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 11, 2024

CANDEL THERAPEUTICS, INC.
(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-40629**	**52-2214851**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

117 Kendrick St., Suite 450 **Needham, MA**	**02494**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (617) 916-5445

Not Applicable
(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, $0.01 par value per share	CADL	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 7.01 Regulation FD Disclosure.

On December 11, 2024, Candel Therapeutics, Inc. (the "Company") issued a press release announcing positive topline data from its phase 3 randomized, double-blinded and placebo-controlled clinical trial in the United States conducted under a Special Protocol Assessment ("SPA") with the U.S. Food and Drug Administration ("FDA") evaluating CAN-2409 viral immunotherapy in localized prostate cancer patients who have an intermediate-to-high risk for disease progression. The Company also announced that its phase 2b randomized, double-blind, placebo-controlled clinical trial in the United States evaluating CAN-2409 in patients with low-to-intermediate risk, localized prostate cancer undergoing active surveillance did not meet its primary endpoint. The Company will hold a meeting at 8:30 am ET on December 11, 2024 to present the topline data results from these phase 3 and phase 2b clinical trials.

A copy of the full press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference herein. A copy of the presentation to be shown at the meeting on December 11, 2024, is attached as Exhibit 99.2 to this Current Report on Form 8-K and incorporated by reference herein. The presentation will also be available on the investor relations section of the Company's website at https://ir.candeltx.com/. Information contained on the Company's website is not incorporated by reference into this Current Report on Form 8-K, and you should not consider any information on, or that can be accessed from, the Company's website as part of this Current Report on Form 8-K.

The information in this Item 7.01 and Exhibits 99.1 and 99.2 of this Current Report on Form 8-K are furnished and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section. The information in this Item 7.01 and Exhibits 99.1 and 99.2 of this Current Report on Form 8-K shall not be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date of this Current Report on Form 8-K, regardless of any general incorporation language in any such filing.

Item 8.01 Other Events.

Phase 3 Trial Results for CAN-2409 in Intermediate-to-High Risk Prostate Cancer

On December 11, 2024, the Company announced positive topline data from its phase 3 clinical trial in the United States conducted under a SPA with the FDA evaluating patients with newly diagnosed, localized prostate cancer who have an intermediate-to-high risk for progression. The 2:1 randomized, double-blind, placebo-controlled, multicenter clinical trial enrolled 745 patients (intent to treat population ("ITT")) to evaluate the effectiveness and safety of CAN-2409 plus prodrug (valacyclovir) viral immunotherapy in combination with standard of care external beam radiation therapy to improve disease-free survival ("DFS") in patients with intermediate-to-high-risk, localized prostate cancer. Patients were randomized and stratified for the use of short-term (< 6 months) androgen deprivation therapy ("ADT"). The study met its primary endpoint, demonstrating a statistically significant improvement in disease-free survival compared to the control arm. Key topline results include:

- Statistically significant improvement in DFS for CAN-2409 plus radiation therapy (n=496) vs. radiation therapy alone (n=249) (p=0.0155; HR 0.7) in the intent to treat population
- Observed a 14.5% relative improvement in DFS at 54 months for the CAN-2409 treatment arm compared to the placebo control arm
- DFS improvement was observed both in patients receiving short-term ADT and in patients not receiving ADT
- In an analysis that focused on prostate-specific outcomes (e.g., censored mortality due to other causes), CAN-2409 showed a highly significant effect (p=0.0046; HR 0.6) on prostate cancer-free survival
- Significant increase in the proportion of patients achieving a prostate-specific antigen ("PSA") nadir (<0.2 ng/ml) was observed in the treatment arm compared to the placebo control arm (67.1% vs. 58.6%, respectively; p=0.0164)
- CAN-2409 induced 80.4% pathological complete responses in the 2-year post-treatment biopsies compared to 63.6% observed in the control arm (p=0.0015)

The median follow-up time for the recruited population was 50.3 months. The primary outcome measure, DFS, included the evaluation of post-treatment biopsies, performed at two years from the end of radiation, for the presence of tumor recurrence. Local or systemic recurrence and death from any cause were also part of the DFS endpoint.

The safety profile of CAN-2409 was generally consistent with previous studies, with no new safety signals identified. The most common CAN-2409-related adverse events were flu-like symptoms, fever and chills, which were generally mild to moderate in severity and self-limited.

Based on these results, Candel intends to initiate discussions with the FDA regarding the regulatory pathway for CAN-2409 in intermediate-to-high-risk localized prostate cancer, and anticipates submitting a biologics license application for CAN-2409 in the fourth quarter of 2026.

Phase 2b Trial Results for CAN-2409 in Low-to-Intermediate Risk Prostate Cancer

On December 11, 2024, the Company also reported that the phase 2b clinical trial of monotherapy CAN-2409 in 190 patients with low-to-intermediate risk localized prostate cancer undergoing active surveillance showed numerical improvement in time to radical treatment and the percentage of patients achieving negative (prostate cancer-free) biopsies at 1-year post-treatment. However, these differences did not reach statistical significance. The safety profile of CAN-2409 was generally consistent with that reported in the phase 3 clinical trial.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
99.1	Press Release dated December 11, 2024
99.2	Presentation dated December 11, 2024
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.

Candel Therapeutics, Inc.

Date: December 11, 2024

By: /s/ Paul Peter Tak
Paul Peter Tak, M.D., Ph.D., FMedSci
President and Chief Executive Officer

Candel Therapeutics Announces CAN-2409 Achieved Primary Endpoint in Phase 3 Prostate Cancer Trial, Showing Significantly Improved Disease-Free Survival

- *Positive topline data for CAN-2409 viral immunotherapy, achieved primary endpoint by demonstrating statistically significant and clinically meaningful benefit when combined with radiation therapy for intermediate-to-high risk, localized prostate cancer*
- *The safety profile of CAN-2409 was generally consistent with previous studies, with no new safety signals identified*
- *The phase 3 clinical trial was conducted under a Special Protocol Assessment (SPA) with the FDA*

NEEDHAM, Mass., Dec 11, 2024 – Candel Therapeutics, Inc. (Candel or the Company) (Nasdaq: CADL), a clinical-stage biopharmaceutical company focused on developing multimodal biological immunotherapies to help patients fight cancer, today announced results from a multicenter phase 3 clinical trial evaluating CAN-2409 viral immunotherapy in localized prostate cancer patients.

In the United States alone, over 100,000 men are diagnosed with localized prostate cancer every year, and over 50,000 men currently receive radiotherapy. Prostate cancer continues to be the second leading cause of cancer death among men in the United States and there has not been any new treatment or significant change in the standard of care of localized, non-metastatic prostate cancer for over 20 years. The localized prostate cancer addressable market for CAN2409 is potentially worth over $10 billion in the U.S. alone.

The phase 3 clinical trial of CAN-2409 in intermediate-to-high-risk, localized prostate cancer met its primary endpoint, by demonstrating statistically significant improvement in disease-free survival in patients who received CAN-2409 plus prodrug (valacyclovir) combined with standard of care compared to standard of care alone.

The 2:1 randomized, double-blind, placebo-controlled, multicenter clinical trial enrolled 745 patients (intent to treat population, ITT) to evaluate the effectiveness and safety of CAN-2409 plus prodrug (valacyclovir) viral immunotherapy in combination with standard of care external beam radiation therapy to improve disease-free survival (DFS) in patients with intermediate-to-high risk, localized prostate cancer. Patients were randomized and stratified for the use of short-term (< 6 months) androgen deprivation therapy (ADT).

CAN-2409 is an investigational, off-the-shelf, replication-defective adenovirus that delivers the herpes simplex virus thymidine kinase (HSV-tk) gene to tumor cells. CAN-2409, when administered with valacyclovir, is designed to induce immunogenic cell death of tumor cells with exposure of tumor antigens in the context of an activated tumor microenvironment. Together, this regimen is designed to induce an individualized and specific CD8+ T cell-mediated response against the tumor, based on in situ vaccination against a variety of tumor antigens. Preclinical and clinical evidence suggests that CAN-2409 can be synergistic with local radiotherapy, providing further support for the design of the current phase 3 clinical trial.

“The improvement observed in disease-free survival in this phase 3 clinical trial is clinically meaningful. We have not seen significant advances in this indication in decades. CAN-2409 has demonstrated the potential to significantly improve long-term outcomes without adding substantial toxicity to standard of care radiation,” said Glen Gejerman, M.D., MBA, Co-Director of Urologic Oncology at Hackensack Meridian Health, and one of the principal investigators of the study. “If approved, this approach has the potential to transform the treatment paradigm in prostate cancer, offering patients with localized disease an effective treatment option that may reduce the risk of disease recurrence.”

Phase 3 Trial Results in Intermediate-High Risk Disease

The study met its primary endpoint, demonstrating a statistically significant improvement in disease-free survival compared to the control arm.

Key topline results include:

- Statistically significant improvement in DFS for CAN-2409 plus radiation therapy (n=496) vs. radiation therapy alone (n=249) (p=0.0155; HR 0.7) in the intent to treat population
- We observed a 14.5% relative improvement in DFS at 54 months for the CAN-2409 treatment arm compared to the placebo control arm
- DFS improvement was observed both in patients receiving short term ADT and in patients not receiving ADT
- In an analysis that focused on prostate-specific outcomes (e.g., censored mortality due to other causes), CAN-2409 showed a highly significant effect (p=0.0046; HR 0.6) on prostate cancer-free survival

- Significant increase in the proportion of patients achieving a prostate-specific antigen (PSA) nadir (<0.2 ng/ml) was observed in the treatment arm compared to the placebo control arm (67.1% vs. 58.6%, respectively; p<0.0164)
- CAN-2409 induced 80.4% pathological complete responses (pCRs) in the 2-year post-treatment biopsies compared to 63.6% observed in the control arm (p=0.0015)

The median follow-up time for the recruited population was 50.3 months. The primary outcome measure included the evaluation of post-treatment biopsies, performed at two years from the end of radiation, for the presence of tumor recurrence. Local or systemic recurrence and death from any cause were also part of the DFS endpoint.

The safety profile of CAN-2409 was generally consistent with previous studies, with no new safety signals identified. The most common CAN-2409-related adverse events were flu-like symptoms, fever and chills, which were generally mild to moderate in severity and self-limited.

The company also reported today that the phase 2 clinical trial of monotherapy CAN-2409 in 190 patients with low-to-intermediate risk localized prostate cancer undergoing active surveillance showed numerical improvement in time to radical treatment and the percentage of patients achieving negative (prostate cancer-free) biopsies at 1-year post-treatment. However, these differences did not reach statistical significance. The safety profile of CAN-2409 was generally consistent with that reported in the phase 3 clinical trial.

“We are thrilled to report the phase 3 results for CAN-2409 in intermediate-to-high risk, localized prostate cancer,” said Paul Peter Tak, M.D., Ph.D., FMedSci, President and Chief Executive Officer of Candel. “This study validates previous observations of CAN-2409 activity seen in difficult-to-treat solid tumors, often resistant to immunotherapy, and confirms our previous observation of synergies with radiation therapy in models of prostate cancer. Importantly, this study was conducted under a Special Protocol Assessment (SPA) agreed with the U.S. Food and Drug Administration (FDA), on key aspects of study design, meaning that safety and efficacy data generated from the study could be sufficient for the Company to seek regulatory approval for CAN-2409 in this indication. We look forward to working with the FDA, as a next step, to seek approval to bring CAN-2409 to patients in the U.S., and advance our broad viral immunotherapy pipeline across other large oncology indications of high unmet need.”

Based on these results, Candel intends to initiate discussions with the FDA regarding the regulatory pathway for CAN-2409 in intermediate-to-high-risk localized prostate cancer. The Company will present the totality of the data for both studies at upcoming medical conferences.

Conference Call and Webcast

Candel will host a webcast and conference call today, at 8:30 a.m. EDT. The webcast can be accessed (Here) and also on the Candel website at www.candeltx.com under News & Events, in the IR section,of the website. An archived webcast will be available on Candel's website for 30 days following the presentation. Participants may register for the conference call (Here) to receive the dial-in numbers and unique PIN to access the call seamlessly. It is recommended that you join 10 minutes prior to start of the event (although you may register and dial in at any time during the call).

About CAN-2409

CAN-2409, Candel's most advanced multimodal biological immunotherapy candidate, is an investigational, off-the-shelf, replication-defective adenovirus designed to deliver the herpes simplex virus thymidine kinase (HSV-tk) gene to a patient's specific tumor and induce an individualized, systemic immune response against the tumor. HSV-tk is an enzyme that locally converts orally administered valacyclovir into a toxic metabolite that kills nearby cancer cells. Together, this regimen is designed to induce an individualized and specific CD8+ T cell-mediated response against the injected tumor and uninjected distant metastases for broad anti-tumor activity, based on in situ vaccination against a variety of tumor antigens. Because of its versatility, CAN-2409 has the potential to treat a broad range of solid tumors. Encouraging monotherapy activity as well as combination activity with standard of care radiotherapy, surgery, chemotherapy, and immune checkpoint inhibitors have previously been shown in several preclinical and clinical settings. More than 1,000 patients have been dosed with CAN-2409 with a favorable tolerability profile to date, supporting the potential for combination with other therapeutic strategies without inordinate concern of overlapping adverse events.

Currently, Candel is evaluating CAN-2409 in non-small cell lung cancer (NSCLC), borderline resectable pancreatic ductal adenocarcinoma (PDAC), and localized, non-metastatic prostate cancer in ongoing clinical trials. CAN-2409 plus prodrug (valacyclovir) has been granted Fast Track Designation by the U.S. Food and Drug Administration (FDA) for the treatment of PDAC, stage III/IV NSCLC in patients who are resistant to first line PD-(L)1 inhibitor therapy and who do not have activating molecular driver mutations or have progressed on directed molecular therapy, and localized primary prostate cancer. Candel's pivotal phase 3 clinical trial in prostate cancer has been conducted under a Special Protocol Assessment agreed with the FDA. The FDA has also granted Orphan Drug Designation to CAN-2409 for the treatment of PDAC.

About Candel Therapeutics

Candel is a clinical stage biopharmaceutical company focused on developing off-the-shelf multimodal biological immunotherapies that elicit an individualized, systemic anti-tumor immune response to help patients fight cancer. Candel has established two clinical stage multimodal biological immunotherapy platforms based on novel, genetically modified adenovirus and herpes simplex virus (HSV) gene constructs, respectively. CAN-2409 is the lead product candidate from the adenovirus platform and is currently in ongoing clinical trials in NSCLC (phase 2) and borderline resectable PDAC (phase 2), and recently completed phase 2b and phase 3 clinical trials in localized, non-metastatic prostate cancer. CAN-3110 is the lead product candidate from the HSV platform and is currently in an ongoing phase 1b clinical trial in recurrent high-grade glioma (rHGG). Finally, Candel's enLIGHTEN™ Discovery Platform is a systematic, iterative HSV-based discovery platform leveraging human biology and advanced analytics to create new viral immunotherapies for solid tumors.

For more information about Candel, visit: www.candeltx.com

Forward-Looking Statements

This press release includes certain disclosures that contain "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 the expectations regarding the therapeutic benefit of the Company's programs, including the ability of CAN-2409 to improve disease-free survival of patients with intermediate-to-high risk, localized prostate cancer; expectations regarding communications with the FDA and the impact of the phase 3 prostate cancer trial being conducted under an SPA with the FDA. The words "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, those risks and uncertainties related to the timing and advancement of development programs; the Company's ability to continue as a going concern; expectations regarding the therapeutic benefit of the Company's programs; that final data from the Company's pre-clinical studies and completed clinical trials may differ materially from reported interim data from ongoing studies and trials; the Company's ability to efficiently discover and develop product candidates; the Company's ability to obtain and maintain regulatory approval of product candidates; the Company's ability to maintain its intellectual property; the implementation of the Company's business model, including strategic plans for the Company's business and product candidates; whether the Company will receive regulatory approval to market products; and other risks identified in the Company's filings with the U.S. Securities and Exchange Commission (SEC) including the Company's most recent Quarterly Report on Form 10-Q filed with the SEC and subsequent filings with the SEC. The Company cautions you not to place undue

reliance on any forward-looking statements, which speak only as of the date they are made. The Company disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this press release represent the Company's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date.

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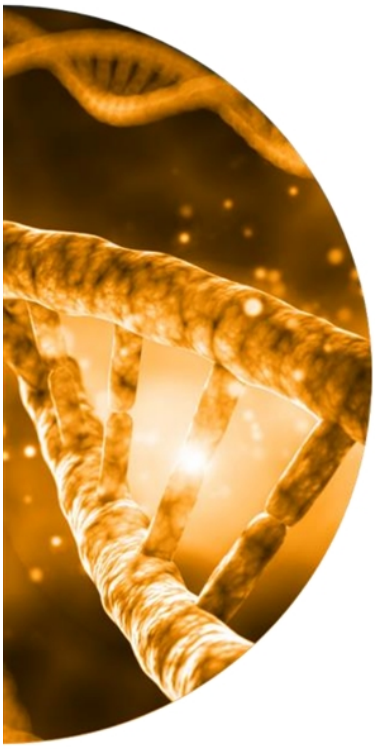
Exhibit 99.2



CANDEL THERAPEUTICS

CAN-2409 in Localized Prostate Cancer: Overview of Phase 3 Top-line Data

Wednesday, December 11th, 2024

Disclaimers and forward-looking statements

This presentation and the accompanying discussion contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, express or implied statements regarding the expectations regarding the therapeutic benefit of the Company's programs, including the ability of CAN-2409 to improve disease-free survival of patients with intermediate-to-high risk, localized prostate cancer; expectations regarding communications with the FDA; the impact of the phase 3 prostate cancer trial being conducted under an SPA with the FDA; and the Company's goals and strategy. The Company intends for such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by terms such as, but not limited to, "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan," "on track," or similar expressions or the negative of those terms. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions, and uncertainties. The express or implied forward-looking statements included in this presentation are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: those risks and uncertainties related to the timing and advancement of development programs; the Company's ability to continue as a going concern; expectations regarding the therapeutic benefit of the Company's programs; that final data from the Company's pre-clinical studies and completed clinical trials may differ materially from reported interim data from ongoing studies and trials; the Company's ability to efficiently discover and develop product candidates; the Company's ability to obtain and maintain regulatory approval of product candidates; the Company's ability to maintain its intellectual property; the implementation of the Company's business model, including strategic plans for the Company's business and product candidates; whether the Company will receive regulatory approval to market products; and other factors that are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of the Company's most recent Annual Report on Form 10-K, subsequent Quarterly Reports on Form 10-Q and any other filings that the Company has made or may make with the SEC in the future.

Any forward-looking statements contained in this presentation represent the Company's 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, the Company explicitly disclaims any obligation to update any forward-looking statements.

The Company has filed a shelf registration statement on Form S-3 (Registration No. 333- 266605) with the SEC for the offering to which this presentation relates. Before you invest in any of the securities of the Company, you should read the prospectus in such registration statement and the prospectus supplement, when available, together with the information incorporated therein by reference, as well as any free writing prospectus provided in connection with the offering and any other documents the Company has filed with the SEC for more complete information about the Company and the offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, the Company, any underwriter or any dealer participating in the offering will arrange to send you the prospectus supplement and accompanying prospectus, if you request them by contacting: Citigroup Global Markets Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717, telephone: 1-800-831-9146; BofA Securities, Inc., NC1-004-03-43, 200 North College Street, 3rd Floor, Charlotte, North Carolina 28255, Attention: Prospectus Department, email: dg.prospectus_requests@bofa.com; or Canaccord Genuity LLC, Attention: Syndication Department, 1 Post Office Square, 30th Floor, Boston, MA 02109, or by email at prospectus@cgf.com. This presentation is not a prospectus and is neither an offer to sell nor a solicitation of an offer to buy any securities, and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale is unlawful.

Opening Remarks

Paul Peter Tak
CEO, Candel Therapeutics

Candel presents statistically significant and clinically meaningful phase 3 clinical trial data for localized prostate cancer

Phase 3 top-line data in intermediate / high risk, localized prostate cancer

Trial Design	• 745-patient randomized trial with treatment arm + placebo arm, focused on disease-free survival (DFS) primary endpoint and multiple secondary endpoints
Primary Endpoint	• Statistically significant and clinically meaningful improvement in DFS for CAN-2409 plus radiation therapy vs. radiation therapy alone – Hazard ratio 0.7, p=0.0155 in the intent to treat (ITT) analysis; median follow up time of 50.3 months – 14.5% relative improvement in DFS rate at 54 months (pre-specified time point), in line with KOL expectations of a clinically meaningful benefit
Secondary and Supplemental Endpoints	• CAN-2409 showed a highly significant effect (hazard ratio 0.62, p=0.0046) on prostate cancer-specific outcomes (prostate cancer recurrence or prostate cancer-related death) • Significant increase in the proportion of patients achieving a prostate-specific antigen (PSA) nadir of <0.2 ng/ml in the treatment arm compared to the placebo (respectively 67.1% vs. 58.6%, p=0.0164) • Central, blinded evaluation of post-treatment biopsies demonstrated a pathological complete response rate of 80.4% in the CAN-2409 treatment arm vs. 63.6% in the placebo control arm (p=0.0015) 2-yrs post-radiation
Safety	• Compelling safety profile, with lower incidence of serious adverse events (SAEs) and treatment-related SAEs in active arm vs. control (5.8% vs. 7.3% and 1.7% vs. 2.2%, respectively)

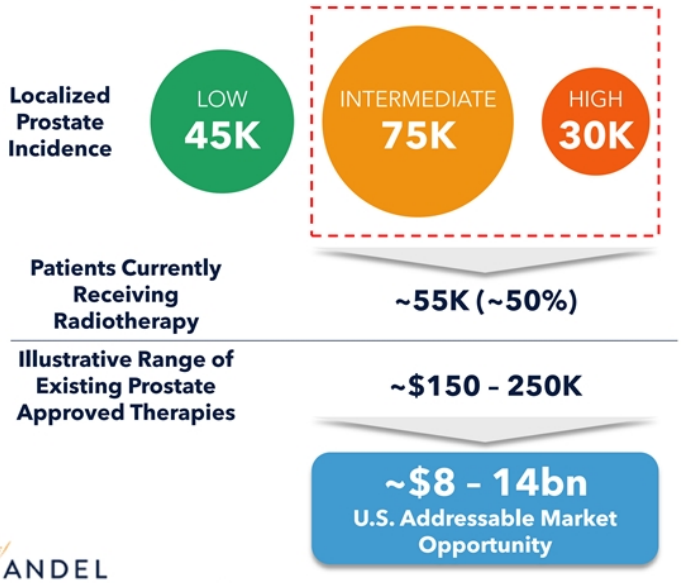
Intermediate / High Risk, Localized Prostate Cancer

Unmet Need & Candel's Approach

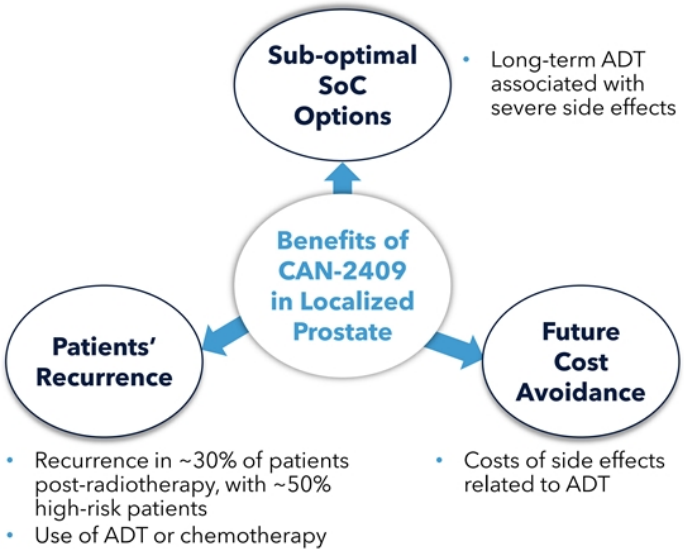
Candel is addressing a potential $10bn+ market with clear unmet need

The prostate cancer opportunity for CAN-2409

Substantial U.S. Addressable Market Opportunity



Clear Unmet Need for Patients



- Long-term ADT associated with severe side effects
- Recurrence in ~30% of patients post-radiotherapy, with ~50% high-risk patients
- Use of ADT or chemotherapy
- Costs of side effects related to ADT

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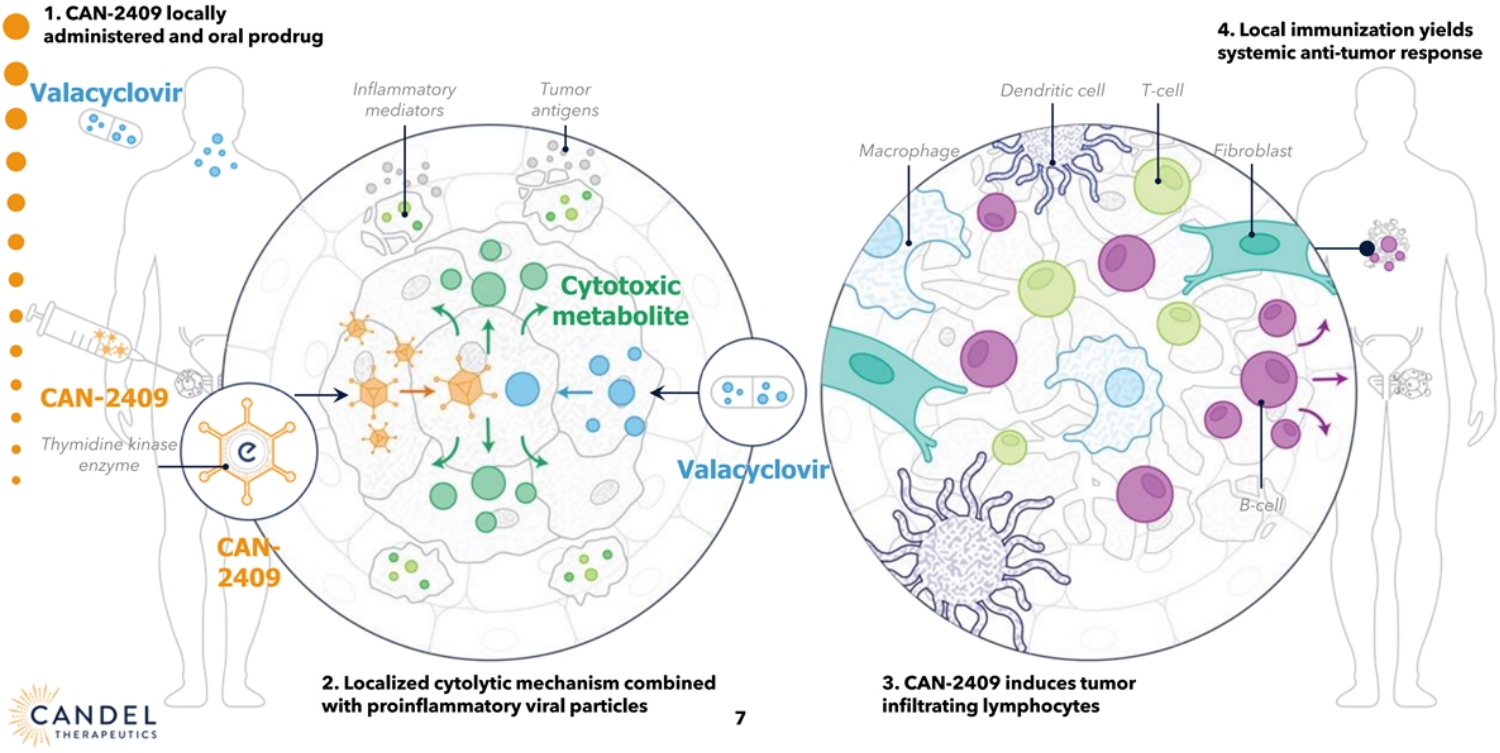
Source: Globe Life Sciences (January 2021).

CAN-2409: Mechanism of Action



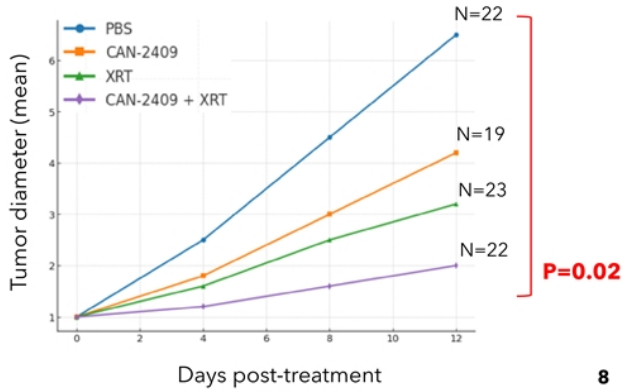
CANDEL THERAPEUTICS

CAN-2409 treatment synergizes with radiotherapy in a mouse model of prostate cancer

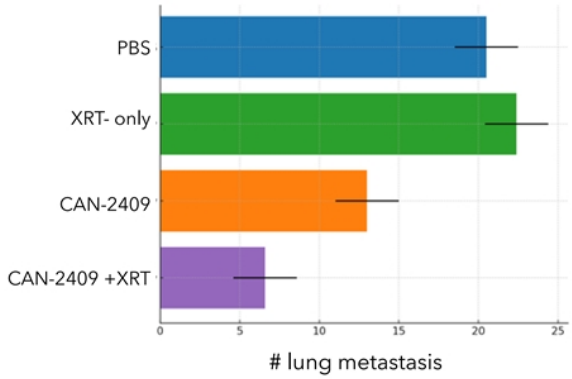
Model of prostate cancer:
RM-1 cells in C57BL/6 mice

PBS= phosphate buffer (control)
XRT= radiation therapy (5Gy)
CAN-2409 = 3x 10^{10} pfu +prodrug

Decrease in injected flank tumor



Decrease in uninjected lung metastases



Target product profile for CAN-2409 in intermediate / high risk, localized prostate cancer

"Off-the-shelf" immunotherapy product designed to elicit a broad, potent immune response against solid tumors

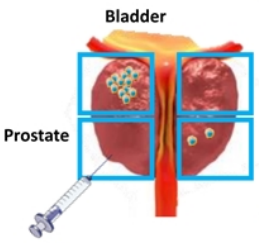
Planned Indication	• Planned indication in newly diagnosed localized prostate cancer in patients with intermediate- to high-risk disease in conjunction with radiotherapy to prevent prostate cancer recurrence – NCCN[(1)] defined intermediate (at least one of: PSA 10 – 20ng/mL, Gleason score of 7, stage T2b/T2c) or patients with a single high-risk characteristic (one of: PSA >20ng/mL, Gleason score 8 – 10, stage T3a)
Administration	• Administered in combination with SoC external beam radiotherapy (EBRT) +/- short course of ADT (<6 months) • 3 courses of intraprostatic injections: 2mL total volume (2-6 weeks apart) – Each administration is performed in outpatient clinic (~20 minutes) – 14 days of valacyclovir orally following each injection course

CANDEL THERAPEUTICS

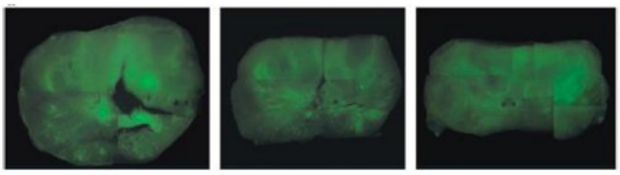
(1) National Comprehensive Cancer Network.

CAN-2409 is delivered in a routine and tolerable procedure

Standard urologic injection procedure



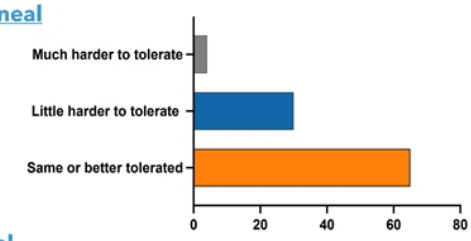
- Routine outpatient procedure (15 min, outpatient setting) performed by urologists or radiation oncologists
- Ultrasound guided injection (transrectal or transperineal) to 4 sites of prostate, one apical and one basal in each lobe
- A total volume of 2ml, 0.5ml in each of 4 quadrants of the prostate using a 10-22 G needle



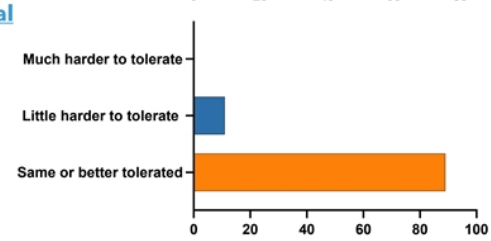
Distribution analysis of fluorescently labeled adenoviral vector in freshly resected prostate, demonstrating homogeneous distribution throughout the organ after 4 injections of virus (0.5ml) in each prostate quadrant.

Patient questionnaire substudy (n=32)[1]
"How did you tolerate the study procedure as compared to a prostate biopsy?"

Transperineal



Transrectal



> 2000 intraprostatic injections in phase 2/3 studies (40% transperineal; 56% transrectal; 4% not reported)

(1) Aguilar L. 28th Annual Prostate Cancer Foundation, Scientific Retreat, October 2021

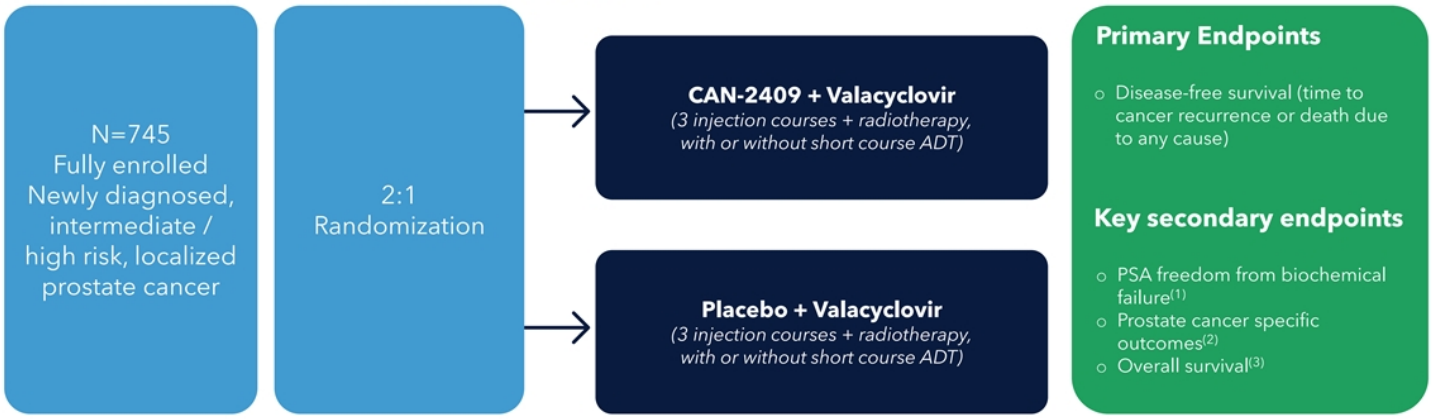
Intermediate / High Risk, Localized Prostate Cancer

Overview of Top-line Phase 3 Data

Phase 3 clinical trial of CAN-2409 in patients with newly diagnosed, intermediate / high risk, localized prostate cancer

PIs: Dr. T. DeWeese (JHU) and Dr. P. Scardino (MSKCC)

NCT01436968



- *Randomization stratified by NCCN(4) risk group and planned short course ADT*

Conducted under agreement with FDA under Special Protocol Assessment

1) Biochemical failure is defined using PSA nadir plus 2ng/ml definition.
2) Defined as time from date of randomization to prostate cancer recurrence or prostate cancer-related death.
3) Defined as time from date of randomization to date of death (all causes).
4) National Comprehensive Cancer Network.

Disease-free survival: primary endpoint to capture treatment effect in early localized prostate cancer

Disease-free survival (DFS)

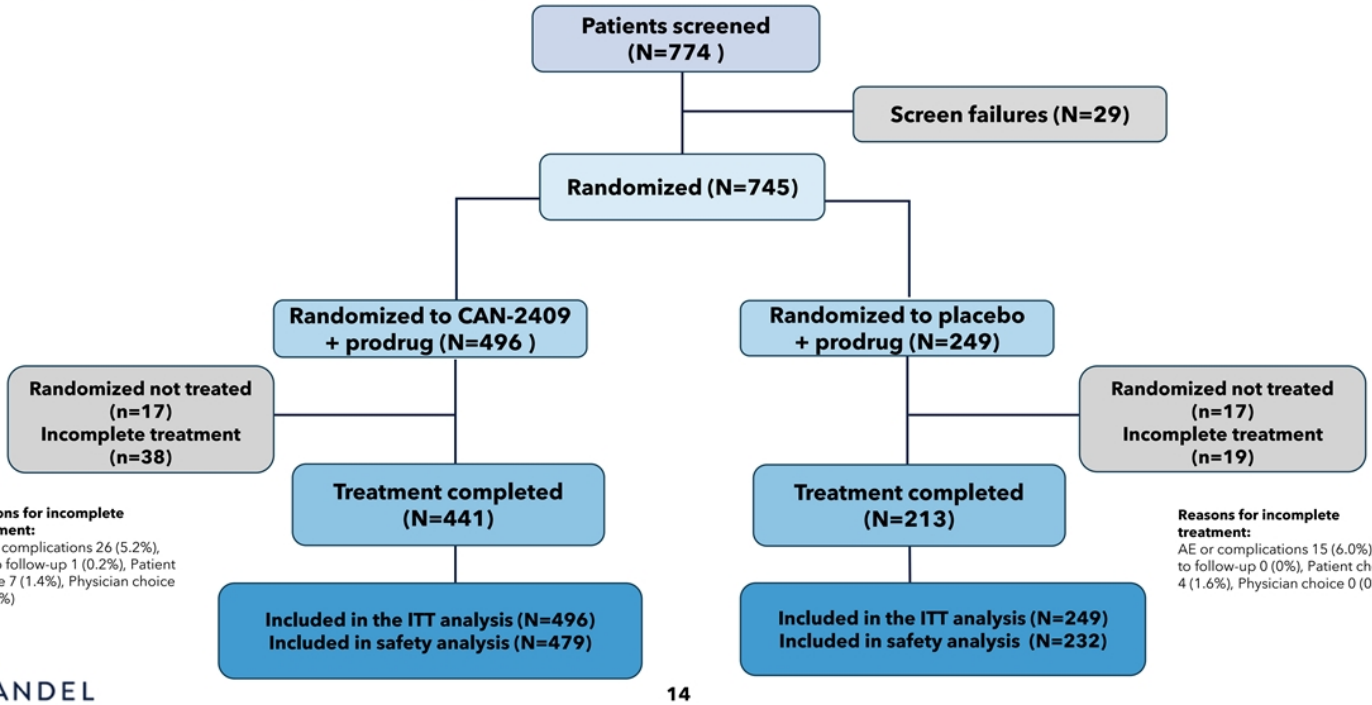
Date of randomization to date of recurrence proven by biopsy, clinical or radiographic evidence of local or regional failure, distant metastases, or death from any cause

- Local failure: includes increase in tumor size by 50%, reappearance of palpable tumor or biopsy revealing adenocarcinoma of the prostate at least 2 years after randomization
- Regional failure: clinical recurrence with radiographic evidence of tumor in the pelvis
- Distant metastases: clinical recurrence with radiographic evidence of disease beyond the pelvis

- ***The study has 90% power to detect a 15% relative improvement in DFS between the treatment arm and control with an alpha of 0.05***
- ***Endpoint validated by FDA with Special Protocol Assessment confirmed in 2019***
- ***Extensive market research with payers and key external experts confirmed that estimated DFS improvements would be clinically relevant***

CONSORT diagram

2:1 randomized to CAN-2409 vs. placebo



Reasons for incomplete treatment:
AE or complications 26 (5.2%), lost to follow-up 1 (0.2%), Patient choice 7 (1.4%), Physician choice 4 (0.8%)

Reasons for incomplete treatment:
AE or complications 15 (6.0%), lost to follow-up 0 (0%), Patient choice 4 (1.6%), Physician choice 0 (0%)

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Demographics/baseline characteristics of randomized patients

ITT population (N=745)	CAN-2409 + prodrug (N=496)	Placebo + prodrug (N=249)	Total (N=745)
Median age (yrs)	69	68	69
Race, n(%)			
White/Caucasian	385 (77.6)	206 (82.7)	591 (79.3)
Black/African American	93 (18.8)	28 (11.2)	121 (16.2)
Asian	3 (0.6)	1 (0.4)	4 (0.5)
Native Hawaiian or Pacific Islander	0 (0)	2 (0.8)	2 (0.3)
American Indian or Alaskan Native	1 (0.2)	1 (0.4)	2 (0.3)
Not reported	14 (2.8)	11 (4.4)	25 (3.4)
Ethnicity, n(%)			
Hispanic or Latino	37 (7.5)	34 (13.7)	71 (9.5)
Not Hispanic or Latino	377 (76.0)	175 (70.3)	552 (74.1)
Not reported	82 (16.5)	40 (16.1)	122 (16.4)
NCCN risk group, n(%)			
Intermediate	422 (85.1)	213 (85.5)	635 (85.2)
High	74 (14.9)	36 (14.5)	110 (14.8)
PSA ng/ml			
Median	6.815	6.500	6.700
Range	0.99 - 52.90	0.83 -63.30	0.83-63.30
Gleason score, n(%)			
< 7	19 (3.8)	5 (2.0)	24 (3.2)
7	417 (84.1)	217 (87.1)	634 (85.1)
> 7	60 (12.1)	27 (10.8)	87 (11.7)
ADT stratification, n(%)			
Planned ADT	244 (49.2)	122 (49.0)	366 (49.1)
No planned ADT	252 (50.8)	127 (51.0)	379 (50.9)

CANDEL THERAPEUTICS

CAN-2409 top-line readout exceeds KOL expectations

KOL expectations on DFS ahead of Ph3 top-line data

> If you hit a 5 –10% improvement in disease-free survival, then that's going to be big and acceptable
>
> **- Urologist A**

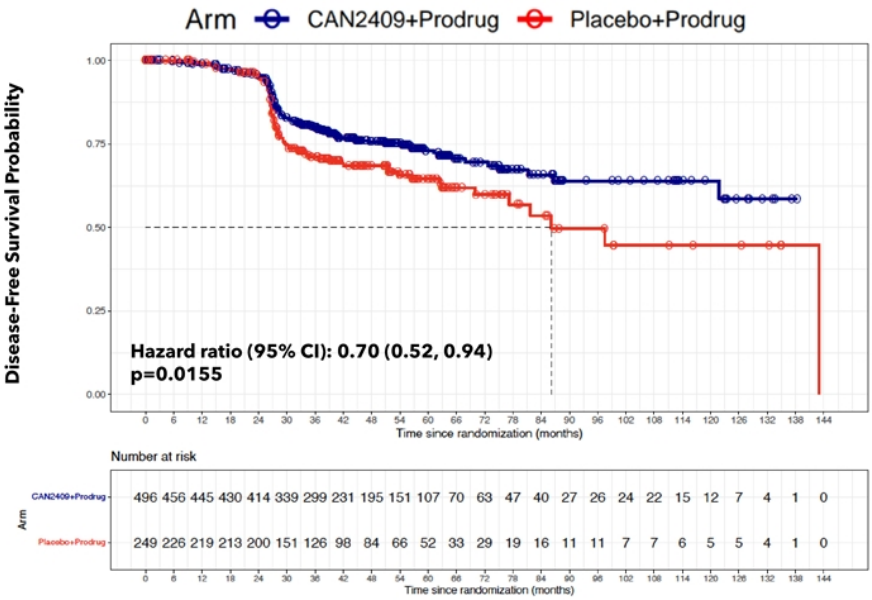
> A 10 –15% improvement in disease-free survival at 5 years would be fairly significant for me to see in this patient group
>
> **- Urologist B**

> [If the data is positive] I'd be happy to use this in most of my patients, to get this used by the radiation oncology centers in the community
>
> **- Urologist C**

Candel Ph3 top-line data

- Ph3 trial 90% powered to detect a 15% relative difference between active and placebo arms
- Demonstrated a DFS rate at 54 months (pre-specified time point) of 75.2% in CAN-2409 treatment arm vs. 65.7% in the placebo arm
- Observed relative improvement of 14.5% considered clinically meaningful
- DFS difference increases over time beyond 54 months

CAN-2409 improved DFS in newly diagnosed, intermediate/high-risk prostate cancer (ITT population, N=745)



Estimated DFS rate at 54 months shows a 14.5% relative improvement in the CAN-2409 treatment arm compared to control arm

Note: Disease-free survival (DFS) represents time to cancer recurrence or death due to any cause

CAN-2409 significantly improves the rate of pathological complete response in 2 year biopsies compared to the placebo control arm

Pathological complete response was observed in 80.4% of the biopsies available at 2 years in the CAN-2409 arm

- 451 post-treatment biopsies centrally reviewed by at least 2 blinded independent readers
- 313 post-treatment biopsies available for review for the 2-year histological analysis

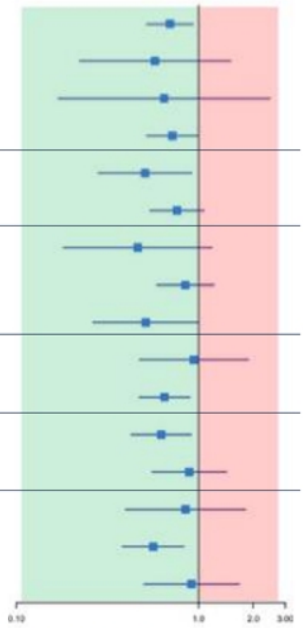
	CAN-2409	Placebo
Total	214	99
Negative	172 (80.4%)	63 (63.6%)
Positive	42 (19.6%)	36 (36.4%)

Difference between arms chi-square test p= 0.0015

Biopsies available at 22-26 months from end of radiation date

CAN-2409 improves DFS in key subgroups

	Subgroups	Number of patients
	ITT:ITT	745
Race	RACE:BLACK OR AFRICAN AMERICAN	121
	RACE:UNKNOWN	25
	RACE:WHITE	591
Age	AGEGR1:< 65	190
	AGEGR1:>= 65	555
Ethnicity	ETHNIC:HISPANIC OR LATINO	71
	ETHNIC:NOT HISPANIC OR LATINO	552
	ETHNIC:UNKNOWN	122
Severity	NCCN:High	110
	NCCN:Intermediate	635
ADT Usage	Actual ADT:No	358
	Actual ADT:Yes	334
Severity & ADT Usage	NCCN/Actual ADT:High, Yes	94
	NCCN/Actual ADT:Intermediate, No	349
	NCCN/Actual ADT:Intermediate, Yes	240



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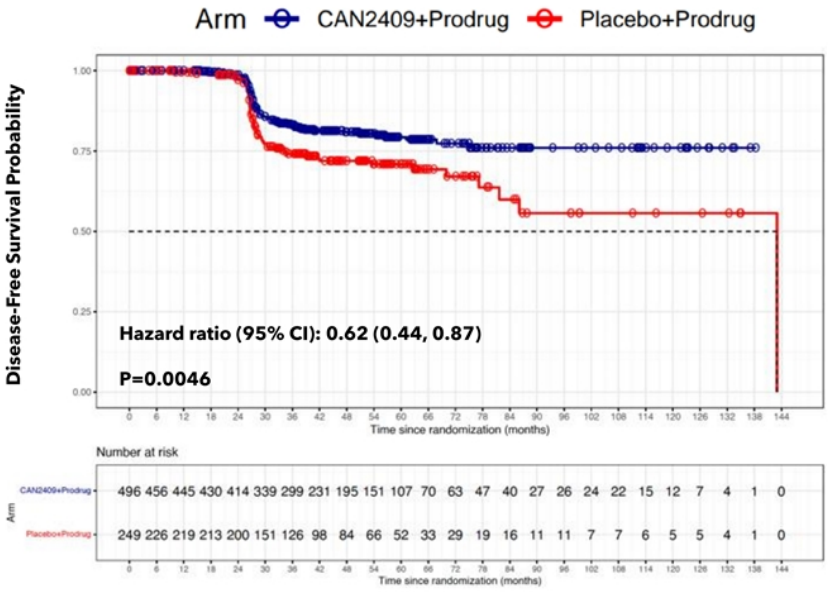
CAN-2409 improves prostate-specific outcomes (ITT population, N=745)



Highly significant 38% reduction in risk for prostate cancer recurrence or prostate cancer-related death

(1) As per Globe Life Sciences (January 2021). Note: Disease-free survival (DFS) represents time to cancer recurrence or death due to any cause

CAN-2409: summary of key secondary endpoints

- Significant increase in the proportion of patients achieving a prostate-specific antigen (PSA) nadir of <0.2 ng/ml in the treatment arm compared to the placebo
  - 67.1% vs. 58.6%, respectively (p=0.0164)
- Freedom from PSA failure numerically lower in CAN-2409 treatment arm (HR 0.84)
- Overall survival was similar by treatment arm
  - Only 2 deaths due to prostate cancer over 10+ years
  - 50 patients died due to other causes, unrelated to treatment

CAN-2409 in combination with SoC radiation +/-ADT was generally well tolerated

Treatment related AEs >5% in either arm

Preferred term	CAN-2409+prodrug (N=479)	Placebo+prodrug (N=232)	Total (N=711)
Chills	160 (33.4)	20 (8.6)	180 (25.3)
Influenza-like illness	146 (30.5)	32 (13.8)	178 (25.0)
Fever	120 (25.1)	9 (3.9)	129 (18.1)
Fatigue	87 (18.2)	35 (15.1)	122 (17.2)
Urinary frequency	58 (12.1)	34 (14.7)	92 (12.9)
Nausea	53 (11.1)	19 (8.2)	72 (10.1)
Headache	45 (9.4)	12 (5.2)	57 (8.0)
Diarrhoea	30 (6.3)	18 (7.8)	48 (6.8)
Malaise	28 (5.8)	5 (2.2)	33 (4.6)
Vomiting	26 (5.4)	3 (1.3)	29 (4.1)
Urinary urgency	19 (4.0)	16 (6.9)	35 (4.9)
Urinary tract pain	18 (3.8)	14 (6.0)	32 (4.5)

Chills, fever, flu-like symptoms were commonly mild to moderate and self limited

Incidence of treatment related SAEs lower on CAN-2409

- 1.7% on CAN-2409 + SoC
- 2.2% on placebo + SoC

Incidence of SAEs lower on CAN-2409 arm

- 5.8% on CAN-2409 + SoC
- 7.3% on placebo + SoC

Incidence of treatment discontinuation due to AEs lower on CAN-2409 arm

- 5.4% on CAN-2409 + SoC
- 6.0% on placebo + SoC

Active Surveillance, Localized Prostate Cancer

Candel's Approach and Overview of Phase 2b Results

Phase 2b of CAN-2409 in low/intermediate risk, localized prostate cancer undergoing active surveillance demonstrated a consistent safety profile, but did not meet statistical significance

- 190 patient randomized trial with treatment arm + placebo arm, focused on primary endpoint progression-free survival (PFS), and secondary endpoints of time to radical treatment and quality of life
- CAN-2409 safety generally consistent with phase 3 trial in intermediate/high risk, localized prostate patients
- Numerical improvement in the percentage of patients with negative biopsies at 1 year and time to radical treatment for the CAN-2409 treatment arm compared to placebo did not reach statistical significance
- No statistically significant difference in PFS between the CAN-2409 arm and placebo
- Small exploratory study, monotherapy regime, and lack of synergy with radiation therapy might have contributed to results
- Candel plans to review the totality of the data and share more details at a future medical conference

Closing Remarks

Paul Peter Tak
CEO, Candel Therapeutics

CANDEL THERAPEUTICS

Summary of today's announcement

Phase 3 prostate cancer clinical trial demonstrated statistically significant and clinically meaningful improvement in DFS for CAN-2409 plus SoC radiotherapy

CAN-2409 showed a highly significant effect on prostate cancer-specific outcomes (prostate cancer recurrence or prostate cancer-related death)

Combination of CAN-2409 plus radiotherapy was well tolerated

Biologics License Application (BLA) filing expected Q4 2026

Candel Therapeutics key milestones in 2025

Expected Milestones in 2025	Expected Timing
CAN-2409	
✓ Phase 3 readout for intermediate / high risk, localized prostate cancer	✓ Q4'24
• Final OS data for non-small cell lung cancer (NSCLC)	• Q1'25
• Final OS data for pancreatic ductal adenocarcinoma (PDAC)	• Q1'25
CAN-3110	
• OS and extensive biomarker data	• Q4'25

Appendix

Primary endpoint DFS event summary

2:1 randomized to CAN-2409 vs. placebo

Disease-Free Survival (DFS)	CAN-2409+ prodrug (N=496)	Placebo+ prodrug (N=249)	Total (N=745)
Patients with DFS event (n)	113 (22.8%)	76 (30.5%)	189 (25.4%)
Positive biopsies	67 (13.5%)	51 (20.5%)	118 (15.8%)
Treatment failure	15 (3.0%)	11 (4.4%)	26 (3.5%)
Deaths[1]	31 (6.3%)	14 (5.6%)	45 (6.0%)
Prostate cancer-related deaths[2]	0	0	0

(1) Death events were non-prostate cancer related. Causes of death include cardiovascular, metabolic and chronic disease complications, COVID-19, other malignancy, and unknown causes
(2) During the length of the study, we observed 2 prostate cancer related deaths; however, patients had a prior event (disease recurrence) and these deaths are not counted as death event

Prostate-specific DFS event summary

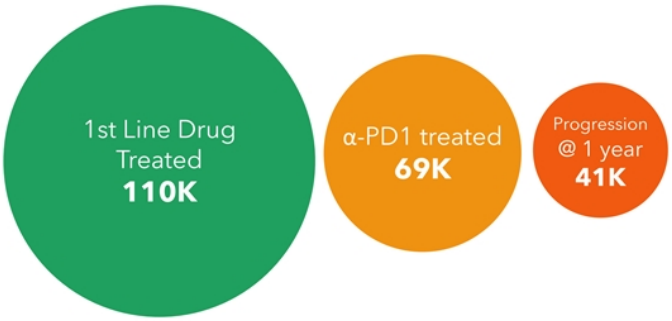
2:1 randomized to CAN-2409 vs. placebo

Summary of Disease-Free Survival (DFS)	CAN-2409+ prodrug (N=496)	Placebo+ prodrug (N=249)	Total (N=745)
Patients with DFS event	82 (16.5%)	62 (24.9%)	144 (19.3%)
Positive biopsies	67 (13.5%)	51 (20.5%)	118 (15.8%)
Treatment failure	15 (3.0%)	11 (4.4%)	26 (3.5%)
Prostate cancer death	0	0	0

CAN-2409 in Non-Small Cell Lung Cancer (NSCLC)

CAN-2409: Non-small cell lung cancer unmet need

Incident advanced NSCLC in the US[1]



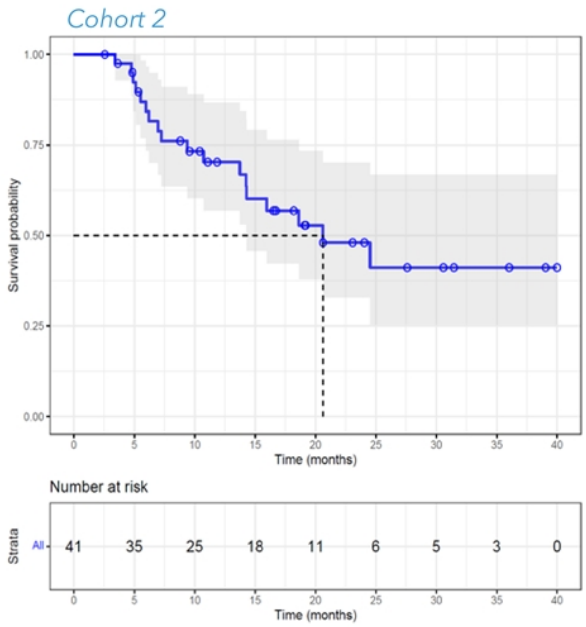
- Lung cancer is the most commonly diagnosed cancer in the US with NSCLC representing over 80% of all lung cancer diagnoses[2]
- Majority of NSCLC patients without actionable mutations are treated with immune checkpoint inhibitors (ICI) as 1st line treatment
- After one year of ICI treatment, 60% of anti-PD1 treated patients will have progressive disease[3]
  - In ICI inadequate responders with SoC docetaxel[4]
    - **Median overall survival (mOS) <12 months**
- Significant opportunity to improve response to ICIs by teaching the immune system how to recognize the cancer cells
- NSCLC cancer therapy global market was estimated at $32B in 2023 and is expected to grow to $52B by 2028[5]

Target label for CAN-2409: Indicated as adjunct to standard-of-care immune checkpoint inhibitor treatment (+/- chemotherapy) in stage III / IV NSCLC patients not responding to first-line or later ICI treatment#

Upside to this target population as ~25% of patients treated in the 2L setting receive an anti-PD-1/L1

[1] *SEER Cancer Statistics Factsheets, accessed Mar 2024*
[2] *American Cancer Society Website, accessed Mar 2024*
[3] *Gandi L et al. NEJM 2018; 378:2078-92*
[4] *Reckamp K et al. J Clin Onc 2022;40:2295-2306*
[5] *EvaluatePharma, accessed May 2023*

mOS of 20.6 months after CAN-2409 treatment in NSCLC patients with progressive disease despite immune checkpoint inhibitor (cohort 2)



Median overall survival: 20.6 mos (13.7, NA)
Median follow-up: 20.6 mos

mOS in this population is <12 months using SoC

Reckamp K et al. J Clin Onc 2022;40:2295-2306

Data cutoff 1 April 2024

CANDEL THERAPEUTICS

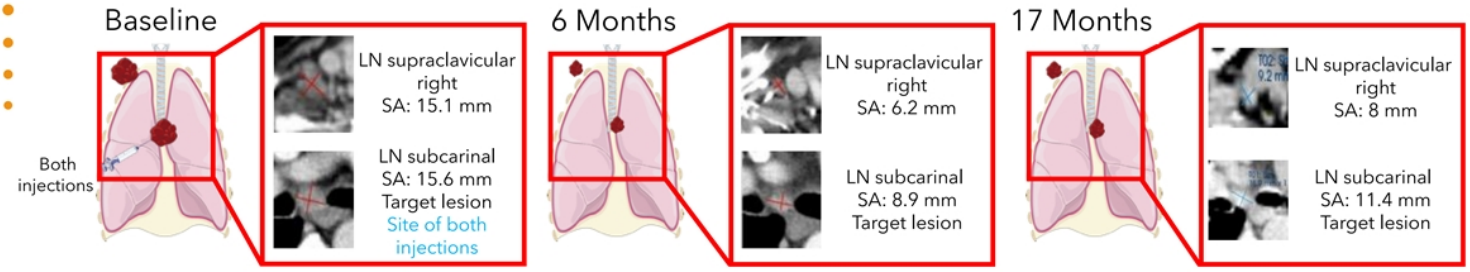
Local injection induces systemic anti-tumor activity

Evidence of abscopal effect, survival > 30 months (ongoing) after CAN-2409 treatment

NY-007 (Cohort 2)

74M, Stage IV non-squamous NSCLC diagnosed Feb'19
PD-L1 <1%
Initial therapy: cisplatin/etoposide Feb-Jul'19
Maintenance: nivolumab from Sep'19, continued on-study
OS 36.0 mo. (ongoing as of LFVJan2024)

Legend
RECIST target lesions (red)
LN = lymph node; LA = long axis; SA = short axis

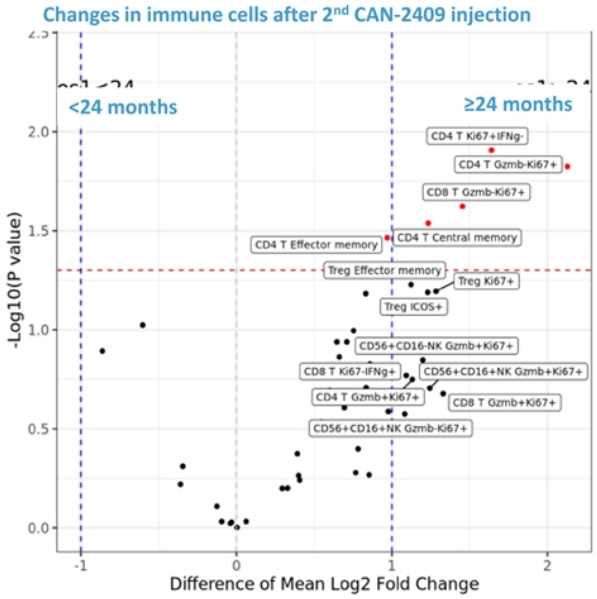


Schematics to show general lesion injection orientation; not to scale

CANDEL THERAPEUTICS

Note: From ongoing phase 2 NSCLC trial as of cutoff date, 1 April 2024.

Immune activation after 2nd CAN-2409 administration is associated with prolonged survival



Multiparameter flow cytometry
Fold changes between 1st and 2nd injection in short (< 24 months; n=9) and long (> 24 months; n=4) survivors
Cohort 2 patients

Data cutoff 1 April 2024

Encouraging safety data, clinical activity and immunological changes demonstrated with CAN-2409 in NSCLC

- Experimental treatment of CAN-2409 + valacyclovir in NSCLC patients with an inadequate response to ICI is feasible and well tolerated, and results in median overall survival (mOS) of 22.0 months after only two administrations
- We observed mOS of 20.6 months in patients with progressive disease at baseline, exceeding mOS reported in this population using standard of care chemotherapy (1, 2)
- While 90% of the patients had stage IV disease, an abscopal effect was observed in more than 70% of the patients presenting with at least one uninjected lesion; this implies that only one or two tumors need to be injected to teach the immune cells how to recognize the patient's tumor and induce systemic and durable anti-tumor immunity

[1] *Reckamp K et al. J Clin Onc 2022;40:2295-2306*

[2] *Garon EB et al. Lancet. 2014;384:665-73*

CAN-2409 in Pancreatic cancer

CAN-2409: Pancreatic ductal adenocarcinoma unmet need

Incidence of pancreatic ductal adenocarcinoma in the US by risk level[1]

- Limited available treatment options for patients suffering from pancreatic cancer beyond resection when possible and chemotherapy
- Borderline resectable disease: median overall survival <18 months (with neoadjuvant chemoradiation and resection)[2]
- Metastatic disease: median overall survival ~11 months (with FOLFIRINOX)[3]
- Significant opportunity to improve response rates by teaching the immune system how to recognize cancer cells
- Pancreatic cancer therapy global market was estimated at $800 M in 2022 and is expected to grow to $3.5 B by 2028[4]

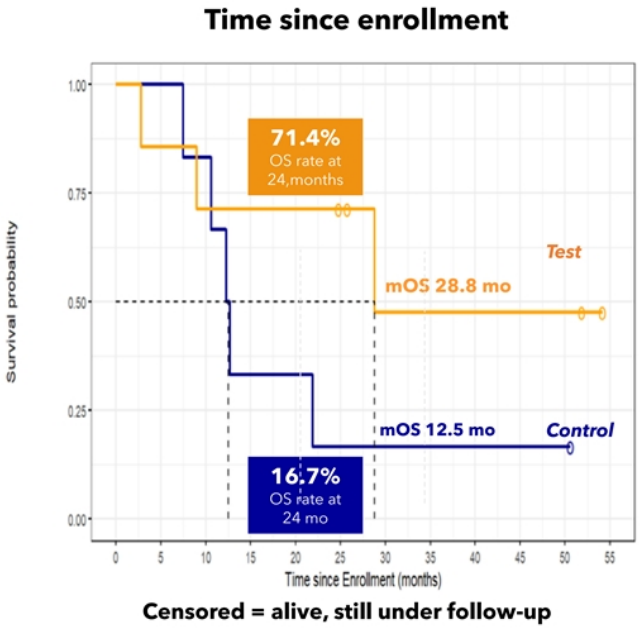
[1] *Park W et al. JAMA 2021;326:851–862*
[2] *Versteijne E et al. J Clin Onc 2020; 38:1763-1773*
[3] *Conroy T et al. NEJM 2011; 364:1817–1825*
[4] *Source: EvaluatePharma, accessed May 2023*

Overall survival in borderline resectable PDAC patients

Data as of 3/29/2024

PCN	Arm	Surgical result	pStage #	Date of last follow-up	OS mo (enrollment)	OS mo (diagnosis)	Alive (A) / Dead (D)
2022PIN	C	Unresected	IV	6/16/2020	10.6	17.2	D
2072PIN	C	Unresected	N/A*	11/13/2020	12.7	52.4	D
2092POS	C	Unresected	N/A*	7/23/2020	7.5	10.3	D
2052PLB	C	Resected	IIA	10/3/2020	12.3	16.9	D
2152PLB	C	Resected	IIB	9/25/2022	21.9	26.8	D
2112PLB	C	Resected	N/A*	3/28/2024	50.6+	54.8+	A
2102PLB	T	Unresected	IV	9/7/2020	9.0	13.7	D
2162PLB	T	Unresected	N/A*	6/9/2021	2.8	8.3	D
2042PIN	T	Unresected	IV	2/22/2024	54.2+	61.7+	A
2172PIN	T	Unresected	N/A*	1/14/2024	28.8	34.7	D
2082PLB	T	Resected	IA	2/26/2024	51.9+	57.0+	A
2182PLB	T	Resected	IB	3/04/2024	25.8+	32.3+	A
2192PIN	T	Resected	IA	3/20/2024	24.8+	30.3+	A

*Refer to slide with details on surgical status
pathologic tumor stage at resection

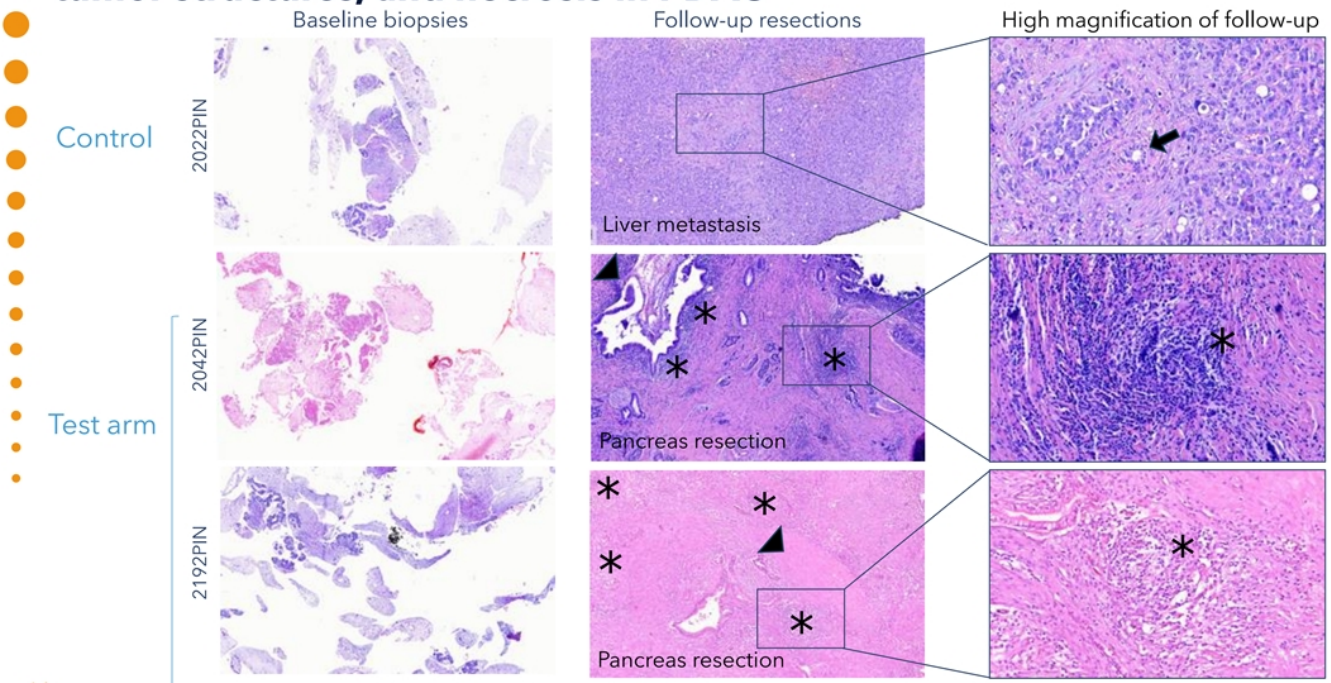


Censored = alive, still under follow-up

Arm: **C** = Control; **T** = Test (CAN-2409+prodrug)

Nichols G et al. Nature Medicine (Under review)

CAN-2409 induces formation of dense lymphocyte aggregates, disruption of tumor structures, and necrosis in PDAC



Arrows: cancer cell. Arrowheads: disrupted tumor structures and tumor necrosis. Asterisk: immune cells

Nichols G et al. Nature Medicine (Under review)

Encouraging safety data, clinical activity and immunological changes demonstrated with CAN-2409 in pancreatic cancer

- Notable improvements in estimated median overall survival of 28.8 months after experimental treatment with CAN-2409 versus only 12.5 months in control group
- At 24 months, survival rate was 71.4% in CAN-2409 treated patients versus only 16.7% in the control group after chemoradiation. At 36 months, estimated survival was 47.6% in the CAN-2409 group versus 16.7% in the control group
- Multiple injections of CAN-2409 were generally well tolerated, with no dose-limiting toxicities and no cases of pancreatitis
- In patients with progressive disease, there was a CA19-9 and survival response to salvage chemotherapy in the CAN-2409 arm but not in control arm
- CAN-2409 activates the immune response in the pancreatic tumor and peripheral blood