GENELUX

Redefining Immuno-Oncology

Forward-Looking Statement

This presentation contains forward-looking statements about Genelux Corporation ("Genelux," "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 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, 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. We undertake no obligation to update or revise publicly any of the forward-looking statements after the date hereof to conform the statements to actual results or changed expectations except as required by law.

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. 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.

Any offering of securities will only be made by means of a registration statement (including a prospectus, filed with the U.S Securities and Exchange Commission ("SEC"), after such registration statement becomes effective. No such registration statement has become effective, as of the date of this presentation. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

We have filed a registration statement (including a prospectus) on Form S-1 (File No. 333-265828) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents we have filed with the SEC for more complete information about Genelux and this offering. You may get these documents for free by visiting EDGAR on the SEC Web site at www.sec.gov. Alternatively, the issuer or any underwriter participating in the offering will arrange to send you the prospectus if you request it by contacting The Benchmark Company, 150 East 58th Street, New York, NY 10155, by email at Prospectus@benchmarkcompany.com or by phone at (212) 312-6700.

Genelux is a Phase 3 biopharmaceutical company developing powerful therapeutics for patients suffering from difficult-to-treat cancers. The Company is focused on the development of next-generation oncolytic viral immunotherapies that are designed to generate a personalized multi-prong attack to overwhelm a tumor's sophisticated defense mechanisms.

OUR LEAD PRODUCT CANDIDATE

Olvi-Vec (olvimulogene nanivacirepvec), is a proprietary, modified strain of the vaccinia virus (VACV), a stable DNA virus with a large engineering capacity having the potential to:

- Directly kill cancer cells
- Stimulate a tumor-specific immune response
- Ability to transform immunologically "cold" tumors into "hot" tumors allowing for responsiveness for immunotherapy

OUR SCIENCE

Platform technology (**Choice™**) is the foundation of our oncolytic immunotherapy product development program; and is designed to allow us to generate new product candidates rapidly from conception through the initiation of clinical trials.

Seasoned Leaders with Extensive Business & Clinical Development Experience

The Genelux Team

Executive Leadership

- **Thomas Zindrick, JD** – Chair, President & CEO
  - 30+ years industry experience
    (Former – Amgen, VP)
- **James L. Tyree, MBA** – Lead Independent Director
  - 35+ years industry experience
    (Former - Abbott Global Pharmaceuticals, EVP)
- **Paul Scigalla, MD, PhD** – Chief Medical Officer
  - 35+ years industry experience
    (Former - Pfizer, VP; Boehringer Mannheim, SVP)
- **Doug Samuelson –** Chief Financial Officer
  - 30+ years industry experience
    (Former – Wellness Center USA, CFO)
- **Sean Ryder, JD**– General Counsel
  - 20+ years industry experience
    (Former – Helsinn Therapeutics (US), VP)

Operations

- **Joseph Cappello, PhD** – Head of Operations
  - 30+ years industry experience
- **Caroline Jewett** – Head of Quality
  - 30+ years industry experience

R&D

- **Tony Yu, PhD** – Head of Development
  - 20+ years industry experience
- **Qian Zhang, MD, PhD** – Assoc. VP, Research
  - 15+ years industry experience
- **Ralph Smalling, MS** – Head of Regulatory Affairs
  - 35+ years industry experience

Clinical Advisory Board

- Robert Holloway, MD – Chairman
- Robert L. Coleman, MD
- Alberto A. Mendivil, MD
- Thomas J. Herzog, MD
- David M. O'Malley, MD

Investment Thesis

Advanced Clinical Program

- Phase 3 registration trial actively recruiting patients (late-stage ovarian cancer)
  - *Proof of Concept confirmed in Phase 2 trial*
- Phase 2 trial actively being prepared for initiation (recurrent non-small cell lung cancer; i.v. route)
  - *Dose-dependent survival benefit in Phase 1b monotherapy study*

Broad Technology Platform

- Potential utility against broad range of tumor types and metastatic disease
- Physician-preferred/familiar route(s) of administration, e.g., intravenous delivery
- 500+ novel strains generated via our proprietary CHOICE™ platform

Large Market Opportunity

- Five-year US sales forecast estimated at $1B+ (post-marketing approval of Olvi-Vec)
- Potential in multiple clinical settings offer significant revenue upside

Validating Strategic Partnerships

- Newsoara BioPharma Co. Ltd. (Chinese rights) anticipates initiating 3 Phase 1/2 clinical trials with Olvi-Vec
- ELIAS Animal Health (Worldwide rights) anticipates initiating canine efficacy studies with V-VET1

Identified Commercial Strategy

- US launch in ovarian cancer; strategic partnership for larger indications
- Exclusive licenses outside the US (Newsoara Collaboration Agreement established in 2021)

Pipeline

❖ ***Believed to be the most-advanced, non-local delivery Oncolytic Virus clinical program.***

Human Therapeutics	Therapeutic Indication	Design	Pre-clinical	Phase 1	Phase 2	Phase 3	Clinical Sites	Clinical Sponsor(s)
Olvi-Vec[1a]	Regional Program Ovarian Cancer[2] *(resistant / refractory)*	*Olvi-Vec (i.pe.)* +Chemotherapy	Active				US	
	Systemic Program NSCLC[3] *(recurrent)*	*Olvi-Vec (i.v.)* +Chemotherapy	Planned				US	NEWSOARA
	NSCLC[4] *(recurrent)*	*Olvi-Vec (i.v.)* +Chemotherapy						
	SCLC[4] *(recurrent)*	*Olvi-Vec (i.v.)* +Chemotherapy	Regulatory Submission				China	NEWSOARA
	Ovarian Cancer[4] *(recurrent)*	*Olvi-Vec (i.v.)* +Chemotherapy						
V2ACT Immunotherapy[1b]	Pancreatic Cancer[5] *(newly diagnosed, surgically resectable)*	*Olvi-Vec (i.v..)* +Adoptive Cell Therapy	Regulatory Submission				US	V2ACT THERAPEUTICS

Animal Therapeutic	Therapeutic Indication	Design	Safety	Preliminary Efficacy	Pivotal Efficacy	Clinical Sites	Clinical Sponsor
V-VET1[1c]	Hematologic & solid cancer(s)[6]	V-VET1 *(i.v.)* *+/- standard of care*	Active			US	ELIAS

U.S. Revenue Projection
(5-yr post-marketing approval)

1. Ovarian: $250M
2. Total: $1B+

$1B+

Additional Revenue Opportunities

1. Re-treatment
2. Front-line cancer
3. Additional Indications

[1] **Commercial Rights**
[1a]Genelux: Worldwide (excluding Greater China); Newsoara (Greater China)
[1b]V2ACT Immunotherapy: Worldwide (excluding Greater China)
[1c]ELIAS: Worldwide

[2] We have enrolled our first patient in our Phase 3 clinical trial.

[3] Based on the results of our previously completed Phase 1 clinical trials of Olvi-Vec administered intravenously to patients with solid tumors, we are planning to initiate a Phase 2 clinical trial of Olvi-Vec in recurrent NSCLC.

[4] Newsoara has submitted an IND and protocols to the Chinese National Medical Products Administration

[5] V2ACT has an active IND for this product candidate. The Phase 1b/2a clinical trial is not yet scheduled to be initiated.

[6] ELIAS is developing an efficacy trial.

Genelux is focused on building a fully-integrated therapeutics company.

Near-Term Milestones

Late-Stage Clinical Program

- Initiated Phase 3 registration trial in late-stage Ovarian cancer
- Initiate Phase 2 trial in recurrent Non-Small-Cell Lung cancer

Strategic Partnerships

- Newsoara anticipates initiating 3 China-based Phase 1/2 clinical trials
- ELIAS anticipates initiating canine efficacy study(ies)

In-house cGMP Manufacturing Facility

- Build-out of in-house production facility in San Diego, CA
- Produce additional GMP batches to meet supply requirements

Clinical Program & Science

Our Lead Product

❖ ***Addressing significant unmet medical needs.***

A differentiated, and desirable immuno-oncology approach

- Physician-preferred methods of delivery locate and kill cancer cells to enhance antigen presentation and stimulate an anticancer immune response

Signals of Differentiated Therapeutic Potential

- Immunostimulatory backbone, by turning the tumor "hot", for combination therapy with other therapies, including chemotherapies

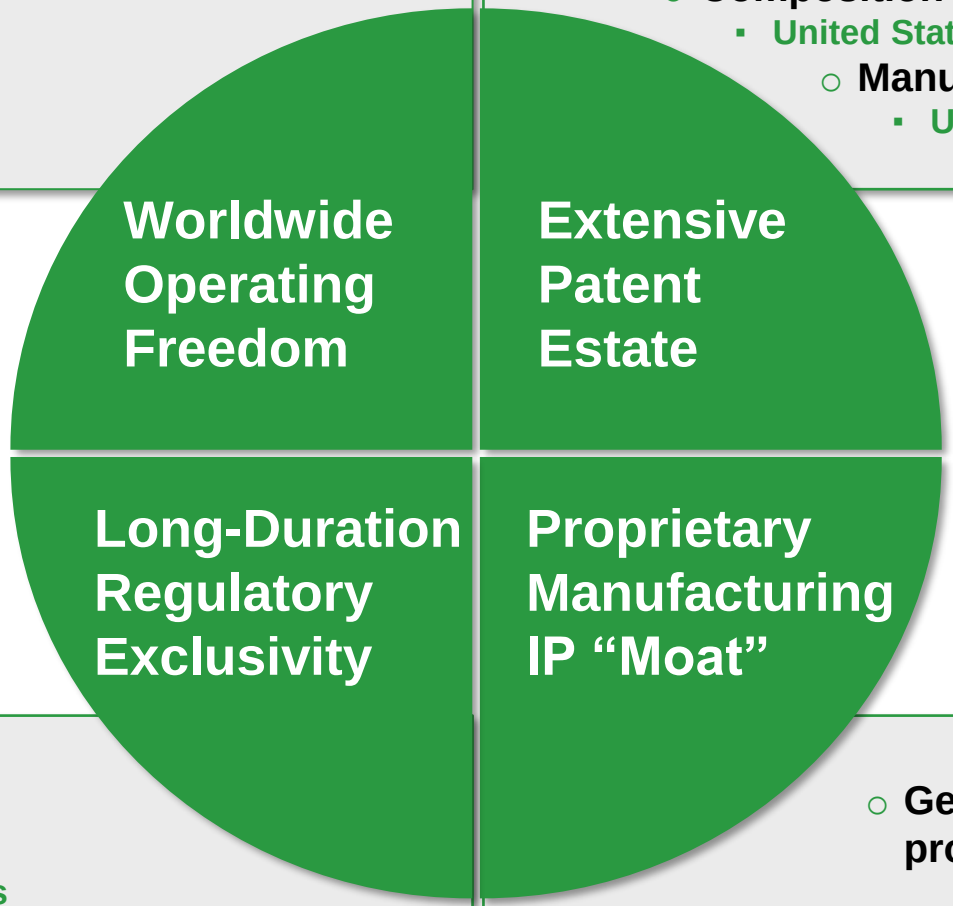
Oncolytic Vaccinia (Olvi-Vec) Primed Immunochemotherapy

- Patients who received Olvi-Vec-primed immunochemotherapy may respond to chemotherapy to which they previously were deemed resistant or refractory

Intellectual Property: Freedom to Operate and Market Exclusivity

- No **third-party royalties** due

- **40 patents** issued
  - **Composition of matter / use**
    - **United States expiry 2031** (includes PTE)
      - **Manufacturing**
        - **United States expiry 2038**



- **Marketing exclusivity**
  biosimilar entry
  - **United States: 12 years**
  - **European Union: 10+1 years/CA & JP 8 years**
  - **PRC (China): (pending 6-12 years)**

- **Genelux technology protected as Trade Secrets**

Clinical Trial Results

Ovarian Cancer Program: VIRO-15 Phase 1b/2 trial

❖ ***Demonstrated anti-tumor activity as monotherapy and combination therapy***

Platinum-resistant / refractory Patients

- Heavily pre-treated with documented progressive disease at baseline
- No Standard of Care
  i.e., clinical trial or palliative care

High & Condensed Dosing

- All patients received a single cycle of Olvi-Vec
- Bolus infusions (intraperitoneal delivery) on 2 consecutive days, i.e., total dose: $6x10^9$ pfu

Phase 1b: Olvi-Vec Monotherapy (11 patients)

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 tumor infiltration lymphocytes
- Favorable immune-related genetic signatures *(via biomarkers)*

Tolerability:

- Toxicity:
  - No Dose Limiting Toxicity (DLT)
  - No Maximum Tolerated Dose (MTD)
- Most Common Adverse Events (AE):
  - Transient, flu-like symptoms
  - Abdominal pain (Grades 1 & 2)
  - No Grade 4 AEs

Manyam M, et al, Gynecologic Oncology 163 (2021) 481–489

Ovarian Cancer Program: Platinum-resistant / refractory Ovarian Cancer

❖ Preestablished endpoints met

Phase 2: Olvi-Vec followed by chemotherapy[1] (Clinical Benefit[2&3])

Oncolytic Vaccinia (Olvi-Vec) Primed Immunochemotherapy in Platinum-Resistant / Refractory Ovarian Cancer

Robert W. Holloway, et al

All PRROC (27 patients)

- **54% RECIST response**
  (vs.<15-20% historical to chemotherapy)
- **11.0 mo. of median progression-free survival (PFS)**
  (vs. ~5 mo. historical)

Platinum-refractory (13 patients)

- **54% RECIST response**
  (vs. <10% historical);
  7% response to VIRO-15 patients' most recent prior platinum line
- **11.4 mo. of median progression-free survival (PFS)**
  (vs. ~3 mo. historical)

1Platinum doublet +/- Bevacizumab
2VIRO-15 patients had results in prior lines of therapy similar to historical data.
3RECIST readings based on pre-chemo baseline.

Olvi-Vec-Primed Immunochemotherapy

❖ *Exemplary heavily pre-treated platinum-refractory*

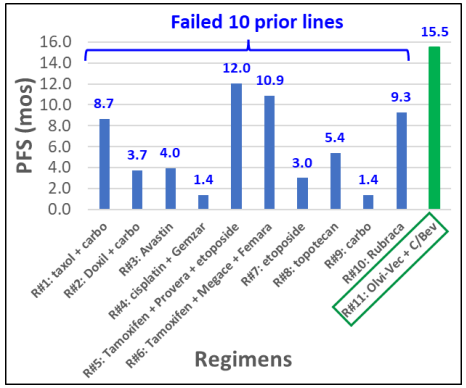
*Patient who **progressed while on last platinum**, presented at time of enrollment with progressive disease and projected short life expectancy.*

*All achieved **PFS exceeding any of their respective prior lines**, and achieved **objective partial response**, indicating meaningful clinical benefit from Olvi-Vec-primed immunochemotherapy.*

15B-01:

- 36 yrs old
- Stage IIIB, papillary serous
- ECOG: 0
- BRCA negative
- MSI: stable
- # of mutations (load): 4 (low)
- PD-L1 negative

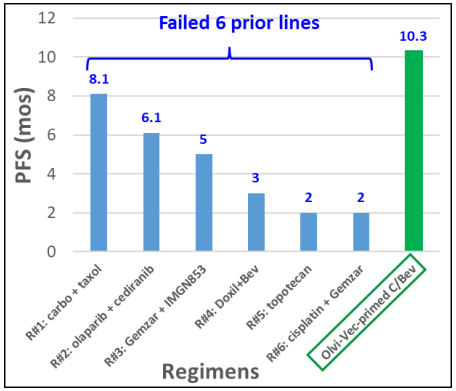
- BOR: PR by CA-125 & CT scan
- Overall survival: 23.2 months



15B-15:

- 67 yrs old
- Stage IIIB, high grade serous
- ECOG: 0
- BRCA negative
- # of mutations (load): 0 (low)
- PD-L1 negative

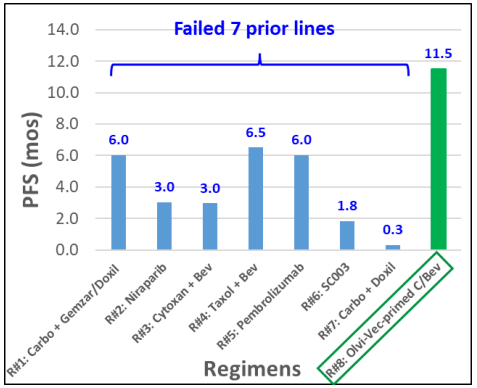
- BOR: PR by CA-125 & CT scan
- Overall survival: 12.3 months

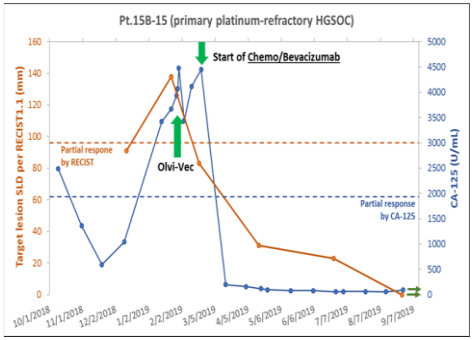


15B-17:

- 65 yrs old
- Stage IIIC, high grade serous
- ECOG: 1
- BRCA negative

- BOR: PR by CA-125 & CT scan
- Overall survival: 15.7 months





Anti-tumor Activity: Tumor Shrinkage

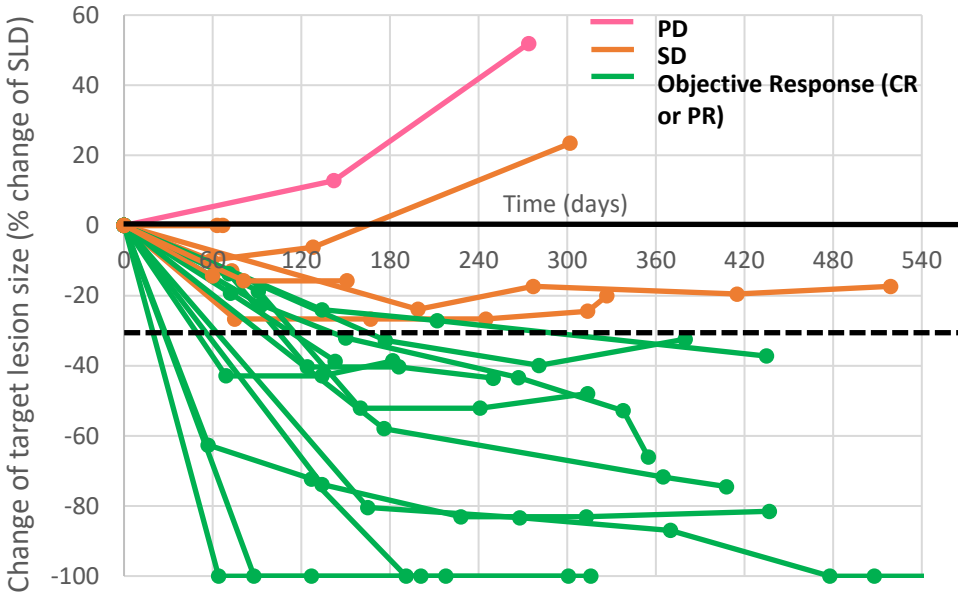
❖ *Rapid, Common and Durable Responses*

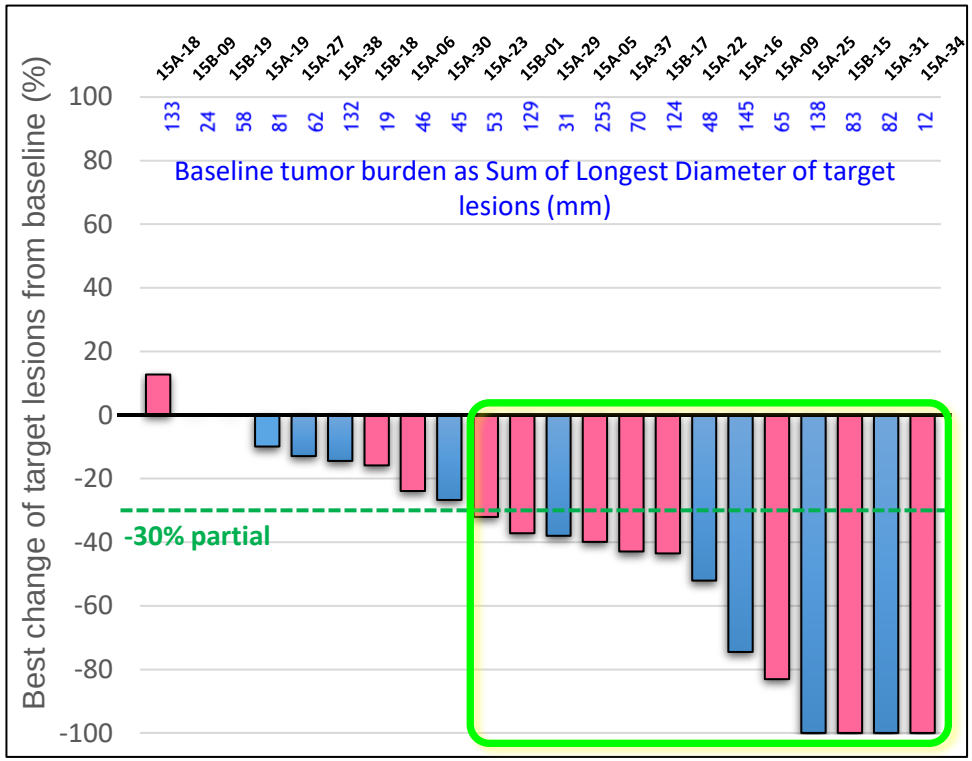
Duration of Response

- **All PRROC Patients: 7.6 months**
- **Platinum-refractory patients: 8.0 months**

Tumor Shrinkage

- **All PRROC Patients: 86%**
- **Platinum-refractory patients: 91%**





4 patients achieved 100% reduction of target lesions
(even in a platinum-refractory patient with heavy tumor burden)

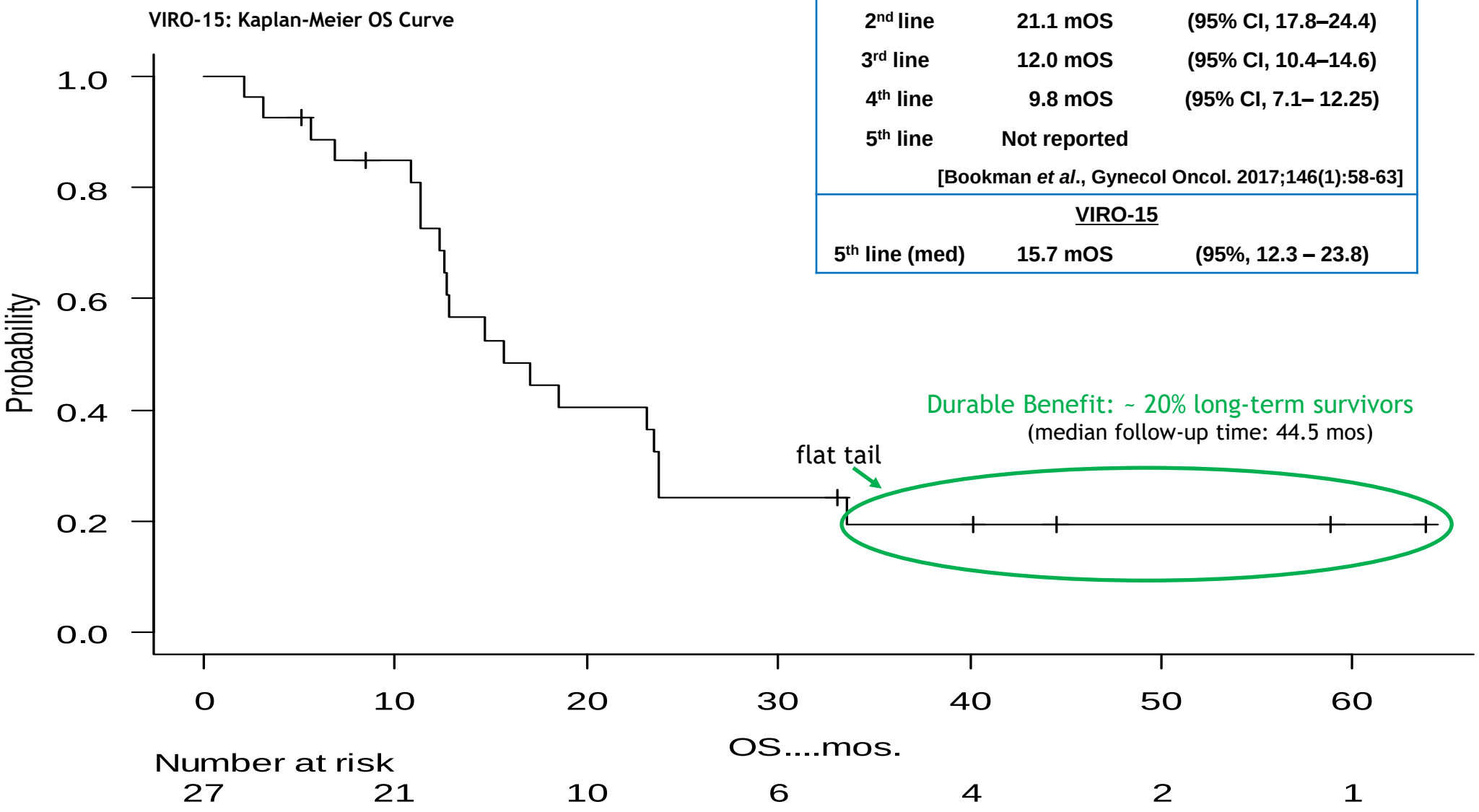
platinum-resistant

platinum-refractory

Clinical benefit: Long-term Overall Survival Benefit

❖ ***Demonstrated Survival Tail (~20%), a hallmark of Clinically Beneficial Immunotherapies***

Historical Data		
2nd line	21.1 mOS	(95% CI, 17.8–24.4)
3rd line	12.0 mOS	(95% CI, 10.4–14.6)
4th line	9.8 mOS	(95% CI, 7.1– 12.25)
5th line	Not reported	
[Bookman *et al*., Gynecol Oncol. 2017;146(1):58-63]		
VIRO-15		
5th line (med)	15.7 mOS	(95%, 12.3 – 23.8)

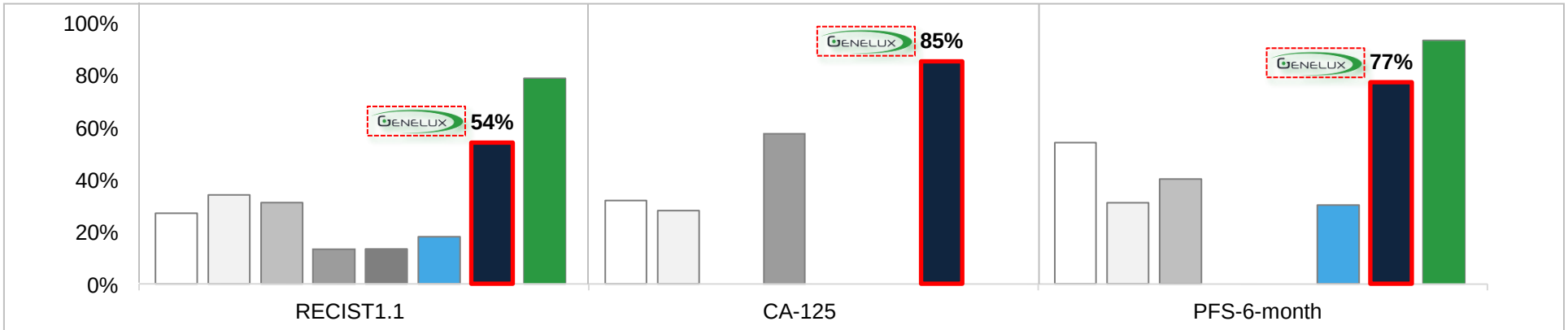


Competitive Landscape

VIRO-15 Phase 2 Results: Comparison with Seminal Trials in Ovarian Cancer

❖ *Driver of Market Penetration*

- **Currently 230,000+ ovarian cancer patients in the United States**
- **While clinical remissions are obtainable, a majority of patients will relapse (~80%)**



	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.

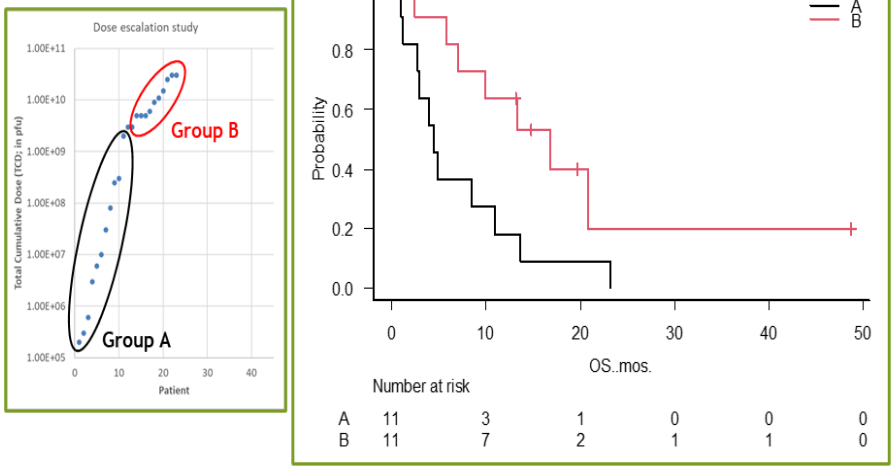
Systemic Program: Dose-dependent survival benefit of Heavily Pre-treated Patients

❖ *Demonstrated feasibility of multiple IV cycles*

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

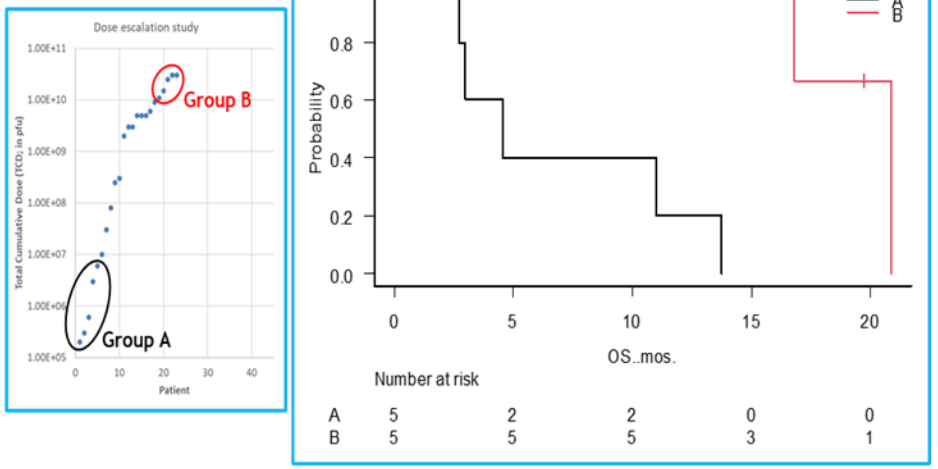
Dose Escalation Phase 1b Monotherapy Study in Solid Tumors Progressed from Last Prior Therapy

- Median 5 prior lines of therapy
- Regimen: various dosing levels and schedules (typically over 4-6 months)
- Well tolerated: no DLT or MTD reached
- Clinical Benefit: statistically significant in primary / metastatic lung diseases | Data below



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.

*Virus dose is in Total Cumulative Dose (**TCD**) received in all cycles in each patient*

Systemic Program: Condensed Dosing followed by Chemotherapy

❖ Demonstrated Anti-tumor effect of IV immunochemotherapy

AdventHealth | Cancer Institute — Phase 1 Study

(NCT03420430/FHCI)

- **High and Condensed Dosing**
  (Single round: bolus infusion on 5 consecutive days)

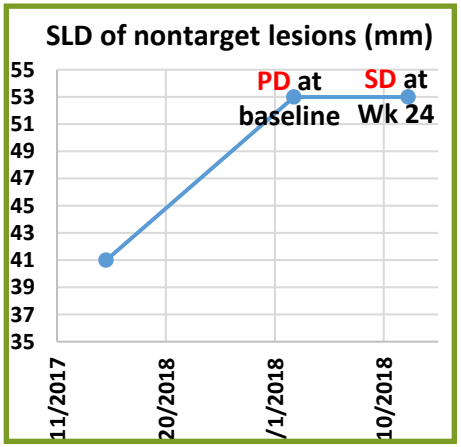
Summary

- **Well tolerated**, with **No DLT** or **MTD** reached.
- **Anti-tumor effects** of monotherapy treatment
- **Virus treatment revitalizes tumors** to subsequent chemotherapy

Recurrent 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**

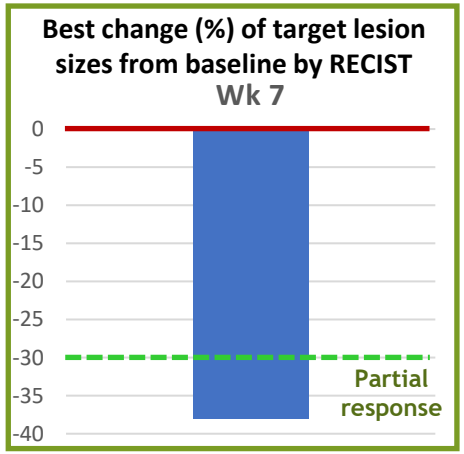


- ❖ **Chemotherapy after disease progression**
  - **Partial Response**
  - **PFS: 70+ wks**
  - **OS: 46.4 mos (ongoing)**

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**

CHOICE™ Discovery Platform

❖ Flexible, powerful and modular

Comprehensive Approach

- Viral vectors selected based on multiple *in vitro* and *in vivo* selection criteria

Highly Productive

- Extensive library of viral vectors with a variety of anti-tumor attributes

Broad Utility

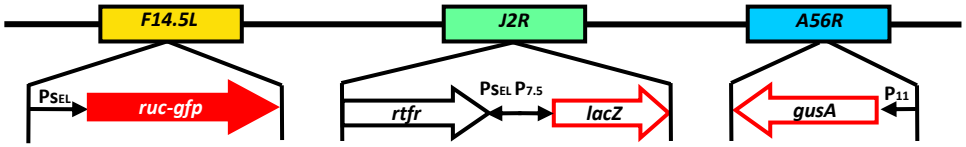
- Regression and elimination of a wide range (20+) of tumor types in pre-clinical models

❖ Generated an extensive library of engineered and selected viral strains

Unique Attributes of Vaccinia Virus

- **No genomic integration**
- **Highly modular, customizable**
- **Broad spectrum**
- **Robust lytic capabilities, high replication and proliferation**
- **Powerful immune activator (Th1-type immune response)**

Olvi-Vec



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

Library

500+ vectors armed with 110+ transgenes

Therapeutic Genes

Immune Modularity Molecules

- *LIGHT*
- *P60*
- *OspF*
- *OspG*
- *STAT1α*
- ***IL-6/sIL-6R*** ✓
- ***IL-24*** ✓
- *GM-CSF*
- *STAT1β*
- *IP-10*

Apoptosis Inducing Genes

- Secretable Trimeric TRAIL

Cell Growth & Differentiation Regulators

- *BMP-2*
- ***BMP-4*** ✓

Metastasis Suppressor Genes

- ECAD
- NM23

Hormones

- *Human EPO*

Imaging Genes

Cell Matrix-Degradative Genes

- *Relaxin1*
- ***hMMP9*** ✓

Clonal Isolated Strains (non-GMO)

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

Tissue Regenerating Genes

Single-Chain Antibodies

- **Anti-DLL4** ✓
- **Anti-CTLA4** ✓
- Anti-TNFα
- **Anti-αvβ3-integrin** ✓
- **Anti-VEGF** ✓
- **Anti-PD-1** ✓
- **Anti-FAP** ✓
- **Anti-PD-L1** ✓

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

Facilities and Operations

Facilities and Operations: Based in Southern California

❖ ***Integrated R&D and manufacturing capabilities***

Genelux has developed a large-scale cGMP manufacturing process to optimize production

- *Established and equipped an **independent, Company-controlled 7,500+ Sq. Ft** manufacturing facility in San Diego to secure material for **pivotal studies** and potential **commercial supply***
- *Genelux maintains agreements with **raw material and equipment suppliers**, as well as **contract labs** to provide supply chain redundancies and flexibility to offload certain services to CMOs / CROs*
- *Genelux maintains agreements with third-party companies for **labeling, packaging, distribution** of both clinical material as well as future potential commercial products*
- *Genelux plans to invest in and augment **its internal development capabilities** as well as **continually improve its proprietary manufacturing processes***

GENELUX

THANK YOU