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): **November 27, 2021**

Blueprint Medicines Corporation

(Exact name of registrant as specified in its charter)

Delaware	**001-37359**	**26-3632015**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

45 Sidney Street **Cambridge, Massachusetts**	**02139**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(617) 374-7580**

(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))

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. ☐

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common stock, par value $0.001 per share	BPMC	Nasdaq Global Select Market

Item 1.01 Entry into a Material Definitive Agreement.

On November 27, 2021, Blueprint Medicines Corporation, a Delaware corporation (the "Company"), entered into an Agreement and Plan of Merger (the "Merger Agreement") with Pavonis Merger Subsidiary, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Merger Sub"), Lengo Therapeutics, Inc., a Delaware corporation ("Lengo") and Fortis Advisors LLC, a Delaware limited liability company, as the representative of the Lengo Securityholders (as defined below). The Merger Agreement provides that, upon the terms and subject to the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Lengo, with Lengo continuing as the surviving entity and a wholly-owned subsidiary of the Company (the "Merger"). The Boards of Directors of the Company, Lengo, and Merger Sub and the stockholders of Lengo have approved the Merger Agreement and the transactions contemplated thereby.

Subject to the terms and conditions of the Merger Agreement, the Company has agreed to pay upfront merger consideration of $250 million in cash (the "Upfront Merger Consideration") to Lengo stockholders and optionholders (collectively, the "Lengo Securityholders"). The Merger Agreement also provides that the Company shall pay future contingent cash milestone payments of up to $215 million in the aggregate to the Lengo Securityholders upon the achievement of specified regulatory approval and sales milestones. The Upfront Merger Consideration is subject to customary net indebtedness, transaction expenses, and other adjustments, as set forth in the Merger Agreement.

The Merger Agreement contains customary representations, warranties and covenants of the parties, including, among others, covenants by Lengo with respect to its operations during the period between execution of the Merger Agreement and the closing of the Merger. The Merger Agreement also provides that approximately $25 million of the Upfront Merger Consideration will be placed into a third party escrow account (the "Indemnification Escrow") to secure the Lengo Securityholders' obligations to indemnify the Company for certain matters, including breaches of representations and warranties, covenants included in the Merger Agreement, payments made by the Company to dissenting stockholders, specified tax claims, excess parachute claims, purchase price adjustments, and other customary matters, subject to certain specified limitations, including, among other things, limitations on the period during which the Company may make certain claims for indemnification and limitations on the amounts for which the Lengo Securityholders may be liable.

The closing of the Merger is conditioned upon, among other things, the expiration of the applicable waiting period (and any extension thereof) under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 laws and other customary closing conditions. The Merger Agreement provides for limited termination rights, including, among others, by the mutual consent of the Company and Lengo, upon certain breaches of representations, warranties, covenants or agreements, and in the event the Merger has not been consummated before March 27, 2022, subject to the ability to extend under certain circumstances.

The foregoing description of the Merger Agreement, the Merger and the other transactions contemplated thereby is not complete and is subject to and qualified in its entirety by reference to the Merger Agreement, a copy of which will be filed as an exhibit to the earlier of the Current Report on Form 8-K that the Company will file with the Securities and Exchange Commission following the closing of the Merger and the Company's next Annual Report on Form 10-K.

The foregoing description of the Merger Agreement has been included to provide investors and security holders with information regarding its terms. It is not intended to provide any other financial information about the Company, Lengo, or their respective subsidiaries and affiliates. The representations, warranties and covenants contained in the Merger Agreement were made only for purposes of that agreement and as of specific dates, were solely for the benefit of the parties to the Merger Agreement, may be subject to limitations agreed upon by the parties, including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Merger Agreement instead of establishing these matters as facts, and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors. Investors are not third-party beneficiaries of these representations, warranties and covenants and should not rely thereon or on any description thereof as characterizations of the actual state of facts or condition of the Company, Lengo, or any of their respective subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations, warranties and covenants may change after the date of the Merger Agreement, which subsequent information may or may not be fully reflected in public disclosures by the Company.

Item 7.01 Regulation FD Disclosure.

On November 29, 2021 the Company issued a press release announcing the execution of the Merger Agreement. A copy of the press release is furnished as Exhibit 99.1. On November 29, 2021, the Company held an investor presentation regarding the Merger and the execution of the Merger Agreement, a copy of which is furnished as Exhibit 99.2.

The information in this Item 7.01 of this Form 8-K and the Exhibit 99.1 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall any of it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Forward-Looking Statements

This Current Report on Form 8-K forward-looking statements, which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding the timing of the consummation of the Merger. These statements are neither promises nor guarantees, and are subject to a variety of risks and uncertainties, many of which are beyond the control of the Company, which could cause actual results to differ materially from those contemplated in these forward-looking statements. In particular, the risks and uncertainties include, among other things, the risk that the conditions to the Merger will not be satisfied and the Merger does not close. For additional disclosure regarding these and other risks faced by the Company, see the disclosures contained in the Company's Quarterly Report on Form 10-Q for the three months ended September 30, 2021, on file with the Securities and Exchange Commission and the other reports that the Company periodically files with the Securities and Exchange Commission. Actual results may differ materially from those contemplated by these forward-looking statements. These forward looking statements reflect management's current views and the Company does not undertake to update any of these forward-looking statements to reflect a change in its views or events or circumstances that occur after the date hereof except as required by law.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release, dated November 29, 2021.
99.2	Investor Presentation, dated November 29, 2021.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and incorporated as Exhibit 101)

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.

BLUEPRINT MEDICINES CORPORATION

Date: November 29, 2021

By: /s/ Jeffrey W. Albers
Jeffrey W. Albers
Chief Executive Officer

Exhibit 99.1

Blueprint Medicines to Expand Precision Therapy Leadership in Lung Cancer with Acquisition of Lengo Therapeutics

-- Adds LNG-451, a highly selective brain-penetrant precision therapy targeting EGFR exon 20 insertion mutations, to Blueprint Medicines' lung cancer pipeline

-- Lengo Therapeutics on track to submit IND to FDA for LNG-451 by the end of 2021

-- Lengo Therapeutics to be acquired for $250 million in cash plus $215 million in future potential payments based on the achievement of certain approval and sales-based milestones

-- Blueprint Medicines to host investor conference call and webcast today at 8:30 a.m. ET

CAMBRIDGE, Mass. and San Diego, Calif., Nov. 29, 2021 /PRNewswire/ -- Blueprint Medicines Corporation (NASDAQ: BPMC) today announced that the company has entered into a definitive agreement under which it will acquire Lengo Therapeutics, a privately held precision oncology company, for $250 million in cash plus up to $215 million in additional potential payments based on the achievement of certain regulatory approval and sales-based milestones.

The acquisition includes Lengo Therapeutics' lead compound LNG-451, a potential best-in-class oral precision therapy in development for the treatment of non-small cell lung cancer (NSCLC) in patients with EGFR exon 20 insertion mutations. Preclinical data show LNG-451 potently inhibits all common EGFR exon 20 insertion variants with marked selectivity over wild-type EGFR and off-target kinases. In addition, LNG-451 is highly brain-penetrant and has demonstrated compelling activity in a preclinical intracranial disease model.

Based on these and other preclinical data, Lengo Therapeutics anticipates it will submit an investigational new drug (IND) application for LNG-451 to the U.S. Food and Drug Administration (FDA) in December 2021.

"Our acquisition of Lengo Therapeutics deepens our commitment to advancing precision oncology therapies and specifically expands our opportunity to transform treatment for patients with EGFR-driven lung cancer," said Jeff Albers, Chief Executive Officer of Blueprint Medicines. "The Lengo team has done tremendous work in designing a highly selective therapeutic candidate tailored to the needs of patients with EGFR exon 20 lung cancer, including features with the potential to enable treatment or prevention of brain metastases. With our integrated precision therapy research, development and commercial capabilities, Blueprint Medicines is perfectly positioned to carry forward this compound into the clinic and deliver on our goal to meaningfully advance care for NSCLC patients with EGFR exon 20 insertion mutations."

"With a proven track record of developing and delivering precision therapies for patients with significant medical needs and a compelling lung cancer portfolio, Blueprint Medicines is unique in its abilities to quickly progress LNG-451," said Enoch Kariuki, Chief Executive Officer of Lengo Therapeutics. "From our inception, the Lengo Therapeutics team has focused on generating best-in-class compound profiles, prioritizing those with brain penetration along with high potency and selectivity, like LNG-451. I am incredibly proud of the team for getting us to this point and excited to see the programs continue under Blueprint Medicines' leadership."

With the addition of LNG-451, Blueprint Medicines will have three investigational compounds, each with best-in-class potential, that cover the majority of all activating mutations in EGFR, the second most common oncogenic driver in NSCLC.[1] Approximately 12 percent of activating EGFR mutations are exon 20 insertions and significant medical need remains for patients harboring these mutations, including new treatment options with improved tolerability, combinability and enhanced brain penetration to treat or prevent brain metastases.[1]

The acquisition also brings additional undisclosed preclinical precision oncology programs and research tools, including a catalog of covalent, highly brain penetrant kinase inhibitors that Blueprint Medicines plans to add to its proprietary compound library to further enable future drug discovery efforts.

Blueprint Medicines anticipates the acquisition will close in the fourth quarter of 2021, subject to certain conditions, including the expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act and other customary conditions.

Goldman Sachs & Co. LLC is acting as financial advisor to Blueprint Medicines and Goodwin Procter LLP is acting as its legal counsel. Centerview Partners LLC is acting as financial advisor to Lengo Therapeutics and Cooley LLP is acting as its legal counsel.

Conference Call Information

Blueprint Medicines will host a live webcast beginning at 8:30 a.m. ET today to discuss the planned acquisition of Lengo Therapeutics. To access the live call, please dial 844-200-6205 (domestic) or 929-526-1599 (international) and refer to conference ID 936793. A webcast of the conference call will be available under "Events and Presentations" in the Investors & Media section of Blueprint Medicines' website at http://ir.blueprintmedicines.com. The archived webcast will be available on Blueprint Medicines' website approximately two hours after the conference call and will be available for 90 days following the call.

About Blueprint Medicines’ EGFR Development Program

Derived from Blueprint Medicines’ proprietary research platform, BLU-945 and BLU-701 are investigational next-generation EGFR non-covalent tyrosine kinase inhibitors. Both treatments are specifically designed to provide comprehensive coverage of the most common activating and on-target resistance mutations, spare wild-type EGFR and other kinases to limit off-target toxicities and enable a range of combination strategies, and treat or prevent central nervous system metastases. BLU-945 is currently being evaluated in the Phase 1/2 SYMPHONY trial in patients with previously treated EGFR-driven NSCLC (NCT04862780). In addition, Blueprint Medicines plans to initiate a Phase 1/2 trial of BLU-701 in the fourth quarter of 2021.

About Lengo Therapeutics

Lengo Therapeutics is a biopharmaceutical company committed to developing novel, small molecule precision therapeutics that target driver mutations in oncology. Lengo Therapeutics’ team is comprised of scientists and industry leaders with extensive expertise in kinase biology, covalent drug-target technology, and oncology drug development. The company’s initial focus is on developing inhibitors of protein kinases with mutations known as EGFR exon 20 insertions which are associated with poor prognoses in non-small cell lung cancer and other solid tumors. Lengo Therapeutics is based in San Diego and is backed by Frazier Healthcare Partners and Velosity Capital.

About Blueprint Medicines

Blueprint Medicines is a global precision therapy company that invents life-changing therapies for people with cancer and hematologic disorders. Applying an approach that is both precise and agile, we create medicines that selectively target genetic drivers, with the goal of staying one step ahead across stages of disease. Since 2011, we have leveraged our research platform, including expertise in molecular targeting and world-class drug design capabilities, to rapidly and reproducibly translate science into a broad pipeline of precision therapies. Today, we are delivering approved medicines directly to patients in the United States and Europe, and we are globally advancing multiple programs for genomically defined cancers, systemic mastocytosis, and cancer immunotherapy. For more information, visit www.BlueprintMedicines.com and follow us on Twitter (@BlueprintMeds) and LinkedIn.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, express or implied statements regarding plans, strategies, timelines and expectations for Blueprint Medicines' current or future approved drugs and drug candidates, including timelines for marketing applications and approvals, the initiation of clinical trials or the results of ongoing and planned clinical trials; Blueprint Medicines' plans, strategies and timelines to nominate development candidates; plans and timelines for additional marketing applications for avapritinib and pralsetinib and, if approved, commercializing avapritinib and pralsetinib in additional geographies or for additional indications; the potential benefits of any of Blueprint Medicines' current or future approved drugs or drug candidates in treating patients; the potential benefits of Blueprint Medicines' collaborations; timelines and expectations for the proposed acquisition (including future performance and revenue); and Blueprint Medicines' strategy, goals and anticipated financial performance, milestones, business plans and focus. The words "aim," "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to the impact of the COVID-19 pandemic to Blueprint Medicines' business, operations, strategy, goals and anticipated milestones, including Blueprint Medicines' ongoing and planned research and discovery activities, ability to conduct ongoing and planned clinical trials, clinical supply of current or future drug candidates, commercial supply of current or future approved products, and launching, marketing and selling current or future approved products; Blueprint Medicines' ability and plans in continuing to establish and expand a commercial infrastructure, and successfully launching, marketing and selling current or future approved products; Blueprint Medicines' ability to successfully expand the approved indications for AYVAKIT/AYVAKYT and GAVRETO or obtain marketing approval for AYVAKIT/AYVAKYT in additional geographies in the future; the delay of any current or planned clinical trials or the development of Blueprint Medicines' current or future drug candidates; Blueprint Medicines' advancement of multiple early-stage efforts; Blueprint Medicines' ability to successfully demonstrate the safety and efficacy of its drug candidates and gain approval of its drug candidates on a timely basis, if at all; the preclinical and clinical results for Blueprint Medicines' drug candidates, which may not support further development of such drug candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials; Blueprint Medicines' ability to obtain, maintain and enforce patent and other intellectual property protection for AYVAKIT/AYVAKYT, GAVRETO or any drug candidates it is developing; Blueprint Medicines' ability to develop and commercialize companion diagnostic tests for AYVAKIT/AYVAKYT, GAVRETO or any of its current and future drug candidates; Blueprint Medicines' ability to complete the proposed acquisition in a timely manner or at all; the occurrence of any event, change or other circumstances that could give rise to the termination of the proposed acquisition; and the success of Blueprint Medicines' current and future collaborations, partnerships or licensing arrangements. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in Blueprint Medicines' filings with the Securities and Exchange Commission (SEC), including Blueprint Medicines' most recent Annual Report on Form 10-K, as supplemented by its most recent Quarterly Report on Form 10-Q and any other filings that Blueprint Medicines has made or may make with the SEC in the future. Any forward-looking statements contained in this press release represent Blueprint Medicines' views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Except as required by law, Blueprint Medicines explicitly disclaims any obligation to update any forward-looking statements.

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[1] Riess JW, Gandara DR, Frampton GM, et al. “Diverse EGFR Exon 20 Insertions and Co-Occurring Molecular Alterations Identified by Comprehensive Genomic Profiling of NSCLC”. J Thorac Oncol. 2018;13(10):1560-1568. doi:10.1016/j.jtho.2018.06.019

Exhibit 99.2


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ADVANCING SCIENCE
10
CHANGING LIVES
Celebrating our first decade
of innovation in precision medicine
Expanding our transformative lung cancer pipeline
Blueprint Medicines investor call to discuss planned acquisition of Lengo Therapeutics
NOVEMEBER 29, 2021
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Forward-looking statements

This presentation contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. The words "aim," "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. In this presentation, forward-looking statements include, without limitation, express or implied statements regarding plans, strategies, timelines and expectations for the current or future approved drugs and drug candidates of Blueprint Medicines Corporation (the "Company"), including timelines for marketing applications and approvals, the initiation of clinical trials or the results of ongoing and planned clinical trials; the Company's plans, strategies and timelines to nominate development candidates; plans and timelines for additional marketing applications for avapritinib and pralsetinib and, if approved, commercializing avapritinib and pralsetinib in additional geographies or for additional indications; the potential benefits of any of the Company's current or future approved drugs or drug candidates in treating patients; timelines and expectations for the proposed acquisition (including future performance and revenue); and the Company's financial performance, strategy, goals and anticipated milestones, business plans and focus.

The Company has based these forward-looking statements on management's current expectations, assumptions, estimates and projections. If such expectations, assumptions, estimates and projections do not fully materialize or prove incorrect, the events or circumstances referred to in the forward-looking statements may not occur. While the Company believes these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks, uncertainties and other important factors, many of which are beyond the Company's control and may cause actual results, performance or achievements to differ materially from those expressed or implied by any forward-looking statements. These risks and uncertainties include, without limitation, risks and uncertainties related to the impact of the COVID-19 pandemic to the Company's business, operations, strategy, goals and anticipated milestones, including the Company's ongoing and planned research and discovery activities, ability to conduct ongoing and planned clinical trials, clinical supply of current or future drug candidates, commercial supply of current or future approved drugs, and launching, marketing and selling current or future approved drugs; the Company's ability and plans in establishing a commercial infrastructure, and successfully launching, marketing and selling current or future approved products; the Company's ability to successfully expand the approved indications for AYVAKIT™/AYVAKYT® (avapritinib) and GAVRETO™ (pralsetinib) or obtain marketing approval for AYVAKIT/AYVAKYT in additional geographies in the future; the delay of any current or planned clinical trials or the development of the Company's drug candidates or the licensed drug candidate; the Company's advancement of multiple early-stage efforts; the Company's ability to successfully demonstrate the efficacy and safety of its drug candidates and gain approval of its drug candidates on a timely basis, if at all; the preclinical and clinical results for the Company's drug candidates, which may not support further development of such drug candidates; actions or decisions of regulatory agencies or authorities, which may affect the initiation, timing and progress of clinical trials or marketing applications; the Company's ability to obtain, maintain and enforce patent and other intellectual property protection for AYVAKIT/AYVAKYT, GAVRETO or any drug candidates it is developing; the Company's ability to develop and commercialize companion diagnostic tests for any of the Company's current or future approved drugs or drug candidates; the Company's ability to complete the proposed acquisition in a timely manner or at all; the occurrence of any event, change or other circumstances that could give rise to the termination of the proposed acquisition; and the success of the Company's current and future collaborations, partnerships and licenses. These and other risks and uncertainties are described in greater detail under "Risk Factors" in the Company's filings with the Securities and Exchange Commission ("SEC"), including its most recent Annual Report on Form 10-K, as supplemented by its most recent Quarterly Report on Form 10-Q, and any other filings it has made or may make with the SEC in the future. The Company cannot guarantee future results, outcomes, levels of activity, performance, developments, or achievements, and there can be no assurance that its expectations, intentions, anticipations, beliefs, or projections will result or be achieved or accomplished. The forward-looking statements in this presentation are made only as of the date hereof, and except as required by law, the Company undertakes no obligation to update any forward-looking statements contained in this presentation as a result of new information, future events or otherwise. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements.

This presentation also contains estimates, projections and other statistical data made by independent parties and by the Company relating to market size and growth and other data about the Company's industry. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of the Company's future performance and the future performance of the markets in which the Company operates are necessarily subject to a high degree of uncertainty and risk.

Blueprint Medicines to acquire Lengo Therapeutics

- Expands our transformative pipeline for patients with non-small cell lung cancer
- Adds potential best-in-class, IND-ready EGFR exon 20 precision therapy
- Leverages our integrated precision therapy business to maximize patient impact

$250M purchase price plus $215M in potential regulatory approval and sales-based milestone payments

IND, investigational new drug application.

LNG-451 is highly complementary to our lung cancer pipeline

	Therapeutic targets in NSCLC	Program status
GAVRETO (pralsetinib)	• RET fusions and predicted resistance mutations	• Approved for first-line treatment of advanced RET fusion+ NSCLC in the US and EU
BLU-945	• EGFR exon 19 deletion and L858R plus on-target resistance mutations	• Phase 1/2 SYMPHONY trial is ongoing
BLU-701	• EGFR exon 19 deletion and L858R plus on-target resistance mutations • Highly brain penetrant*	• On track to initiate Phase 1/2 trial in Q4 2021
LNG-451	• EGFR exon 20 insertion mutations • Highly brain penetrant*	• Lengo on track to submit IND in Q4 2021

Lengo Therapeutics has additional preclinical precision oncology programs for NSCLC and beyond, with a platform focused on covalent, brain penetrant small molecule kinase inhibitors

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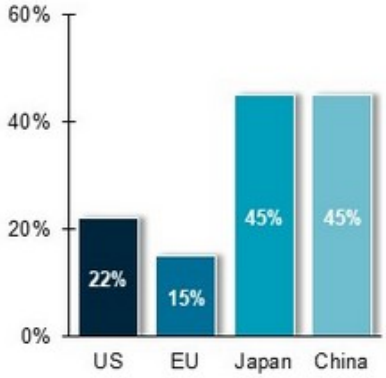
NSCLC, non-small cell lung cancer; IND, Investigational New Drug Application. * Based on preclinical models.

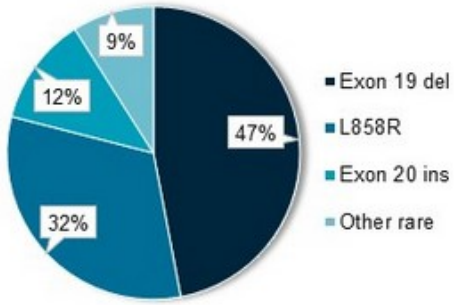
We have expanded our opportunity to transform EGFR-driven lung cancer

EGFR is the second most common oncogenic driver in NSCLC[1]



Estimated EGFR mutation rates in NSCLC adenocarcinoma

Our pipeline will address >90% of activating EGFR mutations[2]



Frequency of activating mutations in patients with EGFR-driven NSCLC in a recent U.S. multi-center study

Significant need exists in patients with exon 20 insertions

- All approved and investigational therapies have important safety, efficacy and/or CNS limitations
- Opportunities:

Better selectivity
→ Improve tolerability including cardiovascular safety

Enhanced brain penetration
→ Treat or prevent brain metastases

Oral administration
→ Enable patient convenience

1 Datamonitor, SEER, Incidence and Prevalence Database, GBD 2019, WHO, IARC, RKI, Cancer Research UK, Siegel 2015 CA Cancer J Res, Sonoda 2019 Cancer Manag Res. 2 Riess 2018 J Thorac Oncol. CNS, central nervous system; Del, deletion; Ins, insertion.

LNG-451 has best-in-class potential

- **Potent inhibition** of all common EGFR exon 20 insertion variants
- **Brain penetrant** with robust activity in a preclinical intracranial model
- **Highly selective** over wild-type EGFR and off-target kinases
- **Oral administration** with well-characterized preclinical pharmacology

Preclinical data show LNG-451 achieves all target profile features, with potential to translate into improved safety and efficacy, including in patients with brain metastases

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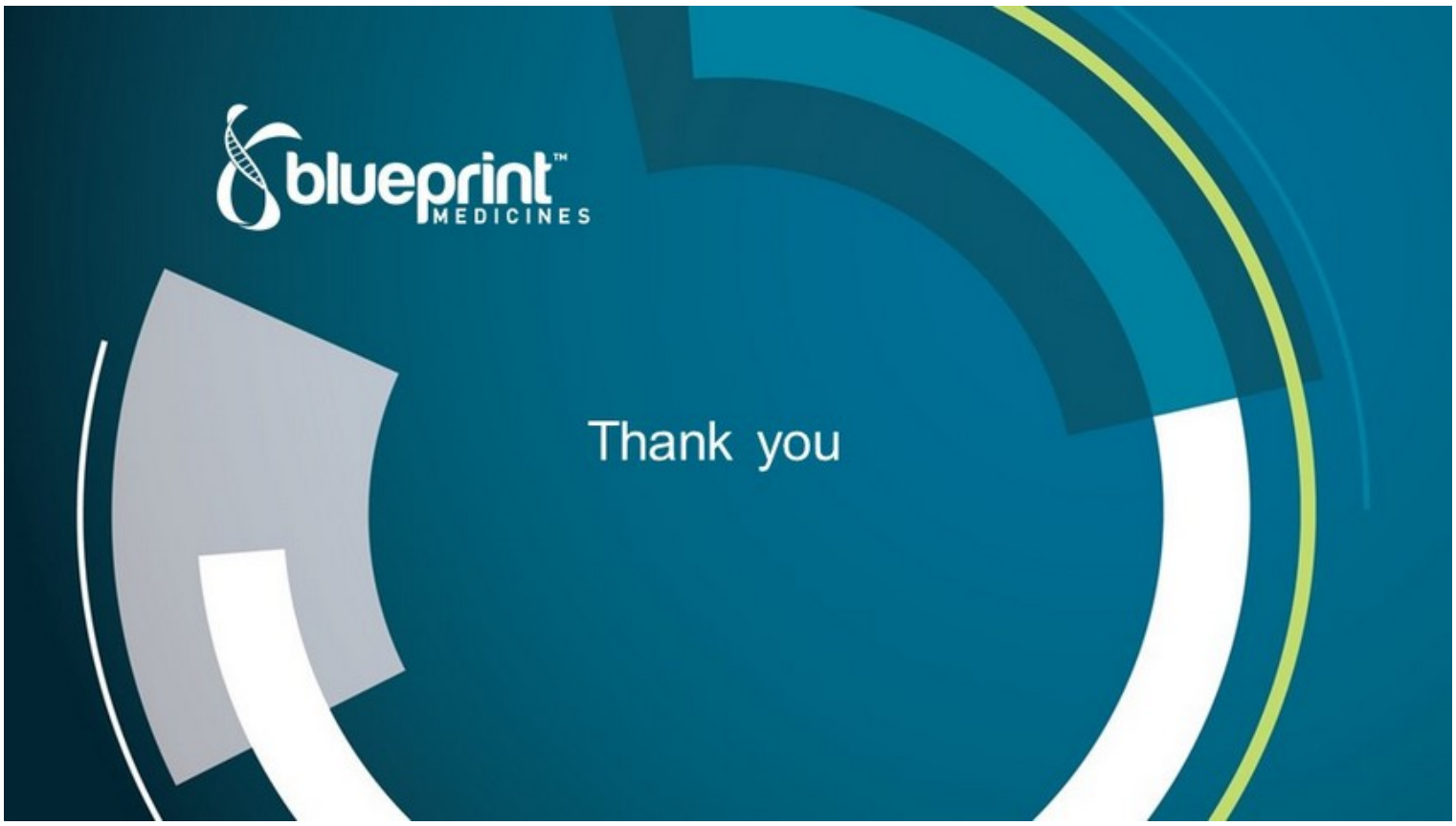
Internal company data on file.

1. Unresectable or metastatic disease. 2. CStone Pharmaceuticals has exclusive rights to develop and commercialize avapritinib, pralsetinib and fisogatinib in Mainland China, Hong Kong, Macau and Taiwan. 3. Approved in the U.S. for the treatment of adults with unresectable or metastatic GIST harboring a PDGFRA exon 18 mutation, including PDGFRA D842V mutations. Received conditional marketing authorization in Europe under the brand name AYVAKYT® for the treatment of adults with unresectable or metastatic GIST harboring the PDGFRA D842V mutation. 4. Approved in the U.S. for the treatment of adults with advanced SM, including aggressive SM, SM with an associated hematologic neoplasm and mast cell leukemia. 5. In collaboration with Roche. Blueprint Medicines and Roche have coexclusive rights to develop and commercialize pralsetinib in the U.S., and Roche has exclusive rights to develop and commercialize pralsetinib outside the U.S., excluding the CStone territory. 6. Received accelerated approval in the U.S. for the treatment of adults with metastatic RET fusion-positive NSCLC. Continued approval may be contingent on a confirmatory trial. The proposed indication for the MAA is locally advanced or metastatic RET fusion-positive NSCLC previously treated with platinum-based chemotherapy. 7. Zai Lab has exclusive rights to develop and commercialize BLU-701 and BLU-945 in Mainland China, Hong Kong, Macau and Taiwan. 8. Received accelerated approval in the U.S. for the treatment of patients with advanced or metastatic RET-mutant medullary thyroid cancer and RET fusion-positive thyroid cancer. Continued approval may be contingent on confirmatory trials. 9. In collaboration with Roche. Blueprint Medicines and Roche are conducting activities for up to two programs under the collaboration, including the program targeting MAP4K1. For one of the programs, Blueprint Medicines has U.S. commercial rights and Roche has ex-U.S. commercialization rights. For one of the programs, Roche has worldwide commercialization rights. GIST, gastrointestinal stromal tumors; HCC, hepatocellular carcinoma; MAA, marketing authorization application; NDA, new drug application; NSCLC, nonsmall cell lung cancer; SM, systemic mastocytosis.

Updated as of November 29, 2021

Not for promotional use.


blueprint™
MEDICINES
Thank you