Pelareorep

A Novel Cancer Immunotherapeutic

July 2025

Forward-Looking Statements

This presentation contains forward-looking statements, within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended and forward-looking information under applicable Canadian securities laws (such forward-looking statements and forward-looking information are collectively referred to herein as "forward-looking statements"). Forward-looking statements contained in this presentation include statements regarding our belief as to the potential, mechanism of action and benefits of pelareorep as a cancer therapeutic; our stated goals and objectives; our anticipated patent protection; our belief in the commercial opportunities for pelareorep; pelareorep's safety profile; and other statements related to anticipated developments in Oncolytics' business and technologies. In any forward-looking statement in which Oncolytics expresses an expectation or belief as to future results, such expectations or beliefs are expressed in good faith and are believed to have a reasonable basis, but there can be no assurance that the statement or expectation or belief will be achieved. Such forward-looking statements involve known and unknown risks and uncertainties, which could cause Oncolytics' actual results to differ materially from those in the forward-looking statements. Such risks and uncertainties include, among others, the availability of funds and resources to pursue research and development projects, the efficacy of pelareorep as a cancer treatment, the success and timely completion of clinical studies and trials, Oncolytics' ability to successfully commercialize pelareorep, uncertainties related to the research and development of pharmaceuticals, uncertainties related to the regulatory process and general changes to the economic environment. We may incur expenses or delays relating to such events outside of our control, including public health crises such as pandemics and epidemics, which could have a material adverse impact on our business, operating results and financial condition. Investors should consult Oncolytics' quarterly and annual filings with the Canadian and U.S. securities commissions for additional information on risks and uncertainties relating to the forward-looking statements. Investors are cautioned against placing undue reliance on forward-looking statements. The Company does not undertake to update these forward-looking statements, except as required by applicable laws.

Pelareorep (PELA)

Characteristics & Mechanism of Action

PELA is an Oncolytic Virus Cancer Immunotherapy

- **Non-genetically modified, non-pathogenic reovirus – requires no special handling**
- **IV administration allows direct targeting of both primary and metastatic tumors**
- **Manufactured at commercial scale**

IV PELA evades neutralization in the blood and selectively replicates in cancer cells

↓

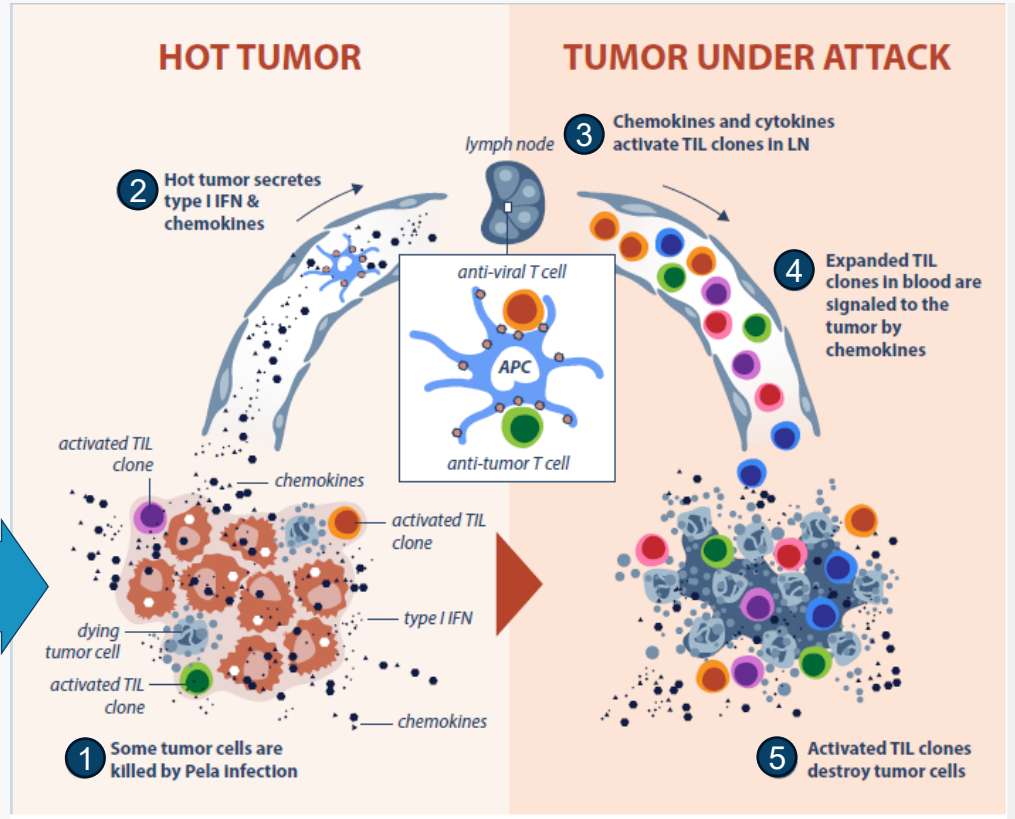
PELA infection leads to accumulation of double-stranded RNA in cancer cells

↓

Stimulates chemokine expression to make tumors visible to the immune system

and

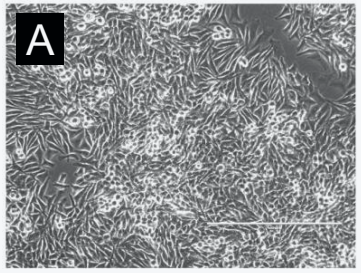
Induces anti-tumor cellular immune responses including expansion of cytotoxic tumor-infiltrating lymphocytes (TILs)



IV PELA is Shielded from Neutralization in the Blood

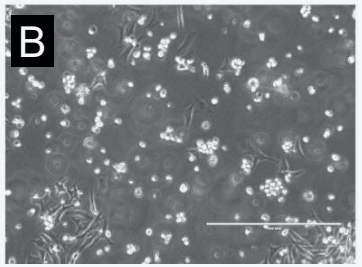
IV PELA is delivered to tumors by peripheral blood mononuclear cells (PBMCs), where it selectively infects cancer cells

Antibody-bound reovirus remains infectious when associated with mononuclear cells



A. Ab-bound reovirus

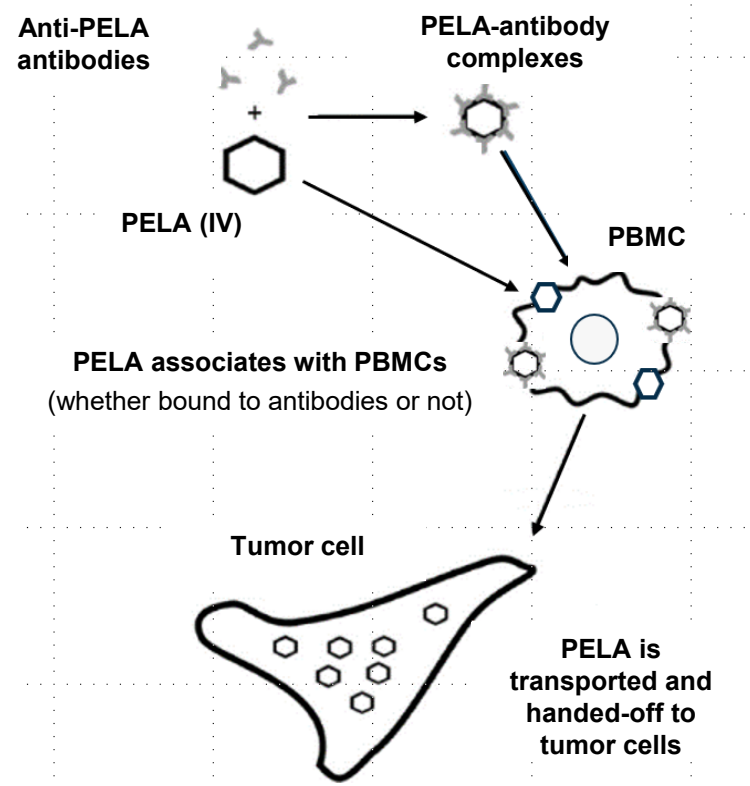
Free reovirus is neutralized by antibodies, so melanoma cells are not lysed



B. Ab-bound reovirus <u>loaded onto monocytes</u>

When loaded onto monocytes, Ab-bound reovirus is shielded from neutralization; consequently, it remains infectious and lyses melanoma cells

IV PELA is transported by PBMCs and handed-off to tumor cells

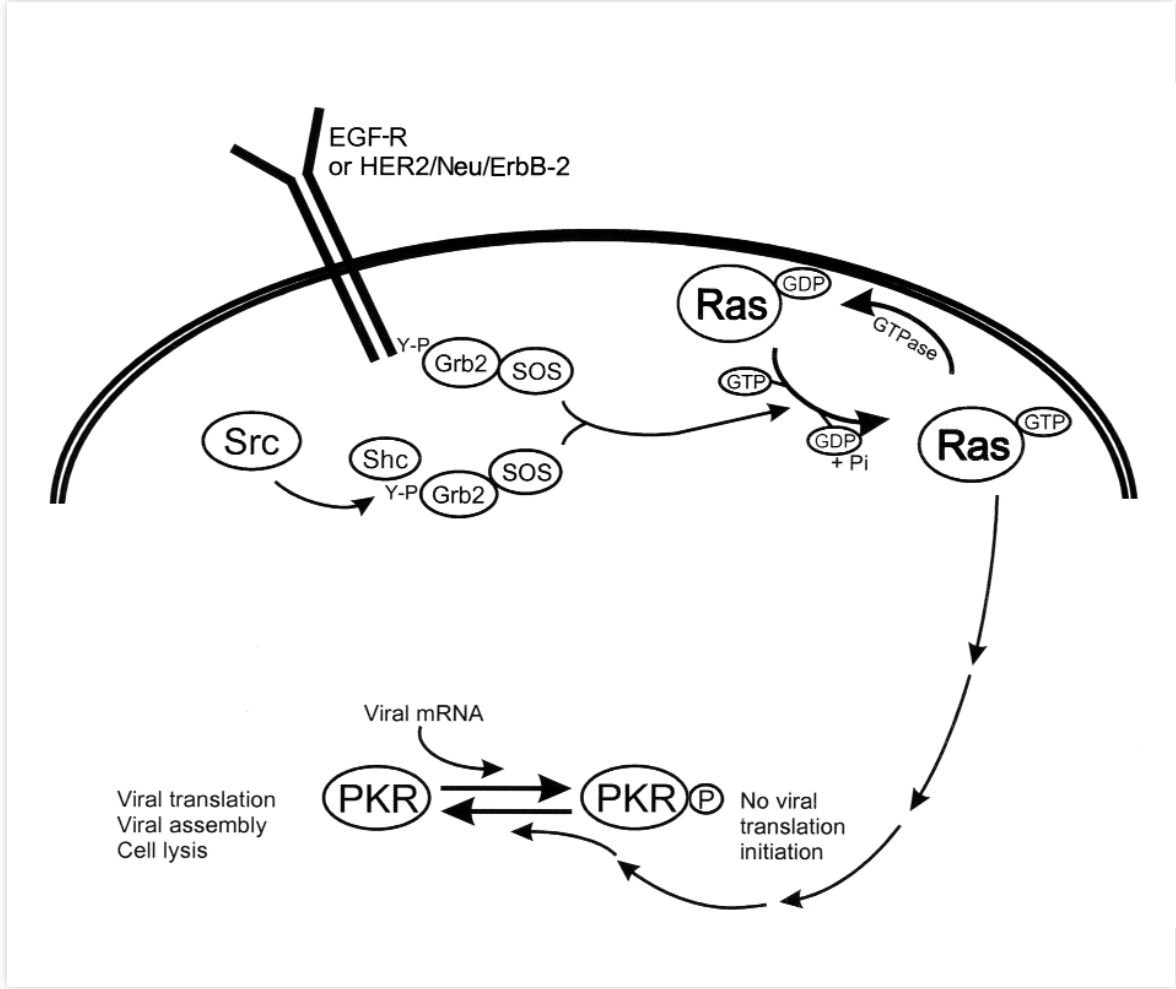


Sources: Berkeley et al. Can Immunol Res. 2018; Adair et al. Sci Transl Med. 2012; Mahalingam, et al. British J Can. 2023; Ilett et al. Gene Ther 2009; Ilett et al. Clin Cancer Res. 2011; Phillips et al. Oncolytic Virother. 2018; Berkeley, Cancer Imm. Res. 2018

PELA Selectively Infects Transformed Cells, Not Healthy Cells

"In untransformed, reovirus-resistant cells, double-stranded RNA structures in reovirus transcripts activate PKR, which subsequently phosphorylates eIF-2a, inhibiting translation initiation of viral genes. In cells with an activated Ras signaling pathway (i.e., transformed cells), however, PKR phosphorylation in response to viral transcripts is inhibited and viral translation proceeds unimpeded."
(emphasis and parentheses added)

Reovirus as a Novel Oncolytic Agent
Journal of Clinical Investigation
2000;105(8):1035-1038. https://doi.org/10.1172/JCI9871



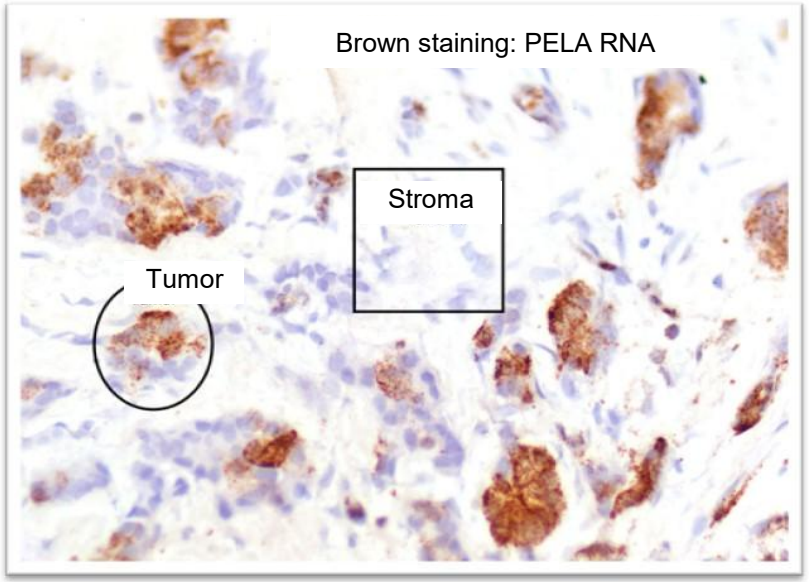
PELA Translational Research & Intellectual Property

Upon IV Administration, PELA is Found in Almost all Tumors Regardless of Type Including PDAC

PELA is found in almost all on-treatment tumor biopsies

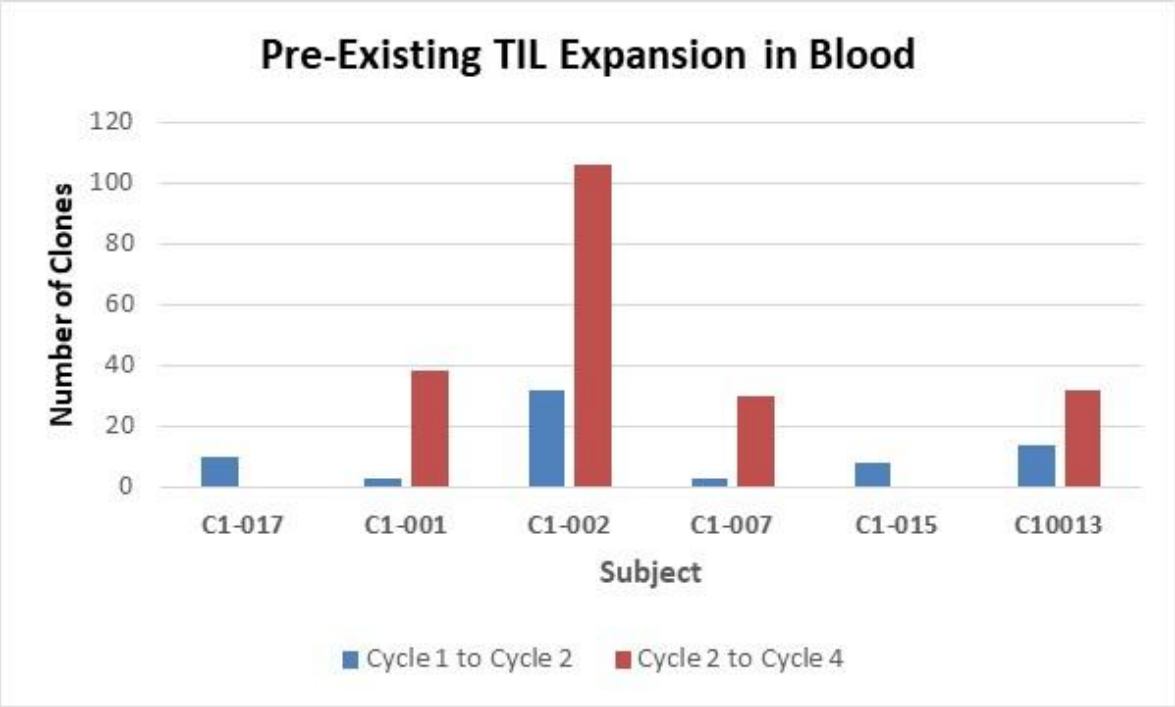
Indication treated with IV PELA	# of biopsied tumors	# PELA-positive biopsies
Pancreatic ductal adenocarcinoma	12	12
Metastatic colorectal cancer	12	11
Head and neck cancer	3	3
Gliomas/metastatic brain tumors	9	8
Relapsed multiple myeloma	20	20
Primary breast cancer	23	23
Other	4	4

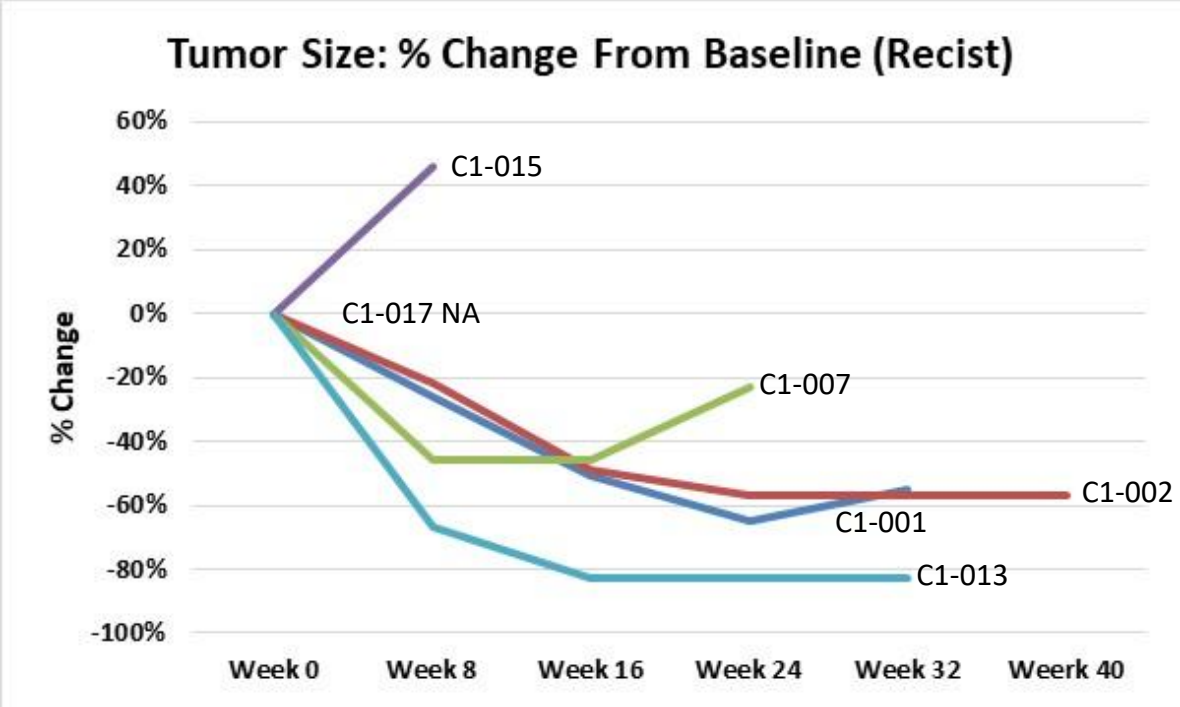
PELA RNA is found in tumor but not stromal cells



1. Berkeley, et al. Can Immunol Res. 2018
2. Adair, et al. Sci Transl Med. 2012
3. Mahalingam, et al. British J Can. 2023
4. Ilett, et al. Ther 2009
5. Ilett, et al. Clin Cancer Res. 2011
4. Phillips, et al. Oncolytic Virother. 2018
6. Berkeley, et al. Cancer Imm. Res. 2018

REO 029 mPDAC Study Translational Data: TIL Expansion by Cycle 4 Correlates with Change in Tumor Size





NA = tumor response data not available for patient C1-017

Conclusions

- TIL expansion in the blood continued at least through Cycle 3 of therapy
- TIL clonal expansion in the blood correlates with a reduction in tumor volume

AWARE-1 Neoadjuvant Study in HR+/HER2- Breast Cancer: PELA Modified the TME and Stimulated Anti-tumor Immunity

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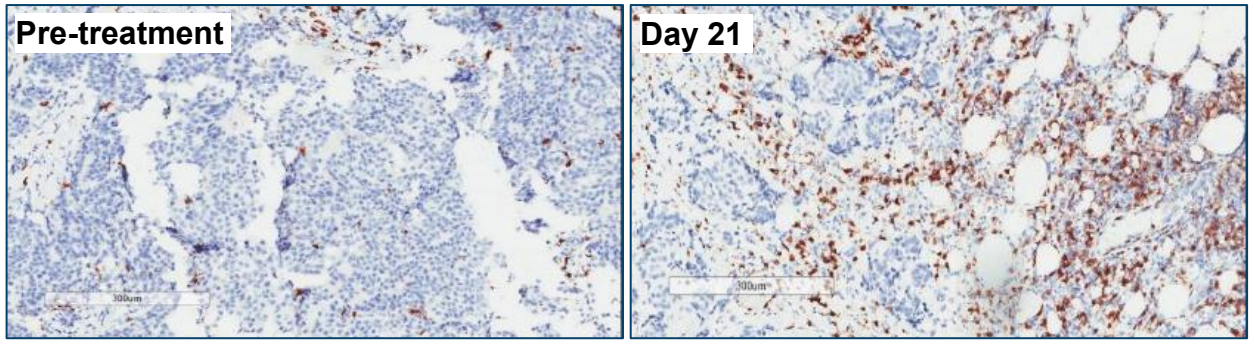
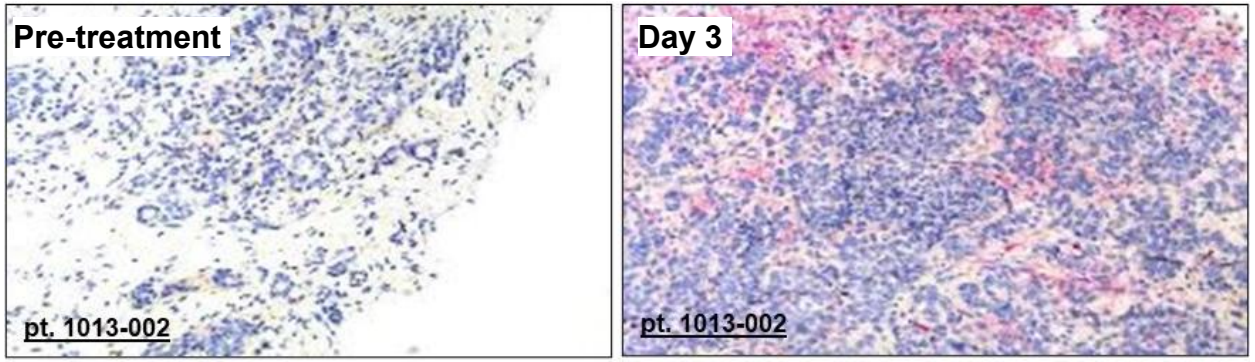
PELA increased T cell infiltration into tumors



- All tumors (N=20) were infected by PELA
- Intratumoral CD8+ T cells increased in all patients by day 21
- CD8+ T cells increased an average of 11-fold from baseline

PELA increased PD-L1 expression in tumors



In addition, PELA:

- Enhances tumor expression of IFN-α and IFN-γ regulated genes including CXCL9, CXCL10 and CXCL11
- Upregulates genes of the Tumor Inflammation Signature (TIS) pathway, which potentiate responses to CPIs
- Enhances T cell activation and expansion of TIL clones

- **PELA induces an inflamed tumor phenotype, stimulates innate and adaptive immune responses, and primes the tumor to respond to PD-L1 therapy**
- **Consistent results demonstrate PELA's inflammatory and anti-tumor effects across indications**

IP Profile

Issued Patents	• 146 patents issued worldwide • 11 in the U.S. • 7 in Canada
Patent Life	• Composition of matter protection through 2028 • Method of use and manufacturing protection through 2031
Extension Strategy	• Pending filings regarding proprietary manufacturing methods for virus harvest and extraction • New patents expected to extend protection to 2044

Patent numbers as of March 31, 2025

PELA Clinical Development

Broad Clinical Experience and Well-Understood Safety Profile

PELA evaluated in:

- >20 Oncolytics-sponsored studies and several externally sponsored studies (NCI, CCTG, etc.)
- Multiple cancer indications (breast, pancreatic, colorectal, myeloma, brain, etc.)

- **>1,100 patients treated; >900 intravenously**
- **No maximum tolerated dose (MTD) identified**
- **Most common PELA-adverse reactions**
  - "Flu-like" symptoms: Fever, chills, headache, fatigue, myalgia, cough, anorexia
  - GI symptoms also common: Nausea, diarrhea, vomiting
  - Lymphopenia, neutropenia, thrombocytopenia also common, but rarely clinically significant
- **Adverse events usually last <6 hours and can be managed with OTC meds**
- **Serious PELA-related adverse events or severe symptoms are <u>uncommon</u>**

ABSTRACTS | IMMUNOTHERAPY OF CANCER · Volume 28, Supplement 5, V422, September 2017 · *Open Archive*

1193P - Pooled data analysis of the safety and tolerability of intravenous pelareorep in combination with chemotherapy in 500 + cancer patients

A.A. Gutierrez · C. Reid · M. Crawford · ... · D. Galindez · R. O'Flynn · M. Coffey ... Show more

Affiliations & Notes · Article Info

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Show Outline

Background: Oncolytic viruses are promising cancer immunotherapies but questions have been raised regarding their safety. Pelareorep (REOLYSIN, R), an unmodified Reovirus Deering strain, selectively replicates and lyses cancer cells and induces anti-tumor immunity. To date, 900+ patients (pts) have been treated with intravenous (IV) pelareorep. In a phase 2 trial, its combination with paclitaxel improved overall survival (17.4m) vs paclitaxel (10.4m) in metastatic breast cancer (MBC) pts (HR 0.65, 80% CI 0.46-0.91, p=0.1; Berstein et.al. AACR2017). A pooled analysis was thus conducted to better characterize pelareorep's safety profile in combinations with paclitaxel.

Methods: 1417 pts have been enrolled in 36 trials: 934 pts received IV pelareorep and 359 were in control arms. Data from 8 trials with paclitaxel (P), paclitaxel + pelareorep (PR), carboplatin + paclitaxel (CP) or carboplatin + paclitaxel + pelareorep (CPR) were pooled. Standard doses of P (weekly) and CP were administered. Pelareorep IV dose was 3x1010 TCID50 (5-6 doses q21-28 d). Various advanced solid tumors were evaluated, including the 81 pts with MBC.

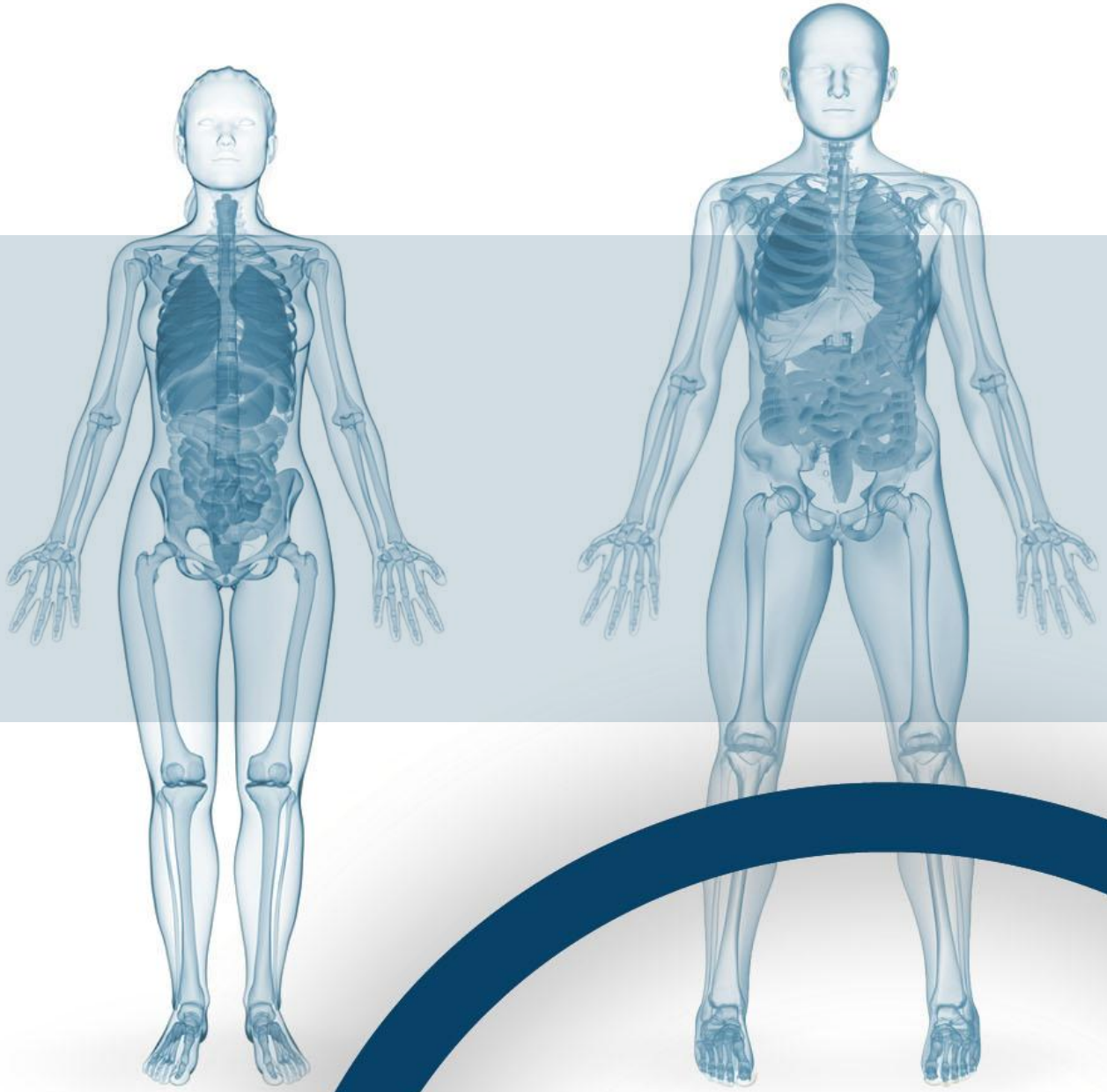
Results: A total of 563 pts were included in P (86), PR (95), CP (118) or CPR (264) groups. Median age (59-62 y) and ECOG 0-1 status (90-96%) were similar across the groups. All pts in P or PR had received prior chemo but only 26% in CP and 38% in CPR. Fatigue was the most common grade ≥3 treatment related adverse event (TRAE) in PR (9.5%) and CPR (8.3%) vs P (8.1%) and CP (2.5%). Grade ≥3 neutrophil count decreased and/or WBC decreased were more frequent in PR (15.8%/17.9%) than in P (5.8%/3.5%), but addition of pelareorep did not increase the frequency or severity of other grade ≥3 TRAEs with P or CP. Serious TRAEs (%) of interest in P vs PR and CP vs. CPR, included: fever (0 vs 3.2 & 0 vs 3.8), febrile neutropenia (0 vs 1.1 & 3.4 vs 3.4), sepsis (1.2 vs 0 & 0 vs 1.5) and flu-like syndrome (0 vs 1.1 & 0 vs 0.8).

Conclusions: This is the largest database reported to date examining the safety of an IV viral agent. Pelareorep's administration, in combination with paclitaxel or carboplatin-paclitaxel, is safe and well tolerated. Continued evaluation in a registration trial is planned.

Gutierrez, A.A., et al., Pooled data analysis of the safety and tolerability of intravenous pelareorep in combination with chemotherapy in 500 + cancer patients, Annals of Oncology, Volume 28, V422, September 2017

NCI: National Cancer Institute; Canadian Cancer Trials Group

Pancreatic Cancer Program



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PDAC Represents a Potentially Significant Commercial Opportunity

66,440

Estimated PDAC cases in the US in 2024[1], with 5-year survival rate of ~8%[2]

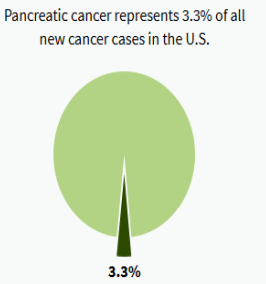
51%

Percentage of PDAC that has metastasized at diagnosis[1]

20%

Percentage of PDAC patients with resectable disease at diagnosis[3]

	Common Types of Cancer	Estimated New Cases 2024	Estimated Deaths 2024
1.	Breast Cancer (Female)	310,720	42,250
2.	Prostate Cancer	299,010	35,250
3.	Lung and Bronchus Cancer	234,580	125,070
4.	Colorectal Cancer	152,810	53,010
5.	Melanoma of the Skin	100,640	8,290
6.	Bladder Cancer	83,190	16,840
7.	Kidney and Renal Pelvis Cancer	81,610	14,390
8.	Non-Hodgkin Lymphoma	80,620	20,140
9.	Uterine Cancer	67,880	13,250
10.	**Pancreatic Cancer**	**66,440**	**51,750**



Pancreatic cancer is the third deadliest cancer the US in 2024[1] (14% of annual deaths)

Year	Revenue Projections Range for RMC-6236 in PDAC*
2027	$51 - $522 million
2028	$217 - $978 million
2029	$555 - $1,308 million
2030	$885 - $1,679 million

*Sources include TD Securities (USA) LLC, Needham & Company, LLC, Piper Sandler & Co., Jefferies LLC; 2L: second-line; 1. National Cancer Institute. (2024). Cancer Stat Facts: Pancreatic Cancer. SEER Program, Surveillance, Epidemiology, and End Results. Retrieved April 7, 2025, from https://seer.cancer.gov/statfacts/html/pancreas.html, 2. American Cancer Society Cancer Facts & Figures 2025.; 3. Janssen QP, et al Neoadjuvant Treatment in Patients With Resectable and Borderline Resectable Pancreatic Cancer. Front Oncol. 2020 Jan 31;10:41. doi: 10.3389/fonc.2020.00041. PMID: 32083002; PMCID: PMC7005204.

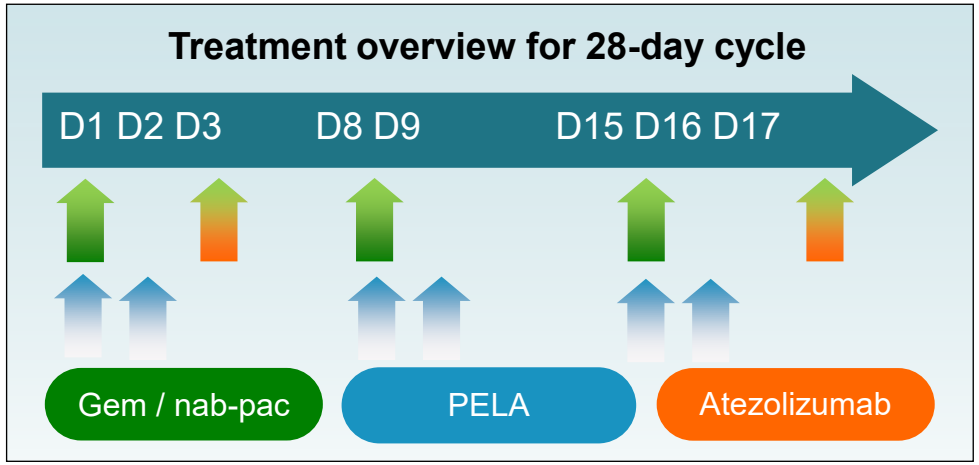
Several PELA-based Combinations, Including with CPIs, Have Been Evaluated in First-line mPDAC Patients

Study	N	CPI	Treatment regimen
REO 017	34	-	PELA + gemcitabine
NCI 8601 (randomized trial)	73	-	PELA + carboplatin + paclitaxel vs. carboplatin + paclitaxel
REO 029 (Cohort 1)	19	+	PELA + gemcitabine/nab-paclitaxel + atezolizumab
REO 029* (Cohort 5)	Ongoing	-	PELA + modified FOLFIRINOX
		+	PELA + modified FOLFIRINOX + atezolizumab

* Currently enrolling, third-party funded
** gemcitabine, FU/leucovorin, or irinotecan

REO 029: PELA + Gemcitabine/nab-Paclitaxel + Atezolizumab

Design	Single-arm, mPDAC cohort
Population	mPDAC (1L)
Treatment	• PELA + gemcitabine/nab-paclitaxel + atezolizumab • PELA dose: 4.5 x 10^{10} $TCID_{50}$
Primary	Objective response rate (ORR)
Secondary	Progression-free survival (PFS), overall survival (OS), disease control rate (DCR), safety



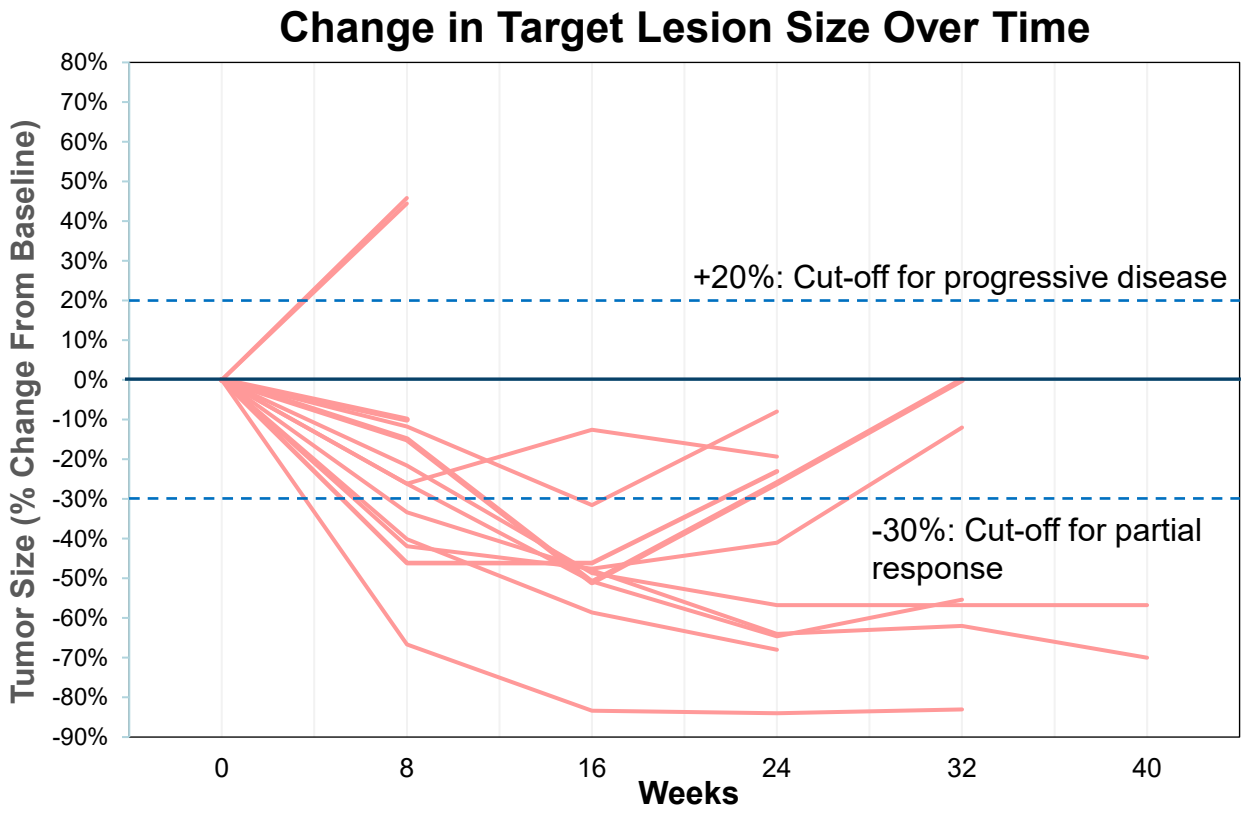
Study population

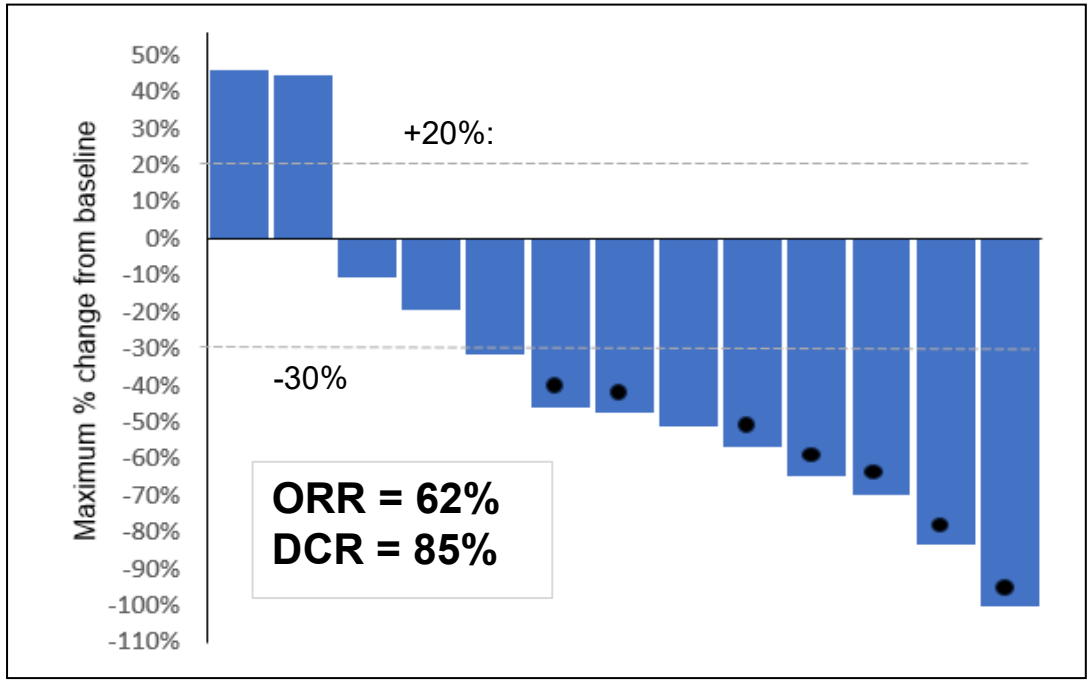
- Median age: 61 years
- Sex: 85% male; 15% female
- All patients had metastatic disease; 69% had liver metastases

Results Summary

- Treatment well-tolerated with no safety concerns
- Strong tumor responses: **62% ORR; 85% DCR**
- Encouraging survival outcomes: **45% 1-year survival rate**
- Treatment well-tolerated with no safety concerns
- Expansion of TIL clones correlates with tumor response

REO 029
Best Published ORR and Strong 12-month Survival Rate





ORR	DCR	12-month survival rate
62% (54% confirmed)	85%	45%

REO 029
Patient Characteristics and Treatment Response

Age (years)	Sex	ECOG score	Metastases (location)	Baseline target lesion size (mm)	Best Response
72	F	1	Liver	65	PR
54	M	1	Peritoneum	37	PR
63	F	1	Lung	13	PR
71	M	0	Liver	79.5	SD
54	M	0	Liver	63	PD
53	M	0	Liver	187	PR
67	M	0	Liver	39.1	PR
69	M	0	Liver	15.7	PR
49	M	0	Liver	52.1	PR
65	M	1	Lymphangitis carcinomatosis	30	PR
71	M	0	Liver	24	PD
54	M	0	Peritoneum	29	SD
54	M	0	Liver	39	SD

Patients with liver metastases shown in blue (liver metastasis is a poor prognostic factor in PDAC)

Characteristics of REO 029 evaluable patients:

- Mean age: 61.2 years
- Male: 85%
- Liver metastases: 69%
- ECOG 0/1: 69%/31%
- Average size of target lesions at baseline: 52 mm

Strong tumor responses in patients with liver metastases, a poor prognostic indicator in PDAC

- **ORR = 56%**
- **DCR = 78%**

REO 029
Safety Results

Most frequent treatment emergent adverse events

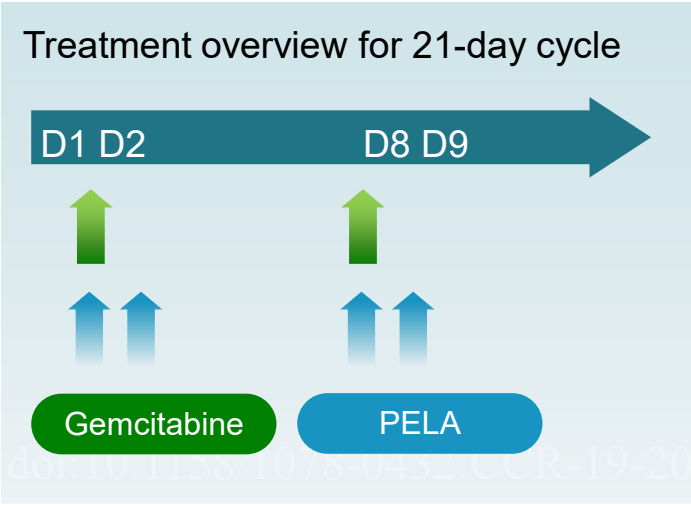
Adverse Event (MedDRA Preferred Term)	All TEAEs N=19, n (%)	Grade 3/4 TEAEs N=19, n (%)
Pyrexia	15 (78.9%)	1 (5.3%)
Anaemia	12 (63.2%)	4 (21.1%)
Chills	10 (52.6%)	0 (0.0%)
Fatigue	10 (52.6%)	2 (10.5%)
Thrombocytopenia	8 (42.1%)	1 (5.3%)
Nausea	7 (36.8%)	0 (0.0%)
Platelet count decreased	6 (31.6%)	1 (5.3%)
Neutrophil count decreased	6 (31.6%)	5 (26.3%)
Urinary tract infection	6 (31.6%)	2 (10.5%)
Alanine aminotransferase increased	5 (26.3%)	0 (0.0%)
Diarrhoea	5 (26.3%)	1 (5.3%)
Dyspnoea	5 (26.3%)	1 (5.3%)
Hypertension	5 (26.3%)	2 (10.5%)
Leukopenia	5 (26.3%)	2 (10.5%)
Neutropenia	5 (26.3%)	3 (15.8%)
Oedema peripheral	5 (26.3%)	1 (5.3%)
Alopecia	4 (21.1%)	0 (0.0%)
Aspartate aminotransferase increased	4 (21.1%)	0 (0.0%)
Hypotension	4 (21.1%)	0 (0.0%)

REO 029 mPDAC Safety Results Summary

- **REO 029** study adverse events in line with well-established PELA safety profile
- Most common AEs are “flu-like” symptoms, GI symptoms, cytopenias
- Most reactions Grade 1 or 2 and transient

REO 017: PELA + Gemcitabine in 1L PDAC

Design	Single-arm
Population	Metastatic or advanced PDAC; No previous chemotherapy (1L)
Treatment	Gemcitabine (Days 1, 8) + PELA (Days 1, 2 & Days 8, 9); PELA dose: 1 x 10^{10} $TCID_{50}$
Primary Endpoint	Clinical benefit rate (CBR) at ≥12 weeks
Secondary Endpoints	PFS, OS, safety

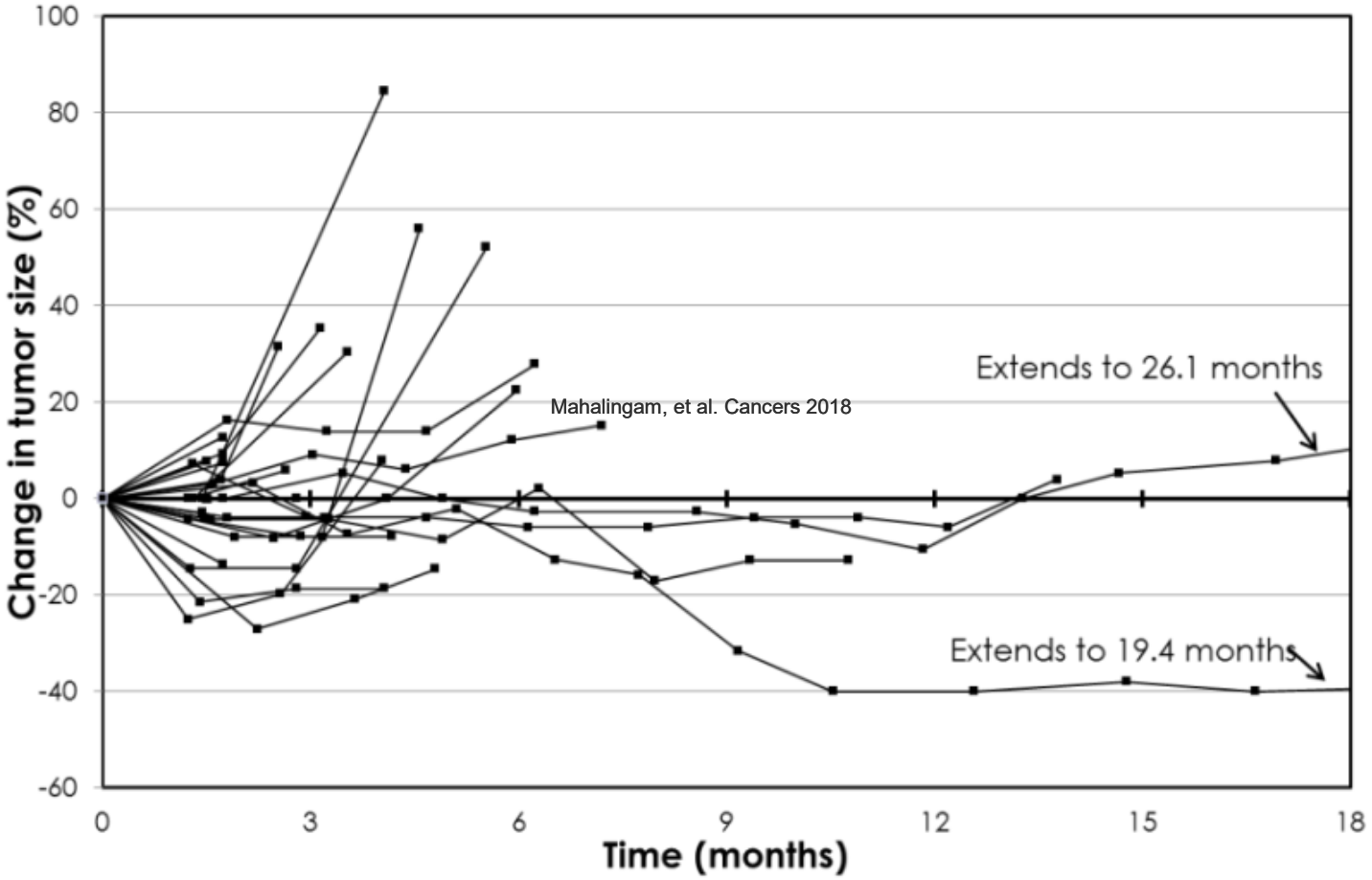


34 patients enrolled; 29 evaluable for response

- Median age: 66 years
- Sex: 53% male; 47% female
- Metastatic disease: 91%; Liver metastases: 65%

Mahalingam, et al. Cancers 2018

REO 017
83% of Evaluable Patients Demonstrated Clinical Benefit



Tumor response:

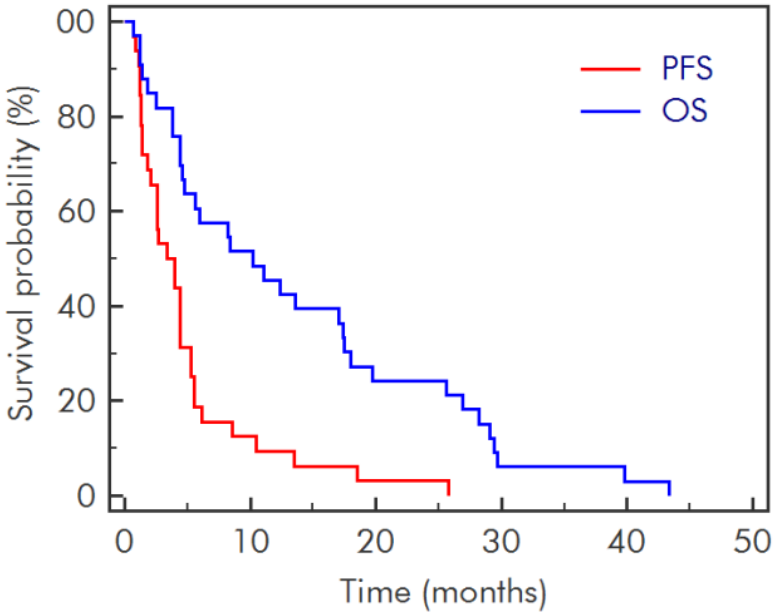
- Partial response: 1
- Stable disease: 23
- Progressive disease 5

Disease control rate

- Evaluable: 83% (24/29)
- ITT: 71% (24/34)

Mahalingam, et al. Cancers 2018

REO 017
6-Fold Increase in 2-year OS vs. Historical Benchmarks



Endpoint	REO 017	Benchmark data*
Median PFS	**3.4 months**	3.7 months
Median OS	**10.2 months**	6.7 months
1-year survival rate	**45%**	22%
2-year survival rate	**24%**	4%


cancers

MDPI

Article

A Phase II Study of Pelareorep (REOLYSIN®) in Combination with Gemcitabine for Patients with Advanced Pancreatic Adenocarcinoma

Devalingam Mahalingam [1,2,*], Sanjay Goel [3], Santiago Aparo [3], Sukeshi Patel Arora [2], Nicole Noronha [4], Hue Tran [4], Romit Chakrabarty [4], Giovanni Selvaggi [4], Andres Gutierrez [4], Matthew Coffey [4], Steffan T. Nawrocki [5], Gerard Nuovo [6] and Monica M. Mita [7]

[1] Division of Hematology/Oncology, Robert H. Lurie Comprehensive Cancer Center, Northwestern University, Chicago, IL 60611, USA
[2] Cancer Therapy and Research Center, University of Texas Health Science Center, San Antonio, TX 78229, USA; aroras@uthscsa.edu
[3] Montefiore Medical Center, New York, NY 10467, USA; sgoel@montefiore.org (S.G.); santiaparo@hotmail.com (S.-A.)
[4] Oncolytics Biotech Inc., Calgary, AB T2N 1X7, Canada; NNoronha@oncolytics.ca (N.N.); htran@oncolytics.ca (H.T.); rchakrabarty@oncolytics.ca (R.C.); giovanni.selvaggi@BMS.com (G.S.); AGutierrez@oncolytics.ca (A.G.); MCoffey@oncolytics.ca (M.C.)
[5] Department of Medicine, Division of Translational and Regenerative Medicine, University of Arizona Cancer Center, Tucson, AZ 85724, USA; snawrocki@email.arizona.edu
[6] Comprehensive Cancer Center, Ohio State University, Columbus, OH and Phylogeny, Inc., Powell, OH 43065, USA; jerrynuovo@yahoo.com
[7] Samuel Oschin Comprehensive Cancer Institute, Los Angeles, CA 90048, USA; monica.mita@cshs.org
* Correspondence: mahalingam@northwestern.edu; Tel.: +1-312-926-9636

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Abstract: Pancreatic ductal adenocarcinoma (PDAC) has a poor prognosis, with 1 and 5-year survival rates of ~18% and 7% respectively. FOLFIRINOX or gemcitabine in combination with nab-paclitaxel are standard treatment options for metastatic disease. However, both regimens are more toxic than gemcitabine alone. Pelareorep (REOLYSIN®), a proprietary isolate of reovirus Type 3 Dearing, has shown antitumor activity in clinical and preclinical models. In addition to direct cytotoxic effects, pelareorep can trigger antitumor immune responses. Due to the high frequency of RAS mutations in PDAC, we hypothesized that pelareorep would promote selective reovirus replication in pancreatic tumors and enhance the anticancer activity of gemcitabine. Chemotherapy-naive patients with advanced PDAC were eligible for the study. The primary objective was Clinical Benefit Rate (complete response (CR) + partial response (PR) + stable disease (SD) ≥ 12 weeks) and secondary objectives include overall survival (OS), toxicity, and pharmacodynamics (PD) analysis. The study enrolled 34 patients; results included one partial response, 23 stable disease, and 5 progressive disease. The median OS was 10.2 months, with a 1- and 2-year survival rate of 45% and 24%, respectively. The treatment was well tolerated with manageable nonhematological toxicities. PD analysis revealed reovirus replication within pancreatic tumor and associated apoptosis. Upregulation of immune checkpoint marker PD-L1 suggests future consideration of combining oncolytic virus therapy with anti-PD-L1 inhibitors. We conclude that pelareorep complements single agent gemcitabine in PDAC.

Keywords: REOLYSIN®; pelareorep; reovirus; immuno-oncolytic virus; pancreatic cancer; PD-L1

A Phase II Study of PELA (REOLYSIN®) in Combination with Gemcitabine for Patients with Advanced Pancreatic Adenocarcinoma
Cancers (Basel). 2018 May 25;10(6):160.
doi: 10.3390/cancers10060160

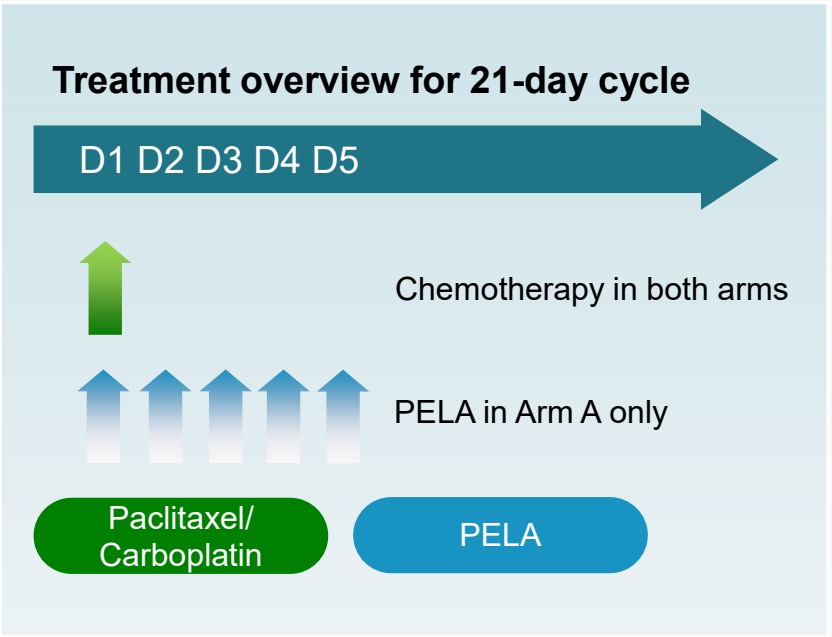
Conclusions: "These survival rates are better than those expected with gemcitabine monotherapy and comparable to the results obtained with FOLFIRINOX in this setting."

PELA + gemcitabine resulted in substantially higher mOS and 12- and 24-month survival rates than historical results for gemcitabine alone

* Von Hoff, et al. NEJM 2013

NCI 8601: PELA + Paclitaxel/Carboplatin in 1L mPDAC

Design	Open-label, randomized
Population	Metastatic PDAC; No previous chemotherapy (1L)
Treatment	Arm A: Paclitaxel/carboplatin (Day 1) + PELA (Days 1-5) Arm B: Paclitaxel/carboplatin (Day 1) PELA dose: 3 x 10^{10} $TCID_{50}$
Primary Endpoint	PFS
Secondary Endpoints	ORR, DCR, OS, safety



73 evaluable patients enrolled: Arm A = 36; Arm B =37

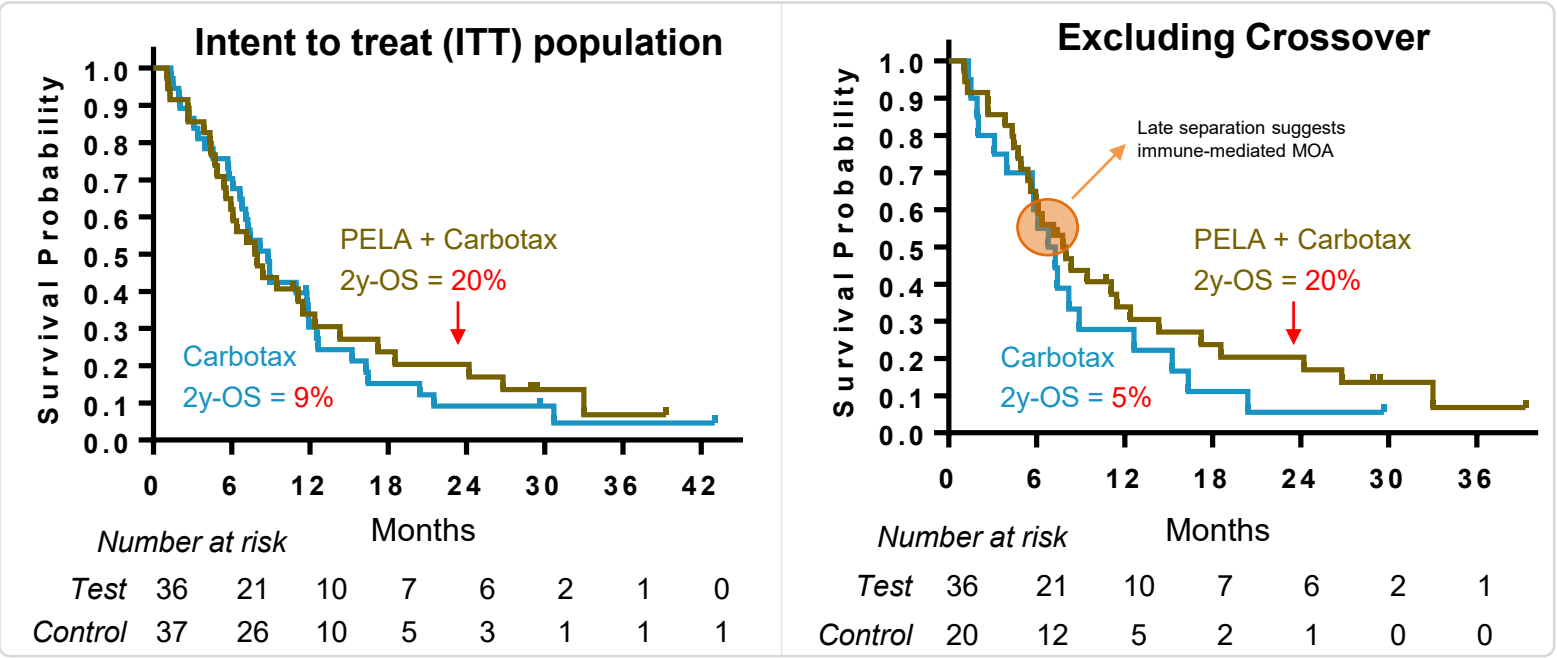
- Median age: 64 years
- Sex: 56% male; 44% female
- Liver metastases: 78%

No significant differences between groups

- 17 patients crossed over from Arm B to Arm A upon progression

Noonan, et al. Molecular Therapy 2016

NCI 8601
Nearly 4-Fold Increase in 2-year OS vs. Control



No difference between arms for:

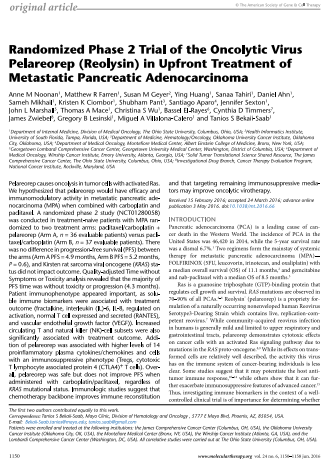
- Median PFS (4.9 vs. 5.2 months)
- Median OS (7.3 vs. 8.8 months)
- ORR (19% in both arms)

However, 2-year survival rate favored the PELA arm:

- **ITT: 20% vs. 9%**
- ***Excluding crossover: 20% vs. 5%***

Discussion *(*Mahalingham, et. al., Cancers 2018*)*

"the mature data showed a possible delayed effect on OS, with a divergence of survival curves occurring around year 1, and the strongest efficacy signal for improvement in OS occurring around year 2 in the pelareorep-containing arm in comparison to the control arm (20% vs. 9%, respectively)."


original article

Randomized Phase 2 Trial of the Oncolytic Virus Pelareorep (Reolysin) in Upfront Treatment of Metastatic Pancreatic Adenocarcinoma

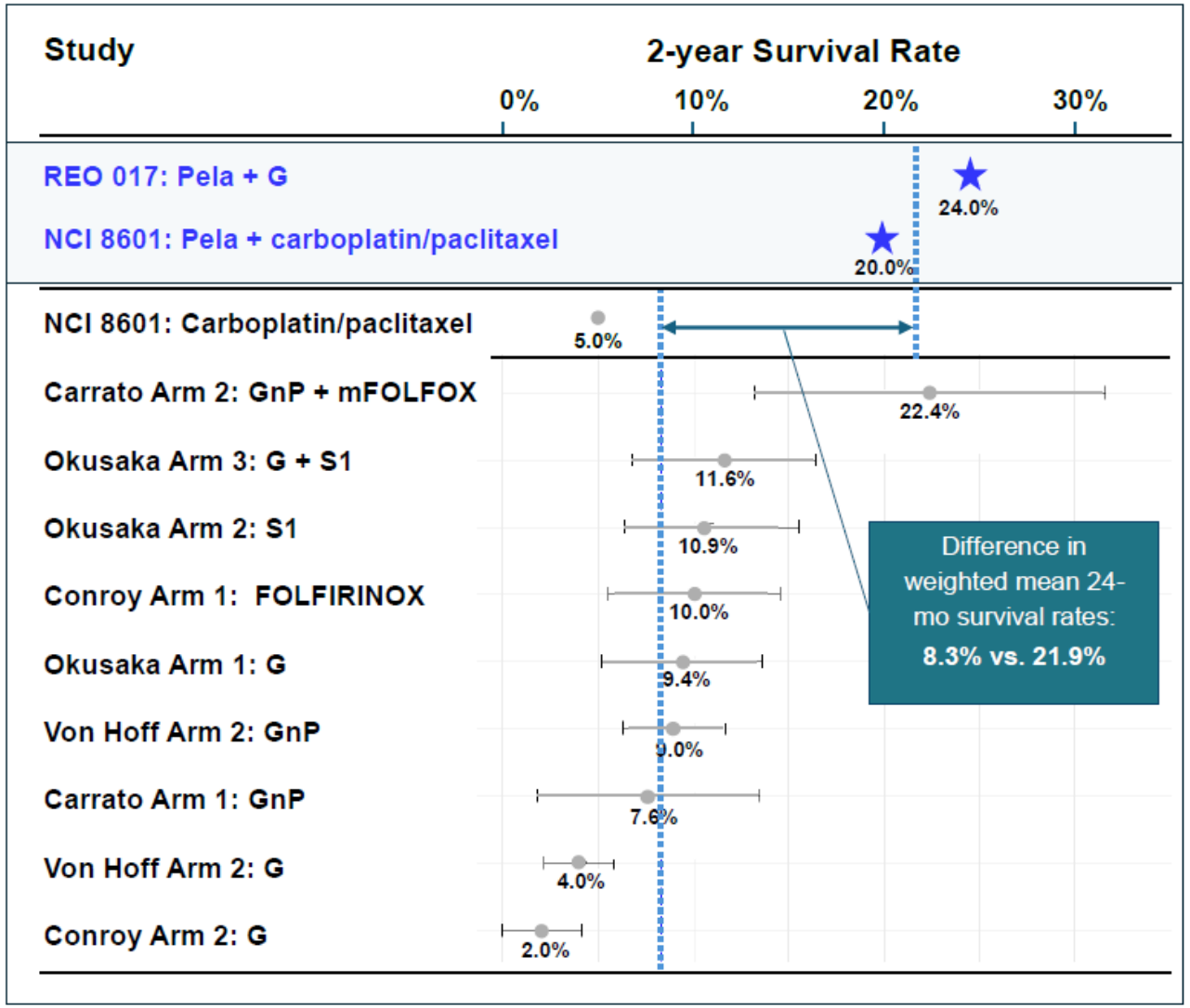
Anne M Noonan[1], Matthew R Farren[1], Susan M Geyer[2], Ying Huang[1], Sanaa Tahiri[1], Daniel Ahn[1], Sameh Mikhail[1], Kristen K Ciombor[1], Shubham Pant[1], Santiago Aparo[3], Jennifer Sexton[1], John L Marshall[1], Thomas A Macer[1], Christina S Wu[1], Bassel El-Rayes[4], Cynthia D Timmers[2], James Zwiebel[5], Gregory B Lesinski[2], Miguel A Villalona-Calero[2] and Tanios S Bekaii-Saab[1]

Randomized Phase 2 Trial of the Oncolytic Virus PELA (Reolysin) in Upfront Treatment of Metastatic Pancreatic Adenocarcinoma
Noonan, et al., Mol Ther. 2016 Jun;24(6):1150-1158

Provides immunologic rationale for combining PELA with a CPI

Carbotax = paclitaxel + carboplatin; OS: overall survival; PFS: progression-free survival; ORR: objective response rate

Pelareorep Enhances 2-year Survival Rates in 1L Metastatic PDAC: A Meta-Analysis



G = gemcitabine; GnP = gemcitabine + paclitaxel; S1: oral fluoropyrimidine; FOLFOX = folinic acid, fluorouracil and oxaliplatin; FOLFIRINOX = FOLFOX + irinotecan

	2-year survival rate (weighted mean)
PELA-based therapy	21.9%
Comparator treatment arms (n=9)	8.3%

Carrato, et al., NEJM Evid. 2024
Mahalingam, et al. Cancers. 2018
Okusaka, et al., Res Clin Oncol. 2017
Noonan, et al., Mol Ther. 2016
Von Hoff, et al., NEJM, 2013
Conroy, et al., NEJM, 2011

Conclusions:
PELA Has Demonstrated Promising Efficacy in 1st-line PDAC

3 completed studies of PELA in 1L PDAC have demonstrated promising efficacy

REO 017: PELA + gemcitabine
- ***6x 2-year survival over benchmark***
- *24% vs 4% for 2-year survival / 45% vs 22% for 1-year survival*

NCI 8601: PELA + paclitaxel/carboplatin vs. carboplatin + paclitaxel
- ***4x 2-year survival rate vs. chemo control*** *(excluding crossover)*
- *20% vs 5% for 2-year survival (excluding crossover)*

REO 029: PELA + gemcitabine/nab-paclitaxel (GnP) + atezolizumab
- ***62% ORR; 85% DCR***
- *45% vs 35% for 1-year survival*

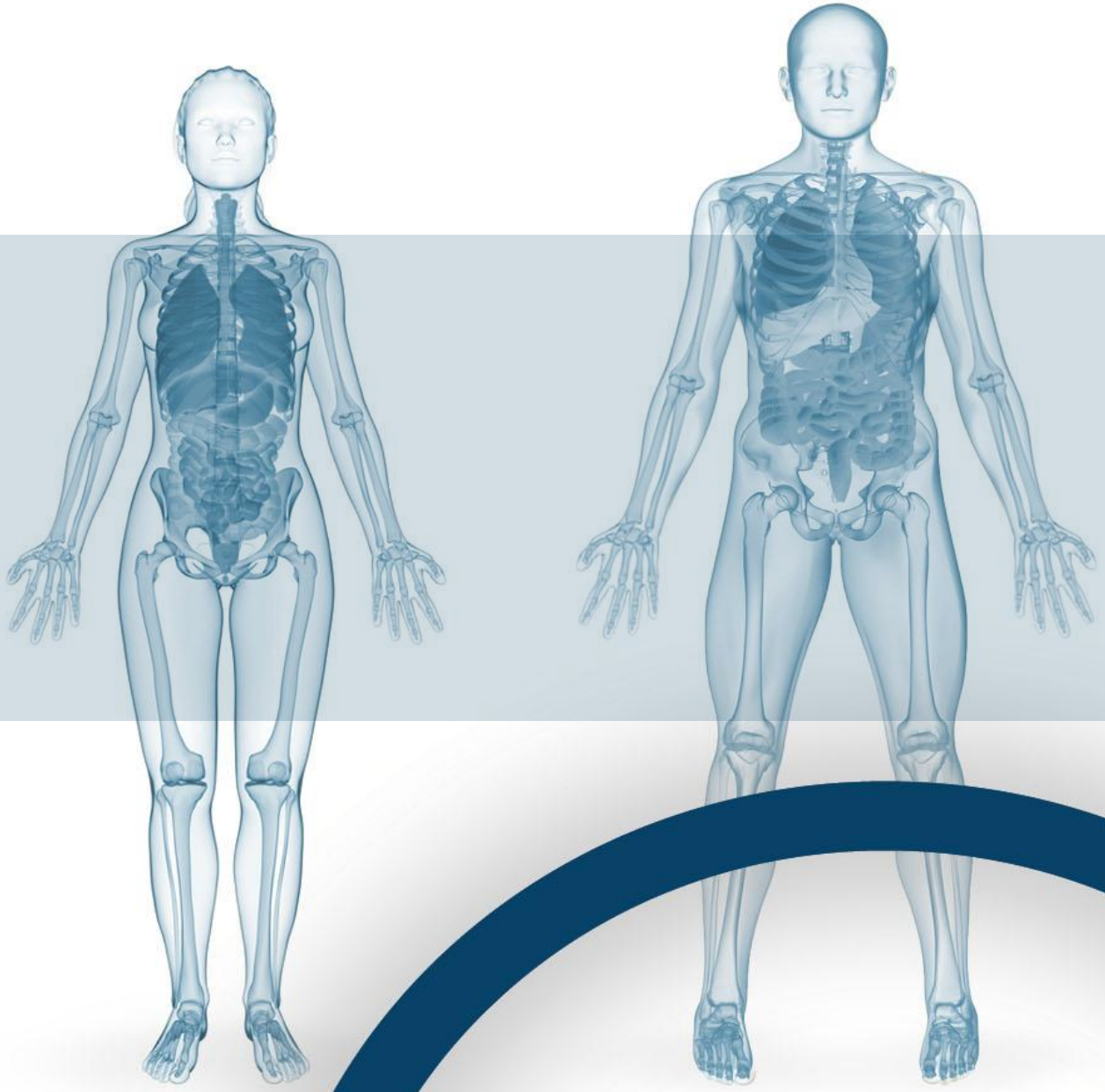
Safety profile in PDAC comparable to that in other indications

Most common PELA-associated AEs are “flu-like” symptoms, GI symptoms, neutropenia

Most reactions Grade 1 or 2 and transient

PELA ***received FDA Fast Track designation*** in 2022 for the treatment of metastatic pancreatic cancer in combination with chemotherapy and atezolizumab

Breast Cancer Program



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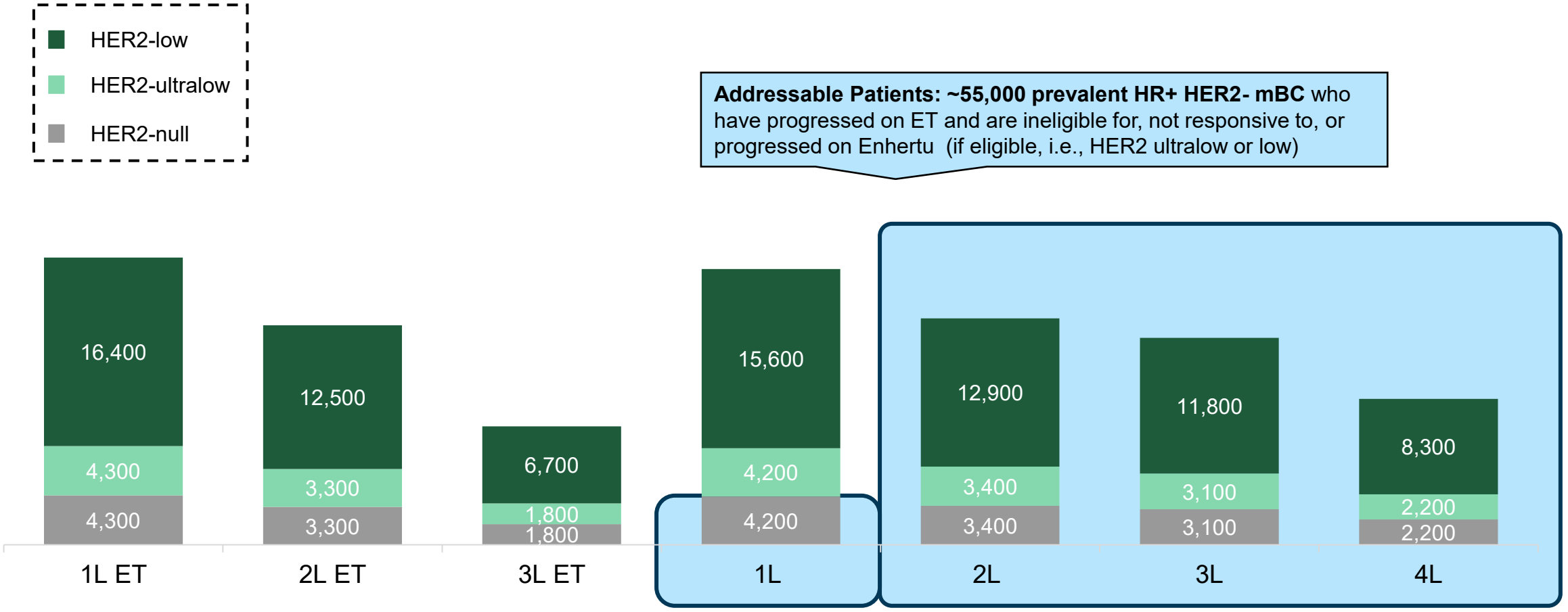
The HR+/HER2- mBC Post-Enhertu Population Represents ~55,000 Patients

Projected 2027 HR+ mBC Treated Prevalence Across Lines of Therapy in U.S.

(# of patients in 1,000s, Not Mutually Exclusive)



Addressable Patients Methodology in Appendix. Sources: Gampenrieder, Simon Peter et al. "Landscape of HER2-low metastatic breast cancer (MBC): results from the Austrian AGMT_MBC-Registry." Breast cancer research : BCR vol. 23,1 112. 14 Dec. 2021, doi:10.1186/s13058-021-01492-x; Schettini, Francesco et al. "Clinical, pathological, and PAM50 gene expression features of HER2-low breast cancer." NPJ breast cancer vol. 7,1 1. 4 Jan. 2021, doi:10.1038/s41523-020-00208-2 Mehta, Sandhya et al. "Prevalent of 'HER2 ultra-low' among patients with advanced breast cancer with historical IHC0 status." Journal of Clinical Oncology vol. 42, 16. 29 May 2024, doi.org/10.1200/JCO.2024.42.16_suppl.e1315; Tarantino, Paolo et al. "HER2-Low Breast Cancer: Pathological and Clinical Landscape." Journal of clinical oncology : official journal of the American Society of Clinical Oncology vol. 38,17 (2020): 1951-1962. doi:10.1200/JCO.19.02488; DESTINY-BREAST04; DESTINY-BREAST06

PELA Evaluated in Multiple Breast Cancer Studies

Phase 1: PELA in advanced breast cancer

Phase 1	PELA has single agent activity in HR+/HER2- breast cancer

Phase 2: Metastatic breast cancer (mBC) – Paclitaxel *vs.* PELA + paclitaxel

IND-213	PELA + paclitaxel provided survival benefit of >10 months in heavily pretreated patients

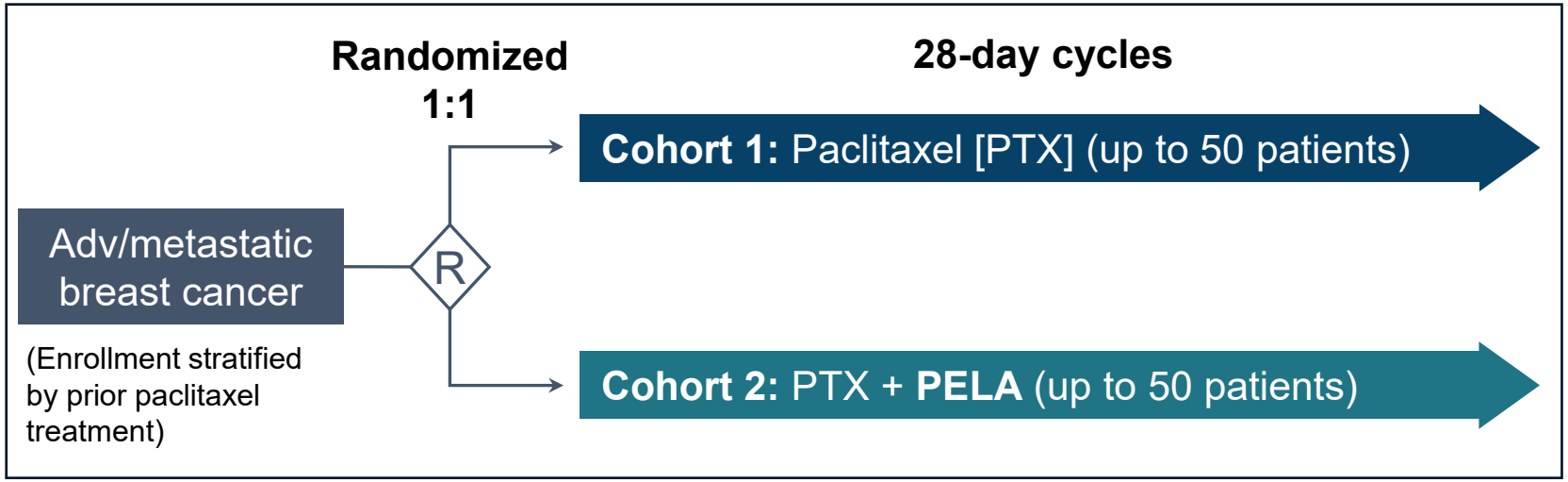
Phase 2: HR+/HER2- mBC – Paclitaxel *vs.* PELA /paclitaxel *vs.* paclitaxel/ PELA /avelumab

BRACELET-1	PELA + paclitaxel provided 5.7-month progression-free survival benefit and >13-month survival benefit following CDK4/6 therapy

IND.213 Study

Overview

- Phase 2, randomized, open-label
- Conducted at 8 Canadian cancer centers



Study Objectives

- Primary: Progression-free survival
- Secondary: Overall survival, objective response rate, biomarker evaluation

Key Eligibility Criteria

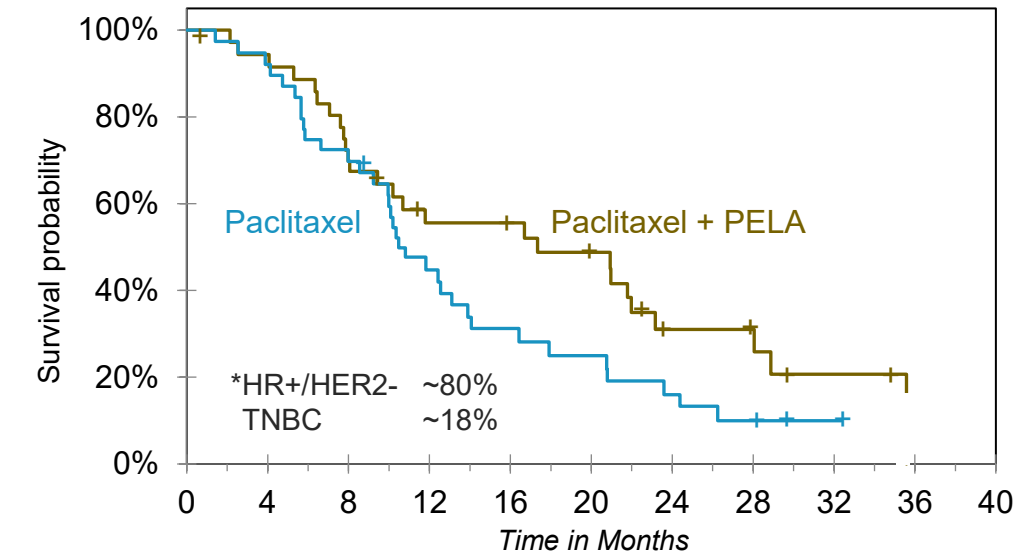
- ≥18 years
- Advanced or metastatic breast cancer (histologically/cytologically confirmed)
- Disease for which systemic paclitaxel is indicated
- Measurable disease per RECIST v1.1
- ≥1 prior chemotherapy regiment for adv/met breast cancer

Dose/schedule

- PELA : $3x10^{10}$ $TCID_{50}$ on days 1,2; 8,9; 15,16
- Paclitaxel: 80 mg/m^2 on days 1, 8, 15

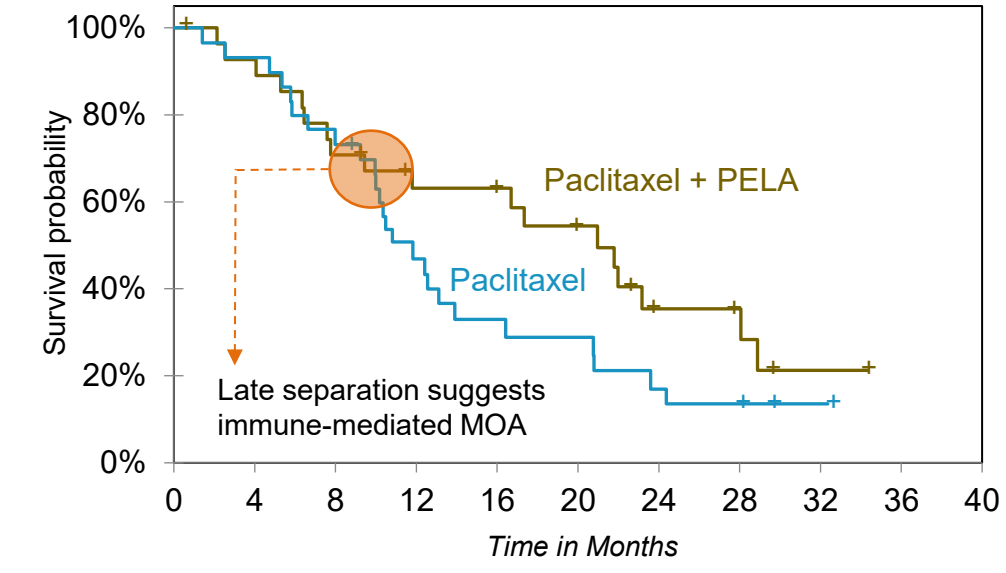
IND.213: Strong Survival Benefit in PELA Combination Arm

Overall survival in the ITT population* (n = 74)



HR	0.65
p	0.1
Median OS	17.4 months vs. 10.4 months
Test	36
Control	38

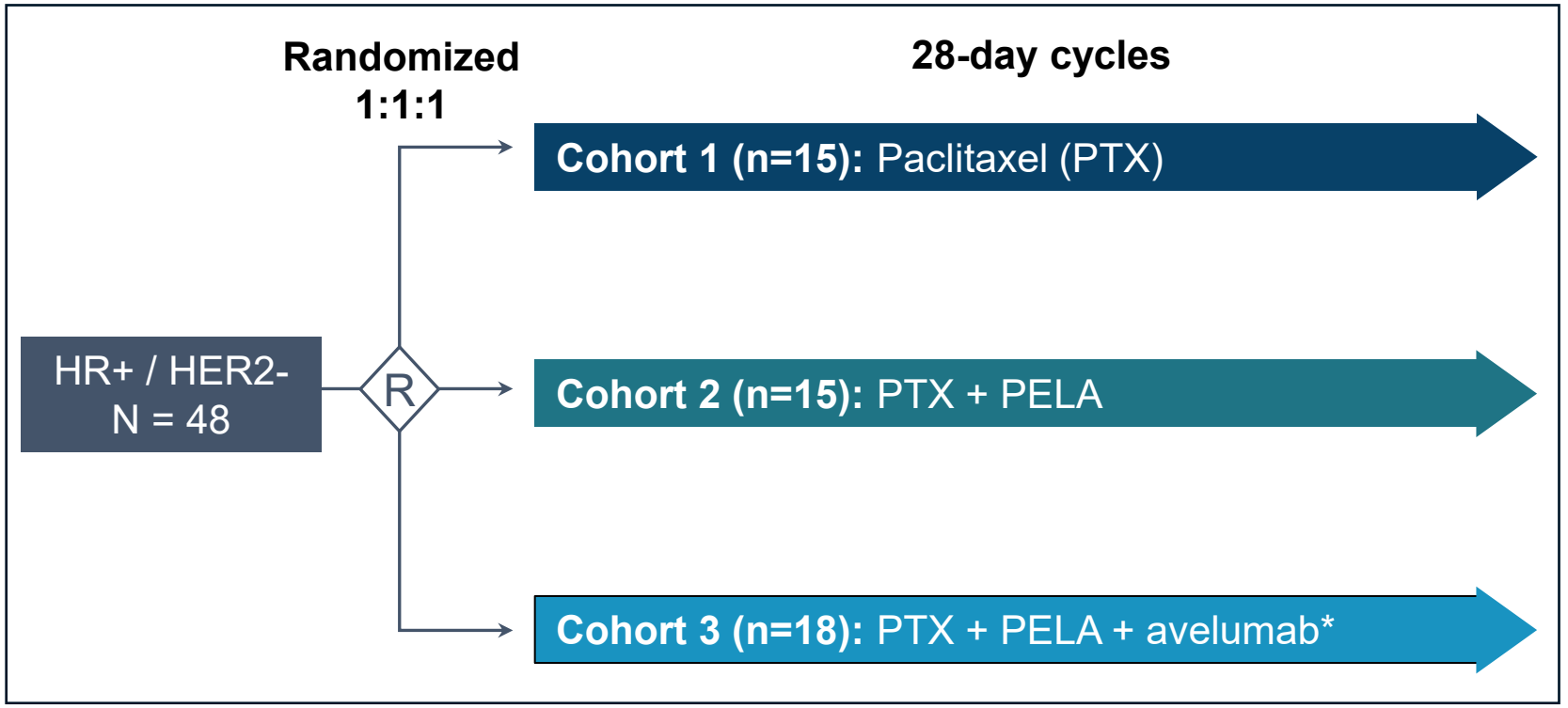
Overall survival in HR+/HER2- patients (n = 57)



HR	0.60
p	0.1
Median OS	21.0 months vs. 10.8 months
Test	28
Control	29

PELA-based therapy led to near doubling of mOS in HR+/HER2- breast cancer patients

BRACELET-1 Study



Key Eligibility Criteria

- No prior chemo for metastatic disease
- Progressed on at least 1 hormone-based therapy with a CDK 4/6 inhibitor

Primary Endpoint

- Overall response rate

Other Endpoints

- Progression-free survival
- Overall survival
- Peripheral and tumor T cell clonality
- Safety and tolerability assessments

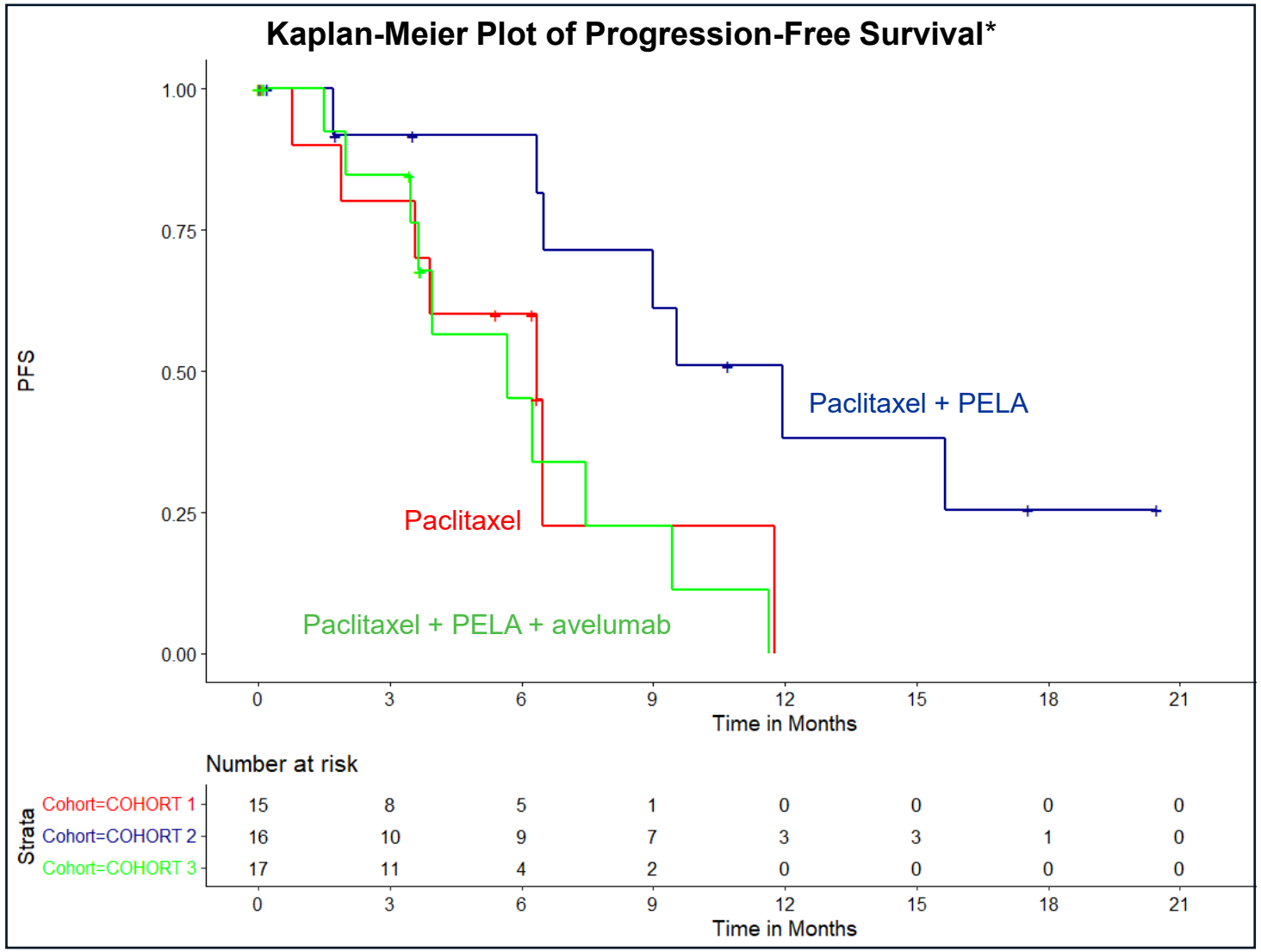
Study Objectives

- To assess the clinical benefit of pelareorep combination therapy in patients who had received CDK4/6 therapy
- To assess whether avelumab added any additional benefit

Collaborators

Avelumab (Bavencio®)
*Includes 3 patient safety run-in

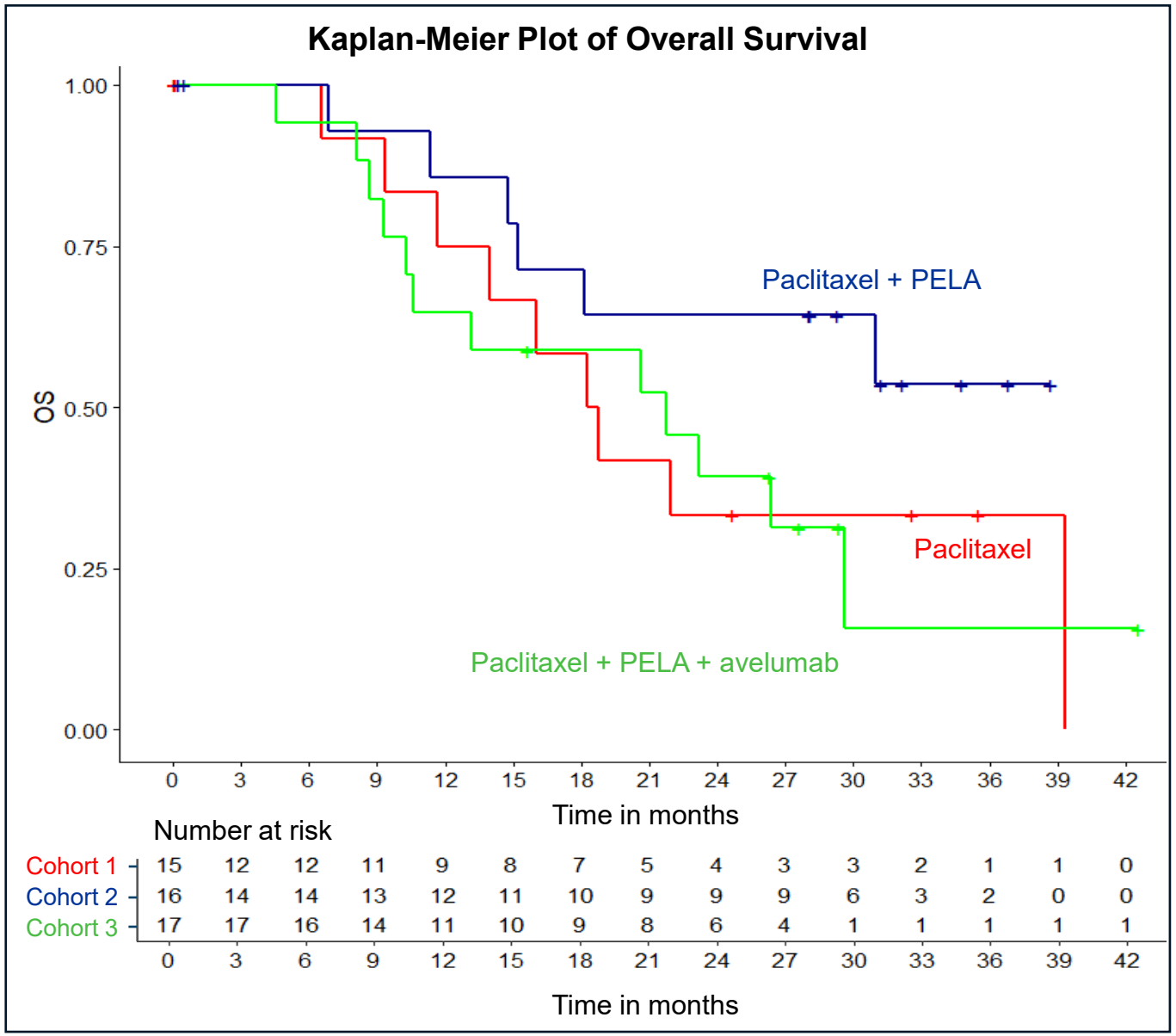
BRACELET-1: Robust Improvement in Progression-free Survival (PFS) in the PELA-combination Arm



	Paclitaxel (PTX)	PTX + PELA	PTX + PELA + avelumab
Median PFS (months)	6.4	12.1	6.4
Hazard ratio vs. PTX	-	0.39	1.43

*Progression-free survival is defined as the time from randomization to the first documented disease progression per RECIST v1.1 or death from any cause, whichever occurs first.

BRACELET-1: Robust Improvement in Overall Survival (OS) in the PELA-combination Arm



	Paclitaxel (PTX)	PTX + PELA	PTX + PELA + avelumab
Median OS (months)	**18.2**	**Not reached**	**21.7**
		Conservative estimate: 32.1*	
Hazard ratio vs. PTX alone	**-**	**0.48**	**1.08**

* Survival estimate assumes death of all patients at next follow-up visit in 4 months

BRACELET-1: Results Summary

Response Measures[1]	PTX Monotherapy (n=15)	PTX + PELA (n=16)	PTX + PELA + Avelumab (n=17)
Confirmed ORR	13.3%	**37.5%**	17.6%
Median PFS (months)	6.4	**12.1**	6.4
Median OS (months)	18.2	**Not Reached** ***Conservative estimate: 32.1****	21.7
Hazard Ratio for OS	-	**0.48**	1.08
24-Month OS Rate (%)	33%	**64%**	39%

[1] Tumor responses based on RECIST version 1.1
ORR: Overall response rate; PTX: paclitaxel
PFS: progression-free survival; OS: overall survival

* Survival estimate assumes death of all patients at next follow-up visit in 4 months

PELA's Favorable Safety Profile Observed in BRACELET-1

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Most Common Adverse Events[1,2] Attributed to Study Drug(s)

	Paclitaxel (PTX) (n=12)		PTX + PELA (n=16)		PTX + PELA + Avelumab (n=17)	
Grade	Any	≥3	Any	≥3	Any	≥3
Alopecia	6 (50%)	-	9 (56%)	-	8 (47%)	-
Anemia	7 (58%)	-	5 (31%)	-	10 (59%)	1 (6%)
Anorexia	4 (33%)	-	5 (31%)	-	5 (29%)	-
Chills	-	-	7 (44%)	-	5 (29%)	-
Diarrhea	1 (8%)	-	6 (38%)	1 (6%)	8 (47%)	2 (12%)
Fatigue	5 (42%)	-	12 (75%)	2 (12%)	8 (47%)	1 (6%)
Infusion related reaction	1 (8%)	-	3 (19%)	-	9 (53%)	1 (6%)
Leucopenia	2 (17%)	-	3 (19%)	1 (6%)	11 (65%)	5 (29%)
LFT[3] Abnormality	3 (25%)	-	6 (38%)	2 (12%)	9 (53%)	2 (12%)
Lymphopenia	3 (25%)	-	3 (19%)	1 (6%)	4 (24%)	2 (12%)
Nausea	4 (33%)	-	7 (44%)	-	8 (47%)	-
Neuropathy	3 (25%)	-	8 (50%)	1 (6%)	10 (59%)	1 (6%)
Neutropenia	3 (25%)	1 (8%)	5 (31%)	3 (19%)	10 (59%)	6 (35%)
Proteinuria	2 (17%)	-	6 (38%)	-	4 (24%)	1 (6%)
Pyrexia	-	-	8 (50%)	-	11 (65%)	-

PELA was well-tolerated with a safety profile as expected based on prior studies

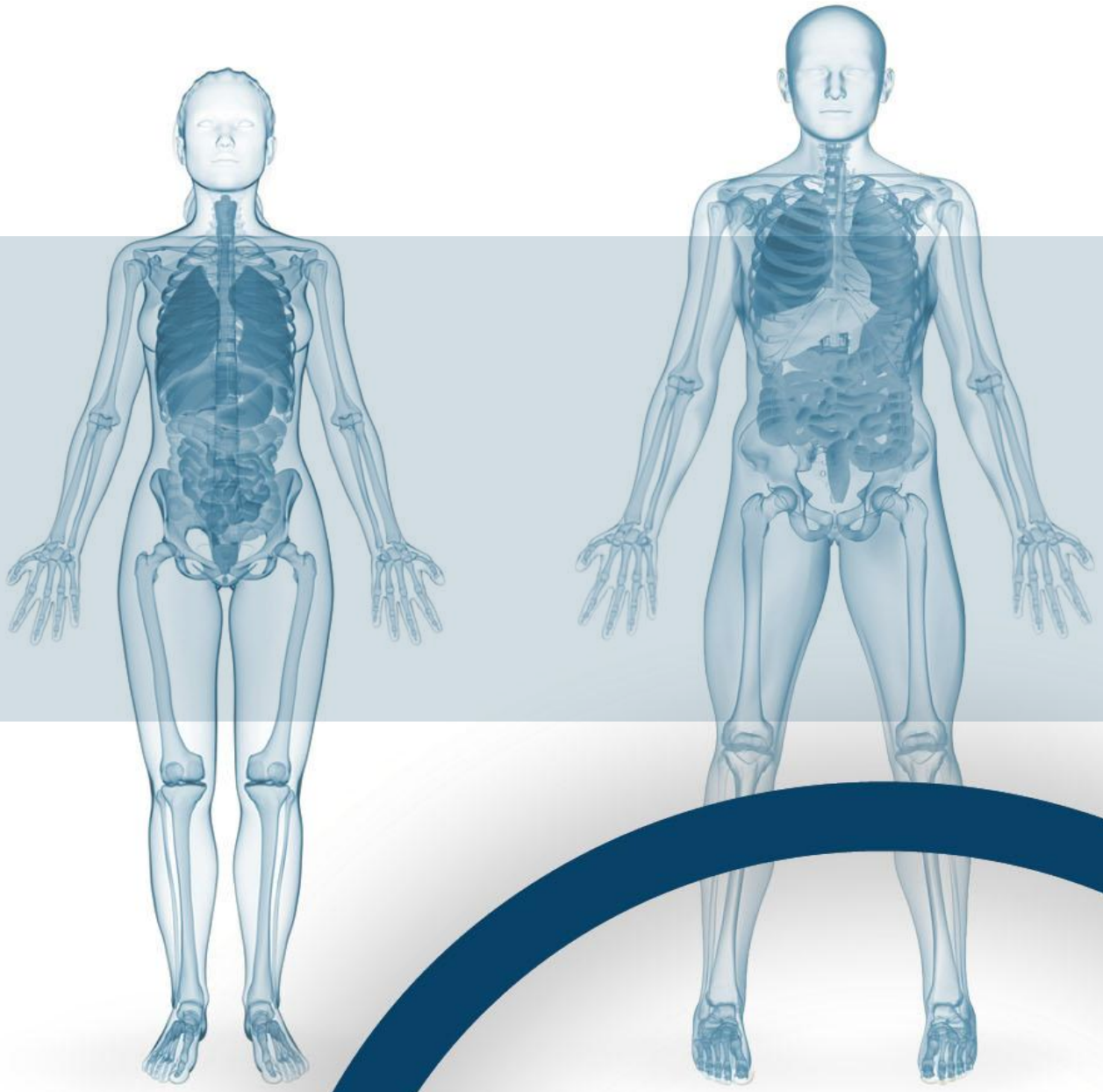
Safety data presented by Clark et al. at ASCO 2023

[1]Adverse Events collected using CTCAE V5.0

[2]Only the 45 randomized patients who received any study therapy included in this analysis

[3] Liver function test abnormality

Anal Cancer Program



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Effective Therapies For Anal Cancer is an Urgent Unmet Need

Checkpoint Inhibitors Provide Limited Efficacy

Historical control trials evaluating checkpoint inhibitors for relapsed anal cancer show an **average ORR of approximately 10-24%**[1-3]

Case numbers have been rising over the past decade

10,930 estimated new cases of anal cancer are expected in 2025 age-adjusted rates for anal cancer have been rising 2.2% each year from 2013-2022 and death rates have been rising 4.1% each year from 2014-2023[4]

Poor Prognosis

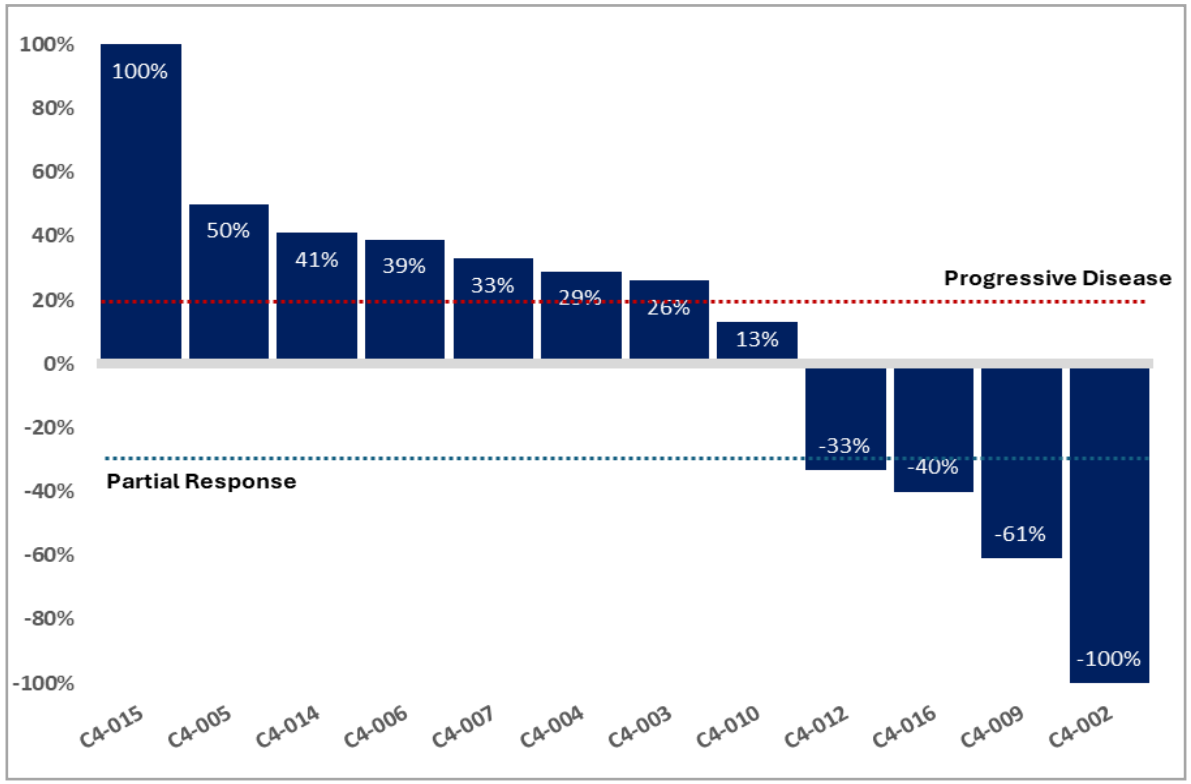
The 71.3% 5-year survival rate for anal cancer drops to a **14% 5-year survival if it metastasizes** per the U.S. National Cancer Institute[4]

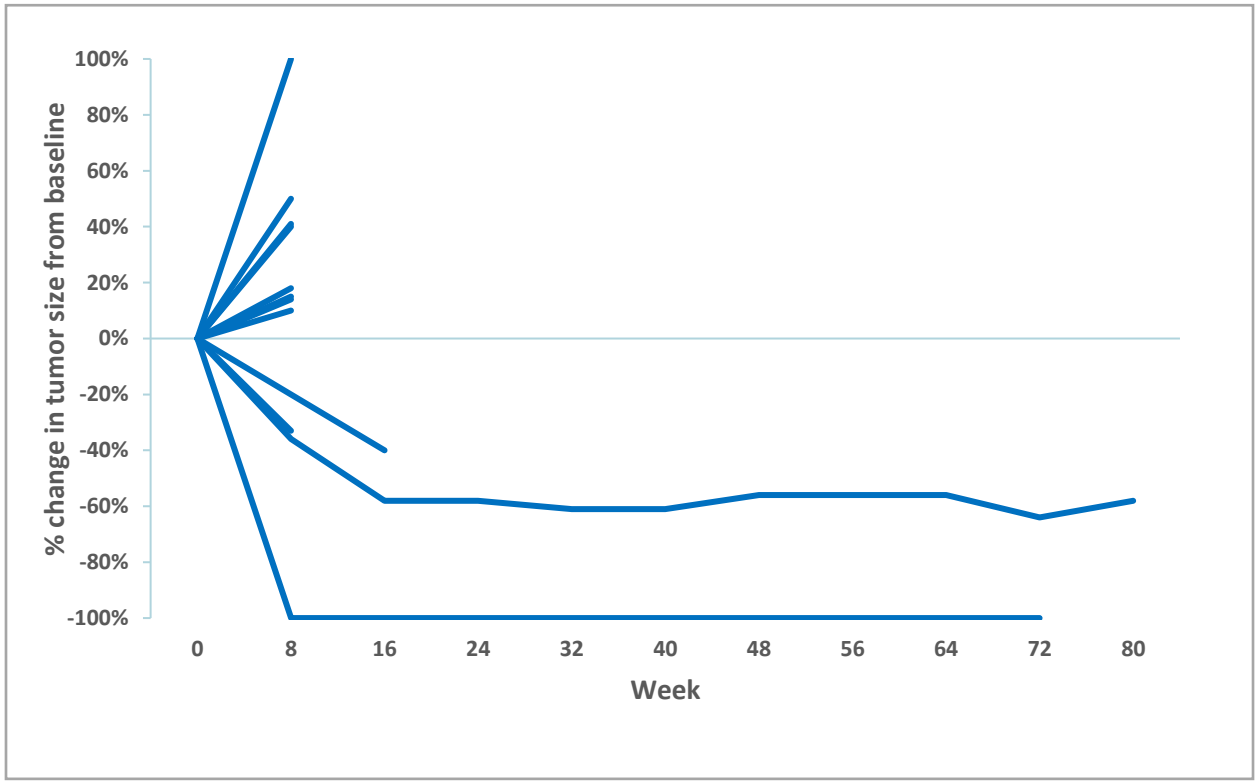
ORR: Objective response rate; 1. Sheela Rao (Frontier Oncol) 2022; 2. Marabelle et al Lancet Oncology (2022)/NCT02628067; 3. Sara Lonardi (2021) J. Immu Cancer/NCT03944252. 4. National Cancer Institute. (2025). Cancer Stat Facts: Anal Cancer. SEER Program, Surveillance, Epidemiology, and End Results. Retrieved June 30, 2025, from https://seer.cancer.gov/statfacts/html/anus.html.

ORR for PELA-Atezolizumab Combination in Anal Cancer Exceeds Historical Rates

ORR of 33%, expanding enrollment to confirm efficacy signal. Of 12 evaluable patients:

- 1 CR (ongoing at 15 months)
- 3 PR (one at week 8, week 16, and one ongoing at week 80)
- ~10-24% Average ORR reported in historical control trials of checkpoint inhibitor therapies[1-3]





ORR: objective response rate; CR: Complete Response; PR: Partial Response; Sources: 1. Sheela Rao (Frontier Oncol) 2022;
2. Marabelle et al Lancet Oncology (2022)/NCT02628067; 3. Sara Lonardi (2021) J. Immu Cancer/NCT03944252;