

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K/A
(Amendment No. 1)

(Mark one)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 001-36020

Onconova Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

22-3627252

(I.R.S. Employer
Identification No.)

12 Penns Trail, Newtown, PA

(Address of principal executive offices)

18940

(Zip Code)

(267) 759-3680

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$.01 per share	ONTX	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S- T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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 the 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

Smaller reporting company

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes No

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of June 30, 2021, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's voting stock held by non-affiliates was approximately \$109.0 million, based on the last reported sale price of the registrant's common stock on the Nasdaq Capital Market.

There were 20,895,563 shares of common stock outstanding as of March 1, 2022.

ONCONOVA THERAPEUTICS, INC.
FORM 10-K/A
For Fiscal Year Ended December 31, 2021

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EXPLANATORY NOTE

Onconova Therapeutics, Inc., sometimes referred to as “we,” “our,” or the “Company” is filing this Amendment No. 1 on Form 10-K/A, or this Amendment, to its Annual Report on Form 10-K for the year ended December 31, 2021, originally filed on March 21, 2022, or the “Original Report,” for the sole purpose of including the information required by Part III of Form 10-K. This information was previously omitted from the Original Report in reliance on General Instruction G(3) to Form 10-K, which permits the information in the above referenced items to be incorporated in the Form 10-K by reference from our definitive proxy statement if such statement is filed no later than 120 days after our fiscal year-end. We are filing this Amendment to provide information required in Part III of Form 10-K because a definitive proxy statement containing such information will not be filed by the Company within 120 days after the end of the fiscal year covered by the Form 10-K.

In accordance with Rule 12b-15 under the Securities and Exchange Act of 1934, as amended, or the Exchange Act, Part III, Items 10 through 14 of the Original Report are hereby amended and restated in their entirety, and Part IV, Item 15 of the Original Report is hereby amended and restated in its entirety, with the only changes being the additions of the new certifications by our principal executive officer and principal financial officer filed herewith and Exhibit 10.40 which was inadvertently omitted from the Original Report. This Amendment does not amend or otherwise update any other information in the Original Report. Accordingly, this Amendment should be read in conjunction with the Original Report and with our filings with the Securities and Exchange Commission subsequent to the Original Report.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

All of our directors bring to our Board of Directors executive leadership experience from their service as executives and/or directors of our Company and/or other entities. The biography of each of the nominees below contains information regarding the person's business experience, director positions held currently or at any time during the last five years, and the experiences, qualifications, attributes and skills that caused the Nominating and Corporate Governance Committee and our Board of Directors to determine that the person should serve as a director, given our business and structure.

Name	Age	Position(s) with Onconova Therapeutics, Inc.	Served as Director From
Jack E. Stover	69	Director	2016
James J. Marino	72	Chairman of the Board of Directors	2015
Jerome E. Groopman, M.D.	70	Director	2013
Steven M. Fruchtman	71	Director, President and Chief Executive Officer	2019
M. Teresa Shoemaker	61	Director	2020
Viren Mehta	72	Director	2004

Jack E. Stover. Mr. Stover has served as a member of our Board of Directors since May 2016. Since March 2021, Mr. Stover has been Chief Executive Officer of NorthView Acquisition Corp. From December 2015 until June 2016, Mr. Stover served as Interim President and CEO of Interpace Diagnostics Group, Inc. ("Interpace") and, since August 2005, served on the Board of Directors of Interpace and was chairman of Interpace's audit committee from August 2005 until December 2015. In June 2016 until December 2020, Mr. Stover was President, CEO and Director of Interpace, which in 2019 changed its name to Interpace Biosciences, Inc. From June 2016 to December 2016, Mr. Stover was chairman of the audit committee and a member of the Board of Directors of Viatar CTC Solutions, Inc. From 2004 to 2008, he served as Chief Executive Officer, President and Director of Antares Pharma, Inc., a publicly held specialty pharmaceutical company then listed on the American Stock Exchange and subsequently Nasdaq. In addition to other relevant experience, Mr. Stover was also formerly a partner with PricewaterhouseCoopers (then Coopers and Lybrand), working in the bioscience industry division in New Jersey. Mr. Stover received his B.A. in Accounting from Lehigh University and is a Certified Public Accountant.

Our Board of Directors believes that Mr. Stover's experience holding senior leadership positions in the life sciences industry, his specific experience and skills in the areas of general operations, and financial operations and administration, and his extensive experience in accounting and as an audit committee member and chair of various public companies in the life sciences industry, provide him with the qualifications and skills to serve as a director.

James J. Marino. Mr. Marino has served as Chairman of the Board of Directors since August 2020 and as a member of our Board of Directors since July 2015. Prior to July 2015, Mr. Marino was a Partner at the global law firm of Dechert LLP for 28 years, where he served as Managing Partner of the Princeton Office. Mr. Marino served as the outside counsel for the Company from its inception through and including its initial public offering. On March 8, 2017, Mr. Marino was appointed to the Board of Directors and as chairperson of the compensation committee of Celldex Therapeutics, Inc., a public company which is developing targeted therapeutics to address devastating diseases for which available treatments are inadequate. Previously, he served on the Board of Directors of Pharmacopeia Drug Discovery, Inc. from 2000 to 2006 and has worked in advisory capacities and on the boards of multiple non-profit organizations. He recently served on the Board of Wake Forest University Baptist Medical Center and is currently a Life Trustee of Wake Forest University. Mr. Marino received his B.A., J.D. and MBA from Rutgers University.

Our Board of Directors believes that Mr. Marino's perspective and experience advising the Company and numerous other leading life science companies in connection with financings, acquisitions and strategic alliances, provide him with the qualifications and skills to serve as a director.

Jerome E. Groopman, M.D. Dr. Groopman has served as a member of our Board of Directors since July 2013. Dr. Groopman has served as the Dina and Raphael Recanati Professor of Medicine at Harvard Medical School since January 1992. He has also served as Attending Hematologist/Oncologist at Beth Israel Deaconess Medical Center since July 1996. Dr. Groopman received an M.D. from Columbia University College of Physicians and Surgeons, and a B.A. in Political Philosophy from Columbia College.

Our Board of Directors believes Dr. Groopman's perspective and experience in the healthcare industry, as well as his educational background, provide him with the qualifications and skills to serve as a director.

Steven M. Fruchtman, M.D. Dr. Fruchtman was appointed as a member of our Board of Directors and as our Chief Executive Officer on January 15, 2019. He was appointed President in June 2018 and continues to serve as President. Dr. Fruchtman served as our Chief Medical Officer and Senior Vice President, Research and Development from January 2015 to November 2018. Dr. Fruchtman is a board certified hematologist with extensive industry experience in clinical research for myelodysplastic syndromes, hematologic malignancies and solid tumors.

From June 2014 to January 2015, Dr. Fruchtman was a hematology oncology drug development consultant. From September 2013 to June 2014, Dr. Fruchtman served as Chief Medical Officer at Syndax Pharmaceuticals, Inc., a biopharmaceutical company. From July 2011 to July 2013, Dr. Fruchtman was the Chief Medical Officer and Senior Vice President of Research and Regulatory Affairs at Spectrum Pharmaceuticals, a biopharmaceutical company (“Spectrum”). From February 2011 to June 2011, he was Vice President of Research at Spectrum. From February 2009 to January 2011, Dr. Fruchtman was Vice President, Clinical Research at Allos Therapeutics, Inc., a biopharmaceutical company. Prior to this, Dr. Fruchtman held senior positions at Novartis and Ortho Biotech Products. Dr. Fruchtman was on the faculty of the Mount Sinai School of Medicine and was the Director of the Stem Cell Transplantation and Myeloproliferative Disorder Programs at Mount Sinai Hospital in New York City. Dr. Fruchtman received his medical degree from New York Medical College and his B.A. from Cornell University. He is currently a board member of the Bone Marrow & Cancer Foundation.

Our Board of Directors believes Dr. Fruchtman's perspective and experience as our Chief Medical Officer, President and Chief Executive Officer, as well as his depth of experience in the healthcare industry and his educational background, provide him with the qualifications and skills to serve as a director.

M. Teresa Shoemaker. Ms. Shoemaker has served as a member of our Board of Directors since April 2020. Ms. Shoemaker served as the President and CEO of Medexus Pharmaceuticals, Inc. (“Medexus”) from October 2018 to May 2020. Prior to joining Medexus, she served as President and CEO and board member of Medac Pharma, Inc. from its inception in June 2012 until its acquisition by Medexus in October 2018. Ms. Shoemaker implemented Medac's commercial strategy in support of a commercial product for the treatment of rheumatoid arthritis. Previously, Ms. Shoemaker served as Principal and Co-Founder of BioPharm Strategic Solutions from 2010 to 2012. From October 2009 to July 2010, she served as Vice President of Sales at InterMune, Inc. From 2002 to 2008, Ms. Shoemaker served as National Sales Director and then Sr. Director US Commercial Operations for Pharmion Corporation (“Pharmion”). In 2008, when Celgene Corporation acquired Pharmion, Ms. Shoemaker remained as Executive Director of Strategic Commercial Operations working as part of the executive transition team until 2009. Ms. Shoemaker began her career at DuPont Pharmaceuticals, which was acquired by Bristol Myers Squibb in 2000, where she held a number of sales and marketing leadership positions. Ms. Shoemaker holds B.S. degrees in Communication Science and Psychology from Missouri State University, and a M.S. degree in Communication Science and Disorders from University of Central Missouri.

Our Board of Directors believes that Ms. Shoemaker's experience holding senior leadership positions in the life sciences industry and her specific skills, developing and managing commercial organizations in the life sciences industry, provide her with the qualifications and skills to serve as a director.

Viren Mehta. Dr. Mehta has served as a member of our Board of Directors since February 2004. Dr. Mehta has been a managing member of Mehta Partners since 1997. Mehta Partners provides strategic advisory services to the biotechnology and pharmaceutical companies worldwide. Prior to founding Mehta Partners, Dr. Mehta co-founded Mehta and Isaly in 1989, and prior to that was a part of the strategic planning team of the International Division at Merck & Co. Dr. Mehta earned a Doctor of Pharmacy at the University of Southern California, and an M.B.A. from the Anderson School of Business at the University of California, Los Angeles. His board affiliations include Yisheng Biopharma, Project Hope and the Venice Family Clinic.

Our Board of Directors believes Dr. Mehta's perspective and experience in the life sciences industry as a biopharma fund manager, fund consultant and a strategic advisor to senior managers in the biopharma industry, as well as his educational background, provide him with the qualifications and skills to serve as a director.

Executive Officers

The following table sets forth certain information regarding our executive officers who are not also directors.

Name	Age	Position(s) with Onconova Therapeutics, Inc.
Abraham N. Oler, J.D.	46	Senior Vice President, Corporate Development and General Counsel
Mark S. Gelder, M.D.	65	Chief Medical Officer
Mark P. Guerin	53	Chief Financial Officer

Abraham N. Oler, J.D. Mr. Oler has served as our Senior Vice President, Corporate Development and General Counsel since January 2020. Previously, he served as Vice President, Corporate Development and General Counsel since December 2018. Prior to joining us, from 2010 to 2018, Mr. Oler was Vice President of Operations at Spectrum, where he headed the legal function and worked in corporate development. Additionally, he served as Chief of Staff to the CEO and corporate secretary. He was also an officer and director for several Spectrum subsidiary companies. From 2007 to 2010, Mr. Oler was a corporate attorney at the international law firm of Kirkland & Ellis LLP. Mr. Oler received his J.D. and an M.B.A. from Northwestern University. He received an M.Sc. in Politics of the World Economy from the London School of Economics and a B.S. in Economics and a B.A. in International Relations from the University of Pennsylvania.

Mark P. Guerin. Mr. Guerin has served as our Chief Financial Officer since September 1, 2016. Previously, he served as Vice President—Financial Planning & Accounting, and Chief Accounting Officer since May 2014, and as Vice President—Financial Planning & Accounting from September 2013 to May 2014. He has also served as our principal financial officer since February 12, 2016. Between January 2012 and September 2013, Mr. Guerin was self-employed as a financial and accounting consultant. For more than six years, through December 2011, Mr. Guerin was employed by CardioKine, Inc. and served as Chief Financial Officer from mid-2009 through December 2011. Mr. Guerin received his B.A. in Accounting from DeSales University.

Mark S. Gelder, M.D. Dr. Gelder has served as our Chief Medical Officer since June 2021. Prior to joining us, Dr. Gelder was employed by Elevar Therapeutics, Inc. as Chief Medical Officer from December 2020 to June 2021 and as Vice President, Head of Medical Affairs from May 2020 to December 2020. From June 2018 to May 2020, Dr. Gelder was Head of America's and AsiaPac Oncology Medical Directors Team and Executive Medical Director, Strategy and Planning, Oncology at Covance Inc. Dr. Gelder was employed by Pierian Biosciences, Inc., as Chief Medical Officer from September 2016 to October 2017, as Executive Vice President, Head of Research & Development from April 2016 to September 2016 and as Senior Vice President, Head of Clinical Development from January 2016 to April 2016. He was Chief Medical Officer (consultant) for Accelovance, Inc from September 2015 to January 2016. He was Vice President, Clinical Development for Inovio Therapeutics, Inc from January 2015 to September 2015. He was Senior Vice President & Chief Medical Officer for Heron Therapeutics, Inc. (formerly AP Pharma) from December 2012 to January 2015. From 2003 to 2012, Dr Gelder held senior medical affairs, clinical development and strategic planning positions at Pfizer, Wyeth Research, Bayer HealthCare Pharmaceuticals and GE Healthcare.

Dr. Gelder received his B.S. from Colgate University and his MD from the University of Virginia School of Medicine. Following graduation from medical school Dr. Gelder completed residencies in Internal Medicine and OB/GYN as well as a Fellowship in Gynecologic Oncology. Following completion of his fellowship, Dr. Gelder practiced as a Gynecologic Oncologist at the University of Florida College of Medicine where he became the Director of the Division of Gynecologic Oncology. Following this, Dr. Gelder entered private practice where he joined a large oncology multi-specialty group. In 2003, Dr. Gelder transitioned from clinical practice to industry.

Corporate Governance

Board Composition and Independence

Our Board of Directors currently consists of six members. Our Board of Directors has undertaken a review of the independence of our directors and has determined that all directors, except Steven M. Fruchtmann, M.D., are independent within the meaning of Section 5605(a)(2) of the NASDAQ Stock Market listing rules and Rule 10A-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Our Tenth Amended and Restated Certificate of Incorporation, as amended, provides that our Board of Directors will consist of not less than three nor more than 11 directors, as such number of directors may from time to time be fixed by our Board of Directors. Each director shall be elected to the Board of Directors to hold office until the next annual meeting of stockholders and until his or her successor is elected and qualified.

Board Leadership Structure and Role in Risk Oversight

Our Board of Directors recognizes the time, effort and energy that the chief executive officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the Board of Directors' oversight responsibilities continue to grow. We believe that, at present, separating these positions allows our chief executive officer to focus on our day-to-day business, while allowing our chairman to lead the Board of Directors in its fundamental role of providing advice to, and independent oversight of, management. Our Board of Directors also believes that this structure ensures a greater role for the independent directors in the oversight of our company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our Board of Directors.

While our bylaws do not require that our chairman and chief executive officer positions be separate, our Board of Directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including but not limited to risks relating to limited cash resources, need to raise additional funds, product candidate development, technological uncertainty, dependence on collaborative partners and other third parties, uncertainty regarding patents and proprietary rights, comprehensive government regulations, having no commercial manufacturing experience, marketing or sales capability or experience and dependence on key personnel. Management is responsible for the day-to-day management of risks we face, while our Board of Directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our Board of Directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed. The Board of Directors periodically consults with management regarding the Company's risks.

Our Board of Directors is actively involved in oversight of risks that could affect us. This oversight is conducted primarily through the audit committee of our Board of Directors, but the full Board of Directors has retained responsibility for general oversight of risks.

Board Committees

Our Board of Directors has established three standing committees: the audit committee, the compensation committee and the nominating and corporate governance committee. The current members of our audit committee are James J. Marino, Viren Mehta and Jack E. Stover, with Jack E. Stover serving as chairperson. The current members of our compensation committee are M. Teresa Shoemaker, James J. Marino and Jack E. Stover with M. Teresa Shoemaker serving as chairperson. The current members of our nominating and corporate governance committee are M. Teresa Shoemaker, Viren Mehta and Jerome E. Groopman, M.D., with Viren Mehta serving as chairperson.

Our Board of Directors has determined that James J. Marino, Viren Mehta and Jack E. Stover meet the additional test for independence for audit committee members imposed by Securities and Exchange Commission ("SEC") regulations and Section 5605(c)(2)(A) of the NASDAQ Stock Market listing rules and that M. Teresa Shoemaker, James J. Marino and Jack E. Stover meet the additional test for independence for compensation committee members imposed by Section 5605(d)(2)(A) of the NASDAQ Stock Market listing rules.

Audit Committee

The primary purpose of our audit committee is to assist the Board of Directors in the oversight of the integrity of our accounting and financial reporting process, the audits of our consolidated financial statements, and our compliance with legal and regulatory requirements. Our audit committee met four times during fiscal year 2021. The functions of our audit committee include, among other things:

- hiring the independent registered public accounting firm to conduct the annual audit of our consolidated financial statements and monitoring its independence and performance;
- reviewing and approving the planned scope of the annual audit and the results of the annual audit;
- pre-approving all audit services and permissible non-audit services provided by our independent registered public accounting firm;
- reviewing the significant accounting and reporting principles to understand their impact on our consolidated financial statements;
- reviewing our internal financial, operating and accounting controls with management, our independent registered public accounting firm and our internal audit provider;
- reviewing with management and our independent registered public accounting firm, as appropriate, our financial reports, earnings announcements and our compliance with legal and regulatory requirements;
- periodically reviewing and discussing with management the effectiveness and adequacy of our system of internal controls;
- in consultation with management and the independent auditors, reviewing the integrity of our financial reporting process and adequacy of disclosure controls;
- reviewing potential conflicts of interest under and violations of our code of conduct;
- establishing procedures for the treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters and confidential submissions by our employees of concerns regarding questionable accounting or auditing matters;
- reviewing and approving related-party transactions; and
- reviewing and evaluating, at least annually, our audit committee's charter.

With respect to reviewing and approving related-party transactions, our audit committee reviews related-party transactions for potential conflicts of interests or other improprieties. Under SEC rules, as a smaller reporting company, related-party transactions are those transactions to which we are or may be a party in which the amount involved exceeds the lesser of \$120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors or executive officers or any other related person had or will have a direct or indirect material interest, excluding, among other things, compensation arrangements with respect to employment and Board of Directors membership. Our audit committee could approve a related-party transaction if it determines that the transaction is in our best interests. Our directors are required to disclose to this committee or the full Board of Directors any potential conflict of interest, or personal interest in a transaction that our Board of Directors is considering. Our executive officers are required to disclose any related-party transaction to the audit committee. We also poll our directors on an annual basis with respect to related-party transactions and their service as an officer or director of other entities. Any director involved in a related-party transaction that is being reviewed or approved must recuse himself or herself from participation in any related deliberation or decision. Whenever possible, the transaction should be approved in advance and if not approved in advance, must be submitted for ratification as promptly as practical.

The financial literacy requirements of the SEC require that each member of our audit committee be able to read and understand fundamental financial statements. In addition, at least one member of our audit committee must qualify as an audit committee financial expert, as defined in Item 407(d)(5) of Regulation S-K promulgated under the Securities Act, and have financial sophistication in accordance with the NASDAQ Stock Market listing rules. Our Board of Directors has determined that Jack E. Stover qualifies as an audit committee financial expert.

Both our independent registered public accounting firm and management periodically will meet privately with our audit committee.

The Board of Directors has adopted a charter for the audit committee, which is available in the corporate governance section of our website at <http://www.onconova.com>.

Compensation Committee

The primary purpose of our compensation committee is to assist our Board of Directors in exercising its responsibilities relating to compensation of our executive officers and employees and to administer our equity compensation and other benefit plans. In carrying out these responsibilities, this committee reviews all components of executive officer and employee compensation for consistency with its compensation philosophy, as in effect from time to time. Our compensation committee met ten times during fiscal 2021. The functions of our compensation committee include, among other things:

- designing and implementing competitive compensation, retention and severance policies to attract and retain key personnel;
- reviewing and formulating policy and determining the compensation of our Chief Executive Officer, our other executive officers and employees;
- reviewing and recommending to our Board of Directors the compensation of our non-employee directors;
- reviewing and evaluating our compensation risk policies and procedures;
- administering our equity incentive plans and granting equity awards to our employees, consultants and directors under these plans;
- administering our performance bonus plans and granting bonus opportunities to our employees, consultants and non-employee directors under these plans;
- if required from time to time, preparing the analysis or reports on executive officer compensation required to be included in our annual proxy statement;
- engaging compensation consultants or other advisors it deems appropriate to assist with its duties; and
- reviewing and evaluating, at least annually, our compensation committee's charter.

The Board of Directors has adopted a charter for the compensation committee, which is available in the corporate governance section of our website at <http://www.onconova.com>.

The compensation committee has utilized Radford ("Radford"), an Aon Hewitt company, as its executive compensation consultant. Radford reports directly to the compensation committee. The compensation committee may replace Radford or hire additional consultants at any time. Upon request by the compensation committee or its chair, a representative of Radford attends meetings of the compensation committee and is available to discuss compensation issues in between meetings.

In connection with its work for the compensation committee, Radford provided various executive compensation services to the compensation committee pursuant to a written consulting agreement. Generally, these services included advising the compensation committee on the principal aspects of our executive compensation program and evolving industry practices and providing market information and analysis regarding the competitiveness of our program design and our award values in relation to performance.

The compensation committee retains sole authority to hire any compensation consultant, approve such consultant's compensation, determine the nature and scope of its services, evaluate its performance, and terminate its engagement. We assessed the independence of Radford pursuant to SEC rules and determined that no known conflict of interest existed that would prevent Radford from serving as an independent consultant to the compensation committee.

The compensation committee has reviewed our compensation policies and practices for all employees, including our named executive officers, as they relate to risk management practices and risk-taking incentives, and has determined that there are no risks arising from these policies and practices that are reasonably likely to have a material adverse effect on us.

Nominating and Corporate Governance Committee

The primary purpose of our nominating and corporate governance committee is to assist our Board of Directors in promoting the best interest of our company and our stockholders through the implementation of sound corporate governance principles and practices. Our nominating and corporate governance committee met two times during fiscal 2021. The functions of our nominating and corporate governance committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our Board of Directors;
- determining the minimum qualifications for service on our Board of Directors;
- developing and recommending to our Board of Directors an annual self-evaluation process for our Board of Directors and overseeing the annual self-evaluation process;
- developing, as appropriate, a set of corporate governance principles, and reviewing and recommending to our Board of Directors any changes to such principles; and
- periodically reviewing and evaluating our nominating and corporate governance committee's charter.

The Board of Directors has adopted a charter for the nominating and corporate governance committee, which is available in the corporate governance section of our website at <http://www.onconova.com>.

Code of Conduct for Employees, Executive Officers and Directors

We have adopted a code of conduct applicable to all of our employees, executive officers and directors. The code of conduct is available in the corporate governance section of our website at <http://www.onconova.com>.

The audit committee of our Board of Directors is responsible for overseeing the code of conduct and must approve any waivers of the code of conduct for employees, executive officers or directors.

Meetings of the Board of Directors

The Board of Directors held eight meetings during fiscal 2021. During fiscal 2021, each director attended at least 75 percent of the aggregate of the total number of meetings of the Board of Directors and the committees on which such director served.

Directors are encouraged, but not required, to attend the annual meeting of stockholders. Two of our directors attended the 2020 Annual Meeting of Stockholders.

Director Nomination Process

The process followed by our nominating and corporate governance committee to identify and evaluate director candidates includes requests to members of our Board of Directors and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the nominating and corporate governance committee and the Board of Directors.

In determining whether to recommend any particular candidate for inclusion in the Board of Directors' slate of recommended director nominees, our nominating and corporate governance committee considers the composition of the Board of Directors with respect to depth of experience, balance of professional interests, required expertise and other factors. The nominating and corporate governance committee considers the value of diversity when recommending candidates. The committee views diversity broadly to include diversity of experience, skills and viewpoint. The nominating and corporate governance committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. Our Board of Directors believe that the backgrounds and qualifications of its directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow it to fulfill its responsibilities.

Stockholders may recommend individuals to our nominating and corporate governance committee for consideration as potential director candidates. The nominating and corporate governance committee will evaluate stockholder-recommended candidates by following the same process and applying the same criteria as it follows for candidates submitted by others.

Stockholders may directly nominate a person for election to our Board of Directors by complying with the procedures set forth in Section 2.2(A) of our bylaws, and with the rules and regulations of the SEC. Under our bylaws, only persons nominated in accordance with the procedures set forth in the bylaws will be eligible to serve as directors. In order to nominate a candidate for service as a director, you must be a stockholder at the time you give the Board of Directors notice of your nomination, and you must be entitled to vote for the election of directors at the meeting at which your nominee will be considered. In addition, the stockholder must have given timely notice in writing to our Secretary. To be timely, a stockholder's notice must be delivered to the Secretary at our principal executive offices not later than the 90th day, nor earlier than the 120th day, prior to the first anniversary of the prior year's annual meeting of stockholders (provided, however, that in the event that the date of the annual meeting is more than 30 days before or 60 days after such anniversary date, notice by the stockholder must be delivered no earlier than the 120th day prior to the annual meeting and no later than the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such annual meeting is first made by us). Your notice must set forth (i) the name, age, business address and, if known, residence address of the nominee, (ii) the principal occupation or employment of the nominee, (iii) the class and number of shares of stock of the Company directly or indirectly, owned beneficially or of record by the nominee, (iv) a description of all arrangements or understandings between you and the nominee and any other person or persons (naming such person or persons) pursuant to which the nomination is to be made by you, and (v) all other information relating to the nominee that is required to be disclosed in solicitations of proxies for the election of directors in an election contest, or is otherwise required, in each case, pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder. Nominations for director must be accompanied by the nominee's written consent to being named in the proxy statement as a nominee and to serving as a director if elected.

Stockholder Communications with the Board of Directors

You can contact our Board of Directors to provide comments, to report concerns, or to ask a question, at the following address.

President
Onconova Therapeutics, Inc.
12 Penns Trail
Newtown, PA 18940
United States

You may submit your concern anonymously or confidentially by postal mail. You may also indicate whether you are a stockholder, customer, supplier, or other interested party.

Communications are distributed to our Board of Directors, or to any individual directors, as appropriate, depending on the facts and circumstances outlined in the communication.

Delinquent Section 16(a) Reports

Pursuant to Section 16(a) of the Exchange Act and the rules issued thereunder, our executive officers, directors and beneficial owners of more than ten percent of our common stock are required to file with the SEC reports of holdings of and transactions in our securities. Copies of such reports are required to be furnished to us. Based solely on a review of the copies of such reports furnished to us, or written representations that no other reports were required, we believe that all required reports were filed in fiscal 2021 in a timely manner, except for one Form 4 for Mark S. Gelder which was inadvertently filed late to report an option grant.

ITEM 11. EXECUTIVE COMPENSATION.

Overview of Executive Compensation

The compensation committee of our Board of Directors is responsible for overseeing the compensation of all of our executive officers. In this capacity, our compensation committee annually reviews and approves the compensation of our chief executive officer and other executive officers, including such goals and objectives relevant to the executive officers' compensation that the committee, in its discretion, determines are appropriate, evaluates their performance in light of those goals and objectives, and sets their compensation based on this evaluation.

2021 Summary Compensation Table

The following table sets forth information for the fiscal years ended December 31, 2021 and 2020 concerning compensation of our principal executive officer and the two most highly compensated executive officers during 2021. We refer to these three executive officers as our "named executive officers."

Name and Principal Position	Year	Salary (\$)	Bonus \$(1)	Stock Awards \$(2)	Option Awards \$(3)	All Other Compensation \$(4)	Total (\$)
Steven M. Fruchtman, M.D. President and Chief Executive Officer	2021	600,000	279,750	1,261,685	509,079	23,699	2,674,213
	2020	562,224	266,705	118,173	61,507	23,214	1,031,823
Mark P. Guerin Chief Financial Officer	2021	400,000	149,200	528,430	192,688	29,202	1,299,520
	2020	374,816	142,243	50,364	26,219	28,467	622,109
Abraham N. Oler Senior Vice President, Corporate Development and General Counsel	2021	375,000	139,875	383,588	180,089	14,739	1,093,291

(1) Represents discretionary annual bonus amounts earned in the year reported herein.

(2) The amounts shown for 2021 represent the aggregate grant date fair value related to the grant of performance stock units ("PSUs") and restricted stock units ("RSUs") to our named executive officers in fiscal 2021. The amounts shown for 2020 represent the aggregate grant date fair value related to the grant of PSUs to our named executive officers in fiscal 2020. Aggregate grant date fair value is calculated in accordance with FASB ASC Topic 718 (excluding the effect of any estimate of future forfeitures). Additional information concerning our financial reporting of PSUs is presented in Note 10 to our Consolidated Financial Statements set forth in our Annual Report on Form 10-K for the year ended December 31, 2021. See the "Outstanding Equity Awards at Fiscal Year-End – 2021" table below for additional details regarding the PSUs and RSUs that were granted to our named executive officers in fiscal 2021.

(3) The amounts shown for 2021 represent the aggregate grant date fair value related to the grant of stock appreciation rights and non-qualified stock options to our named executive officers in fiscal 2021. The amounts shown for 2020 represent the aggregate grant date fair value related to the grant of stock appreciation rights to our named executive officers in fiscal 2020. Aggregate grant date fair value is calculated in accordance with FASB ASC Topic 718 (excluding the effect of any estimate of future forfeitures). Additional information concerning our financial reporting of stock appreciation rights and stock options is presented in Note 10 to our Consolidated Financial Statements set forth in our Annual Report on Form 10-K for the year ended December 31, 2021. See the "Outstanding Equity Awards at Fiscal Year-End – 2021" table below for additional details regarding the stock appreciation rights that were granted to our named executive officers in fiscal 2021.

(4) Includes amounts paid for insurance premiums on behalf of the named executive officer and matching funds paid pursuant to our 401(k) Plan.

Employment Agreements

We have entered into employment agreements with each of our named executive officers, and the compensation of our named executive officers is determined, in large part, by the terms of those employment agreements. Following are descriptions of the material terms of each named executive officer's employment agreement.

Steven M. Fruchtman, M.D.

We entered into an employment agreement with Dr. Fruchtman on June 19, 2018, which supersedes any prior employment agreements (the "Employment Agreement"). The employment agreement continues indefinitely, unless terminated in accordance with the terms of the agreement. On March 18, 2021, we entered into an amendment to the Original Agreement (the "Amendment").

The Employment Agreement provides for an initial base salary of \$510,000, subject to adjustment upon annual review, and subject to the compensation committee's sole discretion, an annual bonus, based on the performance of Dr. Fruchtman and the Company, of up to 50% of such base salary. The bonus may be paid in the form of cash, stock options, shares of our common stock, or a combination thereof, at our compensation committee's discretion.

Dr. Fruchtman is entitled to participate in all of our employee benefit plans and programs that are made generally available from time to time to our executive officers and is entitled to vacation benefits. Dr. Fruchtman's Employment Agreement contains non-solicitation, non-competition, confidentiality and inventions assignment provisions that, among other things, prevent him from competing with us during the term of his employment and for a specified time thereafter. The Company will reimburse Dr. Fruchtman for reasonable expenses including certain commuting costs to the Company's offices.

If Dr. Fruchtman's employment is terminated due to his death, disability, by us for "cause" or by Dr. Fruchtman without "good reason" during the term of his employment agreement, we will pay to Dr. Fruchtman or his spouse or estate the balance of his accrued and unpaid salary, unreimbursed expenses, and unused accrued vacation time through the termination date.

If Dr. Fruchtman's employment is terminated by us without "cause" or by Dr. Fruchtman for "good reason," other than during a change in control protection period, Dr. Fruchtman will be entitled to receive severance equal to the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. If the termination is during a change in control protection period, Dr. Fruchtman will be entitled to receive severance equal to the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. A change in control protection period is the twelve months following a change in control. The Company will also reimburse Dr. Fruchtman for a portion of his medical insurance costs and all of Dr. Fruchtman's stock options that are unvested as of the date of such termination would fully vest as of the date of termination. Any severance payments or benefits provided to Dr. Fruchtman are subject to execution by Dr. Fruchtman of a release of claims.

The Amendment removed Section 4(d) of the Employment Agreement, under which if Dr. Fruchtman would voluntarily resign from employment within three months following the Company's appointment of a new Chief Executive Officer (other than Dr. Fruchtman) and upon not less than 30 days' notice, Dr. Fruchtman would be entitled to receive seven months of his current base salary, and any outstanding unvested options to purchase shares of Company common stock would become fully vested as of the date of termination.

In addition, under the Amendment, if Dr. Fruchtman's employment is terminated by the Company without "cause" or by Dr. Fruchtman for "good reason," other than during the 12-month period following a change in control of the Company, Dr. Fruchtman will be entitled to receive twelve months of his current base salary and target bonus. If the termination is during the 12-month period following a change in control of the Company, Dr. Fruchtman will be entitled to receive the sum of one and one-half times of (i) his current base salary and (ii) target bonus. The Company will also reimburse Dr. Fruchtman for the employer's portion of his medical insurance costs under COBRA for twelve months if Dr. Fruchtman's termination occurs other than during the 12-month period following a change in control of the Company or for 18 months if Dr. Fruchtman's termination occurs during the 12 month-period following a change in control of the Company. In addition, all of Dr. Fruchtman's stock options that are unvested as of the date of such termination will fully vest as of the date of termination. Under the Amendment, in order to receive the forgoing severance benefits, Dr. Fruchtman must sign a release and waiver of claims and such release becomes effective and irrevocable within 60 days of Dr. Fruchtman's cessation of employment and Dr. Fruchtman's continued compliance with the certain restrictive covenants in the Agreement. To the extent any of the above severance payments are subject to Section 409A of the Internal Revenue Code of 1986, as amended ("Section 409A") and Dr. Fruchtman is classified as a "specified employee," as defined in Section 409A, any such payments will not be paid during the six-month period immediately following such termination.

The Amendment also includes a provision on whistleblower protection and trade secrets.

Mark P. Guerin

We entered into an employment agreement with Mr. Guerin on July 1, 2015, which supersedes any prior employment agreements. The employment agreement continues indefinitely, unless terminated in accordance with the terms of the agreement.

The employment agreement provides for an initial base salary of \$243,165, subject to adjustment upon annual review by our board of directors, and subject to the compensation committee's sole discretion, an annual bonus, based on the performance of Mr. Guerin and the Company, of up to 25% of such base salary. The bonus may be paid in the form of cash, stock options, shares of Common Stock, or a combination thereof, at our compensation committee's discretion.

Mr. Guerin is entitled to participate in all of our employee benefit plans and programs that are made generally available from time to time to our executive officers and is entitled to vacation benefits. Mr. Guerin's employment agreement contains non-solicitation, non-competition, confidentiality and inventions assignment provisions that, among other things, prevent him from competing with us during the term of his employment and for a specified time thereafter.

If Mr. Guerin's employment is terminated due to his death, disability, by us for "cause" or by Mr. Guerin without "good reason" during the term of his employment agreement, we will pay to Mr. Guerin or his spouse or estate the balance of his accrued and unpaid salary, unreimbursed expenses, and unused accrued vacation time through the termination date.

If Mr. Guerin's employment is terminated by us without "cause" or by Mr. Guerin for "good reason," other than during a change in control protection period, Mr. Guerin will be entitled to receive severance equal to nine-twelfths of the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. If the termination is during a change in control protection period, Mr. Guerin will be entitled to receive severance equal to the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. A change in control protection period is the twelve months following a change in control. The Company will also reimburse Mr. Guerin for a portion of his medical insurance costs and all of Mr. Guerin's incentive stock options that are unvested as of the date of such termination would fully vest as of the date of termination.

We entered into an employment agreement with Mr. Oler on March 9, 2021, which supersedes any prior employment agreements. The employment agreement continues indefinitely, unless terminated in accordance with the terms of the agreement.

The employment agreement provides for an initial base salary of \$375,000, subject to adjustment upon annual review by our board of directors, and subject to the compensation committee's sole discretion, an annual bonus, based on the performance of Mr. Oler and the Company, of up to 40% of such base salary. The bonus may be paid in the form of cash, stock options, shares of Common Stock, or a combination thereof, at our compensation committee's discretion.

Mr. Oler is entitled to participate in all of our employee benefit plans and programs that are made generally available from time to time to our executive officers and is entitled to vacation benefits. Mr. Oler's employment agreement contains non-solicitation, non-competition, confidentiality and inventions assignment provisions that, among other things, prevent him from competing with us during the term of his employment and for a specified time thereafter.

If Mr. Oler's employment is terminated due to his death, disability, by us for "cause" or by Mr. Oler without "good reason" during the term of his employment agreement, we will pay to Mr. Oler or his spouse or estate the balance of his accrued and unpaid salary, unreimbursed expenses, and unused accrued vacation time through the termination date.

If Mr. Oler's employment is terminated by us without "cause" or by Mr. Oler for "good reason," other than during a change in control protection period, Mr. Oler will be entitled to receive severance equal to nine-twelfths of the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. If the termination is during a change in control protection period, Mr. Oler will be entitled to receive severance equal to the sum of his current base salary and target bonus for the fiscal year during which his employment ceases. A change in control protection period is the twelve months following a change in control. The Company will also reimburse Mr. Oler for a portion of his medical insurance costs and all of Mr. Oler's stock options that are unvested as of the date of such termination would fully vest as of the date of termination. The foregoing severance benefits are contingent on Mr. Oler's execution and nonrevocation of a general release of claims.

Stock Option and Other Compensation Plans

We maintain the Onconova Therapeutics, Inc. 2021 Incentive Compensation Plan (the “2021 Plan”) for the purpose of attracting key employees, directors and consultants, inducing them to remain with us and encouraging them to increase their efforts to make our business more successful. The 2021 Plan provides for awards of stock options, stock appreciation rights, restricted stock, RSUs and other equity-based awards.

The following table contains certain information regarding equity awards held by the named executive officers as of December 31, 2021:

Outstanding Equity Awards at 2021 Fiscal Year-End

Name	Option Awards				Stock Awards			
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Fruchtman	53	-	9,832.50	1/12/2025				
	15	-	5,580.00	4/20/2025				
	17	-	3,330.00	9/25/2025				
	13	-	1,462.50	1/26/2026				
	41	-	1,462.50	1/26/2026				
	111	-	729.00	9/1/2026				
	33	-	596.25	12/15/2026				
	117	-	607.50	1/17/2027				
	193	-	337.50	1/3/2028				
	1,777	-	103.50	7/26/2028				
	8,888(1)	4,445	4.65	12/20/2029				
	39,876(2)	45,044		7/9/2030				
	-(2)	47,066		2/17/2031				
	-(1)	113,000	5.19	8/2/2031				
					37,700(3)	96,135		
							47,065(4)	120,016
Guerin	13	-	64,822.50	10/4/2023				
	2	-	30,330.00	12/20/2023				
	5	-	14,175.00	3/31/2024				
	5	-	14,175.00	3/31/2024				
	11	-	8,955.00	12/18/2024				
	6	-	5,220.00	4/16/2025				
	7	-	3,330.00	9/25/2025				
	5	-	1,462.50	1/26/2026				
	15	-	1,462.50	1/26/2026				
	44	-	729.00	9/1/2026				
	22	-	729.00	9/1/2026				
	24	-	596.25	12/15/2026				
	86	-	607.50	1/17/2027				
	137	-	337.50	1/3/2028				
	1,710	-	103.50	7/26/2028				
	2,893(1)	1,440	4.65	12/20/2029				
	16,997(2)	19,203		7/9/2030				
	-(2)	20,066		2/17/2031				
	-(1)	42,750	5.19	8/2/2031				
					14,250(3)	36,338		
							20,065(4)	51,166
Oler	1,003(1)	330	65.10	12/1/2028				
	2,668(1)	1,332	4.65	12/20/2029				
	11,759(2)	13,281		7/9/2030				
	-(2)	13,866		2/17/2031				
	-	40,000	5.19	8/2/2031				
					13,400(3)	34,170		
							13,865(4)	35,356

(1) Shares vest over three years, one-third on the first anniversary of the date of grant and thereafter in 24 equal monthly installments over the following two years.

(2) These are cash-settled stock appreciation rights that vest over three years, one-third on the first anniversary of the date of grant and thereafter in 24 equal monthly installments over the following two years.

(3) These are RSUs that vest over three years from the date of grant: 33% on the first anniversary; 33% on the second anniversary; and 34% on the third anniversary.

(4) These are PSUs that will be earned and vested upon the Company's attainment of certain performance goals, subject to the executive's continued employment with the Company through each vesting date, as follows: (i) 20% of PSUs will vest upon the attainment of a new clinical program for the Company for an in-licensed compound, (ii) 20% of PSUs will vest upon obtaining the recommended phase 2 dose for a Company compound, (iii) 20% of PSUs will vest upon the first patient being enrolled in the ON 123300 (narazaciclib) expansion cohort, (iv) 20% of PSUs will vest upon the first patient enrolled in a registrational study and (v) 20% of the PSUs will vest upon attainment of registrational study topline data. The goals must be attained prior to the following expiration dates ("Expiration Date"): for the goals under (i), (ii) and (iii), December 31, 2022, for the goal under (iv), December 31, 2025, and for the goal under (v), June 30, 2028. In the event a performance goal is achieved prior to February 17, 2022, the vesting date for the portion of the PSUs that will vest based on the achievement of the applicable performance goal would be February 17, 2022. The PSUs will be settled in cash and are in all cases subject to the terms and conditions of the Company form of Performance Stock Unit Award Agreement. Pursuant to the terms of the PSU awards, the maximum cash amount payable to each officer with respect to each vested PSU subject to the officer's PSU award cannot exceed maximum price per share of \$38.10, subject to adjustment in accordance with the terms of the Performance Stock Unit Award Agreement. If a performance goal is not achieved on or before its corresponding Expiration Date, then all of the PSUs subject to such performance goal will be automatically forfeited as of such date.

Potential Payments Upon Termination of Employment or Change in Control

As discussed under the caption "—Employment Agreements" above, we have agreements with our named executive officers pursuant to which they will receive severance payments upon certain termination events. The information below describes certain compensation that would be available under our existing plans and arrangements if (i) the named executive officer was terminated as of December 31, 2021 or (ii) if a Change in Control, as defined in the applicable employment agreement or plan, occurred on December 31, 2021 and the named executive officer's employment had been subsequently terminated on the same date.

Acceleration of Equity Awards in connection with a Change in Control

Pursuant to the terms of each named executive officer's option agreements reflecting options granted under the 2018 Omnibus Incentive Compensation Plan, as previously amended (the "2018 Plan"), applicable award agreements reflecting options and RSUs granted under the 2021 Plan and the applicable award agreement reflecting cash-settled stock appreciation rights and cash-settled PSUs, in the event of a "Change in Control" in which the Company is not the surviving corporation (or survives only as a subsidiary of another corporation) and the awards are assumed by, or replaced with awards with comparable terms by, the surviving corporation (or parent or subsidiary of the surviving corporation) and the named executive officer's employment or service is terminated without "Cause" or the named executive officer terminates his employment for "Good Reason" (as such terms are defined in the applicable award agreement), all such awards shall fully vest and, if applicable, become exercisable, upon termination of employment or service. In the event that the surviving corporation (or a parent or subsidiary of the surviving corporation) does not assume or replace the awards with grants that have comparable terms, and named executive officer is employed by, or providing services to, the Company and its subsidiaries on the date of the Change in Control, all awards granted pursuant to such award agreements shall fully vest and, if applicable, become exercisable.

Termination Other than for Cause, Death or Disability; Resignation for Good Reason

The outstanding options, RSUs and stock appreciation rights held by our named executive officers will vest and, if applicable, become exercisable in the event that the named executive officer's employment or service is terminated without "Cause" or the named executive officer terminates his employment for "Good Reason" (as such terms are defined in the applicable award agreement).

Director Compensation

The following table summarizes compensation paid to our non-employee directors in fiscal 2021.

Name	Fees Earned or Paid in Cash (\$)	Stock Option Awards (\$)(1)	All Other Compensation (\$)	Total (\$)
Jerome E. Groopman, M.D.	44,000	55,563	—	99,563
James J. Marino	82,500	55,563	—	138,063
Viren Mehta	59,500	55,563	—	115,063
M. Teresa Shoemaker	59,000	55,563	—	114,563
Jack E. Stover	67,500	55,563	—	123,063

(1) The amounts shown represent the aggregate grant date fair value related to the grant of 13,000 non-qualified stock options to each of our non-employee directors on July 30, 2021, calculated in accordance with FASB ASC Topic 718. These stock options vest on the first anniversary of the grant and expire ten years after the grant date and are subject to the director's continued service. Additional information concerning our financial reporting of stock appreciation rights is presented in Note 10 to our Consolidated Financial Statements set forth in our Annual Report on Form 10-K for the year ended December 31, 2021.

(2) As of December 31, 2021, the aggregate number of outstanding stock option awards held by each non-employee director was: Dr. Groopman—13,816; Mr. Marino—13,799; Dr. Mehta—13,798; Ms. Shoemaker—13,000; and Mr. Stover—13,794. As of December 31, 2021, the aggregate number of stock appreciation rights held by each non-employee director was: Dr. Groopman—8,333; Mr. Marino—8,333; Dr. Mehta—8,333; Ms. Shoemaker—8,333; and Mr. Stover—8,333.

In June 2013, our Board of Directors approved a non-employee director compensation policy, which became effective for all non-employee directors in July 2013. In June 2018, the Board of Directors revised the policy to change the retainer amounts and the number of options members of our Board of Directors would receive, based on a benchmarking study comparing our director compensation to a group of comparable peer companies. In accordance with this policy, each non-employee director receives an annual base retainer of \$40,000. In addition, our non-employee directors receive the following cash compensation for board services, as applicable:

- the chairman of our Board of Directors receives an additional annual retainer of \$30,000;
- each member of our audit, compensation and nominating and corporate governance committees receives an additional retainer of \$7,500, \$5,000 and \$4,000, respectively; and
- each chairperson of our audit, compensation and nominating and corporate governance committees receives an additional annual retainer of \$15,000, \$10,000 and \$8,000, respectively, in addition to the retainer received for service as a member of such committee.

All amounts are paid in quarterly installments.

All of our directors are eligible to receive additional discretionary awards under our 2021 Plan, subject to the annual limit set forth in the 2021 Plan.

We reimburse each non-employee director for out-of-pocket expenses incurred in connection with attending our Board of Directors and committee meetings. Compensation for our directors, including cash and equity compensation, is determined, and remains subject to adjustment, by our Board of Directors.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Equity Compensation Plan Information

The following table summarizes the total number of outstanding awards and shares available for other future issuances of options under all of our equity compensation plans as of December 31, 2021. All of the outstanding awards listed below were granted under our 2013 Equity Compensation Plan and 2018 Plan and 2021 Plan.

Plan Category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Shares Remaining Available for Future Issuance Under the Equity Compensation Plan (Excluding Shares in First Column)
Equity compensation plans approved by stockholders	557,699	\$ 17.83	812,394
Equity compensation plans not approved by stockholders	—	—	—

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding the beneficial ownership of common stock as of March 31, 2022 by (a) each person known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock, (b) each of our named executive officers identified on page 8 of this Amendment under the heading, “2021 Summary Compensation Table,” (c) each of our directors, and (d) all of our executive officers and directors as a group.

The percentage of common stock outstanding is based on 20,895,563 shares of common stock outstanding on March 31, 2022. For purposes of the table below, and in accordance with the rules of the SEC, we deem shares of common stock subject to warrants and options that are currently exercisable or exercisable within sixty days of March 31, 2022 to be outstanding and to be beneficially owned by the person holding the warrants and options for the purpose of computing the percentage ownership of that person, but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person. Except as otherwise noted, each of the persons or entities in this table has sole voting and investing power with respect to all of the shares of common stock beneficially owned by him, her or it, subject to community property laws, where applicable. Except as otherwise noted below, the street address of each beneficial owner is c/o Onconova Therapeutics, Inc., 12 Penns Trail, Newtown, PA 18940.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% or greater stockholders:		
None.		
Directors, Director Nominees and Named Executive Officers:		
Jerome E. Groopman, M.D.(1)	1,483	*
James J. Marino (2)	32,133	*
Steven M. Fruchtman, M.D.(3)	78,276	*
Viren Mehta (4)	34,187	*
Jack E. Stover (5)	1,004	*
M. Teresa Shoemaker	3,383	*
Abraham N. Oler (6)	42,280	*
Mark P. Guerin (7)	35,349	*
All current executive officers, directors and director nominees as a group (9 persons)(8)	244,426	1.2%

*Represents a beneficial ownership of less than one percent of our outstanding common stock.

(1) Includes 816 shares of common stock issuable upon the exercise of options that are currently exercisable or exercisable within sixty days of the record date.

(2) Includes 10,799 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date.

(3) Includes 37,700 RSUs and 22,446 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date.

(4) Includes (i) 4 shares of common stock held by Mehta Partners, LLC, (ii) 4 shares of common stock held by Viram Foundation and (iii) 17,465 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date. Dr. Mehta, as managing member, has voting and dispositive power with regard to the shares held by Mehta Partners, LLC. Dr. Mehta, as trustee has voting and dispositive power with regard to the shares held by Viram Foundation.

(5) Includes 794 shares of common stock issuable upon the exercise of options that are currently exercisable or exercisable within sixty days of the record date.

(6) Includes 13,400 RSUs and 4,366 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date.

(7) Includes 14,250 RSUs and 11,418 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date.

(8) Includes 79,300 RSUs and 68,104 shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within sixty days of the record date.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

Review and Approval of Related Person Transactions

The audit committee of our Board of Directors is charged with the responsibility of reviewing and approving all related person transactions (as defined in SEC regulations), and periodically reassessing any related person transaction that we enter to ensure continued appropriateness. This responsibility is set forth in our audit committee charter. A related party transaction will only be approved if the audit committee determines that the transaction is in the best interests of the Company. If a director is involved in the transaction, he or she will recuse himself or herself from all decisions regarding the transaction.

There were no related person transactions (as defined in SEC regulations) during 2021.

See "Item 10. Directors, Executive Officers and Corporate Governance; Corporate Governance, Board Composition" above for a discussion regarding the independence of the members of our Board of Directors.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Fees of Independent Registered Public Accounting Firm

The following table summarizes the fees of Ernst & Young LLP (Philadelphia, PA, PCAOB ID: 42), our independent registered public accounting firm, billed to us for each of the last two fiscal years.

Fee Category	Fiscal 2021	Fiscal 2020
Audit Fees(1)	\$ 345,000	\$ 297,500
Audit-Related Fees(2)	—	—
Tax Fees(3)	—	—
Total Fees	<u>\$ 345,000</u>	<u>\$ 297,500</u>

(1) Audit fees consist of fees for the audits of fiscal 2021 and 2020 and quarterly reviews of our consolidated financial statements and other professional services provided in connection with statutory and regulatory filings or engagements.

(2) Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit and the review of our consolidated financial statements and which are not reported under "Audit Fees."

(3) Tax fees for fiscal 2021 and fiscal 2020 include fees for tax advice, tax return preparation assistance and review.

Pre-Approval Policies and Procedures

Our audit committee's policy is that all audit services and all non-audit services to be provided to us by our independent registered public accounting firm must be approved in advance by the audit committee. The audit committee's approval procedures include the review and approval of engagement letters from our independent registered public accounting firm that document the fees for all audit services and non-audit services, primarily tax advice and tax return preparation and review.

All audit services and all non-audit services in fiscal 2021 were pre-approved by our audit committee. Our audit committee has determined that the provision of the non-audit services for which these fees were rendered is compatible with maintaining the independent auditor's independence.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Financial Statements

Included in Part II, Item 8 of the Original Report.

Exhibits

See Exhibit Index.

EXHIBITS INDEX

Exhibit Number	Exhibit Description
<u>3.1</u>	<u>Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc. (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 25, 2013).</u>
<u>3.2</u>	<u>Certificate of Amendment to Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc. (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 31, 2016).</u>
<u>3.3</u>	<u>Certificate of Amendment to Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc., as amended (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 22, 2018).</u>
<u>3.4</u>	<u>Certificate of Amendment to Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc., as amended (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 8, 2018).</u>
<u>3.5</u>	<u>Certificate of Amendment to Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc., as amended (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 25, 2018).</u>
<u>3.6</u>	<u>Certificate of Designation of Series A Convertible Preferred Stock (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 8, 2018).</u>
<u>3.7</u>	<u>Certificate of Designation of Series B Convertible Preferred Stock (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 30, 2018).</u>
<u>3.8</u>	<u>Certificate of Amendment to the Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc., as amended (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 20, 2021).</u>
<u>3.9</u>	<u>Certificate of Amendment to the Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc., as amended (Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on May 20, 2021).</u>
<u>3.10</u>	<u>Amended and Restated Bylaws of Onconova Therapeutics, Inc. (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 25, 2013).</u>
<u>4.1</u>	<u>Form of Certificate of Common Stock (Incorporated by reference to Exhibit 4.1 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
<u>4.2</u>	<u>Eighth Amended and Restated Stockholders' Agreement, effective as of July 27, 2012, by and among Onconova Therapeutics, Inc. and certain stockholders named therein (Incorporated by reference to Exhibit 4.2 to Pre-Effective Amendment No. 1 to the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
<u>4.3</u>	<u>Amendment No. 1 to Eighth Amended and Restated Stockholders' Agreement, effective as of July 9, 2013 (Incorporated by reference to Exhibit 4.2 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>

Exhibit Number	Exhibit Description
4.4	<u>Form of Warrant Certificate, issued pursuant to Warrant Agreement, dated as of July 27, 2016, by and between Onconova Therapeutics, Inc. and Wells Fargo Bank, N.A., as Warrant Agent (Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed on August 15, 2016).</u>
4.5	<u>Warrant Agreement, dated as of July 27, 2016, by and between Onconova Therapeutics, Inc. and Wells Fargo Bank, N.A., as Warrant Agent (Incorporated by reference to Exhibit 4.2 to the Company's Quarterly Report on Form 10-Q filed on August 15, 2016).</u>
4.6	<u>Form of Pre-Funded Warrants, issued as of July 27, 2016 (Incorporated by reference to Exhibit 4.3 to the Company's Quarterly Report on Form 10-Q filed on August 15, 2016).</u>
4.7	<u>Form of Underwriter Warrant, issued as of February 12, 2018 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on February 8, 2018).</u>
4.8	<u>Form of Preferred Stock Warrant, issued as of February 12, 2018 (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on February 8, 2018).</u>
4.9	<u>Form of Pre-Funded Warrant, issued as of February 12, 2018 (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on February 8, 2018).</u>
4.10	<u>Form of Preferred Stock Warrant, issued as of May 1, 2018 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on April 30, 2018).</u>
4.11	<u>Form of Pre-Funded Warrant, issued as of May 1, 2018 (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on April 30, 2018).</u>
4.12	<u>First Amendment to Underwriter Series A Convertible Preferred Stock Purchase Warrant, dated as of September 24, 2018 (Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed on November 14, 2018).</u>
4.13	<u>Form of Placement Agent Common Stock Purchase Warrant, issued as of September 25, 2019 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 25, 2019).</u>
4.14	<u>Form of Letter Amendment to Warrants, dated as of September 23, 2019 (Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed on November 12, 2019).</u>
4.15	<u>Form of Common Stock Purchase Warrant, issued as of November 25, 2019 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 26, 2019).</u>
4.16	<u>Form of Pre-Funded Common Stock Warrant, issued as of November 25, 2019 (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 26, 2019).</u>
4.17	<u>Form of Placement Agent Common Stock Purchase Warrant, issued as of November 25, 2019 (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on November 26, 2019).</u>
4.18	<u>Form of Common Stock Purchase Warrant, issued as of December 10, 2019 (Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on December 10, 2019).</u>
4.19	<u>Form of Placement Agent Common Stock Purchase Warrant, issued as of December 10, 2019 (Incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K filed on December 10, 2019).</u>
4.20	<u>Form of Common Stock Purchase Warrant, issued as of December 2019 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 19, 2019).</u>
4.21	<u>Form of Placement Agent Common Stock Purchase Warrant, issued as of December 19, 2019 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 19, 2019).</u>
4.21	<u>Form of Placement Agent Common Stock Purchase Warrant, issued as of January 3, 2020 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 3, 2020).</u>
4.22	<u>Description of the Company's Securities Registered under Section 12 of the Securities Exchange Act of 1934, as amended (Incorporated by reference to Exhibit 4.22 to the Company's Annual Report on Form 10-K filed on March 27, 2020).</u>
10.1*	<u>License Agreement, effective as of July 5, 2011, by and between Onconova Therapeutics, Inc. and SymBio Pharmaceuticals Limited (Incorporated by reference to Exhibit 10.2 to Pre-Effective Amendment No. 2 the Company's Registration Statement on Form S-1 filed on July 18, 2013).</u>
10.2*	<u>First Amendment to License Agreement, effective as of September 2, 2011, by and between Onconova Therapeutics, Inc. and SymBio Pharmaceuticals Limited (Incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-1 filed on June 14, 2013).</u>

Exhibit Number	Exhibit Description
10.3*	<u>License Agreement, effective as of January 1, 1999, by and between Onconova Therapeutics, Inc. and Temple University — Of The Commonwealth System of Higher Education (Incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1 filed on June 14, 2013).</u>
10.4*	<u>Amendment to License Agreement, effective as of September 1, 2000, by and between Temple University — Of The Commonwealth System of Higher Education and Onconova Therapeutics, Inc. (Incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-1 filed on June 14, 2013).</u>
10.5*	<u>Amendment #1 to Exclusive License Agreement, effective as of March 21, 2013, by and between Temple University — Of The Commonwealth System of Higher Education and Onconova Therapeutics, Inc. (Incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form S-1 filed on June 14, 2013).</u>
10.6+	<u>Onconova Therapeutics, Inc. 2007 Equity Compensation Plan, and forms of agreement thereunder (Incorporated by reference to Exhibit 10.13 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
10.7+	<u>Consulting Agreement, effective as of January 1, 2012, by and between Onconova Therapeutics, Inc. and E. Premkumar Reddy, Ph.D., including Consultant Agreement Renewal, dated February 27, 2013 (Incorporated by reference to Exhibit 10.23 to the Company's Registration Statement on Form S-1 filed on June 14, 2013).</u>
10.8+	<u>Form of Indemnification Agreement entered into by and between Onconova Therapeutics, Inc. and each director and executive officer (Incorporated by reference to Exhibit 10.24 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
10.9+	<u>Onconova Therapeutics, Inc. 2013 Equity Compensation Plan, and forms of agreement thereunder (Incorporated by reference to Exhibit 10.25 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
10.10+	<u>Onconova Therapeutics, Inc. 2013 Performance Bonus Plan (Incorporated by reference to Exhibit 10.26 to Pre-Effective Amendment No. 1 the Company's Registration Statement on Form S-1 filed on July 11, 2013).</u>
10.11+	<u>Employment Agreement, effective as of July 1, 2015, by and between Onconova Therapeutics, Inc. and Mark Guerin (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 17, 2016).</u>
10.12+	<u>Amended and Restated Employment Agreement, effective as of July 1, 2015, by and between Onconova Therapeutics, Inc. and Steven M. Fruchtman, M.D. (Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on August 13, 2015).</u>
10.13*	<u>License, Development and Commercialization Agreement, dated as of March 2, 2018, by and between Onconova Therapeutics, Inc. and Pint International SA (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 15, 2018).</u>
10.14	<u>Securities Purchase Agreement, dated as of March 2, 2018, by and between Onconova Therapeutics, Inc. and Pint Pharma GmbH (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 15, 2018).</u>
10.15.1+	<u>Amended and Restated Employment Agreement, effective as of June 19, 2018, by and between Onconova Therapeutics, Inc. and Steven M. Fruchtman, M.D. (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 14, 2018).</u>

Exhibit Number	Exhibit Description
<u>10.15.2+</u>	<u>Amendment to Employment Agreement, dated as of March 18, 2021, by and between Onconova Therapeutics, Inc. and Steven M. Fruchtmann, M.D.</u>
<u>10.16+</u>	<u>Onconova Therapeutics, Inc. 2018 Omnibus Incentive Compensation Plan, as approved by the stockholders (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 29, 2018).</u>
<u>10.17+</u>	<u>Form of Nonqualified Stock Option Award Agreement under the Onconova Therapeutics, Inc. 2018 Omnibus Incentive Compensation Plan (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 30, 2018).</u>
<u>10.18+</u>	<u>Employment Agreement, effective as of November 5, 2018, by and between Onconova Therapeutics, Inc. and Richard C. Woodman, M.D. (Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed on November 14, 2018).</u>
<u>10.19</u>	<u>License and Collaboration Agreement, effective as of May 10, 2019, by and between Onconova Therapeutics, Inc. and HanX Biopharmaceuticals, Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 14, 2019).</u>
<u>10.20</u>	<u>Securities Purchase Agreement, effective as of May 10, 2019, by and between Onconova Therapeutics, Inc. and HanX Biopharmaceuticals, Inc. (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 14, 2019).</u>
<u>10.21</u>	<u>Securities Purchase Agreement, effective as of May 10, 2019, by and between Onconova Therapeutics, Inc. and Abundant New Investments Ltd. (Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 14, 2019).</u>
<u>10.22</u>	<u>Form of Securities Purchase Agreement, effective as of September 23, 2019, by and between Onconova Therapeutics, Inc. and each purchaser identified on the signature pages thereto (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 25, 2019).</u>
<u>10.23**</u>	<u>Distribution, License and Supply Agreement, effective as of November 20, 2019, by and between Onconova Therapeutics, Inc. and Knight Therapeutics, Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 21, 2019).</u>
<u>10.24</u>	<u>Form of Securities Purchase Agreement, effective as of November 21, 2019, by and between Onconova Therapeutics, Inc. and each purchaser identified on the signature pages thereto (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 26, 2019).</u>
<u>10.25</u>	<u>Form of Securities Purchase Agreement, effective as of December 6, 2019, by and between Onconova Therapeutics, Inc. and each purchaser identified on the signature pages thereto (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 10, 2019).</u>
<u>10.26**</u>	<u>Distribution, License and Supply Agreement, by and between Onconova Therapeutics, Inc. and Specialised Therapeutics Asia Pte. Ltd., effective as of December 18, 2019 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2019).</u>
<u>10.27</u>	<u>Form of Securities Purchase Agreement, by and between Onconova Therapeutics, Inc. and each purchaser identified on the signature pages thereto, effective as of December 17, 2019 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2019).</u>
<u>10.28</u>	<u>Form of Securities Purchase Agreement, by and between Onconova Therapeutics, Inc. and each purchaser identified on the signature pages thereto, effective as of December 31, 2019 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 3, 2020).</u>

Exhibit Number	Exhibit Description
<u>10.29+</u>	<u>Form of Stock Appreciation Right Award Agreement (for Employees) (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 10, 2020).</u>
<u>10.30</u>	<u>Form of Purchase Agreement, dated as of January 7, 2021, by and among Onconova Therapeutics, Inc. and the investors party thereto (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 8, 2021).</u>
<u>10.31</u>	<u>Underwriting Agreement, dated February 10, 2021, by and between Onconova Therapeutics, Inc. and Guggenheim Securities, LLC (Incorporated by reference as Exhibit 1.1 to the Company's Current Report of Form 8-K filed on February 12, 2021).</u>
<u>10.32+</u>	<u>Form of Stock Appreciation Right Award Agreement (for Non-Employee Directors) (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 16, 2020).</u>
<u>10.33+</u>	<u>Form of Performance Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 10, 2020).</u>
<u>10.34+</u>	<u>Employment Agreement, dated June 14, 2021, by and between Onconova Therapeutics, Inc. and Mark Stephen Gelder, M.D. (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 16, 2021).</u>
<u>10.35+</u>	<u>Employment Agreement, dated March 9, 2021, by and between Onconova Therapeutics, Inc. and Abraham N. Oler (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 16, 2021).</u>
<u>10.36</u>	<u>Equity Distribution Agreement, dated as of August 20, 2021, by and between Onconova Therapeutics, Inc. and Piper Sandler & Co. (Incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed on August 20, 2021).</u>
<u>10.37</u>	<u>Underwriting Agreement, dated September 23, 2021, by and between Onconova Therapeutics, Inc. and Guggenheim Securities, LLC (Incorporated by reference as Exhibit 1.1 to the Company's Current Report of Form 8-K filed on September 24, 2021).</u>
<u>10.38+</u>	<u>Form of Restricted Stock Unit Agreement (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 15, 2021).</u>
<u>10.39+</u>	<u>Form of Non-Qualified Stock Option Agreement (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 15, 2021).</u>
<u>10.40+</u>	<u>Onconova Therapeutics, Inc. 2021 Incentive Compensation Plan (Incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-8 filed on July 30, 2021).</u>
<u>21.1#</u>	<u>Subsidiaries of Onconova Therapeutics, Inc.</u>
<u>23.1#</u>	<u>Consent of Ernst & Young, LLP.</u>
<u>31.1</u>	<u>Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.2</u>	<u>Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>32.1##</u>	<u>Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>32.2##</u>	<u>Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>101.INS#</u>	<u>XBRL Instance</u>
<u>101.SCH#</u>	<u>XBRL Taxonomy Extension Schema Document</u>
<u>101.CAL#</u>	<u>XBRL Taxonomy Extension Calculation Linkbase Document</u>
<u>101.DEF#</u>	<u>XBRL Taxonomy Extension Calculation Linkbase Document</u>
<u>101.LAB#</u>	<u>XBRL Taxonomy Extension Labels Linkbase Document</u>
<u>101.PRE#</u>	<u>XBRL Taxonomy Extension Presentation Linkbase Document</u>

Exhibit Number	Exhibit Description
104#	Cover Page Interactive Data File – The cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
+	Indicates management contract or compensatory plan.
*	Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
**	Portions of the exhibit have been omitted.
#	Previously filed.
##	Previously furnished.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 29, 2022

Onconova Therapeutics, Inc.

By: _____ /s/ STEVEN M. FRUCHTMAN, M.D.
Steven M. Fruchtmann
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ STEVEN M. FRUCHTMAN, M.D.</u> Steven M. Fruchtmann, M.D.	Director, President and Chief Executive Officer (Principal Executive Officer)	April 29, 2022
<u>/s/ MARK GUERIN</u> Mark Guerin	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 29, 2022
<u>/s/ JAMES J. MARINO</u> James J. Marino	Chairman, Board of Directors	April 29, 2022
<u>/s/ JEROME E. GROOPMAN, M.D.</u> Jerome E. Groopman, M.D.	Director	April 29, 2022
<u>/s/ VIREN MEHTA, PH.D.</u> J Viren Mehta, Ph.D.	Director	April 29, 2022
<u>/s/ MARY TERESA SHOEMAKER</u> Mary Teresa Shoemaker	Director	April 29, 2022
<u>/s/ JACK E. STOVER</u> Jack E. Stover	Director	April 29, 2022

CERTIFICATIONS

I, Steven M. Fruchtman, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Onconova Therapeutics, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: April 29, 2022

/s/ STEVEN M. FRUCHTMAN, M.D.

Steven M. Fruchtman M.D.
President and Chief Executive Officer
(Principal Executive Officer and Principal Operating Officer)

CERTIFICATIONS

I, Mark Guerin, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Onconova Therapeutics, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: April 29, 2022

/s/ MARK GUERIN

Mark Guerin
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)
