

# **Future Treatment of Ovarian Cancer Patients with non-BRCA Mutation or HRD (-)**

**Myong Cheol Lim  
National Cancer Center**

11:00-11:30 Sep 3, 2023, EAGOT 2<sup>nd</sup> Annual Meeting

# COI

- **Consulting or Advisory Role:** AstraZeneca, Boryung, CKD Pharm, Genexine, Hospicare, GI Innovation, Takeda
- **Research Funding:** Abbvie, Amgen, Astellas, AstraZeneca, BeiGene, Cellid, CKD Pharm, Clovis, Eisai, Genexine, GSK, Incyte, Merck, MSD, OncoQuest, Pfizer, Roche

Primary

Initiation of chemotherapy

Recurrent



100%  
80%  
60%  
40%  
20%  
0

OPERATION

Chemotherapy Response

PARPi+

(RT 0cm)

CR

PARPi+

PR

PARPi-

(RT 1cm)

SD

PD

(RT >2cm)

CR

PARPi+

PR

PARPi-

SD

PD

Bevacizumab

Treatment Free Interval (O)

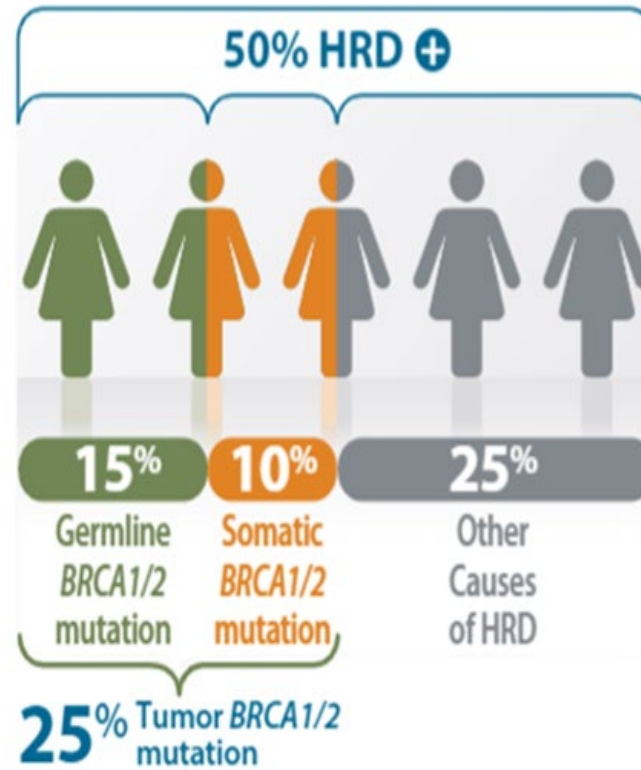
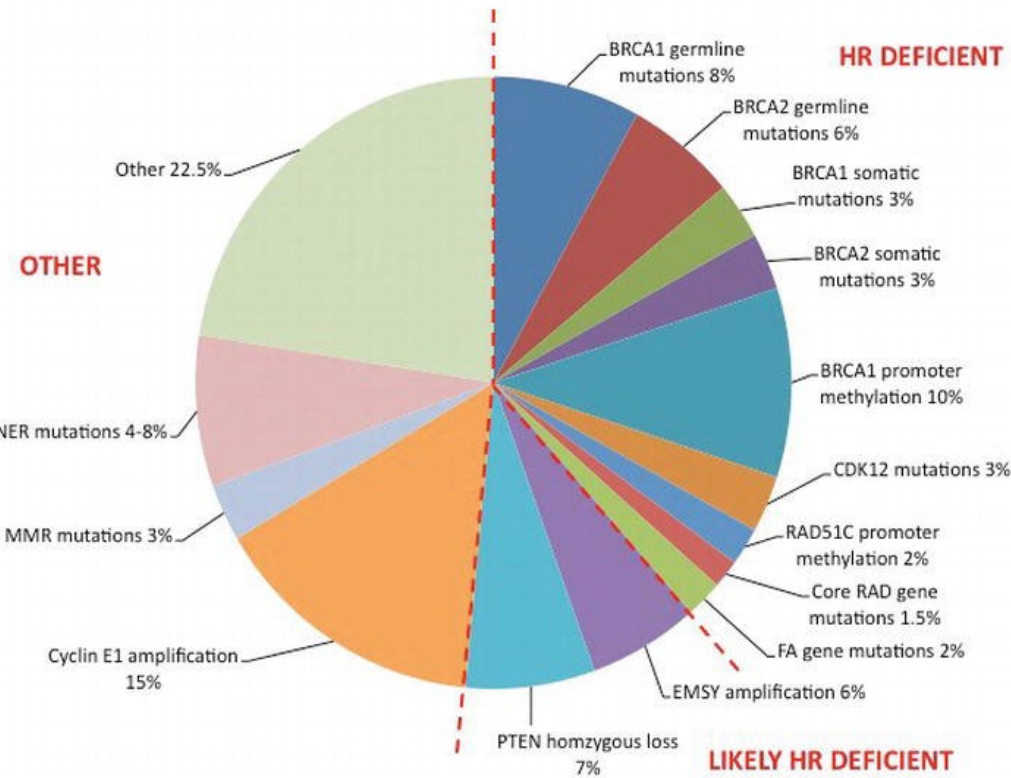
PARPi Free Interval (?)

Site of failure

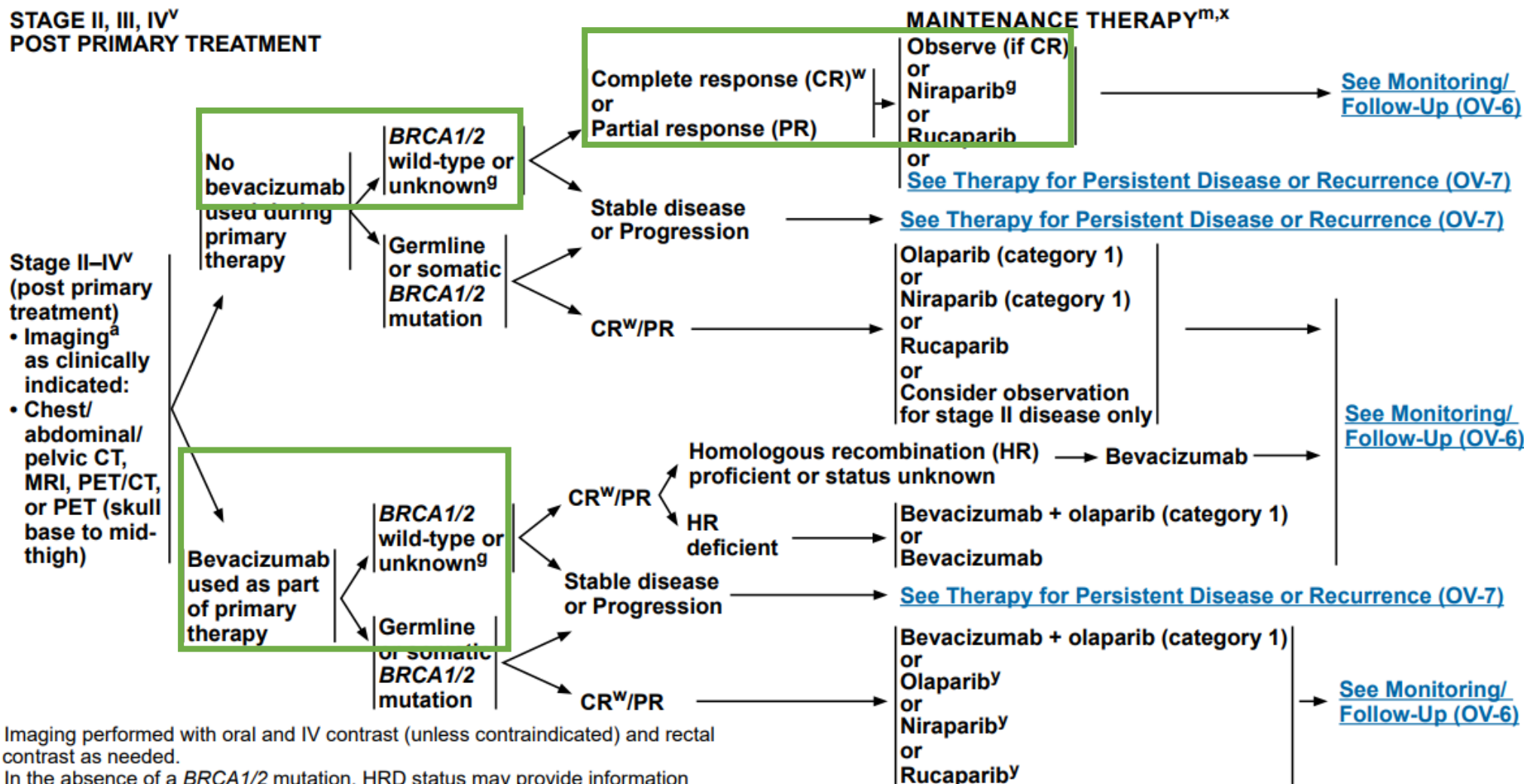
Response to prev. treatment

OS

### HR gene mutation frequency



## STAGE II, III, IV<sup>v</sup> POST PRIMARY TREATMENT



<sup>a</sup> Imaging performed with oral and IV contrast (unless contraindicated) and rectal contrast as needed.

<sup>9</sup> In the absence of a *BRCA1/2* mutation, HRD status may provide information on the magnitude of benefit of PARPi therapy (See OV-B).

<sup>m</sup> See Principles of Systemic Therapy (OV-C) and Management of Drug Reactions (OV-D).

<sup>v</sup> Post primary treatment recommendations for stage II–IV high-grade serous or grade 2/3 endometrioid carcinoma; consider for clear cell carcinoma or carcinosarcoma with a *BRCA1/2* mutation.

<sup>w</sup> No definitive evidence of disease.

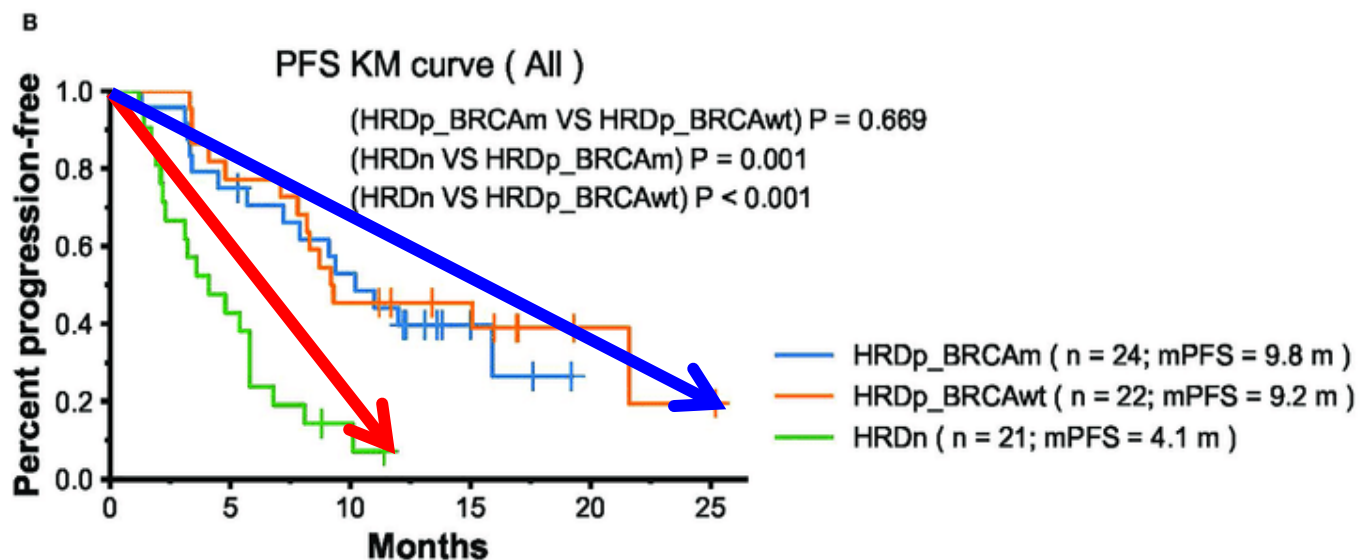
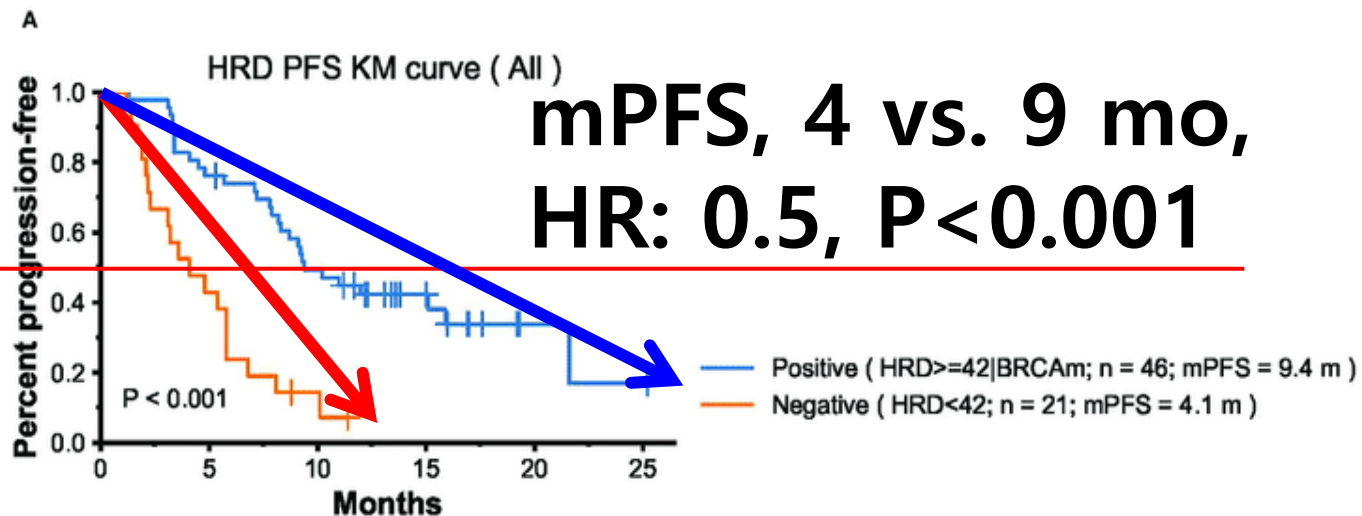
<sup>x</sup> Data are limited for maintenance therapy with a PARPi for patients with stage II disease.

<sup>y</sup> After first-line therapy with bevacizumab, data are limited on maintenance therapy with a single-agent PARPi (olaparib, niraparib, or rucaparib) for patients with a germline or somatic *BRCA1/2* mutation. However, based on the magnitude of benefit of PARPi maintenance therapy for other subgroups, single-agent PARPi can be considered.

# Homologous Recombination Deficiency Associated With Response to Poly (ADP-ribose) Polymerase Inhibitors in Ovarian Cancer Patients: The First Real-World Evidence From China

Jing Ni<sup>1†</sup>, Wenwen Guo<sup>2†</sup>, Qian Zhao<sup>1†</sup>, Xianzhong Cheng<sup>1</sup>, Xia Xu<sup>3</sup>, Rui Zhou<sup>1</sup>, Hongyuan Gu<sup>1</sup>, Chen Chen<sup>1</sup> and Xiaoxiang Chen<sup>1\*</sup>

(Nanjing Medical University, Front Oncol, 2022)





**TABLE 2 |** Univariable and Multivariable Analysis of Progression-Free Survival for the total 67 patient cohort (N = 67).

Parameter	Univariable Analysis		Multivariable Analysis	
	HR (95% CI)	P-Value	HR (95% CI)	P-Value
HRD Status	0.60 (0.45–0.82)	<0.001	0.67 (0.49–0.92)	0.01
HRR mutation status	0.84 (0.47–1.50)	0.55	NA	NA
BRCA mutation status	0.66 (0.36–1.23)	0.19	0.74 (0.39–1.42)	0.37
ECOG	2.49 (1.39–4.44)	0.002	2.20 (1.14–4.23)	0.02
NACT	1.45 (0.81–2.61)	0.21	NA	NA
Treatment Lines	1.58 (0.87–2.87)	0.13	1.16 (0.61–2.20)	0.64
Family History	0.71 (0.39–1.32)	0.28	NA	NA
Secondary cytoreductive surgery	1.59 (0.85–2.98)	0.15	1.80 (0.91–3.53)	0.09
R0 resection or not	1.54 (0.86–2.77)	0.15	1.75 (0.96–3.26)	0.07
Stage	0.72 (0.42–1.23)	0.23	NA	NA

ECOG, Eastern Cooperative Oncology Group; ECOG performance status  $\geq 2$  vs 1 or 0; NACT, New Adjuvant Chemo Therapy yes or no; HR, hazard ratio; Treatment lines, lines  $\leq 2$  as 0,  $\geq 3$  lines as 1; NA, not applicable. Baseline variables that achieved a level of significance of  $P < 0.2$  in the univariable analysis were entered into multivariable models.

DISEASE STATUS<sup>e,cc,dd</sup>THERAPY FOR PERSISTENT DISEASE OR RECURRENCE<sup>m,ff,gg,hh</sup>

Platinum-resistant disease:<sup>ee</sup>  
Progression on primary,  
maintenance or recurrence therapy  
or  
Stable or persistent disease  
(if not on maintenance therapy)  
or  
Complete remission and relapse <6  
mo after completing chemotherapy

Clinical trial<sup>ii,jj</sup>  
and/or  
Best supportive care ([See NCCN Guidelines for  
Palliative Care](#))  
and/or  
Recurrence therapy ([see OV-C, 9 of 11](#))<sup>m,ii,kk</sup>

Platinum-sensitive disease:<sup>ee</sup>  
Complete remission  
and relapse ≥6 mo  
after completing prior  
chemotherapy

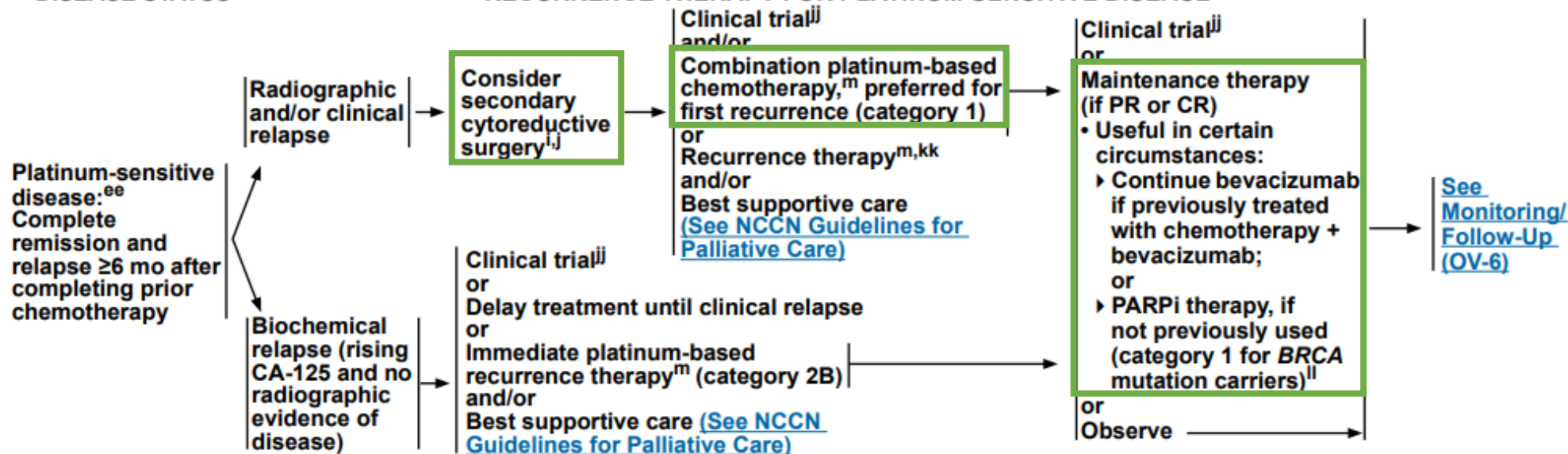
[See OV-8](#)

Definitions of platinum-sensitive and platinum-resistant disease are imprecise; clinical judgment and flexibility should be utilized in determining treatment options



DISEASE STATUS<sup>e,cc,dd</sup>

RECURRENCE THERAPY FOR PLATINUM-SENSITIVE DISEASE<sup>m,ff,gg,hh</sup>



<sup>e</sup> See [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic](#) and [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal](#).

<sup>i</sup> See [Principles of Surgery \(OV-A\)](#).

<sup>j</sup> See [Principles of Pathology \(OV-B\)](#).

<sup>m</sup> See [Principles of Systemic Therapy \(OV-C\)](#) and [Management of Drug Reactions \(OV-D\)](#).

<sup>cc</sup> Validated molecular testing should be performed in a CLIA-approved facility using the most recent available tumor tissue. Tumor molecular analysis is recommended to include, at a minimum, tests to identify potential benefit from targeted therapeutics that have tumor-specific or tumor-agnostic benefit including, but not limited to, *BRCA1/2*, HRD status, MSI, MMR, TMB, FRα, *RET*, and *NTRK* if prior testing did not include these markers. More comprehensive testing may be particularly important in LCOC with limited approved therapeutic options (See [OV-B](#)).

<sup>dd</sup> Tumor molecular testing prior to initiation of therapy for persistent/recurrent disease, if not previously done.

<sup>ee</sup> Definitions of platinum-sensitive and platinum-resistant disease are imprecise; clinical judgment and flexibility should be utilized in determining treatment options.

<sup>ff</sup> Data are limited on primary and maintenance therapy for recurrent/persistent LCOC.

<sup>gg</sup> During and after treatment for recurrence, patients should be evaluated as indicated with tumor markers and repeat imaging (with modalities previously used) to document response and/or disease status.

<sup>hh</sup> See [Ancillary Palliative Surgical Procedures \(OV-A 4 of 4\)](#).

<sup>ij</sup> Clinical trials with newer agents should be strongly considered.

<sup>kk</sup> Palliative localized RT can be considered.

<sup>ll</sup> PARPi options include niraparib, olaparib, or rucaparib. For patients with platinum-sensitive disease who have completed two or more lines of platinum-based therapy. Olaparib may be used regardless of *BRCA* status (preferred for those with a *BRCA* mutation). Niraparib is limited to those with a deleterious or suspected deleterious germline *BRCA* mutation. Rucaparib is limited to those with a deleterious or suspected deleterious *BRCA* mutation. Caution should be used when using maintenance PARPi for longer than 24 months. There are limited data on the use of a maintenance PARPi in patients who previously received a PARPi or after recurrence therapy with bevacizumab. Combination bevacizumab/PARPi is not recommended at this time for maintenance after recurrence therapy.



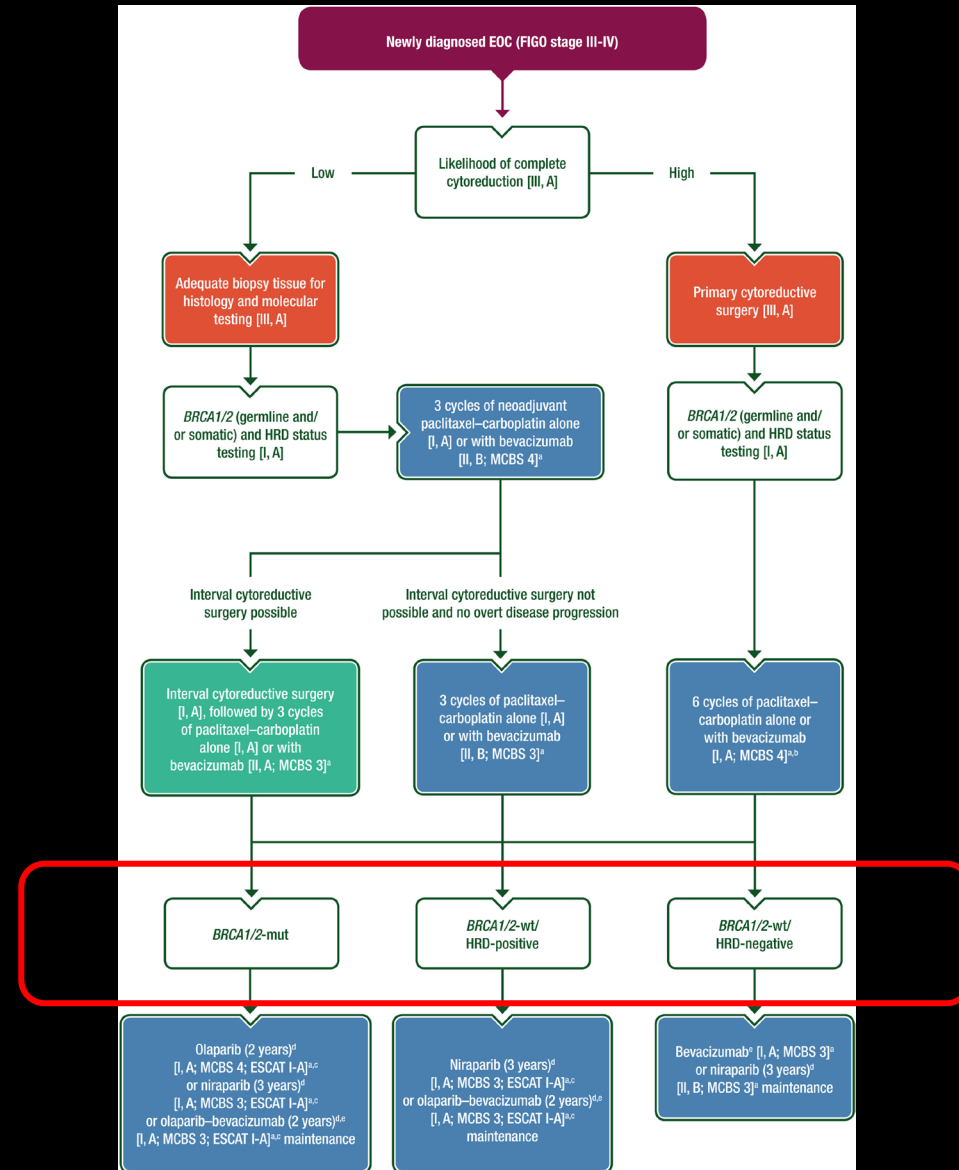
### PRINCIPLES OF SYSTEMIC THERAPY

#### Acceptable Recurrence Therapies for Epithelial Ovarian (including LCOC)<sup>n</sup>/Fallopian Tube/Primary Peritoneal Cancer<sup>o</sup>

##### Recurrence Therapy for Platinum-Resistant Disease (alphabetical order)

Preferred Regimens	Other Recommended Regimens	Useful in Certain Circumstances
<p><u>Cytotoxic Therapy</u> Cyclophosphamide (oral)/ bevacizumab<sup>1,35</sup> Docetaxel<sup>36</sup> Etoposide, oral<sup>37</sup> Gemcitabine<sup>38,39</sup> Liposomal doxorubicin<sup>38,39</sup> Liposomal doxorubicin/ bevacizumab<sup>1,q,40</sup> Paclitaxel (weekly)<sup>f,41</sup> Paclitaxel (weekly)/ bevacizumab<sup>f,i,q,40</sup> Topotecan<sup>42,43</sup> Topotecan/bevacizumab<sup>i,q,40</sup></p> <p><u>Targeted Therapy (single agents)</u> Bevacizumab<sup>i,q,17,18</sup> Mirvetuximab soravtansine-gynx (for FRα-expressing tumors)<sup>x,44</sup></p>	<p><u>Cytotoxic Therapy</u><sup>s</sup> Capecitabine Oxaliplatin Paclitaxel Paclitaxel, albumin bound Pemetrexed Sorafenib/topotecan<sup>45</sup> Vinorelbine</p> <p>Carboplatin* Carboplatin/docetaxel* Carboplatin/paclitaxel (weekly)<sup>f,*</sup> Carboplatin/gemcitabine<sup>10</sup> ± bevacizumab<sup>1,q,r,11,*</sup> Carboplatin/liposomal doxorubicin<sup>12</sup> ± bevacizumab<sup>i,q,13,*</sup> Carboplatin/paclitaxel<sup>f,14</sup> ± bevacizumab<sup>i,q,r,15,*</sup> Cyclophosphamide Doxorubicin Gemcitabine/bevacizumab<sup>i,46</sup> Gemcitabine/cisplatin<sup>16,*</sup> Ifosfamide Irinotecan Ixabepilone/bevacizumab (category 2B)<sup>i,y,47</sup> Melphalan</p> <p><u>Targeted Therapy (single agents)</u> Niraparib (category 3)<sup>u,23</sup> Olaparib (category 3)<sup>v,24</sup> Pazopanib (category 2B)<sup>25</sup> Rucaparib (category 3)<sup>w,26</sup></p> <p><u>Hormone Therapy</u> Aromatase inhibitors (anastrozole, exemestane, letrozole) Leuprolide acetate Megestrol acetate Tamoxifen</p>	<p>Carboplatin/paclitaxel (for age &gt;70)<sup>f,t,*</sup> Carboplatin/paclitaxel, albumin bound (for confirmed taxane hypersensitivity)* <u>Immunotherapy</u> Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors)<sup>x,32</sup> Pembrolizumab (for patients with MSI-H or dMMR solid tumors, or TMB-H tumors ≥10 mutations/ megabase)<sup>x,33</sup></p> <p><u>Hormone Therapy</u> Fulvestrant (for low-grade serous carcinoma)</p> <p><u>Targeted Therapy</u> Dabrafenib + trametinib (for <i>BRAF</i> V600E-positive tumors)<sup>x,28</sup> Entrectinib or larotrectinib (for <i>NTRK</i> gene fusion positive tumors)<sup>x</sup> Mirvetuximab soravtansine-gynx/bevacizumab (for FRα-expressing tumors) (category 2B)<sup>i,x,48,49</sup> Selpercatinib (for <i>RET</i> gene fusion-positive tumors)<sup>x,29</sup> For low-grade serous carcinoma: • Trametinib<sup>30</sup> • Binimetinib (category 2B)<sup>31,32</sup></p>

# Newly diagnosed and relapsed epithelial ovarian cancer: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up†



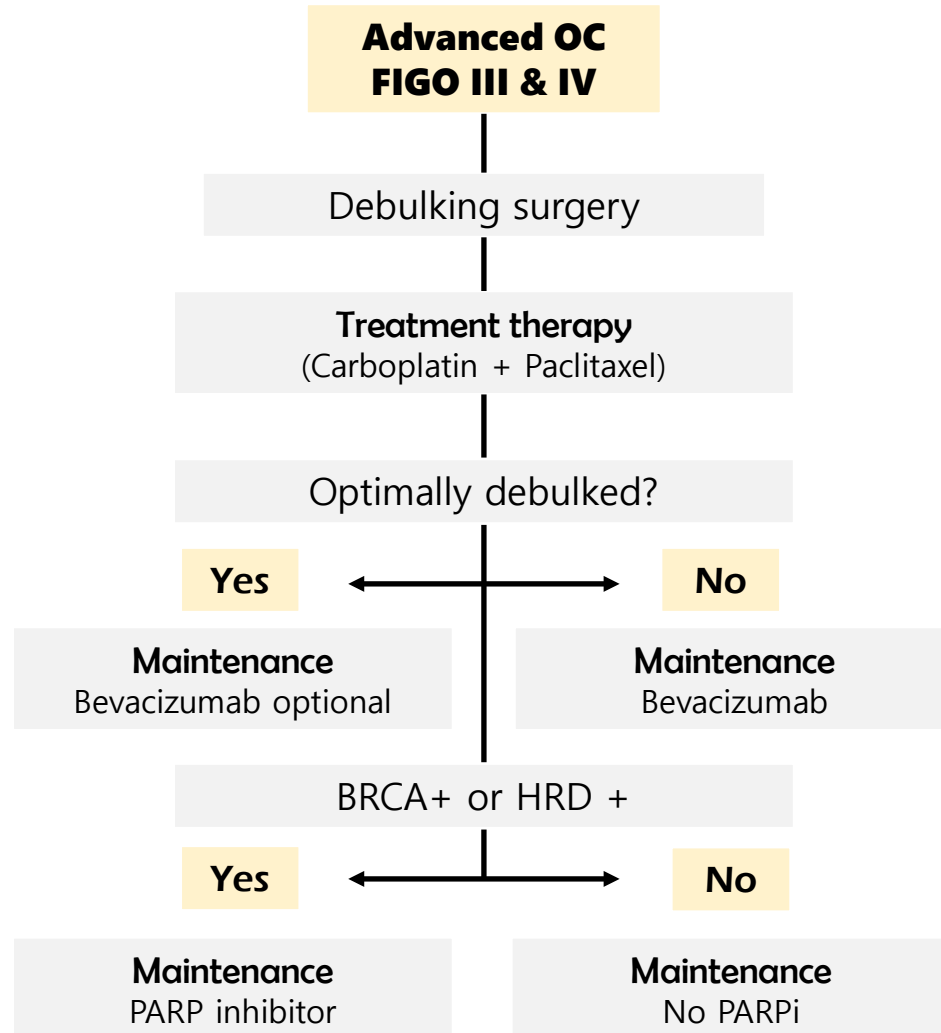
## Oregovomab

---

Categories	Definitions
Clinical Indication	FIGO Stage III & IV epithelial ovarian, fallopian tube, or peritoneal cancer following optimally debulked surgical resection
Modality	<b>Murine monoclonal antibody</b> IgG1-k mAb with high affinity ( $1.16 \times 10^{10}/M$ ) <b>to CA125</b>
Biological Activity	<b>Oregovomab initiates tumor specific immunity by targeting CA125 in patients with CA125 positive cancers.</b> The therapeutic intent is to induce clearance of CA-125 by antigen processing cells.
Efficacy	<b>In the randomized phase 2 study (n=97), PFS and OS were significantly better (PFS: 42 months vs. 12 months)</b>
Safety profile	<b>Treatment-related toxicity clearly related to oregovomab has not been encountered</b> in patients with ovarian cancer or patients in the completed or ongoing clinical studies.
Administration Route	<b>Intravenous infusion over 20 ± 5 minutes</b>
Formulation	<b>Oregovomab solution is prepared by saline reconstitution of the lyophilized vial powder, which is added to a 50 mL saline infusion bag for IV administration.</b>

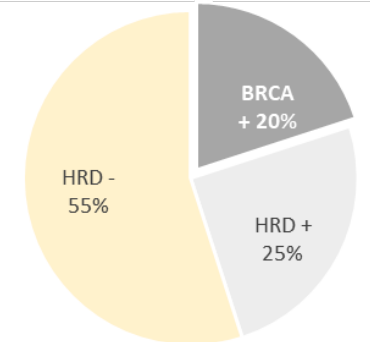


# Oregovomab First in Class, Front Line & Recurrent



## First in class, front line treatment therapy

- ✓ First immunotherapy for ovarian cancer (OC)
- ✓ IOs shown unsatisfactory results for OC.
- ✓ 4 treatment of 2mg, with extremely low toxicity
- ✓ Combination study with Bev, PARPi underway



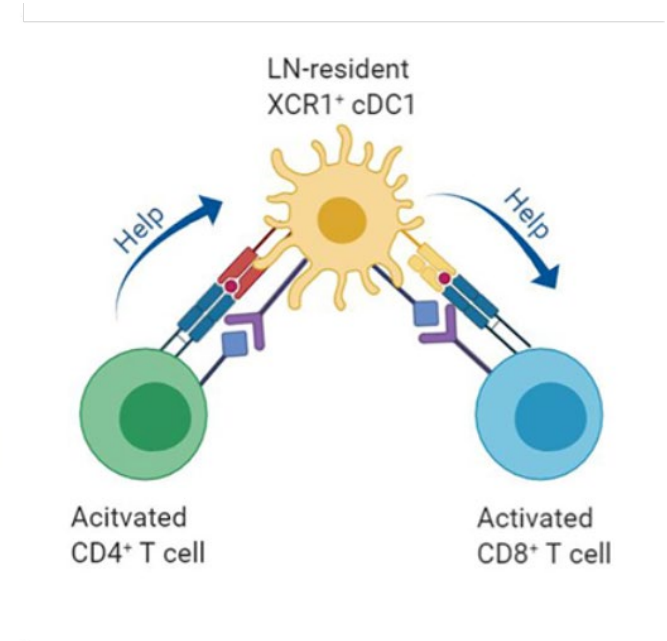
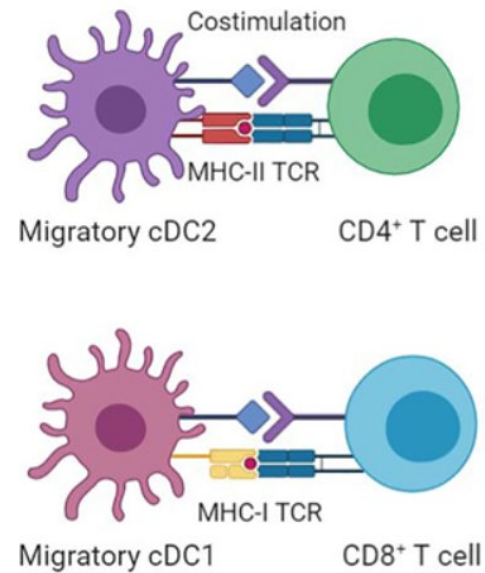
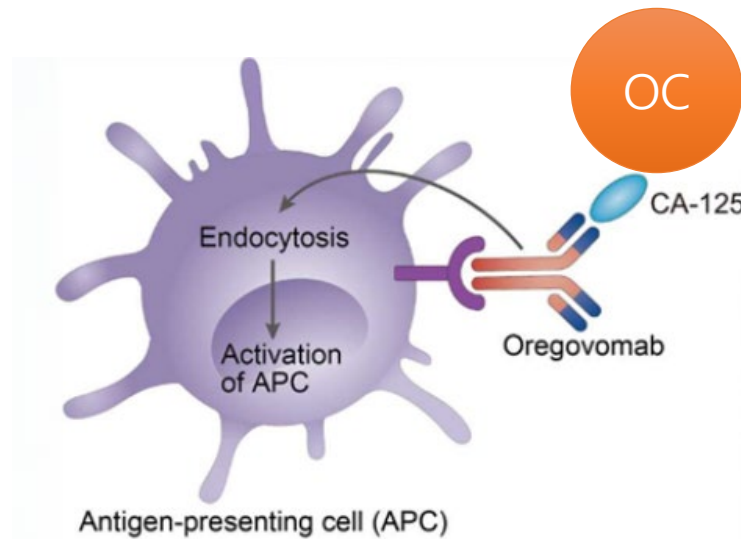
## Unmet need for recurrent patients

- ✓ Chemo±Bev or PARPi still is the only treatment therapy available
- ✓ Huge unmet needs for platinum resistant patients
  - ✓ Mirvetuximab: Limited benefit to limited patients
- ✓ PARPi for PARPi-naïve BRCAm patients

Study	Population	Treatment	Maintenance	PFS (months)
QPT-ORE-002	all comers	C + P	None	12
QPT-ORE-002	all comers	C + P + oregovomab	None	42
NOVA	BRCA +	C + P	Bev + Niraparib	37
NOVA	HRD +	C + P	Bev + Niraparib	28
NOVA	HRD -	C + P	Bev + Niraparib	17
GOG-0218	all comers	C + P	None	12
GOG-0218	all comers	C + P + Bev	None	13
GOG-0218	all comers	C + P + Bev	Bevacizumab	18

## Mechanism of Action

**Oregovomab** is a murine IgG1-k mAb with high affinity ( $1.16 \times 10^{10}/M$ ) to CA125. The therapeutic intent is to induce clearance of CA-125 by antigen processing cells.





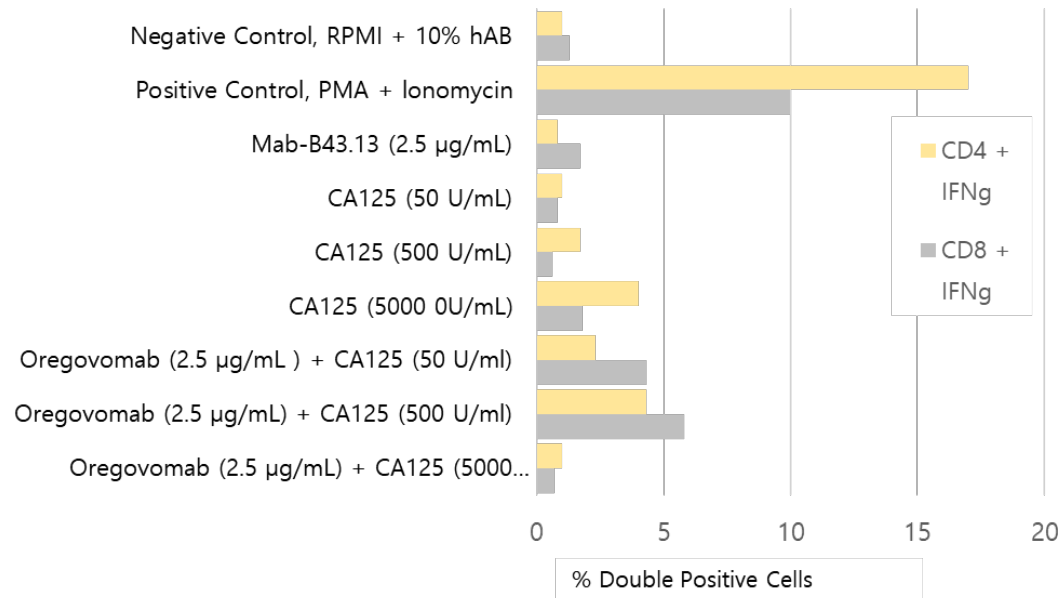
# Mechanism of Action

## Activates immune response via immune complex formation with CA125

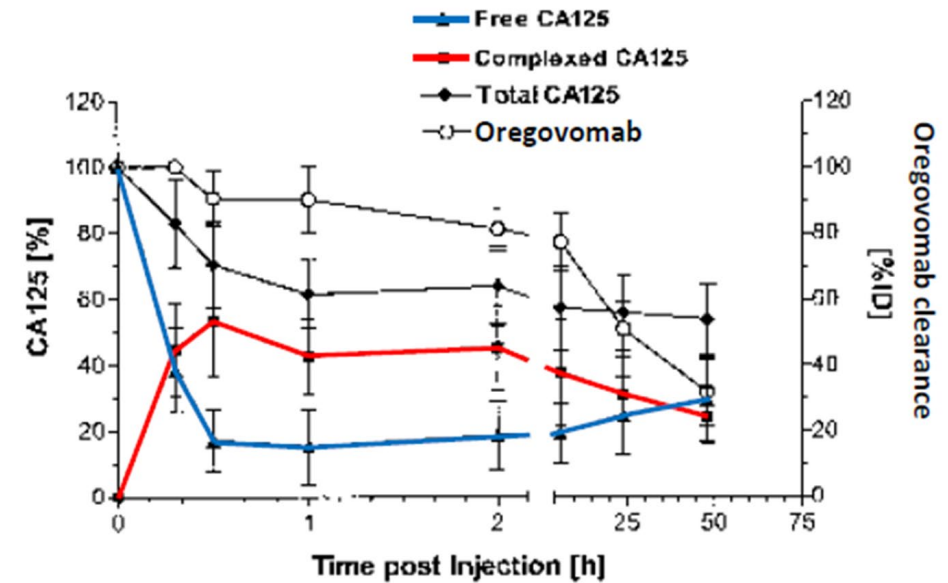
- ✓ Oregovomab binds with circulating CA125 to form antibody antigen complexes within 30 min.
- ✓ Induction of anti-CA125 specific T cells occurs
- ✓ Human anti-CA125 antibodies recognize multiple epitopes of CA125

### Intracellular IFN- $\gamma$ Release from T cells Stimulated with CA125

Two Stimulation Rounds - Increase in CD8+ Cytotoxic T-cells



### Rapid binding of Oregovomab to CA125 in humans

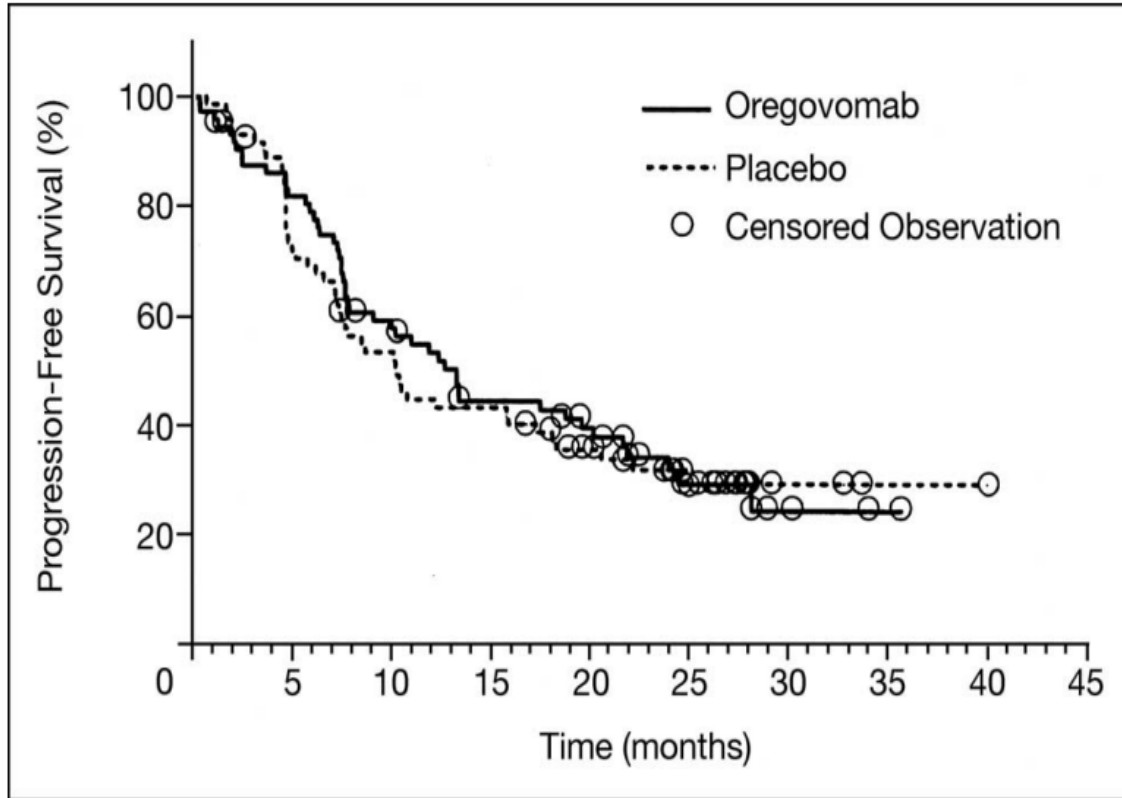


## Randomized, Placebo-Controlled Study of Oregovomab for Consolidation of Clinical Remission in Patients With Advanced Ovarian Cancer

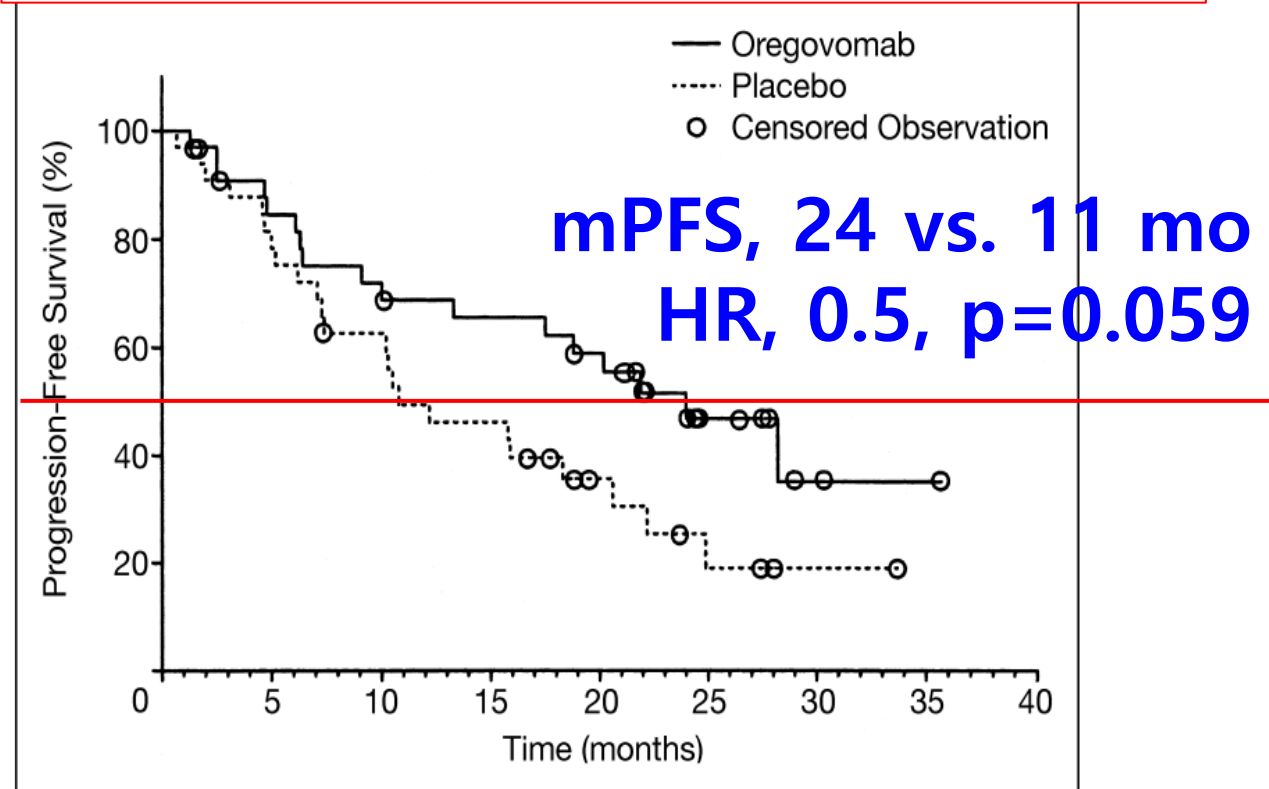
*Jonathan S. Berek, Peyton T. Taylor, Alan Gordon, Mary J. Cunningham, Neil Finkler, James Orr Jr, Saul Rivkin, Birgit C. Schultes, Theresa L. Whiteside, and Christopher F. Nicodemus*

- Inclusion Criteria
  - OC, stage III or IV
  - CR after primary Tx (PCS or NAC → ICS) with normal serum CA125 ( $\leq 35$  U/mL)
  - <10 weeks of completing primary chemotherapy

**Low Risk Sub-population  
SFLT (Successful Front Line Tx):  
RT < 2cm, CA125 ≤ 65 U/mL before 3<sup>rd</sup>  
cycle of chemoTx**



**Fig 1.** Kaplan-Meier curve of time-to-disease relapse from the time of randomization for the modified intent-to-treat population. Median progression-free survival: oregovomab (n = 73; 48 events), 13.3 months; placebo (n = 72; 48 events), 10.3 months. *P* = .71 (log-rank test).



**Fig 6.** Kaplan-Meier of progression-free survival from randomization (successful front-line therapy population [SFLT]). SFLT defined by ≤ 2 cm residual and CA-125 ≤ 65 U/mL by third cycle, CA-125 between 5 and 35 U/mL, and no evidence of disease at first dose. Oregovomab (n = 34; 17 events), 24.0 months; placebo (n = 35; 23 events), 10.8 months.

## Randomized, Placebo-Controlled Study of Oregovomab for Consolidation of Clinical Remission in Patients With Advanced Ovarian Cancer

*Jonathan S. Berek, Peyton T. Taylor, Alan Gordon, Mary J. Cunningham, Neil Finkler, James Orr Jr, Saul Rivkin, Birgit C. Schultes, Theresa L. Whiteside, and Christopher F. Nicodemus*

### **Conclusion**

Consolidation therapy with oregovomab did not significantly improve TTR overall. A set of confirmatory phase III studies has been initiated to determine whether the SFLT population derives benefit from oregovomab treatment.

*J Clin Oncol 22:3507-3516. © 2004 by American Society of Clinical Oncology*



ELSEVIER

Contents lists available at ScienceDirect

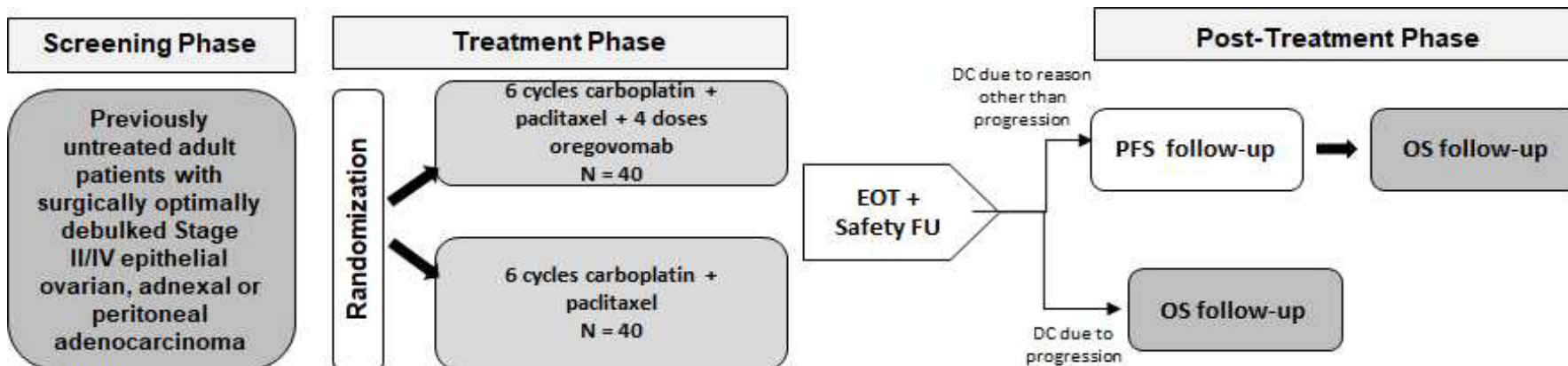
Gynecologic Oncology

journal homepage: [www.elsevier.com/locate/ygyno](http://www.elsevier.com/locate/ygyno)

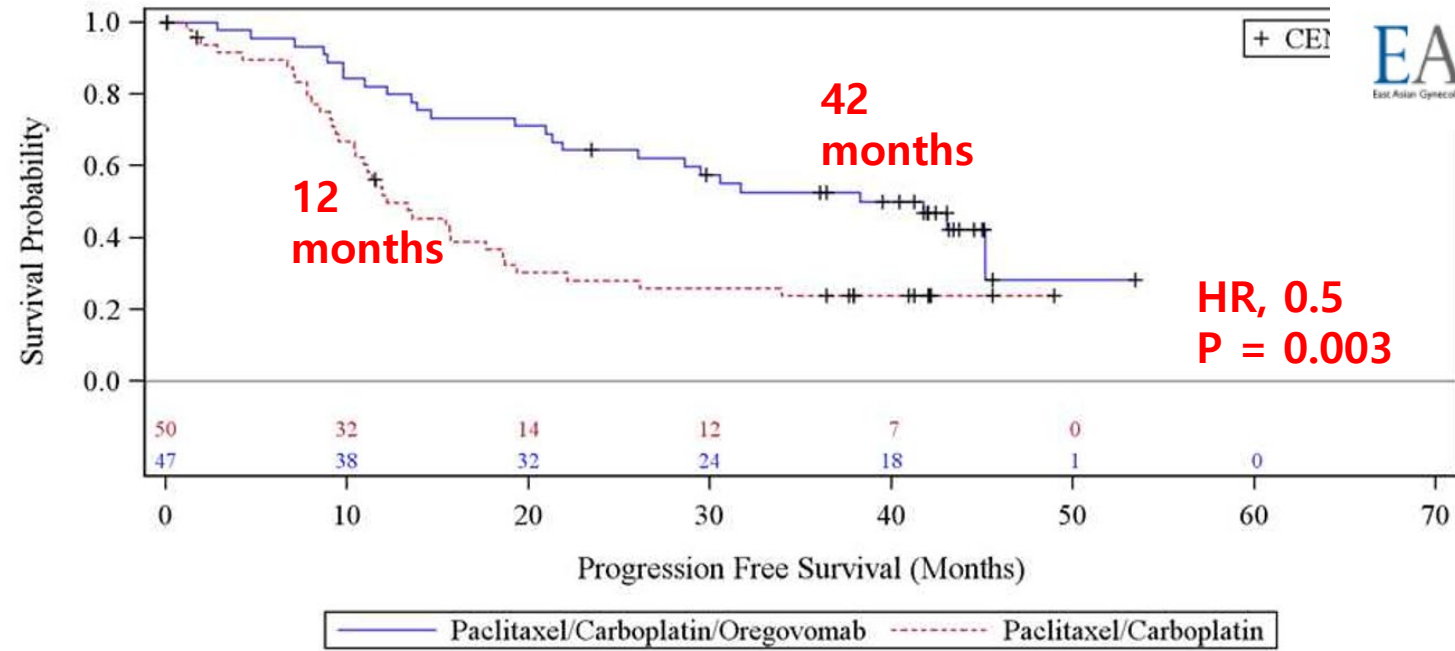
## Front-line chemo-immunotherapy with carboplatin-paclitaxel using oregovomab indirect immunization in advanced ovarian cancer: A randomized phase II study☆



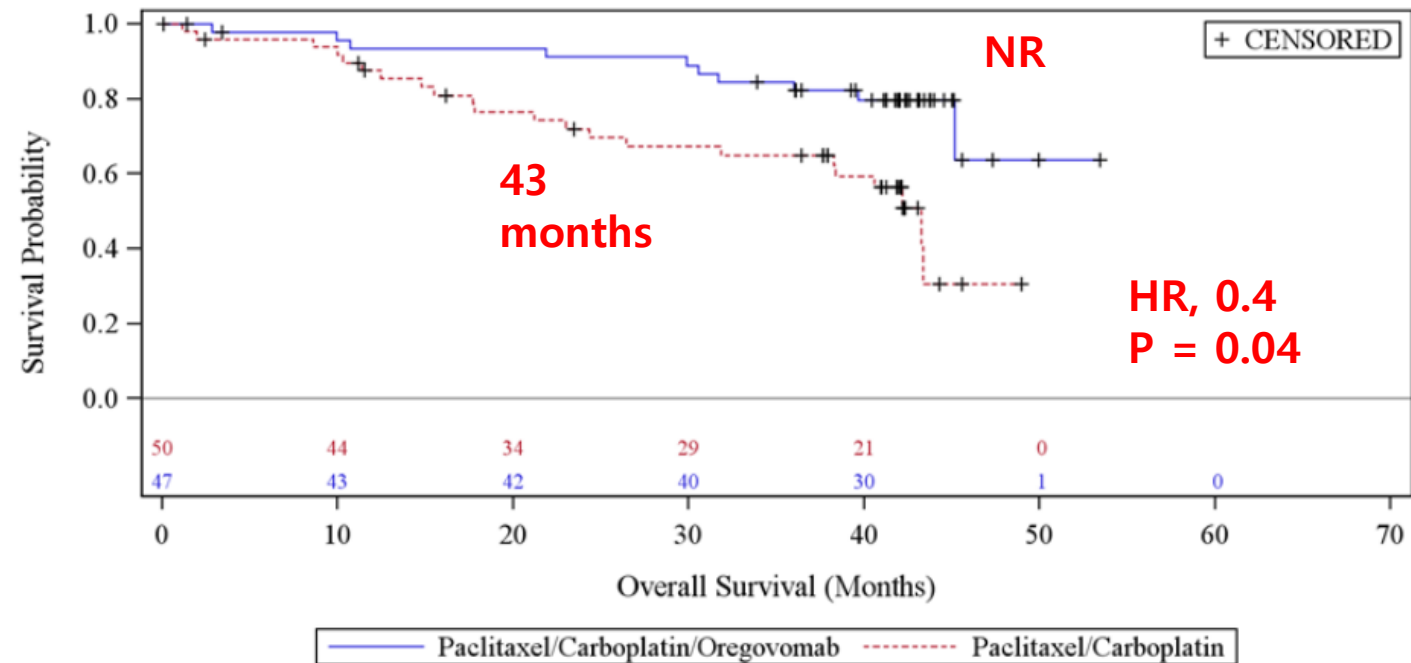
- N=97
- RT
  - Microscopic, 45%
  - <1cm, 55%
- Pre-surgery CA125, 475 (29-34,144) U/mL



PFS



OS





## Phase 2 Safety Evaluation

### Summary of Treatment-Emergent Adverse Events

	Arm 1:Paclitaxel/Carboplatin/Oregovomab (N=46) n (%)	Arm 2:Paclitaxel/Carboplatin (N=48) n (%)	Overall (N=94) n (%)
<b>Patients with:</b>			
At least 1 TEAE	38 (82.6)	41 (85.4)	79 (84.0)
At least 1 related TEAE	8 (17.4)	10 (20.8)	18 (19.1)
At least 1 TEAE Grade≥3	24 (52.2)	29 (60.4)	53 (56.4)
At least 1 related TEAE Grade≥3	2 (4.3)	5 (10.4)	7 (7.4)
At least 1 serious TAAE	9 (19.6)	7 (14.6)	16 (17.0)
At least 1 related serious TEAE	0	0	0
At least 1 TEAE leading to study drug discontinuation	3 (6.5)	1 (2.1)	4 (4.3)
At least 1 TEAE leading to death	1 (2.2)	1 (2.1)	2 (2.1)

Abbreviations: TEAE = treatment-emergent adverse event

### Treatment-Emergent Severe or Life-Threatening Events Occurring in ≥2 Patients in Either Treatment Arm

MedDRA System Organ Class/ Preferred Term	Arm 1:Paclitaxel/Carboplatin/Oregovomab (N=46) n (%)	Arm 2: Paclitaxel/Carboplatin (N=48) n (%)	Overall (N=94)
<b>Blood and lymphatic system disorders</b>	19 (41.30)	21 (43.75)	40 (42.55)
Neutropenia	14 (30.43)	20 (41.67)	34 (36.17)
Leukopenia	4 (8.70)	6 (12.50)	10 (10.64)
Anaemia	5 (10.87)	2 (4.17)	7 (7.45)
Thrombocytopenia	2 (4.35)	2 (4.17)	4 (4.26)
<b>Investigations</b>	0	2 (4.17)	2 (2.13)
Granulocyte count decreased	0	2 (4.17)	2 (2.13)

Abbreviations: MedDRA = Medical Dictionary for Regulatory Activities, version 19.0.

## Phase 2 Safety Evaluation

### Treatment-Emergent Adverse Events Occurring in $\geq 5\%$ of Patients Overall (Safety Population)

MedDRA System Organ Class / Preferred Term	Arm 1: Paclitaxel/Carboplatin Oregovomab (N=46) n (%)	Arm 2: Paclitaxel/Carboplatin (N=48) n (%)	Overall (N=94) n (%)
<b>Blood and lymphatic system disorders</b>	28 (60.87)	31 (64.58)	59 (62.77)
Neutropenia	21 (45.65)	25 (52.08)	46 (48.94)
Anaemia	18 (39.13)	16 (33.33)	34 (36.17)
Leukopenia	17 (36.96)	17 (35.42)	34 (36.17)
Thrombocytopenia	3 (6.52)	5 (10.42)	8 (8.51)
<b>General disorders and administration site conditions</b>	20 (43.48)	13 (27.08)	33 (35.11)
Asthenia	7 (15.22)	6 (12.50)	13 (13.83)
Fatigue	6 (13.04)	7 (14.58)	13 (13.83)
<b>Gastrointestinal disorders</b>	15 (32.61)	17 (35.42)	32 (34.04)
Nausea	9 (19.57)	7 (14.58)	16 (17.02)
Constipation	8 (17.39)	5 (10.42)	13 (13.83)
Diarrhea	4 (8.70)	4 (8.33)	8 (8.51)
Vomiting	3 (6.52)	3 (6.25)	6 (6.38)
<b>Nervous system disorders</b>	15 (32.61)	16 (33.33)	31 (32.98)
Paraesthesia	8 (17.39)	9 (18.75)	17 (18.09)
Peripheral sensory neuropathy	4 (8.70)	3 (6.25)	7 (7.45)
Neuropathy peripheral	2 (4.35)	3 (6.25)	5 (5.32)
<b>Musculoskeletal and connective tissue disorders</b>	8 (17.39)	9 (18.75)	17 (18.09)
Arthralgia	1 (2.17)	5 (10.42)	6 (6.38)
Myalgia	2 (4.35)	3 (6.25)	5 (5.32)
<b>Skin and subcutaneous tissue disorders</b>	9 (19.57)	6 (12.50)	15 (15.96)
Alopecia	8 (17.39)	6 (12.50)	14 (14.89)

Abbreviations: MedDRA = Medical Dictionary for Regulatory Activities, version 19.0.

**Oregovomab Plus Chemo in Newly Diagnosed Patients With Advanced Epithelial Ovarian Cancer Following Optimal Debulking Surgery (FLORA-5)**

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Read our [disclaimer](#) for details.

ClinicalTrials.gov Identifier: NCT04498117

**Recruitment Status** ⓘ : Active, not recruiting**First Posted** ⓘ : August 4, 2020**Last Update Posted** ⓘ : July 24, 2023[View this study on the modernized ClinicalTrials.gov](#)**Study Type** ⓘ : Interventional (Clinical Trial)**Actual Enrollment** ⓘ : 615 participants

Allocation: Randomized

Intervention Model: Parallel Assignment

Masking: Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)

Primary Purpose: Treatment

**Official Title:** A Multicenter Phase 3, Double-Blind, Placebo-Controlled Study Comparing Chemo-Immunotherapy (Paclitaxel-Carboplatin- Oregovomab) vs Chemotherapy (Paclitaxel-Carboplatin- Placebo) in Patients With Advanced Epithelial Ovarian, Fallopian Tube or Peritoneal Carcinoma**Actual Study Start Date** ⓘ : August 25, 2020**Estimated Primary Completion Date** ⓘ : September 26, 2025**Estimated Study Completion Date** ⓘ : August 26, 2027

# Criteria

- INCLUSION

- Microscopic RT or RT < 1cm
- Pre-treatment serum CA-125 levels  $\geq$  50 U/mL

- EXCLUSION

- gBRCAm
- HRD with PARPi use

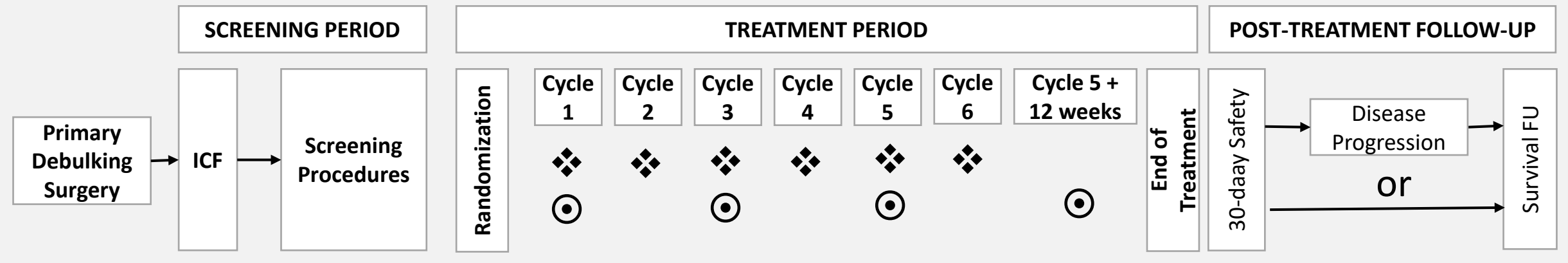
**Low Risk Sub-population**  
**SFLT (Successful Front Line Tx):**  
RT < 2cm, CA125  $\leq$  65U/mL before 3<sup>rd</sup>  
cycle of chemoTx

# FLORA-5 Phase 3 protocol

Two cohorts to be evaluated

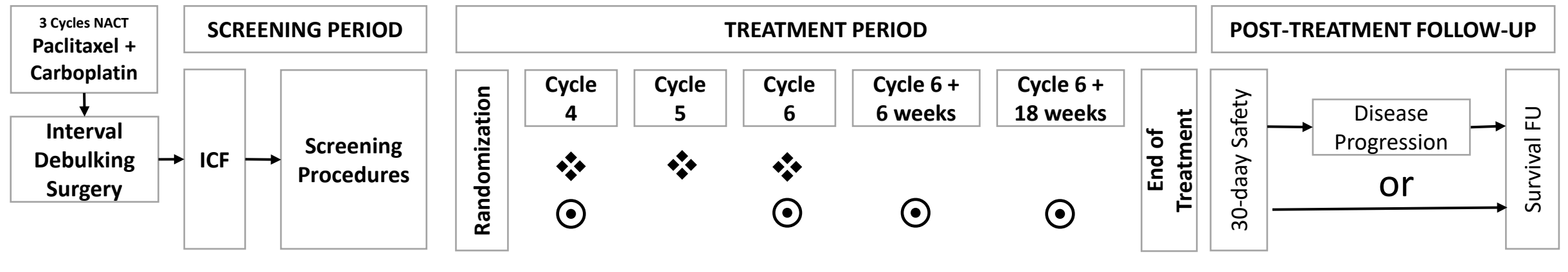
## COHORT 1 - PRIMARY SURGERY, n=316

❖ = paclitaxel + carboplatin    ⊙ = oregovomab or placebo



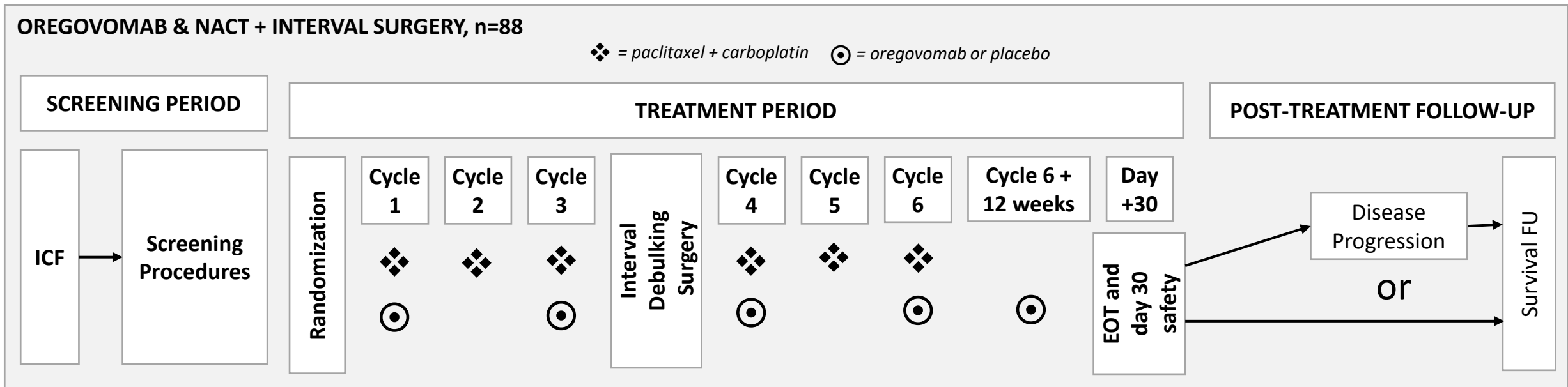
## COHORT 2 - NACT + INTERVAL SURGERY, n=195

❖ = paclitaxel + carboplatin    ⊙ = oregovomab or placebo



## FLORA-6 Phase 2 protocol

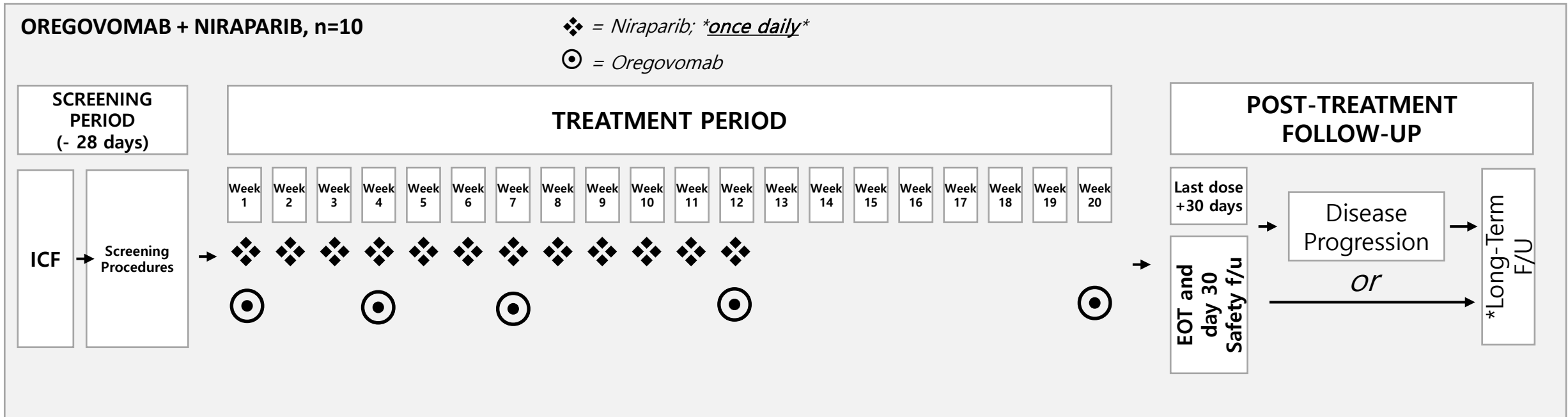
- ✓ Newly diagnosed ovarian cancer
- ✓ To be conducted across 16 study sites in India
- ✓ 1:1 Randomization to active vs placebo
- ✓ Assume ~96 patients to be screened for 88 randomized
- ✓ 1° EP PFS Rate at 1 year: PFS is defined from date of Randomization to date of 1<sup>st</sup> documented PD (Investigator assessed) per RECIST v1.1 or death
- ✓ PFS and OS set as 2° EP





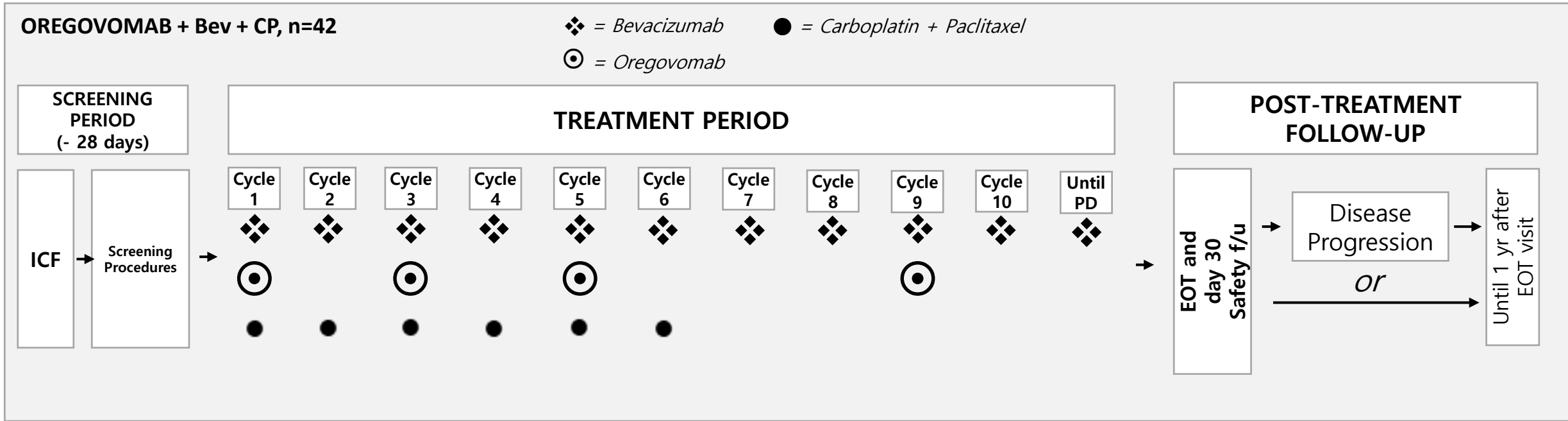
## FLORA-4 Phase 2 protocol

- ✓ Underway in 3 US sites
- ✓ Single arm, open label study
- ✓ Platinum sensitive recurrent ovarian cancer patients with 3 prior lines of therapy including at least one platinum-based therapy
- ✓ Enrollment completed with 10 patients as of Aug 2023
- ✓ 1° EP DCR at 12 weeks and 24 weeks: DCR is defined as the portion of subjects with CR, PR, and SD, determined as defined by RECIST 1.1



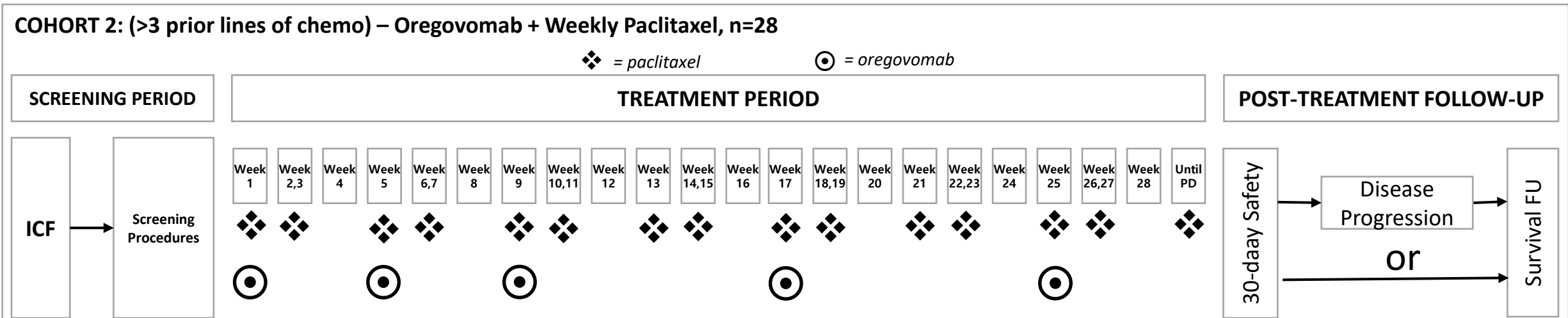
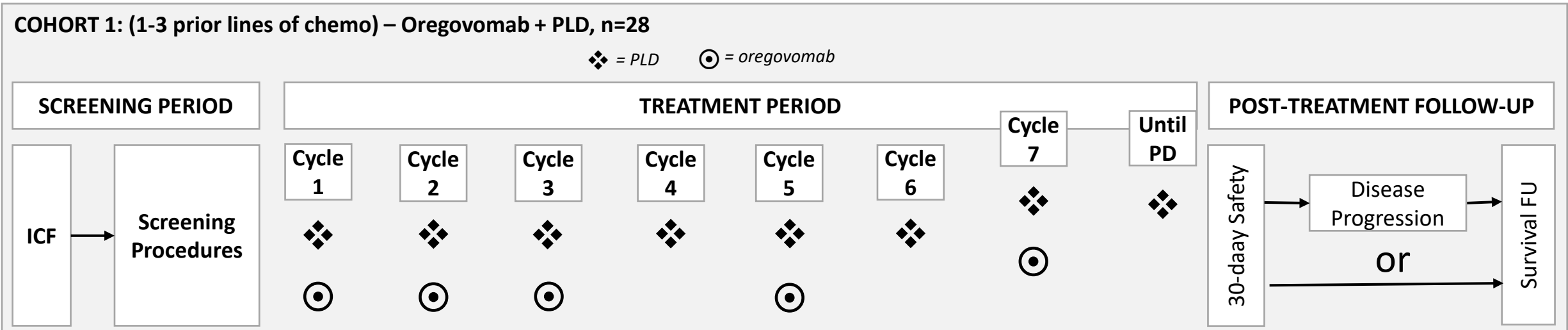
# IIT KCSG GY20-10 Phase 2 protocol

- ✓ Oregovomab + bevacizumab + SOC chemo combination
- ✓ To be conducted across 6 study sites in Korea
- ✓ Open-label, single arm, phase 1b/2
- ✓ Platinum sensitive recurrent ovarian cancer patients with BRCA-wild type, previously treated with 1 prior line of therapy
- ✓ Assume minimum 42, maximum 51 patients to be enrolled in both phase 1b/2
- ✓ 1° EP Safety and Tolerability & ORR
- ✓ PFS and OS set as 2° EP

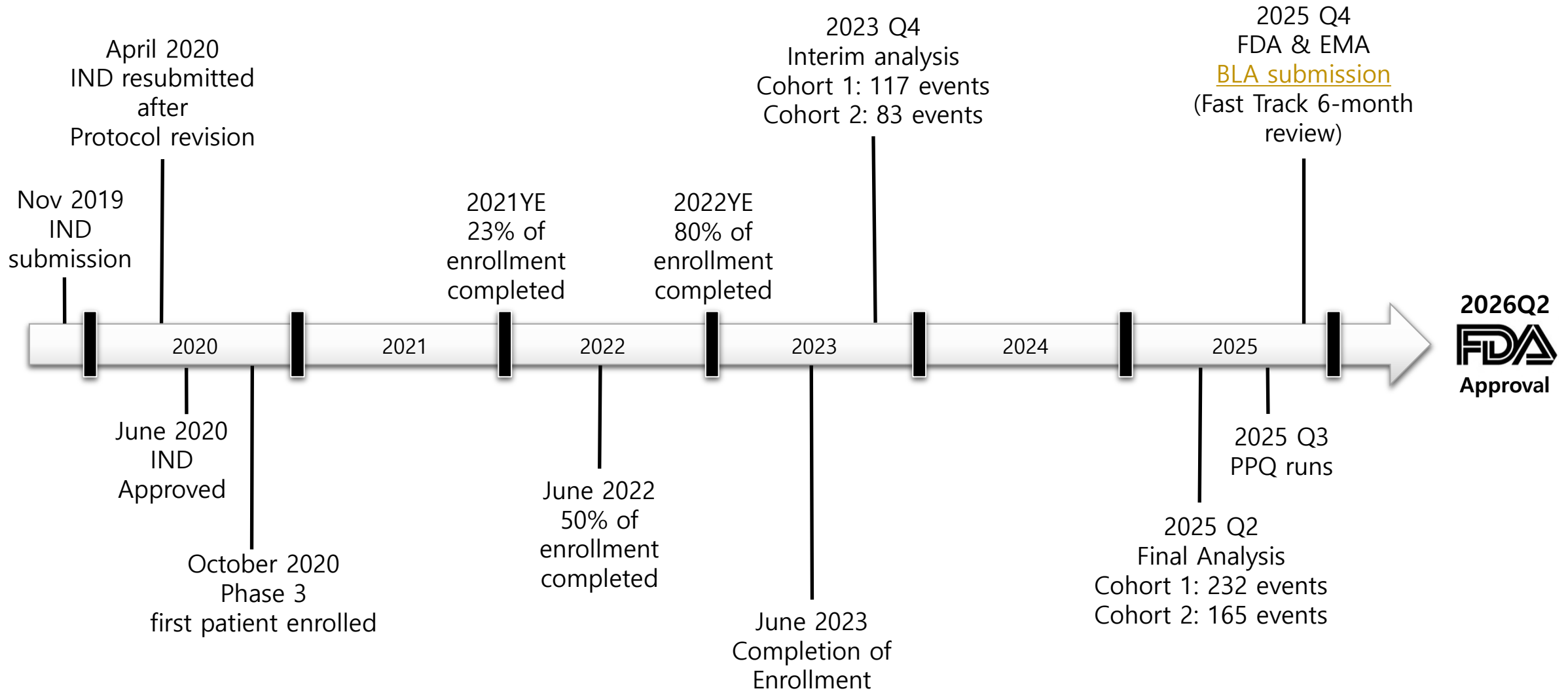


# IIT KGOG3065, APGOT OV6 Phase 2 protocol

- ✓ Oregovomab + non-platinum chemotherapy combination for platinum resistant and PARPi resistant patients
- ✓ 1° EP ORR: Objective Response Rate based on radiographically confirmed response according to CR+PR rate

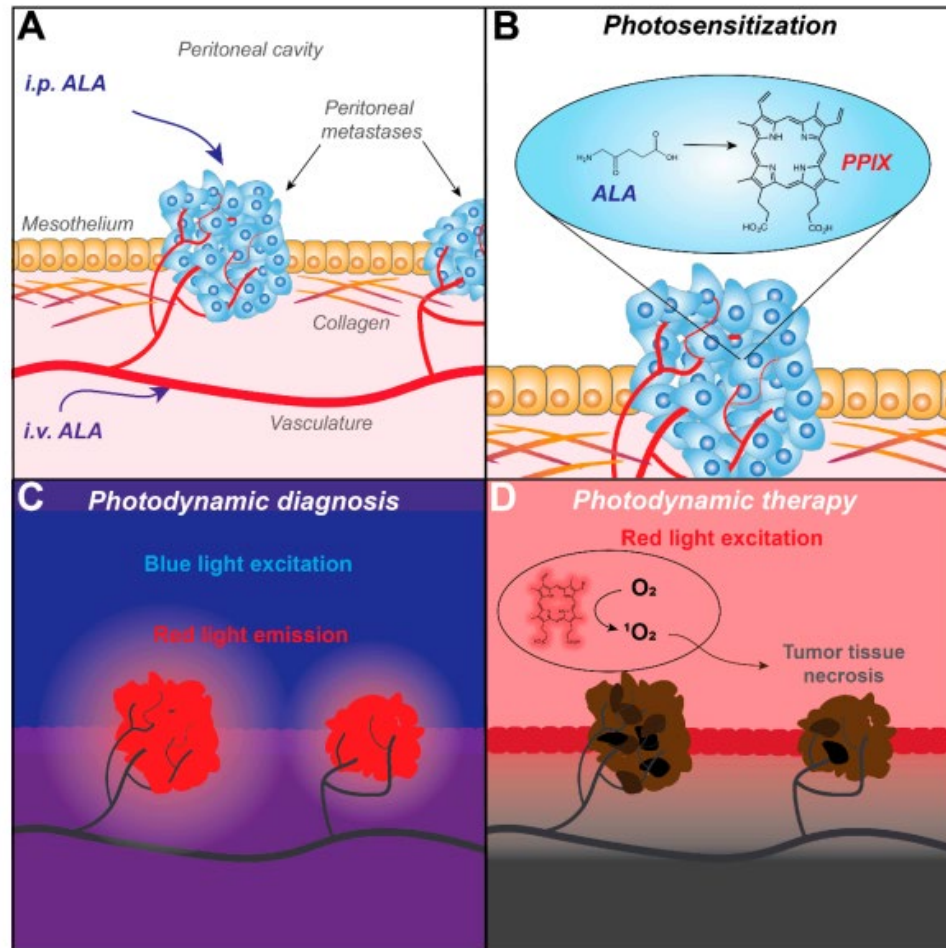


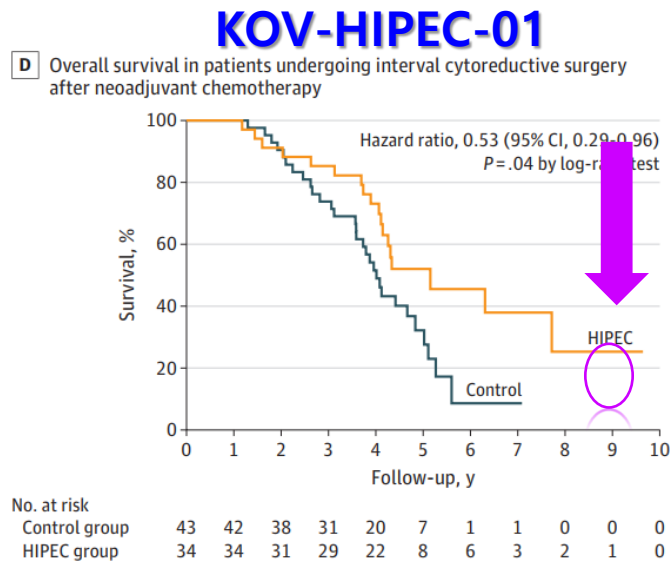
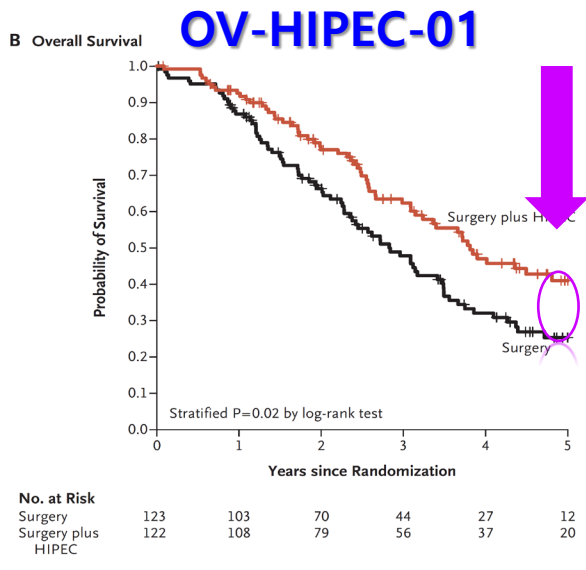
# Oregovomab Development timeline



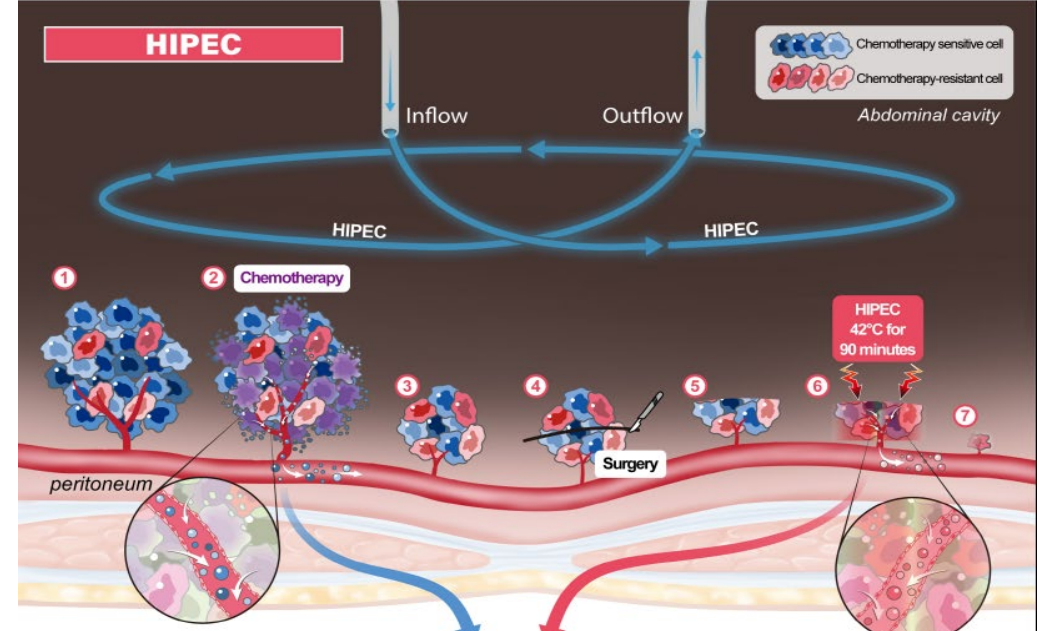
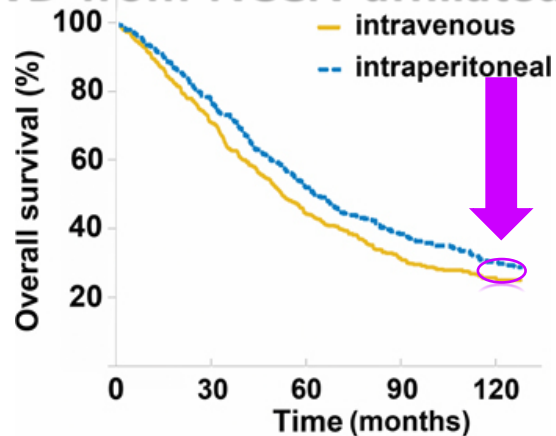
Review

# Photodynamic Diagnosis and Therapy for Peritoneal Carcinomatosis: Emerging Perspectives

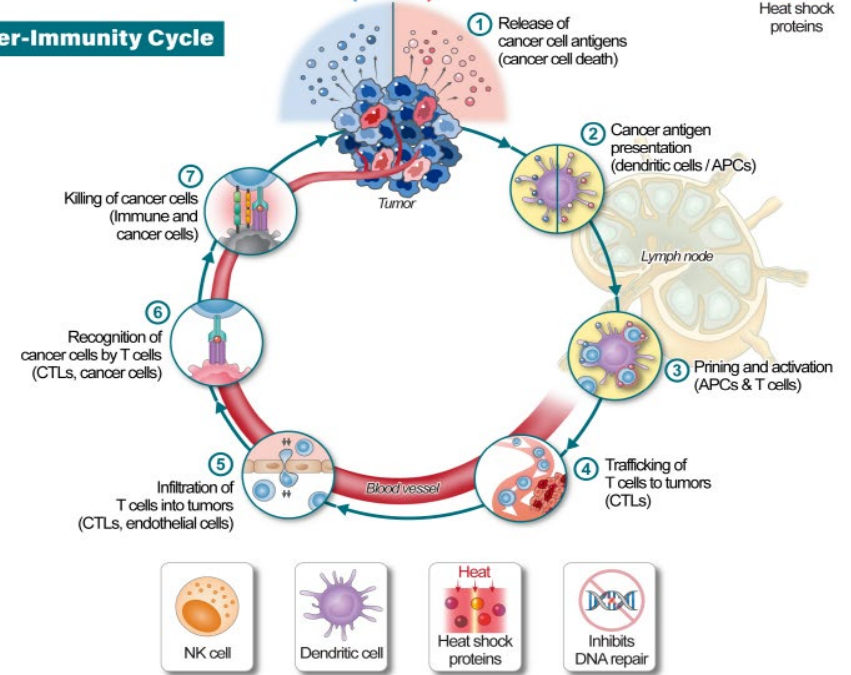




### RWD from NCCN-affiliated hospital



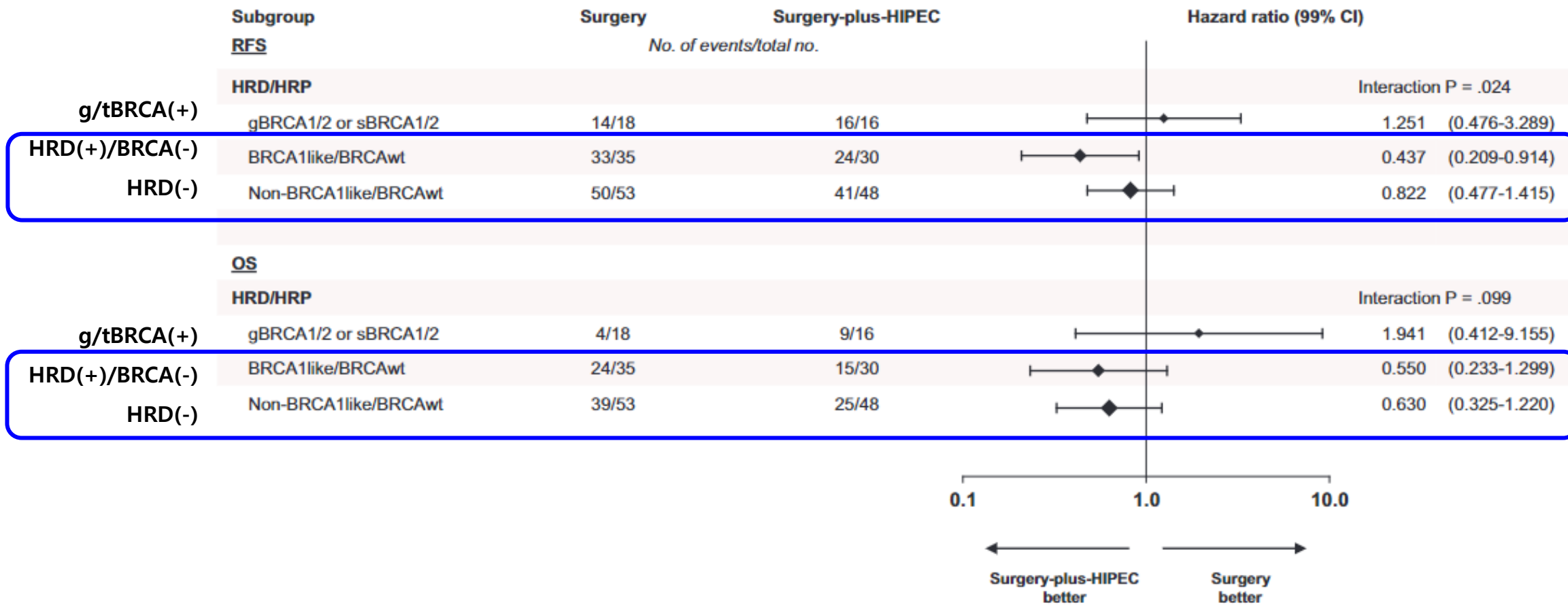
### Cancer-Immunity Cycle





# Effect of HIPEC according to HRD/*BRCA*wt genomic profile in stage III ovarian cancer: Results from the phase III OVHIPEC trial

Simone N. Koole<sup>1,2</sup> | Philip C. Schouten<sup>3</sup> | Jan Hauke<sup>4</sup> | Roel J. C. Kluin<sup>5</sup> |





# Conclusion

- Huge therapeutic unmet needs for HRD(-) OC.
- Biomarker for HRD(-).
- Promising, Ongoing Studies, using mAb of CA125
  - SFLT
- Effective discharge of Cancer Ag.

Thank You !