.

(6) Represents (i) 4,800 shares of common stock, (ii) options to purchase up to 2,180 shares of common stock and (ii) warrants to purchase up to 123 shares of common stock. Excludes options to purchase 372,820 shares of common stock.

(7) Represents options to purchase up to 375,000 shares of common stock.

(8) Represents (i) 12,059 shares of common stock, (ii) options to purchase up to 2,785 shares of common stock and (iii) warrants to purchase up to 123 shares of common stock. Excludes options to purchase 87,215 shares of common stock.

(9) Represents options to purchase up to 90,000 shares of common stock.

(10) Represents (i) 7,004 shares of common stock, (ii) options to purchase up to 1,332 shares of common stock and (iii) warrants to purchase up to 25 shares of common stock. Excludes options to purchase 88,668 shares of common stock.

(11) Represents options to purchase up to 90,000 shares of common stock.

(12) Represents (i) options to purchase up to 1,110 shares of common stock and (ii) warrants to purchase up to 123 shares of common stock. Excludes options to purchase 88,890 shares of common stock.

(13) Represents options to purchase up to 90,000 shares of common stock.

(14) Represents options to purchase up to 1,276 shares of common stock. Excludes options to purchase 88,724 shares of common stock.

(15) Represents options to purchase up to 90,000 shares of common stock.

(16) Represents options to purchase up to 1,051 shares of common stock. Excludes options to purchase 88,949 shares of common stock.

(17) Represents options to purchase up to 90,000 shares of common stock.

(18) Represents 20,000 shares of common stock. Excludes options to purchase 60,000 shares of common stock.

(19) Represents options to purchase up to 60,000 shares of common stock.

PLAN OF DISTRIBUTION

The common stock covered by this reoffer prospectus is being registered by us for the account of the selling stockholders and their successors, including their transferees, pledgees or donees or their successors.

The common stock offered hereby may be sold from time to time directly by or on behalf of the selling stockholders in one or more transactions on The Nasdaq Capital Market or on any stock exchange on which our common stock may be listed at the time of sale, in privately negotiated transactions, or through a combination of such methods, at market prices prevailing at the time of sale, at prices related to such prevailing market prices, at fixed prices (which may be changed) or at negotiated prices. A selling stockholder may sell shares through one or more agents, brokers or dealers or directly to purchasers. Such brokers or dealers may receive compensation in the form of commissions, discounts or concessions from the selling stockholder and/or purchasers of the shares or both. Such compensation as to a particular broker or dealer may be in excess of customary commissions.

In connection with their sales, a selling stockholder and any participating broker or dealer may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions they receive and the proceeds of any sale of shares may be deemed to be underwriting discounts and commissions under the Securities Act.

We are bearing all costs relating to the registration of the common stock covered by this reoffer prospectus. Any commissions or other fees payable to broker-dealers in connection with any sale of the shares will be borne by the selling stockholder or other party selling such shares. In order to comply with the securities laws of certain states, if applicable, the shares may be sold in such jurisdictions only through registered or licensed brokers or dealers. In certain states, the shares may not be sold unless the shares have been registered or qualified for sale in such state, or unless an exemption from registration or qualification is available and is obtained or complied with. Sales of the shares must also be made by the selling stockholders in compliance with all other applicable state securities laws and regulations.

In addition to any shares sold hereunder, selling stockholders may sell common stock in compliance with Rule 144. There is no assurance that the selling stockholders will sell all or a portion of the common stock offered hereby.

The selling stockholders may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of the shares against certain liabilities in connection with the offering of the shares arising under the Securities Act.

We have notified the selling stockholders of the need to deliver a copy of this reoffer prospectus in connection with any sale of the shares.

LEGAL MATTERS

The validity of the securities being offered by this reoffer prospectus will be passed upon for us by Sheppard, Mullin, Richter & Hampton LLP, New York, New York.

EXPERTS

The consolidated financial statements as of December 31, 2019 and December 31, 2018 and for each of the two years in the period ended December 31, 2019, incorporated by reference in this reoffer prospectus have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated by reference herein, given on the authority of said firm as experts in auditing and accounting. The report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement under the Securities Act with respect to the securities being offered under this reoffer prospectus. This reoffer prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this reoffer prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including the Company. The SEC's internet site can be found at *http://www.sec.gov*.

We maintain a website at *www.hepionpharma.com*. Information contained in or accessible through our website does not constitute a part of this reoffer prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this reoffer prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this reoffer prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this reoffer prospectus:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on May 14, 2020 , as amended on June 15, 2020;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020 and September 30, 2020, as filed with the SEC on June 29, 2020, August 12, 2020 and November 16, 2020, respectively;

- our Current Reports on Form 8-K filed with the SEC on January 6, 2020, January 9, 2020, January 28, 2020, February 12, 2020 (two reports), February 20, 2020, March 12, 2020, March 27, 2020, March 30, 2020, April 17, 2020, May 14, 2020, May 19, 2020, May 20, 2020, June 10, 2020, June 22, 2020, June 29, 2020, July 7, 2020, July 30, 2020, August 5, 2020, August 12, 2020, August 27, 2020, September 1, 2020, September 17, 2020, September 29, 2020, October 5, 2020, October 27, 2020, November 10, 2020, November 12, 2020, November 17, 2020, November 18, 2020, November 20, 2020, November 27, 2020, December 2, 2020, December 10, 2020, December 22, 2020, December 29, 2020 and January 5, 2021;

- our definitive proxy statement filed with the SEC on June 12, 2020; and

- the description of our common stock contained in the registration statement on Form 8-A filed with the SEC on February 24, 2015 pursuant to Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating that description.

We also incorporate by reference into this reoffer prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of this reoffer prospectus, or (ii) after the date of this reoffer prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to:

Hepion Pharmaceuticals, Inc.
399 Thornall Street, First Floor
Edison, New Jersey, 08837
Attn.: Secretary

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this reoffer prospectus will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

1,477,000 Shares of
Common Stock

REOFFER PROSPECTUS

January 15, 2021

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission pursuant to the Securities Act and the Exchange Act are incorporated herein by reference:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on May 14, 2020 , as amended on June 15, 2020;

- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020 and September 30, 2020, as filed with the SEC on June 29, 2020, August 12, 2020 and November 16, 2020, respectively;

- our Current Reports on Form 8-K filed with the SEC on January 6, 2020, January 9, 2020, January 28, 2020, February 12, 2020 (two reports), February 20, 2020, March 12, 2020, March 27, 2020, March 30, 2020, April 17, 2020, May 14, 2020, May 19, 2020, May 20, 2020, June 10, 2020, June 22, 2020, June 29, 2020, July 7, 2020, July 30, 2020, August 5, 2020, August 12, 2020, August 27, 2020, September 1, 2020, September 17, 2020, September 29, 2020, October 5, 2020, October 27, 2020, November 10, 2020, November 12, 2020, November 17, 2020, November 18, 2020, November 20, 2020, November 27, 2020, December 2, 2020, December 10, 2020, December 22, 2020, December 29, 2020 and January 5, 2021;

- our definitive proxy statement filed with the SEC on June 12, 2020; and

- the description of our common stock contained in the registration statement on Form 8-A filed with the SEC on February 24, 2015 pursuant to Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating that description.

All documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment, which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such documents, except as to specific sections of such documents as set forth therein. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in any subsequently filed document, which also is deemed to be incorporated by reference herein, modifies or supersedes such statement.

You should rely only on the information provided or incorporated by reference in this Registration Statement or any related prospectus. The Registrant has not authorized anyone to provide you with different information. You should not assume that the information in this Registration Statement or any related prospectus is accurate as of any date other than the date on the front of the document.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

No expert or counsel named in this Registration Statement as having prepared or certified any part of this Registration Statement or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the common stock was employed on a contingency basis or had, or is to receive, in connection with the offering, a substantial interest, directly or indirectly, in the registrant or any of its parents or subsidiaries.

Item 6.Indemnification of Officers and Directors.

The Delaware General Corporation Law ("DGCL") authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties as directors and our certificate of incorporation will include such an exculpation provision. Our certificate of incorporation and by-laws include provisions that indemnify, to the fullest extent allowable under the DGCL, the personal liability of directors or officers for monetary damages for actions taken as a director or officer of us, or for serving at our request as a director or officer or another position at another corporation or enterprise, as the case may be. Our certificate of incorporation and by-laws also provide that we must indemnify and advance reasonable expenses to our directors and officers, subject to our receipt of an undertaking from the indemnified party as may be required under the DGCL. Our by-laws authorize us to carry directors' and officers' insurance to protect us, our directors, officers and certain employees for some liabilities. The limitation of liability and indemnification provisions in our certificate of incorporation and by-laws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against our directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. However, these provisions do not limit or eliminate our rights, or those of any stockholder, to seek non-monetary relief such as injunction or rescission in the event of a breach of a director's duty of care. The provisions will not alter the liability of directors under the federal securities laws. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Item 7. Exemption from Registration Claimed.

The securities that are to be reoffered or resold pursuant to the reoffer prospectus were exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act as transactions not involving any public offering.

Item 8. Exhibits.

Exhibit Number	Description
4.1	2013 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to the Company's Form S-8 filed with the SEC on May 4, 2015)
5.1	Opinion of Sheppard, Mullin, Richter & Hampton LLP
23.1	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm
23.2	Consent of Sheppard, Mullin, Richter & Hampton LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)

Item 9.Undertakings.

1. *Item 512(a) of Regulation S-K*. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represents a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate

offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that paragraphs (i) and (ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2 . *Item 512(b) of Regulation S-K*. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3 . *Item 512(h) of Regulation S-K*. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Edison, New Jersey, on the 15th day of January 2021.

HEPION PHARMACEUTICALS, INC.

By: /s/ Robert Foster
Robert Foster
Chief Executive Officer, President and Director

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert Foster, his true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him/her and in his name, place and stead, in any and all capacities to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement, any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933 and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute or substitutes for him, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, the following persons in the capacities and on the dates indicated have signed this Registration Statement below.

Signature	Title	Date
/s/ Robert Foster Robert Foster	Chief Executive Officer, President and Director (Principal Executive Officer)	January 15, 2021
/s/ John Cavan John Cavan	Chief Financial Officer (Principal Financial and Accounting Officer)	January 15, 2021
/s/ Gary S. Jacob Gary S. Jacob, PhD.	Chairman, Board of Directors	January 15, 2021

/s/ John P. Brancaccio John P. Brancaccio	Director	January 15, 2021
/s/ Arnold Lippa Arnold Lippa	Director	January 15, 2021
/s/ Timothy Block Timothy Block	Director	January 15, 2021
/s/ Thomas H. Adams Thomas H. Adams	Director	January 15, 2021
/s/ Petrus Wijngaard Petrus Wijngaard	Director	January 15, 2021

Exhibit 5.1

SheppardMullin

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New York, New York 10112-0015
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212.653.8701 fax
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January 15, 2021

VIA ELECTRONIC MAIL
Hepion Pharmaceuticals, Inc.
399 Thornall Street, First Floor
Edison, NJ 08837

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Hepion Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the issuance of this opinion which relates to a Registration Statement on Form S-8 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement covers 982,464 shares (the "Plan Shares") of the Company's common stock, par value $0.0001 per share (the "Common Stock"), reserved for issuance pursuant to the Company's 2013 Equity Incentive Plan, as amended (the "Plan"), and 1,477,000 shares (the "Resale Shares" and together with the Plan Shares, the "Shares") of Common Stock issuable upon exercise of options issued pursuant to the Plan to the selling stockholders named in the Registration Statement.

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5)(i) of Regulation S-K under the Securities Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement.

In connection with this opinion, we have reviewed and relied upon the Registration Statement, the Company's Certificate of Incorporation, as amended, as in effect on the date hereof, the Company's Bylaws effective as in effect on the date hereof (the "Bylaws"), the proceedings taken by the Company with respect to the authorization and adoption of the Plan, resolutions adopted by the board of directors of the Company (the "Board of Directors") and the committees of the Board of Directors, and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. With respect to the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity to original of all documents submitted to us as certified or reproduced copies. We have also assumed that the Shares will be uncertificated in accordance with Section 158 of the Delaware General Corporation Law, and the transfer agent therefor will register the purchaser thereof as the registered owner of any uncertificated Shares on its stock transfer books and records. We have further assumed that (a) shares of the Common Stock currently reserved for issuance under the Plan will remain available for the issuance of the Shares, and (b) neither the Company's charter documents nor any of the proceedings relating to either the Plan or any of the award agreements relating to the Shares will be rescinded, amended or otherwise modified prior to the issuance of the Shares. We have also obtained from public officials and officers of the Company certificates or comparable documents as to certain factual matters and, insofar as this opinion is based on matters of fact, we have relied on such certificates and comparable documents without independent investigation. We have made such other investigations as we have deemed relevant and necessary in connection with the opinions hereinafter set forth.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Plan Shares, when issued and sold in the manner referred to in the Plan and against proper payment and consideration thereof and pursuant to the agreements that accompany the Plan, will be legally and validly issued, fully paid and nonassessable, and the Resale Shares being registered to be sold pursuant to the Registration Statement are duly authorized and will be, when sold in the manner described in the Registration Statement, legally and validly issued, and fully paid and non-assessable.

We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC promulgated thereunder.

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We express no opinion as to matters governed by any laws other than the Delaware General Corporation Law and reported decisions of the Delaware courts interpreting such law.

This opinion letter is rendered as of the date first written above, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares, the Plan, the award agreements related to the Shares or the Registration Statement.

Respectfully submitted,

/s/ Sheppard, Mullin, Richter & Hampton LLP

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

Hepion Pharmaceuticals, Inc.
Edison, New Jersey

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement on Form S-8 of our report dated May 14, 2020, relating to the consolidated financial statements of Hepion Pharmaceuticals, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2019. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP
Woodbridge, New Jersey

January 15, 2021