The Path Forward to Altering the Landscape of Solid Tumor Treatment

Image created for Seneca Therapeutics' use only
- Protein art of the TEM8 soluble domain -

Investors' Calls

March 19th and 26th 2024

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Context and today's discussion objectives

- Since JP Morgan, Seneca Therapeutics (STI) has not been able to secure a deal with strategic investors or VC firms
- Our historical approach of raising small tranches of funds to last short periods of time has not worked
  - Not enough cash available to pursue scientific advance and data generation
- Since the objective of any biotech company – and the only way it creates value – is to create data to enable fund raising, we ***MUST*** change course
- Today's discussion will focus on two proposed changes
  - Prioritizing all efforts to support the Miami trial to generate human data
  - Changing how the company operates to prioritize scientific advancement above all else
- Based on shareholders' agreement on these changes, we will endeavor to raise $8-10 million from select VCs and existing shareholders to execute plan over the next 24 months

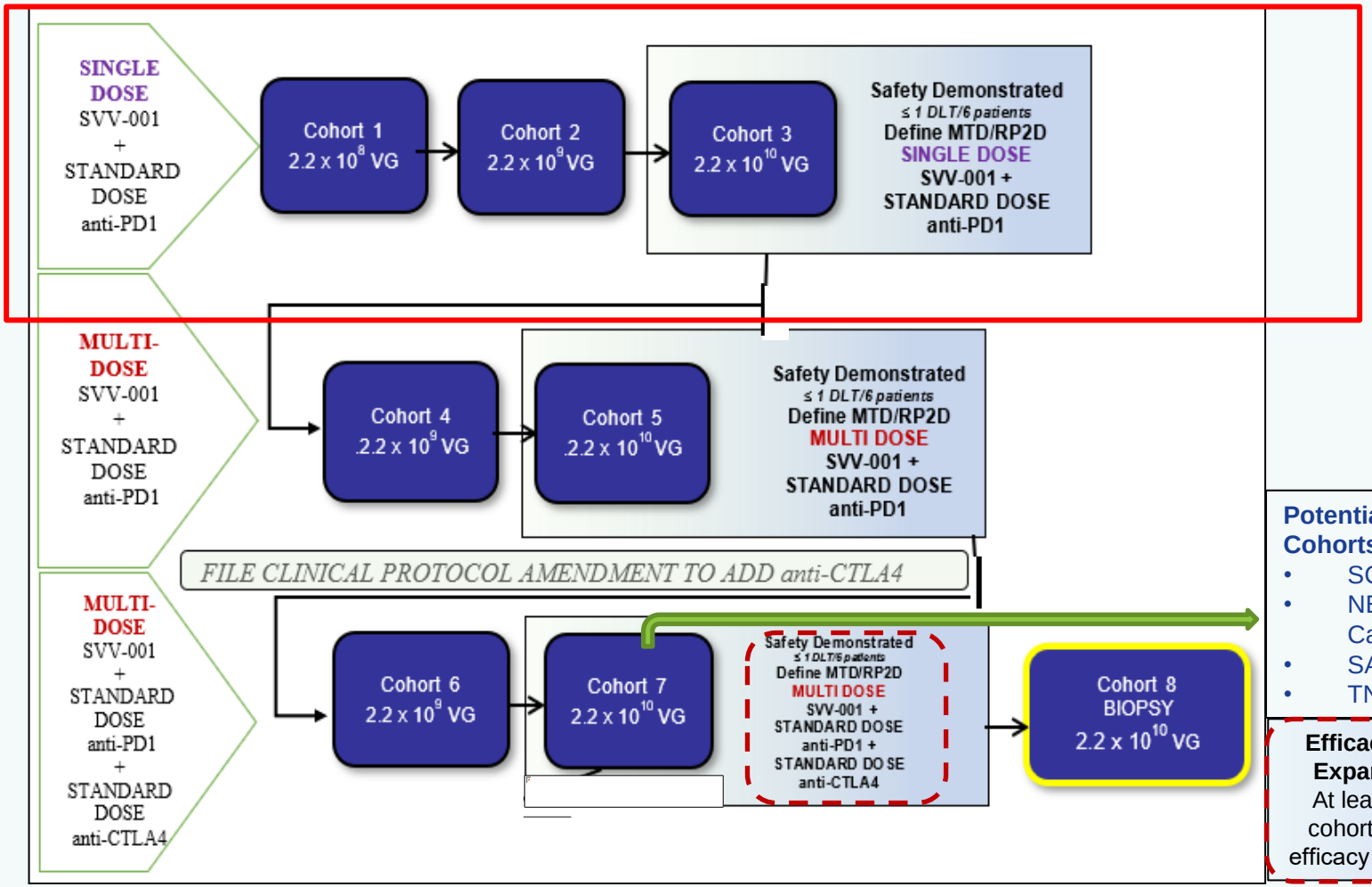
Initiating human clinical trial ASAP with minimal funding

Opportunity: Support Dr. Aman Chauhan the University of Miami Sylvester Comprehensive Cancer Center (SCCC) in conducting an investigator initiated trial (IIT) using his grant funding and STI's IND

SCCC's responsibilities being discussed	STI's responsibility
• Patient recruitment • Communications with the NCI formulary to obtain Nivolumab and Ipilimumab at no cost for trial • Testing to ensure patient eligibility (excluding STI's companion diagnostic) • Collect patient samples for companion diagnostic testing and send to Canopy for analysis. STI will review results and notify PI of eligibility • Conduct regularly scheduled blood and related tests • Provide radiologically guided intratumoral injections of SVV-001 for eligible patients • Collect all biopsies for Cohort 6 and ship to STI-designated site for analysis • Coordinating all regulatory requirements • Enlist NCI to be an additional site with STI support	• Provide GMP SVV-001 investigational drug • Provide Nivo and Ipi if cannot be sourced from MCI for free • Costs for testing and analyzing patient biopsies • Analyzing all serum SVV tests (viral genomes, if positive then TCID50s) until undetectable • Costs for analyzing serum after SVV admin to determine when nAbs appear and peak • Provide regulatory assistance if requested to expedite trial start

Clinical Strategy – Approved IND – CURRENT STRATEGY

Phase I/II SVV-001 plus Nivolumab (+/- Ipilimumab) in NET/NEC Patients



Potential Expansion Cohorts:

- SC and/or LC
- NET Subset Carcinoid
- SARCOMA
- TNBC

Efficacy Observed in Expansion Cohorts
At least ¼ expansion cohorts demonstrates efficacy in ≥ 4/15 patients

Abbreviations: DLT = dose-limiting toxicity; MTD = maximum tolerated dose; NEC = neuroendocrine carcinoma; NET = neuroendocrine tumor; RP2D = recommended Phase 2 dose; VG = viral particle.

Indicates Goals of Phase I/II Clinical Trial

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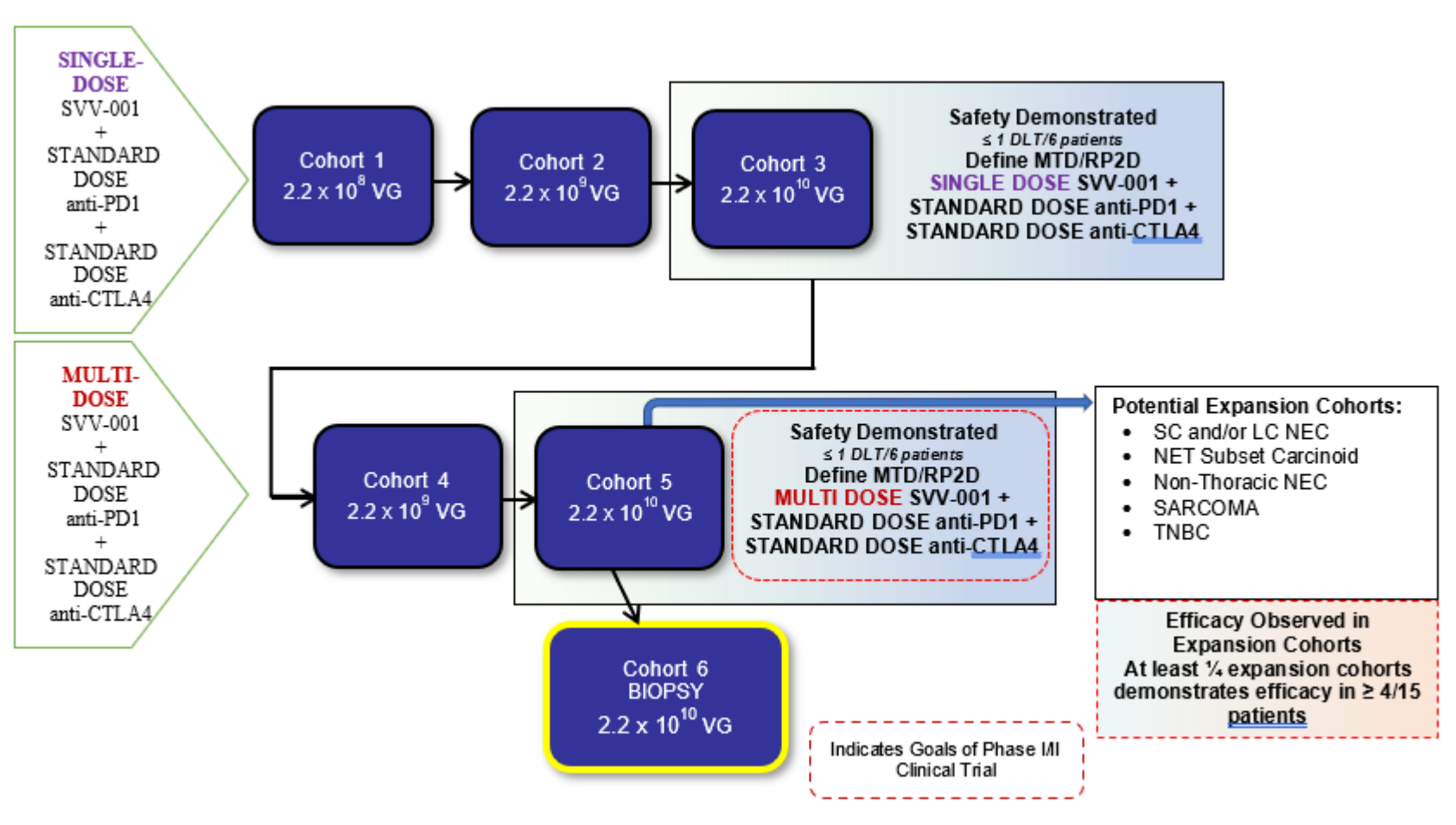
Changes to SVV-001 Phase I/II Protocol under Sylvester IND

- There were recent publications reporting no significant differences in side effects among nivolumab (“nivo”) alone, ipilimumab (“ipi”) alone and nivo and ipi together.
- This creates an opportunity to eliminate the first three cohorts of SVV-001 and nivo alone and immediately start with SVV-001 plus nivo and ipi
- This will reduce the time of the trial by up to 8 months (2 cohorts x 4 months) and reduce the cost of the trial by roughly 20%
- Further, Sylvester is requesting that some of the assays which are not relevant to SVV-001 be dropped from the trial further saving money
- STI and UM have approached NCI-CTEP to add NCI-Bethesda as a second further increasing the prestige of the IIT
- Finally, STI and UM have approached NCI-Formulary to pay for the Nivo and Ipi offering further cost savings over current projections

Revised Clinical Strategy under the Sylvester IND
Phase I/II SVV-001 plus Nivolumab and Ipilimumab in NET/NEC Patients



Abbreviations: DLT = dose-limiting toxicity; MTD = maximum tolerated dose;
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Status and Timeline Targets for Sylvester IIT Phase I/II

- Dr. Aman Chauhan and Dr. Paul Hallenbeck complete letters of support detailing STI and UM's role in upcoming clinical trial (Done)
- Aman to start process of obtaining Nivo/Ipi with NCI formulary (Done)
- Aman also reaches out to NCI CTEP to start process of having them be an additional site (Done)
- Dr. Chauhan completes drafting of Clinical Protocol and makes submission to FDA – April 5
- UM and STI develop and sign an accelerated clinical trial agreement April 12
- FDA IND Approval May 5
- IRB Submission at Sylvester – May 15
- IRB 30-day clock ends – June 15
- First Patient Dosed (earliest date) – July 29, 2024
- Last Patient Dosage completed – targeting December 2025

Changing the way we operate

- Focus spending on the most critical items
  - Items required to initiate and support the Miami trial
  - Core scientific leadership
  - Items required to “keep the lights on” (e.g., IP maintenance, repayments of key historical liabilities, etc.)
- Dramatically reduce our non-science spending
  - CEO and CFO will transition to part-time basis to reduce cash spend (starting May 1 and dependent on finalizing new employment terms)
  - Cut all other spending to bare minimum required (or to zero)
- Cuong Do will assume Executive Chairman role and work with CEO on fundraising and execution; will not receive cash compensation
- New governance model
  - Restructure board to be mostly non-management Directors
  - Provide greater financial clarity to shareholders

Funding needs and tranches

- While we will endeavor to raise the full $8-10 Series B, we must plan for the possibility that we will not succeed
- In the downside case, clear prioritization of spending and tranching of funds can be articulated
- If successful in raising the full amount, any surplus funds will judiciously support additional R&D projects requiring up to $1 million

	4/24 - 3/25	4/25 - 3/26	Notes
Must Fund			
R&D projects required to launch Miami	$272,000		1
Required cash commitment for Miami	$3,610,000		2,3
Required R&D support	$65,000	$44,000	4
Scientific leadership	$982,000	$993,000	5
IP maintenance	$318,000	$319,000	6
Must fund subtotal	*$5,247,000*	*$1,356,000*	
Minimium payback of historical liabilities	$1,267,000	$489,000	7,8
CEO & CFO Functions	$180,000	$60,000	9
Required G&A	$271,000	$193,000	10
Total	**$6,965,000**	**$2,098,000**	

1 Shedding assay; biomarker assay; completion of biomarker development
2 Cost for analyzing patient companion diagnostic assays, serum assay and biopsies
3 May be $1-2 million less if we can obtain Ipi/Nivo for free from NCI (~50% probability)
4 Virus storage; GMP testing
5 Paul and small team of employees and consultants
6 Fees and legal fees to maintain issued and pending patents. Will work to reduce
7 The company has ~$1.9 million payables overdue with 30+ vendors that need to be paid
8 Contractually obligated to pay off ~440K of paybles to Oxford/Leaf CRO when $4 million raised. Will try to renegotiate to defer ~400K+ of payments in first 12 months
9 CEO and CFO functions at a fraction of full-time employees
10 Legal; accounting; IT; insurance

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Additional R&D Projects if Funding Suffice

STI's other areas of continued R&D, activity which will be pursued over the next 24 months if funds become available:

- TEM8 and Bioinformatics - leading to the basis for a diagnostic product
  $137,000
- Armed Constructs - genetically modifying SVV to effectively deliver CPIs, while concurrently attacking TEM8
  $278,000
- Multiple Intravenous Administration - allowing SVV and Armed Constructs to be delivered at lower cost and more conveniently
  $525,000

Discussion

Summary Risk Factors

AN INVESTMENT IN THE COMPANY IS HIGHLY SPECULATIVE AND INVOLVES A HIGH DEGREE OF RISK. ONLY THOSE INVESTORS WHO CAN BEAR THE RISK OF LOSS OF THEIR ENTIRE INVESTMENT SHOULD PARTICIPATE. In addition to the other information provided by the company, potential investors should carefully consider the following risk factors in evaluating an investment in the Company. These are not the only risk factors faced by the Company (See offering materials for additional information).

The Company may not raise the full amount of the proposed financing.

- Capital raised may not be sufficient to reach a licensing event, an exit or a follow-on financing.
- In that event, the Company may have to cut back operations and may be unable to pay license fees to intellectual property ("IP") holders or meet other important obligations.

The Company's product concept may take longer to prove or may not perform as expected, delaying or precluding further financing.

The Company may fail to attract the talent it needs to achieve its objectives.

The Company's IP may infringe on others' patents or it may not be sufficient to protect the Company against competition.

- The Company has not commissioned a freedom-to-operate opinion; it is possible the Company's IP infringes on someone else's patent estate.
- The Company may need to assert its IP rights against other parties and the IP may not prove adequate to block imitators.

The product may fail in clinical trials due to safety problems or failure to demonstrate efficacy sufficient to gain approval from the FDA

The product may not receive favorable reimbursement treatment from public and/or private insurers

Revenues from products may be lower than projected, reducing the milestones & royalty payments Seneca expects from licensees.

Seneca relies heavily on third parties for product development and manufacturing expertise; those third parties may not deliver or may insist on unaffordable payment.

Seneca may not be able to raise additional capital if needed, or on terms that would be acceptable to existing owners

- The Company may need more money than anticipated to complete regulatory requirements and cover product launch costs
- Capital may need to be raised at a lower valuation, diluting existing owners

The Company's discussions with potential licensees and partners might not mature into binding commitments.

Competing products or technologies may emerge which are superior to the Company's products and technologies.

Competing products or technologies may emerge which are superior to Seneca's prospective strategic partners' products

Recent failures in the oncolytic virus space may adversely affect investor and strategic interest in the company, which may adversely affect the company's ability to raise money and may lessen the company's opportunities to seek strategic collaborations or transactions.

The target markets for the Company's products may not materialize or may diminish in unanticipated ways.

The Company may not be adept at marketing its products and may not be able to partner with a marketing company to do so.

Safe Harbor Statement and Disclaimer

This presentation contains “forward-looking statements” pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance or achievements, and may contain the words "estimate," "intend," "target," “will," “is likely,” "would," "may," or, in each case, their negative, or words or expressions of similar meaning. These forward-looking statements are found at various places throughout this presentation and include information concerning possible or assumed future results of our operations; business strategies; future cash flows; financing plans; plans and objectives of management; any other statements regarding future operations, future cash needs, business plans and future financial results, and any other statements that are not historical facts. Unless otherwise indicated, the terms “Seneca”, “STI” “Company,” “we,” “us” and “our” refer to Seneca Therapeutics, Inc. Any or all of the forward-looking statements included in this presentation are not guarantees of future performance and may turn out to be inaccurate. These forward-looking statements represent our intentions, plans, expectations, assumptions and beliefs about future events and are subject to risks, uncertainties and other factors. Many of those factors are outside of our control and could cause actual results to differ materially from the results expressed or implied by those forward-looking statements. Although these expectations may change, we are under no obligation to inform you if they do. Actual events or results may differ materially from those contained in the forward-looking statements. The following factors, among others, could cause our actual results to differ materially from those described in a forward-looking statement: our history of losses; competition, inability to achieve regulatory approval for our device, technology systems beyond our control and technology-related defects that could affect the companies’ products or reputation; risks related to adverse business conditions; our dependence on key employees; competition for qualified personnel; the possible unavailability of financing as and if needed; risks related to protecting our intellectual property rights or potential infringement of the intellectual property rights of third parties; and potential fluctuations in our quarterly and annual results. This list is intended to identify only certain of the principal factors that could cause actual results to differ from those discussed in the forward-looking statements. In light of these risks, uncertainties and assumptions, the events described in the forward-looking statements might not occur or might occur to a different extent or at a different time than we have described. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of the applicable presentation. You are referred to a discussion of important risk factors detailed in the Company’s offering materials.

THE SECURITIES THAT THE COMPANY IS OFFERING ARE HIGHLY SPECULATIVE IN NATURE AND INVOLVE A HIGH DEGREE OF RISK. A POTENTIAL INVESTOR SHOULD CONSIDER VERY CAREFULLY THE RISKS AND SPECULATIVE FACTORS INHERENT IN AND AFFECTING THE COMPANY’S BUSINESS PRIOR TO THE PURCHASE OF ANY OF THE SECURITIES, INCLUDING, WITHOUT LIMITATION, THE RISK FACTORS ENUMERATED ABOVE.

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Securities are offered through Walter Greenblatt & Associates, member FINRA. More information can be found at www.wgreenblatt.com.

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