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): February 5, 2024

Genelux Corporation
(Exact name of registrant as specified in its charter)

Delaware	**001-41599**	**77-0583529**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(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 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, 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 ☒

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 February 5, 2024, Genelux Corporation (the "Company") made available the corporate 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 (the "Securities Act"), 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.

Exhibit No.	Description
99.1	Corporate Presentation, dated February 5, 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.

Genelux Corporation

Date: February 5, 2024

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

Exhibit 99.1


GENELUX
Redefining Immuno-Oncology
Corporate Presentation February 2024

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: Olvi-Vec's potential utility and our plans and expectations for Olvi-Vec across various designs and indications; our expectations regarding the field of oncolytic viral immunotherapy; Olvi-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 September 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," "believe," "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.

Highlights

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

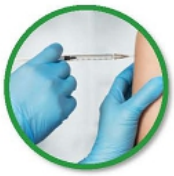
Validating Strategic Partnerships
Newsoara Biopharma (Greater China rights) initiated a Phase 1b/2 clinical trial with Olvi-Vec in small-cell lung cancer

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. for Ovarian Cancer
Potential well beyond ovarian and lung cancers in numerous platinum-failure settings via systemic administration.

The Most Advanced Non-local Delivery Oncolytic Immunotherapy

Olvi-Vec: 7 Completed Clinical Trials (>150 Patients)



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
- Potential ability to use across patients with platinum failure in multiple tumor types

Program Builds on Completed Trials to Exploit Competitive Advantages

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

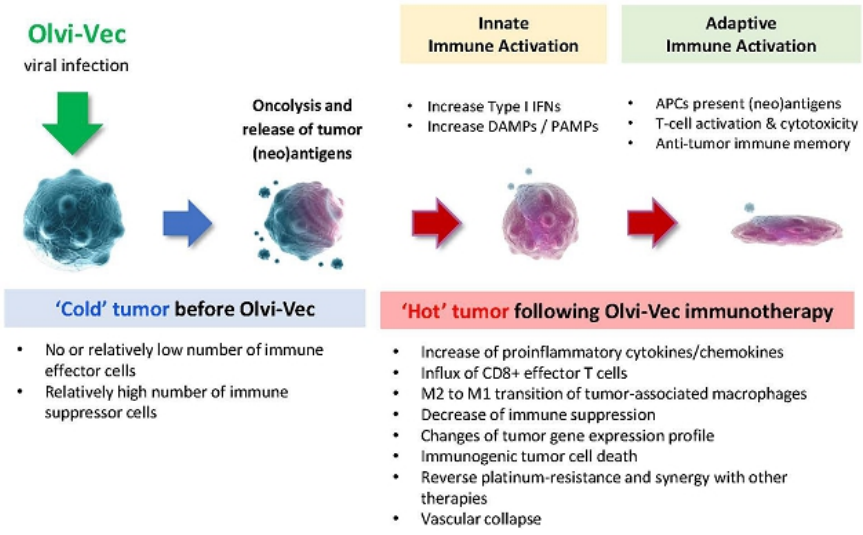
Olvi-Vec	Indication	Design	Preclinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones	Collaborators
Regional Route	***Ovarian Cancer*** *(platinum-resistant/refractory)*	*Olvi-Vec (i.pe) +* ***Platinum-based regimen***	***Ph3 OnPrime/GOG-3076 Study Actively Enrolling*** Received FDA Fast Track Designation				*Topline results expected in 2H, 2025*	GOG FOUNDATION *(Cooperative Group)*
Systemic Route	***Non-Small Cell Lung Cancer*** *(recurrent/ Adjuvant maintenance/ platinum failure)*	*Olvi-Vec (IV) +* ***Platinum-based regimen***	***Ph2 Regulatory Submission***				*Expected to Initiate in 1H 2024*	
	Small Cell Lung Cancer *(recurrent/platinum failure)*	*Olvi-Vec (IV) +* ***Platinum-based regimen***	***Ph1b/2 Enrolling***				*Expected to readout in 2H 2024*	NEWSOARA *(Greater China)*
	Ovarian Cancer *(recurrent/platinum failure)*	*Olvi-Vec (IV) +* ***Platinum-based regimen***	***Ph1b/2 Regulatory Submission***					
	Non-Small Cell Lung Cancer *(recurrent/platinum failure)*	*Olvi-Vec (IV) +* ***Platinum-based regimen***	***Planned***					
V2ACT Immunotherapy			**Preclinical**	**Phase 1**	**Phase 2**	**Phase 3**		
Systemic Route	***Pancreatic Cancer***	*Olvi-Vec (IV) +* ***Adoptive Cell Therapy***	***Regulatory Submission***					V-ACT THERAPEUTICS *(Worldwide Rights Ex-Greater China)*

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 tumor-specific immune response
- Converts tumor microenvironment from immunosuppressive (cold state) to immunoreactive (hot state)



'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

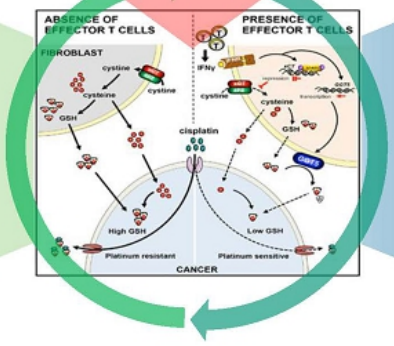
PAMPs - Pathogen-associated Molecular Patterns
DAMPs - Damage-associated Molecular Patterns

Olvi-Vec-Primed Immunochemotherapy: Overcoming Drug Resistance

Olvi-Vec-Induced Hot Tumor

Pro-therapeutic gene expression

- Positive regulation of T-cell activating and trafficking
- Expression profiles correlated to better prognosis in cancer patients
- Promotion of sensitization/ response to chemotherapy

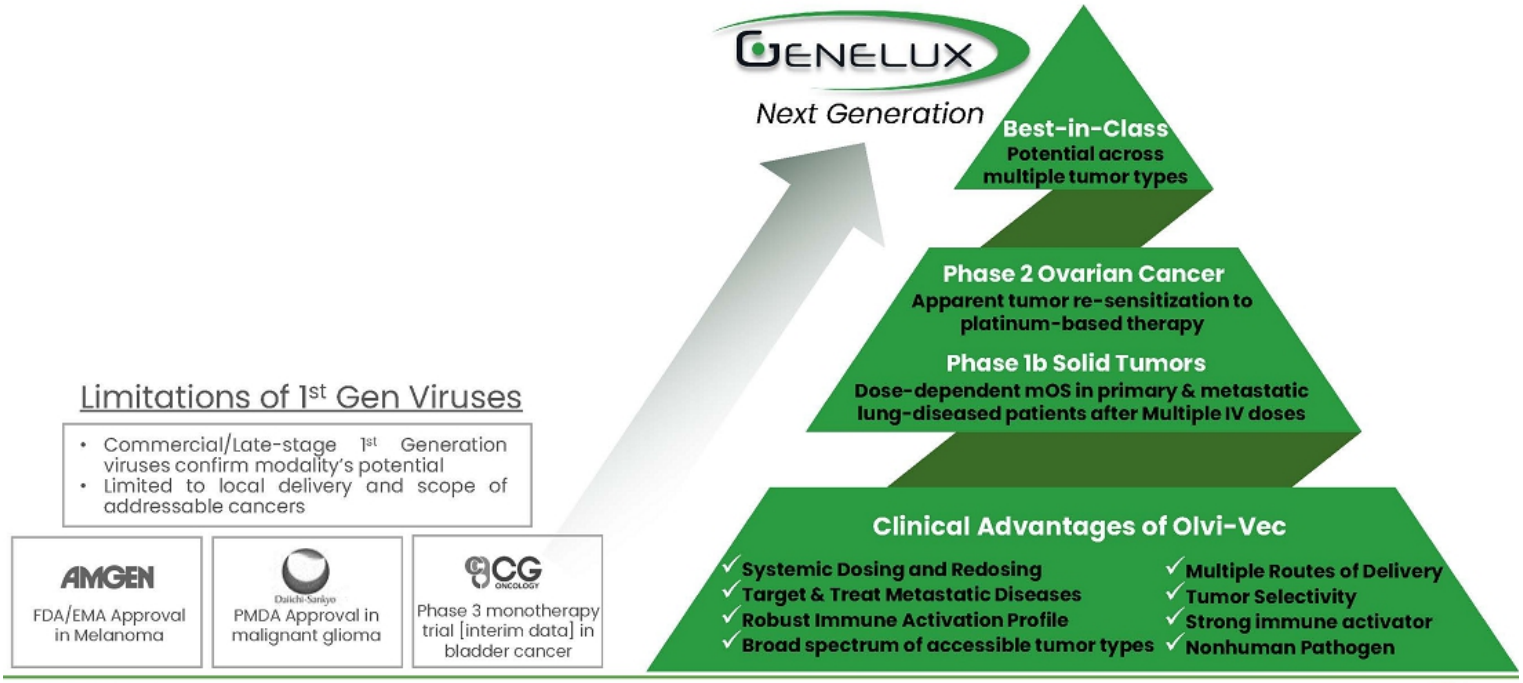


Chemotherapy synergy

- Immunogenic cell death
- Depletion of suppressor cells
- Increase susceptibility to cytotoxic T-lymphocytes

Wang et al., Cell. 2016; 165(5): 1092–1105

A Maturing Modality with Phase 3 Companies validating OV Potential



Limitations of 1st Gen Viruses

- Commercial/Late-stage 1st Generation viruses confirm modality's potential
- Limited to local delivery and scope of addressable cancers

AMGEN	Daiichi-Sankyo	CG ONCOLOGY
FDA/EMA Approval in Melanoma	PMDA Approval in malignant glioma	Phase 3 monotherapy trial [interim data] in bladder cancer

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 Phase 2.
  1. SOC-AURELIA regimen (1-2 prior lines)
     - mPFS: 6.7 mos
  2. 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 1 received a Single cycle of intraperitoneal delivery on 2 consecutive days; total dose: $6x10^9$ pfu, same dose as Phase II/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

Manyam *et al.*, Gynecologic Oncology 163 (2021) 481 - 489

Completed Phase 2 Tested Olvi-Vec-primed Immunochemotherapy

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

Design

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

JAMA Oncology

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

Phase 2: 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
- The median PFS of the patients' immediately preceding line of therapy was ~4.5 months
- Based on historical data, the median PFS would be expected to decrease in the subsequent line of therapy

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◊/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

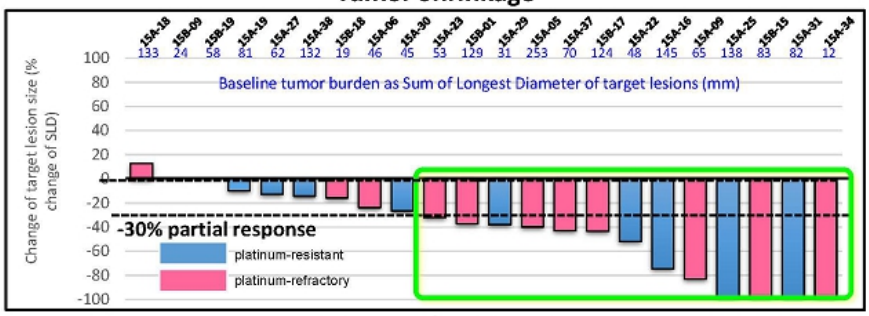
Tumor Shrinkage

- 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

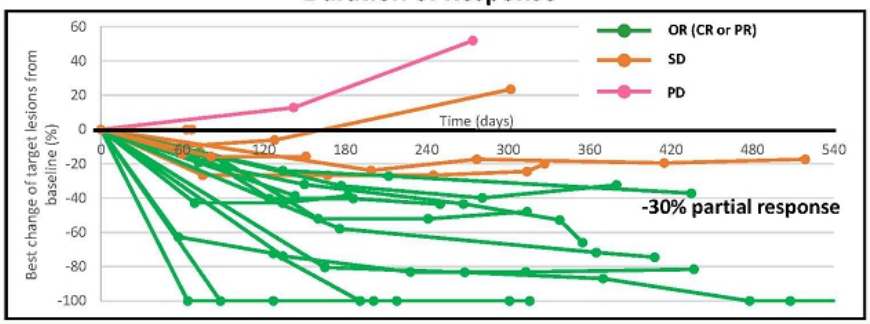
Duration of Response (DOR)

- DOR of 7.6 Months in all platinum-Resistant patients
- DOR of 8.0 Months in platinum-refractory patients

Tumor Shrinkage



Duration of Response

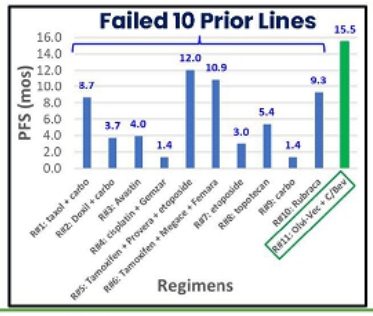


Olvi-Vec-Primed Immunochemotherapy Overcomes "Refractoriness"

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

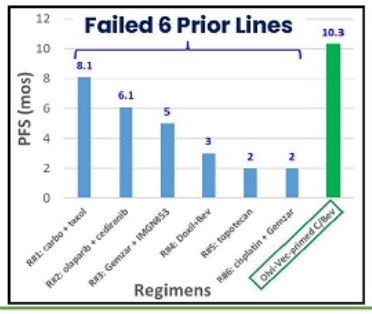
15B-01:
- Stage IIIB papillary serous
- ECOG: 0
- BRCA negative
- PD-L1 negative

Overall Survival: 23.2 Months



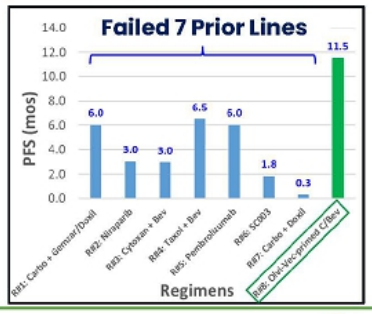
15B-15:
- Stage IIIB high-grade serous
- ECOG: 0
- BRCA negative
- PD-L1 negative

Overall Survival: 12.3 Months



15B-17:
- Stage IIIC high-grade serous
- ECOG: 1
- BRCA negative

Overall Survival: 15.7 Months



Durable Survival Benefit

Key Clinical Takeaways

Encouraging mOS and Long-term survival data

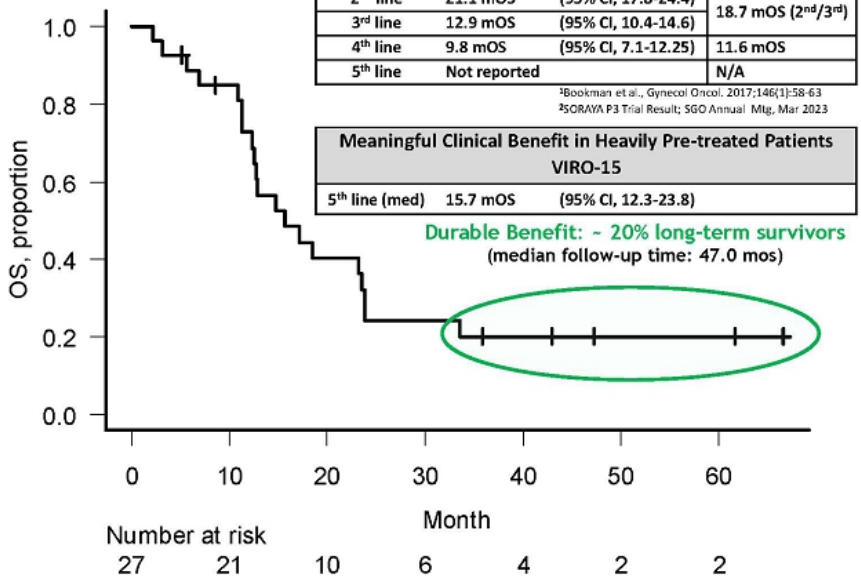
20% long-term survivors consistent with commercially successful immunotherapies

- On a median 5th line of treatment, VIRO-15 Phase 2 patients achieved a mOS of 15.7 mos
- 4 of 6 long-term survivors were platinum-refractory at enrollment

Prognosis Worsens with each Successive Line			
Historical Data[1]			ELAHARE[2]
2nd line	21.1 mOS	(95% CI, 17.8-24.4)	18.7 mOS (2nd/3rd)
3rd line	12.9 mOS	(95% CI, 10.4-14.6)	
4th line	9.8 mOS	(95% CI, 7.1-12.25)	11.6 mOS
5th line	Not reported		N/A

[1]Bookman et al., Gynecol Oncol. 2017;146(1):58-63
[2]SORAYA P3 Trial Result; SGO Annual Mtg, Mar 2023

Meaningful Clinical Benefit in Heavily Pre-treated Patients VIRO-15		
5th line (med)	15.7 mOS	(95% CI, 12.3-23.8)



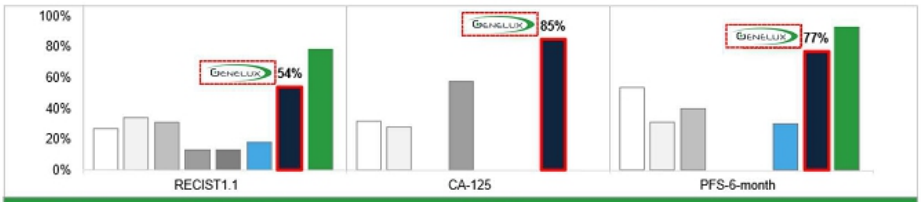
"Allcomers" Approach May Reset Life Clock of Heavily Pre-treated Patients

Key Clinical 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 platinum-sensitive patients

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



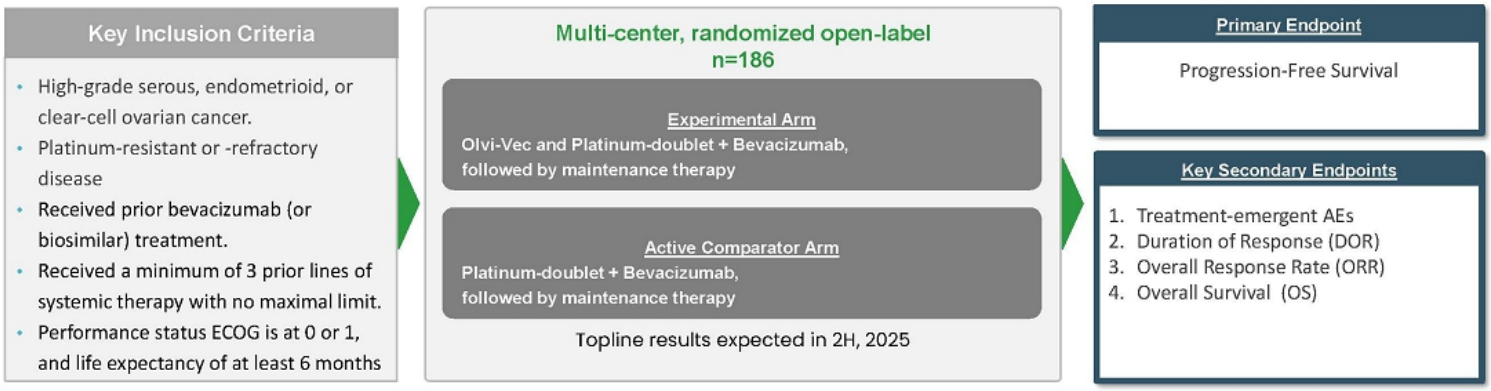
Study	# or prior lines	Regimen
Platinum-resistant / refractory patients		
AURELIA[1]	≤ 2 prior lines	Chemo + Avastin (i.e., CT+Bev)
B-GEMOX[2]	1-2 (21%), 3-4 (63%), ≥ 5 (16%)	Oxali + Gem + Avastin
FORWARD II[3]	Median 3 prior lines	Mirvetuximab soravtansine + pembrolizumab (median/high FRα group)
VB-111[4]	≤ 3 prior lines	VB-111 + paclitaxel
JAVELIN-200	≤ 3 prior lines	Avelumab + PLD
TOPACIO[5]	≤ 4 prior lines	Niraparib + pembrolizumab
VIRO-15	**Median 4 prior lines**	**Olvi-Vec / Chemo ± Avastin**
Platinum-sensitive patients		
OCEANS[6]	*No prior chemo in recurrent setting*	Carbo + Gem + Avastin

References
(1) Pujade-Lauraine et al., J Clin Oncol 2014;32:1302-1308.
(2) Ikeda et al., Int J Gynecol Cancer 2013;23:355-360.
(3) Matulonis et al., ESMO 2018.
(4) Arend et al., Gynecol Oncol. 2020;157:578-584.
(5) Konstantinopoulos et al., J Clin Oncol 2018;36(S15)106.
(6) Aghajanian et al., Gynecol Oncol. 2015;139(1):10–16.

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



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

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

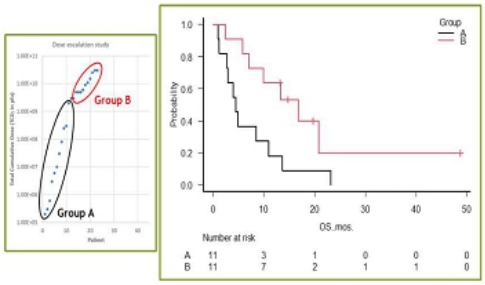
Systemic administration demonstrated dose-dependent OS benefit

Key Clinical Takeaways

Demonstrated feasibility and clinical benefit of multiple IV cycles

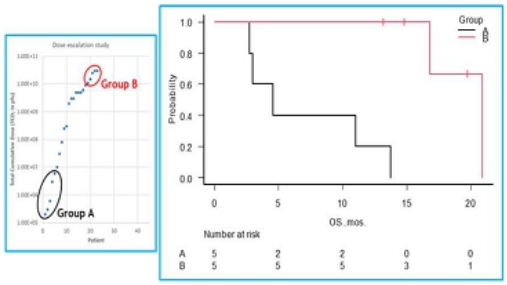
- Median 5 prior lines of therapy
- Regimen: various dosing levels and schedules (typically over 4-6 months)
- Well tolerated: no-MTD reached with one DLT
- Clinical Benefit: statistically significant overall survival (OS) benefit in primary and metastatic lung diseases

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 2×10^5 pfu - 2×10^9 pfu)
Group B : (n=11; **higher-dose group** with TCD ranging from 3×10^9 pfu - 3×10^{10} pfu)

Groups lower vs higher TCD:
median Overall Survival at **4.6 months** (95% CI: 1.3 – 11.0) vs **16.8 months** (95% CI: 5.9 – NA);
$p = 0.026$; a statistically significant clinical benefit favoring the higher dose group.



Group A : (n=5; **lowest-dose group** with TCD ranging from 2×10^5 pfu - 1×10^6 pfu)
Group B : (n=5; **highest-dose group** with TCD ranging from 1×10^{10} pfu - 3×10^{10} pfu)

Groups lowest vs highest TCD:
median Overall Survival at **4.6 months** (95% CI: 2.7 – NA) vs **20.9 months** (95% CI: 16.8 – NA);
$p = 0.002$; a statistically significant clinical benefit favoring the highest dose group.

The ROYAL MARSDEN NHS Foundation Trust
UNIVERSITY OF SURREY
ICR The Institute of Cancer Research

Systemic Administration + Chemo Generated Encouraging Data

Key Clinical Takeaways

Anti-tumor effect of IV Immunochemotherapy

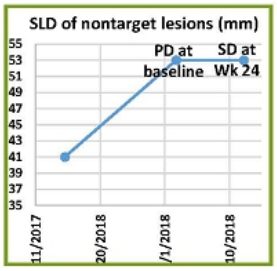
- High and Condensed Dosing (single cycle: bolus infusion on 5 consecutive days)
- Well tolerated: No DLT or MTD reached
- Monotherapy: Anti-tumor effects
- Combination therapy: Virus treatment revitalized tumors to subsequent chemotherapy with prolonged PFS and OS

AdventHealth | Cancer Institute : Expanded Access Program

Platinum refractory metastatic cervical cancer with lung mets

Case Report (Pt #21A-06)

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

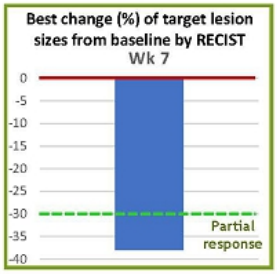


- Chemotherapy after disease progression
  - Partial Response
  - PFS: 70+ Weeks
  - OS: 53.4 Months

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

Genelux has Partnered with Newsoara BioPharma Co., Ltd

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
HIGHLIGHTS

7 Pipelines
12 Indications

5 Phase IIb/III
2 Phase II

$850 Million Valuation

Top 10 Blue-chip Biotech Investors

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
- All patients in these trials will be treated systemically and have previously failed platinum-based therapy
- Systemic Trial Milestones
  - Initiate Phase 2 NSCLC: 1H, 2024
  - Phase 1b SCLC readout: 2H, 2024

Systemic Program: Clinical Trials

Sponsor	Trial Sites	Indication	Clinical Stage	Patients (est.)	Randomization	Status
	US	Recurrent/Adjuvant Maintenance NSCLC	Phase II	~142	1:1	Regulatory Submission
NEWSOARA	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

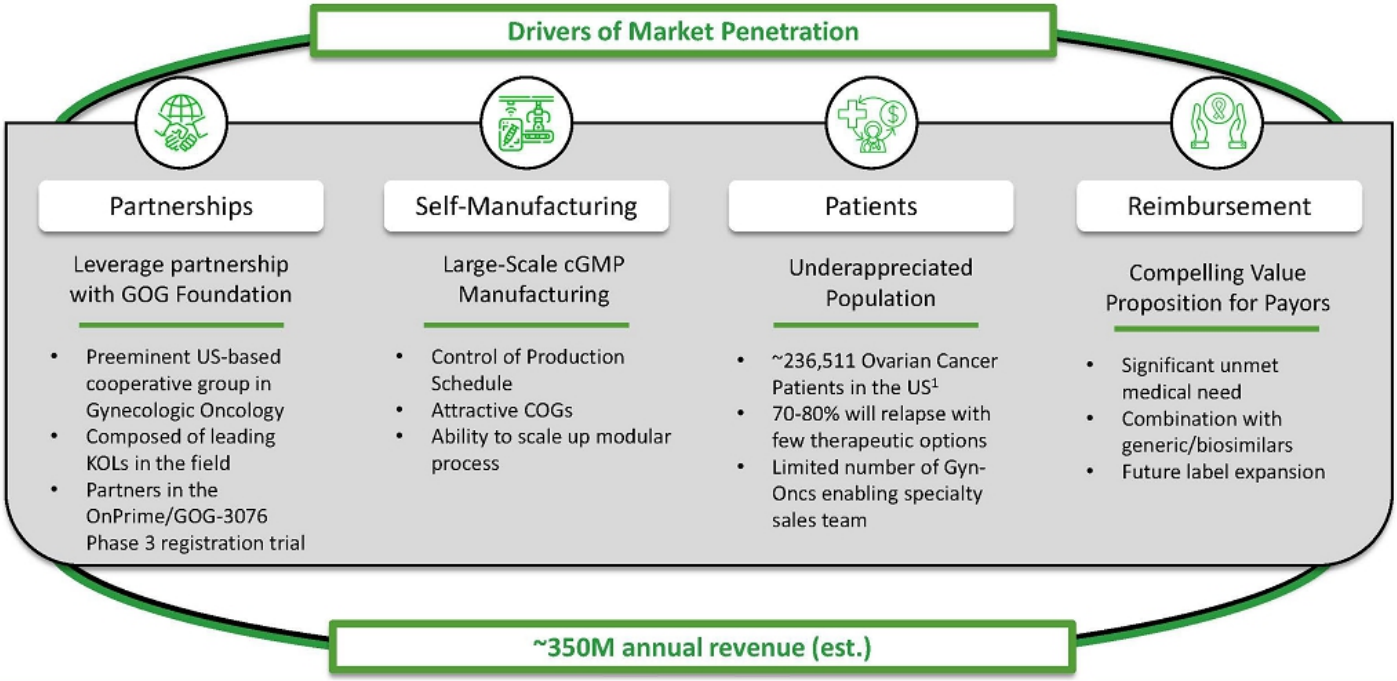
V2ACT Therapeutics is a joint venture between Genelux Corporation and TVAX Biomedical, Inc. established to develop and test V2ACT.

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	TVI Adoptive Cell Therapy	Olvi-Vec Oncolytic Immunotherapy
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

Self Launch Olvi-Vec for Ovarian Cancer in the US



1. NIH Ovarian Cancer Fact Sheet

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

Key Takeaways

Facilities and Operations based in Southern California

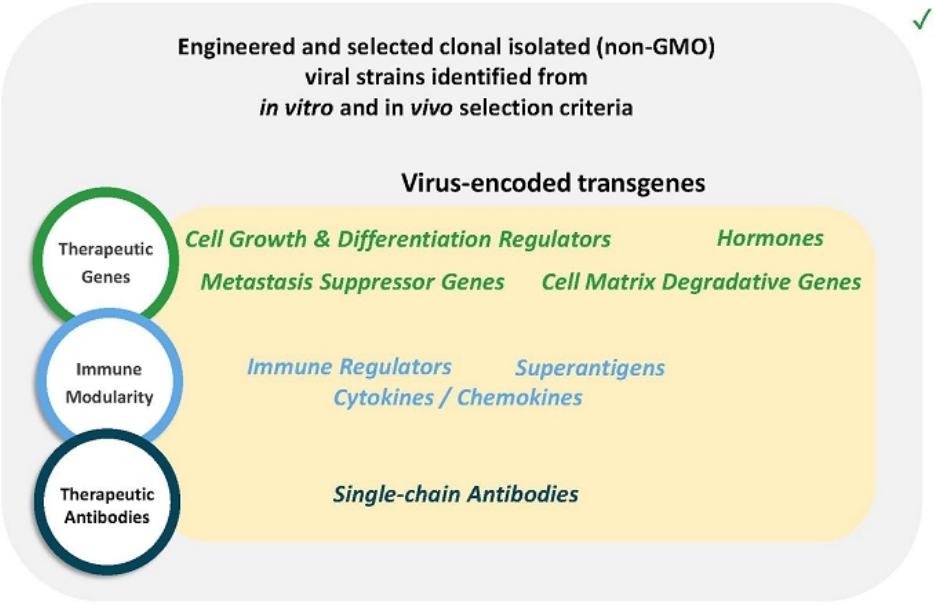
GMP Manufacturing
- Large-scale manufacturing process
- Capacity for clinical studies and commercial launch needs

Translational Research
- Clinical Science capabilities to support development program
- Process development capabilities to support manufacturing

Headquarters
- Executive Office suite
- Right of First Refusal on 16,338 Sq. Ft of adjacent office space for build-out of Commercialization, Development & G&A functions

Facilities and Operations: Based in Southern California

Choice Platform Library: 500+ Vectors with 110+ Transgenes



✓ ***In vitro & in vivo tested: GLP Tox ready***

Immune Modularity Molecules

- ***IL-6/sIL-6R***
- ***IL-24***

Cell Growth & Differentiation Regulators

- ***BMP-4***

Cell Matrix-Degradative Genes

- ***hMMP9***

Clonal Isolated Strains (non-GMO)

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

Single-Chain Antibodies

- **Anti-VEGF**
- **Anti-PD-1**
- **Anti-FAP**
- **Anti-PD-L1**
- **Anti-DLL4**
- **Anti-CTLA4**
- **Anti-αvβ3-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

Strong IP & Regulatory Designations

*Reflects Patent Term Extension

Accomplished Leadership Team

Executive Team

Thomas Zindrick, JD
Chief Executive Officer

Lourie Zak
Chief Financial Officer

Paul Scigalla, MD, PhD
Chief Medical Officer

Sean Ryder, JD
General Counsel

Board of Directors

THOMAS ZINDRICK, JD
Chairman of the Board

JAMES L. TYREE, MBA
Lead Independent Director

MARY MIRABELLI, MBA
Director

JOHN THOMAS, MBA, PhD
Director

JOHN SMITHER, CPA (Inactive)
Director

Operations & R&D

Tony Yu, PhD
SVP, ClinDev

Joseph Cappello, PhD
Chief Technical Officer

Caroline Jewett
Head,Quality

Ralph Smalling
Head, Regulatory Affairs

Qian Zhang, MD, PhD
VP, Clinical Sciences

Cathy Gust, PhD
VP, Program Mgmt

Expected Operating Runway into 2Q 2025

Capitalization Summary

Stock Symbol	GNLX
Share Price[1]	$12.84
Shares Outstanding	26.7M
Market Capitalization[1]	$328.3M
Cash & Equivalents[2]	$29.9M
PIPE Commitments Due	$ 2M**
Insider Ownership FULLY DILUTED	25.4%

1) At market close on December 8th, 2023.
2) As of September 30th, 2023.

Analyst Coverage

- **Kemp Dolliver** CFA
  Brookline Capital Markets
- **Emily Bodner**
  H.C. Wainwright
- **Jason McCarthy,** Ph.D.
  Maxim Group
- **Bruce Jackson,** M.S., MBA
  The Benchmark Company

2023 Financing Events
January IPO*: $15.9M
May/June Private Placements: $25.8M

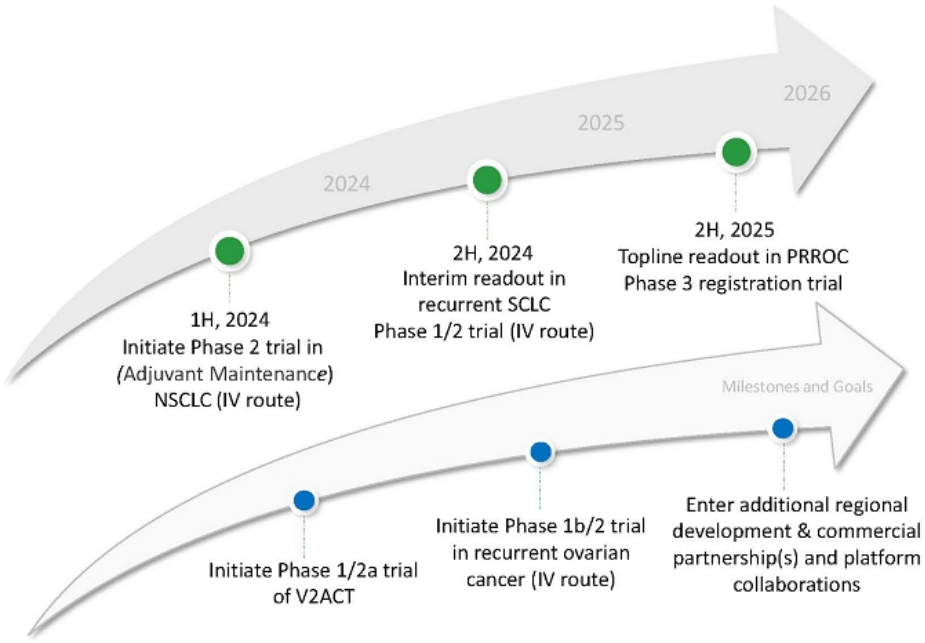
*Reconciliation of Cap Table and Balance Sheet:
-All Preferred Series (1400 A-K investors) to Common
-$32M (debt and accrued dividends) to Common

** Excludes $2M that an investor was originally obligated to fund by November 15, 2023, extended to March 31, 2024 .

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

Executed Milestones

- ☑ Executed on go public strategy and follow on, $41.7M raised
- ☑ Initiation of Phase 3 Trial in PRROC
- ☑ Phase 2 results published in JAMA Oncology
- ☑ Collaboration and License agreement with Newsoara
- ☑ Initiation of Phase 1b/2 trial in recurrent SCLC (China)
- ☑ Issuance of V2ACT US Patent



Highlights

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

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. for Ovarian Cancer
Potential well beyond ovarian and lung cancers in numerous platinum-failure settings.

GENELUX

Redefining Immuno-Oncology

Corporate Presentation | February 2024
Appendix

Accomplished Clinical Advisory Board

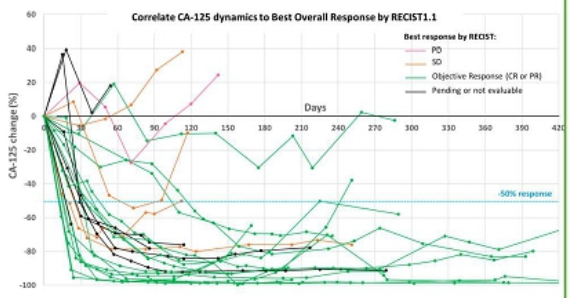
Medical Director, Gynecologic Oncology, AdventHealth Cancer Institute 	**Robert Holloway, MD** CHAIRMAN	Dr. Holloway is the principal investigator for VIRO-15 and has served on several committees of the Society of Gynecologic Oncology (SGO), including its Board of Directors.
Chief Medical Officer, Vanium 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** Member	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 Cancer Center 	**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-primed Immunochemotherapy Anti-tumor Activity: CA-125 Biomarker

Rapid, Common and Durable Responses

CA-125 Decrease

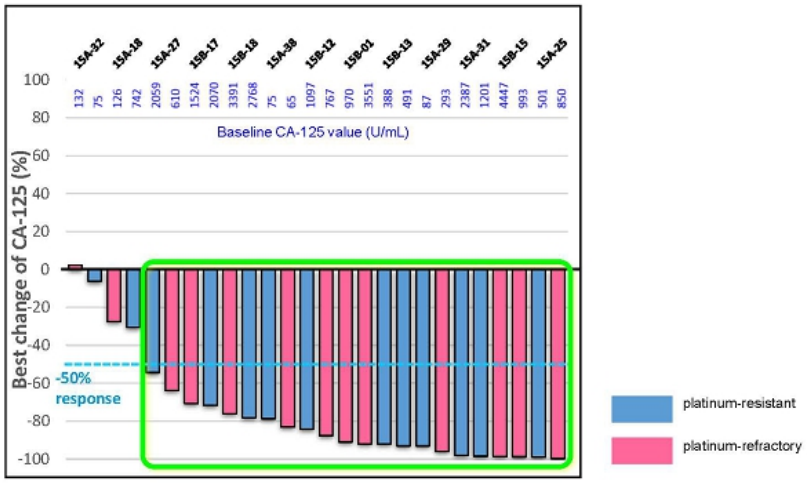
- All PRROC Patients: 96% (25/26)
- Platinum refractory patients: 85% (11/13)



- All 11 patients with > 90% decrease of CA-125 achieved RECIST response
- RECIST responses correlate to CA-125 responses ($p = 0.007$)

ORR by CA-125

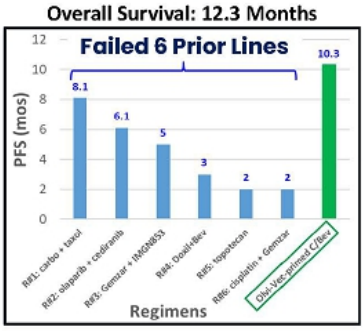
- All PRROC Patients: 85% (22/26)
- Platinum refractory patients: 85% (11/13)

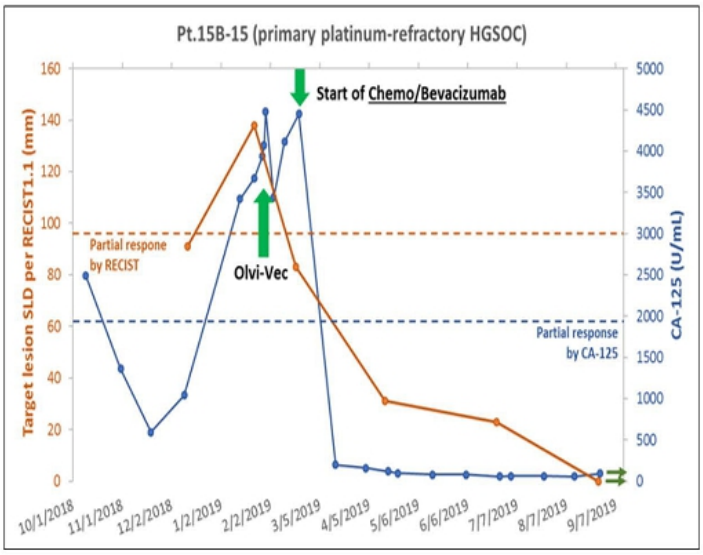


Olvi-Vec-Primed Immunochemotherapy Overcomes "Refractoriness"

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

15B-15:
- Stage IIIB high-grade serous
- ECOG: 0
- BRCA negative
- PD-L1 negative



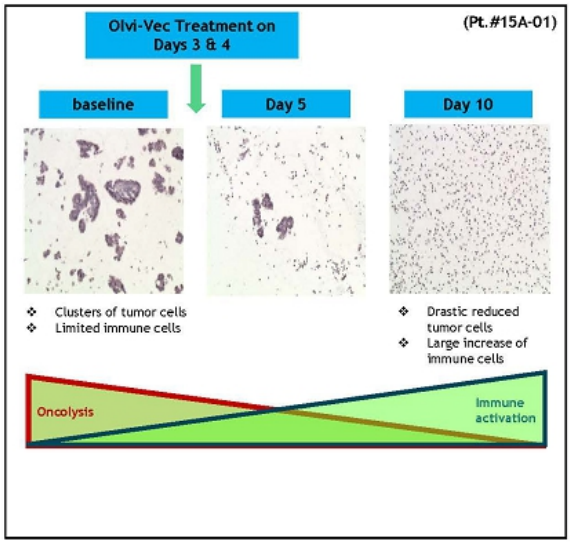


Olvi-Vec Monotherapy Demonstrates Oncolysis and Immune Activation

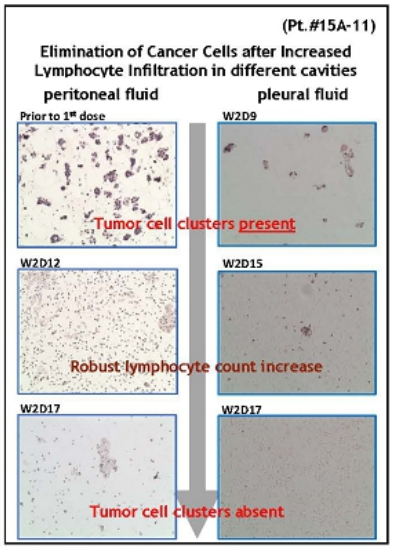
Key Takeaways

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

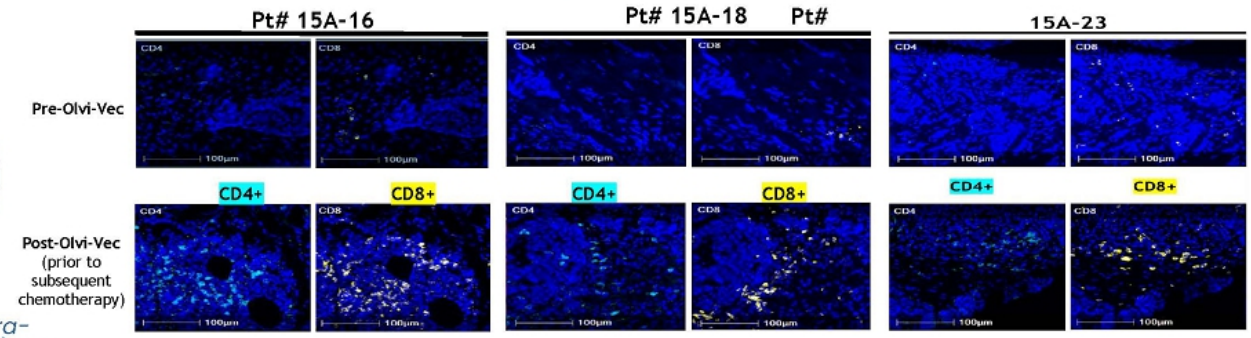


(VIRO-15: monotherapy)



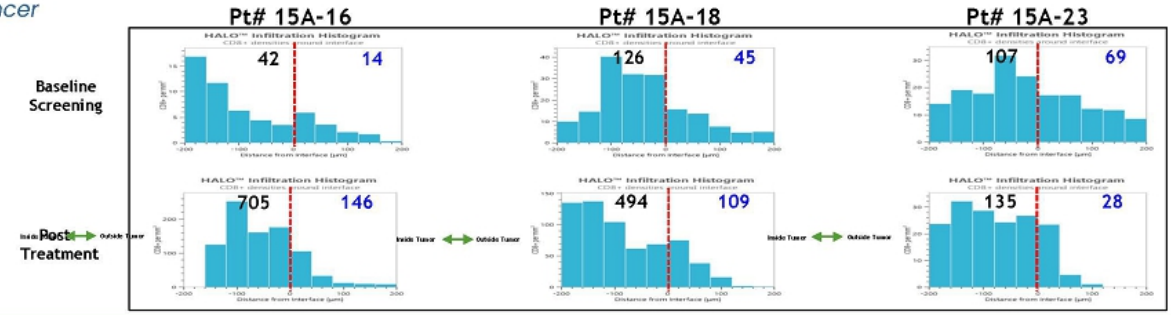
CD8+ T-cells: Infiltrating Lymphocytes are Prognostic for Response/Survival

Induced Infiltration of CD8+ cells into Tumors



Endogenous TILs (intra-tumoral and stromal) are very low in ovarian cancer

Shift of CD8+ cells into epithelial tissue



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

Key Takeaways

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

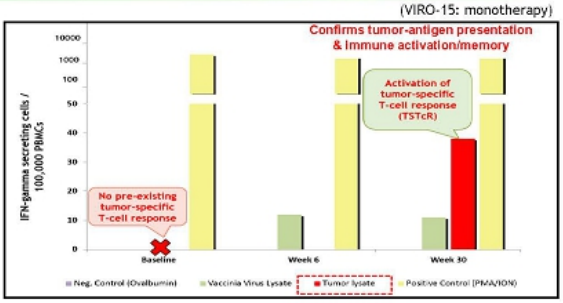
- Olvi-Vec induces favorable & long-lasting Tumor-specific T-cell Response (TSTcR) by ELISPOT analysis in patient in heavily treated patient w/ 9 prior regimens of chemo; no Tumor-specific T-cell response at baseline
- Documented OR from Olvi-Vec treatment after failure of last chemotherapy

Case Report (Pt #15A-05)

Heavily pre-treated:
9 prior regimens of chemo+Avastin;
no pre-existing tumor-specific T-cells

Post treatment:
Consequential amount (~3%) of all activatable T cells at Week 30 are tumor-specific T-cells

(VIRO-15: monotherapy)



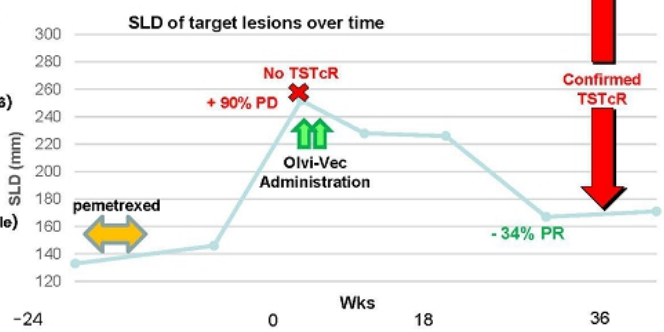
Last Chemotherapy: Pemetrexed 3/30-5/18/2016

Progressive disease (PD) (CT scans on 6/30/2016 & 8/30/2016)

GL-ONC1 Tx

Partial response (confirmed on Week 24 & 36; durable)

Stable disease @ Week 48 (-27% compared to baseline)

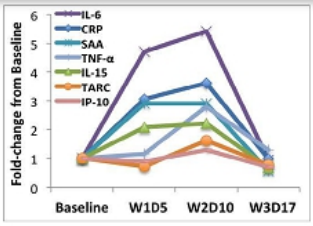


Olvi-Vec: Ideal Backbone for Combination Therapy

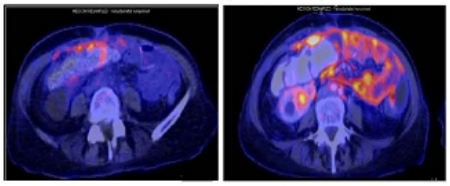
Converts Tumor Microenvironment to Inflammatory "Hot Spot"

Induction of acute inflammatory cytokines (Th1-type related)

VIRO-15 Study



NCT01443260/TUE Study



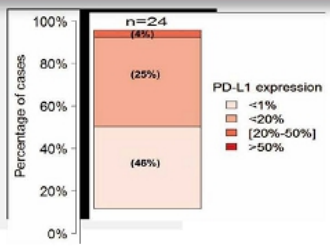
Baseline

Massive inflammatory response after cycle 1 of virus treatment

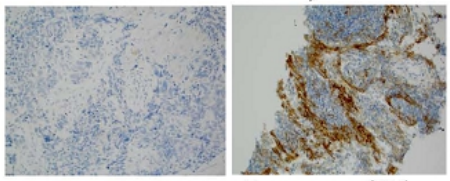
Up Regulates Immunomodulatory Target Proteins, such as PD-L1

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