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): October 10, 2023

Genelux Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-41599 (Commission File Number) 77-0583529 (I.R.S. Employer Identification No.)

2625 Townsgate Road, Suite 230 Westlake Village, California 91361 (Address of principal executive offices) (Zip Code)					
Registrant's telephone number, including area code: (805) 267-9889					
Not Applicable (Former name or former address, if changed since last report.)					
Check the appropriate box below if the Form 8-K filling is intended to simult	aneously satisfy the filing obligation of t	he 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	ne Exchange Act (17 CFR 240.14d-2(b))				
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the	ne Exchange Act (17 CFR 240.13e-4(c))				
Securities registered pursuant to Section 12(b) of the Act:					
Title of each class Trading Symbol(s) Name of each exchange on which registered					
Common stock, par value \$0.001 per share GNLX The Nasdaq Stock Market LLC					
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 October 10, 2023, Genelux Corporation (the "Company") made available the slide presentation attached hereto as Exhibit 99.1 (the "Corporate Presentation"). Information from the Corporate Presentation may also be used by the management of the Company in future meetings regarding the Company. For important information about forward-looking statements in the Corporate Presentation, see the slide titled "Forward-Looking Statements" in Exhibit 99.1 attached hereto.

The information contained or incorporated in this Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for 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, nor shall it be deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such filing to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

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Exhibit	Nο	Description

99.1 Slide presentation, dated October 10, 2023.

Cover Page Interactive Data File (embedded within the Inline XBRL document).

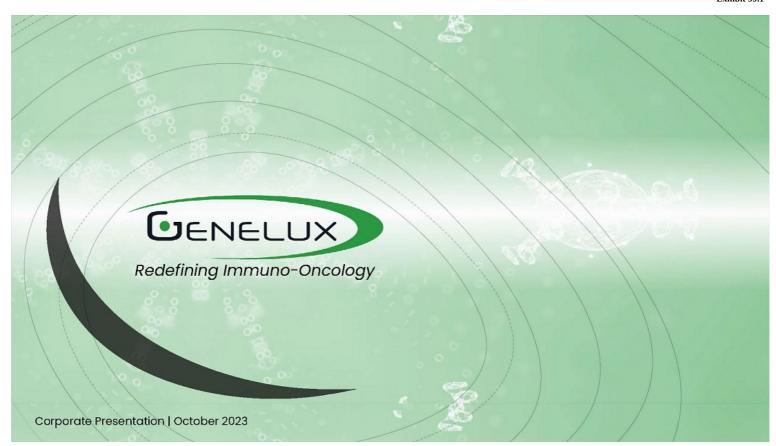
SIGNATURES

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.

Genelux Corporation

Date: October 10, 2023

By: /s/ Thomas Zindrick, J.D.
Thomas Zindrick, J.D.
President and Chief Executive Officer



Forward Looking Statements

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created by those sections, about Genelux Corporation ("Genelux," the "Company," "we," "us" or "our") that are based on the beliefs and assumptions of our management team, and on information currently available to such management team. These forward-looking statements include, but are not limited to, statements concerning: Oliv-Vec's potential utility and our plans and expectations for Oliv-Vec across various designs and indications; our expectations regarding the field of oncolytic viral immunotherapy; Oliv-Vec's potential to provide utility across multiple tumor types, and our expectations regarding our Phase 3 trial; our clinical trial strategy and design; our expectations regarding (i) the timing of our Phase 2 and Phase 3 clinical trials and (ii) our intellectual property rights under the Newsoara license agreement; our planned investments to meet worldwide clinical trial demand and facilitate our U.S. commercial launch; the commercial market opportunity for Olvi-Vec in the United States; our various commercial strategies for self-launching Olvi-Vec for ovarian cancer in the United States, including expected milestones related to clinical trials and commercial partnerships and collaborations; and our expectations regarding our cash operating runway. These forward-looking statements are subject to numerous risks and uncertainties, many of which are beyond our control. All statements, other than statements of historical fact, contained in this presentation, including statements regarding future events, future financial performance, business strategy and plans, and objectives of ours for future operations, are forward-looking statements.

Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks set forth under the heading "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, and in our other filings with the SEC, which may cause our actual results, levels of activity, performance or achievements of and those of our industry to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. You should not place undue reliance on any forward-looking statement. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will" or "would," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these identifying words. You should not put undue reliance on any forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved, if at all. Except as required by law, Genelux does not undertake any obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

Trade names, trademarks and service marks of other companies appearing in this presentation are the property of their respective owners. Solely for convenience, the trademarks and tradenames referred to in this presentation appear without the ** and *** symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

This presentation discusses a product candidate that is under clinical study and which has not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of this product candidate for the use for which it is being studied.



Olvi-Vec: De-risked late-stage Clinical Program

Ongoing pivotal trial in late-stage Ovarian Cancer, SCLC and planned Phase 2 trial Adjuvant Maintenance NSCLC



CHOICE[™] Platform; Broad and Diverse Discovery Engine

Library with over 500 novel vaccinia strains and 110+ transgenes



Validating Strategic Partnerships

Newsoara Biopharma (Greater China rights) initiated a Phase 1b/2 clinical trial with Olvi-Vec in small-cell lung cancer and ELIAS Animal Health (global rights) is preparing a canine efficacy study with V-VET1



Focused Commercial Strategy

US launch in Ovarian Cancer initially; strategic partnerships for ex-US rights



Estimated Billion Dollar Plus Annual Market Opportunity in the U.S.

Potential beyond this in numerous clinical settings



The Most Advanced Non-local Delivery Oncolytic Immunotherapy

Olvi-Vec: Engineered to selectively target and eliminate tumor cells while inducing a robust patient-specific immune response



Physician-preferred Routes of Delivery

- Regional and systemic administration to preferentially locate, colonize and destroy tumor cells
- In Ovarian Cancer trials, catheter placement is prior to chemotherapy, with removal 2 days after initial placement.
- IV therapy currently being used in small cell lung cancer Phase 1 trial.



Antitumor Effect and Well Tolerated

- Strong data in Phase 1b/2 study in platinum-resistant/refractory ovarian cancer (PRROC)
- No Maximum Tolerated Dose (MTD) observed+
- Potential utility in multiple cancers (demonstrated in 20 pre-clinical tumor models), including metastatic disease



Ideal Backbone of Combination Therapy

- Turns tumors "hot" by localized inflammation and induction of the influx of tumor infiltrating lymphocytes (TILs)
- Positively modulates anti-tumor pathways in tumor microenvironment



Diversified Designs and Indications Exploit Competitive Advantages

Olvi-Vec	Human Health	Design	Preclinical	Phase 1	Phase 2	Phase 3	Collaborators
Regional Route	Ovarian Cancer (platinum-resistant/refractory)	Olvi-Vec (i.pe) + Chemotherapy	Ph3 C	OnPrime/GOG-3076	6 Study Actively Eni	rolling	(Cooperative Group)
	Non-Small Cell Lung Cancer (Adjuvant Maintenance)	Olvi-Vec (IV) + Chemotherapy	Phase 2 Regula	tory Submission			
Systemic Route	Small Cell Lung Cancer (recurrent)	Olvi-Vec (IV) + Chemotherapy	Ph1b/2 e	nrolling		1	
Systemic Route	Ovarian Cancer (recurrent)	Olvi-Vec (IV) + Chemotherapy	Ph1b/2 Regulatory Submission				NEWSO-ARA
	Non-Small Cell Lung Cancer (relapsed/recurrent)	Olvi-Vec (IV) + Chemotherapy	Planned				(Greater China)
V2ACT Immunotherapy			Preclinical	Phase 1	Phase 2	Phase 3	
Systemic Route	Pancreatic Cancer	Olvi-Vec (IV) + Adoptive Cell Therapy	Regulatory Submission				(Worldwide Rights Ex-Greater China)
V-VET1	Animal Health		Safety	Preliminary Efficacy	Pivotal	Efficacy	
Systemic Route	Hematologic and solid tumors	V-VET1 (IV) +/- standard of care	Preparing				(Worldwide)



Selective Replication In Tumors Unleashes Immune System Against Cancer

Key Takeaways

Olvi-Vec is a robust immune modulator that utilizes a triple mode of action to mount a personalized attack against cancer cells throughout the body

- Kills cancer cells directly
- Enhances (neo)antigen presentation and stimulates a tumorspecific immune response
- Converts tumor microenvironment from immunosuppressive (cold state) to immunoreactive (hot state)

Olvi-Vec



Oncolysis and release of tumor (neo)antigens







Innate Immune Activation

Increase DAMPs / PAMPs

Increase Type I IFNs

- Immune Activation
- APCs present (neo)antigens

Adaptive

- T-cell activation & cytotoxicity
- * And-tunior immune memo









'Cold' tumor before Olvi-Vec

- No or relatively low number of immune effector cells
- Relatively high number of immune suppressor cells

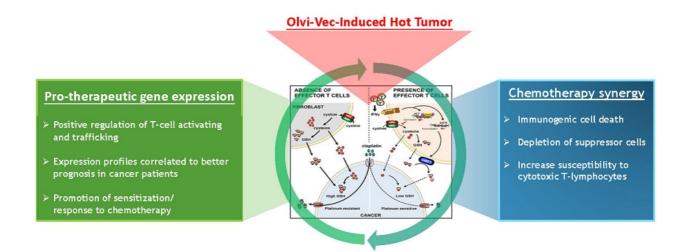
'Hot' tumor following Olvi-Vec immunotherapy

- Increase of proinflammatory cytokines/chemokines
- Influx of CD8+ effector T cells
- . M2 to M1 transition of tumor-associated macrophages
- · Decrease of immune suppression
- Changes of tumor gene expression profile
- Immunogenic tumor cell death
- Reverse platinum-resistance and synergy with other therapies
- Vascular collapse

PAMPs - Pathogen-associated Molecular Patterns DAMPs - Damage-associated Molecular Patterns



Olvi-Vec-Primed Immunochemotherapy: Overcoming Drug Resistance





Over \$4 Billion in Transactions in Active Oncolytic Space

Emerging Late-Stage Modality

With its recent IPO, Genelux joined the public markets as a Phase 3 company

A maturing field with Amgen launching Imlygic in 2014 and Phase 3 companies (CG Oncology, Replimune, GNLX) working to validate its power and potential



CG Oncology raises aggregate \$225 million in Series E and crossover financing for clinical-stage uro-onc pipeline



Replimune completed a \$225 million offering as well as \$200M in non-dilutive debt financing



Genelux enters the public markets raising \$68.5M in the first half of 2023





Competitive Advantages of Olvi-Vec as an Oncolytic Virus

Key Takeaways

Olvi-Vec Key Advantages:

- · Broad spectrum of activity
- · Tumor selectivity
- Strong lytic activity / spread
- Strong immune activator
- · Engineering capability
- · Multiple routes of delivery
- · Nonhuman pathogen
- · Stable DNA virus
- Cytoplasmic, no genomic integration

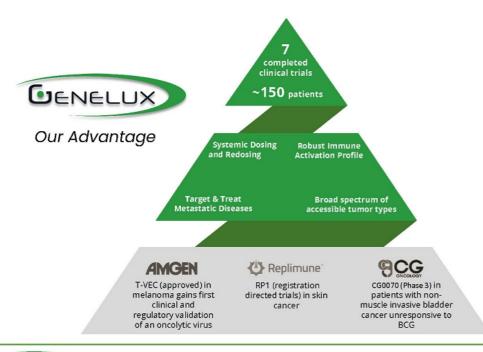
Oncolytic Virus Space



IV dosing is the physician preferred administration technique, and our IV data has the potential to enable physician preferred administration vs. local-delivery-only assets



Creating a New Paradigm Of Oncolytic Virus Drug Development



Olvi-Vec

Our New Generation

Olvi-Vec has the potential to redefine the oncolytic virus space and provide utility across multiple tumor types by enabling physician-preferred administration techniques and setting new benchmarks in efficacy and safety, as shown in multiple clinical trials. Genelux looks to its Phase 3 trial to potentially bring a best-in-class therapy to those patients in need.

1st Gen Viruses

Commercial/Late-stage 1st Generation viruses confirm modality's potential, but all are limited to local delivery and scope of addressable cancers



Phase 1b: Anti-tumor Activity as Monotherapy Leading into Combination

Key Clinical Takeaways

- mPFS of 6.1 months (median 4 prior lines; 95%CI: 2.2-NA) for the six patients in Cohort 1 virus monotherapy – the dose
 - used in Ph2
 SOC-AURELIA
 regimen (1-2 prior
 lines; mPFS: 6.7 mos)
 ELAHARE (1-3 prior
 lines; mPFS: 5.62
 - mos
- Cohort 2/3 dosing done exponentially higher with no MTD reached.

Olvi-Vec Monotherapy



Patient Background & Study Treatment

- Heavily pre-treated PRROC patients with documented
- progressive disease Cohort I received a Single cycle of intraperitoneal delivery on 2 consecutive days; total dose: 6x109 pfu, same dose as Phil/III



Tolerability:

- No Dose Limiting Toxicity (DLT)
- No Maximum Tolerated Dose (MTD)
- No Grade 4 Adverse Events (AE)



Antitumor activity:

- Clinical Benefit Rate: 73% (8/11)
- 4/11 patients had >2x PFS relative to immediate prior chemotherapy



Translational Evidence:

- Activation of tumor-specific T cell response detected in blood
- Documented immune activation in tumor microenvironment with significant influx of TILs
- Favorable immune-related genetic signatures



Completed Phase 2 Tested Olvi-Vec Immunochemotherapy

Olvi-Vec Primed Immunochemotherapy in Heavily Pretreated Patients With Platinum-Resistant or Platinum-Refractory Ovarian Cancer

Key Inclusion Criteria

- · High-grade serous, endometrioid or clear-cell ovarian cancer which includes: platinum-resistant or PRROC with at least two prior lines of therapy
- · ECOG Performance status is at 0 or 1

Interventional Single Group Assignment n=27

<u>Design</u>

Olvi-Vec via intraperitoneal infusion in multiple doses, after systemic chemotherapy administered with or without bevacizumab

Endpoints

Primary: Median progression-free survival (mPFS); Objective Response Rate (ORR) by RECIST 1.1 and by tumor biomarker Cancer Antigen-125. Secondary: Median overall survival (mOS)

Data Presentations

1. 2020 Digital Annual Meeting of International Gynecologic Cancer Society

Oral Plenary Session

2. JAMA Oncology

Selected for Journal podcast series interview

OnPrime Phase 3 Trial

Ongoing Pivotal Phase 3 for the treatment of PRROC patients, using the same Experimental Arm treatment regimen



Results of the VIRO-15 Phase 2 Trial were published in JAMA Oncology (Link)



Clinically-Meaningful Responses in Heavily Pretreated Patients

Key Clinical Takeaways

Promising ORR and PFS, and clinical reversal of platinum resistance and refractoriness among patients with PRROC

- All patients had documented progressive disease at enrollment
- Overall response rate in 27 patients was 54% with 7.6-month median duration of response
- Historical PFS in this patient population is ~4 mos

Overall Response Rate (ORR) & Progression-Free Survival (PFS)*

	ORR by RECIST1.1"	Duration of Response	ORR by CA-125	Median PFS	Median OS
All patients (n= 27) (95% CI)	54% (13 ⁰ /24) (33 - 74)	7.6 mos (3.7 - 9.6)	85 % (22/26) (65 - 96)	11.0 mos (6.7 - 13.0)	15.7 mos (12.3 - 23.8)
Platinum-resistant (n=14) (95% CI)	55 % (6/11) (26 - 84)	7.6 mos (3.7 - NA)	85 % (11/13) (55 - 98)	10.0 mos (6.4 - NA)	18.5 mos (11.3 – 23.8)
Platinum-refractory (n=13) (95% CI)	54 % (7/13) (27 - 81)	8.0 mos (3.7 - NA)	85 % (11/13) (55 - 98)	11.4 mos (4.3 -13.2)	14.7 mos (10.8 – 33.6)

*Baseline for ORR & PFS evaluation is the timepoint immediately prior to starting post-Olvi-Vec carboplatin doublet +/- bevacizumab to allow direct comparison to historical data or patients'



own previous line of chemotherapy
**Eligible for evaluation: with at least 1 measurable target lesion at baseline; including 2 patients without post-chemo scan after virotherapy, and therefore are assigned to the 'inevaluable for response' category per RECIST1.1

Including 3 unconfirmed; 2 in resistant and 1 in refractory groups

Demonstrated Deep and Durable Tumor Shrinkage

Key Clinical Takeaways

Refractory patients performed as well as resistant patients

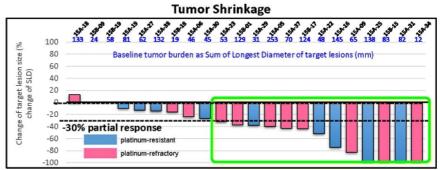
Tumor Shrinkage

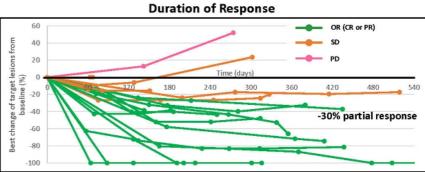
- Overall, 86% of PRROC patients showed tumor reduction, with 91% of Platinum-refractory patients showing tumor reduction
- · Four patients had 100% reduction of target lesions (two with confirmed CR), including two platinum-refractory patients

Duration of Response (DOR)

- DOR of 7.6 Months in all platinum-Resistant patients

 DOR of 8.0 Months in platinum-
- refractory patients







Olvi-Vec-Primed Immunochemotherapy Overcomes "Refractoriness"

Exemplary platinum-refractory patients, after platinum re-challenge, achieved PFS exceeding any prior lines

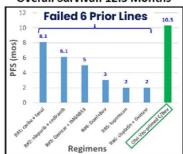


Overall Survival: 23.2 Months



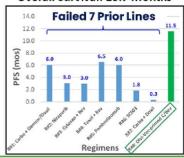


Overall Survival: 12.3 Months





Overall Survival: 15.7 Months



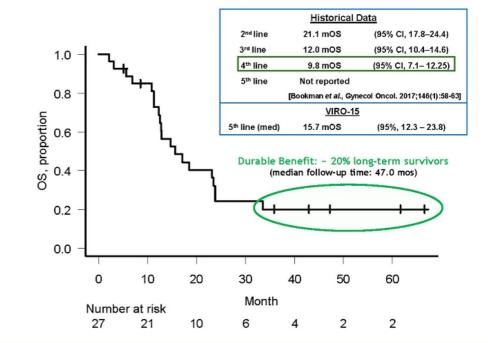


Durable Benefit of Overall Survival via Clinically-Validated Endpoint

Key Clinical Takeaways

20% long-term survivors consistent with commercially successful immunotherapies

- Historical data in 4th line and beyond shows a median overall survival of only 9.8 months
- On a median 5th line of treatment, VIRO-15 Ph2 patients achieved a mOS of 15.7 mos
- 4 of 6 long-term survivors were platinum-refractory at enrollment





"Allcomers" Approach May Reset Life Clock of Heavily Pre-treated Patients

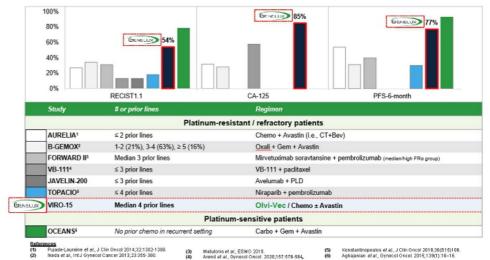
Key Trial Takeaways

Olvi-Vec addresses a broad and underserved pool of patients

- Olvi-Vec trial inclusion criteria allows patients regardless of

 (i) tumor biomarkers,
 (ii) platinum refractory tumors, or
 (iii) number of prior lines of treatment (i.e., no cap)
- Olvi-Vec Phase 2 results approach results in less pre-treated platinumsensitive patients

While clinical remissions are obtainable, a majority of patients will relapse. Genelux looks to take an all-comers approach



Footnote: As the data presented is based on a cross-trial comparison and not a head-to-head clinical trial, such comparisons may not be reliable due to differences in study protocols, conditions and patient populations. Accordingly, cross-trial comparisons may not be reliable predictors of the relative efficacy or other characteristics of our candidates compared to others presented.



Phase 3 Pivotal Trial Design Founded on Phase 2 Trial Design & Results

Trial design intends to replicate previous data showing anti-tumor activity of Olvi-Vec and reversal of platinum resistance in the tumor microenvironment

Key Inclusion Criteria

- High-grade serous, endometrioid, or clear-cell ovarian cancer.
- Platinum-resistant or -refractory
- Received prior bevacizumab (or biosimilar) treatment.
- Received a minimum of 3 prior lines of systemic therapy with no maximal limit.
- Performance status ECOG is at 0 or 1, and life expectancy of at least 6 months

Multi-center, randomized open-label n=186 Experimental Arm Olvi-Vec and Platinum-doublet + Bevacizumab, followed by maintenance therapy Active Comparator Arm Platinum-doublet + Bevacizumab, followed by maintenance therapy Enrollment expected to be completed as early as mid-2024, with 11-month follow-up

Primary Endpoint

Progression-Free Survival

Key Secondary Endpoints

- 1. Treatment-emergent AEs
- 2. Duration of Response (DOR)
- 3. Overall Response Rate (ORR)
- 4. Overall Survival (OS)

A platinum resensitizing agent is a long-standing desirable and highly demanded mechanism of action of Gyn-Oncs, their so-call "Holy Grail".*

*Journal of Investigative Medicine High Impact Case Reports, Volume 6: 1–3, 2018 DOI:10.1177/2324709618760080 Journals.sagepub.com/home/hic



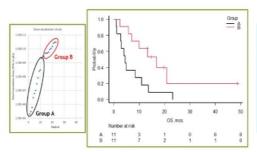
Systemic administration demonstrated dose-dependent OS benefit

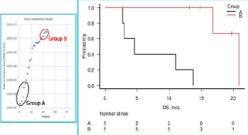
Key Trial Takeaways

Demonstrated feasibility and clinical benefit of multiple IV cycles

- Median 5 prior lines of therapy
- Regimen: various dosing levels and schedules (typically over 4-6 months)
- Well tolerated: no-MTD reached with one DLT
- <u>Clinical Benefit</u>: statistically significant overall survival (OS) benefit in primary and metastatic lung diseases

Dose Escalation Phase 1b Monotherapy Study in Solid Tumors Progressed from Last Prior Therapy





Group A: (n=11; lower-dose group with TCD ranging from 2×10⁵ pfu - 2×10⁵ pfu) Group B: (n=11; higher-dose group with TCD ranging from 3×10⁶ pfu - 3×10¹⁶ pfu) Groups lower vs higher TCD: median Overall Survival at 4.6 months (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (95% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ months}}$ (10% CI: 1.3-11.0) vs $\frac{16.8 \text{ months}}{16.8 \text{ month$

Group A: (n=5; lowest-dose group with TCD ranging from 2×10⁵ pfu - 1×10⁶ pfu)

Group B: (n=5; highest-dose group with TCD ranging from 1×10¹⁶ pfu - 3×10¹⁶ pfu) Groups lowest vs highest TCD: median Overall Survival at 4.6 months (95% CI: 2.7 – NA) vs $\frac{20.9 \text{ months}}{20.00}$ months (95% CI: 16.8 – NA); $\rho = 0.002$; e statistically significant clinical benefit favoring the highest dose group.







Systemic Administration + Chemo Generated Encouraging Data

Key Trial Takeaways

Anti-tumor effect of IV Immunochemotherapy

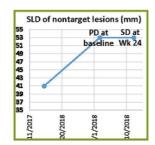
- High and Condensed Dosing (single cycle: bolus infusion on 5 consecutive days)
- Well tolerated: No DLT or MTD reached
- Monotherapy: Anti-tumor effects
- Combination therapy:
 Virus treatment revitalized
 tumors to subsequent
 chemotherapy with
 prolonged PFS and OS

Advent Health | Cancer Institute : Expanded Access Program

Recurrent metastatic cervical cancer

with lung mets

- Received 5 consecutive daily i.v. doses
 - Transient adverse reactions: fever, nausea, bone pain (Hx arthritis)
 - > Stable disease with no tumor size increase



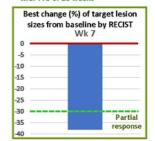
- * Chemotherapy after disease progression
 - Partial Response
 - > PFS: 70+ Weeks
 - OS: 53.4 Months

High-grade pancreatic cancer with

lung & liver mets

Case Report (Pt.#21A-04)

- ❖ Received 5 consecutive daily i.v. doses
 - > Transient adverse reactions: fever, nausea
 - 59% drop of CA19.9 tumor biomarker and Objective Response per RECIST, with PFS of 18 weeks



* Chemotherapy after disease progression

- > 83% drop of CA 19.9
- Partial Response by RECIST
- PFS: 31 wks





Benny Li, PhD Founder and Chief Executive Officer

20+ yrs. global and China local pharma Former VP, GM of Takeda China Development Center and SVP, Executive GM of R&D at Hansoh Pharmaceuticals Former Head of Clinical Development & Medical Affairs in Asia at Alcon/Novartis



Newsoara has paid \$11M to date and GNLX is eligible for additional development, regulatory and sales milestone payments and up to mid-double-digit percentages royalties on net sales



Validating Industry Collaboration with Newsoara BioPharma Co., Ltd

Key Takeaways

- Newsoara will fund the US-based Genelux Phase 2 trial in NSCLC
- Newsoara has development and commercialization rights in Greater China
- Interim readout for one or more systemic administration trials expected as early as mid-2024

Systemic Program: Clinical Trials

Sponsor	Trial Sites	Indication	Clinical Stage	Patients (est.)	Randomization	Status
•	us	Adjuvant Maintenance NSCLC	Phase II	~138	2:1	Regulatory Submission
NEWSQUAA China		Recurrent SCLC	Phase I/II	~150	Single Arm	Enrolling
		Recurrent OC	Phase I/II	~150	2:1	Regulatory Submission
	Recurrent NSCLC	Phase I/II	~150	2:1	Planned	

Genelux will have worldwide commercial rights (excluding Greater China) to all data generated from clinical trials of Olvi-Vec in China.



V2ACT Therapeutics LLC: Joint Venture between GNLX and TVAX BioMedical

Key Trial Takeaways

V2ACT Immunotherapy, combines an oncolytic immunotherapy and adoptive cell therapy

- Induces an acute inflammatory response in the tumor and converts tumor microenvironment from immunosuppressive to immunostimulatory;
- Anticipated to enhance effect of neoantigen specific effector T cells



V2ACT Therapeutics is a joint venture between Genelux Corporation and TVAX Biomedical, Inc. established to develop and test V2ACT.

Vaccination increases the numbers of neoantigen-specific T cells in the body and Olvi-Vec kills cancer cells and potentiates T cells by increasing cancer tissue receptivity to adoptively transferred neoantigen-specific effector T cells.

Technology	ology TVI Adoptive Cell Olvi-Vec Oncoly Therapy Immunotherap	
Patients Dosed	~130	~ 150
Regulatory	Fast Track Designation / FDA Grant - glioblastoma	Phase 3 enrolling - ovarian

Novel IO modality: United States Patent No. 11,633,442, issued in April 2023



Estimated Billion Dollar Plus annual Olvi-Vec Commercial Opportunity (US)





Drivers of Market Penetration

The Phase 3 population is a broad category of patients with significant unmet medical need, including those excluded from other therapies or trials.



Polaris Market Research
 MIH Ovarian Cancer Fact Sheet



Integrated R&D and Manufacturing Capabilities For Phase 3 And Launch

Key Takeaways

- Established and equipped an independent, Companycontrolled 7,500 + Sa. Ft manufacturing facility in San Diego to secure material for pivotal studies and potential commercial supply
- cGMP material manufactured and released for the ongoing Phase 3 Trial and Newsoara's trials
- Planned investment to augment internal development capabilities as well as continually improve proprietary manufacturing processes
- Genelux aims to meet worldwide clinical trial demand and U.S. commercial launch

Large-Scale cGMP Manufacturing Process to Optimize Production







Facilities and Operations: Based in Southern California



Self Launch Olvi-Vec for Ovarian Cancer in the US









Partnerships

Leverage partnership with GOG Foundation

- Preeminent US-based cooperative group in Gynecologic Oncology
- Composed of leading KOLs in the field
- Partners in the OnPrime/GOG-3076
 Phase 3 registration trial

Self-Manufacturing

Large-Scale cGMP Manufacturing

- Control of Production Schedule
- Attractive COGs
- Ability to scale up modular process

Patients

Population without Standard of Care

- PRROC patients lack effective SoC therapies
- Limited number of Gyn-Oncs enabling specialty sales team
- Label expansion starting with IV administration in 2L ovarian (Ph2 planned)

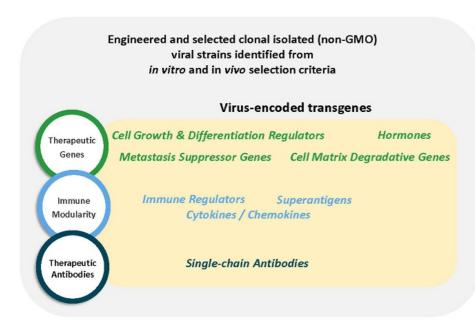
Reimbursement

Compelling Value Proposition for Payors

- Significant unmet medical need
- No SOC
- Combination with generic/biosimilars



Choice Platform Library: 500+ Vectors with 110+ Transgenes



√ In vitro & in vivo tested: GLP Tox ready

Immune Modularity Molecules

o IL-6/sIL-6R o IL-24

Cell Growth & Differentiation Regulators

o BMP-4

Cell Matrix-Degradative Genes

o hMMP9

Clonal Isolated Strains (non-GMO)

o V-VET1 (LIVP6.1.1) o LIVP1.1.1 o LIVP5.1.1 o Cop15.1.1

Single-Chain Antibodies

 Anti-VEGF o Anti-PD-1

Anti-DLL4
 Anti-CTLA4
 Anti-ανβ3-

o Anti-FAP o Anti-PD-L1

integrin



Intellectual Property: Market Exclusivity & Freedom to Operate



Patent Portfolio: 33 issued patents; 7 pending Olvi-Vec covered by Composition of Matter (2031) and Manufacturing (2038)



Olvi-Vec: Worldwide operating freedom; No third-party royalties due



Long Duration of Regulatory / Marketing Exclusivity





Accomplished Leadership Team

Executive Team



Thomas Zindrick, JD Chief Executive Officer **AMGEN**

aeromics DNX



Lourie Zak Chief Financial Officer

SØNIFI SE



Paul Scigalla, MD, PhD Chief Medical Officer Pfizer



Sean Ryder, JD General Counsel # HELSINN *mesoblast

Board of Directors

THOMAS ZINDRICK, JD Chairman of the Board

AMGEN aeromics DNX

JAMES L. TYREE, MBA Lead Independent Director



MARY MIRABELLI, MBA Director



JOHN THOMAS, MBA, PhD



Director



JOHN SMITHER, CPA (Inactive) AMGEN KYTHERA EY





Operations & R&D



Tony Yu, PhD SVP, Clin Dev UC San Diego Moores Cancer Center



Joseph Cappello, PhD Chief Technical Officer UNIVERSITY B BRAUN



Caroline Jewett Head,Quality **AMGEN**



Ralph Smalling Head, Regulatory Affairs **AMGEN**



Qian Zhang, MD, PhD VP, Clinical Sciences UC San Diego



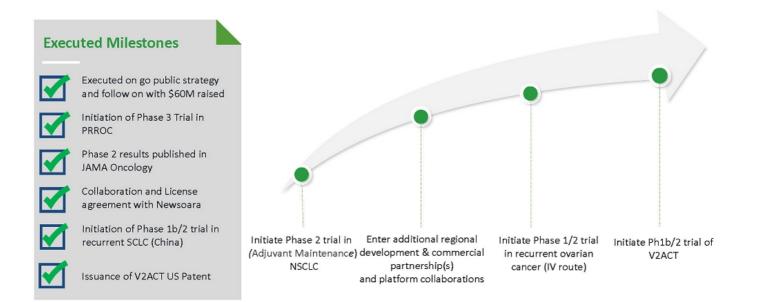
DougSamuelson VP, Finance Medacta AdvaVet



VP, Program Mgmt **AMGEN**



Genelux Has Executed on Multiple Milestones and is Positioned for the Future





Expected Operating Runway into 1Q 2026

Capitalization Summary

Stock Symbol	GNLX
Share Price ⁽¹⁾	\$28.89
Shares Outstanding	25.98M
Market Capitalization ⁽¹⁾	\$750M
Cash & Equivalents ⁽²⁾	\$28.40M
PIPE Commitments Due	\$ 25M"
Insider Ownership FULLY DILUTED	29.4%

At market close on July 18th , 2023.
 As of July 18th , 2023.

Analyst Coverage

- Bruce Jackson M.S., MBA
- Kemp Dolliver CFA
- Jason McCarthy, Ph.D.

2023 Financing Events January IPO: \$15M May Private Placement": \$33M June Private Placement": \$18M

*Reconciliation of Cap Table and Balance Sheet: -All Preferred Series (1400 A-K investors) to Common -\$32M (debt and accrued dividends) to Common



^{**} Includes \$25M that two investors will, and are contractually obligated to, fund no later than November 15, 2023.



Olvi-Vec: De-risked late-stage Clinical Program

Ongoing pivotal trial in late-stage Ovarian Cancer, SCLC and planned Phase 2 trial Adjuvant Maintenance NSCLC



CHOICE™ Platform; Broad and Diverse Discovery Engine

Library with over 500 novel vaccinia strains and 110+ transgenes



Validating Strategic Partnerships

Newsoara Biopharma (Greater China rights) initiated a Phase 1b/2 clinical trial with Olvi-Vec in small-cell lung cancer and ELIAS Animal Health (global rights) is preparing a canine efficacy study with V-VET1



Focused Commercial Strategy

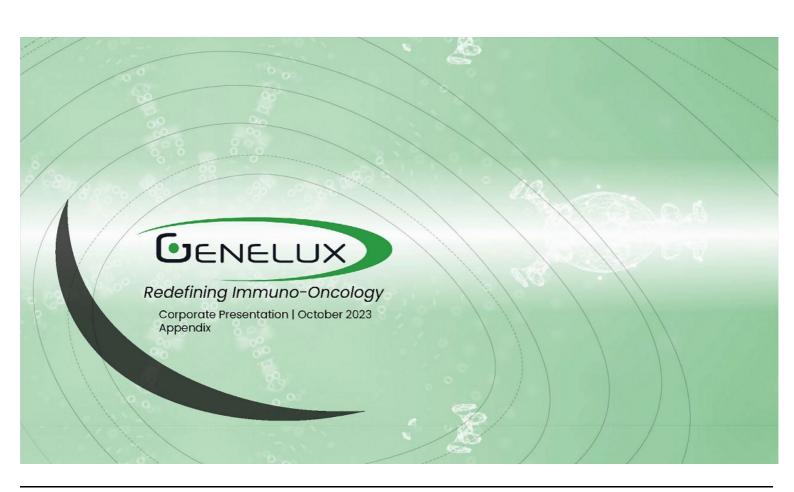
US launch in Ovarian Cancer initially; strategic partnerships for ex-US rights



Estimated Billion Dollar Plus Annual Market Opportunity in the U.S.

Potential beyond this in numerous clinical settings





Accomplished Clinical Advisory Board





Robert Holloway, MD CHAIRMAN Dr. Holloway is the principal investigator for VIRO-15 and has served on several committees of the Society of Gynecologic Oncology (SGO), including its Board of Directors.

Chief Medical Officer, Vanium Group



Robert Coleman, MD Member Dr. Coleman currently serves on the Board of Directors of Gynecologic Oncology Group and is co-Director of GOG-Partners. In addition, he is immediate Past-President of the International Gynecologic Cancer Society.

Co-Director, Gynecologic Oncology, Hoag Memorial Hospital Presbyterian



Albert A. Mendivil, MD

Dr. Mendivil, site principal investigator for VIRO-15, serves as Co-Director of Gyn- Onc and Complex Pelvic Surgery, Hoag Hospital. He has been the principal investigator or site sub-investigator on 20+ clinical trials.

Deputy Director of the University of Cincinnati Cancer Institute



Thomas J. Herzog, MD Chief Executive Officer Dr. Herzog is President-Elect of the GOG Foundation. He has served on the leadership board or council of SGO, the Foundation for Women's Cancer, and ACOG.

Professor and Division Director, Ohio State University Comprehensive



David M. O'Malley, MD Chief Medical Officer Dr. O'Malley is the clinical trial advisor/lead for ovarian cancer within GOG Partners, a committee member for the NCI Gynecologic Cancer Steering Committee's Ovarian Task Force and the NRG Oncology.

Forsythe & Bear, LLC



Alan Forsythe, PhD Chief Financial Officer Dr. Forsythe has had a distinguished career in pharmaceutical drug development. As Vice President of Corporate Biomedical Information at Amgen, Alan led the Biostatistics, Epidemiology and HOER depts.





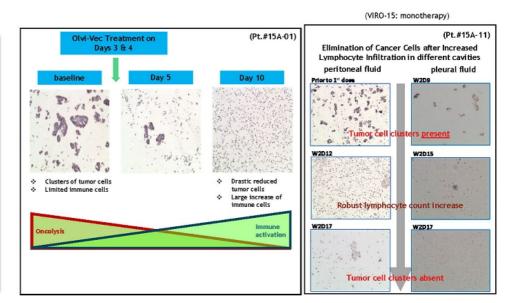
Olvi-Vec Demonstrates Monotherapy Oncolysis and Immune Activation

Colvi-Vec monotherapy shows decreased tumor cells and increase immune activation Olvi-Vec treatment was able to dramatically decrease or eliminate tumor cells in multiple patient samples The Activation of

Immunosurveillance by

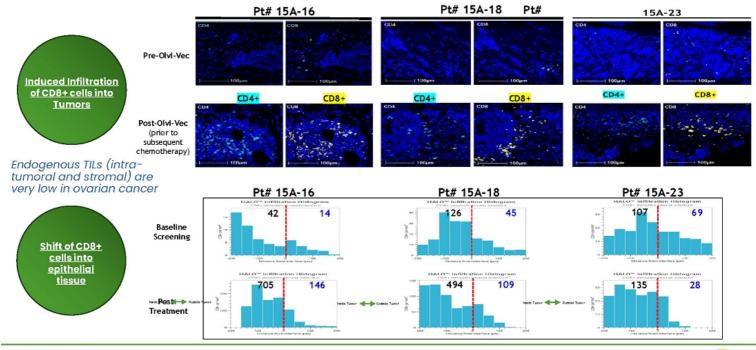
monotherapy

Olvi-Vec after 2 doses was seen in multiple cavities as





CD8+ T-cells: Infiltrating Lymphocytes are Prognostic for Response/Survival



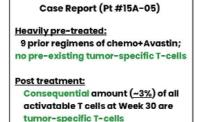
GENELUX

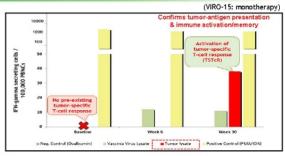
Long-lasting, Tumor-specific T cell response corresponds to tumor reduction

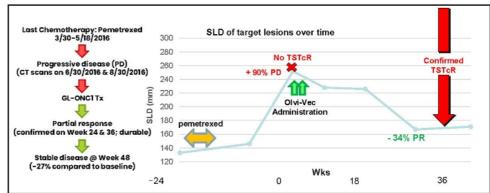
Key Takeaways

Off-the-Shelf Personalized Medicine: Single Agent generates Individualized Results

- Olvi-Vec induces favorable & long-lasting Tumor-specific T-cell Response (TSTcR) by ELISPOT analysis in patient in heavily treated patient w/ 9 prior regimens of chemo; no Tumor-specific T-cell response at baseline
- Documented OR from Olvi-Vec treatment after failure of last chemotherapy







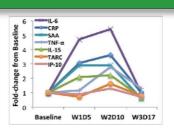


Olvi-Vec: Ideal Backbone for Combination Therapy

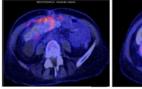
Converts Tumor Microenvironment to Inflammatory "Hot Spot"

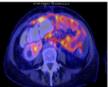
Induction of acute inflammatory cytokines (Th1-type related)

VIRO-15 Study



NCT01443260/TUE Study





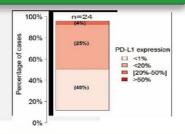
Baseline

Massive inflammatory response after cycle 1 of virus treatment

Up Regulates Immunomodulatory Target Proteins, such as PD-L1

Endogenous PD-L1 expression in ovarian tumor is low, hence limiting target by

anti-PD-1/PD-L1 therapy Rodriguez-Freixinos et al. J Clin Oncol 36, 2018 (suppl; abstr 5595)



PD-L1: VIRO-15 Study





Baseline

Post treatment (20d) Strong PD-L1 staining at the tumor-stromal interface

