

Cipher Pharmaceuticals Inc.

NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

and

MANAGEMENT INFORMATION CIRCULAR

May 7, 2019

CIPHER PHARMACEUTICALS INC.

May 7, 2019

Dear Shareholders:

It is my great pleasure to invite you to the Annual and Special Meeting (the “**Meeting**”) of the shareholders of Cipher Pharmaceuticals Inc. (the “**Corporation**”) to be held on Tuesday, June 11, 2019 at the offices of Wildeboer Dellelce LLP, Wildeboer Dellelce Place, 365 Bay Street, Suite 800, Toronto, Ontario at 11:00 a.m. (Toronto time).

The items of business to be considered and voted upon at this Meeting are described in the Notice of Annual and Special Meeting and the accompanying Management Information Circular.

You may find further information concerning the Corporation on our website: www.cipherpharma.com. We encourage you to visit our website before attending the Meeting.

Your participation at this Meeting is important. We encourage you to exercise your right to vote, which can easily be done by following the instructions provided in the Management Information Circular and form of proxy, or a voting instruction form if you are not a registered shareholder.

At the Meeting, a report on the Corporation’s affairs will be provided by senior management. You will also have the opportunity to ask questions and to meet the Corporation’s Board of Directors.

We look forward to seeing you on June 11, 2019.

Yours very truly,

“Mark Beaudet” (signed)

Mark Beaudet
Chair of the Board of Directors
Cipher Pharmaceuticals Inc.

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CIPHER PHARMACEUTICALS INC.
NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS
TO BE HELD ON JUNE 11, 2019

NOTICE IS HEREBY GIVEN that the Annual and Special Meeting (the “**Meeting**”) of the holders of common shares of Cipher Pharmaceuticals Inc. (“**Cipher**” or the “**Corporation**”) will be held on Tuesday, June 11, 2019 at the offices of Wildeboer Dellelce LLP, Wildeboer Dellelce Place, 365 Bay Street, Suite 800, Toronto, Ontario at 11:00 a.m. (Toronto time), for the following purposes:

- (a) to receive and consider the consolidated financial statements of the Corporation for the year ended December 31, 2018, together with the report of the auditor thereon;
- (b) to elect directors for the ensuing year;
- (c) to appoint the auditor for the ensuing year and to authorize the directors to fix the auditor’s remuneration;
- (d) to consider, and, if deemed advisable, approve, with or without variation, by ordinary resolution, the unallocated shares, rights and other entitlements under the Corporation’s employee and director share purchase plan in accordance with the rules of the Toronto Stock Exchange; and
- (e) to transact such other business as may properly come before the Meeting or any adjournments or postponements thereof.

Only holders (“**Shareholders**”) of record at the close of business on Tuesday, May 7, 2019 (the “**Record Date**”) of common shares of the Corporation are entitled to notice of and to attend the Meeting or any adjournments or postponements thereof and to vote thereat.

Shareholders may vote in person at the Meeting or any adjournments or postponements thereof, or they may appoint another person (who need not be a Shareholder) as their proxy to attend and vote in their place.

Shareholders unable to be present at the Meeting are requested to date and sign the enclosed form of proxy and return it to Computershare Investor Services Inc., attention: Proxy Department, 100 University Ave., 8th Floor, Toronto, Ontario, M5J 2Y1, or by fax (1-866-249-7775 or 416-263-9524) not later than 5:00 p.m. (Toronto time) on June 7, 2019, or with the Chair of the Meeting before the commencement of the Meeting, or, if the Meeting is adjourned or postponed, not less than 24 hours, excluding Saturdays, Sundays and statutory holidays in Toronto, Ontario, preceding the time of such adjourned or postponed Meeting or with the Chair of the Meeting before the commencement of such adjourned or postponed Meeting. Voting can also be done by phone or internet as described in the accompanying Management Information Circular.

A Management Information Circular relating to the business to be conducted at the Meeting and, if previously requested, the Corporation’s 2018 Annual Report containing the audited consolidated financial statements of the Corporation for the financial year ended December 31, 2018, accompany this Notice.

DATED at Toronto, Ontario this 7th day of May, 2019.

BY ORDER OF THE BOARD OF DIRECTORS

“Robert Tessarolo” (signed)
President and Chief Executive Officer

MANAGEMENT INFORMATION CIRCULAR

This Management Information Circular (the “**Circular**”) is furnished to shareholders of Cipher Pharmaceuticals Inc. (the “**Corporation**” or “**Cipher**”) in connection with the solicitation by and on behalf of the management of the Corporation of proxies to be used at the Annual and Special Meeting of Shareholders (the “**Meeting**”) of the Corporation to be held on Tuesday, June 11, 2019 at the offices of Wildeboer Dellelce LLP, Wildeboer Dellelce Place, 365 Bay Street, Suite 800, Toronto, Ontario at 11:00 a.m. (Toronto time), and at any adjournment(s) or postponement(s) thereof, for the purposes set forth in the attached Notice of Annual and Special Meeting of Shareholders (the “**Notice**”).

This Circular, the Notice, the accompanying form of proxy and, if previously requested, the Corporation’s 2018 Annual Report are being mailed to shareholders of record of the Corporation as of the close of business on May 7, 2019. The Corporation will bear all costs associated with the preparation and mailing of this Circular, the Notice, the accompanying form of proxy and the Corporation’s 2018 Annual Report, as well as the cost of the solicitation of proxies. The solicitation will be primarily by mail; however, officers and regular employees of the Corporation may also directly solicit proxies (but not for additional compensation) personally, by telephone, by telefax or by other means of electronic transmission. Banks, brokerage houses and other custodians and nominees or fiduciaries will be requested to forward proxy solicitation material to their principals and to obtain authorizations for the execution of proxies and will be reimbursed for their reasonable expenses in doing so.

All amounts referred to in this Circular are presented in Canadian dollars, unless otherwise noted.

HOW TO VOTE YOUR SHARES

Your vote is important. Please read the information below to ensure your shares are properly voted.

Registered Shareholders and Non-Registered Shareholders

How you vote your shares depends on whether you are a registered shareholder or a non-registered shareholder. In either case, there are two ways you can vote at the Meeting – by appointing a proxyholder or by attending in person.

Registered Shareholder:

You are a registered shareholder if you hold one or more share certificates which indicate your name and the number of shares which you own. As a registered shareholder, you will receive a form of proxy from Computershare Investor Services Inc. (“**Computershare**”) representing the shares you hold. If you are a registered shareholder refer to “How to Vote – Registered Shareholders” below.

Non-Registered Shareholder:

You are a non-registered shareholder if an intermediary such as a securities dealer, broker, bank, trust company or other nominee holds your shares for you, or for someone else on your behalf, registered in the name of the nominee. In accordance with applicable securities laws, the Corporation distributes copies of its meeting materials to non-registered shareholders directly or to intermediaries for onward distribution to non-registered shareholders. As a non-registered shareholder, you will most likely receive a Voting Instruction Form from either Computershare on behalf of Cipher (if you are a non-objecting beneficial owner of shares willing to have your nominee disclose your ownership information to Cipher) or Broadridge Investor Communications Corporation (“**Broadridge**”) on behalf of intermediaries (if you are an objecting beneficial owner of shares not willing to have your nominee disclose your ownership information to Cipher), although in some cases you may receive a form of proxy from the securities dealer, broker, bank, trust company or other nominee holding your shares. If you are a non-registered shareholder, refer to “How to Vote - Non-Registered Shareholders” below.

How to Vote – Registered Shareholders

If you are a registered shareholder you may either vote by proxy or in person at the Meeting.

Submitting Votes by Proxy

There are four ways to submit your vote by proxy:

-  phone
-  internet
-  mail
-  fax

in accordance with the instructions on the form of proxy.

If you are voting by phone or internet, you will need the pre-printed Control Number, Holder Account Number and Access Number on your form of proxy.

A proxy submitted by mail or fax must be in writing, dated the date on which you signed it and be signed by you (or your authorized attorney). If a proxy submitted by mail or fax is not dated, it will be deemed to bear the date on which it was sent to you. If such a proxy is being submitted on behalf of a corporate shareholder, the proxy must be signed by an authorized officer or attorney of that corporation, whose title should be indicated. Documentation evidencing power to sign the proxy may be required. A form of proxy executed by a person acting as attorney or in some other representative capacity should state such person's capacity following his or her signature. Documentation evidencing power to sign the proxy may be required.

If you are voting your shares by proxy, you must ensure that your completed and signed proxy form or your phone or internet vote is received by Computershare not later than 5:00 p.m. (Toronto time) on June 7, 2019 or, if the Meeting is adjourned or postponed, not less than 24 hours excluding Saturdays, Sundays and statutory holidays in Toronto, Ontario, preceding the time of such adjourned or postponed Meeting, or is provided to the Chair of the Meeting before the commencement of the Meeting or any adjourned or postponed Meeting.

Appointment of Proxyholder

Unless you specify a different proxyholder or specify how you want your shares to be voted, the Cipher representatives whose names are pre-printed on the form of proxy (who are directors or officers of the Corporation) will vote your shares:

- **FOR** the election as directors each of the nominees named in this Circular;
- **FOR** the appointment of Ernst & Young LLP as auditor and authorizing the directors to fix the auditor's remuneration; and
- **FOR** the approval of all unallocated shares, rights and other entitlements under the Share Purchase Plan (as defined herein);

You have the right to appoint someone else (who need not be a shareholder) as your proxyholder; however, if you do, that person must vote your shares in person on your behalf at the Meeting. To appoint someone else your proxyholder, insert the person's name in the blank space provided on the form of proxy or complete, sign, date and submit another proper form of proxy naming that person as your proxyholder.

If you choose to vote by proxy, you are giving the person (referred to as a "**proxyholder**") or people named on your form of proxy the authority to vote your shares on your behalf at the Meeting.

You may indicate on the form of proxy how you want your proxyholder to vote your shares, or you can let your proxyholder decide for you. If you do not specify on the form of proxy how you want your shares to be voted, your proxyholder will have the discretion to vote your shares as they see fit.

The form of proxy accompanying this Circular gives the proxyholder discretion with respect to any amendments or changes to the matters described in the Notice and with respect to any other matters which may properly come before the Meeting. As of the date of this Circular, management of the Corporation is not aware of any amendments, changes or other matters to be addressed at the Meeting.

Voting in Person

If you attend in person, you do not need to complete or return your form of proxy. When you arrive at the Meeting, a Computershare representative will register your attendance before you enter the Meeting.

If you vote in person at the Meeting and had previously completed and returned your form of proxy, your proxy will be automatically revoked and any votes you cast at the Meeting will count.

Revoking a Vote Made by Proxy

You have the right to revoke a proxy as to any matter on which a vote has not already been cast pursuant to its authority by one of the following methods:

- vote again by phone or internet not later than the deadline described above under “How to Vote – Registered Shareholders – Submitting Votes by Proxy”;
- deliver another completed and signed form of proxy, dated later than the first form of proxy, by mail or fax such that it is received by Computershare not later than the deadline described above under “How to Vote – Registered Shareholders – Submitting Votes by Proxy”;
- personally attend the Meeting and vote your shares; or
- in any other manner permitted by law.

How to Vote – Non-Registered Shareholders

The purpose of the below noted procedures is to permit non-registered shareholders to direct the voting of the shares they beneficially own. Non-registered shareholders should carefully follow the instructions and procedures set out in the materials they receive, including those regarding when and where the form of proxy or Voting Instructions Form is to be delivered.

Pursuant to National Instrument 54-101 *Communication with Beneficial Owners of Securities of a Reporting Issuer* (“**NI 54-101**”), Cipher is distributing copies of proxy related materials in connection with the Meeting directly to non-objecting beneficial holders of shares. Cipher is not relying on the notice-and-access delivery procedures set out in NI 54-101 to distribute copies of proxy-related material in connection with the Meeting. Cipher will pay the reasonable costs of intermediaries to deliver copies of proxy-related materials to objecting beneficial owners.

If you are a non-registered shareholder and Computershare has sent these materials directly to you on behalf of Cipher, your name, address and information about your holdings of securities have been obtained in accordance with applicable securities regulatory requirements from the intermediary holding on your behalf. By choosing to send these materials directly to you, Cipher (and not the intermediary holding on your behalf) has assumed responsibility for (i) delivering these materials to you and (ii) executing your proper voting instructions.

Submitting Voting Instructions

There are four ways to submit your vote by Voting Instruction Form:

-  phone
-  internet
-  mail
-  fax

in accordance with the instructions on the Voting Instruction Form.

If you are a non-registered shareholder and have received a Voting Instruction Form from Computershare, you must complete and submit your vote by phone, internet, mail or fax, in accordance with the instructions on the Voting Instruction Form. On receipt of a properly completed and submitted form, a legal form of proxy will be submitted on your behalf.

You must ensure your completed, signed and dated Voting Instruction Form or your phone or internet vote is received by Computershare not later than 5:00 p.m. (Toronto time) on June 7, 2019 or, if the Meeting is adjourned or postponed, not less than 24 hours, excluding Saturdays, Sundays and statutory holidays in Toronto, Ontario, preceding the time of such adjourned or postponed Meeting. If a Voting Instruction Form submitted by mail or fax is not dated, it will be deemed to bear the date on which it was sent to you.

If you are a non-registered shareholder and have received a Voting Instruction Form from Broadridge, please complete and submit your vote by phone, internet or mail in accordance with the instructions provided to you on the form prior to the deadline specified by Broadridge. Voting by fax is not available in this instance.

In some cases, you may have received a form of proxy instead of a Voting Instruction Form, even though you are a non-registered shareholder. Such a form of proxy will likely be stamped by the securities dealer, broker, bank, trust company or other nominee or intermediary holding your shares and be restricted as to the number of shares to which it relates. In this case, you must complete the form of proxy and submit it to Computershare as described above under “How to Vote – Registered Shareholders – Submitting Votes by Proxy”.

Voting in Person

If you have received a Voting Instruction Form and wish to attend the Meeting in person or have someone else (who need not be a shareholder) attend on your behalf, you must complete, sign and return the Voting Instruction Form in accordance with the instructions on the form in that regard. Unless prohibited by law, the person you designate to attend the Meeting will have full authority to present matters to the Meeting and vote all matters presented at the Meeting, even if those matters are not set out in the Voting Instruction Form or this Information Circular. You, or such other designated person if applicable, must then vote your shares in person at the Meeting.

If you have received a form of proxy instead of a Voting Instruction Form and wish to attend the Meeting in person or have someone else attend on your behalf, you must insert your name, or the name of the person you wish to attend on your behalf, in the blank space provided on the form of proxy. You must ensure that your completed and signed proxy form is received by Computershare not later than 5:00 p.m. (Toronto time) on June 7, 2019 or, if the Meeting is adjourned or postponed, not less than 24 hours, excluding Saturdays, Sunday and statutory holidays, in Toronto, Ontario, preceding the time of such adjourned or postponed Meeting. You, or such other designated person if applicable, must then vote your shares in person at the Meeting.

When you or your designated person arrive at the Meeting, a Computershare representative will register such attendance before you or your designated person enter the Meeting.

Revoking a Voting Instruction Form or Proxy

If you wish to revoke a Voting Instruction Form or a form of proxy as to any matter on which a vote has not already been cast pursuant to its authority and you received your Voting Instruction Form from Computershare, you may vote again by phone or internet, or by delivering another completed and signed Voting Instruction Form dated later than the first Voting Instruction Form by mail or fax to Computershare, not later in any case than the deadline described above under “How to Vote – Non-Registered Shareholders – Submitting Voting Instructions”. If you received your Voting Instruction Form from Broadridge, and voted by phone or internet, you may vote again by phone or internet prior to the deadline specified by Broadridge. If you received your Voting Instruction Form from Broadridge and voted by mail, please contact your account service provider at your intermediary for instructions should you wish to revoke your Voting Instruction Form. If you received a form of proxy from your securities dealer, broker, bank, trust company or other nominee or intermediary, please refer to “How to Vote – Registered Shareholders – Revoking a Vote Made by Proxy” above. In any case you must comply with any applicable requirements relating to the revocation of votes made by Voting Instruction Form or proxy.

RECORD DATE

The Board has fixed the close of business on May 7, 2019 as the record date (the “**Record Date**”) for the Meeting. Only holders of record of common shares at the close of business on the Record Date are entitled to receive notice of and to attend and vote at the Meeting.

VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

As at May 7, 2019, there were issued and outstanding 26,923,835 common shares. Holders of common shares as at the time of taking any vote on the date of the Meeting are entitled to cast one vote per common share held by them on each matter to be acted on at the Meeting.

The following table sets forth information with respect to the only shareholder known to the directors or officers of the Corporation to own beneficially, or exercise control or direction over, directly or indirectly, more than ten percent of the issued and outstanding common shares of the Corporation (the “**common shares**”), as at May 7, 2019:

	<u>Number of Shares</u>	<u>Percentage of Common Shares</u>
Dr. John D. Mull	9,923,927 ⁽¹⁾	36.9%

(1) 9,438,050 of these shares are held by 1207407 Ontario Limited, all of the shares of which are held by Dr. Mull.

The Corporation has been advised that 1207407 Ontario Limited and Dr. John D. Mull intend to vote their common shares for the election of the management nominees named in this Circular as directors of the Corporation, for the appointment of Ernst & Young LLP as auditor and to authorize the directors to fix the auditor’s remuneration and for the approval of all unallocated shares, rights and other entitlements under the Share Purchase Plan.

INTEREST OF CERTAIN PERSONS OR COMPANIES IN MATTERS TO BE ACTED UPON

Except as otherwise disclosed in this Circular, no person who has been a director or executive officer of Cipher at any time since the beginning of the financial year ended December 31, 2018 or who is a proposed nominee for election as a director at the Meeting nor any associate or affiliate of such persons has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter to be acted upon at the Meeting.

MATTERS TO BE CONSIDERED AT THE MEETING

Financial Statements and Auditor’s Report

Management, on behalf of the Board of Directors of the Corporation (the “**Board**”), will submit to the shareholders at the Meeting the audited consolidated financial statements of the Corporation for the financial year ended December 31, 2018 and the auditor’s report thereon, but no vote by the shareholders with respect thereto is required or proposed to be taken. The financial statements and auditor’s report are included in the Corporation’s 2018 Annual Report.

Election of Directors

Under the Articles of Incorporation of the Corporation, the Board is to consist of a minimum of one and a maximum of ten directors. The directors are authorized to determine from time to time, by resolution, the number of directors of the Corporation and the number of directors to be elected at an annual meeting of the shareholders of the Corporation, such number being within the minimum and maximum numbers provided for in the Corporation’s articles. The number of directors currently is set at six.

Mark Beaudet and Dr. Laurence Terrisse-Rulleau have determined not to stand for re-election at the Meeting and will be retiring from the Board. The Board and management of Cipher wish to thank Mr. Beaudet and Dr. Rulleau for their service and contribution to Cipher during their tenure as directors.

Management proposes to nominate, and the persons named in the accompanying form of proxy, in the absence of specifications or instructions to withhold from voting on the proxy, will vote for the election of the six persons whose names are set forth below, but will not vote for a greater number of persons than the number of nominees named in the form of proxy. Management does not contemplate that any of the nominees will be unable to serve as a director. If, as a result of circumstances not now contemplated, any nominee is unavailable to serve as a director, the proxy will be voted for the election of such other person or persons as management may select. Each director elected will hold office until the next annual meeting of shareholders of the Corporation, or until his/her respective successor is elected or appointed in accordance with applicable law and the Corporation’s by-laws.

The Board has adopted a policy regarding majority voting in the election of directors. For details regarding this policy see “Majority Voting in Director Elections Policy” in Appendix B hereto. The Corporation has adopted an Advance Notice By-law with respect to the nomination of directors by shareholders as described in the Corporation’s Management Information Circular dated March 31, 2015.

The following table sets forth information with respect to each of the six management nominees for director, including the number of common shares of the Corporation beneficially owned or over which control or direction is exercised, directly or indirectly, by each such nominee, as at May 7, 2019. The information as to common shares beneficially owned or controlled or directed, directly or indirectly, not being within the knowledge of the Corporation, has been furnished by the respective nominees individually or obtained from the System for Electronic Disclosure by Insiders (“**SEDI**”).

Name and Province or State of Residence of Nominee	Director Since	Other Positions and Offices Presently Held With Corporation	Principal Occupation	Cipher Common Shares
Dr. John D. Mull <i>Ontario, Canada</i>	January 9, 2004	--	Chief Executive Officer, Typhon Group Limited	9,923,927 ⁽¹⁾
Harold Wolkin ⁽²⁾ <i>Ontario, Canada</i>	August 9, 2016	--	Retired. Former Managing Director of BMO Capital Markets, Former Vice President and Head of Investment Banking of Dundee Capital Markets	193,446

Name and Province or State of Residence of Nominee	Director Since	Other Positions and Offices Presently Held With Corporation	Principal Occupation	Cipher Common Shares
Christian Godin ⁽³⁾ <i>Quebec, Canada</i>	August 9, 2016	--	Retired. Former Head of Equities, Montrusco Bolton Investments Inc.	41,593 ⁽⁵⁾
Arthur M. Deboeck <i>Gurabo, Puerto Rico</i>	May 11, 2017	--	Vice-President and General Manager of Galephar Pharmaceutical Research, Inc.	105,062
Robert D. Tessarolo <i>Ontario, Canada</i>	May 11, 2017	President and Chief Executive Officer (as of April 17, 2017)	President and Chief Executive Officer of the Corporation	44,606
Craig Mull <i>Ontario, Canada</i>	March 26, 2019	--	Managing Director of 1207407 Ontario Limited and founder and Chief Executive Officer of Typhoon Group Ltd.	741,854

- (1) An associate of Dr. Mull owns and controls an additional 17,700 common shares.
- (2) Mr. Wolkin is Chair of the Audit Committee and a member of the Nominating and Governance Committee and the Compensation Committee. The Board intends to reconstitute the membership of the Nominating and Governance Committee and the Compensation Committee at a Board meeting to be held following the Meeting.
- (3) Mr. Godin is Chair of the Compensation Committee and a member of the Nominating and Governance Committee and the Audit Committee. The Board intends to reconstitute the membership of the Compensation Committee, the Nominating and Governance Committee and the Audit Committee at a Board meeting to be held following the Meeting.

The following are brief biographies of each of the nominees for director:

Dr. John D. Mull: Dr. Mull is Chief Executive Officer of Typhon Group Limited, a private equity capital corporation. Dr. Mull is the founder and former Chief Executive Officer of Cipher, as well as CML HealthCare Inc. (“CML”), Pharma Medica Research Inc. (“Pharma Medica”) and Starplex Scientific, Inc. In those capacities, he has been involved in more than 30 merger and acquisition transactions. Cipher and Pharma Medica were subsidiaries of CML prior to CML’s conversion to an income trust in 2004. At the time, CML was one of the largest operators of medical diagnostic and medical imaging facilities in Canada and the United States. Its peak market capitalization exceeded \$1.4 billion. CML merged with LifeLabs Medical Laboratory Services in 2013. Dr. Mull is a graduate of the Faculty of Medicine, University of Toronto, and completed his training in Anatomic and Clinical Pathology at the University of Michigan (Ann Arbor). He is certified in Pathology by the Royal College of Physicians and Surgeons and in Anatomic and Clinical Pathology by the American College of Physicians and Surgeons. His original investigative research work in those fields involved publication of 15 papers in various medical journals. Dr. Mull’s experience in practice as a staff pathologist at hospitals in South Western Ontario convinced him that healthcare providers required high-quality medical diagnostic services not then available. He founded CML in 1971 to address that need.

Harold Wolkin: Mr. Wolkin is an accomplished investment banker and financial analyst with over 30 years of experience. Mr. Wolkin joined BMO Nesbitt Burns as a senior research analyst in 1983. He went on to serve as managing director in the Diversified Industries Group of BMO Capital Markets until January 2008. Most recently, Mr. Wolkin served as Executive Vice-President and Head of Investment Banking for Dundee Capital Markets. Mr. Wolkin has served on a number of public company and not-for-profit boards and currently serves as a director of Diamond Estates Wines & Spirits and Baylin Technologies Inc. He was the past President of the CFA Society Toronto and has been a member of the Chartered Financial Institute since 1980. He is a member of the Institute of Corporate Directors.

Christian Godin: Mr. Godin is the former Head of Equities at Montrusco Bolton Investments Inc. (“Montrusco”), a Montreal based investment firm, and previously sat on its board of directors. He was also a member of the Management Committee of Montrusco. Prior to joining Montrusco in 2001, Mr. Godin worked for Merrill Lynch Canada where he was a director and senior equity research analyst. He also worked for Midland Walwyn

Capital and CTI Capital. Christian holds a Bachelor of Business Administration from Université du Québec à Montréal and a Master of Science in Administration specialized in Finance from HEC Montréal.

Arthur M. Deboeck: Mr. Deboeck is the Founder and currently Vice-President and General Manager of Galephar Pharmaceutical Research, Inc. and President and Principal Investigator of Galephar Research, Inc. (collectively, “**Galephar**”). Galephar is a Puerto Rico-based pharmaceutical research company with oral and pulmonary drug delivery technology, formulation, and manufacturing expertise. Galephar has developed and licensed to CIPHER various pharmaceutical products and manufactures products for CIPHER. Mr. Deboeck has more than 45 years of experience in the pharmaceutical field of drug delivery. He received his education as a chemical engineer from the Institut Meurice Chimie, Brussels, Belgium and a Galenic Pharmacy degree from the University of Liege, Belgium.

Robert D. Tessarolo: Mr. Tessarolo was appointed President and Chief Executive Officer of CIPHER effective April 17, 2017. Mr. Tessarolo most recently held the position of Vice President & General Manager with Celgene Corporation (“**Celgene**”) until March 31, 2017, where he was responsible for leading its U.S. Inflammation & Immunology business. He contributed to the substantial expansion of the U.S. business in 2016, which was led by the rapid growth of Otezla for plaque psoriasis and psoriatic arthritis. Prior to joining Celgene in September, 2015, Mr. Tessarolo led the launch of Actavis, plc’s Canadian Specialty Pharmaceutical Division, serving as President & General Manager – Canada of Actavis Specialty Pharmaceuticals Co. Under his leadership, Mr. Tessarolo established a Canadian business of over 140 employees and \$190 million in revenue, leading his team through several new product launches and the successful integration of multiple company acquisitions, including Warner Chilcott, Forest Labs and Allergan. Prior to joining Actavis in 2011, Mr. Tessarolo held a number of positions of increasing responsibility with Biovail Pharmaceuticals Canada, culminating in his appointment to the position of Vice President and General Manager. Mr. Tessarolo had direct oversight and accountability for country strategy, operations, business development and financial responsibilities for each of the Canadian entities he has led. Mr. Tessarolo received his B.A. in Economics at Carleton University and has attended the Advanced Management Program for General Management at the Ross School of Business, University of Michigan.

Craig Mull: Craig Mull is currently the managing director of 1207407 Ontario Limited and is responsible for overseeing a variety of its investments which includes the entity’s interest in the Corporation. Mr. Mull is also the founder and Chief Executive Officer of Typhon Group Ltd, a privately held real estate development firm which owns and develops commercial and residential projects throughout the Greater Toronto Area. He served as Director of Corporate Development, Vice President and Chief Operating Officer of CML from 1989 to 2004 where he was instrumental in the company’s growth. During his tenure at CML, Mr. Mull was part of a small executive team that grew the company from less than \$20 million in annualized revenue to over \$235 million. Prior to joining CML, Mr. Mull held the role of Sales and Marketing Manager at Baxter Corporation. Mr. Mull received an HBA from Ivy Business School at the University of Western Ontario.

Skills Matrix

The skills matrix set out below with respect to the functional expertise of each of the directors of CIPHER, including the nominee director, is used to assess the overall strength and diversity of the Board.

FUNCTIONAL EXPERTISE	DEBOECK	GODIN	J. MULL	C. MULL	TESSAROLO	WOLKIN
Public Company Board Experience			✓	✓	✓	✓
Public Company CEO Experience			✓			
General Management / Business Operations	✓	✓	✓	✓	✓	✓
Finance / Public Company CFO						✓
Recent US Commercial Experience					✓	
Strategy & Business Development	✓	✓		✓	✓	

FUNCTIONAL EXPERTISE	DEBOECK	GODIN	J. MULL	C. MULL	TESSAROLO	WOLKIN
Clinical Development / Regulatory	✓				✓	
Government Affairs / Policy				✓	✓	
Manufacturing / Supply Chain	✓			✓	✓	
Legal / Compliance	✓				✓	
Transactions / Investment Expertise	✓	✓	✓	✓	✓	✓
Science / Technology (PhD / MD / PharmD)	✓		✓			
Corporate Governance		✓		✓	✓	✓

Appointment and Remuneration of Auditor

At the Meeting, shareholders will be asked to appoint Ernst & Young LLP as the auditor of the Corporation until the next annual meeting of shareholders or until a successor is appointed, based on the recommendation of the Audit Committee and the Board, and to authorize the directors to fix the remuneration of the auditor. Effective March 20, 2019, PricewaterhouseCoopers LLP, which was first appointed as auditor of the Corporation when the Corporation became a public company in February 2004, resigned as auditor of the Corporation at the Corporation’s request. Ernst & Young LLP was appointed auditor of the Corporation effective as at March 20, 2019 in respect of the financial year ended December 31, 2019. The resignation of PricewaterhouseCoopers LLP and the appointment of Ernst & Young LLP have been approved by the Board.

A “reporting package”, as such term is defined in National Instrument 51-102 – *Continuous Disclosure Obligations* (“**NI 51-102**”), is set out in Appendix “C” to this Circular. As indicated in the Notice of Change of Auditor contained in the reporting package, there have been no (i) modified opinions expressed in PricewaterhouseCoopers LLP’s auditor reports in connection with the audit of the Corporation’s financial statements for the years ended December 31, 2018 and December 31, 2017; and/or (ii) “reportable events”, as such term is defined in NI 51-102. PricewaterhouseCoopers LLP and Ernst & Young LLP each acknowledged the Notice of Change of Auditor on March 26, 2019, and each firm indicated that it agreed with the information contained therein.

The persons named in the accompanying form of proxy, in the absence of specifications or instructions to withhold from voting on the form of proxy, will vote for the appointment of Ernst & Young LLP as the auditor of the Corporation and to authorize the directors to fix the remuneration of the auditor. Representatives of Ernst & Young LLP are expected to attend the Meeting.

Approval of Unallocated Shares, Rights and other Entitlements under the Share Purchase Plan

At the Meeting, shareholders will be asked to consider and, if deemed advisable, approve, with or without variation, an ordinary resolution approving all unallocated shares, rights and other entitlements under the Corporation’s employee and director share purchase plan (the “**Share Purchase Plan**”) in accordance with the rules of the Toronto Stock Exchange (“**TSX**”), the text of which resolution is set out below. Under the rules of the TSX, all unallocated shares, rights or other entitlements under a security based compensation arrangement which does not have a fixed maximum aggregate of securities issuable (such as the Share Purchase Plan) must be specifically approved by shareholders every three years after institution. Subject to adjustment in certain circumstances, the Share Purchase Plan authorizes the issuance, together with common shares that are issuable pursuant to outstanding awards or grants under the Corporation’s other security-based compensation arrangements, of up to 10% of the issued and outstanding common shares of Cipher from time to time pursuant to its terms. The Share Purchase Plan was last approved on May 5, 2016. Accordingly, it has been three years since shareholders last approved all unallocated shares, rights and other entitlements under the Share Purchase Plan. A copy of the Share Purchase Plan is attached as Appendix “D” to this

Circular and a summary thereof is set out under the heading “Statement of Executive Compensation – Description of the Employee and Director Share Purchase Plan”.

If shareholder approval of the resolution in respect of the Share Purchase Plan is obtained at the Meeting, Cipher will not be required to seek further approval of the grant of unallocated shares, rights and other entitlements under the Share Purchase Plan until the Corporation’s 2022 annual and special shareholders’ meeting (provided that such meeting is held on or prior to June 11, 2022). If approval is not obtained at the Meeting, any currently unallocated shares, rights and other entitlements under the Share Purchase Plan will no longer be available for grant or award.

The Board recommends that shareholders approve the unallocated shares, rights and other entitlements under the Share Purchase Plan. Accordingly, shareholders will be asked at the Meeting to pass the following ordinary resolution:

“BE IT RESOLVED, as an ordinary resolution of the Corporation’s shareholders, that:

- 1. all unallocated shares, rights and other entitlements permitted under the Share Purchase Plan are hereby approved and authorized;**
- 2. the Corporation is hereby authorized to continue granting shares, rights and other entitlements under the Share Purchase Plan until June 11, 2022, being that date that is three years from the date of the meeting of shareholders of the Corporation at which shareholder approval is being sought; and**
- 3. any director or officer of the Corporation is hereby authorized to take all necessary steps and proceedings, and to execute, deliver and file any and all applications, declarations, documents and other instruments, and do all such other acts and things (whether under corporate seal of the Corporation or otherwise) that may be necessary or desirable to give effect to this resolution.”**

STATEMENT OF EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

The Corporation’s executive compensation program is designed to provide short and long-term rewards to the Named Executive Officers (as defined herein) that are consistent with individual and corporate performance and their contribution to Cipher’s objectives. The objectives of the Corporation with respect to compensation of executive officers are to provide compensation levels necessary to attract and retain high quality executives and to motivate key executives to contribute to the interests of the Corporation. These objectives are to be met by the principal components of the Corporation’s executive compensation program, as set out in greater detail below.

The total compensation plan for senior executives of the Corporation includes four components: base salary, annual discretionary cash bonus, annual benefits and a long-term component based on stock options, restricted share units and performance share units.

Base Salary

Base salary is reflective of responsibilities and annual increases should, at a minimum, reflect inflationary pressures and changes in duties. At the date of hire, base salary is determined using a number of factors including industry comparators and relevant experience and is set out in the employment agreement. Annual increases are determined based upon reference to data on compensation levels of executives in comparable companies (i.e. public companies in the drug development/specialty pharmaceutical/health care sector) as well as the annual performance evaluation and underlying economic circumstances. The Compensation Committee recommends the annual base salary increases for the Chief Executive Officer and the direct reports of the Chief Executive Officer to the Board for approval.

Annual Incentive Plans and Benefits

The annual incentive plan is a cash performance plan under which a payment is made to executives following the end of the Corporation's fiscal year, based on the achievement of established corporate and individual goals and objectives. Cash bonuses are awarded to recognize the achievement of annual corporate objectives and to recognize individual contributions that enhance the intrinsic value of the Corporation. The objective of performance-based incentive compensation in the form of annual cash bonuses, as part of the total compensation payable to the Corporation's executive officers, is to create a link between pay and performance to encourage and reward those individuals' contributions in producing strong results and to focus senior management to work as a team on overall corporate results and strategic initiatives.

In determining the amount of the annual cash bonus for each executive officer: (i) a target payout is established expressed as a percentage of base salary ranging from 30% to 50% (the "**Target**"); (ii) a performance multiplier is established based on performance of the Corporation within the range of 0% to 125% (the "**Business Performance Multiplier**" or "**BPM**"), which is assessed against growth in Adjusted EBITDA per share (as defined below) and growth in Canadian product revenue per share (each metric to be weighted equally); and (iii) a performance multiplier is established based on individual performance within the range of 0% to 120% (the "**Personal Performance Multiplier**" or "**PPM**"), which is assessed against the achievement of annual objectives. The annual cash bonus payable to an executive officer is the product of base salary x the applicable Target x the applicable BPM x the applicable PPM. As a result, an executive officer with a Target of 30% of base salary will have a maximum combined BPM/PPM multiplier of 150% resulting in a maximum annual cash bonus equal to 45% of base salary, and an executive with a Target of 50% of base salary will have a maximum combined BPM/PPM multiplier of 150% resulting in a maximum annual cash bonus equal to 75% of base salary.

The determination of the BPM between the assessment range of 0% to 125% is based on a minimum of 5% of growth in Adjusted EBITDA per share and growth in revenue per share. If the minimum 5% threshold is met with respect to both metrics, the BPM will be 50%. If growth in both metrics is 20% or greater, the BPM will be 125%. The BPM will vary within the assessment range of 50% to 125% in relation to the actual growth in Adjusted EBITDA per share and revenue per share achieved over the performance period. Growth of less than 5% in respect of Adjusted EBITDA per share, or growth in revenue per share of less than 5%, will result in a BPM of 0% applicable to such metric for the purpose of determining the overall BPM. The determination of the PPM between the assessment range of 0% to 120% is based on the achievement of annual objectives and will vary in relation to the level of achievement of such annual objectives over the performance period.

"**Adjusted EBITDA**" means earnings (excluding licensing revenue) before interest expense, income taxes, depreciation of property and equipment, amortization of intangible assets, loss on debt extinguishment, non-cash share based compensation, changes in fair value of derivative financial instruments, impairment of intangible assets and goodwill and foreign exchange gains and losses from the translation of Canadian cash balances less cash taxes and cash interest paid.

The annual objectives of the Corporation and the annual individual objectives for executive officers are presented to the Compensation Committee early in the fiscal year and regular updates are provided to the Compensation Committee by the Chief Executive Officer during the year. Following the completion of the fiscal year, the Chief Executive Officer presents an evaluation of corporate performance and individual performance versus the respective objectives to the Compensation Committee. The Chief Executive Officer also presents the recommended incentive plan payments for each of his direct reports to the Compensation Committee, including their achievement of individual objectives. The Board, on recommendation of the Compensation Committee, has final approval of the amounts paid to the Chief Executive Officer and his direct reports under the annual incentive plan.

Stock Options, Restricted Share Units ("RSUs") and Performance Share Units ("PSUs")

The long-term component of compensation for executive officers, including the Chief Executive Officer, is based on stock options, RSUs and PSUs. This component of compensation is intended to reinforce management's commitment to long term improvements in Cipher's performance and shareholder value. The Stock Option Plan (as defined herein) includes initial option grants upon hire and executives are eligible for an annual award of stock options. Executives are also eligible for an annual grant of RSUs and PSUs. Thereafter, options, RSUs and PSUs may be

granted on an annual basis based upon guidelines set by the Compensation Committee. The Chief Executive Officer recommends the amount of annual option, RSU and PSU grants for each of his direct reports which is then presented to the Compensation Committee for review. The Compensation Committee will then, after making any revisions deemed necessary, recommend the annual grants to the Board for approval. The annual grant of options, RSUs and PSUs for the Chief Executive Officer is determined by the Compensation Committee based upon pre-determined guidelines. Annual awards are made during the first quarter of the fiscal year following the completion of the annual audit and the determination of financial performance for the preceding year. The amount of options, RSUs and PSUs previously granted to an executive is not a factor in determining the amount of the annual award. While the Corporation is permitted to grant options under the Stock Option Plan with a term of up to 10 years, the Corporation's current practice is to grant options with a term not exceeding seven years from the date of grant.

In September 2017, the Corporation granted PSUs to certain Named Executive Officers that vest on October 1, 2020, subject to the achievement of performance goals based on the compound annual share price appreciation of the Corporation's common shares over such period. If at least the minimum share price target of \$8.24 is achieved at October 1, 2020 based on the 20 day volume-weighted average trading price of the common shares on the TSX as at such date (the "**Minimum Share Price Target**"), a performance multiplier of up to five times the number of PSUs granted will be applied in determining the number of common shares issuable upon vesting. The number of common shares ultimately issuable upon the vesting of PSUs will increase incrementally at share price values between the Minimum Share Price Target and \$18.29, being the threshold 20 day volume-weighted average trading price necessary to be achieved as at October 1, 2020 in order to apply the maximum five times performance multiplier. If the Minimum Share Price Target is not achieved at October 1, 2020, no PSUs vest on that date, the performance period extends to October 1, 2021 and the number of PSUs that vest on October 1, 2021 (if any), based on the share price targets determined as at October 1, 2020, will be reduced by 50%.

Compensation of the Chief Executive Officer

The total compensation package available for the Chief Executive Officer of Cipher includes a base salary, a discretionary bonus component, benefits and a long-term component based on stock options, RSUs and PSUs. Compensation is based upon the factors outlined above, including a comparison with compensation of senior officers of companies of similar size and scope to Cipher and the performance of Cipher.

Share Ownership Requirements for the Chief Executive Officer

The Board believes that the economic interest of the Chief Executive Officer should be aligned with those of shareholders. In that regard, the Board has adopted a Chief Executive Officer Share Ownership Policy. The policy provides within five years of appointment as Chief Executive Officer, the Chief Executive Officer must own common shares with a value equal to a minimum of three times his or her annual base salary. Share ownership for this purpose includes shares issuable under any incentive plan of the Corporation but excluding stock options. The Compensation Committee has the authority to permit exceptions from the policy from time to time.

If the Chief Executive Officer's share ownership falls below the minimum guidelines due a decline in the price of the common shares or an increase in the Chief Executive Officer's base salary, the Chief Executive Officer will have a period of one year to acquire additional common shares to comply with the policy.

Executive Compensation Related Fees

Periodically, the Compensation Committee receives professional advice from external independent compensation experts with respect to the compensation levels for the Corporation's executive officers. Cipher's compensation program for executives was updated in 2016. The consulting firm of Mercer (Canada) Ltd. ("**Mercer**") was retained in 2014 to perform compensation reviews for the key executive positions as well as the level of compensation paid to directors. The fees paid to Mercer in 2016 totalled \$14,607 for such services. No fees were paid to Mercer in 2017 or 2018. Total compensation of executive officers is established based on prevailing market rates in the industry and/or rates prevailing from time to time to attract executives with particular skills considered necessary by the Corporation.

Risk Management

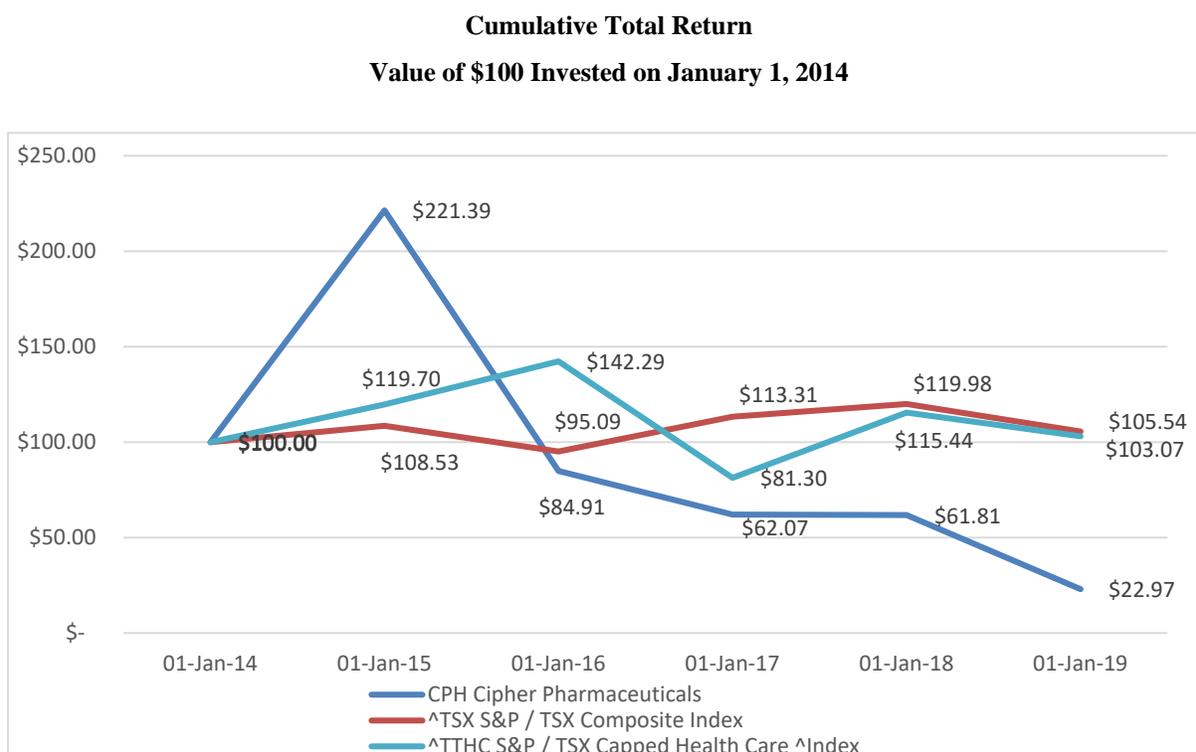
The Compensation Committee reviews the performance objectives associated with annual incentive plans to ensure that they do not result in any undue risks for the Corporation. The balance between short and long term objectives is taken into account by the Corporation in the design of compensation plans and in the annual evaluation of the achievement of objectives when deciding on the amounts of annual incentive awards. The Corporation has implemented “claw-back” arrangements related to the executive compensation programs, pursuant to the Compensation Recoupment Policy, as described below.

Compensation policies and practices and the design of the Corporation’s incentive plans for executives take into account risk elements, including the following: (i) incentive plan awards do not vary significantly from the overall compensation structure of the Corporation; and (ii) incentive plans are designed so they do not provide for rewards for the accomplishment of tasks while the risk to the Corporation extends over a significantly longer period of time.

The Board, in consultation with the Compensation Committee, will continue to review Cipher’s approach to executive compensation and, if deemed appropriate in Cipher’s circumstances, will consider alternative or supplemental compensation arrangements to mitigate and discourage excessive risk-taking.

Performance Graph

The following graph compares the change in the cumulative total shareholder return on the common shares of the Corporation on the TSX compared to the cumulative total return of the S&P/TSX Composite Index and the S&P/TSX Capped Health Care Index for the period commencing on January 1, 2014 and ending on December 31, 2018 based on the market price of the common shares, assuming a \$100 investment on January 1, 2014 and reinvestment of dividends.



The total cumulative shareholder return for the common shares of the Corporation for the five year period ended December 31, 2018 was negative 25.5%%, compared to a return of 1.1%% for the S&P/TSX Composite Index over the same period and a return of 0.6%% for the S&P/TSX Capped Health Care Index over the same period. In 2014, the performance of Absorica™, the trade name for CIP-ISOTRETINOIN in the U.S., was the primary

contributor to the Corporation's strong financial results. In 2015, the Corporation's profitability declined as a result of investments in new initiatives, including the Innocutis Holdings, LLC ("**Innocutis**") acquisition. In 2016, the return on investment continued to decline as a result of the integration of Innocutis. During the 2016 fiscal year, the Corporation commenced a strategic review process focused on improving the profitability of the business which resulted in changes to the Board and the Corporation's management team. In 2017, the Corporation sold substantially all the assets of Cipher Pharmaceuticals U.S., LLC, formerly known as Innocutis. In 2018, Cipher's licensing revenue declined while the Corporation executed on its growth strategy to acquire additional prescription products to fill and diversify its pipeline.

During the five year period ended December 31, 2018, compensation for the Corporation's executive officers was primarily influenced by the performance of the Corporation and individual performance of the executive officer and was not directly linked to share price or changes in the Corporation's total shareholder return. Accordingly, the trend shown in the above graph does not correspond to the Corporation's compensation earned by its executive officers for the financial year ended December 31, 2018 or for any prior fiscal periods. Additionally, significant changes in the Corporation's management team were made over the course of fiscal 2016 and fiscal 2017 and the Named Executive Officers (as defined below) as at the end of fiscal 2018 were not all the same individuals who were executive officers of the Corporation during the entire five year measurement period.

The market price of the common shares of the Corporation is subject to fluctuation based on several factors, many of which are outside the control of the Corporation. These include market perception of the Corporation's ability to achieve business goals, trading volume in the common shares, changes in general conditions in the economy and the financial markets or other general developments in the specialty pharmaceutical industry that affect the Corporation. Accordingly, the Corporation's share price and total shareholder return over the measurement period may not be reflective of the Corporation's financial performance or management's efforts in enhancing shareholder value.

Compensation for the Named Executive Officers consists of different components. The Corporation provides Named Executive Officers with a base salary in order to attract and retain quality employees and to compensate them for services rendered during the year having regard to such individual's role and level of responsibility and the importance of the position to the Corporation. Accordingly, base salaries for the Named Executive Officers have generally remained relatively stable over the measurement period given that the determination of base salary having regard to the foregoing factors does not depend on the market price of the common shares or total shareholder return. Short-term incentive plan awards in the form of annual cash bonuses are based on performance relative to targets (primarily growth in Adjusted EBITDA and revenue) and therefore, while awards are determinable having regard to an indicator of the Corporation's financial performance, they do not depend on the market price of the common shares or total shareholder return. In that regard, short-term incentive plan awards have both increased and decreased over the measurement period. Finally, while individual awards under the Stock Option Plan and the PR Plan (as defined herein) are awarded on the basis described above, the value of an option-based award or share-based award will fluctuate based on the Corporation's share price, thereby aligning the interests of Named Executive Officers with those of the Corporation's shareholders. Accordingly, overall compensation for the Named Executive Officers generally increases in periods where the Corporation's share price increases and decreases in periods where the share price decreases.

Summary Compensation Table

In this Circular, a "**Named Executive Officer**" means: (a) Cipher's Chief Executive Officer at any time during the 2018 fiscal year; (b) Cipher's Chief Financial Officer at any time during the 2018 fiscal year; (c) the three other most highly compensated executive officers of Cipher at the end of the financial year ended December 31, 2018 whose total compensation, individually, was greater than \$150,000; and (d) each individual who would be a Named Executive Officer but for the fact that the individual was neither an executive officer of Cipher or its subsidiaries, nor serving in a similar capacity, at the end of the financial year ended December 31, 2018. For the financial year ended December 31, 2018, Cipher had four Named Executive Officers, namely: (i) Robert Tessarolo, Chief Executive Officer; (ii) Stephen Lemieux, former Chief Financial Officer and former Chief Executive Officer; (iii) Chris Watters, Vice President, Corporate Development; and (iv) Dr. Diane Gajewczyk, Vice President, Scientific and Medical Affairs.

The following table presents the compensation earned by the Named Executive Officers for the financial years ended December 31, 2018, December 31, 2017 and December 31, 2016.

Name and Principal Position	Year	Salary (\$)	Share-based Awards (\$)(5)	Option-based Awards (\$)(6)	Non-Equity Incentive Plan Compensation (\$)		Pension Value (\$)	All Other Compensation (\$)(8)	Total Compensation (\$)
					Annual Incentive Plans ⁽⁷⁾	Long-term Incentive Plans			
Robert Tessarolo, President & Chief Executive Officer ⁽¹⁾	2018	412,775	152,969	258,903	211,134	Nil	Nil	38,658	1,074,439
	2017	279,792	225,785	165,600	259,885	Nil	Nil	22,510	953,572
Stephen Lemieux, Chief Financial Officer and Secretary and Former Interim Chief Executive Officer ⁽²⁾	2018	303,050	78,412	132,711	124,857	Nil	Nil	35,227	674,257
	2017	290,000	174,988	160,748	174,000	Nil	Nil	56,315	856,051
	2016	89,045	111,329	115,681	54,949	Nil	Nil	5,860	376,864
Chris Watters, Vice President Corporate Development ⁽³⁾	2018	271,700	73,229	53,117	86,401	Nil	Nil	33,661	518,108
	2017	144,833	92,000	68,264	87,750	Nil	Nil	22,761	415,608
Dr. Diane Gajewczyk, Vice President, Scientific and Medical Affairs ⁽⁴⁾	2018	149,345	Nil	66,666	44,570	Nil	Nil	28,292	260,581

Notes:

- (1) Mr. Tessarolo commenced employment with the Corporation on April 17, 2017. Compensation amounts shown for fiscal 2017 are for the period April 17, 2017 to December 31, 2017.
- (2) Mr. Lemieux served as the Interim Chief Executive Officer for the period November 11, 2016 to April 16, 2017 and served as the Chief Financial Officer from his date of appointment on September 12, 2016 until March 31, 2019. "All Other Compensation" includes \$35,243 of compensation for serving as Interim Chief Executive Officer for the period January 1, 2017 to April 16, 2017.
- (3) Mr. Watters commenced employment with the Corporation on June 12, 2017. Compensation amounts shown for fiscal 2017 are for the period June 12, 2017 to December 31, 2017.
- (4) Dr. Diane Gajewczyk commenced employment with the Corporation on June 4, 2018. Compensation amounts shown for fiscal 2018 are for the period June 4, 2018 to December 31, 2018. "All Other Compensation" includes a signing bonus of \$10,000.
- (5) Represents the fair value at the date of grant for RSUs and PSUs granted to each Named Executive Officer. For the grants included herein, the fair values were \$3.53 \$5.59 and \$5.18 (other than for Mr. Watters in 2017). The RSUs granted to Mr. Watters upon joining the Corporation were made on August 22, 2017 and the dollar value is based upon a fair value of \$5.05. The actual value received, if any, will be different as it will depend on the portion of RSUs and PSUs that vest and the price of the underlying common shares at the time of vesting. Vesting of the PSUs is contingent upon the achievement of performance objectives.
- (6) Cipher has adopted fair value accounting for options granted under the Stock Option Plan using the Black-Scholes fair value option pricing method, an established methodology. The options granted vest over a four year period and expire after seven or ten years. The grants for 2018 (other than the grants for Dr. Gajewczyk) were made on March 22, 2018 and the dollar value is based upon the share price of \$3.53, and Black-Scholes value of \$1.55 (risk-free rate: 1.94%; expected option life: 4.9 years; expected volatility: 48.2%) The options granted to Dr. Gajewczyk on joining the Corporation were made on August 14, 2018 and the dollar value is based upon the share price of \$3.04 and a Black-Scholes value of \$1.22 (risk-free interest rate: 2.02%; expected option life: 4.9 years; expected volatility: 50.1%). The grants for 2017 (other than the grants for Mr. Watters) were made on May 15, 2017 and the dollar value is based upon the share price of \$5.06, and Black – Scholes value of \$1.84 (risk-free interest rate: 0.94%; expected option life: 4.9 years; expected volatility: 49.6%). The options granted to Mr. Watters on joining the Corporation were made on August 15, 2017 and the dollar value is based upon the share price of \$5.24 and a Black-Scholes value of \$1.93 (risk-free interest rate: 1.50%; expected option life: 4.9 years; expected volatility: 49.5%). The grants for 2016 (other than the grant for Mr. Lemieux) were made on February 26, 2016 and the dollar value is based upon the share price of \$6.79 and Black – Scholes value of \$3.79 (risk-free interest rate: 1.19%; expected option life: 5.6 years; expected volatility: 62.8%). The options granted to Mr. Lemieux on joining the Corporation were made on September 12, 2016 and the dollar value is based upon the share price of \$5.18 and a Black-Scholes value of \$3.07 (risk-free interest rate: 0.82%; expected option life: 6.5 years; expected volatility: 65.9%).
- (7) The value represents the annual discretionary bonus earned by the Named Executive Officer for the associated fiscal year. The bonus is paid in the first half of the subsequent year, following review and approval by the Board.
- (8) For the Named Executive Officers, the perquisites and other personal benefits did not exceed the lesser of \$50,000 and 10% of the total annual salary and bonus. For the Named Executive Officers, the value represents the amount paid by the Corporation into retirement savings

plans on behalf of each Named Executive Officers as well as automobile allowances and the amounts referred to in notes (2) and (4), as applicable. Under the terms of the retirement savings plans, the Corporation matches the contribution of the executive up to a maximum of 5% of base salary in Canada.

Executive Employment Agreements

Robert Tessarolo has a written employment agreement with the Corporation. The agreement provides for a base salary and an annual performance bonus, with targets to be set annually by the Board. In addition, Mr. Tessarolo received an initial grant of 90,000 options upon the signing of his employment agreement. The agreement has an indefinite term, but may be terminated by the Corporation at any time, for cause or without cause. In the event Mr. Tessarolo is terminated without cause and a change of control has not occurred prior to the date of termination, the agreement provides for a severance payment equal to Mr. Tessarolo's Severance Compensation (defined in the employment agreement as base salary from that year, plus the average of the performance bonuses paid or payable for the two previous fiscal years) plus an amount equal to one-twelfth of Mr. Tessarolo's Severance Compensation, multiplied by the number of completed years of employment (to a maximum of twelve years) by Mr. Tessarolo with the Corporation since his initial hire date of April 17, 2017. In the event Mr. Tessarolo's employment is terminated without cause on the date of a change of control or within twelve months of a change of control or if Mr. Tessarolo tenders his resignation during such period for Good Reason (defined in the employment agreement as including, among other things, a material change in the title, responsibilities, authority or status of Mr. Tessarolo or a reduction of Mr. Tessarolo's annual base salary), the agreement provides for a severance payment equal to 200% of the Severance Compensation as well as a performance bonus calculated *pro rata* for the period up to the date of termination or resignation, such payment to be calculated based on the average performance bonus paid or payable to Mr. Tessarolo for the two fiscal years of the Corporation completed immediately prior to such date. In addition, in such a scenario, the agreement also provides for enhanced severance benefits up to a maximum of 24 months. In the event Mr. Tessarolo's employment with the Corporation is terminated for cause or by resignation (other than for Good Reason upon or during the 12 month period after a change of control of the Corporation), his employment agreement provides that he is owed no severance payment. Additionally, Mr. Tessarolo is bound by certain restrictive covenants, including a covenant not to compete for a period of 24 months in Canada or the U.S.

Chris Watters has a written employment agreement with the Corporation. The agreement provides for a base salary and an annual performance bonus, with targets to be set annually by the Board. The agreement has an indefinite term, but may be terminated by the Corporation at any time, for cause or without cause. In the event Mr. Watters is terminated without cause and a change of control has not occurred prior to the date of termination, the agreement provides for a severance payment equal to one half of Mr. Watters' Severance Compensation (defined in the employment agreement as base salary from that year, plus the average of the performance bonuses paid or payable for the two previous fiscal years) plus an amount equal to one-twelfth of Mr. Watters' Severance Compensation, multiplied by the number of completed years of employment (to a maximum of six years) by Mr. Watters with the Corporation since his initial hire date of June 12, 2017. In the event Mr. Watters' employment is terminated without cause on the date of a change of control or within twelve months of a change of control or if Mr. Watters tenders his resignation during such period for Good Reason (defined in the employment agreement as including, among other things, a material change in the title, responsibilities, authority or status of Mr. Watters or a reduction of Mr. Watters' annual base salary), the agreement provides for a severance payment equal to 150% of the Severance Compensation as well as a performance bonus calculated *pro rata* for the period up to the date of termination or resignation, such payment to be calculated based on the average performance bonus paid or payable to Mr. Watters for the two fiscal years of the Corporation completed immediately prior to such date. In addition, in such a scenario, the agreement also provides for enhanced severance benefits up to a maximum of 18 months. In the event Mr. Watters' employment with the Corporation is terminated for cause or by resignation (other than for Good Reason upon or during the 12 month period after a change of control of the Corporation), his employment agreement provides that he is owed no severance payment. Additionally, Mr. Watters is bound by certain restrictive covenants, including a covenant not to compete for a period of up to 12 months in Canada or the U.S.

Dr. Diane Gajewczyk has a written employment agreement with the Corporation. The agreement provides for a base salary and an annual performance bonus, with targets to be set annually by the Board. The agreement has an indefinite term, but may be terminated by the Corporation at any time, for cause or without cause. In the event Dr. Gajewczyk is terminated without cause and a change of control has not occurred prior to the date of termination, the agreement provides for a severance payment equal to one half of Dr. Gajewczyk's Severance Compensation (defined in the employment agreement as base salary from that year, plus the average of the performance bonuses paid or

payable for the two previous fiscal years) plus an amount equal to one-twelfth of Dr. Gajewczyk’s Severance Compensation, multiplied by the number of completed years of employment (to a maximum of six years) by Dr. Gajewczyk with the Corporation since her initial hire date of June 4, 2018. In the event Dr. Gajewczyk’s employment is terminated without cause on the date of a change of control or within twelve months of a change of control or if Dr. Gajewczyk tenders her resignation during such period for Good Reason (defined in the employment agreement as including, among other things, a material change in the title, responsibilities, authority or status of Dr. Gajewczyk or a reduction of Dr. Gajewczyk’s annual base salary), the agreement provides for a severance payment equal to 150% of the Severance Compensation as well as a performance bonus calculated *pro rata* for the period up to the end of the statutory notice period following the date of termination or resignation, such payment to be calculated based on the average performance bonus paid or payable to Dr. Gajewczyk for the two fiscal years of the Corporation completed immediately prior to such date. In addition, in such a scenario, the agreement also provides for enhanced severance benefits up to a maximum of 18 months. In the event Dr. Gajewczyk’s employment with the Corporation is terminated for cause or by resignation (other than for Good Reason upon or during the 12 month period after a change of control of the Corporation), her employment agreement provides that she is owed no severance payment. Additionally, Dr. Gajewczyk is bound by certain restrictive covenants, including a covenant not to compete for a period of up to 12 months in Canada or the U.S.

Stephen Lemieux was a Named Executive Officer as at the end of the December 31, 2018 fiscal year and resigned from his employment with the Corporation effective March 31, 2019 (the “**Resignation Date**”). Mr. Lemieux did not receive any severance payments and will be subject to certain non-competition and confidentiality obligations per the terms of the employment agreement that governed his employment with the Corporation .

Incentive Plan Awards

Outstanding Option-Based Awards

The following table sets forth the details of all outstanding option-based awards for the Named Executive Officers as at December 31, 2018:

Name	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Value of Unexercised in-the-Money Options⁽¹⁾ (\$)
Robert Tessarolo	198,014	3.53	March 22, 2025	Nil
	90,000	5.06	May 15, 2024	Nil
Stephen Lemieux	101,500	3.53	March 22, 2025 ⁽²⁾	Nil
	87,363	5.06	May 15, 2024 ⁽³⁾	Nil
	37,681	5.18	Sept. 12, 2026 ⁽⁴⁾	Nil
Chris Watters	40,625	3.53	March 22, 2025	Nil
	35,370	5.24	Aug. 15, 2024	Nil
Dr. Diane Gajewczyk	55,741	3.04	August 14, 2025	Nil

Note:

- (1) The value of unexercised in-the-money options is based on the difference between the exercise price of the options and the closing price of the common shares of Cipher on the TSX on December 31, 2018, being the last trading day of fiscal 2018, of \$1.71 per share.
- (2) Stephen Lemieux ceased to be an officer of the Corporation effective the Resignation Date. 25,375 of such options were vested as of the Resignation Date and, pursuant to the Stock Option Plan, will expire 180 days following such date. The remaining unvested options were cancelled.
- (3) 21,842 of such options were vested as of the Resignation Date and, pursuant to the Stock Option Plan, will expire 180 days following such date. The remaining unvested options were cancelled.
- (4) 18,840 of such options were vested as of the Resignation Date and, pursuant to the Stock Option Plan, will expire 180 days following such date. The remaining unvested options were cancelled.

Outstanding Share-Based Awards

The following table sets forth the details of all outstanding share-based awards for the Named Executive Officers as at December 31, 2018:

Name	Number of Shares or Units of Shares That Have Not Vested (#)	Market or Payout Value of Share-based Awards That Have Not Vested (\$) ⁽²⁾	Market or Payout Value of Vested Share-based Awards Not Paid Out or Distributed (\$)
Robert Tessarolo ⁽¹⁾	55,671 RSUs 29,151 PSUs	145,046	Nil
Stephen Lemieux ⁽¹⁾⁽²⁾	49,634 RSUs 16,052 PSUs	112,323	Nil
Chris Watters ⁽¹⁾	27,198 RSUs 9,594 PSUs	62,914	Nil

Notes:

- (1) For the PSUs, the payout on vesting depends on the performance multiplier, which can range from one to five and is subject to a 50% reduction if the performance period is extended beyond the initial three year period (see “Statement of Executive Compensation – Stock Options, Restricted Share Units and Performance Share Units” for additional details). A performance multiplier of one is assumed for the purpose of the above table.
- (2) Stephen Lemieux ceased to be an officer of the Corporation effective the Resignation Date. Pursuant to the terms of the PR Plan, all outstanding and unvested PSUs and RSUs were cancelled on the Resignation Date.
- (3) The value of RSUs and PSUs is calculated by multiplying the number of units held on December 31, 2018 by the closing price of the common shares of Cipher on the TSX on December 31, 2018, being the last trading day of fiscal 2018, of \$1.71 per share.

Incentive Plan Awards – Value Vested or Earned During the Year

The following table sets forth, for each Named Executive Officer, the value of option-based awards and share-based awards that vested during the year ended December 31, 2018 and the value of non-equity incentive plan compensation earned during the year ended December 31, 2018: :

Name	Option-Based Awards – Value Vested During the Year (\$) ⁽¹⁾	Share-based Awards – Value Vested During the Year (\$) ⁽²⁾	Non-Equity Incentive Plan Compensation – Value Earned During the Year (\$)
Robert Tessarolo	Nil	14,683	211,134
Stephen Lemieux ⁽³⁾	Nil	29,813	124,857
Chris Watters	Nil	6,216	86,401
Dr. Diane Gajewczyk	Nil	Nil	54,570 ⁽⁴⁾

Notes:

- (1) The value of the options that vested during the financial year is based on the difference between the exercise price of the options and the closing price of the common shares of Cipher on the TSX on the applicable vesting date. If the closing price of the common shares of Cipher on such date was below the exercise price, the options had no then current value and are valued at nil. The options may not have been exercised on such date or subsequently and, accordingly, the amount shown may not reflect the actual amount, if any, realized by the Named Executive Officer.
- (2) Consists of RSUs. The value of the RSUs that vested during the financial year is calculated by multiplying the number of RSUs that vested by the five-day volume weighted average price of the common shares of Cipher on the vesting date.
- (3) Stephen Lemieux ceased to be an officer of the Corporation effective the Resignation Date.
- (4) Includes a \$10,000 signing bonus paid to Dr. Diane Gajewczyk upon the commencement of her employment with the Corporation on June 4, 2018.

Description of the Stock Option Plan

The Corporation's stock option plan (the "**Stock Option Plan**") provides that the Board may, from time to time, at its discretion, grant to directors, officers, employees and certain other service providers of the Corporation (a "**Participant**"), in connection with their employment or position, options to purchase common shares. The purchase price for any optioned common shares is fixed by the Board, which purchase price will not be less than the "fair market value" of a common share on the date the option is granted, being the closing price of the common shares on the TSX on the last trading day on which the common shares traded prior to the grant date.

The aggregate number of common shares which may be issued under the plan upon the exercise of options which have been granted and are outstanding under the Stock Option Plan, together with common shares that are issuable pursuant to outstanding awards or grants under the Corporation's other security-based compensation arrangements, cannot exceed 10% of the Corporation's common shares then issued and outstanding. As an "evergreen" plan, the TSX will require that the Stock Option Plan be approved by shareholders on a periodic basis, each approval being effective for a period of three years.

The aggregate number of common shares reserved for issuance pursuant to options granted under the Stock Option Plan and options or other entitlements granted under any other share compensation arrangement of the Corporation to any Participant under the Stock Option Plan cannot exceed 5% of the aggregate number of common shares outstanding (on a non-diluted basis) on the date of grant.

The aggregate number of common shares reserved for issuance pursuant to options granted under the Stock Option Plan and options or other entitlements granted under any other share compensation arrangement of the Corporation to insiders, as such term is defined in the *Securities Act* (Ontario), or any Associates of such persons, cannot exceed 10% of the aggregate number of common shares outstanding (on a non-diluted basis) on the date of grant. Within any one-year period, the aggregate number of common shares issued to insiders pursuant to options granted under the Stock Option Plan or options or other entitlements granted under any other share compensation arrangement cannot exceed 10% of the aggregate number of common shares outstanding (on a non-diluted basis) on the date of grant and the number of common shares issued to any one insider, and his or her associates, cannot exceed 5% of the aggregate number of common shares outstanding (on a non-diluted basis) on the date of grant.

Options granted under the Stock Option Plan have a maximum term of 10 years from the date of grant. Options will become available for purchase by a Participant on a date or dates to be determined by the Board on the date of grant. Vested options may be exercised by a Participant either by (a) the purchase of any number of whole common shares which are then available for purchase, provided that no partial exercise may be for less than 100 whole common shares, at the exercise price specified for such option, or (b) the receipt, without payment by a Participant, of an amount per option equal to the difference between the exercise price of the option and the "market price" of the common shares (the "**Growth Amount**"), which Growth Amount will be payable by the issuance by the Corporation to the Participant of that number of common shares calculated by dividing the Growth Amount by the "market price" of the common shares. For the purposes of the Stock Option Plan, "market price" means the closing price of the common shares on the TSX on the date of exercise.

In the event (a) an offer is made to purchase outstanding voting shares of the Corporation and if accepted by a sufficient number of holders of such shares to constitute the offeror being entitled to exercise more than 50% of the voting rights attached to the outstanding voting shares of the Corporation (provided that prior to the offer, the offeror was not entitled to exercise more than 50% of the voting rights attached to the outstanding voting shares) or (b) if there is a consolidation, merger or amalgamation of the Corporation with or into any other corporation whereby the voting shareholders of the Corporation immediately prior to the consolidation, merger or amalgamation receive less than 50% of the voting rights attaching to the voting shares of the consolidated, merged or amalgamated corporation, including a sale whereby all or substantially all of the Corporation's undertakings and assets become the property of any other corporation, then a Participant will be entitled to exercise his or her options with respect to all of the common shares subject to the options and not yet purchased thereunder. In addition, if an offer is made to purchase 50% or more of the outstanding voting shares of the Corporation, a Participant will be entitled to exercise his or her options with respect to all of the common shares subject to the options and not yet purchased thereunder and tender such common shares into such offer, conditional upon the take-up of common shares under such offer.

Options may not be transferred, assigned or otherwise encumbered, unless they are transferred under the succession laws applicable at the time of death of the option holder.

Description of the Performance and Restricted Share Unit Plan

The purposes of the Corporation's performance and restricted share unit plan (the "**PR Plan**") are to (i) promote a significant alignment between employees and directors of the Corporation and the growth objectives of the Corporation, (ii) associate a portion of participating employees' and directors' compensation with the performance of the Corporation over the long term and (iii) retain critical personnel to drive the business success of the Corporation. Grants may be made under the PR Plan to executives, other employees or directors of the Corporation or of any subsidiary of the Corporation. PSU and RSU awards will be paid in common shares issued from treasury.

The aggregate number of common shares which may be issued under the plan to pay awards which have been granted and are outstanding under the PR Plan, together with common shares that are issuable pursuant to outstanding awards or grants under the Corporation's other security-based compensation arrangements, cannot exceed 10% of the Corporation's common shares then issued and outstanding. As an "evergreen" plan, the TSX will require that the PR Plan be approved by shareholders on a periodic basis, each approval being effective for a period of three years. Issuances of common shares to pay awards will be issued at a price equal to the Market Value on the date of issuance.

Awards granted under the PR Plan will be made with a specified dollar value (the "**Award Value**") as of the date of grant, as determined by the Board or by the grant of specific amounts of PSUs or RSUs. In the case of PSUs, the Compensation Committee may determine any performance criteria applicable to the PSU.

If applicable, the number of PSUs granted to a participant for a performance period will be determined by dividing the Award Value for the award to such participant divided by the Market Value of the common shares as at the end of the calendar quarter immediately preceding the date of the award, rounded down to the next whole number (with currency conversion if necessary).

If applicable, the number of RSUs granted to a participant is determined by dividing the Award Value of the award provided to the participant in the form of RSUs by the Market Value of the Common shares as at the end of the calendar quarter immediately preceding the date of the award, rounded down to the next whole number (with currency conversion if necessary).

The "Market Value" for purposes of the PR Plan is (i) the volume-weighted average trading price of the common shares on the TSX (or such other stock exchange on which the common shares are traded) for the five trading days preceding the date in question, or (ii) if the common shares are not traded on a stock exchange, the fair market value of the common shares as determined by the Board.

Each whole PSU and RSU will give a participant the right to receive common shares in accordance with the terms of the PR Plan and the applicable Award Agreement. A participant will have no right to receive Common shares with respect to any PSUs or RSUs that do not become vested.

On the first day immediately following the end of a performance period in respect of a PSU grant, the relevant PSUs (including Dividend PSUs as described in the PR Plan) in the participant's PSU account maintained by the Corporation will vest in an amount equal to the number of relevant PSUs multiplied by a performance adjustment factor, as determined by the Board in accordance with the participant's Award Agreement. Where the performance adjustment factor is zero, no such PSUs will vest. Any PSUs that do not become vested are forfeited by the participant.

RSUs will vest on the vesting dates specified in the relevant Award Agreement, in such proportion as may be determined in accordance with the Award Agreement. Any RSUs that do not become vested are forfeited by the participant.

On vesting, the participant will receive a number of common shares equal to (i) the number of vested PSUs as of the last day of the relevant performance period or (ii) the number of RSUs that have vested on the vesting date.

Subject to the terms of the relevant Award Agreement, in the event of a change of control of the Corporation, the PSUs and RSUs credited to the account of the participant as at the date of the change of control, will become vested PSUs and RSUs on a one-for-one basis on the date of change of control, unless otherwise determined by the Board. As soon as practical following the change of control, the participant will receive a payment in common shares equal to the number of vested RSUs or PSUs, as applicable, multiplied by the price at which the common shares are valued for the purposes of the transactions giving rise to the change of control.

Description of the Employee and Director Share Purchase Plan

The purpose of the Share Purchase Plan is to encourage employees and directors of the Corporation to participate in the growth and development of the Corporation by providing such persons with the opportunity, through share purchases, to acquire an increased proprietary interest in the Corporation. Shares subject to the plan are issued from treasury and delivered to the administrative agent.

The aggregate number of common shares which may be issued under the plan, together with common shares that are issuable pursuant to outstanding awards or grants under the Corporation's other security-based compensation arrangements, cannot exceed 10% of the Corporation's common shares then issued and outstanding. As an "evergreen" plan, the TSX will require that the Share Purchase Plan be approved by shareholders on a periodic basis, each approval being effective for a period of three years.

Each fiscal year, employees who have been employed by the Corporation for not less than three consecutive months may contribute up to 20% of the aggregate base compensation received by such participant from the Corporation in the previous fiscal year to the Share Purchase Plan. Participants who are directors of the Corporation may contribute an amount up to (but not exceeding) 100% of the aggregate director fees received by such director from the Corporation in the previous fiscal year.

Pursuant to the Share Purchase Plan, common shares are issued from treasury to the administrative agent on behalf of the participants at the market price, which is defined in the Share Purchase Plan as the volume weighted average trading price of the common shares on the TSX for the five trading days preceding the date on which common shares are issued, less a discount of 15%.

No shares shall be issued on behalf of a participant under the Share Purchase Plan if such issuance could result, at any time, in: (a) the number of common shares issuable (pursuant to the Share Purchase Plan and any other share compensation arrangement of the Corporation) to "insiders" (as defined in the *Securities Act* (Ontario)) exceeding, at any time, 10% of the issued and outstanding common shares; (b) the number of common shares issued (pursuant to the Share Purchase Plan and any other share compensation arrangement of the Corporation) to insiders exceeding, within any one-year period, 10% of the issued and outstanding common shares; or (c) the number of common shares issuable (under the Share Purchase Plan and any other share compensation agreement of the Corporation) to any one participant and such participant's "associates" (as defined in the *Securities Act* (Ontario)), exceeding, within any one-year period, 5% of the issued and outstanding common shares.

Participation in the Share Purchase Plan terminates automatically if, in the case of a director, the term of appointment of such director expires or the director resigns, and in the case of a person employed by the Corporation, the employment of the participant by the Corporation is terminated for any reason whatsoever (including without limitation, the death or retirement of the participant).

The Board reserves the right at any time, subject to any regulatory or stock exchange approval that may be required, to amend the Share Purchase Plan, without prior notice to or approval by shareholders, provided that no amendment shall adversely affect the rights and interests of a participant's shares allocated to his or her account under the Share Purchase Plan prior to the date of such amendment. The Board may terminate the Share Purchase Plan at any time, provided that the common shares of the participants and any monies held by the administrative agent on behalf of participants shall be transferred and delivered to such participants at the time of termination.

Pension Plan Benefits

The Corporation does not maintain any defined benefit pension plans or defined contribution pension plans.

Termination and Change of Control Benefits

The termination benefits for the Named Executive Officers are set out in the “Executive Employment Agreements” section above. The following are the amounts of severance payments that would have been made to each of the Named Executive Officers who remain with the Corporation as of the date hereof in the event of such officer’s termination without cause or resignation of such officer as a result of a change of control of the Corporation, as of December 31, 2018:

Name	Triggering Event	Cash Portion (\$)	Value of Options, PSUs and RSUs (\$)	Total (\$)
Robert Tessarolo	Termination without cause in the absence of a change of control	702,308	25,559	727,867
	Termination without cause as a result of a change of control, or resignation for Good Reason	1,296,569	95,197	1,391,766
Chris Watters	Termination without cause in the absence of a change of control	209,286	8,870	218,156
	Termination without cause as a result of a change of control, or resignation for Good Reason	538,163	46,509	584,672
Dr. Diane Gajewczyk	Termination without cause in the absence of a change of control	151,035	nil	151,035
	Termination without cause as a result of a change of control, or resignation for Good Reason	453,105	nil	453,105

Compensation Committee

The Compensation Committee is comprised of the following three directors: Harold Wolkin, Christian Godin and Mark Beaudet. The Committee’s responsibilities with respect to compensation matters include: (i) reviewing and making recommendations to the Board with respect to compensation of the Chief Executive Officer and (ii) making recommendations to the Board with respect to non-CEO compensation, incentive compensation plans and equity-based plans. All of the members of the Compensation Committee are independent directors. As Mr. Beaudet has determined not to stand for re-election at the Meeting, the Board intends to reconstitute the membership of the Compensation Committee at a Board meeting to be held following the Meeting.

The experience of the members of the committee, other than Mr. Beaudet, is summarized in the “Election of Directors” section. Mr. Beaudet is a co-founder of Paladin Labs Inc. (“**Paladin**”), a specialty pharmaceutical company focused on acquiring or in-licensing innovative pharmaceutical products, which was acquired by Endo International plc (“**Endo**”) in 2014 for approximately \$3.0 billion. Since Paladin’s founding in 1996, Mr. Beaudet served as a member of its board of directors and as the company’s Vice President of Sales and Marketing until 2011 when he became interim President and Chief Executive Officer. Following Endo’s acquisition of Paladin, Mr. Beaudet joined Endo’s executive leadership team and continued to lead the Paladin team until his departure in June 2016. Prior to his work with Paladin, Mr. Beaudet held marketing management positions at Procter & Gamble Canada and Pizza Hut Canada. Mr. Beaudet is a member of the board of directors of the McGill University Health Center Foundation, Loyola High School and the Loyola High School Foundation. Mr. Beaudet is the Chairman of Ilkos Therapeutic Inc and also serves on the board of Altus Formulations Inc., both privately held drug development companies. He is a former member of the board and former Chair of the Regulatory Affairs Committee of Innovative Medicines Canada (formerly Rx&D - Canada’s Research Based Pharmaceutical Industry Association). Mr. Beaudet holds a B.Comm in Marketing and Entrepreneurship from McGill University and is recognized as a Certified Market Research Professional (CMRP) by the Canadian Market Research and Intelligence Association and as an Accredited Pharmaceutical Manufacturer’s Representative by the Council for Continuing Pharmaceutical Education (CCPE).

Each member of the Compensation Committee has had significant experience in dealing with compensation matters in companies with a level of complexity at least as great as the Corporation.

Director Compensation

Director Compensation Table

The following table presents the details of all compensation paid to non-management directors of the Corporation for the year ended December 31, 2018:

Name ⁽¹⁾	Fees Earned (\$)	Share-Based Awards (\$) ⁽³⁾	Option-Based Awards (\$) ⁽⁴⁾	All Other Compensation (\$)	Total (\$)
Dr. John Mull	40,000	4,646	1,857	Nil	47,403
Harold Wolkin	60,000	4,646	1,857	Nil	66,503
Mark Beaudet	90,000	4,646	1,857	Nil	96,503
Christian Godin	52,500	4,646	1,857	Nil	59,033
Arthur Deboeck	40,000	4,646	1,857	Nil	46,503
Dr. Laurence Terrisse-Rulleau ⁽²⁾	27,191	2,616	4,767	Nil	34,574

Notes:

- (1) Robert Tessarolo is a Named Executive Officer and, as such, does not receive compensation as a director of the Corporation.
- (2) Dr. Laurence Terrisse-Rulleau was elected a director of the Corporation on May 10, 2018.
- (3) Represents the fair value at the date of grant for RSUs granted to each director. For the grants included herein, the fair value was \$3.53. The actual value received, if any, will be different as it will depend on the portion of RSUs that vest and the price of the underlying common shares at the time of vesting.
- (4) Cipher has adopted fair value accounting for options granted under the Stock Option Plan using the Black-Scholes fair value option pricing method, an established methodology. The options granted vest over a four year period and expire after seven or ten years. The grants for 2018 (other than the grants for Dr. Rulleau) were made on March 22, 2018 and the dollar value is based upon the share price of \$3.53, and Black-Scholes value of \$1.55 (risk-free rate: 1.94%; expected option life: 4.9 years; expected volatility: 48.2%). The options granted to Dr. Rulleau on joining the Corporation were made on August 14, 2018 and the dollar value is based upon the share price of \$3.04 and a Black-Scholes value of \$1.22 (risk-free interest rate: 2.02%; expected option life: 4.9 years; expected volatility: 50.1%).

The compensation paid to directors of the Corporation is \$40,000 per year plus \$2,500 per year for serving on a committee. No attendance fees are paid to directors. In addition to the foregoing, the Corporation pays annual

retainers to the Audit Committee chair of \$15,000, the Compensation Committee chair of \$10,000 and the Nominating and Governance Committee chair of \$5,000. An annual retainer of \$40,000 is paid to the Chair of the Board.

The Corporation reimburses directors for out-of-pocket expenses for attending meetings. Directors and officers of the Corporation are covered by insurance in respect of liability that may be incurred by them acting in such capacity, unless the liability arises because such director or officer fails to act honestly and in good faith with a view to the best interests of the Corporation.

Outstanding Option-Based Awards

The following table sets forth the details of all outstanding option-based awards for the directors of the Corporation, at December 31, 2018:

Name	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Value of Unexercised in-the-Money Options (\$) ⁽¹⁾
Dr. John Mull	3,500	1.60	Feb. 19, 2020	385
	3,500	1.16	Mar. 11, 2021	1,925
	3,500	1.20	Feb. 24, 2022	1,785
	3,500	2.88	Mar. 6, 2023	Nil
	3,500	8.13	Feb. 28, 2024	Nil
	3,500	13.88	Feb. 24, 2025	Nil
	5,000	6.79	Feb.26, 2026	Nil
	3,500	5.06	May 15, 2024	Nil
	3,500	3.53	March 22, 2025	Nil
Harold Wolkin	20,000	6.19	Aug. 15, 2026	Nil
	3,500	5.06	May 15, 2024	Nil
	3,500	3.53	March 22, 2025	Nil
Mark Beaudet	20,000	6.19	Aug. 15, 2026	Nil
	3,500	5.06	May 15, 2024	Nil
	3,500	3.53	March 22, 2025	Nil
Christian Godin	20,000	6.19	Aug. 15, 2026	Nil
	3,500	5.06	May 15, 2024	Nil
	3,500	3.53	March 22, 2025	Nil
Arthur Deboeck	20,000	5.06	May 15, 2024	Nil
	3,500	3.53	March 22, 2025	Nil
Dr. Laurence Terrisse-Rulleau	20,000	3.04	August 14, 2025	Nil

Note:

- (1) The value of unexercised in-the-money options is based on the difference between the exercise price of the options and the closing price of the common shares of Cipher on the TSX on December 31, 2018, being the last trading day of fiscal 2018, of \$1.71 per share.

Outstanding Share-Based Awards

The following table sets forth the details of all outstanding share-based awards for the directors of the Corporation at December 31, 2018:

Name	Number of Shares or Units of Shares that have not Vested (#)⁽¹⁾	Market or Payout Value of Share-based awards that have not Vested (\$)⁽²⁾	Market or Payout Value of Vested Share-based awards not paid out or distributed (\$)
Dr. John Mull	1,500	2,565	Nil
Harold Wolkin	1,500	2,565	Nil
Mark Beaudet	1,500	2,565	Nil
Christian Godin	1,500	2,565	Nil
Arthur Deboeck	1,500	2,565	Nil
Dr. Laurence Terrisse-Rulleau	1,500	2,565	Nil

Note:

- (1) Consists of RSUs.
- (2) The value of RSUs is calculated by multiplying the number of units held on December 31, 2018 by the closing price of the common shares of Cipher on the TSX on December 31, 2018, being the last trading day of fiscal 2018, of \$1.71 per share.

Incentive Plan Awards – Value Vested or Earned During the Year

The following table sets forth, for each non-management director, the value of option-based awards and share-based awards that vested during the year ended December 31, 2018 and the value of non-equity incentive plan compensation earned during the year ended December 31, 2018:

Name	Option-Based Awards – Value Vested During the Year (\$)⁽¹⁾	Share-based Awards – Value Vested During the Year (\$)⁽²⁾	Non-Equity Incentive Plan Compensation – Value Earned During the Year (\$)
Dr. John Mull	Nil	5,355	Nil
Harold Wolkin	Nil	5,355	Nil
Mark Beaudet	Nil	5,355	Nil
Christian Godin	Nil	5,355	Nil
Arthur Deboeck	Nil	5,355	Nil
Dr. Laurence Terrisse-Rulleau	Nil	Nil	Nil

Notes:

- (1) The value of the options that vested during the financial year is based on the difference between the exercise price of the options and the closing price of the common shares of Cipher on the TSX on the applicable vesting date. If the closing price of the common shares of Cipher on such date was below the exercise price, the options had no then current value and are valued at nil. The options may not have been exercised on such date or subsequently and, accordingly, the amount shown may not reflect the actual amount, if any, realized by the director.
- (2) The value of the RSUs that vested during the financial year is calculated by multiplying the number of RSUs that vested by the five-day volume weighted average price of the common shares of Cipher on the vesting date.

Share Ownership Requirements for Directors

The Board believes that economic interest of non-management directors should be aligned with those of shareholders. In that regard, the Board has adopted a director share ownership policy. By the time a director has served on the Board for five years, he or she must own common shares with a value equal to a minimum of three times the annual base cash retainer including chairmanships and committee participation, as applicable, for the particular director. Share ownership for this purpose includes shares issuable to a director under any incentive plan of the Corporation but excluding stock options. The Compensation Committee of the Corporation has the authority to permit exceptions from the policy from time to time.

If a director's share ownership falls below the minimum guidelines due a decline in the price of the common shares or an increase in the particular director's annual retainer, the director will have a period of one year to acquire additional common shares to comply with the policy.

Currently, each of the directors of the Corporation who has served as a director for five years is in compliance with the share ownership requirements of the policy.

Hedging

The Corporation does not allow its Named Executive Officers or directors to hedge against declines in the market value of their equity-based compensation or equity securities held by them through the purchase of financial instruments designed to offset such risk. The prohibition extends to all officers and employees. Directors, officers and employees are also prohibited from selling securities of the Corporation they do not own (a short sale) and from using securities of the Corporation as collateral in any financial transaction, including margin loan arrangements. The Board may determine to permit exceptions to these prohibitions in exceptional circumstances to further the best interests of the Corporation.

Compensation Recoupment Policy

The Board approved on February 24, 2015 a Compensation Recoupment Policy ("claw-back" policy)". Under this policy, where there has been a restatement of the Corporation's financial statements or the financial results are found to be inaccurate in a manner that materially affects the calculation of compensation for senior executives, the Board can require the reimbursement of incentive-based compensation that exceeds such compensation that would have been awarded on the basis of the restated or corrected financial statements. The Board can recover compensation from current or former senior executives for the three year period preceding the restatement or correction of the financial statements.

In addition, if the Board determines that a current or former senior executive has engaged in embezzlement, fraud or theft on or after February 24, 2015, the Board may require the reimbursement of incentive-based compensation from the senior officer granted during the three year period preceding the discovery by the Corporation of the misconduct.

Securities Authorized for Issuance Under Equity Compensation Plans

The Stock Option Plan, the PR Plan and the Share Purchase Plan are equity compensation plans of the Corporation which have been approved by Cipher's shareholders. As at December 31, 2018, Cipher did not have any equity compensation plans that had not been approved by shareholders nor any such plans in effect as of the date of this Circular. The following table sets forth the details of the securities authorized for issuance under the Stock Option plan and the PR Plan as at December 31, 2018:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)⁽²⁾
Stock Option Plan	1,086,363	Nil	See Note 2
PR Plan	486,707 ⁽¹⁾	Nil	See Note 2
Total	1,573,070	5.36	1,108,978 ⁽²⁾

Notes:

- (1) Includes the application of a performance multiplier of five applicable to an aggregate of 273,985 outstanding as at December 31, 2018.
- (2) Each of the Stock Option Plan, the PR Plan and the Share Purchase Plan provide that the aggregate number of common shares that are issuable thereunder pursuant to outstanding awards or grants, together with common shares issuable pursuant to outstanding awards or grants under the Corporation's other security-based compensation arrangements shall not at any time exceed 10% of the Corporation's common shares then issued and outstanding. Accordingly, an aggregate of 1,108,978 common shares remained available for future issuance under the Stock Option Plan, the PR Plan and the Share Purchase Plan, collectively, as at December 31, 2018.

As at the date hereof: (i) options to purchase an aggregate of 1,326,207 common shares are outstanding, representing approximately 4.9% of the issued and outstanding common shares; (ii) RSUs to acquire an aggregate of 362,143 common shares are outstanding, representing approximately 1.4% of the issued and outstanding common shares; and (iii) PSUs to acquire an aggregate of 193,725 common shares (assuming application of the maximum multiplier) are outstanding, representing approximately 0.7% of the issued and outstanding common shares for a total of 1,882,075 common shares issuable pursuant to outstanding awards. As a result, grants under the Corporation's equity compensation plans to purchase a total of 810,308 common shares, representing approximately 3.0% of the issued and outstanding common shares, are available for grant as of the date hereof.

During the financial year ended December 31, 2018: (i) an aggregate of 375 options were exercised resulting in the issuance of 375 common shares; (ii) an aggregate of 35,525 RSUs vested resulting in the issuance of an equal number of common shares; (iii) 7,197 PSUs vested; and (iv) an aggregate of 58,490 common shares were issued under the Share Purchase Plan.

Annual Burn Rate

In accordance with the policies of the TSX, the following table sets out the burn rate of the awards granted under the Corporation's security based compensation arrangements, namely the Stock Option Plan, the PR Plan and the Share Purchase Plan, as of the end of the financial year ended December 31, 2018 and for the two preceding financial years. The burn rate is calculated by dividing the number of securities granted under each security based compensation agreement during the relevant fiscal year by the weighted average number of common shares of Cipher outstanding for the applicable fiscal year.

Compensation Plan	2018	2017	2016
Stock Option Plan	2.2%	2.1%	2.6%
PR Plan ⁽¹⁾	0.6%	1.7%	2.9%
Share Purchase Plan	0.2%	0.1%	0.4%

Note:

- (1) Reflects the maximum number of common shares issuable under PSUs assuming the application of the maximum multiplier thereon (see "Statement of Executive Compensation – Stock Options, Restricted Share Units and Performance Share Units" for additional details with respect to the terms for the application of multipliers).

INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

No director or executive officer of the Corporation, or proposed nominee for election as director of the Corporation, and no associate of any such director, officer or proposed nominee was indebted at any time during fiscal 2018 to the Corporation or any of its subsidiaries in connection with the purchase of the Corporation's securities or otherwise or had indebtedness to another entity that is, or has been, the subject of a guarantee, support agreement, letter of credit or similar arrangement or understanding provided by the Corporation or any of its subsidiaries, excluding in each case routine indebtedness or indebtedness that has been entirely repaid before the date of this Circular.

INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS

No director or executive officer of the Corporation, or any associate or affiliate thereof, has any material interest, direct or indirect in any transaction since January 1, 2018 or in any proposed transaction which has materially affected or would materially affect Cipher.

STATEMENT OF CORPORATE GOVERNANCE PRACTICES

The Corporation has adopted certain practices and procedures, including the creation of a Nominating and Governance Committee, to ensure that effective corporate governance practices are followed and to ensure that the Board functions independently of management. Appendix A sets forth the Corporation's statement of corporate governance practices. Appendix B sets out the Charter of the Board of Directors of the Corporation.

OTHER MATTERS

Management is not aware of any amendments or variations to matters identified in the Notice or of any other matters that are to be presented for action to the Meeting other than those described in the Notice. Information stated in this Circular is dated as at May 7, 2019 except where otherwise indicated.

ADDITIONAL INFORMATION

Additional information relating to the Corporation is available on SEDAR at www.SEDAR.com and financial information relating to the Corporation is provided in the Corporation's financial statements and Management's Discussion and Analysis ("MD&A") for the year ended December 31, 2018. To request copies of the Corporation's financial statements and MD&A, security holders may contact the Corporation directly:

Cipher Pharmaceuticals Inc.
209 Oak Park Blvd., Suite 501
Oakville, ON L6H 0M2
Telephone: 905-602-5840
Facsimile: 905-602-0628
Email: info@cipherpharma.com

CERTIFICATE

The contents of this Circular and the sending thereof to the shareholders has been approved by the Board of Directors.

Dated: May 7, 2019

BY ORDER OF THE BOARD OF DIRECTORS

“Robert Tessarolo” (signed)
President and Chief Executive Officer

Appendix A

STATEMENT OF CORPORATE GOVERNANCE PRACTICES

In general, the Board of Directors of the Corporation (the “**Board**”) is responsible for the stewardship of the Corporation. The Board oversees the business and affairs of the Corporation, supervises senior management’s day-to-day conduct of business, establishes or approves overall corporate policies where required and involves itself jointly with management in ensuring the creation of shareholder value and the preservation and protection of the Corporation’s assets as well as in establishing the Corporation’s strategic direction. The Board acts through regularly scheduled Board meetings, which are held on a quarterly basis, with additional meetings being scheduled when required. In addition, there is continued communication between senior management and Board members between meetings both on an informal basis and through committee meetings.

To assist in the discharge of its responsibilities, the Board has established an Audit Committee, a Nominating and Governance Committee and a Compensation Committee. All of the members of the committees are “independent” under National Instrument 52-110 – *Audit Committees* and under National Instrument 58-101 – *Disclosure of Corporate Governance Practices* (“**NI 58-101**”) of the Canadian Securities Administrators. The committees operate pursuant to written mandates (charters). Other committees may be established by the Board from time to time as circumstances require.

The Board believes that sound corporate governance practices are in the best interests of the Corporation and its shareholders and contribute to prudent and effective decision-making. The Board, both generally and through the Nominating and Governance Committee, is committed to remaining abreast of the ongoing evolution of corporate governance standards and practices both in Canada and more broadly. As such, directors of the Corporation are committed to thorough and effective corporate governance arrangements. In addition, the Board supports the Corporation’s efforts to align its corporate governance practices with the recommendations currently in effect and contained in National Instrument 58-201 – *Corporate Governance Guidelines* having regard to the Corporation’s particular circumstances from time to time.

Pursuant to NI 58-101, the Corporation is required to disclose its corporate governance practices, which are described below. The Board will continue to monitor its practices on an ongoing basis and, when necessary, amend such practices or implement such additional practices as it deems appropriate.

1. **Board of Directors**

The importance of the independence of the directors from management is fully endorsed by the Corporation. The Charter of the Board of Directors (the “**Charter of the Board**”) provides that at least a majority of the directors must be “independent” for the purposes of all applicable regulatory requirements. The Board has determined that each of Dr. J. Mull, Mr. Wolkin, Mr. Beaudet, Mr. Godin, Dr. Rulleau and Mr. C. Mull are “independent” directors. The Board has determined that Mr. Deboeck is not an “independent” director as a result of the commercial relationship between the Corporation and Galephar Pharmaceuticals Research Inc. and its affiliates. Mr. Tessarolo is not considered an “independent” director as he is the Corporation’s President and Chief Executive Officer. Notwithstanding the foregoing, in the view of the Board, the fact that Mr. Tessarolo occupies a management position with the Corporation does not impair the ability of the Board to act independently of management. The Board believes that each of Mr. Tessarolo’s and Mr. Deboeck’s status as a non-independent director does not preclude either of them from exercising independent judgement with a view to the best interests of the Corporation. The Audit Committee, the Nominating and Governance Committee and the Compensation Committee are each presently composed entirely of “independent” directors. As Mr. Beaudet and Dr. Rulleau have determined not to stand for re-election at the Meeting, the Board intends to reconstitute the membership of the Audit Committee, the Nominating and Governance Committee and the Compensation Committee at a Board meeting to be held following the Meeting.

In addition to their roles as directors of the Corporation, the following individuals also hold positions as directors of the following reporting issuers: Mr. Wolkin is a director of Baylin Technologies Inc. and Diamond Estates Wines & Spirits Ltd.

The Board meets from time to time without the non-independent directors and management being present at *in camera* sessions of independent directors held before, during an adjournment of, or following the conclusion of each meeting of the Board.

The Board elects from its ranks a chairperson to preside at all meetings of the Board. Mr. Beaudet, an independent director, was appointed Chair of the Board on April 12, 2017 and continued to act in such capacity throughout fiscal 2018. The Chair provides leadership to directors in discharging their mandate as set out in the Charter of the Board, including, by: (a) promoting a thorough understanding by the directors and management of the duties and responsibilities of the directors and the distinctions between the role of the directors and the role of management; (b) promoting cohesiveness among the directors; and (c) ensuring processes are in place to monitor legislation and best practices relating to the responsibilities of the Board, and reviewing the effectiveness of the Board, its committees and individual directors on a regular basis. As Mr. Beaudet has determined not to stand for re-election at the Meeting, the Board intends to appoint a new Chair at a Board meeting to be held following the Meeting.

The following table sets forth the number of Board and committee meetings held and attendance by directors for the financial year ended December 31, 2018:

Attendance of Directors <i>(in person or by telephone)</i>				
<i>Director</i>	<i>Board Meetings Attended</i>	<i>Audit Committee Meetings Attended</i>	<i>Nominating and Governance Committee Meetings Attended</i>	<i>Compensation Committee Meetings Attended</i>
Dr. John Mull	13 of 13	N/A	N/A	N/A
Harold Wolkin	13 of 13	4 of 4	3 of 3	3 of 3
Christian Godin	13 of 13	4 of 4	1 of 1	3 of 3
Mark Beaudet	13 of 13	4 of 4	3 of 3	3 of 3
Arthur M. Deboeck	8 of 13	N/A	N/A	N/A
Robert D. Tessarolo	13 of 13	N/A	N/A	N/A
Dr. Laurence Terrisse- Rulleau ⁽¹⁾	5 of 6	N/A	2 of 2	N/A

(1) Dr. Laurence Terrisse-Rulleau was appointed a director of the Corporation on May 10, 2018.

2. Board Mandate

The Board, both directly and through its committees, supervises the activities and manages the investments and affairs of the Corporation and is responsible for the stewardship of the Corporation and its business.

The Board is kept informed of the Corporation's operations at Board meetings, committee meetings and through reports and discussions with management of the Corporation, as necessary. Each of the Board and the Audit Committee meet on a quarterly basis, with additional meetings scheduled when required. In addition, there is continued communication between senior management of the Corporation and the Board on an informal basis.

The duties and responsibilities of the Board are set out in the Charter of the Board attached as Appendix B to this Circular.

3. Position Descriptions and Chief Executive Officer Succession Planning

The Corporation has developed and implemented written position descriptions for the Chief Executive Officer, Chief Financial Officer, Chair of the Board, Chair of the Audit Committee, Chair of the Nominating and

Governance Committee and Chair of the Compensation Committee. Position descriptions are reviewed periodically. In addition, as a matter of succession planning with respect to the Corporation's Chief Executive Officer, the Board has identified specific criteria to be considered in the appointment of the Chief Executive Officer which the Board reviews annually and updates as necessary.

4. Orientation and Continuing Education of New Directors

The Board is responsible for developing and implementing, on recommendation of the Nominating and Governance Committee, a comprehensive orientation program for new directors. The Nominating and Governance Committee develops the comprehensive orientation programs with a goal of assisting new directors in understanding: (a) the role of the Board and its committees; (b) the contribution individual directors are expected to make (including the commitment of time and energy that the Corporation expects from its directors); and (c) the nature and operation of the Corporation's business. The Nominating and Governance Committee's continuing education program assists directors to maintain or enhance their skills and abilities as directors and in ensuring that their knowledge and understanding of the Corporation's business remains current. In regard to these matters the Board has adopted a Director Education and Continuing Education Policy whereby the Corporation will maintain a membership for each director in an organization dedicated to corporate governance and ongoing director education. The Corporation will also annually fund the attendance of each director at seminars or conferences of interest and relevance, the annual allowance in this regard to be set by the Board from time to time.

5. Ethical Business Conduct

The Corporation has a strong commitment to the conduct of business in a lawful and ethical manner. The Board has adopted a written Code of Business Conduct and Ethics (the "**Code**") for directors, officers and employees which is available on the Corporation's website and may be obtained by written request to the Secretary of the Corporation at 209 Oak Park Blvd, Suite 501, Oakville, Ontario, L6H 0M2. The Code describes confidential reporting procedures which may be used by personnel to communicate good faith concerns about any violation of the Code or related policies and guidelines directly to the Chair of the Nominating and Governance Committee. The Chair maintains a log of all reports that are received, tracking their receipt, investigation and resolution.

The Charter of the Board describes the requirement and procedure by which each director must disclose, in writing to the Corporation or by requesting to have entered in the minutes of meetings of the Board or a committee of Directors, the nature and extent of any interest that such director has in a material contract or material transaction, whether made or proposed, with the Corporation, if the director: (a) is a party to the contract or transaction; (b) is a director or officer, or an individual acting in a similar capacity, of a party to the contract or transaction; or (c) has a material interest in a party to the contract or transaction. Directors are to disclose such interest to the Board at the first opportunity and if a material contract or material transaction, whether entered into or proposed, is one that, in the ordinary course of the Corporation's business, would not require approval by the directors, a director must disclose, in writing to the Corporation or request to have entered in the minutes of a meeting of the Board or a committee, the nature and extent of such director's interest immediately after he or she becomes aware of the contract or transaction. A director required to make such disclosure shall not vote on any resolution to approve the contract or transaction unless the contract or transaction: (a) relates primarily to his or her remuneration as a director, officer, employee or agent of the Corporation or an affiliate; (b) is for indemnity or insurance; or (c) is with an affiliate.

The Code, the Charter of the Board, as well as a number of other policies implemented by the Corporation, including insider trading and whistleblowing policies, serve to promote and encourage a culture of ethical business conduct within the Corporation.

6. Nomination of Directors

The Nominating and Governance Committee, composed entirely of independent directors, has the responsibility of identifying individuals qualified to become new directors of the Corporation and recommending to the Board the directors to be nominated for election at annual meetings of shareholders. External advisors may be retained to assist in this process.

In evaluating the competencies and skills of potential new directors, the Nominating and Governance Committee considers: (a) the competencies and skills the Board, as a whole, should possess; (b) the competencies and skills each existing director possesses; and (c) the personality and skills each new nominee would bring to the Board. A skills matrix of the functional expertise of existing and potential new directors is used in this regard. The Nominating and Governance Committee is also guided by the principles set out in the Board Diversity Policy as described in item 11 below.

7. Majority Voting in Director Elections

The Board has adopted a Majority Voting in Director Elections Policy that will apply at any meeting of shareholders where an uncontested election of directors is held. For the purpose of the policy, an “uncontested election” means an election where the number of nominees for director equals the number of directors to be elected. Pursuant to the policy, if the number of proxy votes “withheld” for a particular director nominee is greater than the votes “for” such director, the director nominee will be required to submit his or her resignation to the Chair of the Board promptly following the meeting of shareholders at which the director was elected. Following receipt of the resignation, the Board will consider whether or not to accept the offer of resignation. With the exception of special circumstances, the Board will be expected to accept the resignation. Within 90 days following the applicable meeting of shareholders, the Board will make its decision whether or not to accept the resignation. The Corporation will announce the decision of the Board in a press release, such press release to include the reasons for rejecting the resignation, if applicable. The director who tendered such resignation will not be part of any deliberations of the Board pertaining to the resignation offer.

8. Compensation

The Board approves the compensation of the Chief Executive Officer and considers recommendations of the Chief Executive Officer with respect to the compensation of other members of senior management. The Board has directed the Compensation Committee to consider matters related to executive compensation and to report and make recommendations to the Board with respect to such matters.

The Compensation Committee, composed entirely of independent directors, assists the Board in its oversight of executive and director compensation and undertakes the responsibility for: (a) reviewing and making recommendations to the Board with respect to compensation of the Chief Executive Officer; (b) making recommendations to the Board with respect to non-CEO officer compensation, incentive compensation plans and equity-based plans; and (c) reviewing the Corporation’s compensation disclosure in public documents and preparing the annual report on executive compensation for inclusion in the Corporation’s information circulars.

The Compensation Committee also monitors the administration of the Corporation’s executive officer incentive and other compensation related plans and reports to the Board annually on whether incentives and bonuses awarded or paid to the Chief Executive Officer and each of the other executive officers have been awarded or paid in accordance with the applicable plans.

9. Assessments

The Nominating and Governance Committee is charged with developing and recommending to the Board a process for reviewing the performance and effectiveness of the Board as a whole, the committees of the Board and the contributions of individual directors on an annual basis, such process to consider: (a) input from directors, as appropriate; (b) attendance of directors at meetings of the Board and any committee; (c) the Board’s written charter; (d) the charter of each committee of the Board; (e) applicable position description(s) for each individual director and for the chairs of the Board and of each committee of the Board; and (f) the competencies and skills each individual director is expected to bring to the Board. The Nominating and Governance Committee is responsible for overseeing the execution of the review process as approved by the Board.

The Nominating and Governance Committee also reviews the Board’s committee structure on an annual basis and recommends to the Board any changes it considers necessary or desirable with respect to the committee structure, including: (a) the charters of each committee; (b) the criteria for membership on any committee; (c) the composition

of each committee; (d) the appointment and removal of members from any committee; (e) the operations of each committee, including the ability of any committee to delegate any or all of its responsibilities to a sub-committee of that committee; and the process by which each committee reports to the Board.

The Board, its committees and individual directors are regularly assessed with respect to their effectiveness and contribution. For fiscal 2018, each director completed a detailed self-evaluation questionnaire (including the ability of each director to provide open-ended feedback) which asked each director to assess, among other things: (a) the effectiveness of the Board; (b) the conduct of the Board in fulfilling its objectives and responsibilities; (c) the Board's relationship with the Chief Executive Officer; (d) such director's individual performance as a Board member; and (e) the performance of the Chair. The results and key themes derived from the questionnaires were compiled by the Chair and presented at a meeting of the Board. The purpose of the questionnaire is to serve as a basis for a structured and robust discussion among the directors as a group in order to focus on areas for improvement or determine if any corrective action is advisable, including in respect of changes to the composition of the Board, having regard to the Corporation's policies and objectives. In addition to the questionnaire, the Board satisfies itself that the Board, its committees, and its individual directors are performing effectively by conducting informal assessments from time to time.

The Board may, upon the recommendation of the Nominating and Governance Committee, from time to time implement alternate or additional measures to review the performance and effectiveness of the Board as a whole, its committees and the contributions of individual directors, which may include, among other things, a peer evaluation process and/or the use of an outside third party to assist with the assessment process.

Each of the Board as a whole, the Audit Committee, the Nominating and Governance Committee and Compensation Committee are to review performance and effectiveness annually in accordance with the review process approved from time to time by the Nominating and Governance Committee.

10. Director Term Limits and Other Mechanisms of Board Renewal

The Corporation currently benefits from a depth of institutional and industry experience on the Board. Since the changes to the composition of the Board in August 2016, and subsequently at the Corporation's annual shareholder meetings in May 2017 and 2018, the current Board has been focused on working closely as a group to ensure the Corporation benefits from the valuable input and insight of each director given the Corporation's strategic focus of building a diversified portfolio of prescription products to deliver robust and reliable growth for shareholders. The Corporation believes that term limits for directors would have the effect of forcing directors to resign from the Board who have, or who have developed through their service on the Board, expertise and insight in the highly specialized industry in which the Corporation operates and that term limits impose a rigid and arbitrary rule on a decision that should be flexible and reasoned. Accordingly, the Board has determined that the use of term limits is not appropriate in the Corporation's circumstances.

In the view of the Corporation, optimal corporate governance is aided by a combination of board renewal and board continuity. Directors who have served on the Board for an extended period of time are in a unique position to provide valuable insight into the operations and future of the Corporation based on their experience with a perspective on the Corporation's history, performance and objectives. The Board believes it is important to have a balance between directors who have a long history and organizational understanding of the Corporation's business with directors who bring new perspectives and ideas to the Board. Therefore, in lieu of imposing term limits, the Corporation will continue to periodically monitor director performance through formal and informal annual assessments, analyze the skills and experience necessary for the Board and evaluate the need for director changes to ensure that the Corporation has highly knowledgeable and motivated Board members, while ensuring that new perspectives are available to the Board.

11. Policies Regarding the Representation of Women on the Board

The Corporation adopted on December 17, 2014 a written policy with respect to the Diversity of the Board of Directors (the "**Board Diversity Policy**"). Pursuant to the Board Diversity Policy, the Nominating and Governance Committee, when identifying candidates for election or appointment to the Board, is guided by principles which include consideration of diversity criteria by seeking directors who represent both genders and various ages, cultural

communities and geographic areas. The Nominating and Governance Committee and the Board may engage external advisors to conduct a search for Board candidates to help achieve Board diversity as above described. The effectiveness of the policy and progress thereunder will be monitored by the Nominating and Governance Committee on an ongoing basis.

12. Consideration of the Representation of Women in the Director Identification and Selection Process

Pursuant to the Board Diversity Policy, the Nominating and Governance Committee is to consider the level of representation of women on the Board in identifying and nominating candidates for election to the Board. This will be achieved by monitoring the level of female representation on the Board and, where appropriate, recruiting qualified female candidates as part of the Corporation's overall recruitment and selection process to fill Board positions, as the need arises, through vacancies, growth or otherwise.

13. Consideration Given to the Representation of Women in Executive Officer Appointments

The Corporation believes that diversity of perspectives and viewpoints at the executive level is equally as important as at the Board level. Accordingly, the Corporation adopted on December 17, 2014 a written Policy with respect to the Diversity of Executive Officers (the “**Executive Officer Diversity Policy**”). Pursuant to this policy, when identifying candidates for appointment as executive officers of the Corporation, the Board is guided by principles which include consideration of diversity criteria by seeking executive officers who represent both genders and various cultural communities. The Board may engage external advisors to conduct a search for candidates to help achieve executive officer diversity as above described.

14. Targets Regarding the Representation of Women on the Board and in Executive Officer Positions

The Board does not believe that it is in the best interests of the Corporation or its shareholders to set any specific targets or quotas for recruiting Board members or executive officers based on diversity criteria. The Corporation believes that diversity criteria should be considered as one important aspect of the identification and selection process but should not be considered paramount to other important criteria. The Corporation is committed to promoting diversity as evidenced by the implementation of the Board Diversity Policy and the Executive Officer Diversity Policy, but does not believe that specific targets or quotas necessarily result in the identification or selection of the best candidates. Accordingly, the Board has determined that such targets are not appropriate in the Corporation’s circumstances.

The Board will continue to assess, no less than annually, the effectiveness of the Board Diversity Policy and the Executive Officer Policy and whether their objectives are being met.

15. Number of Women on the Board and in Executive Officer Positions

As of the date of this Circular, one woman (representing 12.5% of the directors of the Corporation) is on the Board. There are currently two female executive officers of the Corporation (representing approximately 40% of the executive officers of the Corporation).

Appendix B

CHARTER OF THE BOARD OF DIRECTORS OF CIPHER PHARMACEUTICALS INC.

GENERAL

1. PURPOSE AND RESPONSIBILITY OF THE BOARD

The Board of Directors is responsible for supervising the activities and managing the investments and affairs of the Corporation. By approving this Charter, the Board confirms its responsibility for the stewardship of the Corporation and its business. This stewardship function includes responsibility for the matters set out in this Charter. The responsibilities of the Directors described herein are pursuant to, and subject to, the Act and do not impose any additional responsibilities or liabilities on the Directors at law or otherwise.

2. REVIEW OF CHARTER

The Board shall review and assess the adequacy of this Charter annually and at such other times as it considers appropriate and shall make such changes as it considers necessary or appropriate.

3. DEFINITIONS AND INTERPRETATION

3.1 Definitions

In this Mandate:

- (a) “**Act**” means the *Business Corporations Act* (Ontario), as amended;
- (b) “**Applicable Laws**” means all applicable provisions of law, domestic or foreign, including, without limitation, the Act; the *Securities Act* (Ontario) as amended, together with all regulations, rules, policy statements, rulings, notices, orders or other instruments promulgated thereunder; and the applicable rules and policies of any stock exchange on which the Corporation is listed;
- (c) “**Board**” means the Board of Directors of the Corporation;
- (d) “**CEO**” means the chief executive officer of the Corporation;
- (e) “**Chair**” means the chair of the Board;
- (f) “**Charter**” means this charter, as amended from time to time;
- (g) “**Corporation**” means Cipher Pharmaceuticals Inc.;
- (h) “**Directors**” means the directors of the Corporation;
- (i) “**Residents**” means “resident Canadians” for purposes of the Act; and
- (j) “**Vice Chair & Lead Director**” means the lead director of the Corporation.

3.2 Interpretation

This Charter is subject to and shall be interpreted in a manner consistent with the Act and any other applicable legislation.

CONSTITUTION OF THE BOARD

4. ELECTION AND REMOVAL OF DIRECTORS

4.1 Number of Directors

The Corporation shall have a minimum of one Director and a maximum of ten Directors, with the number of Directors from time to time within such range being fixed by resolution of the Directors.

4.2 Election of Directors

Directors shall be elected (including the re-election of incumbent Directors) at each annual meeting of the shareholders, and may be elected at a special meeting of the shareholders, in each case to hold office, subject to Section 4.4, for a term expiring at the close of the next annual meeting of the shareholders following such an election.

4.3 Vacancies

A quorum of Directors may fill a vacancy among the Directors, to the extent permitted under the Act.

4.4 Ceasing to Be a Director

A Director shall cease to hold office when:

- (a) he or she dies or resigns;
- (b) he or she is removed in accordance with the provisions of the Act; or
- (c) he or she ceases to be duly qualified to act as a Director as specified in the Act.

4.5 Majority Voting in Director Elections

The Majority Voting in Director Elections Policy set out in Schedule B to this Charter shall apply with respect to an uncontested election of Directors.

5. CRITERIA FOR DIRECTORS

5.1 Qualifications of Directors

Every Director shall be an individual who is at least 18 years of age, has not been found under the *Substitute Directors Act, 1992* (Ontario) or under the *Mental Health Act* (Ontario) to be incapable of managing property or found to be incapable by a court in Canada or elsewhere.

5.2 Residency

At least 25% of the Directors shall be Residents.

5.3 Independence of Directors

At least a majority of the Directors shall be independent as defined under Applicable Laws.

5.4 Other Criteria

The Board may establish other criteria for Directors as contemplated in this Charter.

6. BOARD CHAIR

6.1 Board to Appoint Chair

The Board shall appoint an independent Director to act as Chair, or alternatively, shall appoint a Director who is not independent to act as Chair and shall also appoint an independent Director to act as Vice Chair & Lead Director.

6.2 Chair to Be Appointed Annually

The Board shall appoint the Chair annually at the first meeting of the Board after a meeting of the members at which Directors are elected. If the Board does not so appoint a Chair, the Director who is then serving as Chair shall continue as Chair until his or her successor is appointed.

7. INFORMATION, ADVICE AND REMUNERATION OF DIRECTORS AND RETAINING ADVISORS

7.1 Remuneration

Members of the Board and the Chair shall receive such remuneration for their service on the Board as the Board may determine from time to time, in consultation with the Compensation Committee of the Board.

7.2 Retaining and Compensating Advisors

Each Director shall have the authority to retain at the expense of the Corporation outside counsel and any other external advisors from time to time as appropriate with the approval of the chair of the Nominating and Governance Committee.

7.3 Information

The Board shall have the authority to request from management of the Corporation, and from other sources, such information as the Board considers necessary in order to discharge its oversight responsibilities.

MEETINGS OF THE BOARD

8. MEETINGS OF THE BOARD

8.1 Time and Place of Meetings

Meetings of the Board shall be held in Canada and shall be called in the manner and at the location contemplated in the by-laws of the Corporation.

8.2 Frequency of Board Meetings

The Board shall meet at least four times per year on a quarterly basis.

8.3 Quorum

The quorum for the transaction of business at any meeting of the Directors shall consist of a majority of the number of Directors fixed in accordance with Section 4.1.

8.4 Secretary of the Meeting

The Chair shall designate from time to time a person who may, but need not, be a member of the Board, to be Secretary of any meeting of the Board.

8.5 Right to Vote

Each member of the Board shall have the right to vote on matters that come before the Board.

8.6 Invitees

The Board may invite any of the Corporation's officers, employees, advisors or consultants or any other person to attend meetings of the Board to assist in the discussion and examination of the matters under consideration by the Board.

9. CONFLICTS OF INTEREST

9.1 Disclosure of Interest

Each Director shall disclose, in writing to the Corporation or by requesting to have entered in the minutes of meetings of the Board or a committee of Directors, the nature and extent of any interest that such Director has in a material contract or material transaction, whether made or proposed, with the Corporation, if the Director:

- (a) is a party to the contract or transaction;
- (b) is a director or officer, or an individual acting in a similar capacity, of a party to the contract or transaction; or
- (c) has a material interest in a party to the contract or transaction.

9.2 Time of Disclosure

- (a) Each Director shall disclose such interest to the Board at the first opportunity to disclose such interest. For example, the Director shall disclose such interest at the meeting at which the contract or transaction is first considered or, if the Director becomes interested at a later time, at the first meeting after which the Director becomes so interested or, if an interested individual later becomes a Director, at the first meeting after he or she becomes a Director.
- (b) If a material contract or material transaction, whether entered into or proposed, is one that, in the ordinary course of the Corporation's business, would not require approval by the Directors, a Director shall disclose, in writing to the Corporation or request to have entered in the minutes of meetings of the Board or a committee of Directors, the nature and extent of such Director's interest immediately after he or she becomes aware of the contract or transaction.

9.3 Voting

A Director required to make a disclosure under paragraph 9.2(a) above shall not vote on any resolution to approve the contract or transaction unless the contract or transaction:

- (a) relates primarily to his or her remuneration as a Director, officer, employee or agent of the Corporation or an affiliate;
- (b) is for indemnity or insurance; or
- (c) is with an affiliate.

9.4 Continuing Disclosure

A Director may declare his or her interest in relation to a contract or transaction by a general notice to the Directors declaring that a Director is to be regarded as interested, for any of the following reasons, in a contract or transaction made with a party:

- (a) the Director is a director or officer, or an individual acting in a similar capacity, of a party referred to in paragraphs 9.1(b)-(c) above;
- (b) the Director has a material interest in the party; or
- (c) there has been a material change in the nature of the Director's interest in the party.

9.5 Avoidance Standards and Shareholder Confirmation

A contract or transaction for which disclosure is required under Section 9.1 above is not invalid, and the Director is not accountable to the Corporation or its shareholders for any profit realized from such contract or transaction, because of the Director's interest in the contract or transaction or because the Director was counted to determine whether a quorum existed at the meeting of the Board or a committee of the Board that considered the contract or transaction, if:

- (a) disclosure of the interest was made as described in this Section 9, the Directors approved the contract or transaction, and the contract or transaction was reasonable and fair to the Corporation when it was approved; or
- (b) the contract or transaction is approved or confirmed by special resolution at a meeting of shareholders, disclosure of the interest was made to shareholders in a manner sufficient to indicate its nature before such approval or confirmation, and the contract or transaction was reasonable and fair to the Corporation when it was approved or confirmed.

10. IN CAMERA SESSIONS

10.1 In Camera Sessions of Independent Directors

Before, during an adjournment of, or following the conclusion of each meeting of the Board, the independent Directors shall meet without the non-independent Directors and any member of management being present, provided that any failure to do so shall not invalidate business transacted at a duly convened meeting of the Board.

10.2 Business Transacted at In Camera Sessions

The Directors shall not transact business of the Board at an in camera session of Directors.

DELEGATION OF DUTIES AND RESPONSIBILITIES

11. DELEGATION AND RELIANCE

11.1 Delegation of Powers

The Directors may establish one or more committees and may, subject to Applicable Laws, delegate to such committees any of the powers of the Directors. The Directors may also, subject to Applicable Laws, delegate such powers to such of the officers of the Corporation (or to other persons as the Directors may deem appropriate) as they, in their sole discretion, may deem necessary or desirable, and define the scope of and manner in which such powers shall be exercised by such persons as they may deem appropriate, without regard to whether such authority is normally granted or delegated by directors, subject, however, to the overall supervision and control of the Directors.

11.2 Requirement for Certain Committees

The Board shall establish and maintain the following committees of the Board, each having mandates that incorporate all applicable legal and stock exchange listing requirements and with such recommendations of relevant securities regulatory authorities and stock exchanges as the Board may consider appropriate:

- (a) Audit Committee;
- (b) Nominating and Governance Committee; and
- (c) Compensation Committee.

11.3 Composition of Committees

The Board shall appoint and maintain in office members of each of its committees such that the composition of each such committee is in compliance with all applicable legal and stock exchange listing requirements and with such recommendations of relevant securities regulatory authorities and stock exchanges as the Board may consider appropriate.

11.4 Review of Charters

On an annual basis, the Board shall review the recommendations of the Nominating and Governance Committee with respect to the charters of each committee of the Board. The Board shall approve those changes to the charters that it determines are appropriate.

11.5 Reliance on Management

The Board is entitled to rely in good faith on the information and advice provided to it by the Corporation's management.

11.6 Reliance on Others

The Board is entitled to rely in good faith on information and advice provided to it by advisors, consultants and such other persons as the Board considers appropriate.

11.7 Oversight

The Board retains responsibility for oversight of any matters delegated to any Director(s) or any committee of the Board, to management or to other persons.

DUTIES AND RESPONSIBILITIES

12. RESPONSIBILITY FOR SPECIFIC MATTERS

12.1 Responsibility for Specific Matters

The Directors explicitly assume responsibility for the matters set out below, recognizing that these matters represent in part responsibilities reflected in requirements and recommendations adopted by applicable securities regulators and stock exchanges and do not limit the Directors' responsibilities under the Act.

12.2 Delegation to Committees

Whether or not specific reference is made to committees of the Board in connection with any of the matters referred to below, the Board may direct any committee of the Board to consider such matters and to report and make recommendations to the Board with respect to these matters.

13. CORPORATE GOVERNANCE GENERALLY

13.1 Governance Practices and Principles

The Board shall be responsible for developing the Corporation's approach to corporate governance, including, if deemed appropriate, a set of corporate governance principles and guidelines that are specifically applicable to the Corporation.

13.2 Governance Disclosure

- (a) *Approval of Disclosure.* The Board shall approve disclosure about the Corporation's governance practices in any document before it is delivered to the Corporation's shareholders or filed with applicable securities regulators or with the stock exchanges.
- (b) *Determination that Differences Are Appropriate.* If the Corporation's governance practices differ from those recommended by applicable securities regulators or the stock exchanges, the Board shall consider these differences and why the Board considers them to be appropriate.

13.3 Delegation to Nominating and Governance Committee

The Board may direct the Nominating and Governance Committee to consider the matters contemplated in this Section 13 and to report and make recommendations to the Board with respect to these matters.

14. RESPONSIBILITIES RELATING TO MANAGEMENT

14.1 Integrity of Management

The Board shall, to the extent feasible, reasonably satisfy itself:

- (a) as to the integrity of the CEO and other executive officers of the Corporation; and
- (b) that the CEO and other executive officers of the Corporation create a culture of integrity throughout the organization.

14.2 Succession Planning

The Board shall be responsible for succession planning, including appointing, training and monitoring senior management. In discharging this responsibility, the Board may:

- (a) consider recommendations of the Nominating and Governance Committee; and
- (b) consider recommendations of management and review and approve (as appropriate) succession plans developed by the CEO for senior management positions.

14.3 Executive Compensation Policy

- (a) *Board Approval.* The Board shall approve the compensation of the CEO and shall consider and, if appropriate, approve the recommendations of the CEO with respect to the compensation of other members of senior management.
- (b) *Delegation to Compensation Committee.* The Board may direct the Compensation Committee to consider the matters contemplated in this Section 14.3 and to report and make recommendations to the Board with respect to these matters.

15. OVERSIGHT OF THE OPERATION OF THE BUSINESS**15.1 Risk Management**

Taking into account the reports of management and such other persons as the Board may consider appropriate, the Board shall identify the principal risks of the Corporation's business and satisfy itself as to the implementation of appropriate systems to manage these risks.

15.2 Strategic Planning Process

The Board shall adopt a strategic planning process and shall approve, on at least an annual basis, a strategic plan which takes into account, among other things, the opportunities and risks of the Corporation's business.

15.3 Internal Control and Management Information Systems

The Board shall review the reports of management and the Audit Committee concerning the integrity of the Corporation's internal control and management information systems. Where appropriate, the Board shall require management and the Audit Committee to implement changes to such systems to ensure integrity of such systems.

15.4 Communications Policies

The Board shall review and, if determined appropriate, approve a corporate disclosure policy and such other policies as may be necessary or desirable for communicating with shareholders, the investment community, the media, governments and their agencies, employees and the general public. All publicly disseminated materials of the Corporation shall provide for a mechanism for feedback of stakeholders. Persons designated to receive such information shall be required to provide a summary of the feedback to the Directors on a semi-annual basis or at such other more frequent intervals as the Directors require. The Board shall consider, among other things, the recommendations of management and the Nominating and Governance Committee with respect to such policies.

15.5 Whistleblowing Policy

The Board shall review and approve a whistleblowing policy for the Corporation. In adopting the whistleblowing policy, the Board shall consider the recommendations of the Audit Committee concerning its compliance with applicable legal and stock exchange listing requirements and with such recommendations of relevant securities regulatory authorities and stock exchanges as the Board may consider appropriate.

15.6 Financial Statements

The Board shall review the recommendation of the Audit Committee with respect to the annual financial statements of the Corporation to be delivered to shareholders. If in agreement with the Audit Committee, the Board shall approve such financial statements. The Board shall also review the recommendation of the Audit Committee with respect to the interim financial statements or other material financial disclosure of the Corporation prior to its release to the public and, if in agreement with the Audit Committee, shall approve such financial statements or other material financial disclosure.

15.7 Pension Plan Matters

The Board shall receive and review reports from management and from the Nominating and Governance Committee covering administration, investment performance, funding, financial impact, actuarial reports and any pension plan related matters.

15.8 Code of Business Conduct and Ethics

The Board shall review and approve a Code of Business Conduct and Ethics for the Corporation. In adopting this Code, the Board shall consider the recommendations of the Nominating and Governance Committee concerning

its compliance with applicable legal and stock exchange listing requirements and with such recommendations of relevant securities regulatory authorities and stock exchanges as the Board may consider appropriate.

15.9 Compliance and Disclosure

The Board shall direct the Nominating and Governance Committee to monitor compliance with the Code of Business Conduct and Ethics and recommend disclosures with respect thereto. The Board shall consider any report of the Nominating and Governance Committee concerning these matters, and shall approve, if determined appropriate, the disclosure of the Code of Business Conduct and Ethics and of any waiver granted to a Director or executive officer of the Corporation from complying with the Code of Business Conduct and Ethics.

15.10 Legal Counsel

- (a) The Board shall approve any change in the Corporation's regular external legal counsel and any retention by the Corporation of other external counsel as lead counsel for material transactions or matters.
- (b) The Board may delegate to one or more members of the Board the authority to pre-approve the retention by the Corporation of other external counsel as lead counsel for material transactions or matters in satisfaction of the requirement in Section 15.10(a), provided that such member or members must present any such retention to the full Board at its first scheduled meeting following such pre-approval.

16. NOMINATION OF DIRECTORS

16.1 Nomination and Appointment of Directors

- (a) The Board shall nominate individuals for election as Directors by the shareholders and shall require the Nominating and Governance Committee to make recommendations to it with respect to such nominations.
- (b) In selecting candidates for nomination as Directors, the Board shall:
 - (i) consider what competencies and skills the Board, as a whole, should possess;
 - (ii) assess what competencies and skills each existing and proposed new Director possesses; and
 - (iii) consider whether each nominee can devote sufficient time and resources to his or her duties as a Director.
- (c) The Board shall consider recommendations made to it by the Nominating and Governance Committee with respect to the size and composition of the Board.

17. BOARD EFFECTIVENESS

17.1 Position Descriptions

The Board shall review and, if determined appropriate, approve the recommendations of the Nominating and Governance Committee concerning formal position descriptions for:

- (a) the Chair of the Board, the Vice Chair & Lead Director (if any) and for the Chair of each committee of the Board, and
- (b) the CEO,

provided that in approving a position description for the CEO, the Board shall consider the input of the CEO and shall develop and approve corporate goals and objectives that the CEO is responsible for meeting (which may include goals and objectives relevant to the CEO's compensation, as recommended by the Nominating and Governance Committee).

17.2 Director Orientation and Continuing Education

The Board shall review and, if determined appropriate, approve the recommendations of the Nominating and Governance Committee concerning:

- (a) a comprehensive orientation program for new Directors; and
- (b) a continuing education program for all Directors.

17.3 Board, Committee and Director Review

The Board shall review and, if determined appropriate, adopt a process recommended by the Nominating and Governance Committee for reviewing the performance and effectiveness of the Board as a whole, the committees of the Board and the contributions of individual Directors on an annual basis.

18. ANNUAL REVIEW OF THE BOARD

Each year, the Board shall review its performance and effectiveness in accordance with the process established by the Nominating and Governance Committee.

19. POLICY OF PRACTICES FOR DIRECTORS

Directors are expected to carry out their duties in accordance with the Policy of Practices for Directors set out in Schedule A to this Charter.

December 28, 2005 and amended August 3, 2006, July 23, 2007, February 28, 2013 and December 17, 2014, March 30, 2015, May 4, 2016 and March 29, 2018.

SCHEDULE A

POLICY OF PRACTICES FOR DIRECTORS

Attendance at Meetings

Each Director is expected to have a very high record of attendance at meetings of the Board of Directors, and at meetings of each committee on which the Director sits. A Director is expected to:

- (i) advise the Chair as to planned attendance at Board and committee meetings shortly after meeting schedules for the year have been distributed;
- (ii) advise the Chair as soon as possible after becoming aware that he or she shall not be able to attend a meeting; and
- (iii) attend a meeting by telephone conference if unable to attend in person.

Preparation for Meetings

Directors are expected to carefully review and consider the materials distributed in advance of a meeting of the Board of Directors or a committee of the Board of Directors. Directors are also encouraged to contact the Chair, the Chief Executive Officer and any other appropriate officers to ask questions and discuss agenda items prior to meetings.

The Chair shall ensure that all meeting materials are provided to the members of the Board in a timely manner to enable the members to conduct a careful review and consideration of the meeting materials.

Conduct at Meetings

Directors are expected to ask questions and participate in discussions at meetings, and to contribute relevant insights and experience. In discussions at meetings, a Director should:

- (i) be candid and forthright;
- (ii) not be reluctant to express contrary views;
- (iii) be concise and respect the time constraints of a meeting;
- (iv) be courteous to and respectful of other Directors and guests in attendance; and
- (v) openly conduct discussions in a manner which shall foster a consensus amongst the members of the Board.

Knowledge of the Corporation's Business

Directors are expected to be knowledgeable with respect to the various fields and divisions of business. Although management has a duty to keep the Board of Directors informed about developments in the Corporation's business, Directors have a primary duty of care and diligence, which includes a duty of inquiry. Directors should:

- ask questions of management and other directors, at meetings and otherwise, to increase their knowledge of the business of the Corporation;
- familiarize themselves with the risks and challenges facing the business of the Corporation;

- read all internal memoranda and other documents circulated to the directors, and all reports and other documents issued by the Corporation for external purposes;
- insist on receiving adequate information from management with respect to a proposal before Board approval is requested;
- familiarize themselves with the Corporation's competitors; and
- familiarize themselves with the legal and regulatory framework within which the Corporation carries on its business.

Personal Conduct

Directors are expected to:

- (i) exhibit high standards of personal integrity, honesty and loyalty to the Corporation;
- (ii) project a positive image of the Corporation to news media, the financial community, governments and their agencies, shareholders and employees;
- (iii) be willing to contribute extra efforts, from time to time as may be necessary including, among other things, being willing to serve on committees of the Board; and
- (iv) disclose any potential conflict of interest that may arise with the business or affairs of the Corporation and, generally, avoid entering into situations where such conflicts could arise or could reasonably be perceived to arise.

SCHEDULE B

MAJORITY VOTING IN DIRECTOR ELECTIONS POLICY

In an uncontested election of Directors of the Corporation at a meeting of shareholders of the Corporation, any nominee for Director who receives a greater number of votes “withheld” from his or her election than votes “for” such election (a “**Majority Withheld Vote**”) shall promptly tender his or her resignation to the Chair of the Board of Directors (the “**Board**”) following the meeting of shareholders. In this policy, an “uncontested election” shall mean an election where the number of nominees for Director shall be equal to the number of Directors to be elected.

The Board shall consider the resignation offer and whether or not to accept it. The Board shall be expected to accept the resignation except in situations where extenuating circumstances would warrant that the applicable Director continue to serve on the Board. In considering whether or not to accept the resignation, the Board will consider all factors deemed relevant including, without limitation, the stated reasons why shareholders “withheld” votes from the election of that nominee, the length of service and the qualifications of the Director whose resignation has been tendered, such Director’s contributions to the Corporation and the Corporation’s corporate governance policies.

The Board shall act within 90 days following the applicable meeting of shareholders. Following the decision of the Board on the resignation, the Board shall promptly disclose, via press release, the decision whether to accept the Director’s resignation offer including the reasons for rejecting the resignation offer, if applicable. The Corporation shall provide a copy of the press release to the Toronto Stock Exchange. If a resignation is accepted, the Board may, in accordance with applicable law, appoint a new Director to fill any vacancy created by resignation.

Subject to the following, any Director who tenders his or her resignation pursuant to this policy shall not participate in any meeting of the Board to consider whether his or her resignation shall be accepted. If the Directors who did not receive a Majority Withheld Vote in the same uncontested election do not constitute a majority of the Board, then (i) the independent Directors shall appoint a committee amongst themselves to consider resignation offers and recommend to the Board whether to accept them, which committee shall include at a minimum any independent directors who did not receive a Majority Withheld Vote; and (ii) all Directors will participate in the subsequent determinations of the Board as to whether to accept resignations.

In the event that any Director who received a Majority Withheld Vote does not tender his or her resignation in accordance with this policy, he or she will not be re-nominated by the Board.

The Board may adopt such procedures as it sees fit to assist it in its determinations with respect to this policy

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Appendix C

REPORTING PACKAGE

(please see attached)

NOTICE OF CHANGE OF AUDITORS

March 21, 2019

TO: PricewaterhouseCoopers LLP, Chartered Professional Accountants

AND TO: Ernst & Young LLP, Chartered Professional Accountants

In accordance with National Instrument 51-102 - *Continuous Disclosure Obligations* (“**NI 51-102**”), Cipher Pharmaceuticals Inc. (the “**Company**”) hereby provides notice as follows:

1. PricewaterhouseCoopers LLP have resigned as the Company’s auditor, at the Company’s request, on March 20, 2019 (the “**Effective Date**”);
2. Ernst & Young LLP was appointed as auditors of the Company on the Effective Date, to hold office until the next annual and special meeting of shareholders of the Company;
3. the board of directors of the Company approved the resignation of PricewaterhouseCoopers LLP and the appointment of Ernst & Young LLP;
4. there were no modified opinions in PricewaterhouseCoopers LLP’s auditor’s reports on the Company’s financial statements for the two most recently completed fiscal years nor for any period subsequent thereto and preceding Effective Date for which an audit report was issued; and
5. there have been no “reportable events” as such term is defined in NI 51-102 involving the Company and PricewaterhouseCoopers LLP.

DATED this 21st day of March, 2019.

CIPHER PHARMACEUTICALS INC.

Per: (Signed) “Stephen Lemieux”
Name: Stephen Lemieux
Title: Chief Financial Officer and Secretary



Ernst & Young LLP
EY Tower
100 Adelaide Street West, PO Box 1
Toronto, ON M5H 0B3

Tel: +1 416 864 1234
Fax: +1 416 864 1174
ey.com

26 March 2019

Alberta Securities Commission
British Columbia Securities Commission
Manitoba Securities Commission
New Brunswick Financial and Consumer Services Commission
Newfoundland and Labrador Financial Services Regulation Division, Department of Government Services
Northwest Territories Office of the Superintendent of Securities, Department of Justice
Nova Scotia Securities Commission
Nunavut Superintendent of Securities Legal Registries Division, Department of Justice
Ontario Securities Commission
Prince Edward Island Justice and Public Safety
Autorité des Marchés Financiers
Saskatchewan Financial and Consumer Affairs Authority
Government of Yukon Superintendent of Securities

Dear Sirs/Mesdames:

Re: Change of auditor notice dated 2019/03/21 (the “Notice”)

Pursuant to National Instrument 51-102 (Part 4.11), we have read the above-noted Change of Auditor Notice and confirm our agreement with the information contained in the Notice pertaining to our firm.

Yours sincerely,

Chartered Professional Accountants
Licensed Public Accountants

cc: The Board of Directors, Cipher Pharmaceuticals Inc.



March 26, 2019

To: British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
The Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers (Québec)
Financial and Consumer Services Commission (New Brunswick)
Nova Scotia Securities Commission
The Office of the Superintendent Securities Consumer, Corporate and Insurance
Services Division Office of the Attorney General (Prince Edward Island)
Office of the Superintendent of Securities, Service Newfoundland & Labrador
Office of the Superintendent of Securities, Department of Justice, Government of Northwest
Territories
Office of the Yukon Superintendent of Securities
Nunavut Securities Office

We have read the statements made by Cipher Pharmaceuticals Inc. in the attached copy of change of auditor notice dated March 21, 2019, which we understand will be filed pursuant to Section 4.11 of National Instrument 51-102.

We agree with the statements in the change of auditor notice dated March 21, 2019.

Yours very truly,

PricewaterhouseCoopers LLP

Chartered Professional Accountants

PricewaterhouseCoopers LLP
PwC Centre, 354 Davis Road, Suite 600, Oakville, ON, Canada L6J 0C5
T: +1 905 815 6300, F: +1 905 815 6499, www.pwc.com/ca

"PwC" refers to PricewaterhouseCoopers LLP, an Ontario limited liability partnership.

Appendix D

CIPHER PHARMACEUTICALS INC.

EMPLOYEE AND DIRECTOR SHARE PURCHASE PLAN

1. Purpose of the Plan

- 1.1 The purpose of the Plan is to encourage employees and directors of Cipher Pharmaceuticals Inc. (the “**Corporation**”) and its Subsidiaries to participate in the growth and development of the Corporation and its Subsidiaries by providing such persons with the opportunity, through share purchases, to acquire an increased proprietary interest in the Corporation.

2. Definitions

- 2.1 Where used herein, the following terms shall have the following meanings respectively, unless the context otherwise requires:
- (a) “**Administrative Agent**” means Computershare Trust Company of Canada or its successors;
 - (b) “**Associate**” has the meaning ascribed thereto in Subsection 1(1) of the Securities Act (Ontario) (as such provision is from time to time amended, varied or re-enacted);
 - (c) “**Board**” means the board of directors of the Corporation, or any committee of the board of directors of the Corporation so approved by it;
 - (d) “**Business Day**” means any day on which the Exchange is open for business;
 - (e) “**Corporation**” means Cipher Pharmaceuticals Inc. and any successor or continuing corporation resulting from the amalgamation of the Corporation and any other corporation, or resulting from any other form of corporate reorganization;
 - (f) “**Exchange**” means The Toronto Stock Exchange;
 - (g) “**Insider**” means any insider, as such term is defined in subsection 1(1) of the Securities Act (Ontario) (as such provision is from time to time amended, varied or re-enacted), of the Corporation and includes any Associate of any such insider but does not include a person who falls within the meaning of such definition solely by virtue of being a director or senior officer of a Subsidiary;
 - (h) “**Market Price**” at any date in respect of Shares issued from treasury shall be an amount equal to the volume weighted average trading price (“**VWAP**”) of the Shares on the Exchange for the five trading days preceding the date on which Shares are issued hereunder, however, if no Shares trade during the aforementioned period, the period for calculating the Market price shall be extended to twenty days;
 - (i) “**Participant**” means any director duly appointed by the Corporation or any person employed by the Corporation or any Subsidiary for not less than three consecutive months and who has elected to participate in the Plan in the manner provided in Section 4;
 - (j) “**Participant Shares**” means any Shares received and held by the Administrative Agent on behalf of the Participant in accordance with the terms of the Plan, and includes any shares or securities of the Corporation into which such shares are changed, classified, reclassified, subdivided, consolidated or converted;

- (k) “**Plan**” means the “Cipher Pharmaceuticals Inc. Employee and Director Share Purchase Plan” as embodied herein as from time to time amended;
- (l) “**Service Provider**” means a person or company engaged to provide ongoing management or consulting services for the Corporation or for any entity controlled by the Corporation;
- (m) “**Share**” or “**Shares**” means, as the case may be, one or more common shares of the Corporation as constituted at the date hereof;
- (n) “**Share Compensation Arrangement**” means a stock option, stock option plan, employee stock purchase plan or any other compensation or incentive mechanism involving the issuance or potential issuance, of Shares to directors, officers or employees of the Corporation or its Subsidiaries or to Service Providers, including a share purchase from treasury which is financially assisted by the Corporation by way of a loan, guarantee or otherwise; and
- (o) “**Subsidiary**” has the meaning assigned therein in the Securities Act (Ontario) and “**Subsidiaries**” has the corresponding meaning but including unincorporated entities.

3. Shares Subject to the Plan

- 3.1 Shares shall be issued from treasury to the Administrative Agent to hold on behalf of the Participants in accordance with the terms of the Plan. The aggregate number of Shares that are issuable under the Plan to Participants at any time, together with Shares that are issuable pursuant to outstanding awards or grants under other Share Compensation Arrangements of the Corporation shall not at any time exceed 10% of the Shares then issued and outstanding, subject to adjustment to give effect to any relevant changes in the capitalization of the Corporation.

4. Eligibility

- 4.1 Any director duly appointed by the Corporation or any person who has been employed by the Corporation and/or any Subsidiary on a continuous basis for not less than three consecutive months may elect to participate in the Plan by signing and delivering to the Corporation an election to participate in the Plan, which election shall:
 - (a) indicate the amount of the contribution to the Plan and authorize the deduction of such amount from his or her salary, or in the case of a director, from director’s fees, and that such amount be used by the Administrative Agent to obtain Shares on his or her behalf; and
 - (b) contain the agreement of such person to be bound by the terms of the Plan.
- 4.2 No Shares shall be issued on behalf of a Participant under the Plan if such issuance could result, at any time, in:
 - (a) the number of Shares issuable to Insiders (pursuant to this Plan and any other share compensation arrangement of the Corporation) exceeding, at any time, 10% of the issued and outstanding Shares;
 - (b) the number of Shares issued to Insiders (pursuant to this Plan and any other share compensation arrangement of the Corporation) exceeding, within any one-year period, 10% of the issued and outstanding Shares; or
 - (c) the number of Shares issuable to any one Participant and such Participant’s Associates (under this Plan and any other share compensation agreement of the Corporation), exceeding, within any one-year period, 5% of the issued and outstanding Shares.

5. Contributions

- 5.1 In each fiscal year, a Participant who is not a director of the Corporation may contribute to the Plan an amount up to (but not exceeding) 20% of the aggregate base cash compensation (i.e. salary and commissions) received by such employee from the Corporation and/or its Subsidiaries in the previous fiscal year (or the annualized amount if the Participant was not an employee of the Corporation or its Subsidiaries for the entire previous fiscal year).

In each fiscal year, a Participant who is a director of the Corporation may contribute to the Plan an amount up to (but not exceeding) 100% of the aggregate director fees received by such director from the Corporation in the previous fiscal year (or the annualized amount if the Participant was not a director of the Corporation for the entire previous fiscal year).

The amount of this contribution may from time to time be amended or varied by the Participant by written notice to the CFO of the Corporation given at least 10 days before the beginning of the pay period in which the amended or varied contribution is to take effect.

- 5.2 Contributions to the Plan will be made through payroll deductions the records of which shall be provided by the Corporation to the Administrative Agent as soon as practicable after the end of the month in which the deduction occurred. For clarity, the Corporation will not transfer payroll deductions to the Administrative Agent and will maintain the records related to Participant contributions.

- 5.3 Once each calendar year a Participant may also make a contribution to the Plan by way of a lump sum payment (provided the maximum contribution specified in Section 5.1 is not exceeded) by (i) notifying the Corporation in writing of such contribution, and (ii) delivering the lump sum payment to the Corporation contemporaneously with the delivery of the notice. Such lump sum payment will be included with the payroll deduction records provided by the Corporation to the Administrative Agent for the month in which they were received.

- 5.4 A Participant may discontinue making contributions to the Plan by giving written notice to the CFO of the Corporation at least 10 days before the beginning of the pay period in which the contributions are to be discontinued. A Participant who discontinues making contributions to the Plan shall not be entitled for a three month period to resume making contributions to the Plan without the prior approval of the Board.

- 5.5 The Corporation shall be entitled to refuse:

- (a) the enrolment of a Participant in the Plan;
- (b) the increase or decrease in the contribution amount made by a Participant to the Plan; and
- (c) the contribution of a lump sum payment made by a Participant;

in circumstances where it has instituted a blackout period for the purposes of enforcing compliance with applicable securities laws. Any such determination with respect to a Participant shall be made by the applicable Designated Officer pursuant to the Corporation's Insider Trading and Confidential Information Policy.

6. Accounts

- 6.1 The Administrative Agent will cause to be maintained on its books and records a cash account and a share account for each Participant indicating the amount of Shares and any cash held by the Administrative Agent on behalf of each Participant. Shares will be posted to a Participant's share account on a full and fractional share basis. Notwithstanding the foregoing, when a Participant withdraws Participant Shares from his or her share account, no fractional Shares shall be distributed by the Administrative Agent to such Participant and such Participant shall receive cash in lieu of such fractional Share.

6.2 Not later than the last day of each month following the end of a fiscal quarter, the Administrative Agent will make available a report to the Corporation setting out the issuances and withdrawals of Shares during the preceding fiscal quarter and the effect of such issuances and withdrawals on the holdings of each Participant.

6.3 As promptly as practicable after the end of each fiscal quarter, the Administrative Agent will mail or deliver a statement to each Participant setting out the accounts of such Participant as of the end of such quarter.

7. Issuance of Shares

7.1 On the 15th day of each month, or the first Business Day thereafter if any of such days is not a Business Day (each such date being referred to herein as an “**Investment Date**”), the Corporation shall issue from treasury and the Administrative Agent, on behalf of each Participant, shall receive from the Corporation at Market Price less a 15% discount such whole number of Shares as may be obtained with the aggregate contributions of such Participants. For clarity, the calculation of the number of shares to be issued from treasury will occur on each Investment Date, however the actual issuance from treasury of such Shares will occur as soon as possible thereafter. Notwithstanding the foregoing, the Corporation shall be entitled to postpone the date of any such issuance in circumstances where it has instituted a blackout period for the purposes of enforcing compliance with applicable securities laws. Any such determination to postpone the date of such issuance shall be made by the Chief Executive Officer.

8. Hold Period

8.1 Unless otherwise determined by the Board, a Participant shall be permitted to sell, certificate or electronically transfer Participant Shares after a period of six months immediately following the fiscal month in which such Participant Shares were issued. The hold period will not apply to Shares purchased with reinvested dividends.

9. Shares

9.1 The number of Shares held by the Administrative Agent on behalf of a Participant shall be credited to such Participant’s share account.

9.2 The Administrative Agent will hold for safekeeping all Participant Shares until the Participant for whose account they are held, or his legal representative, directs the Administrative Agent to sell or transfer and deliver such certificates to such Participant, or his legal representative, or as otherwise may be directed, provided always that the transfer and delivery will comply with all applicable laws and regulations.

9.3 Unless otherwise determined by the Board, Participant Shares shall not be released to a Participant until the hold period conditions provided for in Section 8.1 have been satisfied with respect to such Participant Shares.

10. Dividends; Offers to Purchase; Changes

10.1 Subject to subsection 9.1 hereof, the Administrative Agent shall reinvest all cash dividends and other cash distributions received by it in respect of the Participant Shares held by it on behalf of any Participant and obtain additional Shares concurrently with the next payroll deduction investment after receiving same.

10.2 For so long as the Administrative Agent is the registered holder of any Participant Shares, then:

(a) in the event that, at any time, an offer to purchase is made to all holders of the Shares, notice of such offer shall be given by the Administrative Agent to each Participating Employee and, notwithstanding the provisions of Section 8.1, any Participant Shares which are still subject to the hold period shall be deemed to be no longer subject to the hold period to the extent necessary to enable a Participant to tender his or her Participant Shares should he or she so desire;

(b) in the event that the Shares are subdivided, consolidated, converted or reclassified by the Corporation, or any action of a similar nature affecting the Shares shall be taken by the Corporation,

then the Participant Shares held by the Administrative Agent for the benefit of Participants shall be appropriately adjusted; and

- (c) the Administrative Agent shall vote the Participant Shares held on behalf of each Participant at every such meeting in such manner as each such Participant, or his or her legal representative, shall have previously directed, and in default of any such direction the Administrative Agent shall refrain from voting. The Administrative Agent may and will, if so required by any Participant, or his or her legal representative, execute all proxies necessary or proper to enable the Participant, or his or her proxy, to attend and vote the Participant Shares held by the Administrative Agent on behalf of such Participant at any such meeting.

10.3 All warrants, options or rights received by the Administrative Agent on any Shares held pursuant to the Plan shall be sold by the Administrative Agent on behalf of the Participants. The proceeds from the sale of any options, rights or warrants shall be used to obtain additional Shares, concurrently with the next payroll deduction reinvestment which shall be allocated to the respective Participants' accounts in proportion to the number of Participant Shares in those Participant accounts before the payment of the warrants, options or rights.

11. Termination

11.1 A Participant shall cease to participate in the Plan if:

- (i) in the case of a director, the term of appointment of such director expires or the director resigns, and in the case of a person employed by the Corporation, the employment of the Participant by the Corporation or its Subsidiaries is terminated for any reason whatsoever (including without limitation, the death or retirement of the Participant); or
- (ii) the Participant elects to terminate his or her involvement in the Plan;

in which case the Administrative Agent shall within 30 days of the Participant ceasing to participate in the Plan, transfer and deliver to such former Participant, or the legal representative of such former Participant, the Participant Shares and any monies then held by the Administrative Agent on behalf of such former Participant as at such date, provided that any Participant Shares subject to the hold period as contemplated by Section 8.1 at such time shall not be transferred or delivered to the Participant until such time as the hold period set out in Section 8.1 has been satisfied with respect to such Participant Shares.

12. Amendment of Plan and Termination of Plan

12.1 The Board reserves the right at any time and from time to time, subject to any regulatory or stock exchange approval that may be required, to amend the Plan in whole or in part, without prior notice to or approval by the shareholders provided, however, that no amendment or modification shall adversely affect the rights and interests of a Participant's Shares allocated to his account under the Plan prior to the date of such amendment or modification. Examples of circumstances where the Board may make amendments without shareholder approval include, without limitation, amendments that would:

- (a) make housekeeping or clerical changes;
- (b) clarify any provision in the Plan;
- (c) ensure compliance with applicable laws, regulations or policies of any governmental authority or relevant stock exchange;
- (d) change the class of participants eligible to participate in the Plan;

- (e) change the terms and conditions of any financial assistance which may be provided by the Corporation to the participants to facilitate the issuance of Shares hereunder, or adding or removing any provisions providing for such financial assistance.
- 12.2 Notwithstanding anything contained herein to the contrary, no amendment to the Plan requiring the approval of the shareholders of the Corporation under any applicable securities laws or requirements (including without limitation the Exchange rules and policies) shall become effective until such approval is obtained. In addition to the foregoing, the approval of the holders of a majority of the Shares present and voting in person or by proxy at a meeting of shareholders shall be required for:
- (a) any amendment to the provisions of this Section 12;
 - (b) a reduction in the price at which Shares are issued under the Plan that benefits an Insider of the Corporation;
 - (c) any amendment to remove or to exceed the Insider participation limit as set out in Section 4.2 hereof; and
 - (d) any increase to the maximum number of Shares issuable, either as a fixed number or a fixed percentage, of the Corporation's outstanding Shares.
- 12.3 The Board may terminate the Plan at any time, provided that the Participant Shares and any monies held by the Administrative Agent on behalf of the Participant shall be transferred and delivered to such Participant forthwith.
- 13. General**
- 13.1 Upon electing to participate in the Plan, each Participant shall acknowledge his or her obligation to comply with applicable securities legislation and the Corporation's Insider Trading Policy in respect of any trade of Shares on behalf of such Participant under the Plan. Without limiting the generality of the foregoing, each Participant shall not trade Shares pursuant to the Plan in the event that such Participant is in receipt of material information concerning the Corporation that has not been previously disclosed.
- 13.2 Nothing in the Plan shall confer upon any Participant any right to continue in the employ of the Corporation or any Subsidiary or affect in any way the right of the Corporation or any such Subsidiary to terminate his or her employment at any time; nor shall anything in the Plan be deemed or construed to constitute an agreement, or an expression of intent, on the part of the Corporation or any such Subsidiary to extend the employment of any Participant beyond the time that he or she would normally be retired pursuant to the provisions of any present or future retirement plan of the Corporation or any Subsidiary or any present or future retirement policy of the Corporation or any Subsidiary, or beyond the time at which he or she would otherwise be retired pursuant to the provisions of any contract of employment with the Corporation or any Subsidiary.
- 13.3 The Administrative Agent shall be entitled to rely on a certificate of the Secretary of the Corporation, under the seal of the Corporation, as to any of the following matters:
- (a) whether the employment of a Participant with the Corporation or any Subsidiary has terminated; and
 - (b) the date of death of any Participant.
- 13.4 The Board may by resolution make, amend and repeal at any time and from time to time such regulations not inconsistent herewith as it may deem necessary or advisable for the issuance of Shares under the Plan and generally for the proper administration and operation of the Plan.

- 13.5 The directors and/or the proper officers of the Corporation are hereby authorized to sign and execute all instruments and documents and do all things necessary or desirable for carrying out the provisions of the Plan, including the allotment and issuance of Shares under the Plan.
- 13.6 Nothing contained herein shall restrict or limit or be deemed to restrict or limit the rights or powers of the Board in connection with any allotment and issuance of Shares that are not allotted and issued hereunder.
- 13.7 All fees and expenses of the Administrative Agent will be paid by the Corporation.
- 13.8 The Plan is established under the laws of the Province of Ontario and the rights of all parties and the construction and effect of each and every provision of the Plan shall be according to the laws of the Province of Ontario.
- 13.9 The Plan shall enure to the benefit of and be binding upon the Corporation, its successors and assigns. The interest hereunder of any Participant shall enure to the benefit of and be binding upon such Participant, his or her legal representative and assigns.
- 13.10 Wherever the singular or masculine are used herein, the same will be construed as meaning the plural or feminine when the context so requires.

Effective May 13, 2011 as amended June 16, 2015, May 5, 2016 and March 29, 2018.

ADDENDUM

TO THE

CIPHER PHARMACEUTICALS INC.

EMPLOYEE AND DIRECTOR SHARE PURCHASE PLAN

SPECIAL PROVISIONS FOR U.S. PARTICIPANTS

The provisions of this Addendum apply only to those persons who are subject to U.S. Federal Income Tax (“**U.S. Participants**”) on Shares issued under the Cipher Pharmaceuticals Inc. Employee and Director Share Purchase Plan (“**Plan**”) at the relevant time.

This Addendum modifies the Plan for U.S. Participants and where there is any conflict between the Plan and the terms of this Addendum, the terms of this Addendum shall prevail.

1. **Purpose of the Plan** The Plan is not intended to qualify as an “Employee Stock Purchase Plan,” as set forth in section 423 of the U.S. Tax Code (as defined below).

2. **Definitions**
 - “Market Price” “**Market Price**” shall have the meaning as to U.S. Participants as specified in Section 2.1(i) of the Plan but determined with reference to the relevant trading price on the NASDAQ Exchange in the United States.

 - “Section 409A” “**Section 409A**” means section 409A of the U.S. Tax Code.

 - “U.S. Tax Code” “**U.S. Tax Code**” means the United States Internal Revenue Code of 1986, as amended, and the regulations and guidance issued under it from time to time.

3. **Shares** Any payment of the Shares or any other awards under the Plan that are subject to Section 409A shall be made in conformity with the requirements of Section 409A. The payment of any amounts due under the Plan that are not exempt from Section 409A shall not be accelerated except as otherwise permitted under Section 409A.

4. **Termination** The provisions of Section 11 (“Termination”) shall apply, in the event of applicability of section 409A, then, as to U.S. Participants, only to the extent that the events indicated in Section 11.1(i) or (ii) constitute a “separation from service” within the meaning of Section 409A. If a U.S. Participant is a “specified employee”, as defined in regulation section 1.409A-1(i) under Section 409A, who becomes entitled to payments under the Plan that are not exempt from Section 409A as a result of a “separation from service” and these payments constitute “deferred compensation” within the meaning of Section 409A, then the payment to the Participant of such amounts shall be made on the date that is six months and one day following termination of employment (subject to acceleration only to the extent permitted under Section 409A).

5. **Section 409A of the U.S. Tax Code** The Plan and any Shares issued under the Plan that are subject to Section 409A are intended to comply with Section 409A and all regulations and guidance issued thereunder. It is intended that all payments under this Plan to U.S. Participants shall be eligible for the “short-term deferral” exception to the provisions of Section 409A, and such payment rights shall be interpreted accordingly. Notwithstanding any contrary provision of the Plan, this Addendum, or any ancillary documents, the Plan, this Addendum, and the ancillary documents shall be interpreted and construed consistent with this Addendum and the ancillary documents shall be interpreted and construed consistent with this intent. Although the Corporation and the parties administering the Plan intend to administer the Plan, this Addendum, and all ancillary documents so that they will comply with the requirements of Section 409A, neither the Corporation nor the parties represents or warrants that the Plan, the Addendum, or the ancillary documents will comply with Section 409A or any provisions of U.S. federal, state, local or non-U.S. law. Neither the Corporation nor any Subsidiary, their respective officers, directors, employees or advisors shall be liable to any Participant (or any other party claiming a benefit through the Participant) for any tax, interest or penalties, or any other loss or liability, resulting from participation in the Plan, and the Corporation and its Subsidiary, officers, directors, employees and advisors shall have no obligation to indemnify or otherwise make whole or reimburse the Participant (or any other party) from tax or other liabilities under Section 409A.

6. **U.S. Tax Withholding** All acquisitions and sales of Shares under the Plan will be subject to applicable U.S. Federal (including FICA), state and local tax withholding requirements if the Internal Revenue Service or other taxing authority requires such withholding.

Except to the extent otherwise provided by applicable law, the Corporation is not responsible for tax withholding or reporting to the extent Canadian tax laws apply to any Shares or other awards made under the Plan, and any such tax withholding or reporting to any Canadian taxing authority shall be the sole responsibility of the Participant.