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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 10, 2020

XOMA CORPORATION
(Exact name of registrant as specified in its charter)

000-14710	Delaware	52-2154066
(Commission File Number)	(State or other jurisdiction of incorporation)	(IRS Employer Identification No.)

2200 Powell Street, Suite 310, Emeryville, California	94608
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (510) 204-7200
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0075 per share	**XOMA**	**The Nasdaq Global Market**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.01. Entry into a Material Definitive Agreement.

On December 10, 2020, XOMA Corporation, a Delaware corporation (the "Company"), entered into an Underwriting Agreement (the "Underwriting Agreement") with B. Riley Securities, Inc., as representative of the several underwriters named therein (the "Underwriters"), to issue and sell an aggregate of 880,000 shares (the "Firm Shares") of the Company's 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.05 per share and liquidation preference of $25.00 per share (the "Series A Preferred Stock"), in a public offering (the "Offering") at a price to the public of $25.00 per share. The Company also granted the Underwriters an option (the "Option") to purchase up to 104,000 additional shares of Series A Preferred Stock (together with the Firm Shares, the "Shares") during the 30 days following the date of the Underwriting Agreement.

The Offering was made pursuant to the prospectus supplement dated December 10, 2020 and the accompanying prospectus dated April 5, 2018, filed with the Securities and Exchange Commission pursuant to the Company's shelf registration statement on Form S-3 (File No. 333-223493).

The net proceeds from the Offering, after deducting the underwriting discounts and commissions, but before expenses and a structuring fee, are expected to be approximately $20.9 million, or approximately $23.4 million, if the Underwriters exercise the Option in full. The Offering of the Firm Shares is expected to close on December 15, 2020.

The foregoing description of the material terms of the Underwriting Agreement is qualified in its entirety by reference to the full text of the Underwriting Agreement, a copy of which is attached as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The legal opinion as to the legality of the Shares is included as Exhibit 5.1 to this Current Report on Form8-K and is incorporated by reference herein.

Item 3.03. Material Modifications to Rights of Security Holders.

On December 11, 2020, the Company filed the Certificate of Designation (the "Certificate of Designation") for the Series A Preferred Stock with the Secretary of State of the State of Delaware, which became effective upon acceptance for record. The Certificate of Designation designated a total of 984,000 shares of preferred stock as Series A Preferred Stock.

As set forth in the Certificate of Designation, the Series A Preferred Stock, as to dividend rights and rights upon the liquidation, dissolution orwinding-up of the Company, will rank (i) senior to all classes or series of the Company's common stock and to all other equity securities issued by the Company expressly designated as ranking junior to the Series A Preferred Stock; (ii) senior with respect to the payment of dividends and on parity with respect to the distribution of assets upon our liquidation, dissolution or winding up with our Series X Preferred Stock and on parity with any future class or series of the Company's equity securities expressly designated as ranking on parity with the Series A Preferred Stock; (iii) junior to all equity securities issued by the Company with terms specifically providing that those equity securities rank senior to the Series A Preferred Stock with respect to the payment of dividends and the distribution of assets upon the liquidation, dissolution or winding up of the Company, none of which exists on the date hereof; and (iv) effectively junior to all of the Company's existing and future indebtedness (including indebtedness convertible into the Company's common stock or preferred stock, if any) and to the indebtedness and other liabilities of (as well as any preferred equity interests held by others in) the Company's existing or future subsidiaries. Holders of Series A Preferred Stock, when and as authorized by the Company's Board of Directors, are entitled to cumulative cash dividends at the rate of 8.625% of the $25.00 liquidation preference per year (equivalent to $2.15625 per share per year). Dividends will be payable quarterly in arrears, on or about the 15th of January, April, July and October, beginning on or about April 15, 2021. The Company, at its option, may redeem the Series A Preferred Stock, in whole or in part, at any time or from time to time, for cash, as follows: (i) on and after December 15, 2021 but prior to December 15, 2022, at a redemption price of $26.00 per share, (ii) on and after December 15, 2022 but prior to December 15, 2023, at a redemption price of $25.75 per share, (iii) on and after December 15, 2023 but prior to December 15, 2024, at a redemption price of $25.50 per share, (iv) after December 15, 2024 but prior to December 15, 2025, at a redemption price of $25.25 per share, in each case, plus any accrued and unpaid dividends. On and after December 15, 2025, the shares of Series A Preferred Stock will be redeemable at the Company's option, in whole or in part, at a redemption price equal to $25.00 per share, plus any accrued and unpaid dividends. Furthermore, upon a change of control or delisting event (each as defined in the Certificate of Designation), the Company will have a special option to redeem the Series A Preferred Stock at $25.00 per share, plus any accrued and unpaid dividends.

This description of the terms of the Series A Preferred Stock is qualified in its entirety by reference to the Certificate of Designation, which is included as Exhibit 3.1 to this Current Report on Form 8-K and is incorporated by reference herein.

Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

The information relating to the Certificate of Designation set forth under Item 3.03 of this Current Report on Form8-K is hereby incorporated by reference into this Item 5.03.

Item 7.01. Regulation FD Disclosure.

On December 10, 2020, the Company posted an investor presentation to its website (the "Investor Presentation"). A copy of these slides is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01 of this Current Report on Form8-K (including Exhibit 99.1) is furnished pursuant to Item 7.01 of Form8-K and shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section and shall not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference to such filing. This Current Report on Form 8-K should not be deemed an admission as to the materiality of any information in the Investor Presentation that is required to be disclosed solely by Regulation FD.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
1.1	Underwriting Agreement, dated as of December 10, 2020, by and between the Company and B. Riley Securities, Inc., as representative of the several underwriters named therein.
3.1	Certificate of Designation designating the 8.625% Series A Cumulative Perpetual Preferred Stock of XOMA Corporation.
5.1	Opinion of Cooley LLP.
23.1	Consent of Cooley LLP to the filing of Exhibit 5.1 herewith (included in Exhibit 5.1).
99.1	Investor Presentation dated December 10, 2020.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

XOMA CORPORATION

Date: December 11, 2020

/s/ Thomas Burns
Thomas Burns
Senior Vice President, Finance and Chief Financial Officer

Exhibit 1.1

880,000 Shares

XOMA CORPORATION

8.625% Series A Cumulative Perpetual Preferred Stock

UNDERWRITING AGREEMENT

December 10, 2020

B. RILEY SECURITIES, INC.
As Representative of the several Underwriters

c/o B. Riley Securities, Inc.
299 Park Avenue, 21st Floor
New York, New York 10171

Ladies and Gentlemen:

XOMA Corporation, a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the "**Underwriters**") 880,000 shares of its 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.05 per share and liquidation preference of $25.00 per share (the "**Firm Shares**"). The Company also proposes to issue and sell to the several Underwriters not more than an additional 104,000 shares of its 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.05 per share and liquidation preference of $25.00 per share (the "**Additional Shares**") if and to the extent that B. Riley Securities, Inc. ("**B. Riley Securities**"), as representative of the Underwriters, shall have determined to exercise, on behalf of the Underwriters, the right to purchase such Additional Shares granted to the Underwriters in Section 2 hereof. The Firm Shares and the Additional Shares are hereinafter collectively referred to as the "**Shares.**" The shares of 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.05 per share and liquidation preference of $25.00 per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the "**Preferred Stock.**" The shares of the Common Stock, par value $0.0075 per share, of the Company are hereinafter referred to as the "**Common Stock**."

The Company has filed with the Securities and Exchange Commission (the "**Commission**") a registration statement on Form S-3 (File No. 333-223493), including a preliminary prospectus supplement, relating to the Shares. The registration statement as amended at the time it became effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the "**Securities Act**"), is hereinafter referred to as the "**Registration Statement**". The prospectus in the form in which it was filed with the Commission in connection with the initial filing of the Registration Statement is herein called the "**Base Prospectus**." Each preliminary prospectus supplement to the Base Prospectus (including the Base Prospectus as so supplemented) that described the

Shares and omitted the Rule 430B Information and that was used prior to the filing of the final prospectus supplement referred to in the following sentence is herein called a "**Preliminary Prospectus**." Promptly after the execution and delivery of this Agreement, the Company will prepare and file with the Commission a final prospectus supplement to the Base Prospectus relating to the Shares in accordance with the provisions of Rule 430B and Rule 424(b) of the Securities Act Regulations. Such final prospectus supplement (including the Base Prospectus as so supplemented), in the form filed with the Commission pursuant to Rule 424(b) under the Securities Act is herein called the "**Prospectus.**" If the Company has filed an abbreviated registration statement to register additional shares of Preferred Stock pursuant to Rule 462(b) under the Securities Act (a "**Rule 462 Registration Statement**"), then any reference herein to the term "**Registration Statement**" shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Agreement, "**free writing prospectus**" has the meaning set forth in Rule 405 under the Securities Act, "preliminary prospectus" shall mean each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted information pursuant to Rule 430A under the Securities Act that was used after such effectiveness and prior to the execution and delivery of this Agreement, "**Time of Sale Prospectus**" means the preliminary prospectus contained in the Registration Statement at the time of its effectiveness together with the documents and pricing information set forth in Schedule II hereto, and "**broadly available road show**" means a "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms "Registration Statement," "preliminary prospectus," "Time of Sale Prospectus" and "Prospectus" shall include the documents, if any, incorporated by reference therein as of the date hereof. The terms "**supplement,**" "**amendment**" and "**amend**" as used herein with respect to the Registration Statement, the Prospectus, the Time of Sale Prospectus or the Prospectus shall include all documents subsequently filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), that are deemed to be incorporated by reference therein.

1. *Representations and Warranties*. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose or pursuant to Section 8A under the Securities Act are pending before or, to the Company's knowledge, threatened by the Commission.

(b) (i) Each document, if any, filed or to be filed pursuant to the Exchange Act and incorporated by reference in the Time of Sale Prospectus or the Prospectus complied or will comply when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) the Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a

material fact required to be stated therein or necessary to make the statements therein not misleading, (iii) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (iv) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (v) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (vi) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through B. Riley Securities expressly for use therein.

(c) The Company is not an "ineligible issuer" in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule II hereto, and electronic road shows, if any, each furnished to B. Riley Securities before first use, the Company has not prepared, used or referred to, and will not, without B. Riley Securities' prior consent, prepare, use or refer to, any free writing prospectus.

(d) The Company has not distributed and will not distribute, prior to the completion of the Underwriters' distribution of the Shares, any offering material in connection with the offering and sale of the Shares other than the Prospectus, Time of Sale Prospectus or the Registration Statement.

(e) This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable against the Company in accordance with its terms, except as rights to indemnification and contribution hereunder may be limited by applicable law and public policy considerations and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(f) (i) At the time of filing the Registration Statement and (ii) at the time of the most recent amendment thereto for the purposes of complying with Section 10(a)(3) of the Securities Act (whether such amendment was by post-effective amendment, incorporated report filed pursuant to Section 13 or 15(d) of the Exchange Act or form of prospectus), the Company met the then applicable requirements for use of Form S-3 under the Securities Act, including compliance with General Instruction I.B.1 of Form S-3, as applicable. At the time of execution of this Agreement, the Company met the then applicable requirements for use of Form S-3 under the Securities Act pursuant to General Instruction I.B.1.

(g) The Shares have been duly authorized and when issued and delivered by the Company against payment therefor pursuant to this Agreement, will be validly issued, fully paid and nonassessable. The Shares, when issued, will conform in all material respects to the description thereof contained in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, and will entitle the holders of the Shares to the rights and benefits provided therein and in the Certificate of Designation of the 8.625% Series A Cumulative Perpetual Preferred Stock of XOMA Corporation (the "**COD**").

(h) There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived.

(i) (i) There has been no material adverse change, or any development that could reasonably be expected to result in a material adverse change, in the condition, financial or otherwise, or in the earnings, business, operations or prospects, whether or not arising from transactions in the ordinary course of business, of the Company and its subsidiaries, considered as one entity (any such change is called a "**Material Adverse Change**"); (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, not in the ordinary course of business nor entered into any material transaction or agreement not in the ordinary course of business: and (iii) there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for regular quarterly dividends publicly announced by the Company or dividends paid to the Company or other subsidiaries, by any of its subsidiaries on any class of capital stock or repurchase or redemption by the Company or any of its subsidiaries of any class of capital stock.

(j) The accounting firm that has expressed its opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) and supporting schedules filed with the Commission or incorporated by reference as a part of the Registration Statement and included in the Time of Sale Prospectus and the Prospectus, is an independent registered public accounting firm as required by the Securities Act and the Exchange Act.

(k) The financial statements, together with related notes and schedules, filed with the Commission as a part of or incorporated by reference in the Registration Statement and included in the Time of Sale Prospectus and the Prospectus present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of and at the dates indicated and the results of their operations and cash flows for the periods specified. Such financial statements and supporting schedules have been prepared in accordance with generally accepted accounting principles as applied in the United States ("**U.S. GAAP**") applied on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto. No other financial statements or supporting schedules are required to be included in or incorporated in the Registration Statement.

(l) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(m) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Time of Sale Prospectus and the Prospectus and to enter into and perform its obligations under this Agreement. The entities listed on **Schedule III** hereto are the Company's only significant subsidiaries (as defined in Rule 1-02(w) of Regulation S-X of the Exchange Act) (the "**Significant Subsidiaries**"). The Significant Subsidiaries have been duly organized and are validly existing as entities in good standing under the respective laws of the jurisdiction of their organization and have the requisite power and authority to own, lease and operate their properties and to conduct their businesses as described in the Time of Sale Prospectus and the Prospectus. Each of the Company and each of the Significant Subsidiaries are duly qualified as a foreign corporation or foreign partnership to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except for such jurisdictions where the failure to so qualify or to be in good standing would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change. Except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, all of the issued and outstanding capital stock or other equity interests of the Significant Subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21.1 to the Company's Annual Report on Form 10-K for the most recently ended fiscal year and other than (i) those subsidiaries not required to be listed on Exhibit 21.1 by Item 601 of Regulation S-K under the Exchange Act and (ii) those subsidiaries formed or acquired since the last day of the most recently ended fiscal year.

(n) Since the most recent date such information was included in the Time of Sale Prospectus and the Prospectus, there has been no material change in the authorized,

issued and outstanding capital stock of the Company (other than for subsequent issuances, if any, pursuant to employee benefit plans described in the Time of Sale Prospectus and the Prospectus, upon the exercise of outstanding options or warrants described in the Prospectus, as a result of sales of Shares hereunder or as otherwise described in any document incorporated by reference in the Time of Sale Prospectus and the Prospectus). The shares of the Preferred Stock conform in all material respects to the description thereof contained in the Time of Sale Prospectus and the Prospectus. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued, are fully paid and nonassessable and have been issued in compliance with federal and state securities laws. None of the outstanding shares of Common Stock were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its Significant Subsidiaries other than those accurately described in all material respects in the Time of Sale Prospectus and the Prospectus. The description of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Time of Sale Prospectus and the Prospectus accurately and fairly presents in all material respects the information required to be shown with respect to such plans, arrangements, options and rights under the Exchange Act or the Securities Act, as applicable.

(o) Neither the Company nor any of its Significant Subsidiaries is in violation of its charter orby-laws or is in default (or, with the giving of notice or lapse of time, would be in default) ("**Default**") under any indenture, mortgage, loan or credit agreement, note, contract, franchise, lease or other instrument to which the Company or any of its Significant Subsidiaries is a party or by which it or any of them may be bound, or to which any of the property or assets of the Company or any of its Significant Subsidiaries is subject (each, an "**Existing Instrument**"), except for such Defaults as would not, individually or in the aggregate, result in a Material Adverse Change. The Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Time of Sale Prospectus and the Prospectus (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter or by-laws of the Company or any Significant Subsidiary, (ii) will not conflict with or constitute a breach of, or Default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its Significant Subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, except for such conflicts, breaches, Defaults, liens, charges or encumbrances as would not, individually or in the aggregate, result in a Material Adverse Change and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any Significant Subsidiary. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Time of Sale Prospectus and the Prospectus, except such as have been obtained or made by the Company and are in full force and effect under the

Securities Act, or that may be required under applicable state securities or blue sky laws and from the Financial Industry Regulatory Authority ("**FINRA**") or the Exchange, or as issued by the Secretary of State of the State of Delaware in respect of the COD.

(p) There are no legal or governmental actions, suits or proceedings pending or, to the Company's knowledge, threatened (i) against or affecting the Company or any of its Significant Subsidiaries, (ii) which has as the subject thereof any officer or director of, or property owned or leased by, the Company or any of its Significant Subsidiaries or (iii) relating to environmental or discrimination matters, where in any such case (A) there is a reasonable possibility that such action, suit or proceeding might be determined adversely to the Company or such Significant Subsidiary and (B) any such action, suit or proceeding, if so determined adversely, would result in a Material Adverse Change or adversely affect the consummation of the transactions contemplated by this Agreement. No material labor dispute with the employees of the Company or any of its Significant Subsidiaries exists or, to the Company's knowledge, is threatened or imminent.

(q) The Company and each Significant Subsidiary possess such valid and current certificates, authorizations or permits issued by the appropriate state, federal or foreign regulatory agencies or bodies necessary to conduct their respective businesses as currently conducted and described in the Time of Sale Prospectus and the Prospectus, other than those the failure to possess or own would not result in a Material Adverse Change, and neither the Company nor any Significant Subsidiary has received any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, could result in a Material Adverse Change.

(r) The Company and the Significant Subsidiaries have good and marketable title to all of the real and personal property and other assets owned by them, in each case free and clear of any security interests, mortgages, liens, encumbrances, equities, adverse claims and other defects, except such as are described in the Time of Sale Prospectus and the Prospectus or as do not materially and adversely affect the value of such property and do not materially interfere with the use made or proposed to be made of such property by the Company or a Significant Subsidiary. To the Company's knowledge, the real property, improvements, equipment and personal property held under lease by the Company or the Significant Subsidiaries are held under valid and enforceable leases, with such exceptions as are described in the Time of Sale Prospectus and the Prospectus or are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or the Significant Subsidiaries.

(s) Subject to any permitted extensions, the Company and its consolidated subsidiaries have filed all necessary federal, state and foreign income, property and franchise tax returns (or have properly requested extensions thereof) and have paid all taxes required to be paid by any of them and, if due and payable, any related or similar assessment, fine or penalty levied against any of them except as may be being contested in good faith and by appropriate proceedings. The Company has made adequate charges, accruals and reserves in the applicable financial statements referred to in Section 1(k)

above in respect of all federal, state and foreign income, property and franchise taxes for all periods as to which the tax liability of the Company or any of its consolidated subsidiaries has not been finally determined.

(t) The Company has been advised of the rules and requirements under the Investment Company Act of 1940, as amended (the "**Investment Company Act**"). The Company is not, and after receipt of payment for the Shares will not be, an "investment company" within the meaning of Investment Company Act and will conduct its business in a manner so that it will not become subject to the Investment Company Act.

(u) Each of the Company and its Significant Subsidiaries are insured by insurers of recognized financial responsibility with policies in such amounts and with such deductibles and covering such risks as are generally deemed prudent and customary for their respective businesses as currently conducted and described in the Time of Sale Prospectus and the Prospectus. The Company has no reason to believe that it or any Significant Subsidiary will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change.

(v) The Company has not taken and will not take, directly or indirectly, any action designed to or that might be reasonably expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares or otherwise, or take any action, directly or indirectly, which would violate Rule 102 of RegulationM.

(w) There are no business relationships or related-party transactions, as defined in Item 404 of RegulationS-K under the Exchange Act, involving the Company or any subsidiary or any other person required to be described in the Time of Sale Prospectus and the Prospectus which have not been described as required.

(x) The Incorporated Documents, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Time of Sale Prospectus and the Prospectus, at the Closing Date, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(y) Neither the Company nor any of its Significant Subsidiaries nor, to the Company's knowledge, any employee or agent of the Company or any Significant Subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law or of the character required to be disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus. Neither the Company nor any of its Significant Subsidiaries nor, to the Company's knowledge, any director, officer, employee or agent of the Company or any

Significant Subsidiary acting on behalf of the Company or any of its Significant Subsidiaries has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "**FCPA**"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its controlled affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(z) The operations of the Company and its Significant Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its Significant Subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(aa) None of the Company, any of its Significant Subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its Significant Subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Action Control of the U.S. Department of the Treasury ("**OFAC**"); and the Company will not, directly or indirectly, use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(bb) The Company maintains a system of "internal control over financial reporting" (as such term is defined in Rule13a-15(f) of the General Rules and Regulations under the Exchange Act (the "**Exchange Act Rules**")) that complies with the requirements of the Exchange Act and has been designed by its principal executive and principal financial officers, or under their supervision, to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Since the end of the Company's most recent audited fiscal year, there has been

(A) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (B) other than as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(cc) The Company maintains disclosure controls and procedures (as such is defined in Rule 13a-15(e) of the Exchange Act Rules) that comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosures. To the extent required by the Exchange Act Rules, the Company has conducted evaluations of the effectiveness of its disclosure controls as required by Rule 13a-15 of the Exchange Act.

(dd) Except as would not, individually or in the aggregate, result in a Material Adverse Change (i) neither the Company nor any of its Significant Subsidiaries is in violation of any federal, state, local or foreign law or regulation relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including without limitation, laws and regulations relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum and petroleum products (collectively, "**Materials of Environmental Concern**"), or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Materials of Environmental Concern (collectively, "**Environmental Laws**"), which violation includes, but is not limited to, noncompliance with any permits or other governmental authorizations required for the operation of the business of the Company or its Significant Subsidiaries under applicable Environmental Laws, or noncompliance with the terms and conditions thereof, nor has the Company or any of its Significant Subsidiaries received any written communication, whether from a governmental authority, citizens group, employee or otherwise, that alleges that the Company or any of its Significant Subsidiaries is in violation of any Environmental Law; (ii) there is no claim, action or cause of action filed with a court or governmental authority, no investigation with respect to which the Company has received written notice, and no written notice by any person or entity alleging potential liability for investigatory costs, cleanup costs, governmental responses costs, natural resources damages, property damages, personal injuries, attorneys' fees or penalties arising out of, based on or resulting from the presence, or release into the environment, of any Material of Environmental Concern at any location owned, leased or operated by the Company or any of its Significant Subsidiaries, now or in the past (collectively, "**Environmental Claims**"), pending or, to the Company's knowledge, threatened against the Company or any of its Significant Subsidiaries or any person or entity whose liability for any Environmental Claim the Company or any of its Significant Subsidiaries has retained or assumed either contractually or by operation of

law; and (iii) to the Company's knowledge, there are no past or present actions, activities, circumstances, conditions, events or incidents, including, without limitation, the release, emission, discharge, presence or disposal of any Material of Environmental Concern, that reasonably could result in a violation of any Environmental Law or form the basis of a potential Environmental Claim against the Company or any of its Significant Subsidiaries or against any person or entity whose liability for any Environmental Claim the Company or any of its Significant Subsidiaries has retained or assumed either contractually or by operation of law.

(ee) The Company and its Significant Subsidiaries own or possess the valid right to use all (i) valid and enforceable patents, patent applications, trademarks, trademark registrations, service marks, service mark registrations, Internet domain name registrations, copyrights, copyright registrations, licenses and trade secret rights ("**Intellectual Property Rights**") and (ii) inventions, software, works of authorships, trademarks, service marks, trade names, databases, formulae, know how, Internet domain names and other intellectual property (including trade secrets and other unpatented and/or unpatentable proprietary confidential information, systems, or procedures) (collectively, "**Intellectual Property Assets**") necessary to conduct their respective businesses as currently conducted, except to the extent that the failure to own, possess, license or have other rights to use such Intellectual Property Rights or Intellectual Property Assets would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change. The Company and its Significant Subsidiaries have not received any opinion from their legal counsel concluding that any activities of their respective businesses infringe, misappropriate, or otherwise violate, valid and enforceable Intellectual Property Rights of any other person, and have not received written notice of any challenge, which is to their knowledge still pending, by any other person to the rights of the Company and its Significant Subsidiaries with respect to any Intellectual Property Rights or Intellectual Property Assets owned or used by the Company or its Significant Subsidiaries. To the knowledge of the Company, the Company and its Significant Subsidiaries' respective businesses as now conducted do not constitute infringement of, misappropriation of, or other violation of, any valid and enforceable Intellectual Property Rights of any other person. All licenses for the use of the Intellectual Property Rights described in the Time of Sale Prospectus and the Prospectus to which the Company is a party are, to the Company's knowledge, valid, binding upon, and enforceable by or against the parties thereto in accordance with their terms, except as the enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles. The Company has complied in all material respects with, and is not in material breach nor has received any written notice of any asserted or threatened claim of breach of, any license agreement pursuant to which Intellectual Property Rights have been licensed to or by the Company (the "**Intellectual Property Licensed Agreements**"), and the Company has no knowledge of any material breach by any other person to any Intellectual Property License Agreement, which would, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. Except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, no claim has been made in writing against the Company alleging the infringement by the Company of any patent, trademark, service mark, trade name, copyright, trade secret, license in or other intellectual property right or

franchise right of any person. The Company has taken all reasonable steps to protect, maintain and safeguard its Intellectual Property Rights, including the execution of appropriate nondisclosure and confidentiality agreements. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company's right to own, use, or hold for use any of the Intellectual Property Rights as owned, used or held by the Company for use in the conduct of the business as currently conducted.

(ff) The Company and the Significant Subsidiaries are and at all times have been in material compliance with all statutes, rules and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company or the Significant Subsidiaries ("**Applicable Laws**").

(gg) Any statistical, demographic and market-related data included in the Registration Statement, the Time of Sale Prospectus and the Prospectus, as of the date or dates to which they speak, are based on or derived from sources that the Company believes to be reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources.

(hh) The Company and its Significant Subsidiaries and any "**employee benefit plan**" (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, "**ERISA**")) established or maintained by the Company, its Significant Subsidiary or their "**ERISA Affiliates**" (as defined below) are, to their knowledge, in compliance in all material respects with ERISA. "**ERISA Affiliate**" means, with respect to the Company or its Significant Subsidiaries, any member of any group of organizations described in Sections 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (the "**Code**") of which the Company or such Significant Subsidiary is a member. No "**reportable event**" (as defined under ERISA) has occurred or is reasonably expected to occur with respect to any "**employee benefit plan**" established or maintained by the Company, its Significant Subsidiaries or any of their ERISA Affiliates. No "**employee benefit plan**" established or maintained by the Company, its Significant Subsidiaries or any of their ERISA Affiliates, if such "**employee benefit plan**" were terminated, would have any "**amount of unfunded benefit liabilities**" (as defined under ERISA). Neither the Company, its Significant Subsidiaries nor any of their ERISA Affiliates has incurred or reasonably expects to incur any liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "**employee benefit plan**" or (ii) Sections 412, 4971, 4975 or 4980B of the Code. Each "**employee benefit plan**" established or maintained by the Company, its Significant Subsidiaries or any of their ERISA Affiliates that is intended to be qualified under Section 401(a) of the Code is so qualified and, nothing has occurred, whether by action or failure to act, which would reasonably be expected to result in the loss of such qualification.

(ii) The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act. The Preferred Stock is registered pursuant to Section 12(b) or Section 12(g) of the Exchange Act, the Company applied for listing of the Preferred Stock on the Exchange, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Preferred Stock under the Exchange Act or delisting the Preferred Stock from the Exchange, nor has the Company received any notification that the Commission or the Exchange is contemplating terminating such registration or listing.

(jj) Except as disclosed to B. Riley Securities, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(kk) There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of the immediate family members of any of them.

(ll) All of the information provided to the Underwriters or to counsel for Underwriters by the Company, its officers and, to the Company's knowledge, directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rule 5110 is true, complete and correct in all material respects.

(mm) To enable the Underwriters to rely on Rule 5110(h)(1)(C) of FINRA, the Company represents that the Company (i) has anon-affiliate, public common equity float of at least $150 million or a non-affiliate, public common equity float of at least $100 million and annual trading volume of at least three million shares and (ii) has been subject to the Exchange Act reporting requirements for a period of at least 36 months.

(nn) The Company has not relied upon the Underwriters or legal counsel for the Underwriters for any legal, tax or accounting advice in connection with the offering and sale of the Shares.

(oo) As of the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, none of (a) the Time of Sale Prospectus, (b) any free writing prospectus, when considered together with the Time of Sale Prospectus, and (c) any individual Testing-the-Waters Communication, when considered together with the Time of Sale Prospectus, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(pp) (i)(x) To the knowledge of the Company, there has been no material security breach or other compromise of the Company's information technology and computer

systems, networks, hardware, software, data (including the data of their respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of them), equipment or technology used in the Company's business (collectively, "**IT Systems and Data**") and (y) the Company has not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any material security breach or other compromise to its IT Systems and Data; (ii) the Company is presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, in the case of this clause (ii), individually or in the aggregate, have a Material Adverse Change; and (iii) the Company has implemented backup and disaster recovery technology consistent with industry standards and practices.

2. *Agreements to Sell and Purchase.* The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the terms and conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Firm Shares set forth in Schedule I hereto opposite its name at $23.75 a share (the "**Purchase Price**").

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to 104,000 Additional Shares at the Purchase Price. B. Riley Securities may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares or later than ten business days after the date of such notice. Additional Shares may be purchased as provided in Section 4 hereof solely for the purpose of covering sales of shares in excess of the number of the Firm Shares. On each day, if any, that Additional Shares are to be purchased (an "**Option Closing Date**"), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as B. Riley Securities may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering.* The Company is advised by B. Riley Securities that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in B. Riley Securities' judgment is advisable. The Company is further advised by B. Riley Securities that the Shares are to be offered to the public initially at

$25.00 a share (the "**Public Offering Price**") and to certain dealers selected by B. Riley Securities at a price that represents a concession not in excess of $0.75 a share under the Public Offering Price.

4. *Payment and Delivery.* Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on December 15, 2020, or at such other time on the same or such other date, not later than December 20, 2020, as shall be designated in writing by B. Riley Securities. The time and date of such payment are hereinafter referred to as the "**Closing Date**."

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than January 22, 2021, as shall be designated in writing by B. Riley Securities.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as B. Riley Securities shall request not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to B. Riley Securities on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations.* The several obligations of the Underwriters are subject to the following conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) no order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission;

(ii) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company or any of its subsidiaries by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Exchange Act; and

(iii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the

earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus that, in B. Riley Securities' judgment, is material and adverse and that makes it, in B. Riley Securities' judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company, to the effect set forth in Sections 5(a)(i) and 5(a)(ii) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

(a) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Cooley LLP, outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Underwriters, to the effect set forth in Exhibit A hereto.

(b) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Duane Morris LLP, counsel for the Underwriters, dated the Closing Date, with respect to the due authorization and valid issuance of the Preferred Stock, the Registration Statement, the Prospectus and other related matters as B. Riley Securities may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters.

(c) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Deloitte & Touche LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(d) The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to B. Riley Securities on the applicable Option Closing Date of the following:

(i) a certificate, dated the Option Closing Date and signed by an executive officer of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 5(b) hereof remains true and correct as of such Option Closing Date;

(ii) an opinion and negative assurance letter of Cooley LLP, outside counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(c) hereof;

(iii) an opinion and negative assurance letter of Duane Morris LLP, counsel for the Underwriters, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(d) hereof;

(iv) a letter dated the Option Closing Date, in form and substance satisfactory to the Underwriters, from Deloitte & Touche LLP, independent public accountants, substantially in the same form and substance as the letter furnished to the Underwriters pursuant to Section 5(e) hereof; *provided* that the letter delivered on the Option Closing Date shall use a "cut-off date" not earlier than two business days prior to such Option Closing Date; and

(v) such other documents as B. Riley Securities may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

6. *Covenants of the Company*. The Company covenants with each Underwriter as follows:

(a) Prior to the Closing Date, the Board of Directors of the Company shall adopt the COD and establishing the rights, preferences and entitlements thereof, which shall conform in all material respects to the description thereof in the Registration Statement, the Time of Sale Prospectus and the Prospectus. The Company shall file such COD with the Secretary of State of the State of Delaware, accompanied by all fees required to be paid therewith, and cause the COD to become effective on or prior to the Closing Date.

(b) To furnish or make available through EDGAR to B. Riley Securities, without charge, eight (8) copies of the Registration Statement (including exhibits thereto and documents incorporated by reference) and for delivery to each other Underwriter a copy of the Registration Statement (without exhibits thereto but including documents incorporated by reference) and to furnish to B. Riley Securities in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 6(f) or 6(g) below, as many copies of the Time of Sale Prospectus, the Prospectus, any documents incorporated by reference therein and any supplements and amendments thereto or to the Registration Statement as B. Riley Securities may reasonably request.

(c) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish or make available through EDGAR to B. Riley Securities a copy of each such proposed amendment or supplement and not to file

any such proposed amendment or supplement to which B. Riley Securities reasonably objects, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(d) To furnish or make available through EDGAR to B. Riley Securities a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which B. Riley Securities reasonably objects.

(e) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(f) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(g) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the reasonable opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses B. Riley Securities will furnish to the Company) to which Shares may have been sold by B. Riley Securities on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the

Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(h) To use its reasonable best efforts to list, effect and maintain, subject to notice of issuance, the Shares on the Nasdaq Global Market.

(i) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as B. Riley Securities shall reasonably request to the extent that exemptions from such qualification are not available.

(j) To make generally available to the Company's security holders and to B. Riley Securities as soon as practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(k) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(h) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by the Financial Industry Regulatory Authority, (v) all costs and expenses incident to listing the Shares on the Nasdaq Global Market, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depositary, (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the

representatives and officers of the Company and any such consultants, (ix) the document production charges and expenses associated with printing this Agreement, (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section and (xi) all other reasonable costs and out-of-pocket expenses of the Underwriters (including reasonable fees and disbursements of counsel) incident to the performance of their obligations hereunder not otherwise specifically provided for here; provided, however, the aggregate amount of fees and disbursements to be paid by the Company pursuant to clause (iv) and clause (xi) of this Section 6(k), when taken together, shall not exceed $75,000 in the aggregate, without the Company's prior written consent. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make.

(l) The Company also covenants with each Underwriter that, without the prior written consent of B. Riley Securities on behalf of the Underwriters, it will not, and will not publicly disclose an intention to, during the period ending 60 days after the date of the Prospectus (the "**Restricted Period**"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Preferred Stock or any securities convertible into or exercisable or exchangeable for Preferred Stock, or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Preferred Stock, whether any such transaction described in clause 1 or 2 above is to be settled by delivery of Preferred Stock or such other securities, in cash or otherwise or (3) file any registration statement with the Commission relating to the offering of any shares of Preferred Stock or any securities convertible into or exercisable or exchangeable for Preferred Stock. The restrictions contained in the foregoing sentence shall not apply to (A) the Shares to be sold hereunder, (B) the issuance by the Company of shares of Preferred Stock upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof as described in each of the Time of Sale Prospectus and Prospectus, or (C) facilitating the establishment of a trading plan on behalf of a shareholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act, for the transfer of shares of Preferred Stock, *provided* that (i) such plan does not provide for the transfer of Preferred Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Preferred Stock may be made under such plan during the Restricted Period.

7. *Covenants of the Underwriters*. Each Underwriter, severally and not jointly, covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

8. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) that arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any "road show" as defined in Rule 433(h) under the Securities Act (a "road show"), the Prospectus or any amendment or supplement thereto, or any Testing-the-Waters Communication, or arise out of, or are based upon, any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any such untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through B. Riley Securities expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriters through B. Riley Securities consists of the information described as such in paragraph (b) below.

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through B. Riley Securities expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus, road show, or the Prospectus or any amendment or supplement thereto, which information consists solely of: the information contained in paragraphs three (relating to the terms of the offering by the Underwriters), ten and eleven (relating to stabilizing transactions, short positions, and penalty bids) and twelve (Underwriters' services) under the section titled "Underwriting".

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the "**indemnified party**") shall promptly notify the person against whom such indemnity may be sought (the "**indemnifying party**") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the fees and disbursements of such counsel related to such proceeding. In any such

proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by B. Riley Securities, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding.

(d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective

proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. *Termination*. The Underwriters may terminate this Agreement by notice given by B. Riley Securities to the Company, if after the execution and delivery of this Agreement and prior to or on the Closing Date or any Option Closing Date, as the case may be, (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE American, the NASDAQ Global Market, the Chicago Board of Options Exchange, the Chicago Mercantile Exchange or the Chicago Board of Trade, (ii) trading of any securities of the

Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in B. Riley Securities' reasonable, good-faith judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in B. Riley Securities' judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

10. *Effectiveness; Defaulting Underwriters*. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as B. Riley Securities may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to B. Riley Securities and the Company for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either B. Riley Securities or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, thenon-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement, the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

11. *Entire Agreement.* (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arms length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement, any contemporaneous written agreements and prior written agreements (to the extent not superseded by this Agreement), if any, and (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Recognition of the U.S. Special Resolution Regimes.* (a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Section a "**BHC Act Affiliate**" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). "**Covered Entity**" means any of the following: (i) a "covered entity" as that term is

defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). "**Default Right**" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. "**U.S. Special Resolution Regime**" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

13. *Counterparts*. This Agreement may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

14. *Applicable Law.* This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

15. *Headings*. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

16. *Notices.* All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to B. Riley Securities at 299 Park Avenue, 21st Floor, New York, New York 10171, Attention: General Counsel; and if to the Company shall be delivered, mailed or sent to 2200 Powell Street, Suite 310, Emeryville, California 94609. An electronic communication ("Electronic Notice") shall be deemed written notice for purposes of this Section 16 if sent to the electronic mail address specified by the receiving party under separate cover. Electronic Notice shall be deemed received at the time the party sending Electronic Notice receives confirmation of receipt by the receiving party. Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("Nonelectronic Notice") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

Very truly yours,

XOMA CORPORATION

By: /s/ Thomas Burns
Name: Thomas Burns
Title: Senior Finance Vice President, and Chief Financial Officer

Accepted as of the date hereof

B. RILEY SECURITIES, INC.

Acting on behalf of themselves and the several Underwriters named in Schedule I hereto.

By: /s/ Patrice McNicoll
Name: Patrice McNicoll
Title: Co-Head of Investment Banking

SCHEDULE I

Underwriter	Number of Firm Shares To Be Purchased
B. Riley Securities, Inc.	545,600
Aegis Capital Corp.	26,400
A.G.P./Alliance Global Partners	8,800
Boenning & Scattergood, Inc.	26,400
Ladenburg Thalmann & Co. Inc.	96,800
National Securities Corporation	79,200
Northland Capital Markets	8,800
William Blair & Company	88,000
Total:	880,000

SCHEDULE II

Time of Sale Prospectus

Time of Sale: 5:00 pm New York City time, on December 10, 2020

Issuer Free Writing Prospectus
Filed pursuant to Rule 433
Registration No. 333-223493

XOMA CORPORATION
Shares of 8.625% Series A Cumulative Perpetual Preferred Stock
(Liquidation Amount of $25.00 Per Share)

Final Term Sheet

Issuer:	XOMA Corporation
Securities:	8.625% Series A Cumulative Perpetual Preferred Stock (the "Series A Preferred Stock")
Number of Shares:	880,000 Shares of Series A Preferred Stock
Option to Purchase Additional Shares:	Up to 104,000 Shares Series A Preferred Stock
Trade Date:	December 11, 2020
Settlement Date:	December 15, 2020
Listing:	Expected NASDAQ "XOMAP"
Size:	$22,000,000
Option:	Up to $2,600,000
Maturity Date:	Perpetual (unless redeemed by us on or after December 15, 2021 or in connection with a change of control or delisting event).
Rating:	The Series A Preferred Stock will not be rated.
Dividend Rate (Cumulative):	We will pay cumulative cash dividends on the Series A Preferred Stock, when and as declared by our Board of Directors, at the rate of 8.625% of the $25.00 liquidation preference per year, equivalent to $2.15625.
Dividend Payment Dates:	Dividends will be payable quarterly in arrears, on or about the 15th day of January, April, July and October, beginning on or about April 15, 2021; provided that if any dividend payment date is not a business day, then the dividend which would otherwise have been payable on that dividend payment date may be paid on the next succeeding business day, and no interest, additional dividends or other sums will accumulate. Dividends will accumulate and be cumulative from, and including, the date of original issuance, which is expected to be December 15, 2020. The first dividend, which is scheduled to be paid on or about April 15, 2021 in the amount of

	$0.71875 per share, will be for more than a full quarter and will cover the period from, and including, the first date we issue and sell the Series A Preferred Stock through, but not including, April 15, 2021.
Price to the Public:	100%
Day Count:	30/360
Liquidation Preference:	The liquidation preference of each share of Series A Preferred Stock is $25.00. Upon liquidation, holders of Series A Preferred Stock will be entitled to receive the liquidation preference with respect to their shares of Series A Preferred Stock plus an amount equal to accumulated but unpaid dividends with respect to such shares.
Optional Redemption:	On and after December 15, 2021 the first anniversary of December 15, 2020 to but excluding the second anniversary, the shares of Series A Preferred Stock will be redeemable at our option, in whole or in part, at a redemption price equal to $26.00 per Preferred Share, plus any accrued and unpaid dividends. On and after December 15, 2022 the second anniversary of December 15, 2020 to but excluding the third anniversary, the shares of Series A Preferred Stock will be redeemable at our option, in whole or in part, at a redemption price equal to $25.75 per Preferred Share, plus any accrued and unpaid dividends. On and after December 15, 2023, the third anniversary of December 15, 2020 to but excluding the fourth anniversary, the shares of Series A Preferred Stock will be redeemable at our option, in whole or in part, at a redemption price equal to $25.50 per Preferred Share, plus any accrued and unpaid dividends. On and after December 15, 2024, the fourth anniversary of December 15, 2020 to but excluding the fifth anniversary, the shares of Series A Preferred Stock will be redeemable at our option, in whole or in part, at a redemption price equal to $25.25 per Preferred Share, plus any accrued and unpaid dividends. On and after December 15, 2025, the fifth anniversary of December 15, 2020, the shares of Series A Preferred Stock will be redeemable at our option, in whole or in part, at a redemption price equal to $25.00 per Preferred Share, plus any accrued and unpaid dividends.
Special Optional Redemption Upon a Change of Control or Delisting Event:	Special optional redemption by the Company upon a change of control or delisting event, in whole or in part, for $25.00 per share, plus accrued but unpaid dividends, to, but not including, the redemption date (the "Redemption Right"). The circumstances that will constitute a "change of control" and a "delisting event" will be set forth in the documents governing the Series A Preferred Stock.
Special Conversion Right Upon a Change of Control or Delisting Event:	Upon the occurrence of a change of control or delisting event, in the event the Company does not exercise the Redemption Right, holders of the Series A Preferred Stock will have the right to convert some or all of the Series A Preferred Stock held by such holder into a number of common shares at a predetermined ratio.
DRD/QDI Eligible:	Yes
Minimum Denomination / Multiples:	$25.00/$25.00
CUSIP/ISIN:	98419J 305 / US98419J3059
Joint Book-Runners:	B. Riley Securities, Ladenburg Thalmann, National Securities Corporation and William Blair & Company
Co-Managers:	Aegis Capital Corp., Boenning & Scattergood and Northland Capital Markets

This communication is intended for the sole use of the person to whom it is provided by the issuer.

The issuer has filed a registration statement (including a base prospectus dated April 5, 2018) and a preliminary prospectus supplement dated December 10, 2020 with the Securities and Exchange Commission ("SEC") for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering.

You may get these documents for free by visiting EDGAR on the SEC Web site at*www.sec.gov.* Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus and related preliminary prospectus supplement if you request them from B. Riley Securities, Inc. at 1300 17th Street, Suite 1300, Arlington, VA 22209, or by calling (703)312-9580, or by emailing prospectuses@brileyfin.com.

ANY DISCLAIMERS OR OTHER NOTICES THAT MAY APPEAR BELOW ARE NOT APPLICABLE TO THIS COMMUNICATION AND SHOULD BE DISREGARDED. SUCH DISCLAIMERS OR OTHER NOTICES WERE AUTOMATICALLY GENERATED AS A RESULT OF THIS COMMUNICATION BEING SENT VIA BLOOMBERG OR ANOTHER E-MAIL SYSTEM.

SCHEDULE III

Significant Subsidiaries

Subsidiaries of the Company	Jurisdiction of Organization
XOMA Technology Ltd.	Bermuda
XOMA (US) LLC	Delaware
XOMA UK Limited	United Kingdom

CERTIFICATE OF DESIGNATION

OF

8.625% SERIES A CUMULATIVE PERPETUAL PREFERRED STOCK

OF

XOMA CORPORATION

Pursuant to the General Corporation Law of the State of Delaware

XOMA Corporation, a Delaware corporation (the "Corporation"), hereby certifies, that pursuant to the authority expressly vested in the Board of Directors of the Corporation (the "Board") by the Certificate of Incorporation of the Corporation (as amended, restated or otherwise modified from time to time, the "Certificate of Incorporation"), the Board has duly adopted the following resolutions.

RESOLVED, that, pursuant to authority expressly set forth in the Certificate of Incorporation, a series of preferred stock, par value $0.05 per share (the "Preferred Stock") to be known as the "8.625% Series A Cumulative Perpetual Preferred Stock" be, and it hereby is, created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof are as set forth in the Certificate of Incorporation and this Certificate of Designation (as amended, restated or otherwise modified from time to time, this "Certificate of Designation") as set forth on Exhibit A hereto.

IN WITNESS WHEREOF, this Certificate of Designation is executed on behalf of the Corporation by its Chief Financial Officer this 11th day of December, 2020.

By: /s/ Thomas Burns
Name: Thomas Burns
Title: Senior Vice President, Finance and Chief Financial Officer

EXHIBIT A
TO
CERTIFICATE OF DESIGNATION
OF
8.625% SERIES A CUMULATIVE PERPETUAL PREFERRED STOCK
OF
XOMA CORPORATION

Section 1. Designation and Number. The designation of the series of preferred stock shall be 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.05 per share (hereinafter referred to as the "Series A Preferred Stock"). Each share of Series A Preferred Stock shall be identical in all respects to every other share of Series A Preferred Stock. The number of authorized shares of Series A Preferred Stock shall be 984,000. Such number may from time to time be increased (but not in excess of the total number of authorized shares of preferred stock) or decreased (but not below the number of shares of Series A Preferred Stock then outstanding) by further resolution duly adopted by the Board of Directors of the Corporation or any duly authorized committee of the Board of Directors of the Corporation and by the filing of a certificate pursuant to the provisions of the Delaware General Corporation Law stating that such increase or reduction, as the case may be, has been so authorized. The Corporation shall have the authority to issue fractional shares of Series A Preferred Stock.

Section 2. Rank. The Series A Preferred Stock will, as to dividend rights and rights upon our liquidation, dissolution orwinding-up, rank (1) senior to all classes or series of our common stock and to all other equity securities issued by us expressly designated as ranking junior to the Series A Preferred Stock, (2) senior with respect to the payment of dividends and on parity with respect to the distribution of assets upon the Corporation's liquidation, dissolution or winding up with the Corporation's Series X Preferred Stock and on parity with any future class or series of our equity securities expressly designated as ranking on parity with the Series A Preferred Stock; (3) junior to all equity securities issued by us with terms specifically providing that those equity securities rank senior to the Series A Preferred Stock with respect to the payment of dividends and the distribution of assets upon our liquidation, dissolution or winding up; and (4) effectively junior to all our existing and future indebtedness (including indebtedness convertible into our common stock or preferred stock) and to the indebtedness and other liabilities of (as well as any preferred equity interests held by others in) our existing or future subsidiaries.

Section 3. Dividends.

(a) Subject to the preferential rights of the holders of any class or series of capital stock of the Corporation ranking senior to the Series A Preferred Stock as to dividend rights, the holders of shares of the Series A Preferred Stock shall be entitled to receive, when, as and if authorized by the Board of Directors and declared by the Corporation, out of funds legally available for the payment of dividends, cumulative cash dividends at the rate of 8.625% per annum of the $25.00 liquidation preference per share of the Series A Preferred Stock. Such dividends shall accrue and be cumulative from and including the first date on which any shares of Series A Preferred Stock are issued (the "Original Issue Date"), or, if later, the most recent Dividend Payment Date (as defined below) to which dividends have been paid in full (or declared and the corresponding Dividend Record Date (as defined below) for determining stockholders entitled to payment thereof has passed), and shall be payable quarterly in arrears on each Dividend Payment Date, commencing on or about April 15, 2021; provided, however, that if any Dividend Payment Date is not a Business Day (as defined below), then the dividend which would otherwise have been payable on such Dividend Payment Date may be paid, at the Corporation's option, on either the immediately preceding Business Day or the next succeeding Business Day, except that, if such Business Day is in the next succeeding calendar year, such payment shall be made on the immediately preceding Business Day, in each case with the same force and effect as if paid on such Dividend Payment Date, and no interest or additional dividends or other sums shall accrue on the amount so payable from such Dividend Payment Date to such next succeeding Business Day; provided, further, that no dividends shall accrue on any share of Series A Preferred Stock for any Dividend Period (as defined below) having a Dividend Record Date (as defined below) before the date such share of Series A Preferred Stock was issued. The amount of any dividend payable on the Series A Preferred Stock for any period greater or less than a full Dividend Period shall be prorated and computed on the basis of a 360-day year consisting of twelve 30-day months. Dividends will be payable to holders of record as they appear in the stockholder records of the Corporation at the close of business on the applicable Dividend Record Date. Notwithstanding any provision to the contrary contained herein, each holder of an outstanding share of

Series A Preferred Stock shall be entitled to receive a dividend with respect to any Dividend Record Date equal to the dividend paid with respect to each other share of Series A Preferred Stock that is outstanding on such date. "Dividend Record Date" shall mean the date designated by the Board of Directors for the payment of dividends that is not more than 30 or fewer than 10 days prior to the applicable Dividend Payment Date. "Dividend Payment Date" shall mean the 15th calendar day of each January, April, July and October commencing on April 15, 2021. "Dividend Period" shall mean the respective periods commencing on the 15th day of January, April, July and October of each year and ending on and including the day preceding the first day of the next succeeding Dividend Period (other than the initial Dividend Period, which shall commence on the Original Issue Date and end on but exclude April 15, 2021, and other than the Dividend Period during which any shares of Series A Preferred Stock shall be redeemed pursuant to Section 5 or Section 6 hereof, which shall end on and include the day preceding the redemption date with respect to the shares of Series A Preferred Stock being redeemed).

The term "Business Day" shall mean any day, other than a Saturday or Sunday, that is neither a federal legal holiday nor a day on which banking institutions in New York City are authorized or required by law, regulation or executive order to close.

(b) Notwithstanding anything contained herein to the contrary, dividends on the Series A Preferred Stock shall accrue whether or not the Corporation has earnings, whether or not there are funds legally available for the payment of such dividends, and whether or not such dividends are authorized or declared.

(c) Except as provided in Section 3(d) or 3(f) below, no dividends shall be declared and paid or declared and set apart for payment, and no other distribution of cash or other property may be declared and made, directly or indirectly, on or with respect to any shares of Common Stock or shares of any other class or series of capital stock of the Corporation ranking, as to dividends, on parity with or junior to the Series A Preferred Stock for any period, nor shall any shares of Common Stock or any other shares of any other class or series of capital stock of the Corporation ranking, as to payment of dividends and the distribution of assets upon the Corporation's liquidation, dissolution or winding up, on parity with or junior to the Series A Preferred Stock be redeemed, purchased or otherwise acquired for any consideration, nor shall any funds be paid or made available for a sinking fund for the redemption of such shares, and no other distribution of cash or other property may be made, directly or indirectly, on or with respect thereto by the Corporation, unless full cumulative dividends on the Series A Preferred Stock for all past Dividend Periods shall have been or contemporaneously are (i) declared and paid or (ii) declared and a sum sufficient for the payment thereof is set apart for such payment.

(d) Except as provided in Section 3(f) below, when dividends are not paid in full (or declared and a sum sufficient for such full payment is not so set apart) on the Series A Preferred Stock and the shares of any other class or series of capital stock ranking, as to dividends, on parity with the Series A Preferred Stock, all dividends declared upon the Series A Preferred Stock and each such other class or series of capital stock ranking, as to dividends, on parity with the Series A Preferred Stock (which, for the avoidance of doubt, shall not include the redemption or repurchase of shares of any such class or series) shall be declared *pro rata* so that the amount of dividends declared per share of Series A Preferred Stock and such other class or series of capital stock shall in all cases bear to each other the same ratio that accrued dividends per share on the Series A Preferred Stock and such other class or series of capital stock (which shall not include any accrual in respect of unpaid dividends on such other class or series of capital stock for prior Dividend Periods if such other class or series of capital stock does not have a cumulative dividend) bear to each other. No interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments on the Series A Preferred Stock which may be in arrears.

(e) Holders of shares of Series A Preferred Stock shall not be entitled to any dividend, whether payable in cash, property or shares of capital stock, in excess of full cumulative dividends on the Series A Preferred Stock as provided herein. Any dividend payment made on the Series A Preferred Stock shall first be credited against the earliest accrued but unpaid dividends due with respect to such shares which remain payable. Accrued but unpaid dividends on the Series A Preferred Stock will accrue as of the Dividend Payment Date on which they first become payable.

(f) Notwithstanding the provisions of this Section 3 or Sections 5 or 6 and regardless of whether dividends are paid in full (or declared and a sum sufficient for such full payment is not so set apart) on the Series A Preferred Stock or the shares of any other class or series of capital stock ranking, as to dividends, on parity with the Series A Preferred Stock for any or all Dividend Periods, the Corporation shall not be prohibited or limited from (i) paying dividends on any shares of stock of the Corporation in shares of Common Stock or in shares of any other class or series of capital stock ranking junior to the Series A Preferred Stock as to payment of dividends and the distribution of assets upon the Corporation's liquidation, dissolution and winding up, (ii) converting or exchanging any shares of

stock of the Corporation for shares of any other class or series of capital stock of the Corporation ranking junior to the Series A Preferred Stock as to payment of dividends and the distribution of assets upon the Corporation's liquidation, dissolution and winding up, or (iii) purchasing or acquiring shares of Series A Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding shares of Series A Preferred Stock.

Section 4. Liquidation Preference.

(a) Upon any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, before any distribution or payment shall be made to holders of shares of Common Stock or any other class or series of capital stock of the Corporation ranking, as to rights upon any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, junior to the Series A Preferred Stock, the holders of shares of Series A Preferred Stock shall be entitled to be paid out of the assets of the Corporation legally available for distribution to its stockholders, after payment of or provision for the debts and other liabilities of the Corporation and any class or series of capital stock of the Corporation ranking, as to rights upon any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, senior to the Series A Preferred Stock, a liquidation preference of $25.00 per share, plus an amount equal to any accrued and unpaid dividends (whether or not authorized or declared) up to but excluding the date of payment. In the event that, upon such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Corporation are insufficient to pay the full amount of the liquidating distributions on all outstanding shares of Series A Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Corporation ranking, as to rights upon the Corporation's liquidation, dissolution or winding up, on parity with the Series A Preferred Stock in the distribution of assets, then the holders of the Series A Preferred Stock and each such other class or series of capital stock ranking, as to rights upon any voluntary or involuntary liquidation, dissolution or winding up, on parity with the Series A Preferred Stock shall share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be respectively entitled. Written notice of any such voluntary or involuntary liquidation, dissolution or winding up of the Corporation, stating the payment date or dates when, and the place or places where, the amounts distributable in such circumstances shall be payable, shall be given not fewer than 30 or more than 60 days prior to the payment date stated therein, to each record holder of shares of Series A Preferred Stock at the respective addresses of such holders as the same shall appear on the stock transfer records of the Corporation. After payment of the full amount of the liquidating distributions to which they are entitled, the holders of Series A Preferred Stock will have no right or claim to any of the remaining assets of the Corporation. The consolidation, merger or conversion of the Corporation with or into any other corporation, trust or entity, or the voluntary sale, lease, transfer or conveyance of all or substantially all of the property or business of the Corporation, shall not be deemed to constitute a liquidation, dissolution or winding up of the Corporation.

(b) In determining whether a distribution (other than upon voluntary or involuntary liquidation), by dividend, redemption or other acquisition of shares of capital stock of the Corporation or otherwise, is permitted under the Delaware General Corporation Law, amounts that would be needed, if the Corporation were to be dissolved at the time of the distribution, to satisfy the preferential rights upon dissolution of holders of shares of Series A Preferred Stock shall not be added to the Corporation's total liabilities.

Section 5. Redemption.

(a) Subject to Section 6(a) below, the Corporation, at its option, upon notice in accordance with Section 5(d), may redeem the Series A Preferred Stock, in whole or in part, at any time or from time to time, for cash, as follows: (i) on and after December 15, 2021 but prior to December 15, 2022, at a redemption price of $26.00 per share, (ii) on and after December 15, 2022 but prior to December 15, 2023, at a redemption price of $25.75 per share, (iii) on and after December 15, 2023 but prior to December 15, 2024, at a redemption price of $25.50 per share, (iv) after December 15, 2024 but prior to December 15, 2025, at a redemption price of $25.25 per share, in each case, plus any accrued and unpaid dividends (whether or not authorized or declared) thereon up to but not including the date fixed for redemption, without interest, to the extent the Corporation has funds legally available therefor (the "Optional Redemption Right") .

(b) On or after December 15, 2025, the Corporation, at its option, upon notice in accordance with Section 5(d), may redeem the Series A Preferred Stock, in whole or in part, at any time or from time to time, for cash at a redemption price of $25.00 per share, plus, subject to Section 5(e), all accrued and unpaid dividends (whether or not authorized or declared) thereon up to but not including the date fixed for redemption, without interest, to the extent the Corporation has funds legally available therefor (together with the Optional Redemption Right described in Section 5(a) above, the "Redemption Right"). If fewer than all of the outstanding shares of Series A Preferred Stock are to be

redeemed pursuant to this Section 5(b), the shares of Series A Preferred Stock to be redeemed shall be redeemed pro rata (as nearly as may be practicable without creating fractional shares) or by lot as determined by the Corporation. Holders of Series A Preferred Stock to be redeemed shall surrender such Series A Preferred Stock at the place, or in accordance with the book-entry procedures, designated in such notice and shall be entitled to the redemption price of $25.00 per share and any accrued and unpaid dividends payable upon such redemption following such surrender. If (i) notice of redemption of any shares of Series A Preferred Stock has been given (in the case of a redemption of the Series A Preferred Stock), (ii) the funds necessary for such redemption have been set aside by the Corporation for the benefit of the holders of any shares of Series A Preferred Stock so called for redemption, and (iii) irrevocable instructions have been given to pay the redemption price and all accrued and unpaid dividends, then from and after the redemption date, dividends shall cease to accrue on such shares of Series A Preferred Stock, such shares of Series A Preferred Stock shall no longer be deemed outstanding, and all rights of the holders of such shares shall terminate, except the right to receive the redemption price plus any accrued and unpaid dividends payable upon such redemption, without interest. So long as full cumulative dividends on the Series A Preferred Stock and any class or series of parity Preferred Stock for all past Dividend Periods shall have been or contemporaneously are (i) declared and paid, or (ii) declared and a sum sufficient for the payment thereof is set apart for payment, nothing herein shall prevent or restrict the Corporation's right or ability to purchase, from time to time, either at a public or a private sale, all or any part of the Series A Preferred Stock or its common stock at such price or prices as the Corporation may determine, subject to the provisions of applicable law, including the repurchase of shares of Series A Preferred Stock or its common stock in open-market transactions duly authorized by the Board of Directors.

(c) Except as provided in Section 3(f) above, unless full cumulative dividends on the Series A Preferred Stock for all past Dividend Periods shall have been or contemporaneously are (i) declared and paid in cash, or (ii) declared and a sum sufficient for the payment thereof in cash is set apart for payment, no shares of Series A Preferred Stock shall be redeemed pursuant to the Redemption Right or Special Optional Redemption Right (defined below) unless all outstanding shares of Series A Preferred Stock are simultaneously redeemed, and the Corporation shall not purchase or otherwise acquire directly or indirectly any shares of Series A Preferred Stock or any class or series of capital stock of the Corporation ranking, as to payment of dividends and the distribution of assets upon liquidation, dissolution or winding up of the Corporation, on parity with or junior to the Series A Preferred Stock (except by conversion into or exchange for shares of capital stock of the Corporation ranking, as to payment of dividends and the distribution of assets upon liquidation, dissolution or winding up of the Corporation, junior to the Series A Preferred Stock); provided, however, that the foregoing shall not prevent the purchase of Series A Preferred Stock, or any other class or series of capital stock of the Corporation ranking, as to payment of dividends and the distribution of assets upon liquidation, dissolution or winding up of the Corporation, on parity with or junior to the Series A Preferred Stock, by the Corporation pursuant to the provisions of Article IV of the Certificate of Incorporation or Sections 5 and 9 of this Certificate of Designation or any comparable provision of the Certificate of Incorporation relating to any class or series of capital stock hereinafter classified and designated, or the purchase or acquisition of Series A Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding shares of Series A Preferred Stock.

(d) Notice of redemption pursuant to the Redemption Right will be mailed by the Corporation, postage prepaid, not fewer than 30 or more than 60 days prior to the redemption date, addressed to the respective holders of record of the Series A Preferred Stock to be redeemed at their respective addresses as they appear on the stock transfer records of the Corporation. No failure to give or defect in such notice shall affect the validity of the proceedings for the redemption of any Series A Preferred Stock except as to the holder to whom such notice was defective or not given. In addition to any information required by law or by the applicable rules of any exchange upon which the Series A Preferred Stock may be listed or admitted to trading, each such notice shall state: (i) the redemption date; (ii) the redemption price; (iii) the number of shares of Series A Preferred Stock to be redeemed; (iv) the place or places where the certificates, if any, representing shares of Series A Preferred Stock are to be surrendered for payment of the redemption price; (v) procedures for surrendering noncertificated shares of Series A Preferred Stock for payment of the redemption price; (vi) that dividends on the shares of Series A Preferred Stock to be redeemed will cease to accrue on such redemption date; and (vii) that payment of the redemption price and any accumulated and unpaid dividends will be made upon presentation and surrender of such Series A Preferred Stock. If fewer than all of the shares of Series A Preferred Stock held by any holder are to be redeemed, the notice mailed to such holder shall also specify the number of shares of Series A Preferred Stock held by such holder to be redeemed.

(e) If a redemption date falls after a Dividend Record Date and on or prior to the corresponding Dividend Payment Date, each holder of Series A Preferred Stock at the close of business of such Dividend Record Date shall be entitled to the dividend payable on such shares on the corresponding Dividend Payment Date notwithstanding the redemption of such shares on or prior to such Dividend Payment Date, and each holder of Series A Preferred Stock that surrenders its shares on such redemption date will be entitled to the dividends accruing after the end of the Dividend Period to which such Dividend Payment Date relates up to but excluding the redemption date.

(f) All shares of the Series A Preferred Stock redeemed or repurchased pursuant to this Section 5, or otherwise acquired in any other manner by the Corporation, shall be restored to the status of authorized but unissued shares of Preferred Stock, without designation as to series or class.

Section 6. Special Optional Redemption by the Corporation.

(a) Upon the occurrence of a Delisting Event or Change of Control (each as defined below), the Corporation will have the option upon written notice mailed by the Corporation, postage pre-paid, no fewer than 30 nor more than 60 days prior to the redemption date and addressed to the holders of record of shares of the Series A Preferred Stock to be redeemed at their respective addresses as they appear on the stock transfer records of the Corporation, to redeem the Series A Preferred Stock, in whole or in part, within 90 days after the first date on which such Delisting Event occurred or within 120 days after the first date on which the Change of Control occurred, as applicable, for cash at $25.00 per share plus, subject to Section 6(d), accrued and unpaid dividends, if any, to, but not including, the redemption date ("Special Optional Redemption Right"). No failure to give such notice or any defect thereto or in the mailing thereof shall affect the validity of the proceedings for the redemption of any shares of Series A Preferred Stock except as to the holder to whom notice was defective or not given. If, on or prior to the Delisting Event Conversion Date or Change of Control Conversion Date (each as defined below), as applicable, the Corporation has provided or provides notice of redemption with respect to the Series A Preferred Stock (whether pursuant to the Redemption Right or the Special Optional Redemption Right), the holders of shares of Series A Preferred Stock will not have the conversion right described below in Section 8.

A "Change of Control" is when, after the original issuance of the Series A Preferred Stock, each of the following have occurred and are continuing:

(i) the acquisition by any person, including any syndicate or group deemed to be a "person" under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), of beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of purchases, mergers or other acquisition transactions of stock of the Corporation entitling that person to exercise more than 50% of the total voting power of all stock of the Corporation entitled to vote generally in the election of the Corporation's directors (except that such person will be deemed to have beneficial ownership of all securities that such person has the right to acquire, whether such right is currently exercisable or is exercisable only upon the occurrence of a subsequent condition); and

(ii) following the closing of any transaction referred to in (i) above, neither the Corporation nor the acquiring or surviving entity (or, if in connection with such transaction holders of Common Stock receive Alternative Form Consideration consisting of common equity securities of another entity, such other entity) has a class of common securities (or American depositary receipts representing such securities) listed on the Nasdaq Stock Market ("NASDAQ"), the New York Stock Exchange (the "NYSE"), or the NYSE American, LLC (the "NYSE AMER"), or listed or quoted on an exchange or quotation system that is a successor to NASDAQ, the NYSE or the NYSE AMER.

A "Delisting Event" occurs when, after the original issuance of Series A Preferred Stock, both (i) the shares of Series A Preferred Stock (or the depositary shares) are no longer listed on NASDAQ, the NYSE or the NYSE AMER, or listed or quoted on an exchange or quotation system that is a successor to NASDAQ, the NYSE or the NYSE AMER, and (ii) the Corporation is not subject to the reporting requirements of the Exchange Act, but any Series A Preferred Stock is still outstanding.

(b) In addition to any information required by law or by the applicable rules of any exchange upon which the Series A Preferred Stock may be listed or admitted to trading, such notice shall state: (i) the redemption date; (ii) the redemption price; (iii) the number of shares of Series A Preferred Stock to be redeemed; (iv) the place or places where the certificates, if any, representing shares of Series A Preferred Stock are to be surrendered for payment of the redemption price; (v) procedures for surrendering noncertificated shares of Series A Preferred Stock for payment of the redemption price; (vi) that dividends on the shares of Series A Preferred Stock to be redeemed will cease to accrue on the redemption date; (vii) that payment of the redemption price and any accumulated and unpaid dividends will be made upon presentation and surrender of such Series A Preferred Stock; (viii) that the shares of Series A Preferred Stock are being redeemed pursuant to the Special Optional Redemption Right in connection with the occurrence of a

Delisting Event or Change of Control, as applicable, and a brief description of the transaction or transactions constituting such Delisting Event or Change of Control, as applicable; and (ix) that holders of the shares of Series A Preferred Stock to which the notice relates will not be able to tender such shares of Series A Preferred Stock for conversion in connection with the Delisting Event or Change of Control, as applicable, and each share of Series A Preferred Stock tendered for conversion that is selected, prior to the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, for redemption will be redeemed on the related redemption date instead of converted on the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable. If fewer than all of the shares of Series A Preferred Stock held by any holder are to be redeemed, the notice mailed to such holder shall also specify the number of shares of Series A Preferred Stock held by such holder to be redeemed. Holders of Series A Preferred Stock to be redeemed shall surrender such Series A Preferred Stock at the place, or in accordance with the book-entry procedures, designated in such notice and shall be entitled to the redemption price of $25.00 per share and any accrued and unpaid dividends payable upon such redemption following such surrender.

If fewer than all of the outstanding shares of Series A Preferred Stock are to be redeemed pursuant to the Special Optional Redemption Right, the shares of Series A Preferred Stock to be redeemed shall be redeemed pro rata (as nearly as may be practicable without creating fractional shares) or by lot as determined by the Corporation.

(c) If (i) the Corporation has given a notice of redemption pursuant to the Special Optional Redemption Right, (ii) the funds necessary for such redemption have been set aside by the Corporation in trust for the benefit of the holders of the shares of Series A Preferred Stock so called for redemption, and (iii) irrevocable instructions have been given to pay the redemption price and all accrued and unpaid dividends, then from and after the redemption date, dividends shall cease to accrue on such shares of Series A Preferred Stock, such shares of Series A Preferred Stock shall no longer be deemed outstanding, and all rights of the holders of such shares shall terminate, except the right to receive the redemption price plus any accrued and unpaid dividends payable upon such redemption, without interest. So long as full cumulative dividends on the Series A Preferred Stock for all past Dividend Periods shall have been or contemporaneously are (i) declared and paid, or (ii) declared and a sum sufficient for the payment thereof is set apart for payment, nothing herein shall prevent or restrict the Corporation's right or ability to purchase, from time to time, either at a public or a private sale, all or any part of the Series A Preferred Stock at such price or prices as the Corporation may determine, subject to the provisions of applicable law, including the repurchase of shares of Series A Preferred Stock in open-market transactions duly authorized by the Board of Directors.

(d) If a redemption date falls after a Dividend Record Date and on or prior to the corresponding Dividend Payment Date, each holder of Series A Preferred Stock at the close of business of such Dividend Record Date shall be entitled to the dividend payable on such shares on the corresponding Dividend Payment Date notwithstanding the redemption of such shares on or prior to such Dividend Payment Date, and each holder of Series A Preferred Stock that surrenders its shares on such redemption date will be entitled to the dividends accruing after the end of the Dividend Period to which such Dividend Payment Date relates up to but excluding the redemption date. Except as provided herein, the Corporation shall make no payment or allowance for unpaid dividends, whether or not in arrears, on Series A Preferred Stock for which a notice of redemption has been given.

(e) All shares of the Series A Preferred Stock redeemed or repurchased pursuant to this Section 6, or otherwise acquired in any other manner by the Corporation, shall be retired and shall be restored to the status of authorized but unissued shares of Preferred Stock, without designation as to series or class.

Section 7. Voting Rights.

(a) Holders of the Series A Preferred Stock shall not have any voting rights, except as set forth in this Section 7.

(b) Whenever dividends on any shares of Series A Preferred Stock shall be in arrears for six or more consecutive or non-consecutive quarterly periods (a "Preferred Dividend Default"), the holders of Series A Preferred Stock and the holders of all other classes or series of preferred stock of the Corporation ranking on parity with the Series A Preferred Stock with respect to payment of dividends and the distribution of assets upon the Corporation's liquidation, dissolution or winding up and upon which like voting rights have been conferred, and are exercisable ("Parity Preferred") and with which the holders of Series A Preferred Stock are entitled to vote together as a single class voting together as a single class, shall be entitled to vote for the election of a total of two additional directors to serve on the Board of Directors of the Corporation (the "Preferred Directors") until all dividends accumulated and

unpaid on such Series A Preferred for all past Dividend Periods shall have been fully paid. At such time as the holders of Series A Preferred Stock become entitled to vote in the election of Preferred Directors, the number of directors serving on the Board of Directors will be increased automatically by two directors (unless the number of directors has previously been so increased pursuant to the terms of any class or series of Parity Preferred). For the purposes of determining whether a Preferred Dividend Default has occurred or is continuing, a dividend in respect of Series A Preferred Stock shall be considered timely made if made within two Business Days after the applicable Dividend Payment Date if at the time of such late payment date there shall not be any prior quarterly Dividend Periods in respect of which full dividends were not timely made at the applicable Dividend Payment Date.

(c) A Preferred Director will be elected by a plurality of the votes cast in the election of Preferred Directors and shall serve until the next annual meeting of stockholders and until his or her successor is duly elected and qualifies, subject to Section 7(e) or such Preferred Director's earlier death, disqualification, resignation or removal. The election of Preferred Directors will take place at (i) either (A) a special meeting called in accordance with Section 7(d) below if the request is received more than 90 days before the date fixed for the Corporation's next annual or special meeting of stockholders or (B) the next annual or special meeting of stockholders if the request is received within 90 days of the date fixed for the Corporation's next annual or special meeting of stockholders, and (ii) at each subsequent annual meeting of stockholders, or special meeting at which Preferred Directors are to be elected, until the right of holders of Series A Preferred Stock to elect Preferred Directors shall have terminated as specified in Section 7(e).

(d) At any time when holders of Series A Preferred Stock are entitled to vote in the election of Preferred Directors, the Secretary of the Corporation shall, unless the request is received more than 90 days before the date fixed for the Corporation's next annual or special meeting of stockholders, call or cause to be called, upon written request of holders of record of at least 10% of the outstanding shares of Series A Preferred Stock and Parity Preferred with which the holders of Series A Preferred Stock are entitled to vote together as a single class in the election of Preferred Directors, call a special meeting of stockholders for the purpose of electing Preferred Directors by mailing or causing to be mailed to the stockholders entitled to vote a notice of such special meeting to be held not fewer than ten or more than 45 days after the date such notice is given. The record date for determining holders of the Series A Preferred Stock entitled to notice of and to vote at such special meeting will be the close of business on the third Business Day preceding the day on which such notice is mailed. The holder or holders of one-third of the outstanding shares of Series A Preferred Stock and Parity Preferred with which the holders of Series A Preferred Stock are entitled to vote together as a single class in the election of Preferred Directors, present in person or by proxy, will constitute a quorum for the election of the Preferred Directors except as otherwise required by law. Notice of all meetings of stockholders at which holders of Series A Preferred Stock are entitled to vote in the election of Preferred Directors will be given to such holders at their addresses as they appear in the Corporation's stock transfer records. At any such meeting or adjournment thereof, in the absence of a quorum, subject to the provisions of any applicable law, the affirmative vote of a majority of the holders of the Series A Preferred Stock and Parity Preferred with which the holders of Series A Preferred Stock are entitled to vote together as a single class in the election of Preferred Directors present in person or by proxy, voting together as a single class, shall be sufficient to adjourn the meeting for the election of the Preferred Directors, without notice other than an announcement at the meeting, until a quorum is present. If a Preferred Dividend Default shall terminate after the notice of a special meeting for the purpose of electing Preferred Directors has been given but before such special meeting has been held, the Corporation shall, as soon as practicable after such termination, mail or cause to be mailed notice of such termination to holders of the Series A Preferred Stock that would have been entitled to vote at such special meeting.

(e) If and when all accumulated dividends on such Series A Preferred Stock for all past Dividend Periods shall have been fully paid, the right of the holders of Series A Preferred Stock to elect such additional two directors shall immediately cease (subject to revesting in the event of each and every Preferred Dividend Default), and, unless there are outstanding shares of Parity Preferred upon which like voting remain exercisable, the term of office of each Preferred Director so elected shall terminate and the number of directors constituting the Board of Directors shall be reduced accordingly. If the rights of holders of Series A Preferred Stock to elect Preferred Directors have terminated in accordance with this Section 7(e) after any record date for the determination of stockholders entitled to vote in the election of such Preferred Directors but before the closing of the polls in such election, holders of Series A Preferred Stock outstanding as of such record date shall not be entitled to vote in such election of Preferred Directors. Any Preferred Director may be removed at any time with or without cause by the vote of, and shall not be removed otherwise than by the vote of, the holders of record of a majority of the outstanding shares of Series A Preferred Stock and the Parity Preferred then entitled to vote together as a single class in the election of Preferred Directors (voting together as a single class). So long as a Preferred Dividend Default shall continue, any vacancy in the office of a

Preferred Director may be filled by written consent of the Preferred Director remaining in office, or if none remains in office, by a plurality of the votes cast in the election of Preferred Directors. Each of the Preferred Directors shall be entitled to one vote on any matter before the Corporation's board of directors.

(f) So long as any shares of Series A Preferred Stock remain outstanding, the affirmative vote or consent of the holders oftwo-thirds of the outstanding shares of Series A Preferred Stock and each other class or series of Parity Preferred with which the holders of Series A Preferred Stock are entitled to vote together as a single class on such matter (voting together as a single class), given in person or by proxy, either in writing or at a meeting, will be required to: (i) authorize, create or issue, or increase the number of authorized or issued number of shares of, any class or series of capital stock ranking senior to the Series A Preferred Stock with respect to payment of dividends or the distribution of assets upon liquidation, dissolution or winding up of the Corporation (collectively, "Senior Capital Stock") or reclassify any authorized shares of capital stock of the Corporation into Senior Capital Stock, or create, authorize or issue any obligation or security convertible into or evidencing the right to purchase any Senior Capital Stock; or (ii) amend, alter or repeal the provisions of the Certificate of Incorporation , including the terms of the Series A Preferred Stock, whether by merger, consolidation, transfer or conveyance of all or substantially all of its assets or otherwise (an "Event"), so as to materially and adversely affect any right, preference, privilege or voting power of the Series A Preferred Stock; provided however, with respect to the occurrence of any Event, so long as the Series A Preferred Stock remains outstanding with the terms thereof materially unchanged, taking into account that, upon the occurrence of such Event, the Corporation may not be the surviving entity and the surviving entity may not be a corporation, the occurrence of such Event shall not be deemed to materially and adversely affect such rights, preferences, privileges or voting power of Series A Preferred Stock, and in such case such holders shall not have any voting rights with respect to the occurrence of any Event. In addition, if the holders of the Series A Preferred Stock receive the greater of the full trading price of the Series A Preferred Stock on the date of an Event or the $25.00 liquidation preference per share of the Series A Preferred Stock plus all accrued and unpaid dividends thereon pursuant to the occurrence of any Event, then such holders shall not have any voting rights with respect to such Event. If any Event would materially and adversely affect the rights, preferences, privileges or voting powers of the Series A Preferred Stock disproportionately relative to other classes or series of Parity Preferred with which the holders of Series A Preferred Stock are entitled to vote together as a single class on such Event, the affirmative vote of the holders of at least two-thirds of the outstanding shares of the Series A Preferred Stock, voting as a separate class, will also be required. Notwithstanding the foregoing, holders of shares of Series A Preferred Stock shall not be entitled to vote with respect to (A) any increase in the total number of authorized shares of Common Stock or Preferred Stock of the Corporation, (B) any increase in the number of authorized shares of Series A Preferred Stock or the creation or issuance of any other class or series of capital stock or (C) any increase in the number of authorized shares of any other class or series of capital stock; provided that, in each case referred to in clause (A), (B) or (C) above, such capital stock ranks on parity with or junior to the Series A Preferred Stock with respect to the payment of dividends and the distribution of assets upon liquidation, dissolution or winding up of the Corporation. Except as set forth herein, holders of the Series A Preferred Stock shall not have any voting rights with respect to, and the consent of the holders of the Series A Preferred Stock shall not be required for, the taking of any corporate action, including an Event, regardless of the effect that such corporate action or Event may have upon the powers, preferences, voting power or other rights or privileges of the Series A Preferred Stock.

(g) The foregoing voting provisions of this Section 7 shall not apply if, at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, all outstanding shares of Series A Preferred Stock shall have been redeemed or called for redemption upon proper notice pursuant to this Certificate of Designation, and sufficient funds, in cash, shall have been deposited in trust to effect such redemption.

(h) In any matter in which the Series A Preferred Stock may vote together as a single class with holders of all other classes or series of parity preferred stock (as expressly provided herein), each share of Series A Preferred Stock shall be entitled to one vote per $25.00 of liquidation preference.

Section 8. Conversion. The shares of Series A Preferred Stock are not convertible into or exchangeable for any other property or securities of the Corporation, except as provided in this Section 8.

(a) Upon the occurrence of a Delisting Event or Change of Control, as applicable, each holder of outstanding shares of Series A Preferred Stock shall have the right, unless, on or prior to the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, the Corporation has provided or provides notice of its election to redeem the Series A Preferred Stock pursuant to the Redemption Right or Special Optional Redemption Right, to convert some or all of the Series A Preferred Stock held by such holder (the "Delisting Event Conversion Right" or

"Change of Control Conversion Right," as applicable) on the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, into a number of shares of Common Stock per share of Series A Preferred Stock to be converted (the "Common Stock Conversion Consideration") equal to the lesser of (A) the quotient obtained by dividing (i) the sum of (x) the $25.00 liquidation preference per share of Series A Preferred Stock to be converted plus (y) the amount of any accrued and unpaid dividends to, but not including, the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable (unless the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, is after a Dividend Record Date and prior to the corresponding Dividend Payment Date, in which case no additional amount for such accrued and unpaid dividends will be included in such sum) by (ii) the Common Stock Price (as defined herein) and (B) 1.46071 (the "Share Cap"), subject to the immediately succeeding paragraph.

The Share Cap is subject to pro rata adjustments for any stock splits (including those effected pursuant to a distribution of the Common Stock), subdivisions or combinations (in each case, a "Share Split") with respect to the Common Stock as follows: the adjusted Share Cap as the result of a Share Split shall be the number of shares of Common Stock that is equivalent to the product obtained by multiplying (i) the Share Cap in effect immediately prior to such Share Split by (ii) a fraction, the numerator of which is the number of shares of Common Stock outstanding after giving effect to such Share Split and the denominator of which is the number of shares of Common Stock outstanding immediately prior to such Share Split.

In the case of a Delisting Event or Change of Control, as applicable, pursuant to which shares of Common Stock shall be converted into cash, securities or other property or assets (including any combination thereof) (the "Alternative Form Consideration"), a holder of shares of Series A Preferred Stock shall receive upon conversion of such shares of Series A Preferred Stock the kind and amount of Alternative Form Consideration which such holder would have owned or been entitled to receive upon the Delisting Event or Change of Control, as applicable, had such holder held a number of shares of Common Stock equal to the Common Stock Conversion Consideration immediately prior to the effective time of the Delisting Event or Change of Control, as applicable (the "Alternative Conversion Consideration"; and the Common Stock Conversion Consideration or the Alternative Conversion Consideration, as may be applicable to a Delisting Event or Change of Control, as applicable, shall be referred to herein as the "Conversion Consideration").

In the event that holders of Common Stock have the opportunity to elect the form of consideration to be received in the Delisting Event or Change of Control, as applicable, the Conversion Consideration will be deemed to be the kind and amount of consideration actually received by holders of a majority of the shares of Common Stock that were voted in such an election (if electing between two types of consideration) or holders of a plurality of the shares of Common Stock that were voted in such an election (if electing between more than two types of consideration), as the case may be, and will be subject to any limitations to which all holders of Common Stock are subject, including, without limitation, pro rata reductions applicable to any portion of the consideration payable in the Delisting Event or Change of Control, as applicable.

The "Delisting Event Conversion Date" or "Change of Control Conversion Date", as applicable, shall be a Business Day set forth in the notice of Delisting Event or Change of Control, as applicable, provided in accordance with Section 8(c) below that is no less than 20 days nor more than 35 days after the date on which the Corporation provides such notice pursuant to Section 8(c).

The "Common Stock Price" shall be (i) if the consideration to be received in the Change of Control by the holders of Common Stock is solely cash, the amount of cash consideration per share of Common Stock or (ii) if the consideration to be received in the Change of Control by holders of Common Stock is other than solely cash (x) the average of the closing sale prices per share of Common Stock (or, if no closing sale price is reported, the average of the closing bid and ask prices or, if more than one in either case, the average of the average closing bid and the average closing ask prices) for the ten consecutive trading days immediately preceding, but not including, the effective date of the Change of Control as reported on the principal U.S. securities exchange on which the Common Stock is then traded, or (y) the average of the last quoted bid prices for the Common Stock in the over-the-counter market as reported by OTC Markets Group, Inc. or similar organization for the ten consecutive trading days immediately preceding, but not including, the effective date of the Change of Control, if the Common Stock is not then listed for trading on a U.S. securities exchange.

The "Common Stock Price" for any Delisting Event will be the average of the closing price per share of our common stock on the 10 consecutive trading days immediately preceding, but not including, the effective date of the Delisting Event.

(b) No fractional shares of Common Stock shall be issued upon the conversion of Series A Preferred Stock. In lieu of fractional shares of Common Stock otherwise issuable in respect of the aggregate number of shares of Series A Preferred Stock of any holder that are converted, that holder shall be entitled to receive the cash value of such fractional shares based on the Common Stock Price. If more than one share of Series A Preferred Stock is surrendered for conversion at one time by or for the same holder, the number of full shares of Common Stock issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series A Preferred Stock so surrendered.

(c) Within 15 days following the occurrence of a Delisting Event or Change of Control, as applicable, a notice of occurrence of the Delisting Event or Change of Control, as applicable, describing the resulting Delisting Event Conversion Right or Change of Control Conversion Right, as applicable, shall be delivered to the holders of record of the Series A Preferred Stock at their addresses as they appear on the Corporation's stock transfer records and notice shall be provided to the Corporation's transfer agent. No failure to give such notice or any defect thereto or in the mailing thereof shall affect the validity of the proceedings for the conversion of any share of Series A Preferred Stock except as to the holder to whom notice was defective or not given. Each notice shall state: (i) the events constituting the Delisting Event or Change of Control, as applicable; (ii) the date of the Delisting Event or Change of Control, as applicable; (iii) the last date on which the holders of Series A Preferred Stock may exercise their Delisting Event Conversion Right or Change of Control Conversion Right, as applicable; (iv) the method and period for calculating the Common Stock Price; (v) the Delisting Event Conversion Right or Change of Control Conversion Date, as applicable; (vi) that if, on or prior to the Delisting Event Conversion Right or Change of Control Conversion Date, as applicable, the Corporation has provided or provides notice of its election to redeem all or any portion of the Series A Preferred Stock, the holder will not be able to convert shares of Series A Preferred Stock designated for redemption and such shares of Series A Preferred Stock shall be redeemed on the related redemption date, even if they have already been tendered for conversion pursuant to the Delisting Event Conversion Right or Change of Control Conversion Right; (vii) if applicable, the type and amount of Alternative Conversion Consideration entitled to be received per share of Series A Preferred Stock; (viii) the name and address of the paying agent and the conversion agent; and (ix) the procedures that the holders of Series A Preferred Stock must follow to exercise the Delisting Event Conversion Right or Change of Control Conversion Right, as applicable.

(d) The Corporation shall issue a press release for publication on the Dow Jones & Corporation, Inc., Business Wire, PR Newswire or Bloomberg Business News (or, if such organizations are not in existence at the time of issuance of such press release, such other news or press organization as is reasonably calculated to broadly disseminate the relevant information to the public), or post notice on the Corporation's website, in any event prior to the opening of business on the first Business Day following any date on which the Corporation provides notice pursuant to Section 8(c) above to the holders of Series A Preferred Stock.

(e) In order to exercise the Delisting Event Conversion Right or Change of Control Conversion Right, as applicable, a holder of shares of Series A Preferred Stock shall be required to deliver, on or before the close of business on the Delisting Event Conversion Right or Change of Control Conversion Date, as applicable, the certificates (if any) representing the shares of Series A Preferred Stock to be converted, duly endorsed for transfer, together with a written conversion notice completed, to the Corporation's transfer agent. Such notice shall state: (i) the relevant Delisting Event Conversion Date or Change of Control Conversion Date, as applicable; (ii) the number of shares of Series A Preferred Stock to be converted; and (iii) that the shares of Series A Preferred Stock are to be converted pursuant to the applicable provisions of this Certificate of Designation. Notwithstanding the foregoing, if the shares of Series A Preferred Stock are held in global form, such notice shall comply with applicable procedures of The Depository Trust Corporation ("DTC").

(f) Holders of Series A Preferred Stock may withdraw any notice of exercise of a Delisting Event Conversion Right or Change of Control Conversion Right (in whole or in part), as applicable, by a written notice of withdrawal delivered to the Corporation's transfer agent prior to the close of business on the Business Day prior to the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable. The notice of withdrawal must state: (i) the number of withdrawn shares of Series A Preferred Stock; (ii) if certificated shares of Series A Preferred Stock have been issued, the certificate numbers of the shares of withdrawn Series A Preferred Stock; and (iii) the number of shares of Series A Preferred Stock, if any, which remain subject to the conversion notice. Notwithstanding the foregoing, if the shares of Series A Preferred Stock are held in global form, the notice of withdrawal shall comply with applicable procedures of DTC.

(g) Shares of Series A Preferred Stock as to which the Delisting Event Conversion Right or Change of Control Conversion Right, as applicable, has been properly exercised and for which the conversion notice has not been properly withdrawn shall be converted into the applicable Conversion Consideration in accordance with the Delisting Event Conversion Right or Change of Control Conversion Right, as applicable, on the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, unless, on or prior to the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, the Corporation has provided or provides notice of its election to redeem such shares of Series A Preferred Stock, whether pursuant to its Redemption Right or Special Optional Redemption Right. If the Corporation elects to redeem shares of Series A Preferred Stock that would otherwise be converted into the applicable Conversion Consideration on a Delisting Event Conversion Date or Change of Control Conversion Date, as applicable, such shares of Series A Preferred Stock shall not be so converted and the holders of such shares shall be entitled to receive on the applicable redemption date $25.00 per share, plus any accrued and unpaid dividends thereon to, but not including, the redemption date.

(h) The Corporation shall deliver the applicable Conversion Consideration no later than the third Business Day following the Delisting Event Conversion Date or Change of Control Conversion Date, as applicable.

(i) The shares of Series A Preferred Stock shall not be convertible into or exchangeable for any other property or securities of the Corporation or any other entity, except as otherwise provided herein.

Section 9. No Conversion Rights. The shares of Series A Preferred Stock shall not be convertible into or exchangeable for any other property or securities of the Corporation or any other entity, except as otherwise provided herein.

Section 10. Record Holders. The Corporation and its transfer agent may deem and treat the record holder of any Series A Preferred Stock as the true and lawful owner thereof for all purposes, and neither the Corporation nor its transfer agent shall be affected by any notice to the contrary.

Section 11. No Maturity or Sinking Fund. The Series A Preferred Stock has no maturity date, and no sinking fund has been established for the retirement or redemption of Series A Preferred Stock.

Section 12. Exclusion of Other Rights. The Series A Preferred Stock shall not have any preferences or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption other than expressly set forth in the Certificate of Incorporation and this Certificate of Designation.

Section 13. Headings of Subdivisions. The headings of the various subdivisions hereof are for convenience of reference only and shall not affect the interpretation of any of the provisions hereof.

Section 14. Severability of Provisions. If any preferences or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption of the Series A Preferred Stock set forth in this Certificate of Designation are invalid, unlawful or incapable of being enforced by reason of any rule of law or public policy, all other preferences or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption of Series A Preferred Stock set forth in this Certificate of Designation which can be given effect without the invalid, unlawful or unenforceable provision thereof shall, nevertheless, remain in full force and effect and no preferences or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption of the Series A Preferred Stock herein set forth shall be deemed dependent upon any other provision thereof unless so expressed therein.

Section 15. No Preemptive Rights. No holder of Series A Preferred Stock shall be entitled to any preemptive rights to subscribe for or acquire any unissued shares of capital stock of the Corporation (whether now or hereafter authorized) or securities of the Corporation convertible into or carrying a right to subscribe to or acquire shares of capital stock of the Corporation.

* * * * * *

EXHIBIT 5.1

Cooley

Michael E. Tenta
+1 650 843 5636
mtenta@cooley.com

December 11, 2020

XOMA Corporation
2200 Powell Street, Suite 310
Emeryville, CA 94608

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the offering by XOMA Corporation, a Delaware corporation (the "***Company***"), of up to 984,000 shares of 8.625% Series A Cumulative Perpetual Preferred Stock, par value $0.005 (the "***Preferred Shares***"), including up to 104,000 Preferred Shares, that may be sold pursuant to the exercise of an option to purchase additional shares, pursuant to a Registration Statement on Form S-3 (Registration Statement No. 333-223493) (the "***Registration Statement***"), filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "***Act***"), the prospectus included therein (the "***Base Prospectus***"), and the prospectus supplement, dated December 10, 2020, filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the "***Prospectus***").

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Company's Certificate of Designation of 8.625% Series A Cumulative Perpetual Preferred Stock, the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as currently in effect, and originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials, and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Preferred Shares, when sold and issued in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Michael E. Tenta
Michael E. Tenta

Exhibit 99.1

CORPORATE PRESENTATION

A ROYALTY AGGREGATION COMPANY

DECEMBER 2020

NASDAQ: XOMA

DISCLAIMERS

Certain statements in this presentation are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements regarding: future potential monetization opportunities, active transactions with significant financial implications, collaborations poised for significant financial contribution, our library of potentially value-generating assets, future potential for milestone and royalty payments, the potential of our antibody discovery engine, potential out-licensing of our internal compounds and products, the ability of our partners and their licensees to successfully develop their pipeline programs, the productivity of acquired assets, our revenue forecasts, upcoming internal milestones and value catalysts, our future cash needs, our strategy for value creation, and other statements that relate to future periods. These statements are not guarantees of future performance and undue reliance should not be placed on them. They are based on assumptions that may not prove accurate, and actual results could differ materially from those anticipated due to certain risks inherent in the biotechnology industry and for companies engaged in the development of new products in a regulated market.

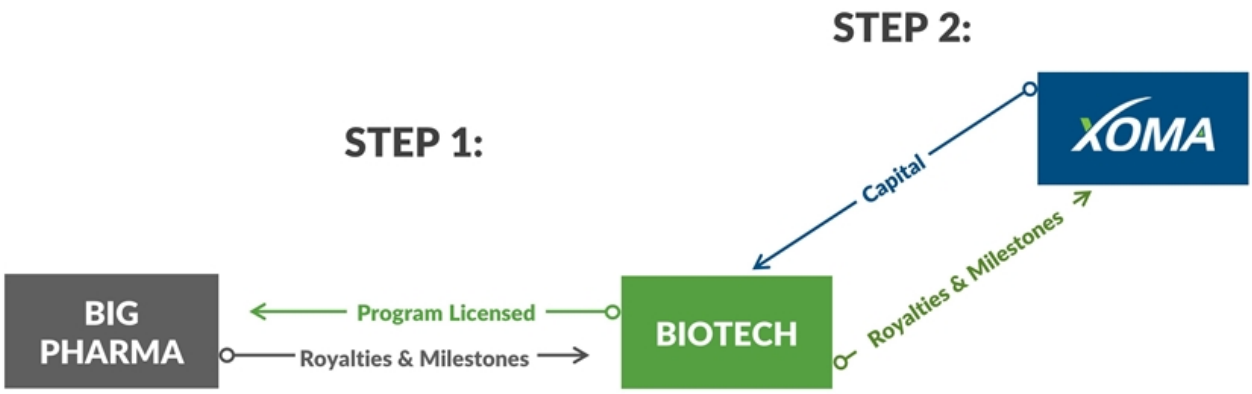
Potential risks to XOMA meeting these expectations are described in more detail in XOMA's most recent filing on Form 10-K and in other SEC filings. Consider such risks carefully when considering XOMA's prospects. Any forward-looking statements represent XOMA's views only as of the date of this presentation and should not be relied upon as representing its views as of any subsequent date. XOMA disclaims any obligation to update any forward-looking statement, except as required by law.

NOTE: All references to "portfolio" in this presentation are to milestone and/or royalty rights associated with a basket of drug products in development. All references to "assets" in this presentation are to milestone and/or royalty rights associated with individual drug product candidates in development. References to royalties or royalty rates contained herein refer to future potential payment streams regardless of whether or not they are technically defined as royalties in the underlying contractual agreement; further, any rates referenced herein are subject to potential future contractual adjustments.

XOMA SNAPSHOT

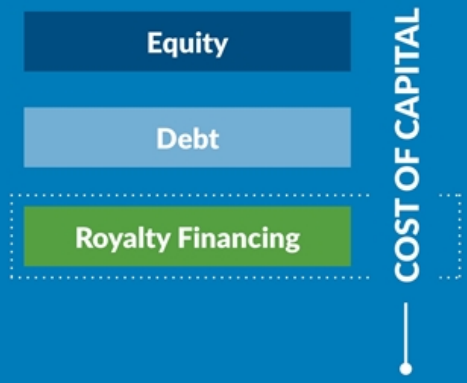
- **Acquire pre-commercial drug royalties**
  - Use portfolio approach to expand number of royalty positions
  - Differentiate by focusing on development-stage assets with blockbuster potential licensed to large-cap partners
- **Provide exposure, through royalties, to the upside potential of biotech**
  - Capital-efficient model where R&D costs are borne by partners
  - Cash inflows from interim milestone payments
  - Exposure risk mitigated through portfolio effects
- **Expected value appreciation driven by:**
  - Advancement of assets by partners who spend hundreds of millions of dollars to develop XOMA royalty assets
  - Acquisition of additional assets by XOMA to expand revenue potential and further mitigate risk
- **Portfolio of 65+ assets in >30 disclosed indications today and growing**

BASICS OF A ROYALTY MONETIZATION TRANSACTION

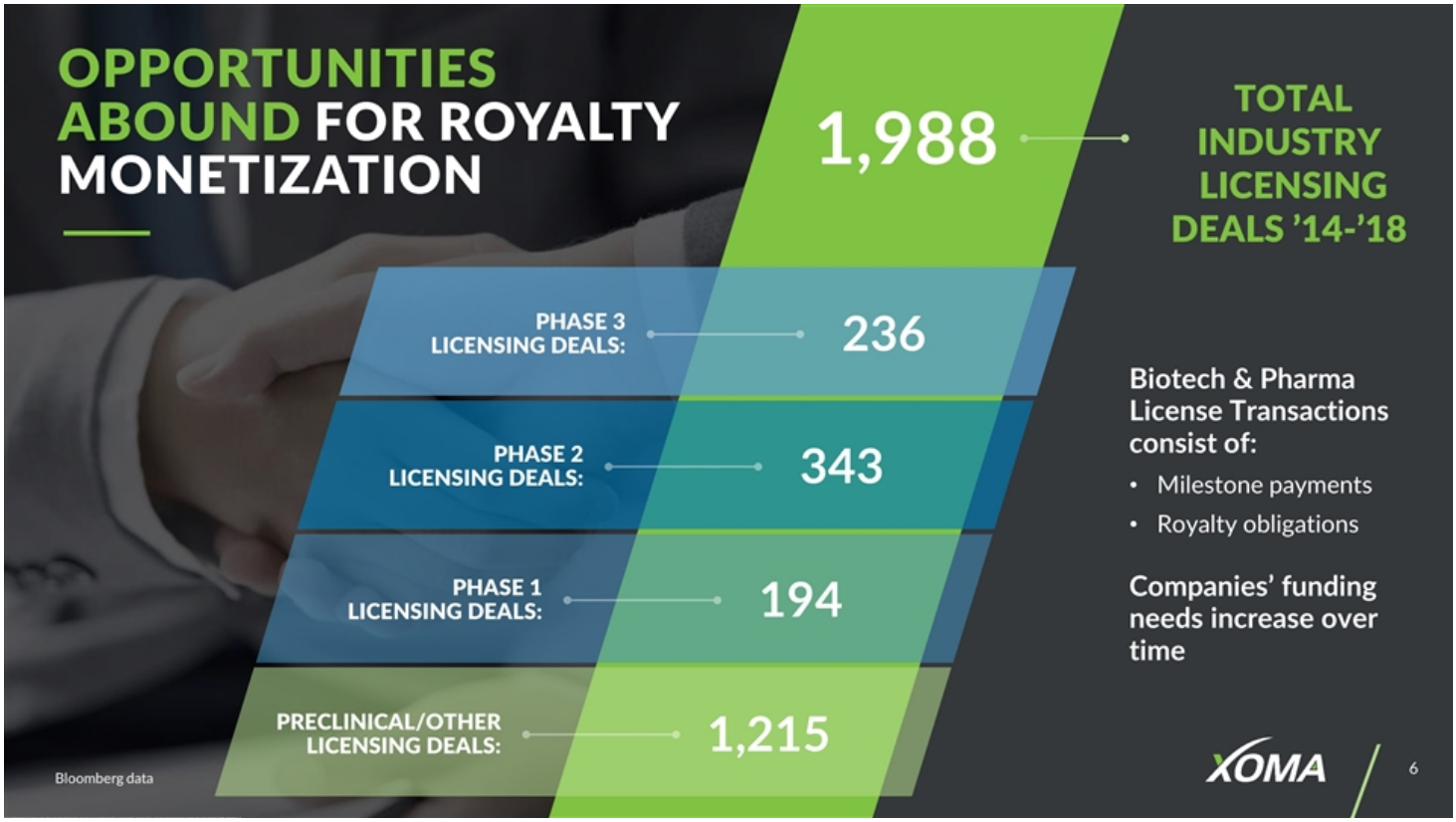


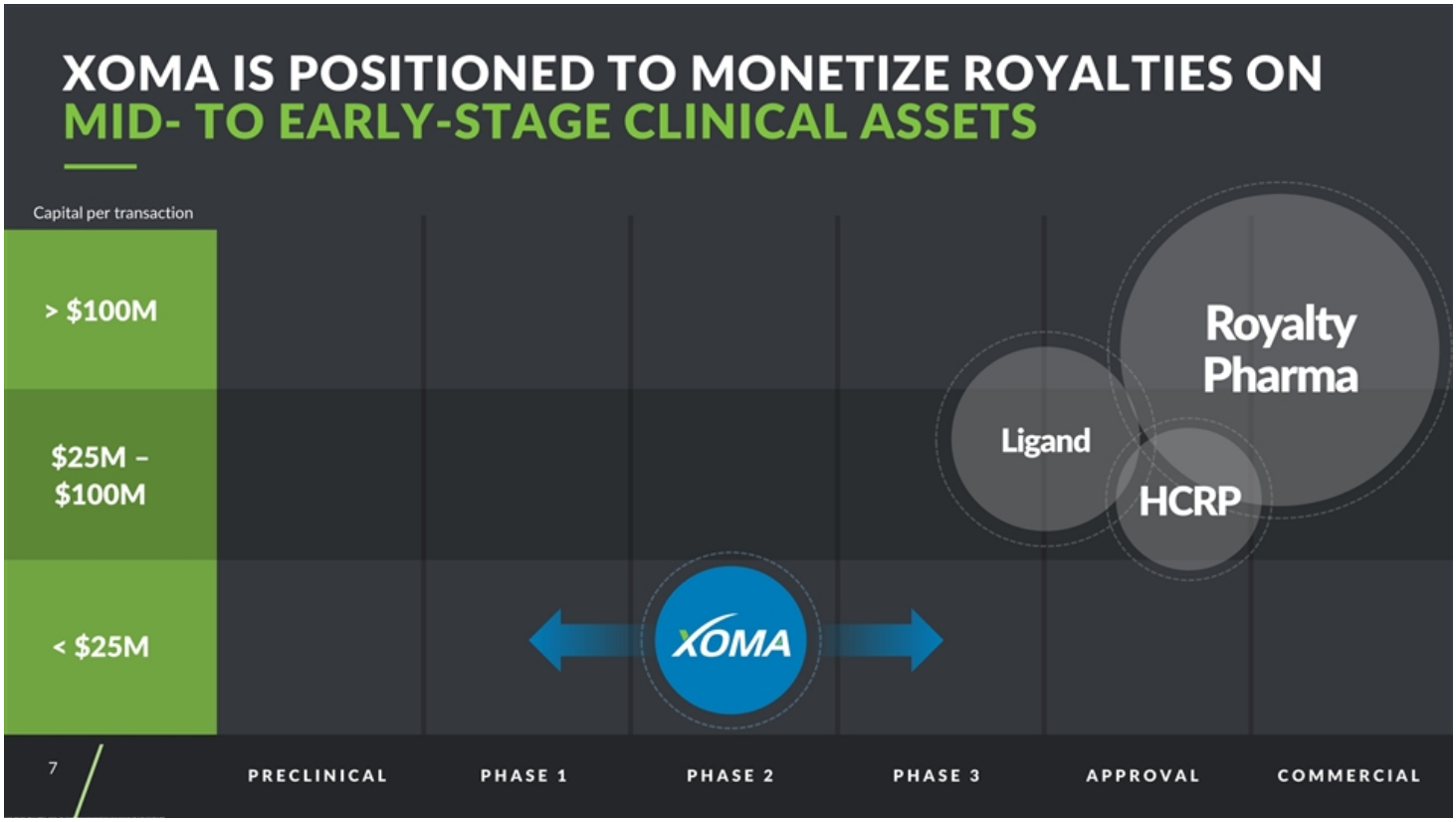
ROYALTY FINANCINGS CAN HELP COMPANIES RAISE CAPITAL MORE EFFICIENTLY THAN EQUITY AND IS LESS ONEROUS THAN DEBT

	Equity	Debt	Royalty Financing
Cost of Capital	High	Medium to High	Low to Medium
Dilution	High	Low	NA
Covenants/Restrictions	Medium	High	Low
Transaction Cost	High	Medium to High	Low
Control	High	Low to Medium	NA
Diligence/Disruption	High	Medium to High	Low
Collateral	N/A	All Assets	Limited to Royalty Asset(s)



XOMA


OPPORTUNITIES ABOUND FOR ROYALTY MONETIZATION
1,988
TOTAL INDUSTRY LICENSING DEALS '14-'18
PHASE 3 LICENSING DEALS:
236
PHASE 2 LICENSING DEALS:
343
PHASE 1 LICENSING DEALS:
194
PRECLINICAL/OTHER LICENSING DEALS:
1,215
Biotech & Pharma License Transactions consist of:
• Milestone payments
• Royalty obligations
Companies' funding needs increase over time
Bloomberg data
XOMA
6


XOMA IS POSITIONED TO MONETIZE ROYALTIES ON
MID- TO EARLY-STAGE CLINICAL ASSETS
Capital per transaction
> $100M
$25M – $100M
< $25M
Royalty Pharma
Ligand
HCRP
XOMA
7
PRECLINICAL
PHASE 1
PHASE 2
PHASE 3
APPROVAL
COMMERCIAL

XOMA ACQUISITION STRATEGY IS DISTINCT

- Acquire milestone and royalty rights to high-potential, fully funded assets
- Focus on mid-stage clinical assets
- Ever-increasing pipeline of potential opportunities
- Team focused on acquiring new royalty assets

THE BENEFITS TO ASSET SELLERS:

Recognize value of non-dilutive, non-recourse financing

Ability to monetize license-economics of mid-stage clinical assets

Immediate cash infusion to advance high-priority internal programs to improve human health

KEY ATTRIBUTES
OF XOMA TARGET ASSETS

STRONG DEVELOPER/MARKETER

Assets partnered with high-quality pharma / biopharma companies

PRE-COMMERCIAL THERAPEUTIC ASSETS

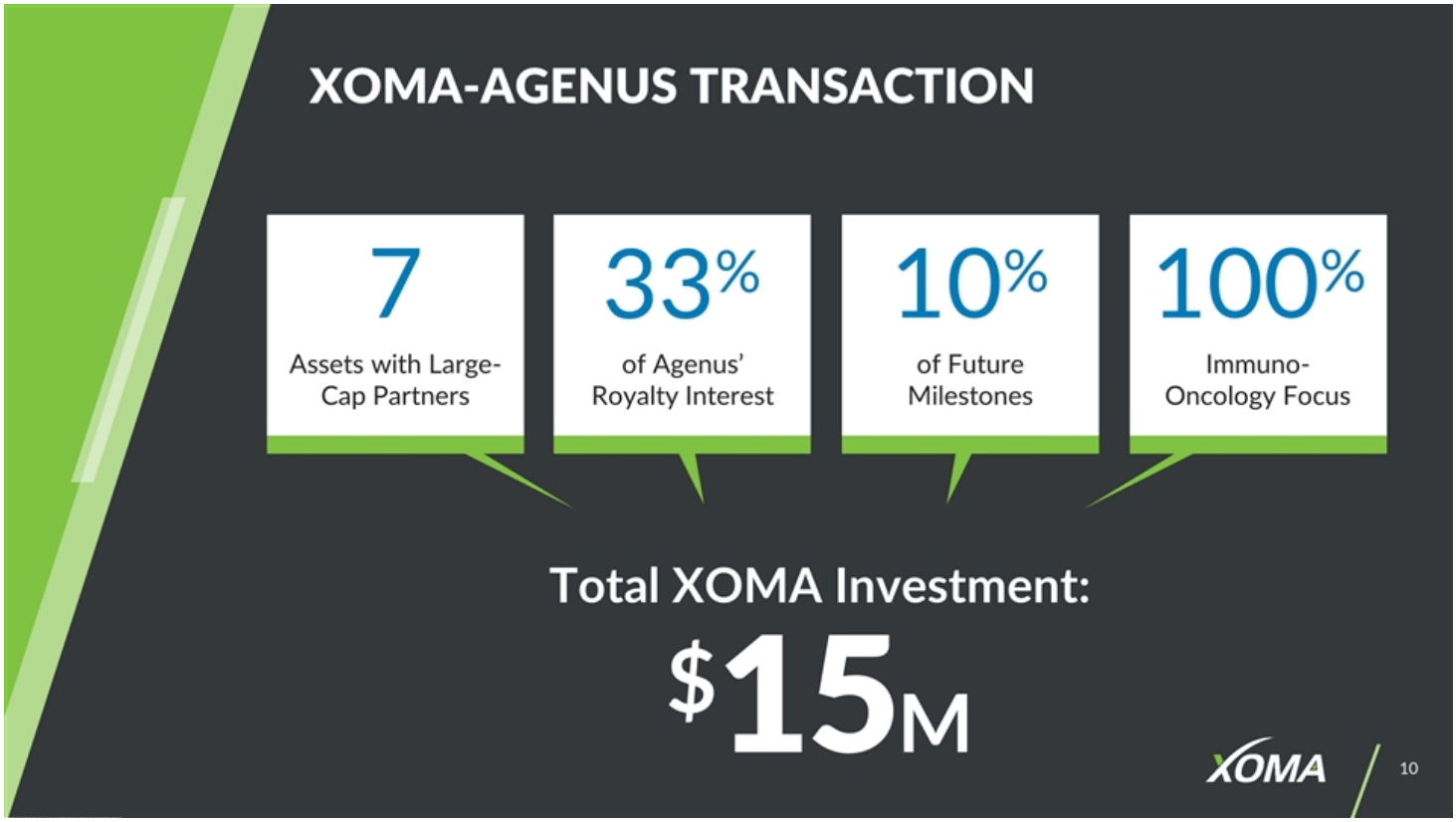
Therapeutic area agnostic

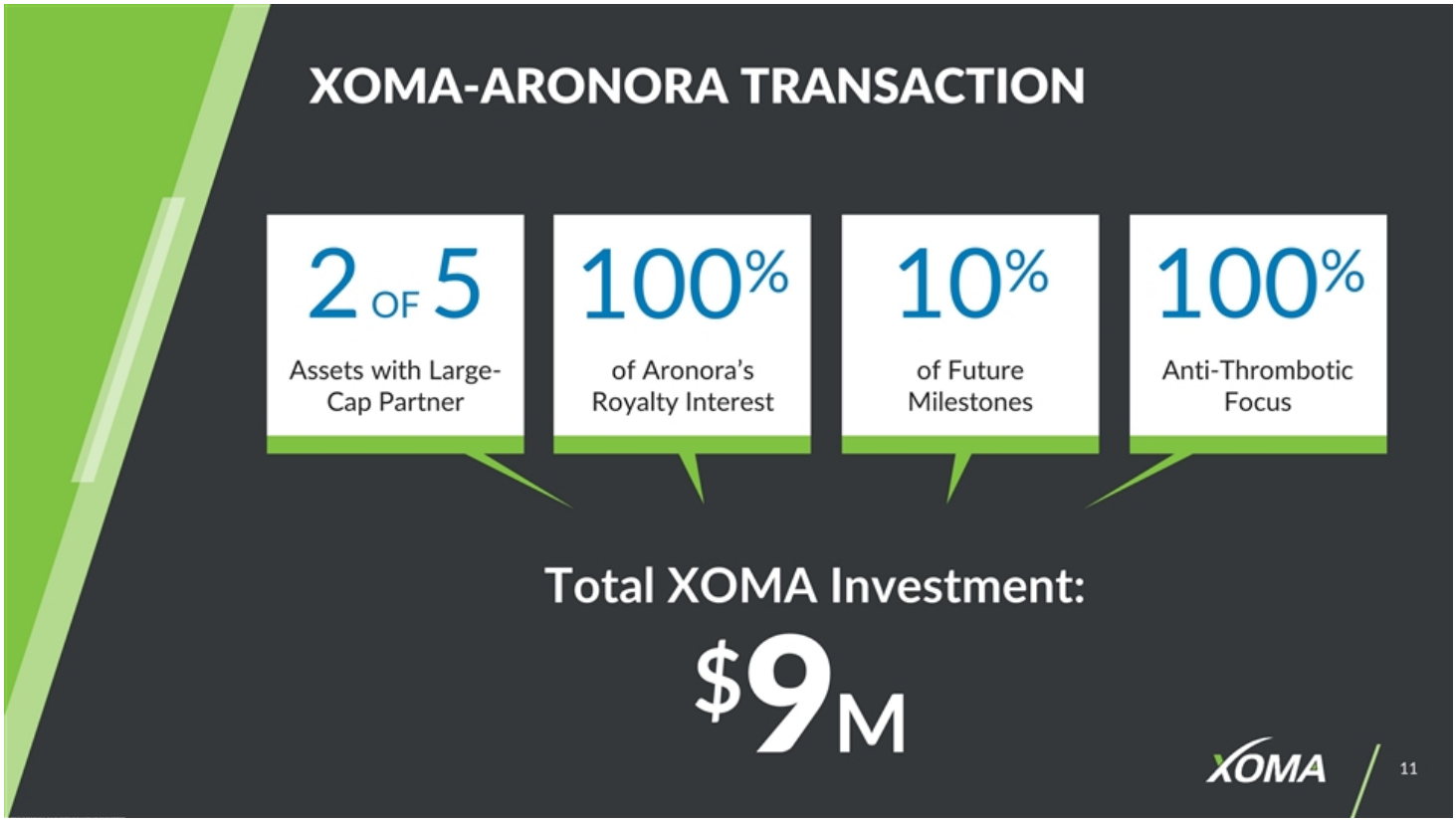
LONG DURATION OF MARKET EXCLUSIVITY

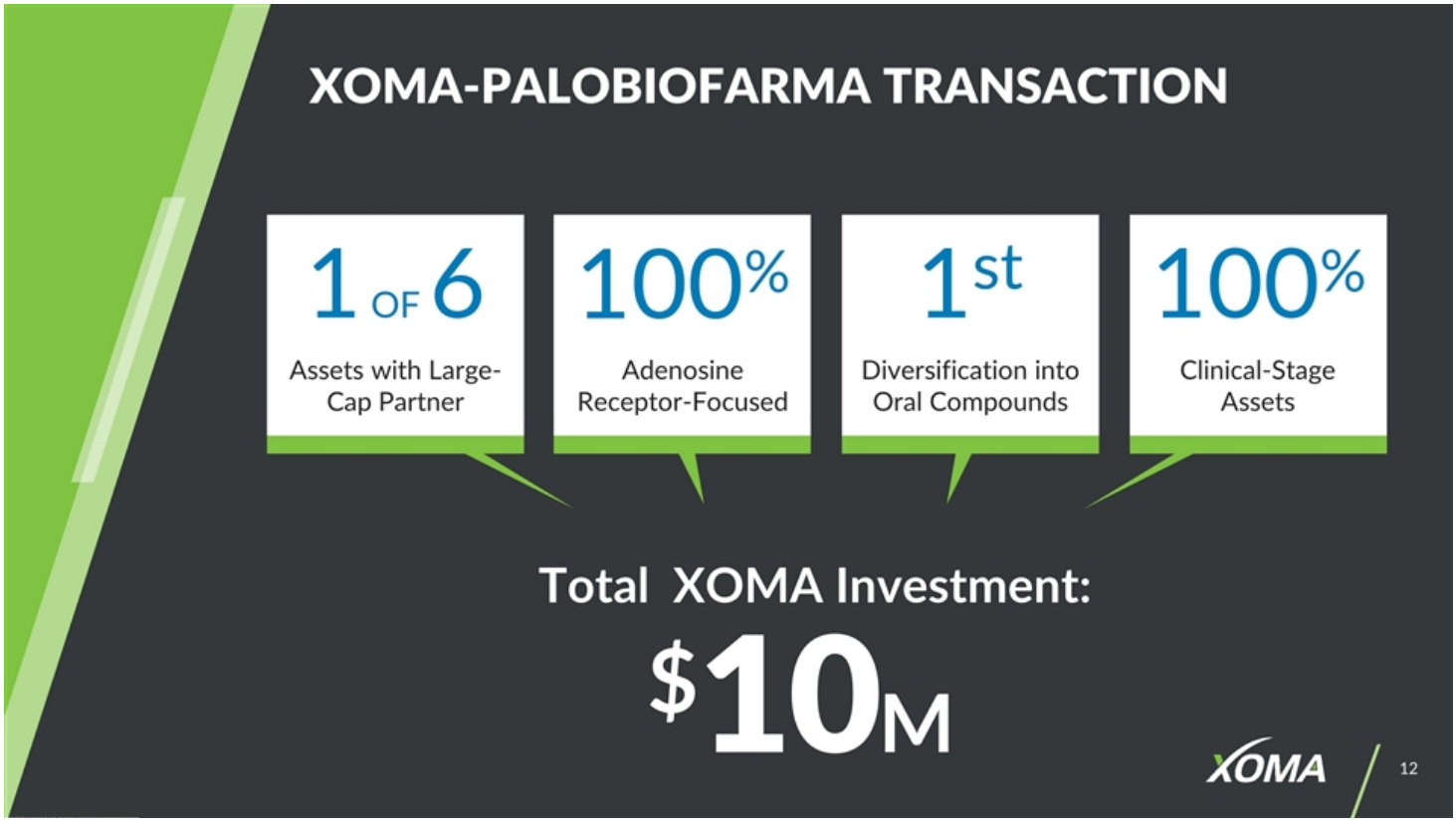
Patent expiration or regulatory exclusivity

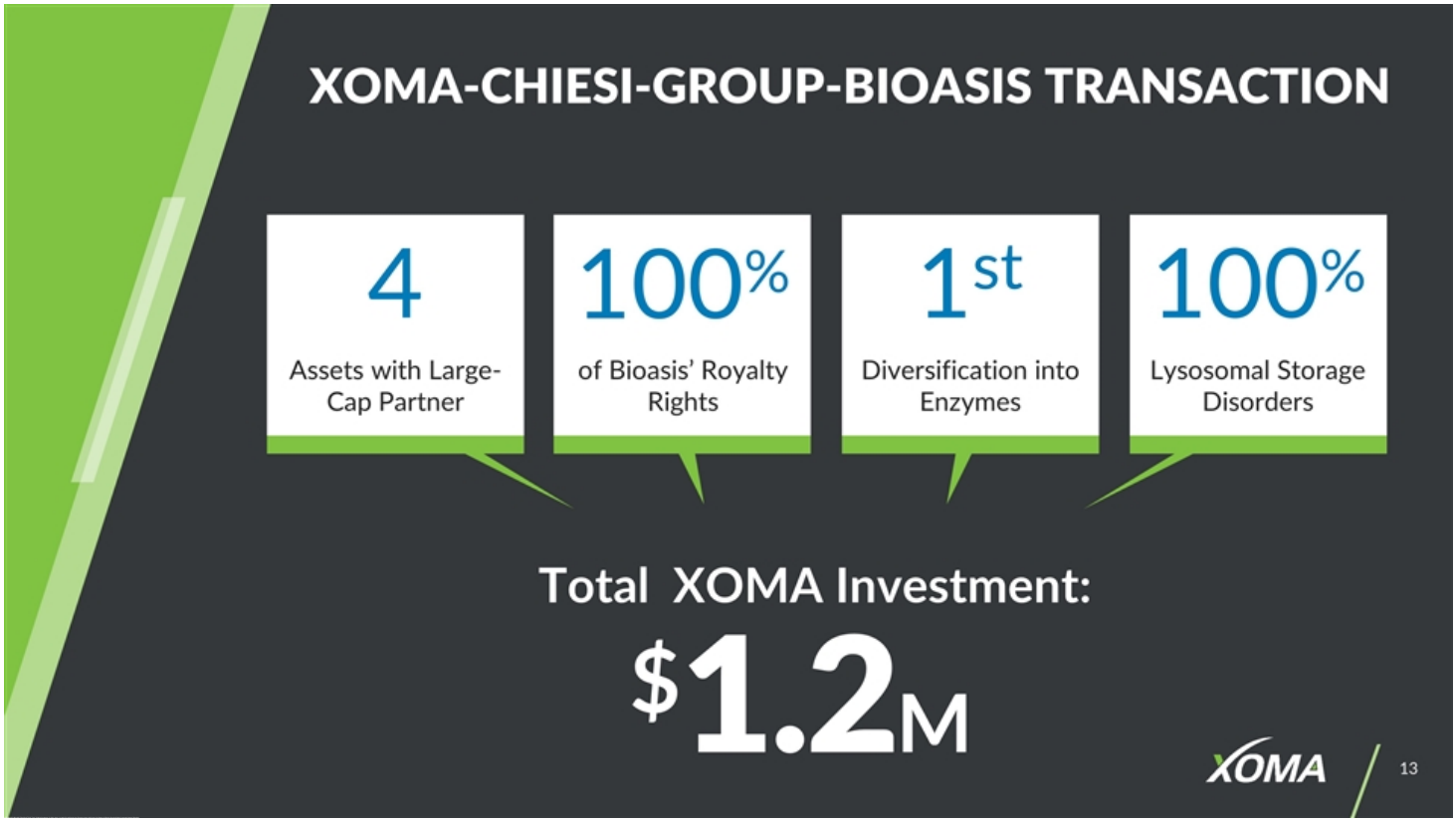
HIGH REVENUE POTENTIAL

High unmet need or clear clinical benefit over alternatives


XOMA-AGENUS TRANSACTION
7
Assets with Large-Cap Partners
33%
of Agenus' Royalty Interest
10%
of Future Milestones
100%
Immuno-Oncology Focus
Total XOMA Investment:
$15M
XOMA
10


XOMA-ARONORA TRANSACTION
2 OF 5
Assets with Large-Cap Partner
100%
of Aronora's Royalty Interest
10%
of Future Milestones
100%
Anti-Thrombotic Focus
Total XOMA Investment:
$9M
XOMA
11

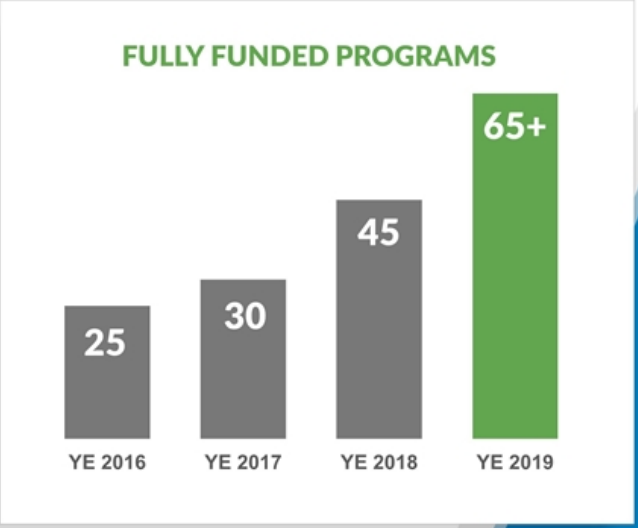

XOMA-PALOBIOFARMA TRANSACTION
1 OF 6
Assets with Large-Cap Partner
100%
Adenosine Receptor-Focused
1st
Diversification into Oral Compounds
100%
Clinical-Stage Assets
Total XOMA Investment:
$10M
XOMA
12


XOMA-CHIESI-GROUP-BIOASIS TRANSACTION
4
Assets with Large-Cap Partner
100%
of Bioasis' Royalty Rights
1st
Diversification into Enzymes
100%
Lysosomal Storage Disorders
Total XOMA Investment:
$1.2M
XOMA
13

THESE TRANSACTIONS HIT ALL OF THE KEY ATTRIBUTES OF XOMA TARGET ASSETS

PRE-COMMERCIAL THERAPEUTIC ASSETS	Phase 1, Phase 2 typically
LONG DURATION EXCLUSIVITY	Potentially 10 years post-commercialization
HIGH REVENUE POTENTIAL	Immuno-oncology, anti-thrombotics, COPD, NASH, LSDs
STRONG DEVELOPER/MARKETER	Incyte, Merck, Bayer, Novartis, Chiesi

MEASURING XOMA'S INTRINSIC VALUE TODAY

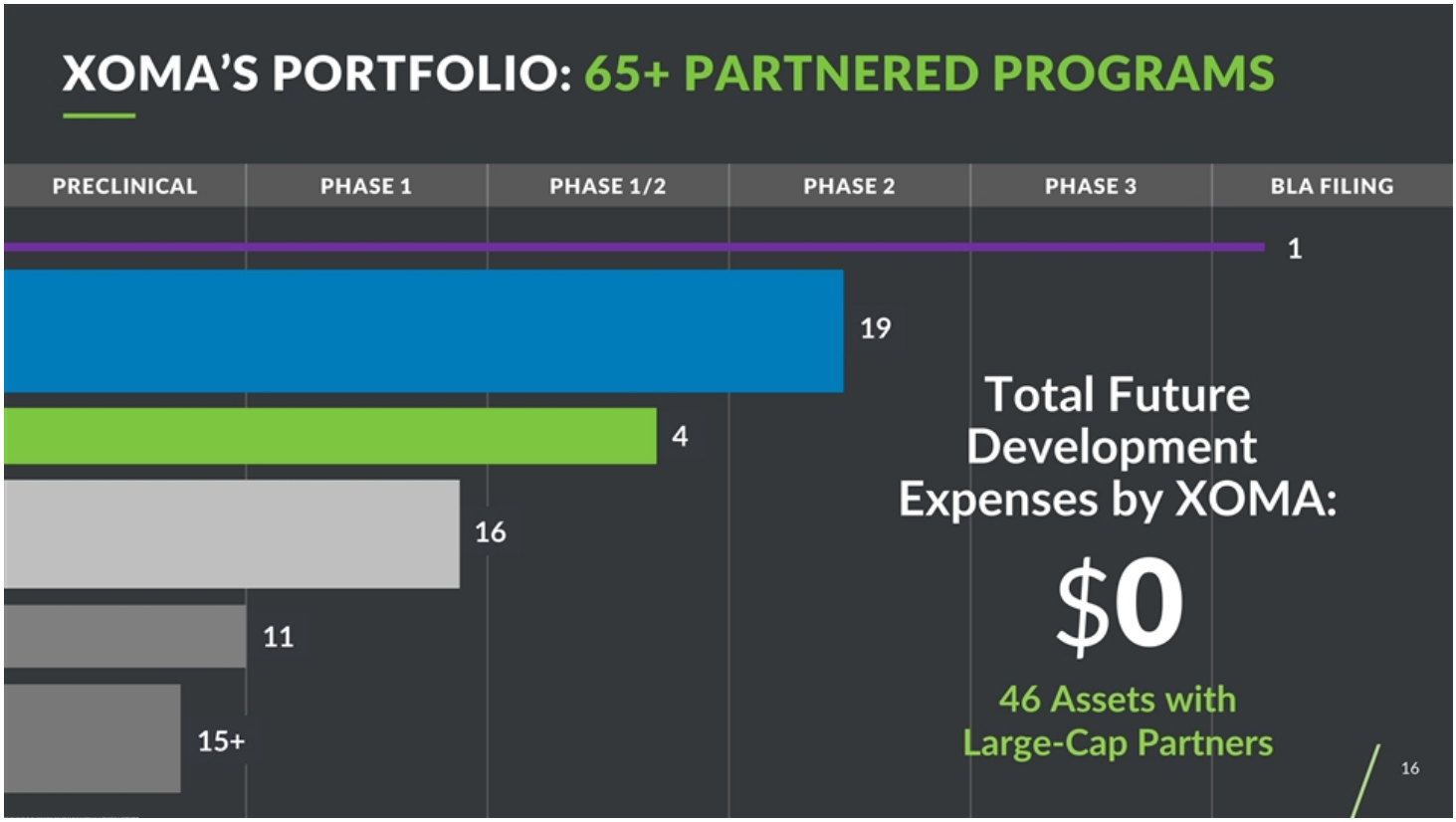


XOMA PORTFOLIO PROFILE

- 65+ assets and growing
- > 60% of assets in clinical-stage development
- Many with blockbuster revenue potential

TYPICAL XOMA ECONOMICS

- Development & Sales milestones
- Average royalty rate: ~2.5%
- Royalty term: 8 – 12 years post commercialization


XOMA'S PORTFOLIO: 65+ PARTNERED PROGRAMS
PRECLINICAL
PHASE 1
PHASE 1/2
PHASE 2
PHASE 3
BLA FILING
1
19
4
16
11
15+
Total Future Development Expenses by XOMA:
$0
46 Assets with Large-Cap Partners
16

SINCE 2017 STRATEGIC PIVOT, PORTFOLIO HAS SEEN 25 ADVANCEMENTS FROM PHASE TO PHASE

PROGRAM ADVANCEMENTS SINCE 2017

EXAMPLES OF CONDITIONS & DISEASES XOMA PARTNERS ARE PURSUING

Lupus Nephritis
Systemic Lupus Erythematosus
Kidney Transplant
Liver Transplant
Hidradenitis Suppurativa
Type 1 Diabetes
Sjögren's Syndrome
Graves' Disease
Myasthenia Gravis
Rheumatoid Arthritis
Congenital Hyperinsulinism
End Stage Renal Disease

Multiple Myeloma
Metastatic Solid Tumors
Prostate Cancer
Urothelial Cancer
Acute Myeloid Leukemia
Colorectal Cancer
Gastroesophageal Cancer
Renal Cancer
Non-Hodgkin Lymphoma
Triple-negative Breast Cancer
Non-small Cell Lung Cancer
Pancreatic Cancer

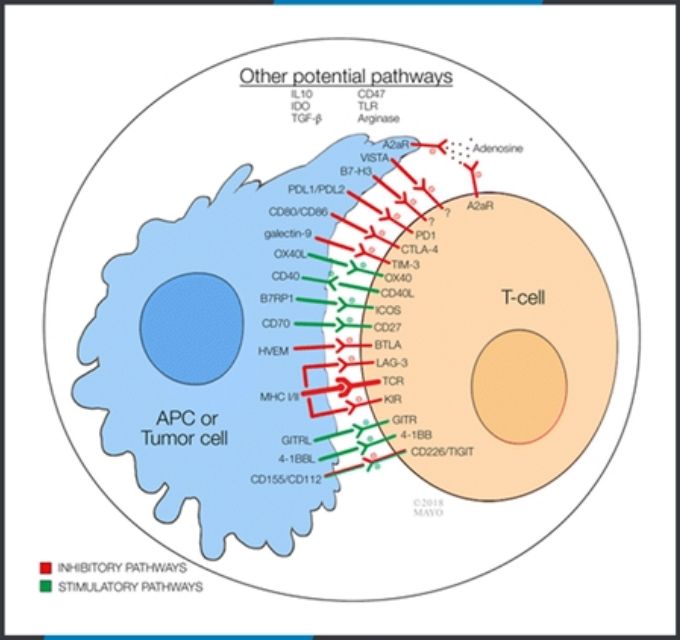
Squamous Cell Carcinoma
Non-muscle Invasive Bladder Cancer
Advanced Solid Tumors
Glioblastoma
Bladder Cancer
Thromboembolism
Myelofibrosis
Ulcerative Colitis
Generalized Myasthenia Gravis
Anti-Botulism
Asthma
Lysosomal Storage Disorders

CAPTURING IMMUNO-ONCOLOGY'S NEXT WAVE

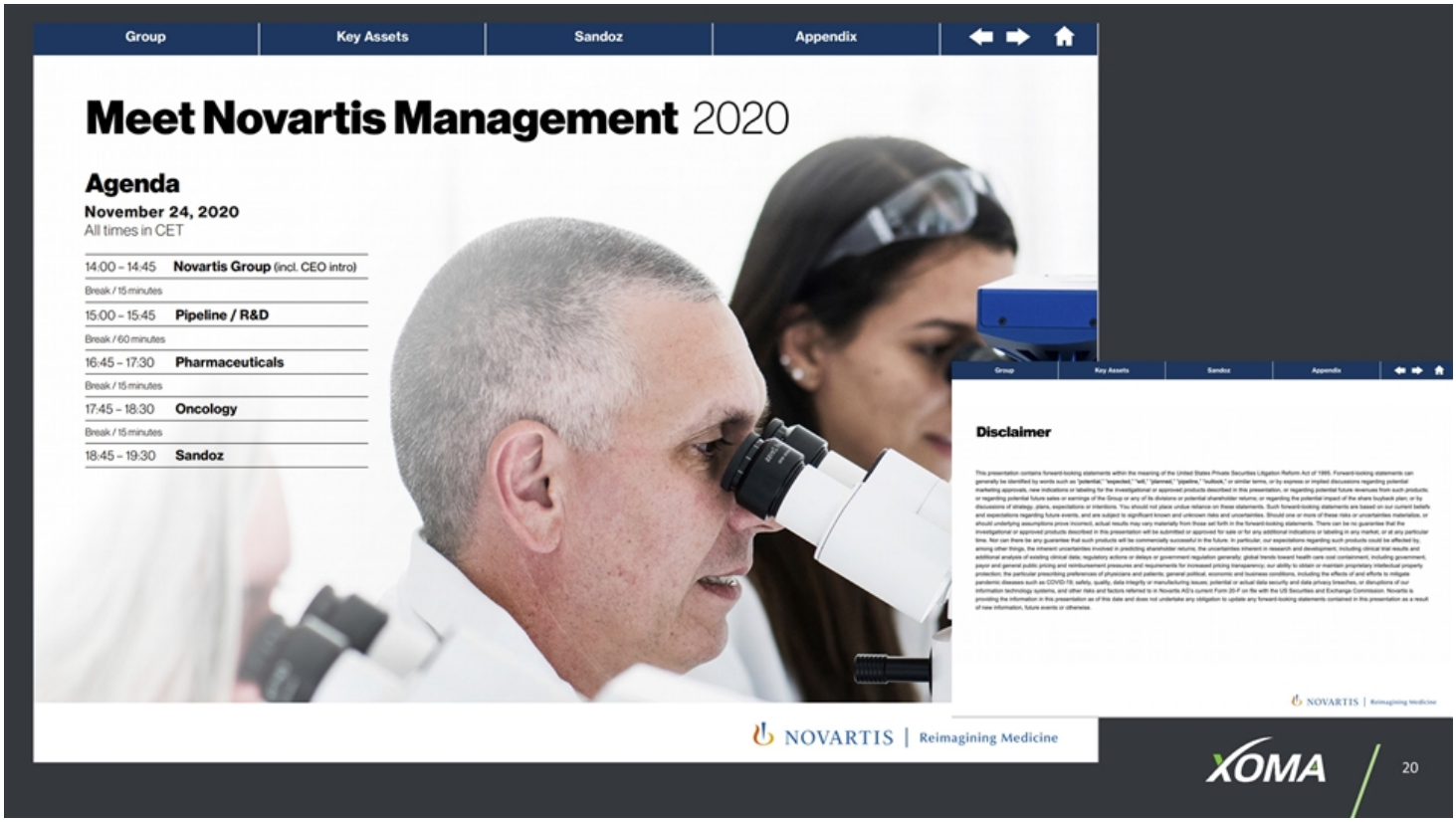
XOMA's current royalty portfolio covers

>90%

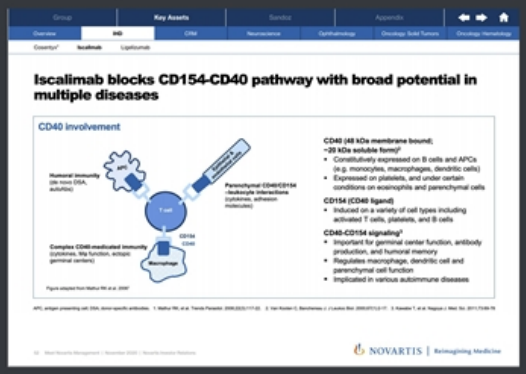
of the next generation of emerging and novel I-O targets

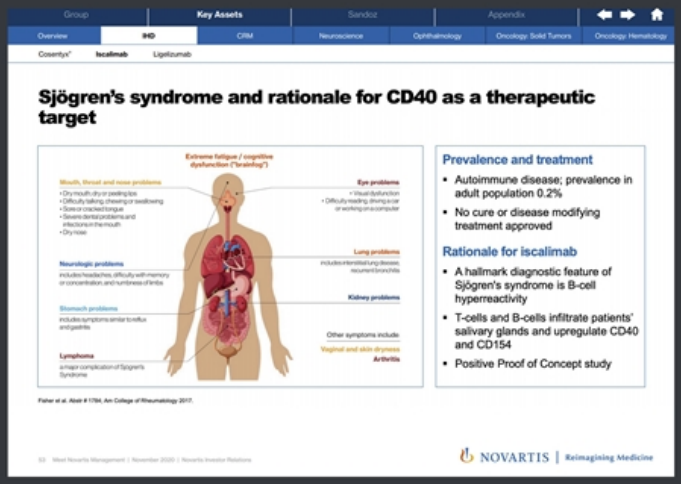


Reference: Marin-Acevedo, J.A., Dholaria, B., Soyano, A.E. *et al.* Next generation of immune checkpoint therapy in cancer: new developments and challenges. *J Hematol Oncol* **11**, 39 (2018)


Group
Key Assets
Sandoz
Appendix
Meet Novartis Management 2020
Agenda
November 24, 2020
All times in CET
14:00 – 14:45 Novartis Group (incl. CEO intro)
Break / 15 minutes
15:00 – 15:45 Pipeline / R&D
Break / 60 minutes
16:45 – 17:30 Pharmaceuticals
Break / 15 minutes
17:45 – 18:30 Oncology
Break / 15 minutes
18:45 – 19:30 Sandoz
NOVARTIS | Reimagining Medicine
Disclaimer
This presentation contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements can generally be identified by words such as "potential," "expected," "will," "planned," "pipeline," "outlook," or similar terms, or by express or implied discussions regarding potential marketing approvals, new indications or labeling for the investigational or approved products described in this presentation, or regarding potential future revenues from such products, or regarding potential future sales or earnings of the Group or any of its divisions or potential shareholder returns, or regarding the potential impact of the share buyback plan, or by discussions of strategy, plans, expectations or intentions. You should not place undue reliance on these statements. Such forward-looking statements are based on our current beliefs and expectations regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that the investigational or approved products described in this presentation will be submitted or approved for sale or for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that such products will be commercially successful in the future. In particular, our expectations regarding such products could be affected by, among other things, the inherent uncertainties involved in predicting shareholder returns, the uncertainties inherent in research and development, including clinical trial results and additional analysis of existing clinical data; regulatory actions or delays or government regulation generally; global trends toward health care cost containment, including government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; our ability to obtain or maintain proprietary intellectual property protection; the particular prescribing preferences of physicians and patients; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; safety, quality, data integrity or manufacturing issues; potential or actual data security and data privacy breaches, or disruptions of our information technology systems, and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this presentation as of this date and does not undertake any obligation to update any forward-looking statements contained in this presentation as a result of new information, future events or otherwise.
NOVARTIS | Reimagining Medicine
XOMA
20


Group
Key Assets
Sandoz
Appendix
Overview
IHD
CRM
Neuroscience
Ophthalmology
Oncology Solid Tumors
Oncology Hematology
Cosentyx®
Iscalimab
Ligelizumab
Iscalimab
(CFZ533)
Fully human monoclonal antibody blocking the CD154-CD40 pathway
Phase 2
Key highlights
• Iscalimab blocks CD154-CD40 pathway with broad potential in multiple diseases
• Positive Proof of Concept study in Sjögren's syndrome, the second most common rheumatic autoimmune disease after Rheumatoid Arthritis
• Positive Proof of Concept study in kidney transplantation, suggesting better renal function and pristine renal histology compared to current SoC
• Iscalimab has the opportunity to be first-in-class in solid organ transplantation and Sjögren's.
NOVARTIS | Reimagining Medicine

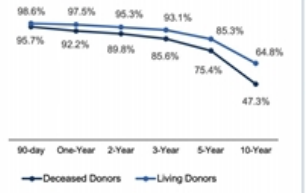

Group
Key Assets
Sandoz
Appendix
Overview
IHD
CRM
Neuroscience
Ophthalmology
Oncology Solid Tumors
Oncology Hematology
Cosentyx®
Iscalimab
Ligelizumab
Iscalimab blocks CD154-CD40 pathway with broad potential in multiple diseases
CD40 involvement
APC
T cell
Macrophage
CD154
CD40
Humoral immunity
Complex CD40-mediated immunity
Parenchymal CD40/CD154
CD40 (48 kDa membrane bound);
~20 kDa soluble form)2
• Constitutively expressed on B cells and APCs (e.g. monocytes, macrophages, dendritic cells)
• Expressed on platelets, and under certain conditions on eosinophils and parenchymal cells
CD154 (CD40 ligand)
• Induced on a variety of cell types including activated T cells, platelets, and B cells
CD40-CD154 signaling3
• Important for germinal center function, antibody production, and humoral memory
• Regulates macrophage, dendritic cell and parenchymal cell function
• Implicated in various autoimmune diseases
NOVARTIS | Reimagining Medicine


Group
Key Assets
Sandoz
Appendix
Overview
IHD
CRM
Neuroscience
Ophthalmology
Oncology Solid Tumors
Oncology Hematology
Cosentyx®
Iscalimab
Ligelizumab
Sjögren's syndrome and rationale for CD40 as a therapeutic target
Extreme fatigue / cognitive dysfunction ("brainfog")
Mouth, throat and nose problems
• Dry mouth, dry or peeling lips
• Difficulty talking, chewing or swallowing
• Sore or cracked tongue
• Severe dental problems and infections in the mouth
• Dry nose
Eye problems
• Visual dysfunction
• Difficulty reading, driving a car or working on a computer
Neurologic problems
includes headaches, difficulty with memory or concentration, and numbness of limbs
Lung problems
includes interstitial lung disease, recurrent bronchitis
Kidney problems
Stomach problems
includes symptoms similar to reflux and gastritis
Other symptoms include:
Vaginal and skin dryness
Arthritis
Lymphoma
a major complication of Sjögren's Syndrome
Prevalence and treatment
• Autoimmune disease; prevalence in adult population 0.2%
• No cure or disease modifying treatment approved
Rationale for iscalimab
• A hallmark diagnostic feature of Sjögren's syndrome is B-cell hyperreactivity
• T-cells and B-cells infiltrate patients' salivary glands and upregulate CD40 and CD154
• Positive Proof of Concept study
Fisher et al. Abstr # 1784, Am College of Rheumatology 2017.
NOVARTIS | Reimagining Medicine

Kidney and liver transplantation

Significant unmet need in transplantation to prolong graft survival and reduce side effects

Graft survival probabilities (%)



2018 USRDS Annual Data Report Reference Tables, adjusted for age, sex, race, ethnicity, and primary cause of ESRD. Graft survival is determined as the earliest occurrence of either death with graft function or graft failure requiring dialysis or re-transplant.

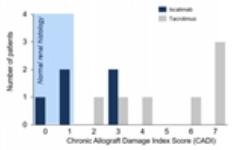
Challenges with existing standard of care, such as CNI-based therapies

Renal toxicity	Chronic toxicity → chronic dysfunction → return to dialysis
Cardio-metabolic complications	Frequent new-onset post-transplant diabetes, hypertension, increased cardio-vascular mortality
Insufficient graft protection	From recipient immune defense leading to progressive graft damage → return to dialysis
Cancers and infections	Cancers, bacterial and viral infections; complications due to (over-) immunosuppression

NOVARTIS | Reimagining Medicine

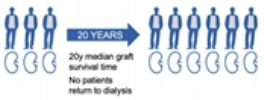
Potential to reimagine transplant with better graft protection and less toxicity

Superior graft quality with iscalimab[1]



Graft loss increases with CADI; after 3 years, the graft loss is[2]:

- CADI 0-1: 0%
- CADI 2-4: 5%
- CADI >4: 17%



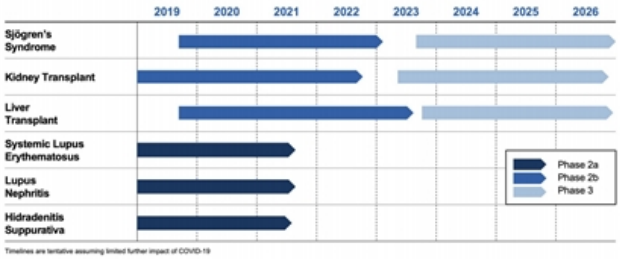
Extending graft survival translates into:

- More organs available for more patients
- Fewer patients on dialysis
- Higher QoL and fewer patients dying

1. Farkash et al, Am Transplant Congress 2019. 2. Yilmaz et al 2003, J Am Soc Nephrol 14: 773-779.

NOVARTIS | Reimagining Medicine

Advancing iscalimab in a range of indications through 2020-26



Timelines are tentative assuming limited further impact of COVID-19

NOVARTIS | Reimagining Medicine

Prevalent and incident patient populations

Market potential
in G7 countries

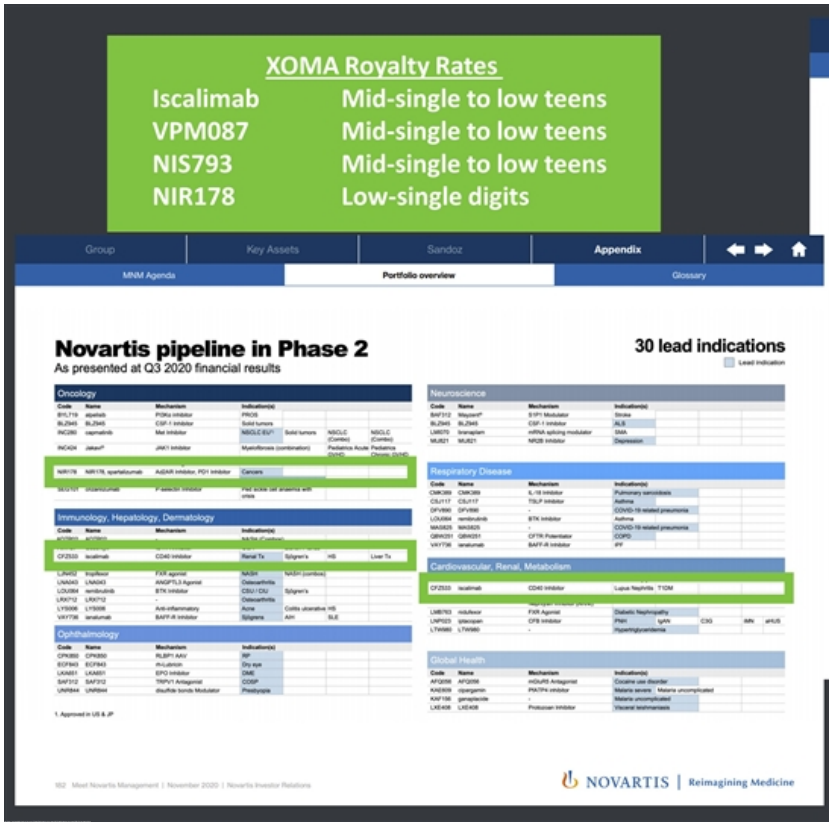
Indication	Prevalence	Incidence
Sjögren's Syndrome[1]	950,000+	
Kidney transplantation[2]	500,000+	40,000+
Liver transplantation[3]	300,000+	15,000+
Systemic Lupus Erythematosus[4]	500,000+	
Lupus Nephritis[5]	180,000+	
Hidradenitis Suppurativa[6]	~3m (150,000+ Hurley stage II and III)	

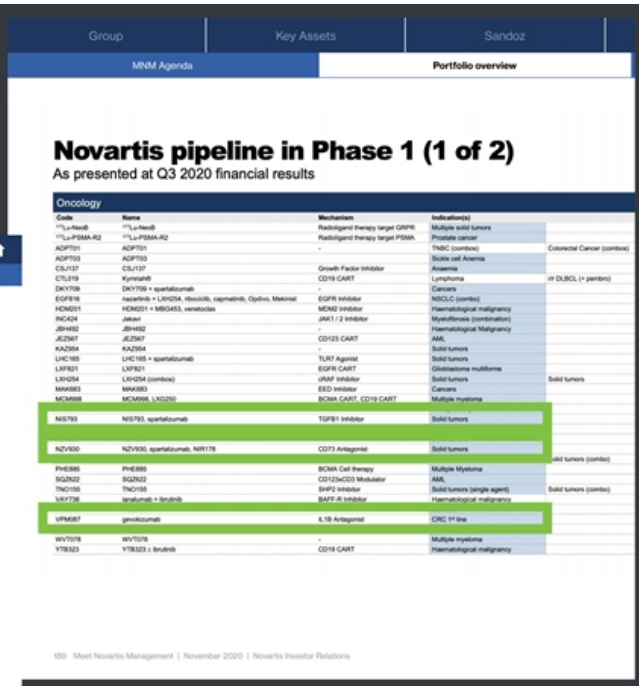
1. Data monitor Healthcare Report 2018; BMJ Best Practice, 2017; Comez & Chiche, 2015; Maciel et al., 2017; Patel & Shaharia, 2014 ; Kantar Health report 2014. 2. Prevalence: Novartis internal estimate; incidence: US – unos.org, EU/global - European Commission Transplant Newsletter 2020. 3. Prevalence: Novartis internal estimate; incidence: US - unos.org, EU/global - European Commission Transplant Newsletter 2020. 4. DRG Lupus Nephritis Disease report, Novartis internal analysis, SLE prevalence based on clinical definition (ACR/eli or 3 with LN confirmed biopsy or ESRD diagnosis). 5. DRG Lupus Nephritis Disease report, Novartis internal analysis. 6. Phan K et al. Biomedical Dermatology 2020; Primary Market Research.

NOVARTIS | Reimagining Medicine

XOMA Royalty Rates

Iscalimab	Mid-single to low teens
VPM087	Mid-single to low teens
NIS793	Mid-single to low teens
NIR178	Low-single digits





XOMA'S PORTFOLIO: KEY HIGHLIGHTS

(Does not include all assets, including certain assets subject to confidentiality agreements)

PARTNER	ASSET NAME	TARGET	ROYALTY RATE
Bayer	BAY1213790 (osocimab)	Factor XIa	Low single-digit
Bayer	BAY1831865	Factor XI	Low single-digit
Chiesi Group	undisclosed	Lysosomal storage disorders	Low single-digit
Incyte	INCAGN1876	GITR	Mid-single-digit
Incyte	INCAGN1949	OX-40	Mid-single-digit
Incyte	INCAGN02390	TIM-3	Low to mid-single-digit
Incyte	INCAGN2385	LAG-3	Low to mid-single-digit
Janssen Biotech	JNJ-63723283 (cetrelimab)	PD-1	0.75%
Janssen Biotech	JNJ-55920839	IFN	0.75%
Janssen Biotech	JNJ-63709178	CD123xCD3	0.75%
Janssen Biotech	JNJ-63898081	PSMA	0.75%
Janssen Biotech	JNJ-64232025	CD154	0.75%
Janssen Biotech	undisclosed	GPRC5DxCD3	0.75%
Merck	MK-4830	ILT-4	Low single-digit
Novartis	CFZ533 (iscalimab)	CD-40	Mid-single-digit to low-teens
Novartis	VPM087 (gevokizumab)	IL-1ß	High single-digit to mid-teens
Novartis	NIS793	TGFß	Mid-single digit to low teens
Novartis	NIR178	adenosine A2A	Low single-digit
Takeda	Mezagitamab (TAK-079)	CD-38	4%
Takeda (Molecular Templates)	TAK-169	CD-38	4%

PARTNER	ASSET NAME	TARGET	ROYALTY RATE
Alligator Bioscience (Janssen)	JNJ-64457107 (mitazalimab)	CD40	0.75%
Aronora	AB002 (ProCase)	E-WE thrombin	Low single-digit
Aronora	AB023 (xisomab 3G3)	Factor XI	Low single-digit
Aronora	AB054	Factor XII	Low single-digit
AVEO	AV-299 (ficlatuzumab)	Anti-HGF	Low single-digit
Compugen	COM902	TIGIT	Low single-digit
Margaux Biologics	rBPI-21 (XOMA 629)	BPI	Low to mid-single-digit
Ology Bioservices	NTM-1631, NTM-1632, NTM-1633, NTM-1634	Botulinum neurotoxins	15%
Palobiofarma	PBF-680	adenosine A1	Low single-digit
Palobiofarma	PBF-677	adenosine A3	Low single-digit
Palobiofarma	PBF-999	adenosine A2A / Phosphodiesterase 10 (PDE-10)	Low single-digit
Palobiofarma	PBF-1129	adenosine A2B	Low single-digit
Palobiofarma	PBF-1650	adenosine A3	Low single-digit
Rezolute	RZ358	INSR	High single-digit to mid-teens
Rezolute	RZ402	Kallikrein Inhibitor	Low single-digit
Sesen Bio (Formerly Eleven Bio & Viventia)	Vicineum™	EpCAM antigens	0.875%

> $1 billion in potential milestones

XOMA'S SIGNIFICANT ROYALTY REVENUE POTENTIAL

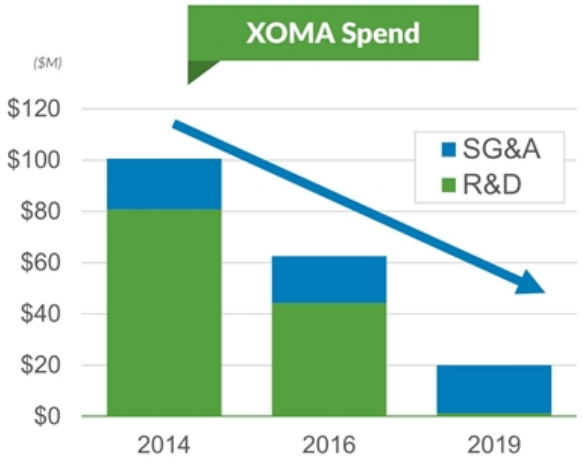
ASSETS BY PROJECTED PEAK SALES POTENTIAL

Royalty Rate at Projected Peak Sales	< $500M	$500M - $1B	≥ $1B
< 2.5%	20+	15	11
2.5% - 7.5%	4	4	8
7.5% - 15%	1	1	3
	13 of 25+ with large-cap partners	**13 of 20** with large-cap partners	**18 of 22** with large-cap partners

Example: If a partnered product were to achieve $1B in annual sales, and XOMA held a 3% royalty on that product, XOMA would receive $30M annual royalty revenue plus any interim revenue from development & regulatory milestones

STRATEGY REQUIRES 2 THINGS

1. **PATIENCE** - PROVIDE TIME FOR UNDERLYING DRUG ASSETS TO ADVANCE THROUGH YEARS OF DISCOVERY, DEVELOPMENT AND APPROVAL
2. **LEAN INFRASTRUCTURE** - MINIMIZE COSTS



RECENT HIGHLIGHTS

OPERATIONAL

- **Partner-driven financial events**
  - $25M from Novartis, blend of cash and debt reduction
  - Accelerated $1.4M in payments from Rezolute
  - $2M milestone from Takeda, $1M from Merck
- **Increased number of royalty licenses by >40% since 3Q18**
  - Acquired milestone & royalty interests in 7 partnered assets, 8 unpartnered assets, future assets from 2 technology platforms
  - Licensed XOMA's IL-2 mAb to Zydus for development and commercialization rights in India, Mexico, and Brazil
- **Added Natasha A. Hernday to Board of Directors**

PARTNERS & PARTNERED ASSETS

- **Novartis**
  - Dosed **NIS793 (anti-TGFβ mAb)** in first metastatic pancreatic cancer patient – launch of Phase 2 development
  - Launched **gevokizumab** development in oncology
  - Conducting multiple **iscalimab** (CFZ533) Phase 2 trials
- **Takeda**
  - Launched **mezagitamab (TAK-079)** Phase 2 program - myasthenia gravis and thrombocytopenia studies
- **Merck**
  - Commenced **MK-4830** Phase 2 development with NSCLC study
- **Bayer**
  - Initiated Phase 2 **osocimab** (BAY1213790) study in kidney failure setting
- **Sesen Bio & Vicineum™** for the treatment of BCG-unresponsive non-muscle invasive bladder cancer
  - Initiated rolling BLA in Dec 2019
- **Ology Bioservices** awarded DoD contract to advance anti-botulinum neurotoxin monoclonal antibodies

LOOKING AHEAD

OPERATIONAL

- **Acquire additional milestone and royalty interest assets to continue to grow the portfolio**
- **Maintain lean cost infrastructure and financial discipline**
  - Current balance sheet sufficient to fund operations for multiple years
  - ~$1M per month core G&A expense

PARTNERS & PARTNERED ASSETS

NOVARTIS
Iscalimab data readouts – multiple Phase 2 studies

NOVARTIS
Gevokizumab advancing to Phase 2

SESEN BIO
Completed BLA Filing / PDUFA date

Study Initiations & Results

Data Presentations / Publications

WHY XOMA'S PORTFOLIO IS VALUABLE

- XOMA holds **65+ current assets**; pharmaceutical **partners fund research & development and cover 100% of costs**
- XOMA sources **royalty rights** through deep industry network
- XOMA constructs an increasingly **diverse and expanding portfolio** to increase odds of success and mitigate binary risk
- XOMA has **low-cost infrastructure**; future potential **revenues largely fall to bottom line**