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): June 4, 2022

CANDEL THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation)

001-40629 (Commission File Number)

52-2214851 (IRS Employer Identification No.)

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

02494 (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) П

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

D 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:

	Trading	Name of each exchange
Title of each class	Symbol(s)	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 \boxtimes

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. \Box

Item 7.01 Regulation FD Disclosure.

On June 4, 2022, Candel Therapeutics, Inc. held an investor presentation via live webcast in which it presented initial data on CAN-2409 in a phase 2 clinical trial, which showed cytotoxic T Cell response and disease control in patients with non-small cell lung cancer. The investor presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01 and Exhibit 99.1 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 Exhibit 99.1 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, regardless of any general incorporation language in any such filing.

Description

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number

104

00.1	T	Description		T 4	2022
99.1	Investor	Presentation	dated	June 4,	2022

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 thereunto duly authorized.

Candel Therapeutics, Inc.

Date: June 6, 2022

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





Breakfast Event during ASCO 2022 Annual Meeting

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(NASDAQ: CADL)



Tipping the balance in favor of the immune system to fight cancer

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Paul Peter Tak, MD, PhD, FMedSci

President and Chief Executive Officer Candel Therapeutics, Needham, MA

CANDEL

Forward-Looking Statements

This Presentation contains forward-looking statements and information. All statements other than statements of historical facts contained in this Presentation, including express or implied statements regarding our strategy, future financial condition, future operations, projected costs, prospects, plans, objectives of management and expected market size, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "target," "seek," "predict," "potential," "continue" or the negative of these terms or other comparable terminology. Although we believe that the expectations reflected in these of management and expected market size, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this Presentation include, but are not limited to, statements about: the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical and clinical studies, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs; our ability to efficiently discover and develop product candidates; our ability to initiate, recruit and enroll patients in and conduct our clinical trials at the pace that we project; our ability to obtain and maintain regulatory approval of our product candidates; our ability to compete with companies currently marketing or engaged in the development of treatments that our product candidates are designed to target; our reliance on third parties to conduct our clinical trials and to manufacture drug substance for use in our clinical trials; the size and growth potential of the markets for our product candidates and our ability to serve those markets; the ability and willingness of our third-party strategic collaborators to continue research and development activities relating to our development candidates and product candidates; our ability to obtain and maintain adequate intellectual property rights; our estimates of our future expenses, revenue, capital requirements or our need for or ability to obtain additional financing; the potential benefits of strategic collaboration agreements, our ability to enter into additional strategic collaborations or arrangements, and our ability to attract collaborators with development regulatory and commercialization expertise; our financial performance; developments and projections relating to our competitors or our industry; the effects of the COVID-19 pandemic, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations, including but not limited to our preclinical studies or current and future clinical trials. We caution the recipient not to place considerable reliance on the forward-looking statements contained in this Presentation. The forward-looking statements in this Presentation speak only as of the date of this document, and we undertake no obligation to update or revise any of these statements. Our business is subject to substantial risks and uncertainties, including those referenced above.

Certain information contained in this Presentation relates to or is based on estimates, projections and other information concerning the Company's industry, its business and the markets for its programs and product candidates and studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this Presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this Presentation involves a number of assumptions and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not verified by any independent

These forward-looking statements are based on the beliefs of our management, as well as assumptions made by and information currently available to us. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. If such assumptions do not fully materialize or prove incorrect, the events or circumstances referred to in the forward-looking statements may not occur. We undertake no obligation to update publicly any forward-looking statements to actual results or to changes in our expectations, except as required by law. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. Additional risks and uncertainties that could affect our business are included under the caption "Risk Factors" in our most recent report filed with the Securities and Exchange Commission.

Candel overview: Oncolytic viral immunotherapies

Two clinical stage investigational medicines and an innovative discovery platform



• CAN-3110

- o Engineered, replication-competent herpes simplex virus with tumor-specificity
- Ongoing phase 1 clinical trial in recurrent HGG
- Potential for expansion of indications



• CAN-2409

• Engineered, non-replicating adenoviral gene construct encoding HSV-thymidine kinase

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- o Ongoing clinical trials in NSCLC, high-grade glioma (HGG), pancreatic cancer, and prostate cancer
- Pipeline in a product
- enLIGHTEN[™] Discovery Platform based on HSV technology



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Oncolytic HSV infection and CD8+ T cell infiltration after CAN-3110 treatment in patients with recurrent high-grade glioma



HSV1 antigen 6 weeks after injection of 1x10⁶ pfu 1.79 x 10⁶ copies of viral DNA/mg

 2.97×10^5 copies of viral RNA transcript (ICP22)/mg



Infiltration by CD8+ cytotoxic T cells (tumor infiltrating lymphocytes)

Post-treatment tissue (available in 18 patients) demonstrates persistence of HSV antigen and CD8+ T cell infiltrates T cell receptor repertoire, transcriptomics, and single cell RNA sequencing analyses are ongoing



EA Chiocca et al. Oral presentation. ASCO June 2021 New data: Q4 2022

Survival in ongoing phase 1b clinical trial after single dose of CAN-3110 in recurrent high-grade glioma

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56 YOM, IDH wild-type, MGMT partially methylated, right frontal mesial lesion initially treated with gross total resection, chemoradiation. Recurrences at two sites.

Clinical effect on injected tumor and uninjected tumor





Clinical evidence supports ongoing clinical trials of CAN-2409 in prostate cancer and pancreatic cancer



Completed phase 2 trial of CAN-2409 shows consistently improved freedom from failure rates in newly diagnosed, localized prostate cancer



Pathological complete response (pCR) observed in 93% of the biopsies available at 2yrs (37%-73% in control populations) Low risk patients achieved PSA < 2ng/ml in 77% of CAN-2409 treated patients versus 58% in control populations ٠

Significant increase in activated CD8+ T cells compared to baseline (p=0.0003)

Clinical evidence supports ongoing phase 3 clinical trial of CAN-2409 in combination with SoC as first line treatment

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Failure was measured from the start date of treatment until the date of treatment failure defined as clinical failure or biochemical failure, whichever first, according to the Phoenix ASTRO consensus (Nadir +2)





Leadership team with decades of experience in oncology, immunology, and drug development

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Research Advisory Board of premier thought leaders



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James Allison, Ph.D.

Chair of the Department of Immunology MD Anderson Cancer Center Director of the Parker Institute for Cancer Research 2018 Nobel Recipient



Edward Benz, M.D. President and CEO Emeritus

Dana-Farber Cancer Institute



Henry Brem, M.D. Director, Department of Neurosurgery Professor of Neurosurgery Johns Hopkins University

Roy Herbst, M.D., Ph.D. Chief of Medical Oncology Yale Cancer Center



Philip Kantoff, M.D. Former Chair, Department of Medicine Memorial Sloan Kettering Cancer Center



Padmanee Sharma, M.D., Ph.D.

Professor of Genitourinary Medical Oncology and Immunology MD Anderson Cancer Center





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[#]

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* Decision Resources Group 2020

[#] Market research and interviews with 13 KOLs (8 US and 5EU) Dec. 2020



First report from a phase 2 clinical trial of CAN-2409 in inadequate responders to immune checkpoint inhibitors for stage III/IV NSCLC

Daniel Sterman, MD

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Thomas and Suzanne Murphy Professor of Pulmonary and Critical Care Medicine, at the New York University Grossman School of Medicine, and Director of the Division of Pulmonary, Critical Care, and Sleep Medicine, and Director of the Multidisciplinary Pulmonary Oncology Program at NYU Langone Health

Conflict of interest disclosure: Nothing to disclose





CAN-2409 teaches the immune system how to fight cancer in injected tumor and uninjected metastases



- 2. Radiotherapy
- 3. CAN-2409 with prodrug
- 4. CAN-2409 with prodrug plus radiotherapy

Decrease in uninjected lung metastases



Model of prostate cancer: RM-1 cells in C57BL/6 mice Chhikara M et al. Mol Ther 2001; 3:536-42

Response to CAN-2409 is dependent on CD8+ T cells and transferable in mouse models of cancer



Depletion of CD8+ cells eliminated effect

Esophageal cancer model (AKR) flank tumors in C57Bl/6 mice (n = 8 per group)

CD8+ cells from 'cured' mice administered CAN-2409 protected naïve mice from tumor challenge

Winn Assay: Lung cancer model (TC-1) flank tumors in C57BI/6 mice (n = 5 per group)

18

Predina JD et al. J Hematol Oncol 2012; 5:34

Phase 1 mechanistic trial in resectable NSCLC: Safety and feasibility of intratumoral administration of CAN-2409

Evidence of monotherapy activity both via biomarkers and clinical response



Principal investigators: Dr S Singhal (UPenn) and Dr S Albelda (UPenn)



CAN-2409 stimulates local and systemic CD8+ T-cell response in patients with NSCLC

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PERIPHERAL BLOOD



Predina JD et al. Mol Ther 2020; 29:1-13

Monotherapy activity of CAN-2409 in NSCLC

70 yr old male with a 14.8 cm stage IIIA sarcomatoid carcinoma



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Day 0 Tumor Dimensions: 148 x 40 x 82 mm

10¹² vp dose



Day 22 Tumor Dimensions: 100 x 34 x 75 mm

Nearly 50% decrease in tumor volume* at 3 weeks after CAN-2409 monotherapy

Predina JD et al. Mol Ther 2020; 29:1-13

 $\pi/6 \times L \times W \times H$

Current, ongoing phase 2 clinical trial of CAN-2409 in combination with ICI in stage III/IV NSCLC



Demographics

35 patients enrolled between October 2020 and April 2022

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Age	Years
Median (range)	69 (43-88)
Sex	n (%)
Male	20 (57)
Female	15 (43)
Race	n (%)
White/Caucasian	30 (86)
Black/African American	3 (9)
Smoking History	n (%)
Never	4 (11)
Former or current	28 (80); 3 (9)
ECOG Status at Enrollment	n (%)
0 or 1	14 (40); 21 (60)

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Data cutoff was April 20, 2022

Most frequent treatment-related adverse events

Generally, CAN-2409 was shown to be well tolerated with no Grade 4 and few Grade 3 events

SOC/Adverse Event	Grade 1	Grade 2	Grade 3	Total patients						
(>10%)	n (%)	n (%)	n (%)	(n=35)						
General disorders and administration site conditions										
Chills	4 (11)			4 (11)						
Fatigue	8 (22)	4 (11)		12 (33)						
Injection site reaction	4 (11)			4 (11)						
Pyrexia	6 (17)		2 (6)	7 (20)						
Investigations										
Blood creatinine increased	4 (11)	1 (3)		4 (11)						

Swimmer plot for all evaluable patients 20 patients received 2 courses of CAN-2409 with valacyclovir and were evaluable at 12 weeks

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Stage*					mile on rea			
	Histology	PD-L1	TMB	ICI‡	(months)	Patient ID	T	
	NonSQ	< 1%	NA	Pembro +	15.5	PA-003	♦ +	Cohort I
IV	NonSQ	< 1%	NA	Pembro +	5.0	PA-007	•	Cohort II
IV	NonSQ	NA	32.5	Pembro	16.6	MU-002	~	Cohort III
IV	NonSQ	1 - 49%	15.0	Pembro	7.0	NY-001	+ §	+ CAN-2409
IV	NonSQ.	1-49%	11.0	Nivo	12.1	NY-003	*	Partial Response
IV	NonSQ.	>= 50%	19.0	Pembro	11.7	NY-004	+ △	△ Progressive Diseas
IV	NonSQ	< 1%	13.0	Nivo	16.2	NY-007	* 🔶	× Death
IV	Sq	1 - 49%	4.0	Pembro +	10.3	NY-008	+	
IV	NonSQ	< 1%	NA	Pembro +	19.1	PA-005	*	
IV	NonSQ	< 1%	NA	Pembro +	8.2	PA-006	*	
IV	Non-SQ	< 1%	NA	Pembro	11.1	PA-008	+	
IV	Non-SQ	< 1%	NA	Pembro +	11.8	PA-010	+	
ш	NonSQ	1-49%	NA	Nivo	38.4	RV-001	+	
IV	NonSQ	1 - 49%	Na	Pembro	13.0	UC-001	*	
IV	NonSQ	1 - 49%	0.0	Pembro	16.6	UC-002	• <u> </u>	
IV III	NonSQ NonSQ	1 - 49% 1 - 49%	0.0 1.6	Pembro Pembro	16.6 10.8	UC-002 VB-003	*×	
IV III	NonSQ NonSQ NonSQ	1-49% 1-49% <1%	0.0 1.6 9.0	Pembro Pembro Pembro +	16.6 10.8 5.4	UC-002 VB-003 VC-001	*X	
IV III III IV	NonSQ NonSQ NonSQ NonSQ	1 - 49% 1 - 49% < 1% 1 - 49%	0.0 1.6 9.0 5.0	Pembro Pembro * Pembro *	16.6 10.8 5.4 5.4	UC-002 VB-003 VC-001 VC-004	* ×	
	NonSQ NonSQ NonSQ NonSQ Sq	1 - 49% 1 - 49% < 1% 1 - 49% < 1%	0.0 1.6 9.0 5.0 NA	Pembro Pembro * Pembro * Pembro *	16.6 10.8 5.4 5.4 4.2	UC-002 VB-003 VC-001 VC-004 PA-004	$\begin{array}{c} * \\ * \\ * \\ * \\ * \\ * \\ * \\ \\ \end{array} $	
	NonSQ NonSQ NonSQ Sq Sq	1 - 49% 1 - 49% < 1% 1 - 49% < 1% 1 - 49%	0.0 1.6 9.0 5.0 NA 3.7	Pembro Pembro + Pembro + Pembro + Pembro +	16.6 10.8 5.4 5.4 4.2 10.7	UC-002 VB-003 VC-001 VC-004 PA-004 VB-001	$\begin{array}{c} * \\ * \\ * \\ * \\ * \\ * \\ * \\ * \\ * \\ * $	

Months

* Stage: at time of enrollment to study * SOC ICI: at enrollment to study. + Chemotherapy = pemetrexed I Time on SOC ICI prior to Study Enrollment: Initiation of ICI to first CAN-2409 injection ¶ PR by local read § Irradiation included target lesion, no longer RECIST evaluable 25

Radiographic best responses for all evaluable patients

Majority of patients experienced reduction in tumor burden



PR= partial response; PD= progressive disease

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Encouraging clinical responses

Disease control rate in cohort 2 of 87.5% in patients who were progressing at trial entry

Cohort	Completed 12-week treatment	PR	SD	PD	DCR	DoR for PR I (w)	DoR for SD (w)
1	2	1**	1	0	50%	24.1+	26.9
2	16	2	12	2	87.5%	26.7-37.9+	5.4+ - 50.4+
3	2	0	0	2*	0%	n/a	n/a

PR= partial response; SD= stable disease; PD= progressive disease;

DCR = disease control rate

DoR PR= weeks from PR to progression; DoR SD=weeks from SD to progression

+ongoing response

*PD by local read; **PR by local read



CAN-2409 led to disease stabilization in most patients who were progressing at entry

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Cohort 1: challenging recruitment because stable disease in NSCLC was considered acceptable by treating physician

Cohort 3: patients were often too ill to get to the 2nd CAN-2409 administration





Cohort 3







RECIST target lesions (red) Non-target lesions (green)

CAN-2409 increases immune cell infiltration in post-treatment tumor biopsies

Frequency analysis demonstrates enrichment in cytotoxic T cells

Vorenoi diagram illustrating frequency analysis methodology for patient NY-004 in pre- and post-treatment samples

Heat map summarizing frequency data for paired biopsy samples for 9 eligible patients

Increased aggregation of cytotoxic T cells in post treatment biopsies

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Proximity analysis was applied to immunofluorescence (IF) stained samples to evaluate number of CD8+ cytotoxic cells within a distance of 100um radius from tumor cells. Significant difference was observed in post treatment samples (paired patient data represented p=0.0149 t-test).

CAN-2409 increases circulating cytotoxic T cells and decreases circulating T regulatory cells

Flow cytometry quantitation of cytotoxic cells and T regulatory cells; average values for subpopulations at specific time points from 14 patients' PBMCs

t-SNE plot representing patient MU-002 at baseline and 12 w demonstrating changes in the T cells and NK subpopulations (red outline)

CAN-2409 induces an increase in circulating CD8+Ki67+granzyme B+ T cells associated with elevated soluble granzyme A, B, and H levels

GZMA GZMB GZMH

W8

Foxp3+ 8.23

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CAN-2409 induces a systemic increase in proliferating CD8+ and CD4+ IFN γ producing effector cells

Patient: PA-003

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Biomarker analysis summary

Biomarker data consistent with hypothesized mechanism of action

- Post treatment tumor biopsies:
 - Increased infiltration of cytotoxic T cells
 - Increased T cell aggregation in proximity to tumor cells
- Post treatment peripheral blood samples:
 - Increased actively proliferating, granzyme B positive T cells
 - Increased actively proliferating, CD4+ and CD8+ IFNy+ T cells
 - Increased levels of soluble granzymes A, B, and H
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Summary of data from ongoing phase 2 clinical trial:

 Experimental treatment with CAN-2409 plus valacyclovir in patients with advanced NSCLC and an inadequate response to first-line ICI (±chemo) who continued ICI treatment appears to be generally well tolerated

• • Encouraging preliminary activity in the first 20 evaluable patients at 12 weeks post-treatment:

- Evidence for disease regression in both injected and uninjected lesions
- In Cohort 2 (patients who entered the study with progressive disease), a DCR of 87.5% with durable disease stabilization ongoing in 10 out of 16 patients
- Partial Response in 3 patients

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 Increased infiltration by cytotoxic T cells in the tumor microenvironment associated with increased levels of soluble granzymes A, B, and H as well as granzyme B positive T cells in the peripheral blood

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 These data are consistent with the hypothesis that CAN-2409 induces immunization against tumor antigens in the injected tumor and uninjected metastases

Perspective on clinical trial of CAN-2409 and anti-PD-1 in patients with NSCLC and inadequate response to anti-PD-1 agents

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Roy Herbst, MD, PhD

Ensign Professor of Medicine (Medical Oncology) and Professor of Pharmacology at Yale School of Medicine Chief of Medical Oncology at the Yale Cancer Center and Smilow Cancer Hospital

Conflict of interest disclosure: Member of Candel's Research Advisory Board

Key Findings

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 Experimental treatment with CAN-2409 plus valacyclovir in patients with advanced NSCLC and an inadequate response to first-line ICI (±chemo) who continued ICI treatment appears to be well tolerated

• Encouraging preliminary activity in the first 20 evaluable patients at 12 weeks post-treatment:

- Evidence for disease regression in both injected and uninjected lesions
- In Cohort 2 (patients who entered the study with progressive disease), a DCR of 87.5% with durable disease stabilization ongoing in 10 out of 16 patients
- PR in 3 patients
- Increased infiltration by cytotoxic T cells in the tumor microenvironment associated with increased levels of soluble granzymes A, B, and H as well as granzyme B positive T cells in the peripheral blood

• These data are consistent with the hypothesis that CAN-2409 induces immunization against tumor antigens in the injected tumor and uninjected metastases

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Checkpoint therapy Role of targeted agents Novel immuno-oncology combinations

• • Q&A

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- How important is achieving stable disease in NSCLC patients?
- What has been the response rate in PD-1 progressing patients treated beyond progression with anti-PD-1 or other agents?
- What is your view of the monotherapy data for CAN-2409?
- How quickly did patients experience tumor shrinkage? PRs?
- • Do you think you might get better response rates by retreating patients with CAN-2409?
- O Do you think CAN-2409 has a unique opportunity in low PD-L1 tumors?