



# Actualités médicales et **cancers** **de l'ovaire**



Pr Florence JOLY, CFB, Caen



# La rechute

- **Des nouveautés**



- **Changement de paradigme**
- **L'intégration de la QDV**
- **Les inhibiteurs de Parp**



# Intervalle libre sans platine débattu

1<sup>ère</sup> ligne Paclitaxel  
Carboplatine

55%

20%

25%

Evolution du concept

Sensibles  
(> 12 mois)

Partiellement  
sensibles  
(6-12 mois)

Résistants/  
(> 1- ≤6 mois)  
Réfractaires  
(progression  
sous chimio ou  
≤ 1mois)

# The challenge of defining platinum-resistance

## Based exclusively on TFIp (4th OCCC)

### Platinum-

- Refractory: < 4 weeks
- Resistant: < 6 months
- Partially sensitive: 6-12 months
- Fully sensitive: > 12 months

## Based on the possibility of platinum re-challenge (5th OCCC)

- Platinum is an option
- Platinum is not an option
  - Short platinum free interval (at least 6 months ) based on RECIST or symptoms
  - Progression during platinum
  - Allergy to platinum
- Notion d'une variable continue (reci tardive > 1 an)

## Classification of platinum-resistance AFTER platinum therapy

**PLATINUM-RESPONDER:**

Patient achieved OR as best response

**PLATINUM NON-RESPONDER:**

Patient not achieved OR as best response or  
relapse < 3 months

**Recurrent ovarian cancer**

- Prior exposure
- Prior response
- TFI platinum
- Therapy sequale/toxicity

**Pat willing and fit enough to get SoA**

**Surgery an option?**  
(AGO Score etc.)

If not: best supportive care / modified therapy

**Platinum might not be the best option**

- TFI plat  $\leq$  3 months
- No response to prior platinum
- Platinum intolerability

**Platinum might be the best option / re-challenge semms to be justified**

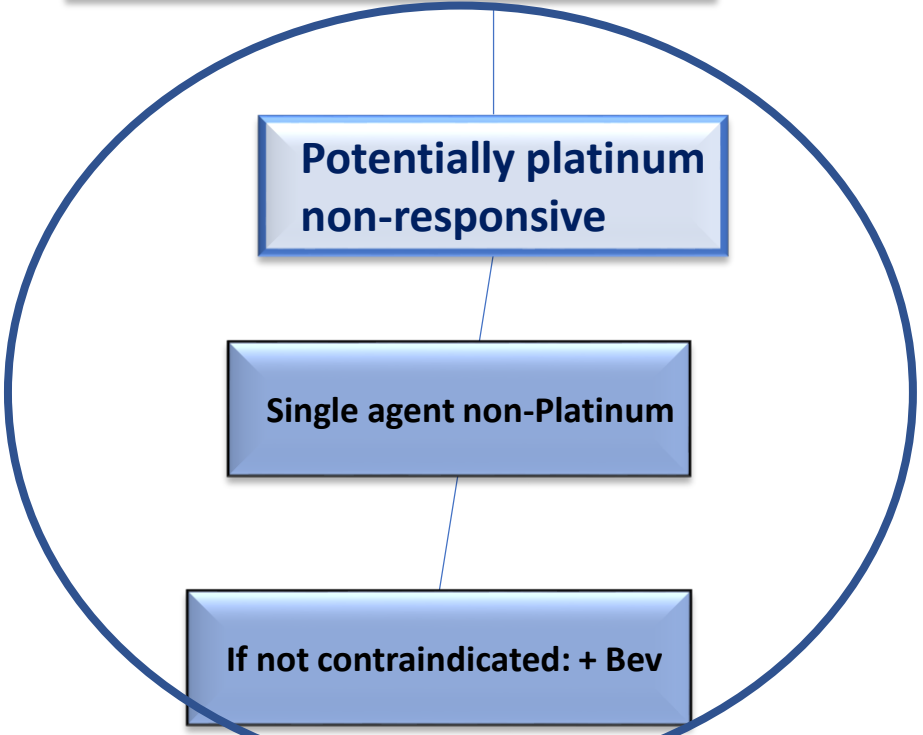
- TFI plat  $>$  3 months
- response to prior platinum

**Potentially platinum sensitive**

**Potentially platinum non-responsive**

**Single agent non-Platinum**

**If not contraindicated: + Bev**





# Essais randomisés : rechute « précoce » : « platine non répondeuse »

- **Mono-chimiothérapie = drogues d'efficacité équivalente avec des profils de toxicités différents**
  - Topotecan vs. Treosulfan
  - Topotecan vs. Paclitaxel
  - Topotecan vs. Doxorubicine liposomale pégylée (DLP)
  - Gemcitabine vs. DLP
  - Paclitaxel vs *DLP*
- **Polychimiothérapie = efficacité identique à la monochimiothérapie mais plus toxiques**
- **Intégration précoce de la QDV dans le choix thérapeutique**



# PREDICTION D'ARRÊT PRÉCOCE DE LA CT ET DE SURVIE COURTE CANCER DE L'OVAIRE RESISTANTS /REFRACTAIRES The GCIG Symptom Benefit Study

545 PRROC

19% stopped within 8 weeks

- disease progression (46%)
- patient preference (12%)
- adverse events (7%)
- clinician preference (6%)
- other (11%)
- Death (18%)

Median PFS 1.2 months  
Median OS 2.9 months

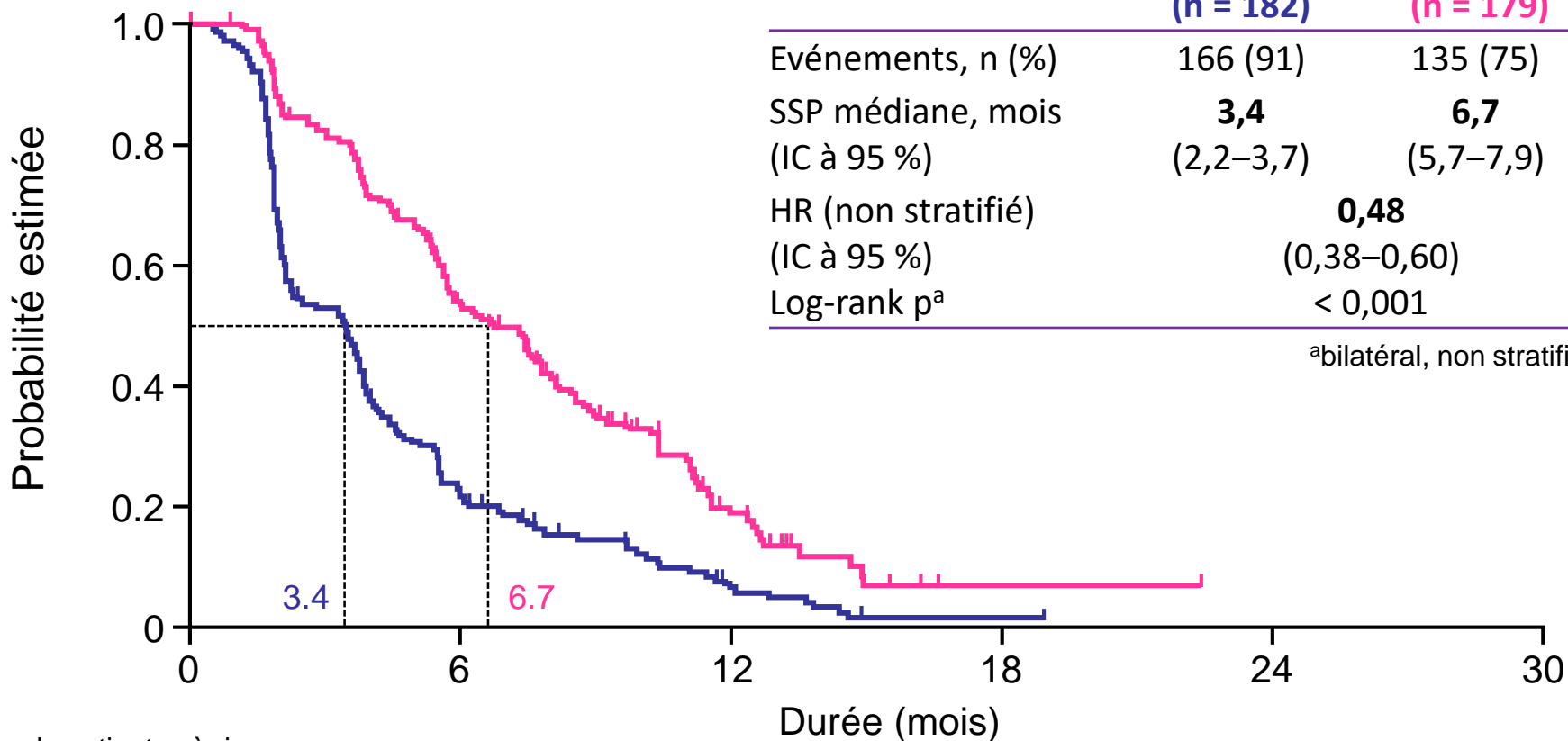
**Role Function and Physical  
Function were independent  
predictors in multivariate  
analysis**





# Essai AURELIA: Ajour du beva à une mono-chimio en cas de rechute précoce (< 6 mois)

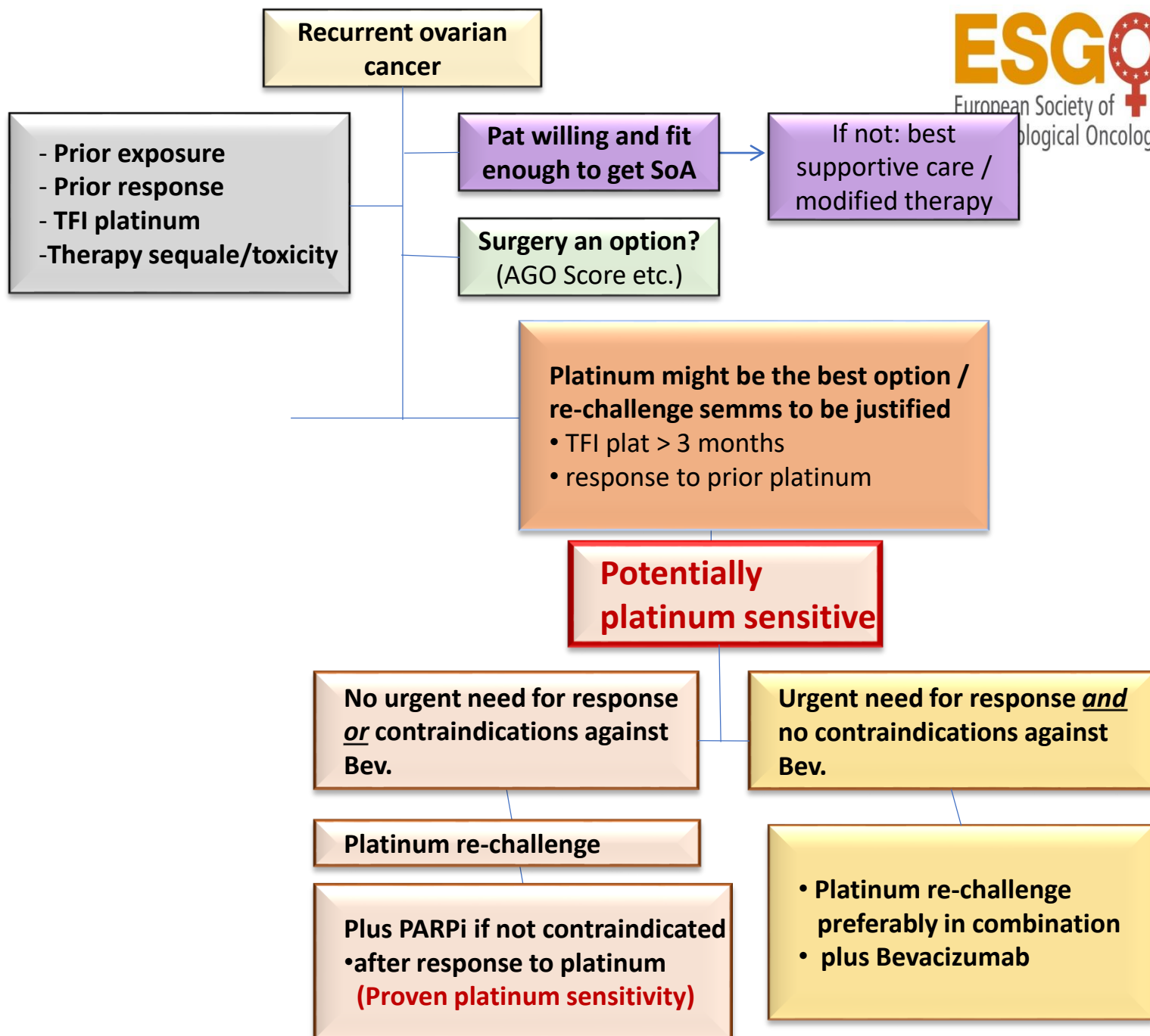
## Survie sans progression



Nbr de patientes à risque :

CT	182	93	37	20	8	1	1	0	0
BEV + CT	179	140	88	49	18	4	1	1	0

Durée médiane du suivi : 13.9 mois (bras CT) vs 13.0 mois (BEV + bras CT)



**Recurrent ovarian cancer**

- Prior exposure  
- Prior response  
- TFI platinum  
- Therapy sequale/toxicity

**Pat willing and fit enough to get SoA**

If not: best supportive care / modified therapy

**Surgery an option?**  
(AGO Score etc.)

**Platinum might be the best option / re-challenge semms to be justified**  
• TFI plat > 3 months  
• response to prior platinum

**Potentially platinum sensitive**

**No urgent need for response *or* contraindications against Bev.**

**Urgent need for response *and* no contraindications against Bev.**

**Platinum re-challenge**

• Platinum re-challenge preferably in combination  
• plus Bevacizumab

**Plus PARPi if not contraindicated**  
• after response to platinum  
**(Proven platinum sensitivity)**

# Essais randomisés: rechute « platine sensible »

Etudes Randomisées	ICON4 <sup>(1)</sup> Pacli-Platine Vs Platine	AGO OVAR2.5 <sup>(2)</sup> Gem Carbo Vs carbo	GEICO <sup>(3)</sup> Pacli-Carbo Vs Carbo	OVA 301 <sup>(4)</sup> Trabectedine -DLP vs DLP	CALYPSO <sup>(5)</sup> DLP-carbo vs pacli-carbo	OCEANS <sup>(6)</sup> Gem-carbo vs Gem- carbo-beva	GOG213 Pacli-carbo vs pacli- carbo-beva
Nbres ptes	802	356	81	12	974	484	
ILSP > 12	77%	60	57	5	65	58	
ILSP 6-12	33	40			35	42	
ILSP < 6	0	0		35	0	0	
TR (%)	66 vs 54 NS		75 vs 50 S	30 vs 19 S	ND	57.4vs 78.5 S	
Médiane SSP (mois)	12 vs 12 S	8.6 vs 5.8 S	12.2 vs 8.4 S	9.7 vs 7.5 S	11.3 vs 9.4 S Non infériorité	8.4 vs 12.4 S	
Médiane SG (mois)	29 vs 24 S	18 vs 17.3 NS	ND	20.5 vs 19.4 (Platine S et R) NS	31,5 mois S	42 vs 37.3 NS	42.2 vs 37.3 NS
Médiane SSP 6-12 (mois)	ND	7.9 vs 5.2 S		11.8 vs 8.8 S	9.4 vs 8.8 S	11.9 vs 8 S	10.4 vs 13.8 S
Médiane SG (mois) 6-12 mois				22.4 vs 16.4 (S)			
> 12 mois				36.5 vs 31.7 (NS)			

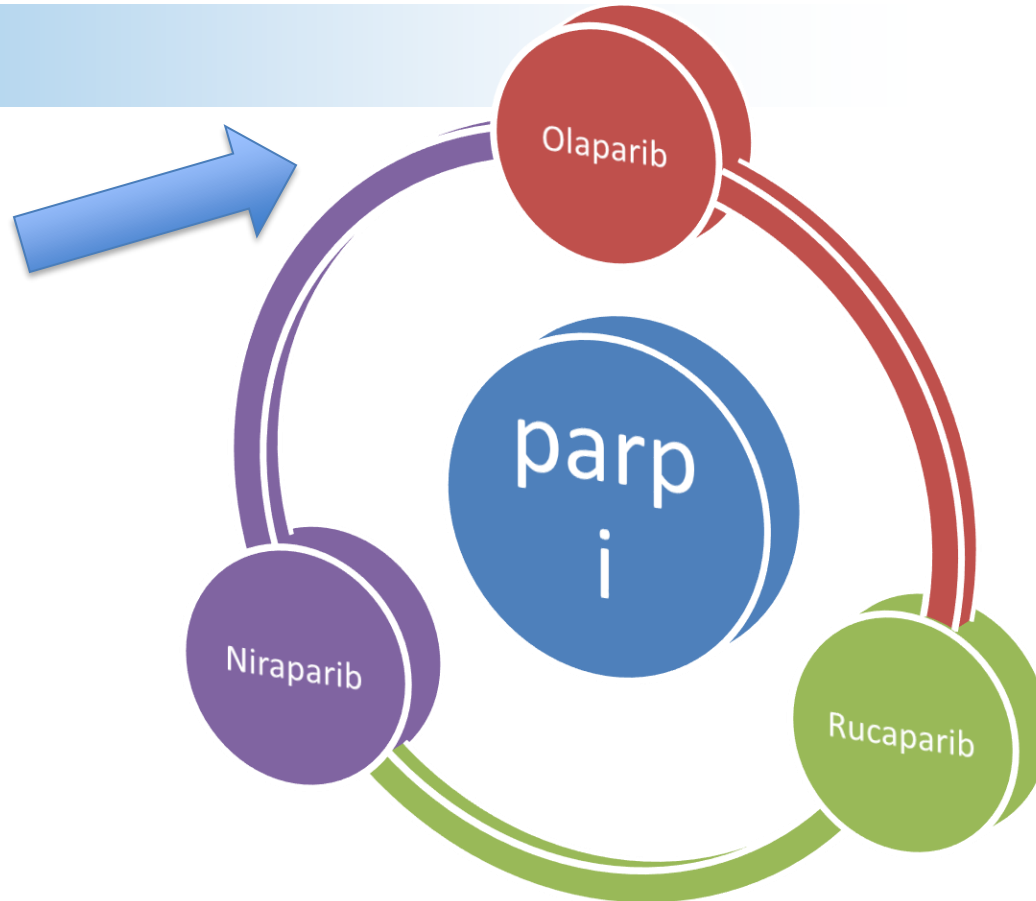
S : significatif, NA : Non atteinte, NS : Non significatif, ND : Non déterminé

Combo avec platine

Combo carbo-gemsar (ou Paclitaxel) -beva



# La confirmation des inhibiteurs de Parp

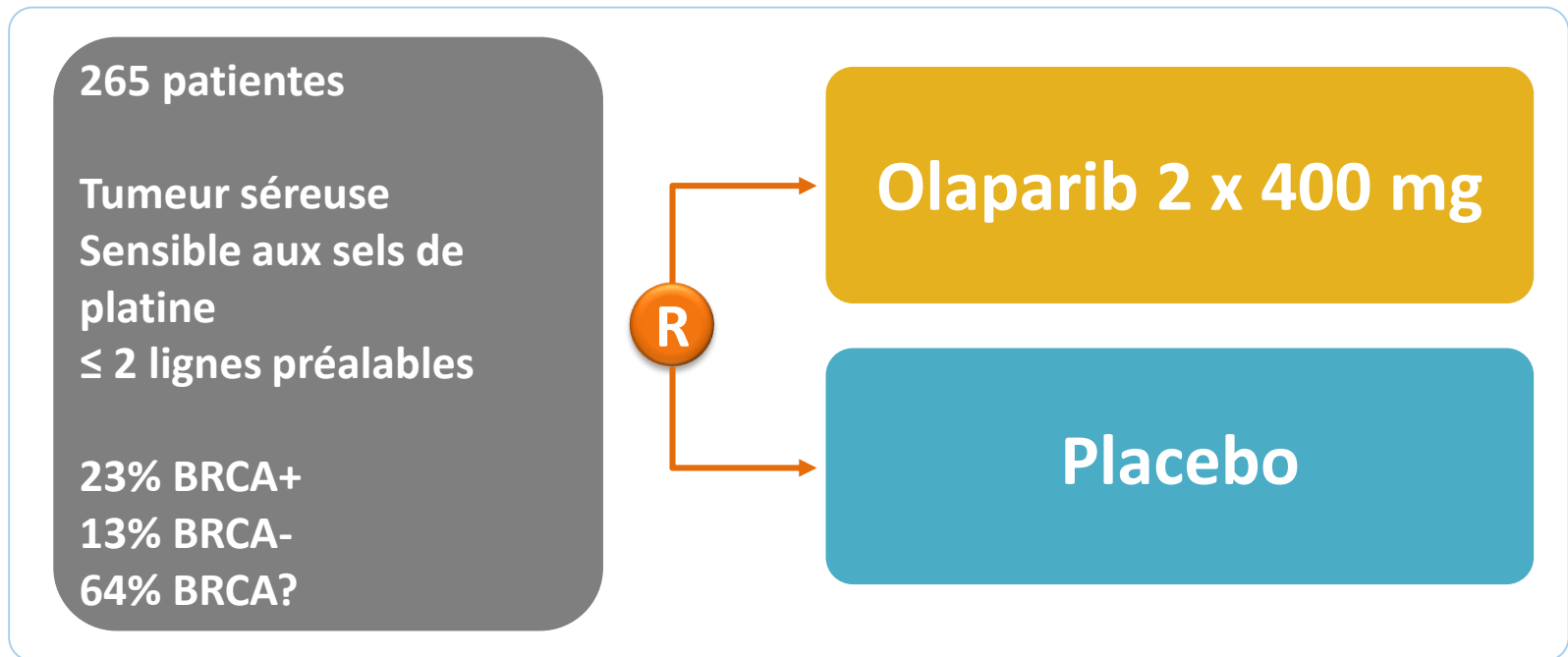




# Olaparib - maintenance

## BRCA muté et BRCAness Olaparib vs placebo

- Etude 19 - Phase II

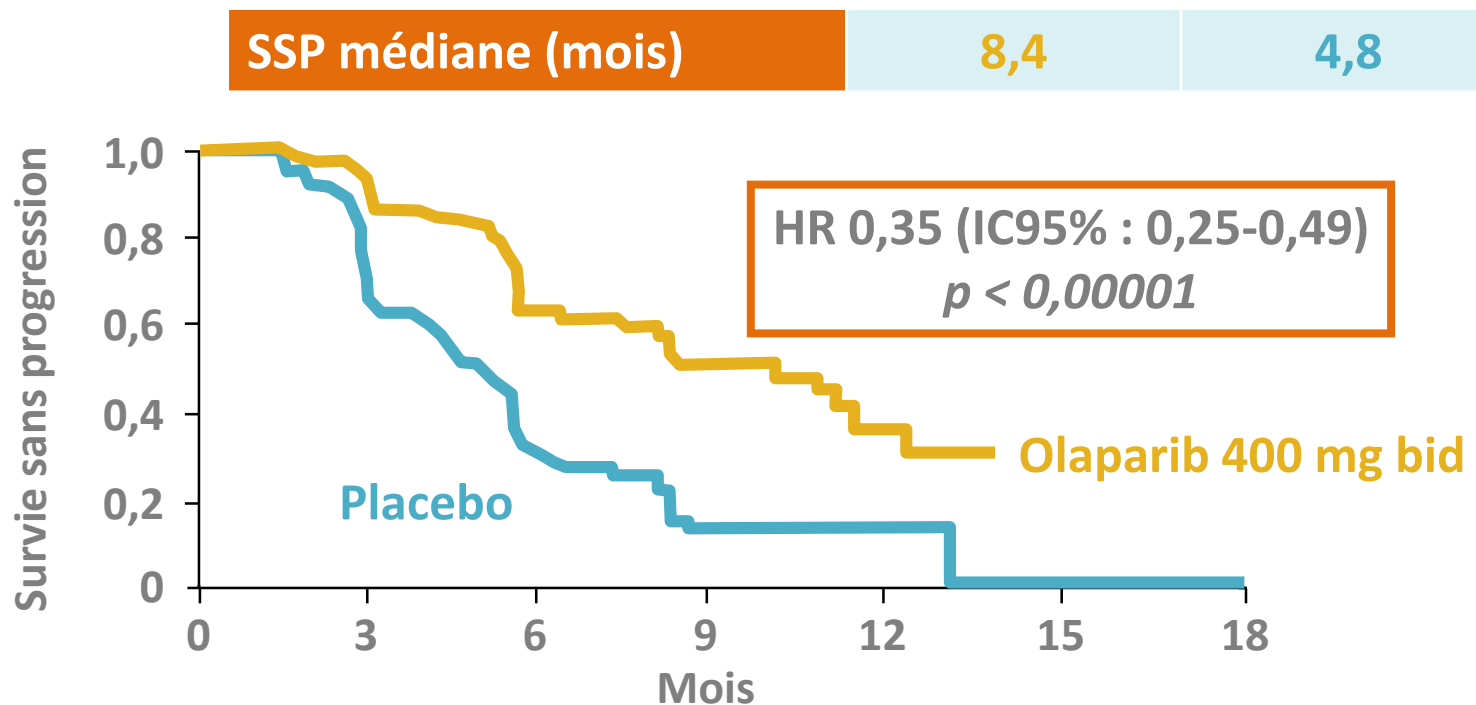


- Objectif principal = SSP
- Objectifs secondaires = SG, TR, tolérance



# PARPi : olaparib maintenance, monothérapie

- **Survie sans progression**

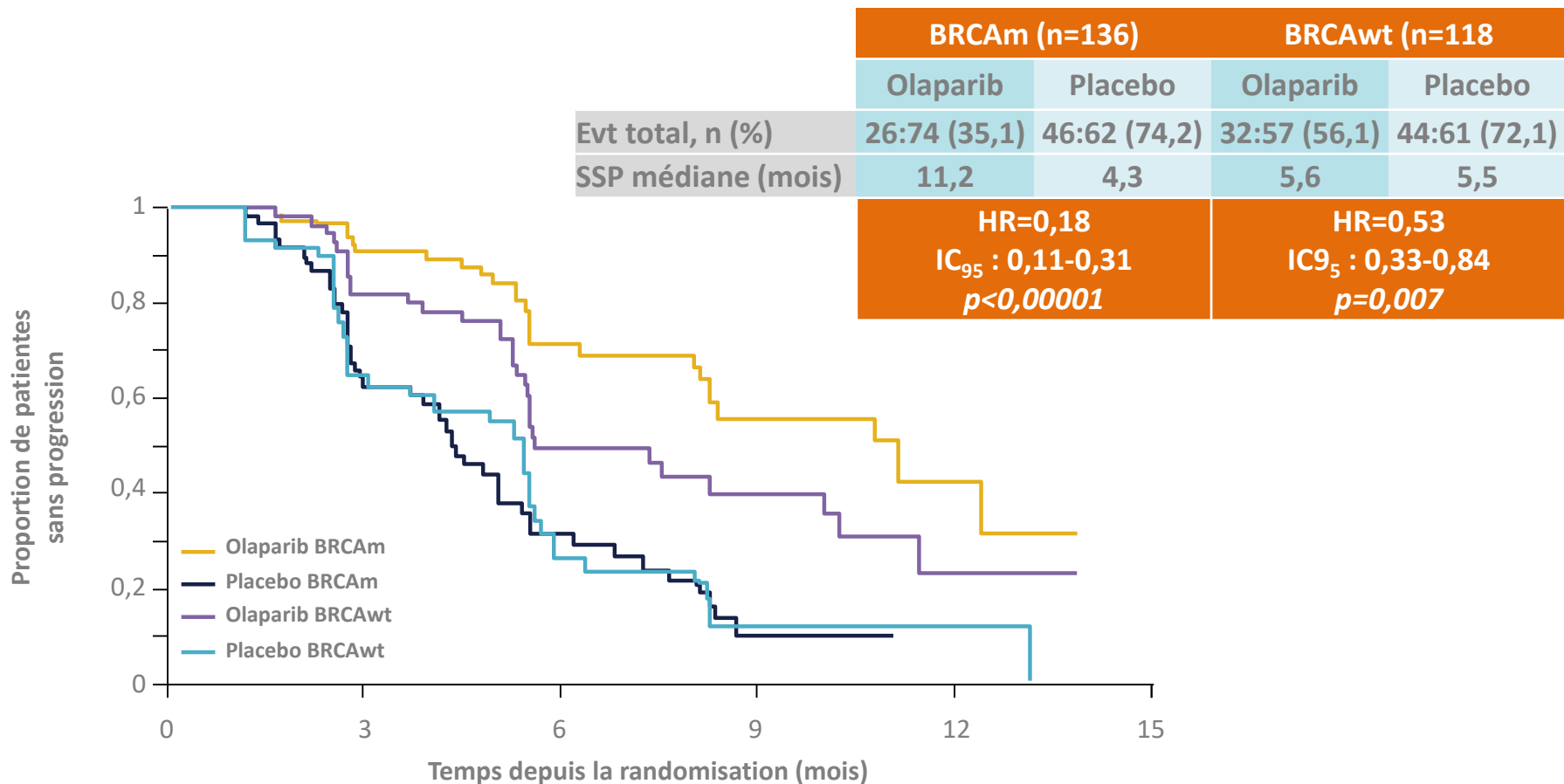


Olaparib	136	104	51	23	6	0	0
Placebo	129	72	23	7	1	0	0



# Olaparib : Etude 19

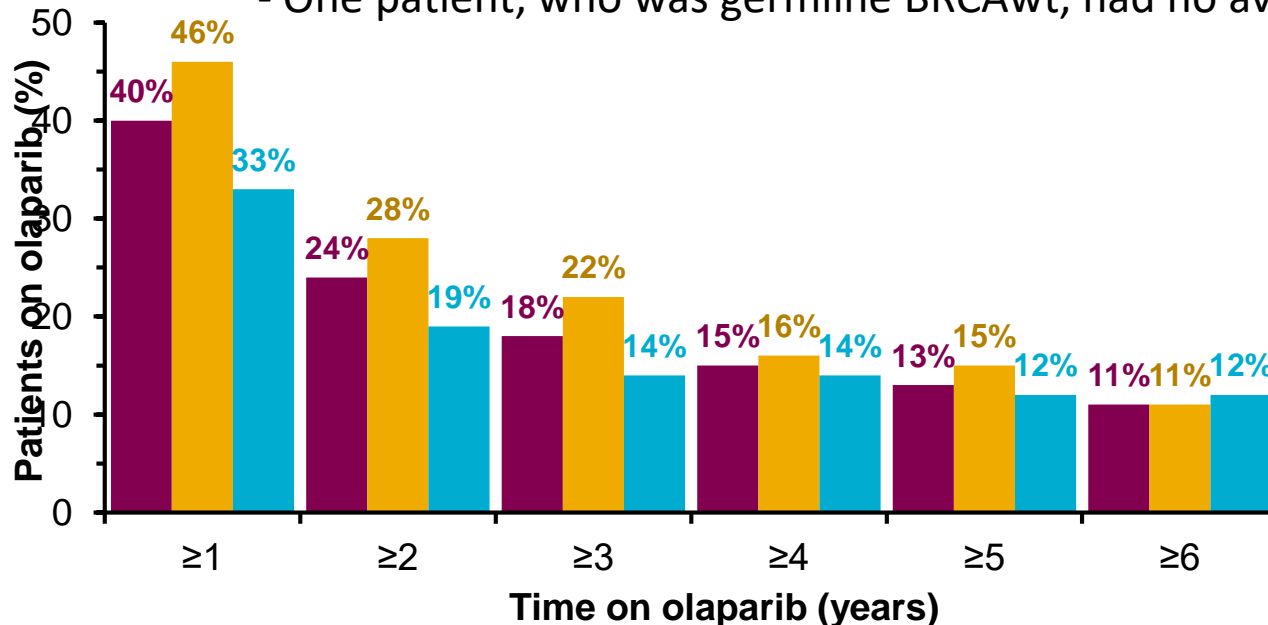
- Survie sans progression par statut BRCAm



# Bénéfice à long terme : 11% de patientes (15pts) sous TT $\geq 6$ years<sup>1</sup>

Of these 15 patients

- Nine patients had a BRCAm, three of whom had a sBRCAm and slight preponderance of BRCA2 mutations was observed
- Five patients were BRCAwt (1-RAD51B, some without HRR, and 1-HRD negative)
- One patient, who was germline BRCAwt, had no available tumor test results



■ Safety analysis set (n=136)

■ BRCAm subgroup (n=74)

Subgroups were defined prior to exploratory biomarker analyses being performed; patients with no known *BRCAm* or a variant of unknown significance were classified as *BRCAwt*, and one patient with no known *BRCAm* who received olaparib treatment for  $\ge 6$  years was found to have a *sBRCAm* in subsequent Myriad tumor testing

DCO: May 2016

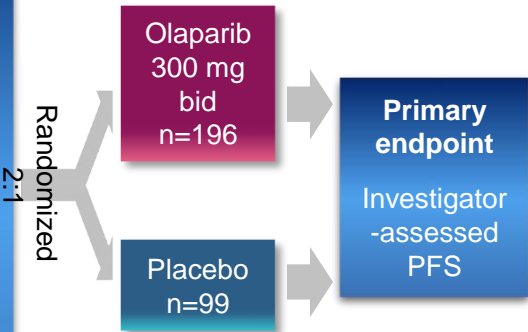
1. Gourley C et al. J Clin Oncol 35, 2017 (suppl; poster related to abstr 5533)



# Etude SOLO2 : Etude de phase 3 : Maintenance par Olaparib (nvelle formulation) , platine sensible, mutation BRCA

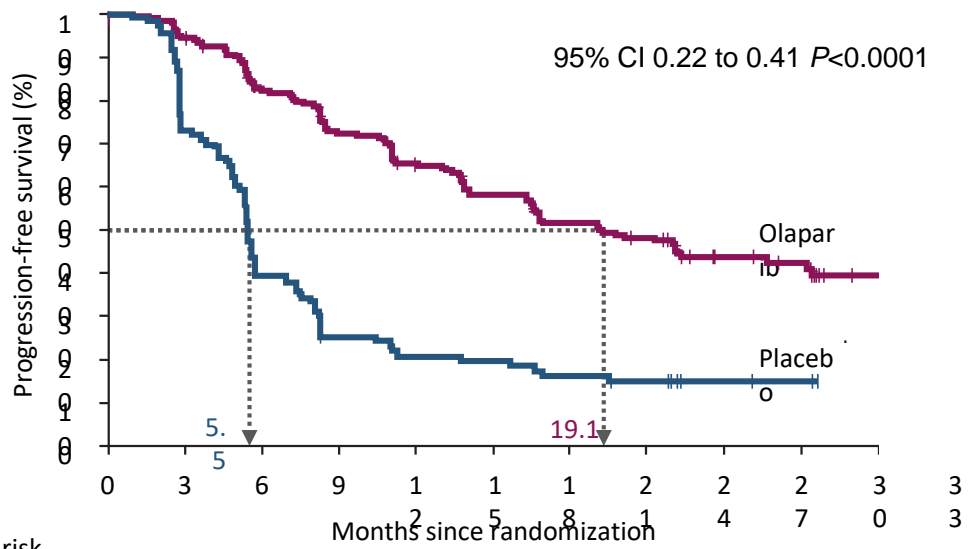


- Patients**
- BRCA1/2 mutation
  - Platinum-sensitive relapsed ovarian cancer
  - At least 2 prior lines of platinum therapy
  - CR or PR to most recent platinum therapy



- Key secondary endpoints:
  - Time to first subsequent therapy or death (TFST),
  - Time to second progression (PFS2),
  - Time to second subsequent therapy or death (TSST),
  - Overall survival (OS)
  - Safety, health-related quality of life (HRQoL\*)

	Olaparib (n=196)	Placebo (n=99)
Events (%)	107 (54.6)	80 (80.8)
Median PFS, months	19.1	5.5
HR 0.30		



No. at risk	0	3	6	9	12	15	18	21	24	27	30	33
Olaparib	1	1	1	1	1	1	8	8	3	2	3	2
Placebo	9	8	5	3	1	0	9	2	2	9	0	0
	6	2	6	4	8	4	1	1	7	6		
	9	7	3	2	1	1	4	2				
	9	0	7	2	8	7						



# Circuit de prescription et de rendu des résultats des tests BRCA dans le cadre de l'AMM Olaparib (Gladiëff et al Bull Cancer 2017)

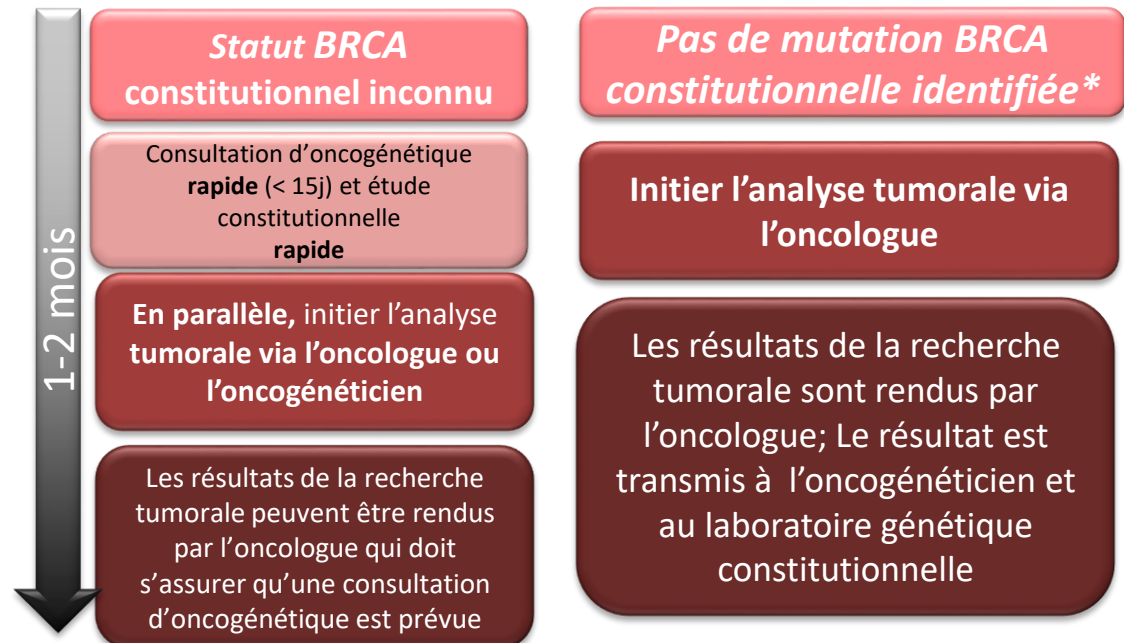
## Accord d'experts avec le Groupe Génétique et Cancer

### Cancer de l'ovaire (haut grade)

Rechute sensible

Circuit rapide

coordination consultations et laboratoires correspondants

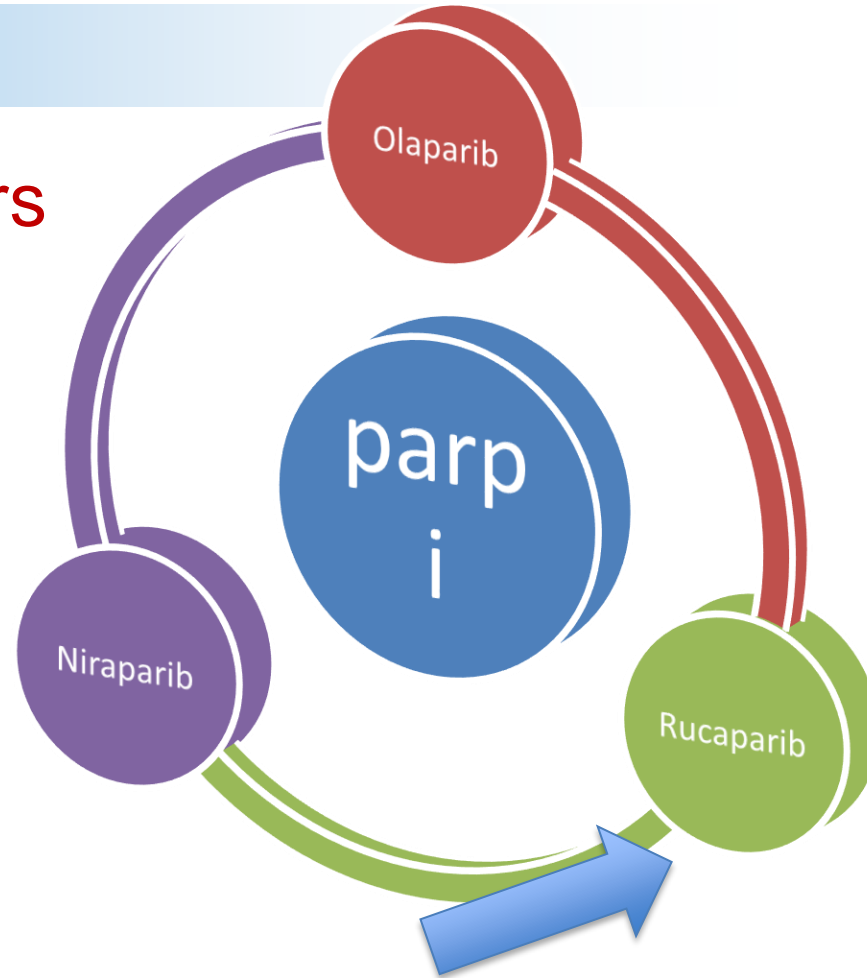


\*pas d'indication à réaliser une recherche tumorale en cas de mutation constitutionnelle connue de BRCA . Si analyse ancienne, reconsidérer en parallèle une nouvelle analyse constitutionnelle



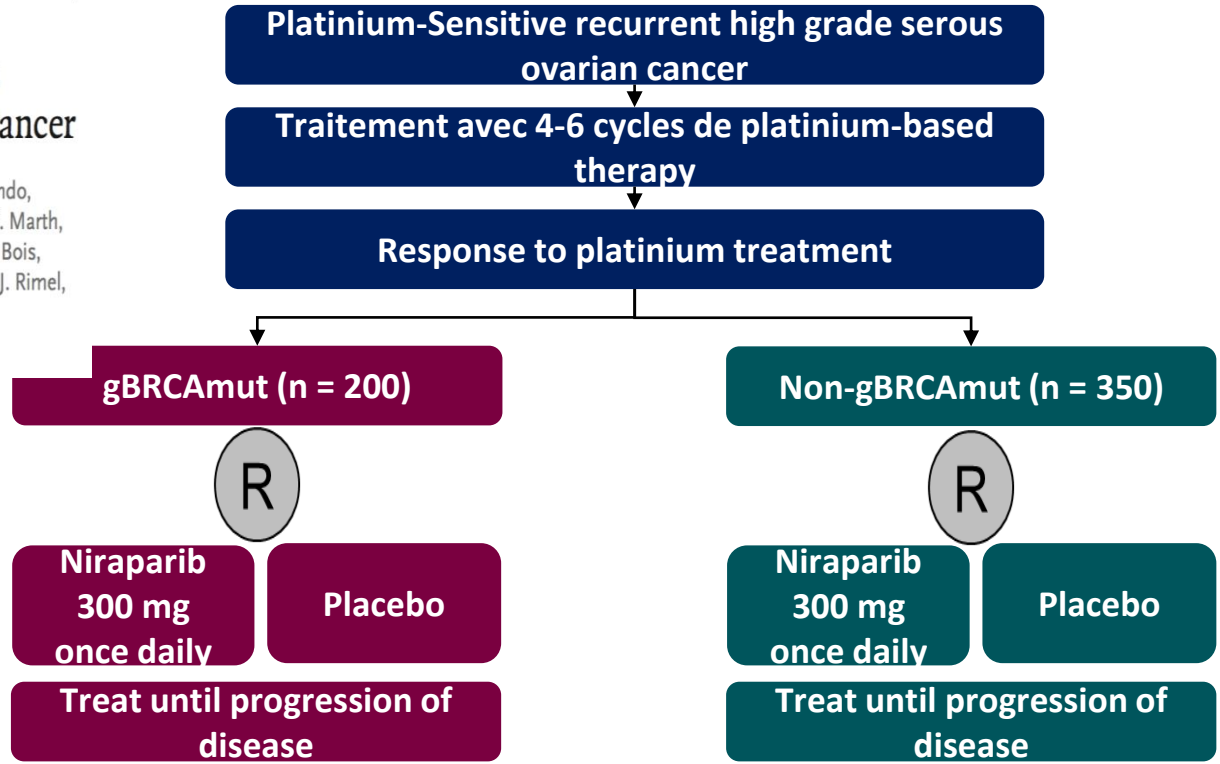
# La confirmation des inhibiteurs de Parp

Les OutSiders



# Niraparib Maintenance Therapy in Platinum-Sensitive, Recurrent Ovarian Cancer

M.R. Mirza, B.J. Monk, J. Herrstedt, A.M. Oza, S. Mahner, A. Redondo, M. Fabbro, J.A. Ledermann, D. Lorusso, I. Vergote, N.E. Ben-Baruch, C. Marth, R. Mądry, R.D. Christensen, J.S. Berek, A. Dørum, A.V. Tinker, A. du Bois, A. González-Martín, P. Follana, B. Benigno, P. Rosenberg, L. Gilbert, B.J. Rimel, J. Buscema, J.P. Balsler, S. Agarwal, and U.A. Matulonis, for the ENGOT-OV16/NOVA Investigators\*



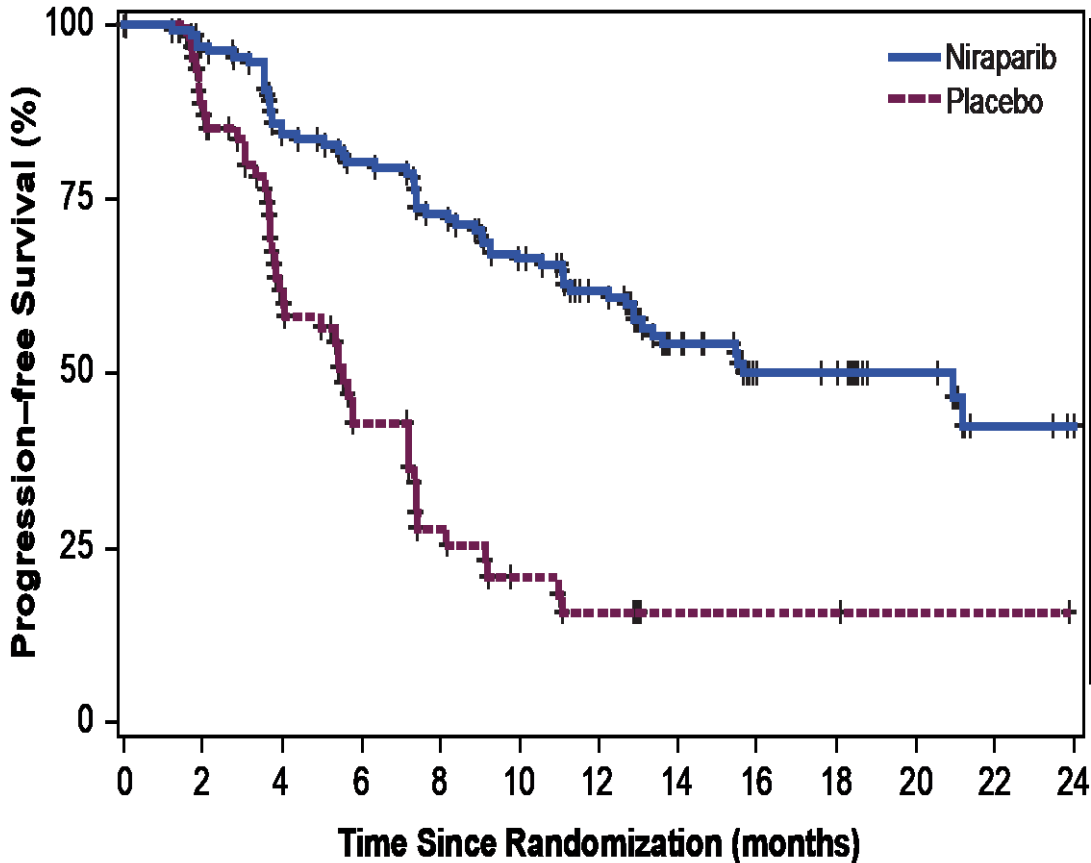
**Primary Endpoint : PFS by central, blinded review**

Tested at 100 events to achieve  $p < 0,05$

HRDpos population  
Tested at 100 events to achieve  $p < 0.05$ ;  
If test was positive then:  
Test overall non-gBRCAmut cohort ( $p < 0.05$ )

# ENGOT-OV16 / NOVA

## Progression-free Survival: gBRCAmut



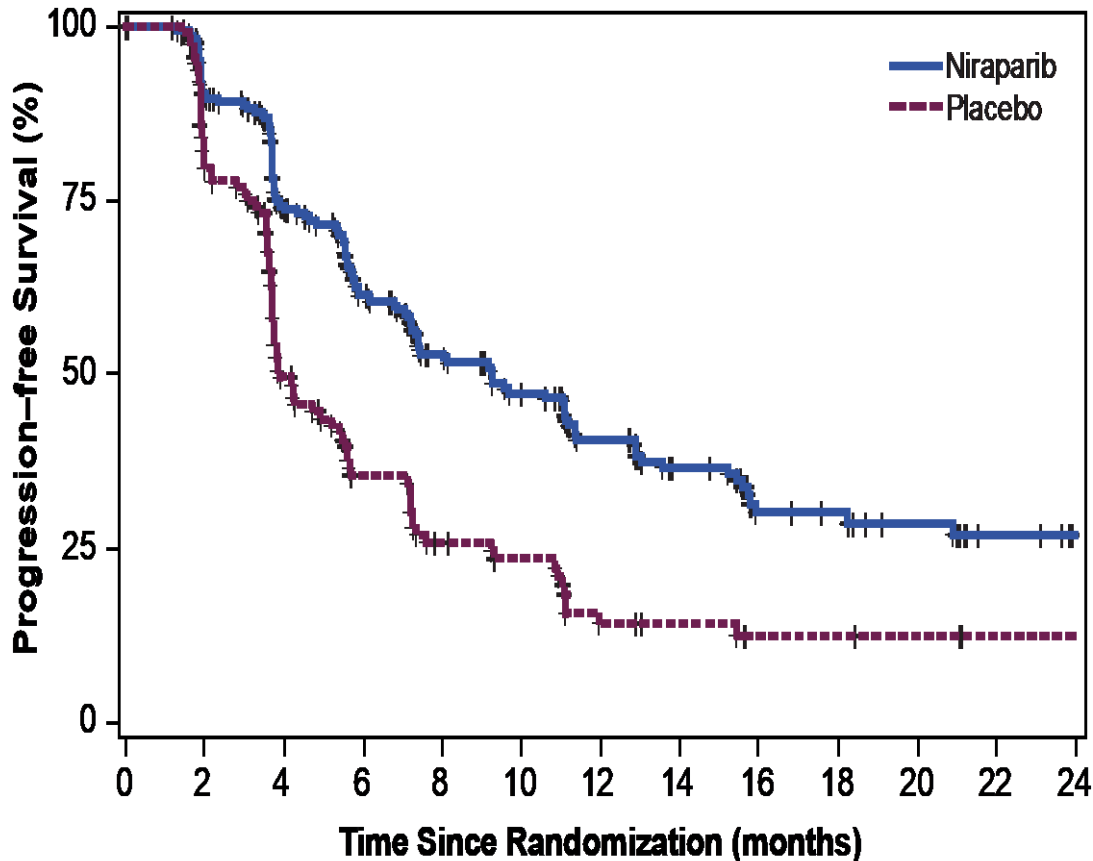
Treatment	PFS Median (95% CI) (Months)	Hazard Ratio (95% CI) p-value	% of Patients without Progression or Death	
			12 mo	18 mo
Niraparib (N=138)	<b>21.0</b> (12.9, NR)	<b>0.27</b> (0.173, 0.410)	62 %	<b>50%</b>
Placebo (N=65)	<b>5.5</b> (3.8, 7.2)	p<0.0001	16 %	16%

PFS was analyzed using a 2-sided log-rank test using randomization stratification factors, and summarized using the Kaplan-Meier methodology. Hazard ratios with 2-sided 95% confidence intervals were estimated using a stratified Cox proportional hazards model, with the stratification factors used in randomization.

NR=not reached

# ENGOT-OV16 / NOVA

## Progression-free Survival: Non-gBRCAmut



Treatment	PFS Median (95% CI) (Months)	Hazard Ratio (95% CI) p-value	% of Patients without Progression or Death	
			12 mo	18 mo
Niraparib (N=234)	<b>9.3</b> (7.2, 11.2)	<b>0.45</b> (0.338, 0.607) p<0.0001	41%	<b>30%</b>
Placebo (N=116)	<b>3.9</b> (3.7, 5.5)		14%	12%

PFS was analyzed using a 2-sided log-rank test using randomization stratification factors, and summarized using the Kaplan-Meier methodology. Hazard ratios with 2-sided 95% confidence intervals were estimated using a stratified Cox proportional hazards model, with the stratification factors used in randomization.

# ARIEL3: STUDY DESIGN

## Patient eligibility

- High-grade serous or endometrioid epithelial OC, primary peritoneal, or fallopian tube cancers
- Sensitive to platinum
- Responding to most recent platinum (CR or PR)\*
  - Excludes patients without assessable disease following second surgery
- CA-125 within normal range
- No restriction on size of residual tumour
- ECOG PS  $\leq 1$
- No prior PARP inhibitors

Randomisation 2:1

## Stratification

- HRR status by NGS mutation analysis
  - *BRCA1* or *BRCA2*
  - Non-*BRCA* HRR gene<sup>†</sup>
  - None of the above
- Response to recent platinum
  - CR
  - PR
- Progression-free interval after penultimate platinum
  - 6 to <12 months
  - $\geq 12$  months

**Rucaparib  
600 mg  
BID  
n=375**

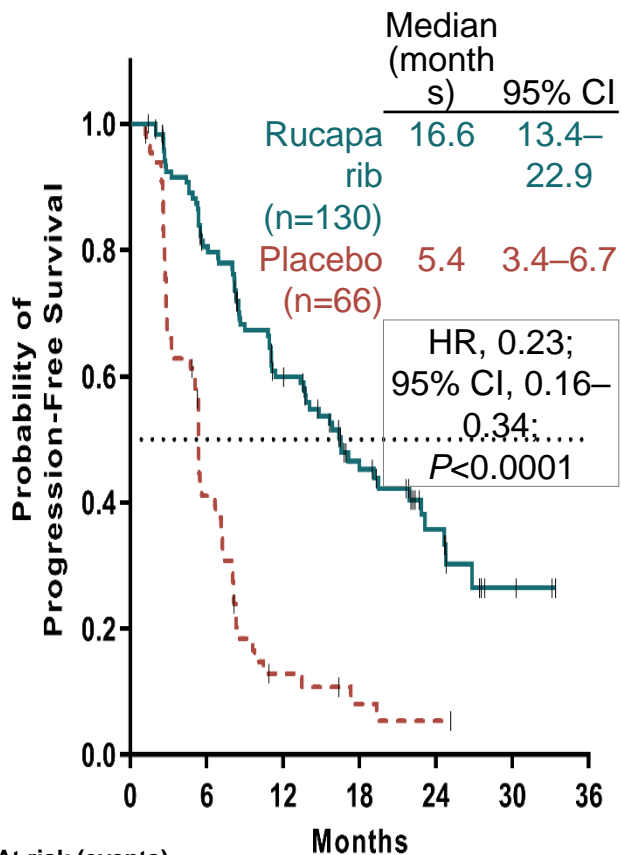
**Placebo  
BID  
n=189**

\*CR (defined by RECIST v1.1) or PR (defined by RECIST v1.1 and/or a GCIG CA-125 response [CA-125 within normal range]) maintained until entry to ARIEL3 ( $\leq 8$  weeks of last dose of chemotherapy). <sup>†</sup>*ATM, ATR, ATRX, BARD1, BLM, BRIP1, CHEK1, CHEK2, FANCA, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FANCL, FANCM, MRE11A, NBN, PALB2, RAD50, RAD51, RAD51B, RAD51C, RAD51D, RAD52, RAD54L, RPA1.*

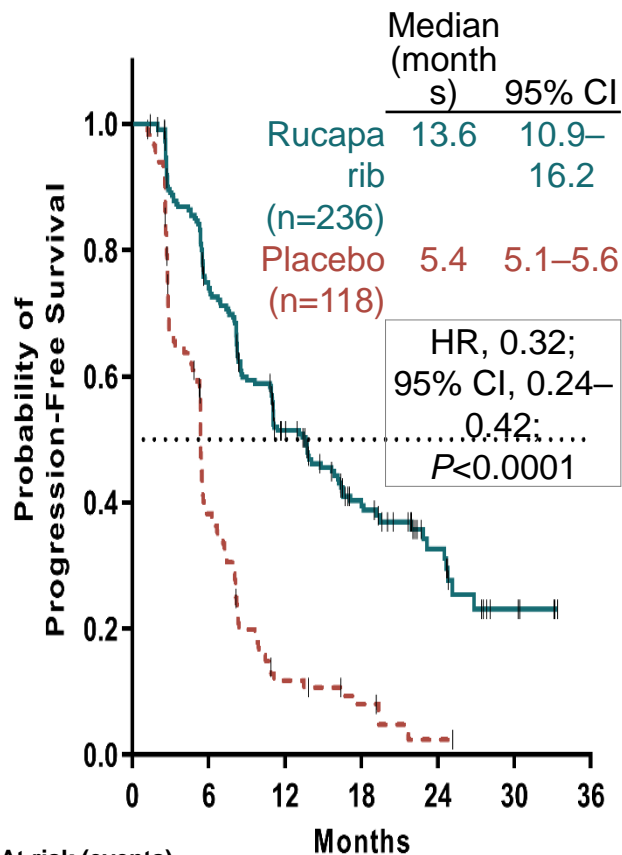
HRR, homologous recombination repair; NGS, next-generation sequencing.

# ARIEL3: PFS

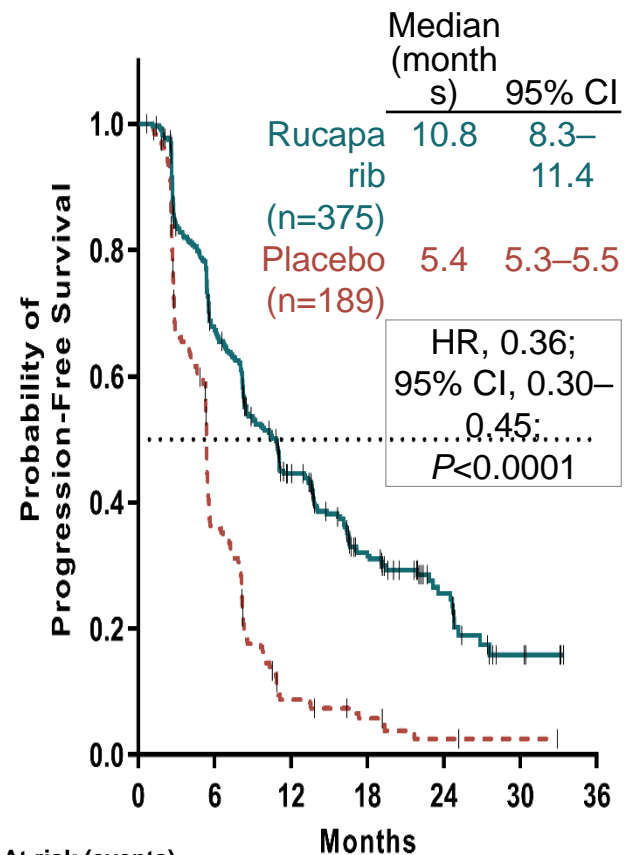
## BRCA mutant



## HRD



## ITT



At risk (events)  
 Rucaparib 130 (0) 93 (23) 63 (46) 35 (58) 15 (64) 3 (67) 0 (67)  
 Placebo 66 (0) 24 (37) 6 (53) 3 (55) 1 (56) 0 (56)  
 Rucaparib, 48% censored      Placebo, 15% censored

At risk (events)  
 Rucaparib 236 (0) 161 (55) 96 (104) 54 (122) 21 (129) 5 (134) 0 (134)  
 Placebo 118 (0) 40 (68) 11 (95) 6 (98) 1 (101) 0 (101)  
 Rucaparib, 43% censored      Placebo, 14% censored

At risk (events)  
 Rucaparib 375 (0) 228 (111) 128 (186) 65 (217) 26 (226) 5 (234) 0 (234)  
 Placebo 189 (0) 63 (114) 13 (160) 7 (164) 2 (167) 1 (167) 0 (167)  
 Rucaparib, 38% censored      Placebo, 12% censored

Visit cutoff date: 15 April 2017.



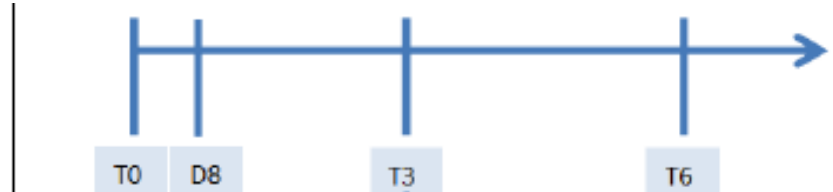
# PARPi IN MAINTENANCE SETTINGS

	SOLO2 (olaparib tablets)	NOVA (niraparib)	ARIEL3 (rucaparib)
<b>Patients population</b>	Germline BRCA <sup>mut</sup> Platinum sensitive and responsive	Germline BRCA <sup>mut</sup> Platinum sensitive Responsive HRD + (My Choice Mvriad)	Germline BRCA <sup>mut</sup> Platinum sensitive Responsive LOH high (FMI)
<p><b>Olaparib:</b></p> <ul style="list-style-type: none"> <li>➤ <b>EMA label (capsules): maintenance in recurrent PS, g+s mBRCA OC</b></li> <li>➤ <b>FDA label (capsules): maintenance in recurrent mutated OC &amp; gmBRCA ovarian cancer, 3+ previous lines, regardless of platinum sensitivity</b></li> <li>➤ <b>FDA label (tablets): maintenance in recurrent PS patients <u>regardless of BRCA mutation</u></b></li> </ul> <p><b>Niraparib</b></p> <ul style="list-style-type: none"> <li>➤ <b>FDA label: maintenance in recurrent PS patients <u>regardless of BRCA mutation</u></b></li> <li>➤ <b>EMA label : maintenance in recurrent PS patients <u>regardless of BRCA mutation</u></b></li> </ul> <p><b>Rucaparib</b></p> <ul style="list-style-type: none"> <li>➤ <b>FDA label: maintenance in recurrent PS regardless platinum sensitivity; BRCA (g +s) mutated ovarian cancer, 2+ previous lines</b></li> </ul>			
		(Primary Endpoint)	Endpoint)
PFS non gBRCA	NA	Non gBRCA: 3.9 vs 9.3 mths HR 0.27 HRD +: 3.8 vs 12.9 HR 0.38 HRD - : 3.8 vs 6.9 HR 0.58	LOH high: 5.4 vs 9.7 HR 0.44 LOH low : 5.4 vs 6.7 months HR 0.58

# BIEN GÉRER LES EFFETS SECONDAIRES EN MAINTENANCE

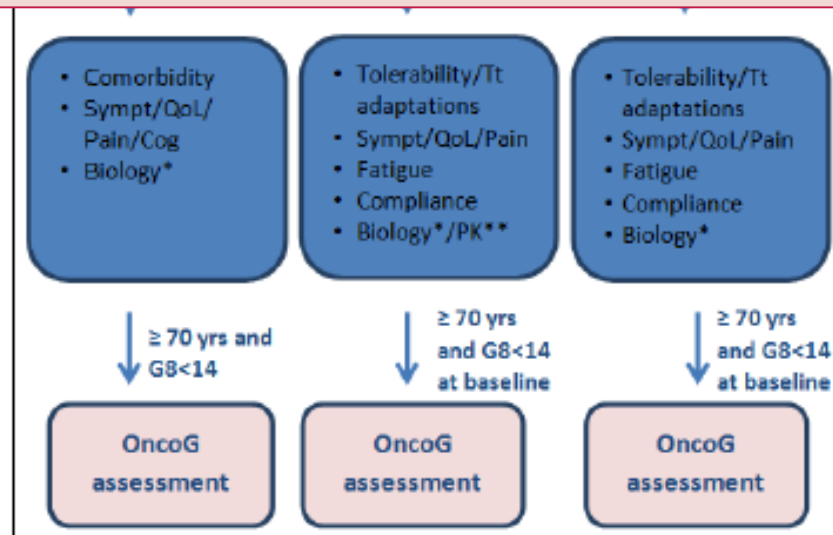


Niraparib



• **Follow-up of QoL and symptoms** is encouraged to be integrated in routine practice (according to the different organisations of the institutions)

- Etude en vraie vie
- Suivi des effets secondaires par tablette
- Transmission aux médecins (lors de la cs)





# Le future?

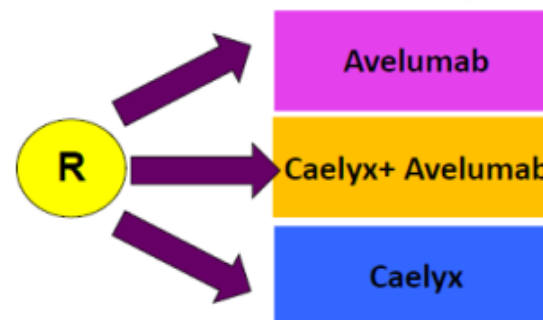
- Immunothérapie : seule ou avec CT

En rechute sans platine

## JAVELIN : SCHEMA DE L'ETUDE



- $\leq 6$  mois post platine
- Pas plus de 3 lignes pour platine sensible
- Pas de ligne antérieure en résistant
- Mesurable
- Pas de ttt inhibiteur de checkpoint immunologique
- Tissu disponible



n = ~550 (282 events)  
(200 events for each comparison)

Etude internationale, lead GINECO  
PI Monde E Pujade Lauraine  
Coordonnatrice France : AC HB





# Le future?

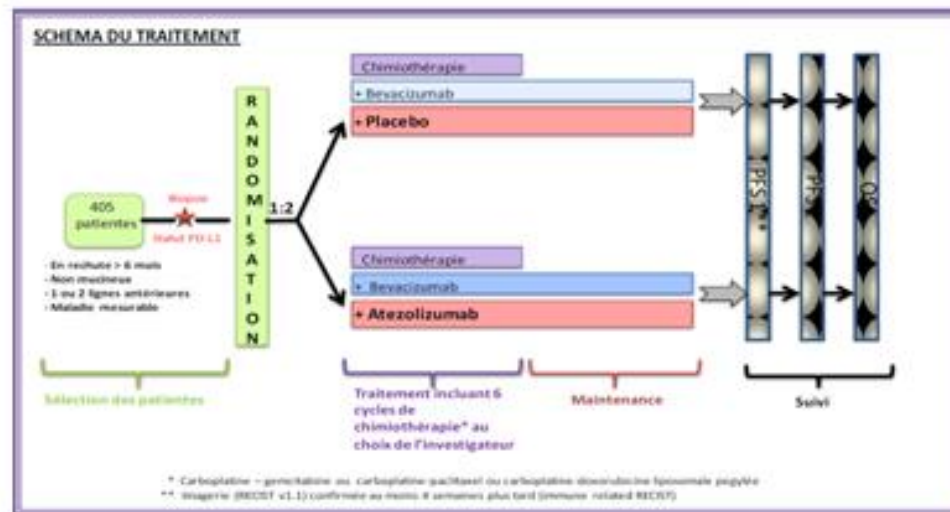
- Immunothérapie : en combo avec Antiangiogénique

En rechute platine sensible



## ATALANTE

Cancer de l'ovaire - Rechute > 6 mois



# TRIALS COMBINING PARP INHIBITORS WITH ANTI-ANGIOGENIC DRUGS

<b>Maintenance combinations</b>	<b>ICON9</b> cediranib/olaparib vs olaparib, platinum-sensitive
<b>olaparib combinations</b>	<b>NGR-GYN 004</b> olaparib+ cediranib vs platinum based chemotherapy
	<b>NGR-GYN 005</b> olaparib+ cediranib vs chemotherapy
	<b>BAROCCO (ManGO)</b> olaparib + cediranib vs chemotherapy
	<b>CONCERTO</b> (NCT 02889900) Olaparib +cediranib in DDP-resistant, gBRCAwt >
<b>Niraparib+bevacizumab</b>	<b>AVANOVA</b> niraparib+ bevacizumab in platinum sensitive ovarian cancer



# La première ligne

- **Peu de modification de la prise en charge médicale**



- **Intérêt du Béva en néo-adjuvant**
- **Place des protocoles de chimiothérapie hebdomadaires**
- **Le future?**



# Circuit de prescription et de rendu des résultats des tests BRCA dans le cadre de l'AMM Olaparib (Gladiëff et al Bull Cancer 2017)

## *Accord d'experts avec le Groupe Génétique et Cancer*

Cancers du sein  
Cancers de l'ovaire  
Soins de s

### Cancer de l'ovaire (haut grade)

Diagnostic initial

Circuit standard

Consultation  
d'oncogénétique **habituelle**  
(information dans le cadre de  
la recherche d'une mutation  
constitutionnelle)

Circuit labo habituel  
(mutation constitutionnelle)

Résultats rendus à, et par  
l'oncogénéticien

5-6 mois



# Critères de choix du traitement initial

**Extension tumorale**

**Caractéristiques patient**  
(co-morbidités, âge)

**Choix du traitement**

**Type histologique**

**Expérience équipe**



dreamstime.com







# Critères de choix de la chimio

**Résection chirurgicale**

**Caractéristiques  
patiente**  
(co-morbidités, âge)

**Choix de la Stratégie  
thérapeutique**

**Type de CT**  
(néo-adjuvante, adjuvante, post  
Chir d'intervalle)

**Suites opératoires**





# Primo-traitement : Chimiothérapie adjuvante (post chirurgie)

- **Chimiothérapie (CT) standard**
  - Paraplatine AUC 5-7, Paclitaxel 175 mg/m<sup>2</sup> en IV
  - 3 semaines
- **Place du Bevacizumab**
  - En association avec la CT, toutes les 3 semaines
  - Et en maintenance après la CT
  - Posologie AMM : 15 mg/kg tous les 3sm, 15 mois
- **Intérêt d'un traitement par Paclitaxel hebdo ?**
  - Paclitaxel +/- carbo
  - Dose dense ou dose hebdo stricte (Réputé « mieux toléré »)



# Phase III antiangiogéniques en maintenance dans le cancer de l'ovaire en première ligne

	Première ligne		
	ICON7 <sup>1</sup> n = 759	GOG 218 <sup>2</sup> n = 1873	OVAR-16 <sup>3</sup> n = 940
	Carbo/Taxol +/- <b>bevacizumab</b>	Carbo/taxol +/- <b>bevacizumab</b>	Carbo/taxol +/- <b>pazopanib</b>
PFS median mois	17,3 vs 19	10.3 vs 14,1	12,3 vs 19,9
	<b>0.81</b> P=0,0041	<b>0.717</b> p<0,0001	<b>0.766</b> p=0,0021
OS median mois	58,6 vs 58 (sous groupe ht risque : 28,8 vs 36,6)	39,3 vs 39,7	NR

1: Burger R. et al. NEJM 2011; 2: Perren T. et al. NEJM 2011; 3 : Du Bois JCO 2014



# Primo-traitement

## Place du paclitaxel hebdomadaire sans beva

**Essai Mito 7  
(Carbo-taxol  
hebdo)**

**Carbo AUC2-Paclitaxel 60 mg/m<sup>2</sup>, les 2 hebdo  
Bras hebdo. : plus de reports, moins de  
réductions de doses**

**Essai JGOG  
(Taxol  
dose/dense)**

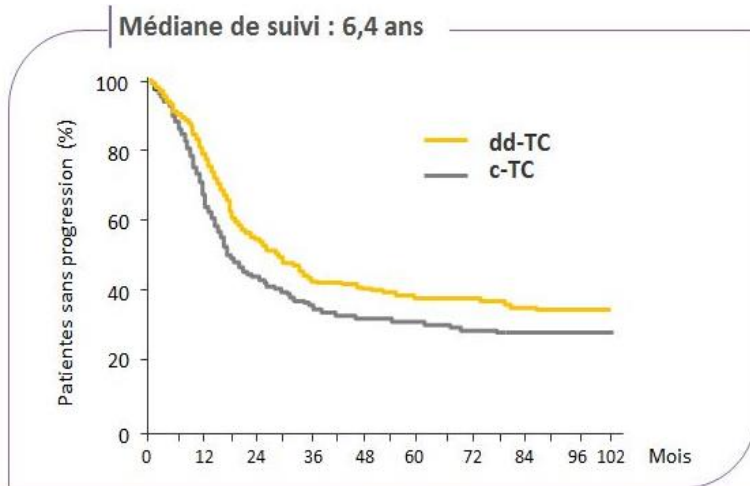
**Carbo AUC-5/6 (3sm) -Paclitaxel 80 mg/m<sup>2</sup> hebdo  
Bras DD : plus d'anémie et de neuropathie  
Bevacizumab en option : impact ?**

	Mito 7 (3S/DD)		JGOG (3S/DD)
PFS (mois)	17,3 m	18,3 m	17,5 m/28,2 m
	Ns		S
*sous-groupe sans Bev (n=112) HR = 0,60			



# Primo-traitement

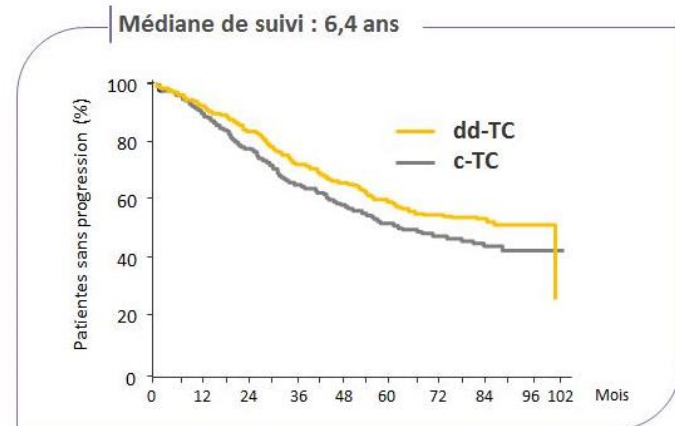
## Place du paclitaxel hebdo dose dense



Traitement	n	Événements, n (%)	SSP médiane (mois)	p	HR	IC <sub>95</sub>
dd-TC	312	197 (63)	28,2	0,0037	0,76	0,62-0,91
c-TC	319	229 (72)	17,5			

ASCO 2012 - D'après Katsumata N *et al.*, abstr. 5003 actualisé

## Etude Japonnaise



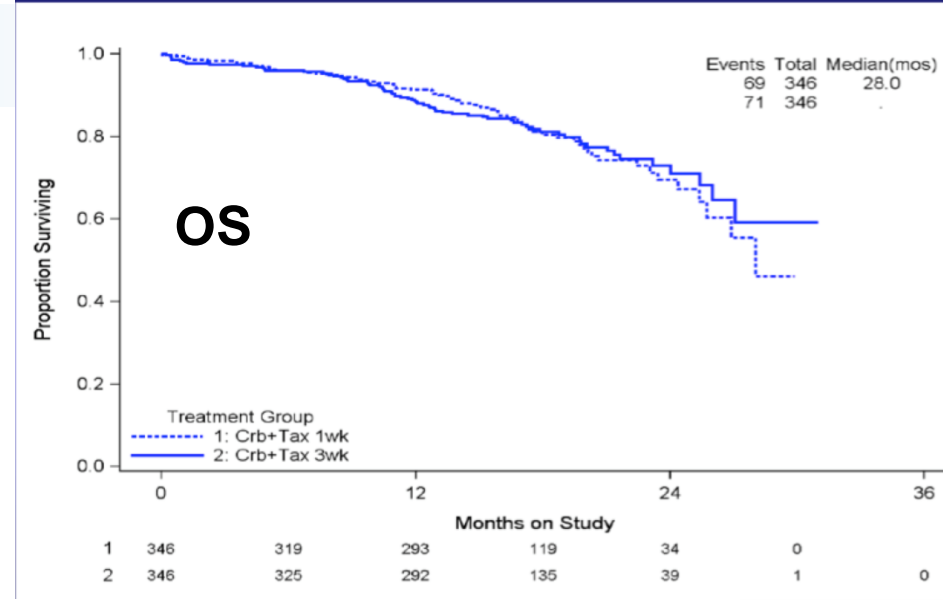
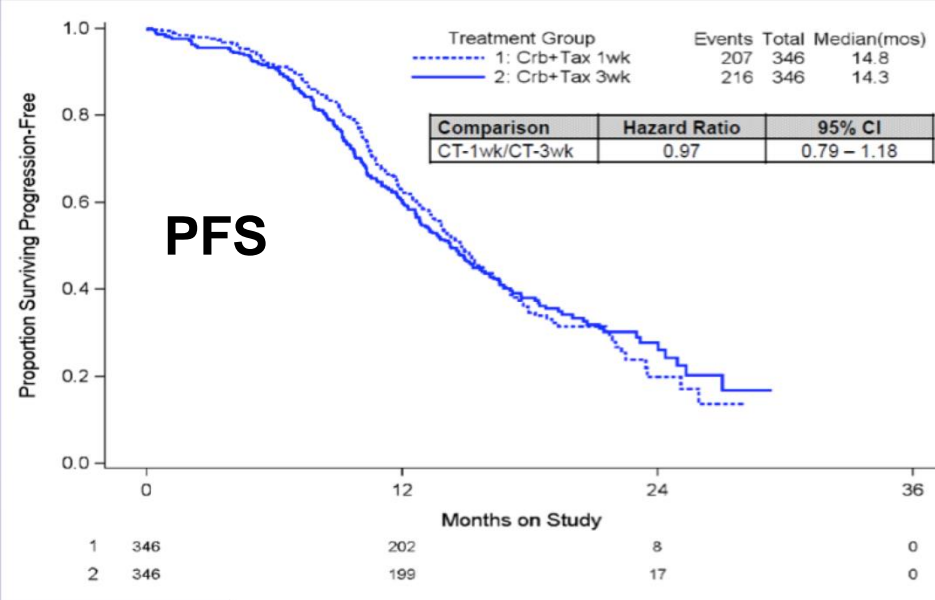
Traitement	n	Décès, n (%)	SG médiane	Survie à 5 ans (%)	p	HR	IC <sub>95</sub>
dd-TC	312	139 (45)	Non atteinte	58,7	0,039	0,79	0,63-0,99
c-TC	319	168 (53)	62,2	51,1			

ASCO 2012 - D'après Katsumata N *et al.*, abstr. 5003 actualisé

- **Données actualisées de l'essai JGOG 3016**
- **Dans cette étude japonnaise :**
  - Schéma DD plus toxique (reports, réductions de doses, moins de poursuites au-delà de 6 cures)
  - Persistance du bénéfice du schéma DD Paclitaxel-Carboplatine avec plus de recul

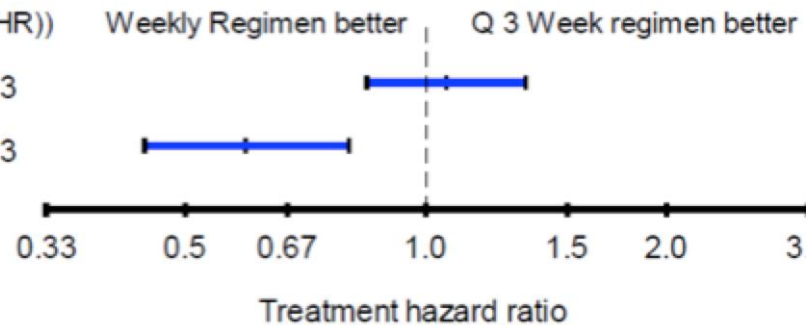


# GOG 262 = +/- bevacizumab (etude américaine)



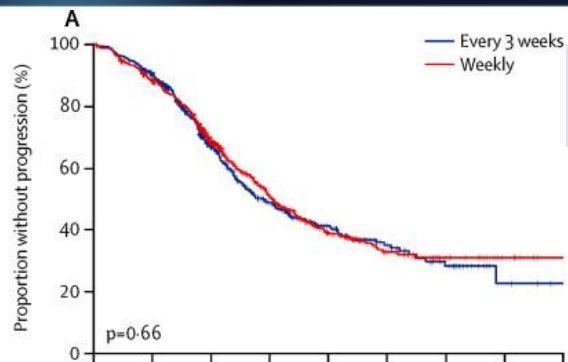
**PFS**  
With Bev (n=580)  
Without Bev (n=112)

Rel Haz	Var(ln(HR))
1.058	0.013
0.595	0.023



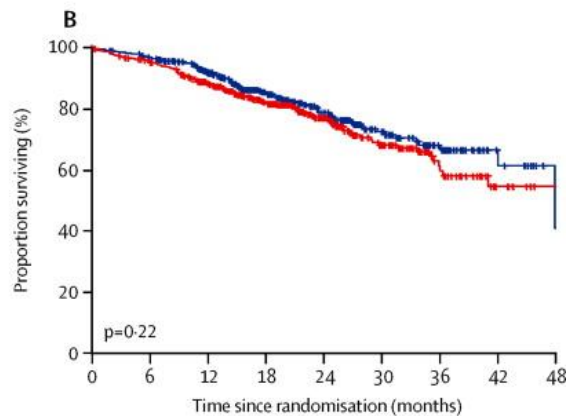


# Carbo et taxol dose hebdo : Etude Mito 7



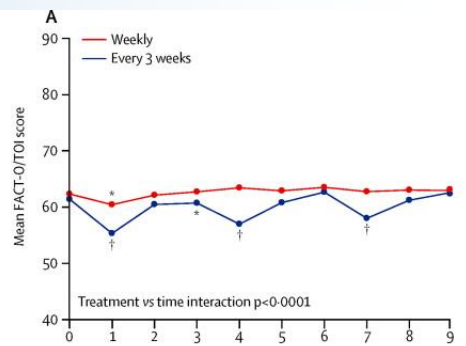
Number at risk

Every 3 weeks	404	357	240	142	82	39	20	4	1
Weekly	406	352	255	151	80	43	20	9	3



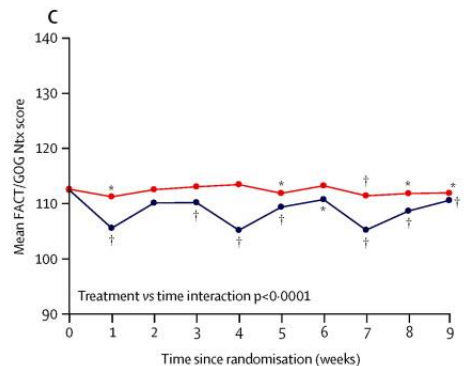
Number at risk

Every 3 weeks	404	383	328	231	142	80	43	13	2
Weekly	406	377	323	231	140	80	38	12	4



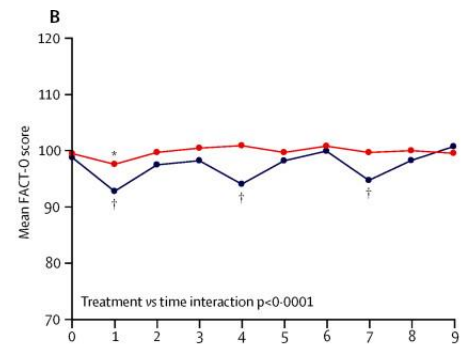
Number of patients

Weekly	308	266	254	237	239	238	218	212	223	177
Every 3 weeks	301	229	208	250	209	195	221	193	177	169



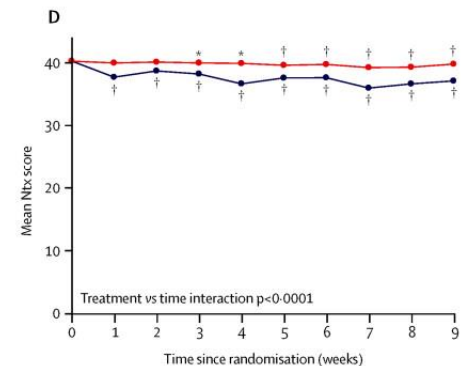
Number of patients

Weekly	298	263	252	232	240	237	217	208	220	175
Every 3 weeks	291	221	202	242	208	192	219	190	174	169



Number of patients

Weekly	307	266	254	236	239	238	218	211	222	177
Every 3 weeks	301	226	207	250	209	195	221	193	177	169



Number of patients

Weekly	299	264	252	233	240	238	217	209	222	175
Every 3 weeks	291	225	204	243	208	192	222	192	175	169

- ➡ QoL, Coprimary endpoint, evaluated every week for the first 9 weeks
- ➡ PRO's in favor for the weekly schedule



# Que retenir du paclitaxel hebdomadaire?

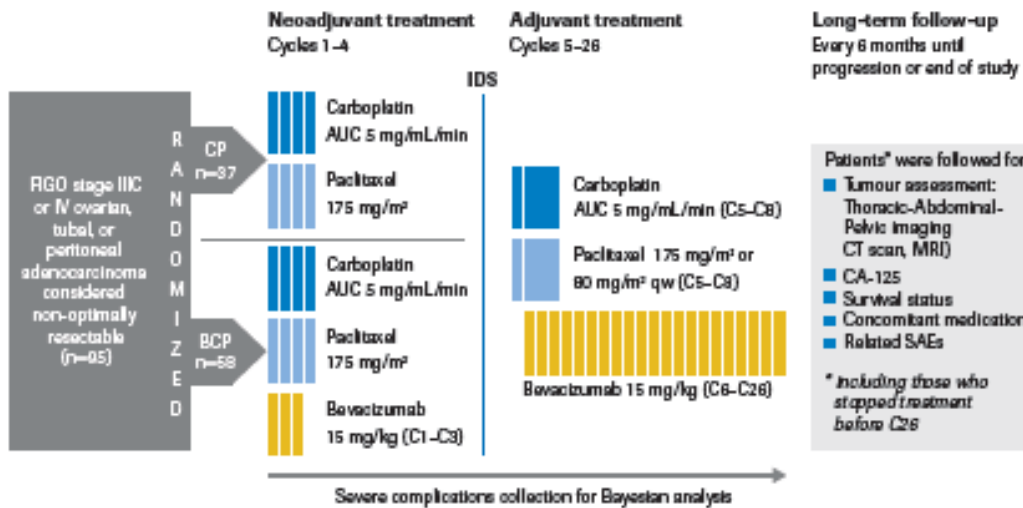
- **Paclitaxel Dose-dense hebdo (80 mg/m<sup>2</sup>):**
  - Bénéfice que chez les asiatiques
  - Pas de bénéfice chez les non asiatiques
  - Plus toxique
- **Paclitaxel Hebdo 60 mg/m<sup>2</sup> carbo hebdo:**
  - pas de bénéfice en PFS ou OS
  - meilleure qualité de vie, et moins de toxicités





# Interet du Beva en Néoadjuvante

Figure 1. ANTHALYA study design



## Multicenter randomized phase II NOVA trial

- Newly diagnosed high-grade serous or endometrioid eOC<sup>a</sup>
- FIGO stage III/IV
- ECOG PS 0-2
- Planned NACT and IDS for unresectable disease
- No intestinal occlusion or BEV contraindication



- Primary endpoint: Complete macroscopic response rate (PCI=0) at IDS
- Secondary endpoints: Safety, surgical feasibility, optimal cytoreduction rate, response rate, PFS

AUC = area under the curve; ECOG PS = Eastern Cooperative Oncology Group performance status; FIGO = International Federation of Gynecology and Obstetrics; PCI = peritoneal cancer index; q3w = every 3 weeks

PRESENTED AT: ASCO ANNUAL MEETING '17 #ASCO17 \*Epithelial ovarian, primary peritoneal, or fallopian tube carcinoma. <sup>a</sup>≥3 cycles. Slides are the property of the author. Permission required for reuse.

French study, joly et al

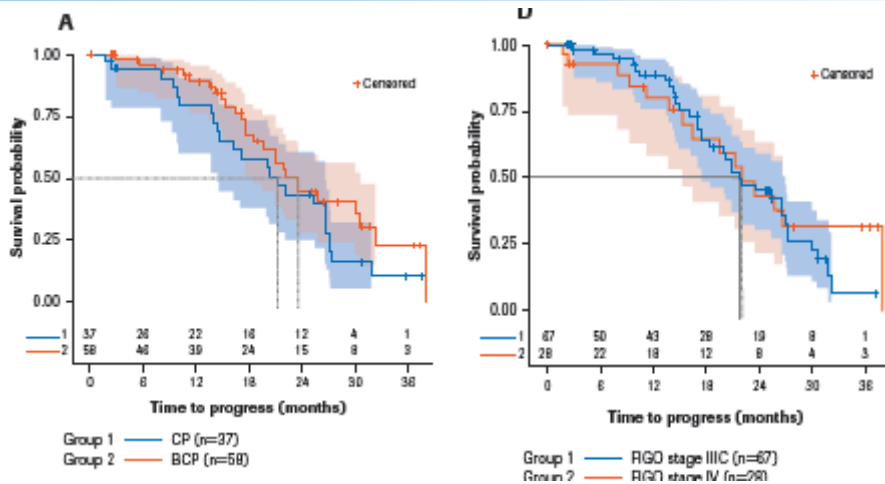
Spanish study, Garcia et al



# Ovaire et Bev en Néoadjuvant

ANTHALYA showed that neoadjuvant bevacizumab (B) added to carboplatin and paclitaxel (CP) was well tolerated and achieved **high complete resection rates at IDS (58.6%).<sup>1</sup>**

Spain Nova study



■ Disease progression occurred in 26 (44.8%) BCP patients and 24 (64.9%) CP patients during the overall study period. Median (95% CI) PFS was **23.5 (18.5, 30.6) months** and **21.2 (14.5, 26.7) months**, respectively (Figure 2A).

■ Median PFS in subgroup analyses were:

- **25.8 (21.0, 30.0) months** for patients with complete resection at IDS (n=53); **22.2 (9.8, 27.2) months** for patients who did not have IDS (n=33); and **14.5 (10.6, 17.1) months** for patients who had IDS but no complete resection (n=9; Figure 2B)
- **25.8 (18.5, 27.2) months** and **21.0 (15.0, 25.4) months** for patients without (n=59) or with (n=29) baseline CTCs, respectively (Figure 2C)
- **21.8 (17.5, 27.1) months** and **22.2 (15.3, 38.0) months** with FIGO IIIc (n=67) and IV (n=28) tumors, respectively (Figure 2D).

## Secondary endpoints (ITT population)

No. of patients (%)		CP alone (n=33)	CP + BEV (n=35)	p-value
IDS surgical feasibility		22 (67)	31 (89)	0.029 <sup>a</sup>
Surgical outcome	Complete resection/optimal surgery	21 (64)	23 (66)	0.858 <sup>a</sup>
	Suboptimal	1 (3)	8 (23)	0.028 <sup>b</sup>
	Unresectable	2 (6)	0	0.232 <sup>b</sup>
	No surgery <sup>c</sup>	9 (27)	4 (11)	0.097 <sup>a</sup>
Best response (RECIST)		(n=32) 22 (69)	(n=32) 28 (88)	0.175 <sup>a</sup>

• Consistent results in the PP population (n=64)

<sup>a</sup>Chi-squared test. <sup>b</sup>Fisher's exact test  
<sup>c</sup>Surgery was planned in 2 patients but they were subsequently considered unresectable. Surgery was not attempted in the remaining patients  
RECIST = Response Evaluation Criteria in Solid Tumors

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## PFS (RECIST v1.1, ITT population)



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# Take Home Message

## Béva en néo-adjuvant

- **Faisable**
- **Mais ne permet pas plus de résection complète ni d'augmentation de la PFS**
- **Peut-être un sous groupe qui pourrait en bénéficier**
  - Stades IV jugés comme inopérables



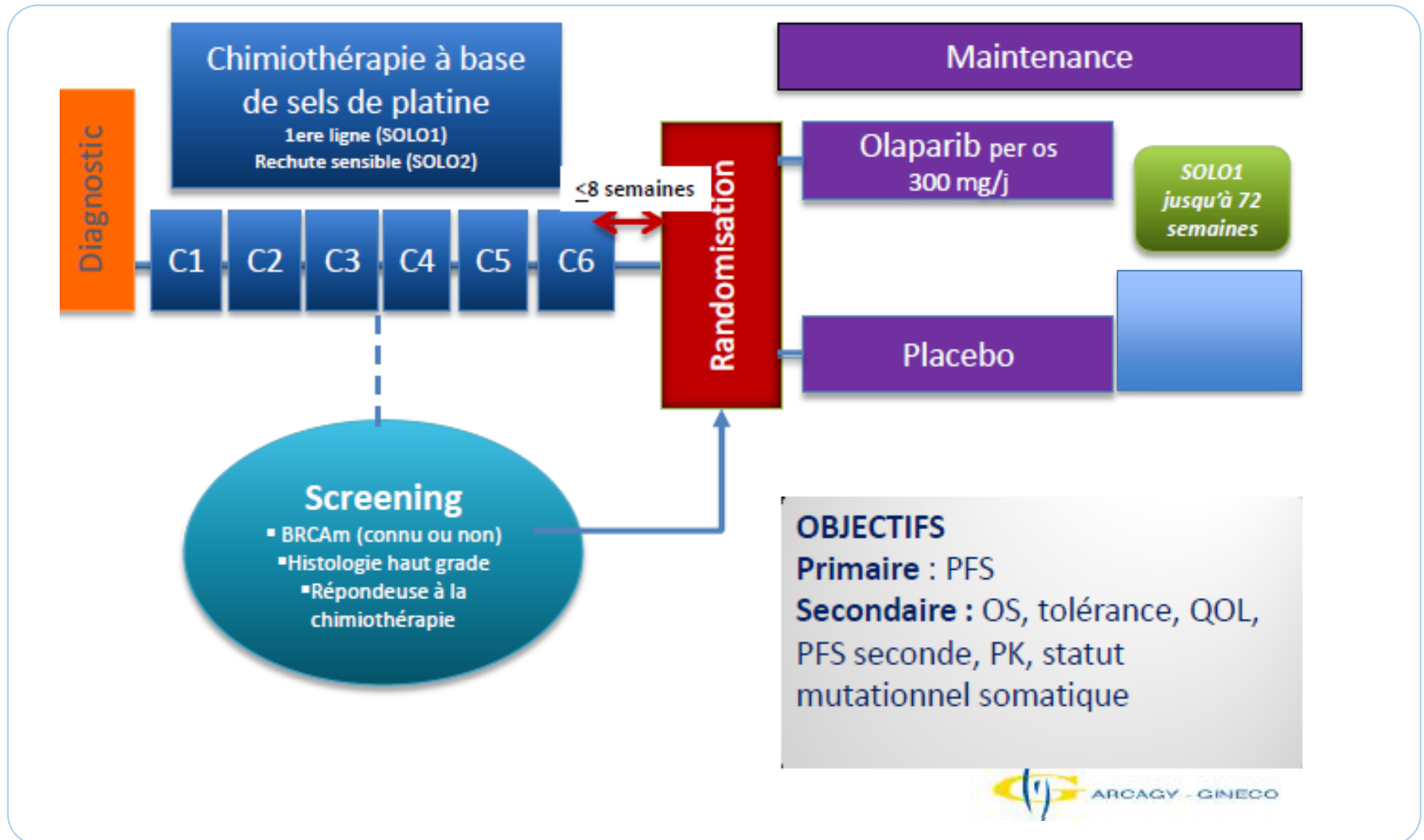
# Take Home Message

- **Standard = chirurgie complète initiale**
- **Alternative = chimiothérapie néo-adjuvante**
  - Chirurgie complète non envisageable
  - État général
- **Chimiothérapie standard : taxol carboplatine J21**
- **Bevacizumab formes avancées ou inopérables**
- **Oncogénétique**

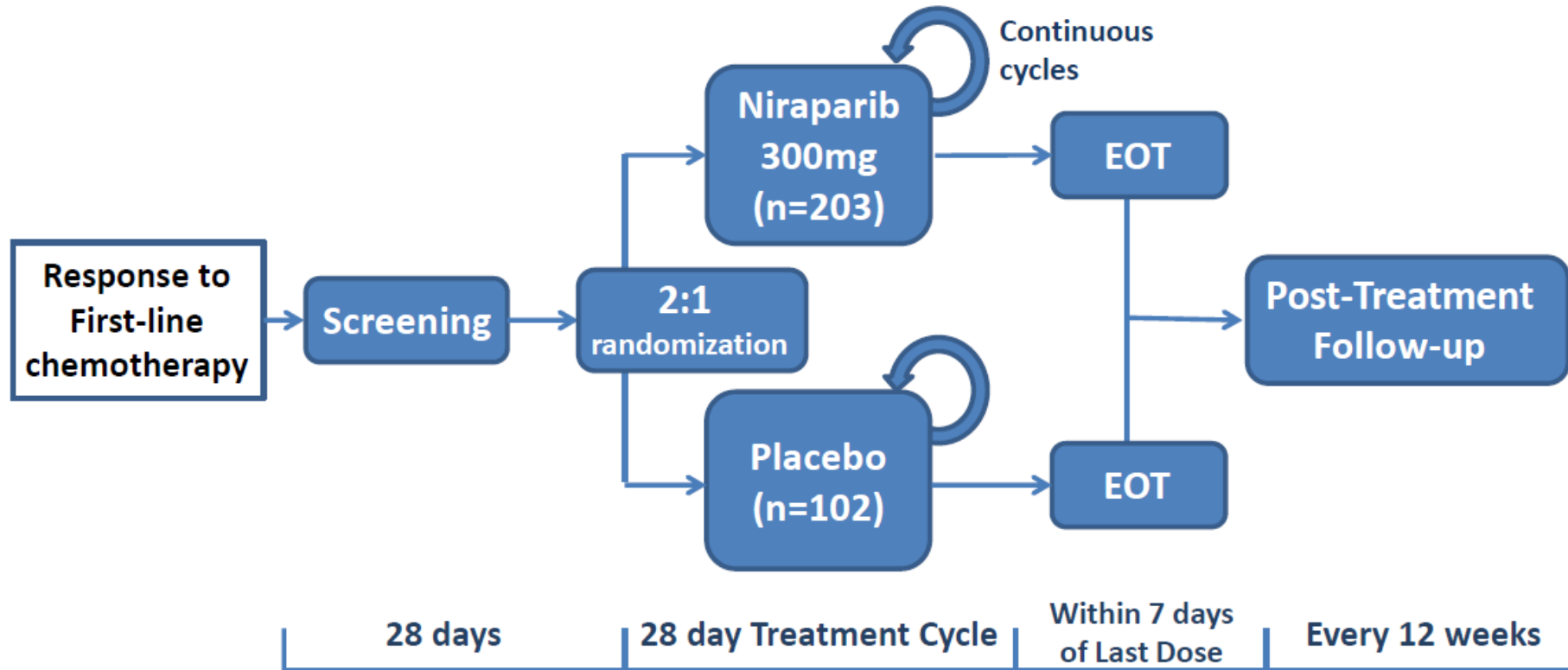


# Inh de parp en première ligne

- Olaparib : etude Solo 1 - Schéma, résultats en attente



# PRIMA: OVARIAN CANCER PHASE 3 TRIAL DESIGN



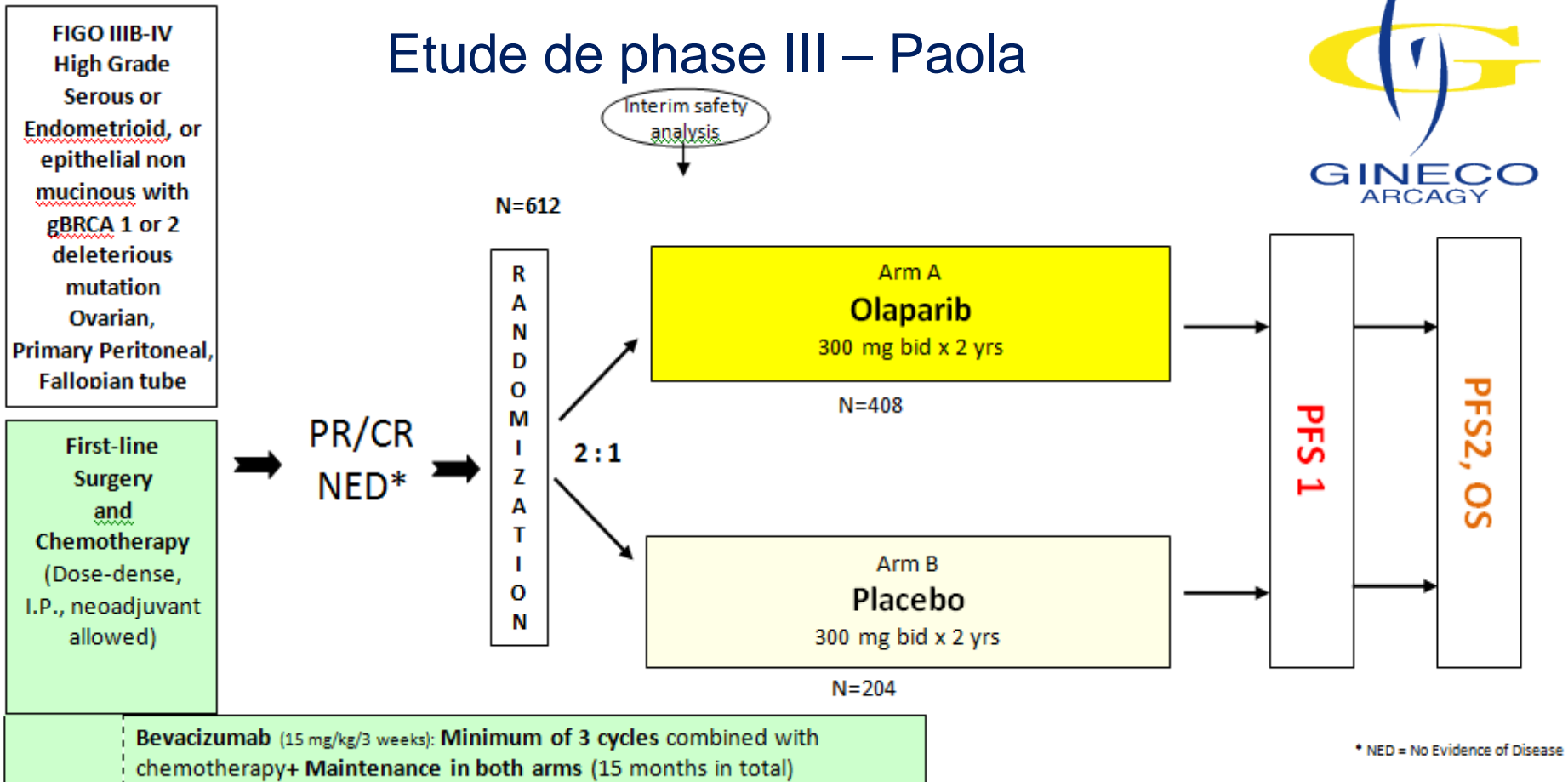
<b>Primary Endpoint</b>	<b>PFS</b> (Interim analysis to be performed when 50% events (N=129) are observed)
<b>Key Secondary Endpoints</b>	<ul style="list-style-type: none"> <li>• Overall survival (OS)</li> <li>• Patient-reported outcomes (PRO)</li> <li>• Time to CA-125 progression</li> <li>• PFS2</li> <li>• Safety and tolerability</li> </ul>



# Le future Combo AA et Inhibiteurs de Parp?



## Etude de phase III – Paola



- *Evaluer entretien Olaparib à la CT par Carboplatine-Paclitaxel-Bevacizumab*
- *Objectif principal : PFS*

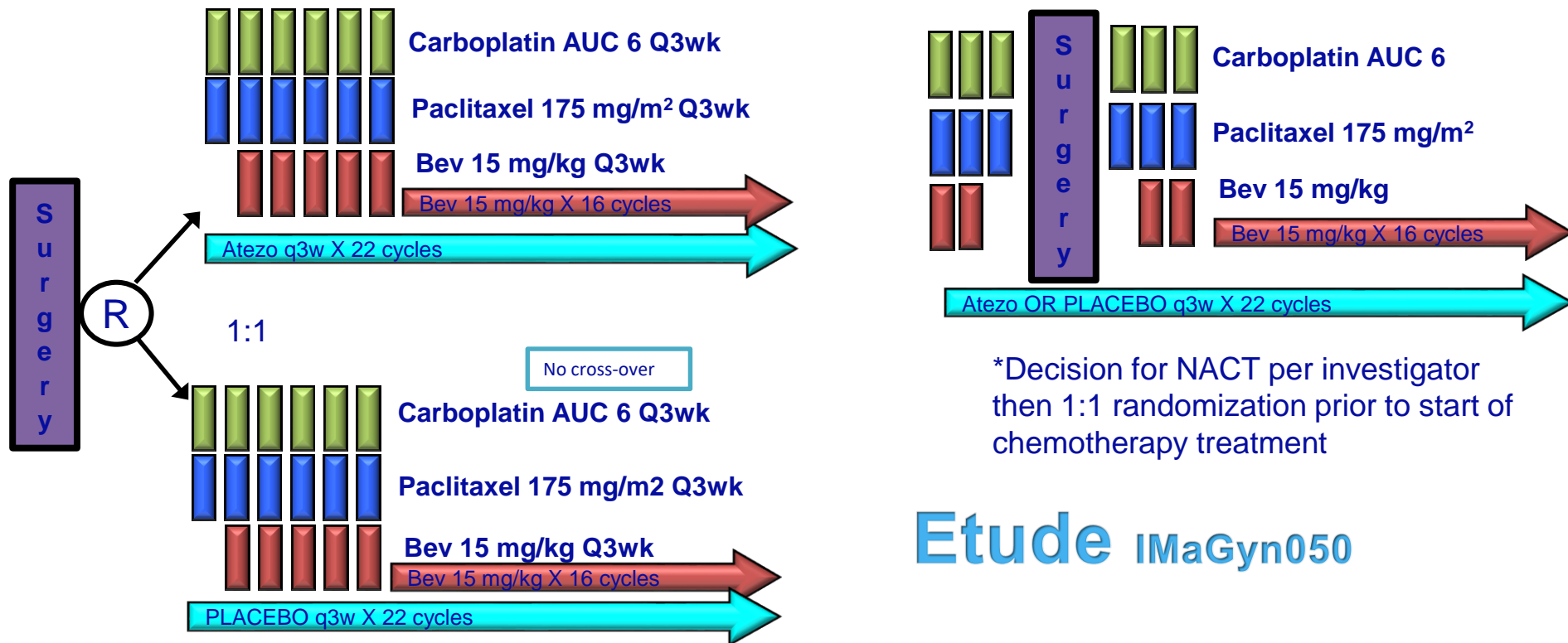


307/612 patientes randomisées au 01/09/2016



# Le future Combo AA et Immuno?

Double blinded, 1:1 randomized, placebo-controlled multi-center study



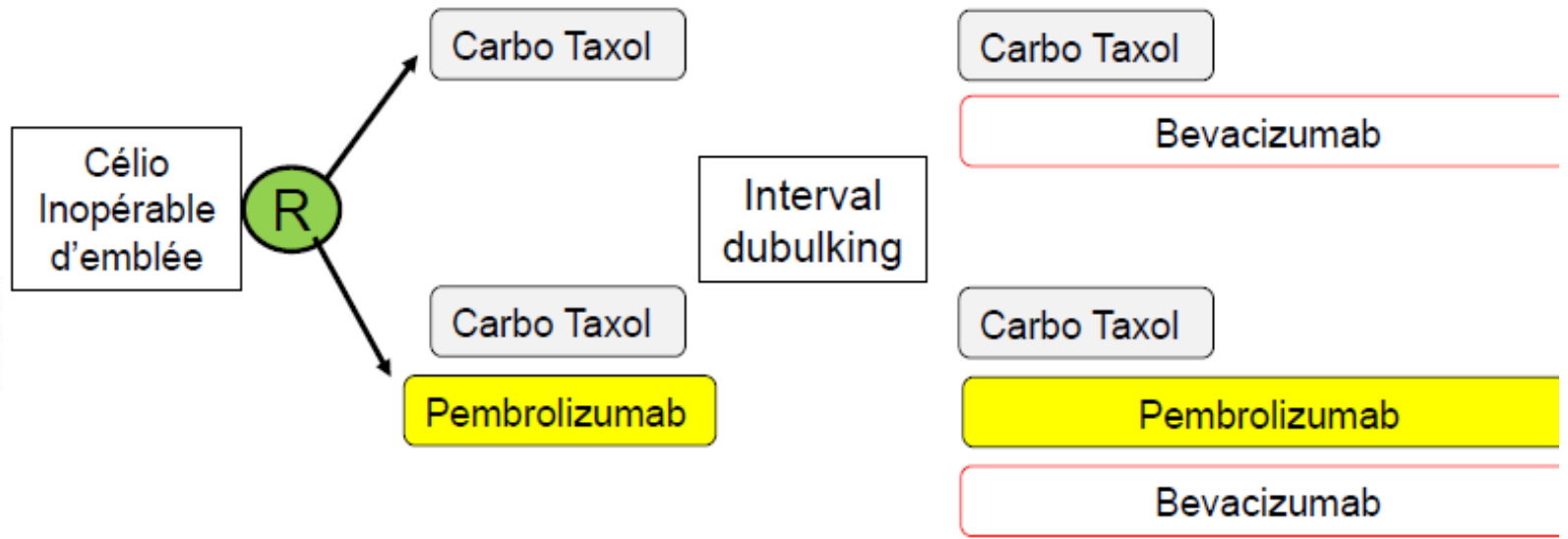
**Etude IMaGyn050**

**N=1300 pts *globally***  
**En cours de recrutement**





# NeoPembOv: Neoadjuvant chemotherapy alone or in combination with Pembrolizumab



1<sup>er</sup> essai évaluant le bénéfice d'une chimiothérapie néoadjuvante avec un anti-PD1  
Puis entretien par bevacizumab seul ou en association avec anti-PD1

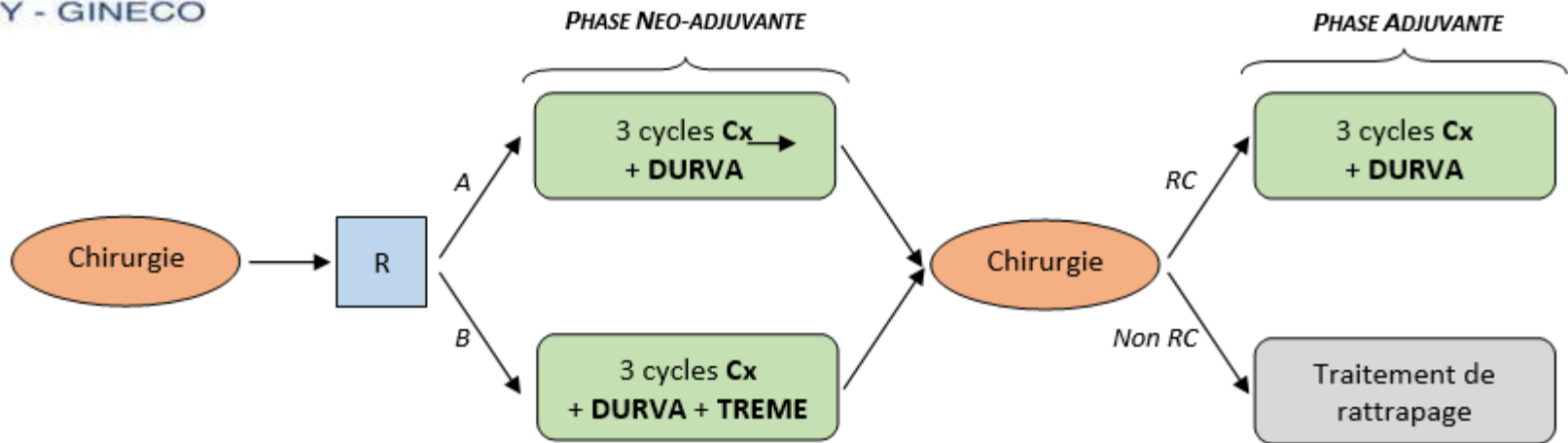




# INEOV : tester la combo immuno, modulée en fonction de la réponse



ARCAGY - GINECO



**Safety Run-in** = 6 patientes recevant 3 cycles Cx-DURVA puis 6 patientes recevant 3 cycles Cx-DURVA + TREME.

**1 cycle = 21 jours** ; Cx = carboplatine + paclitaxel ; DURVA = Durvalumab ; TREME = Tremelimumab.

**Traitement de rattrapage** : • Dans le bras A, addition de Tremelimumab, chirurgie après 3 nouveaux cycles et entretien avec Durvalumab + Tremelimumab.

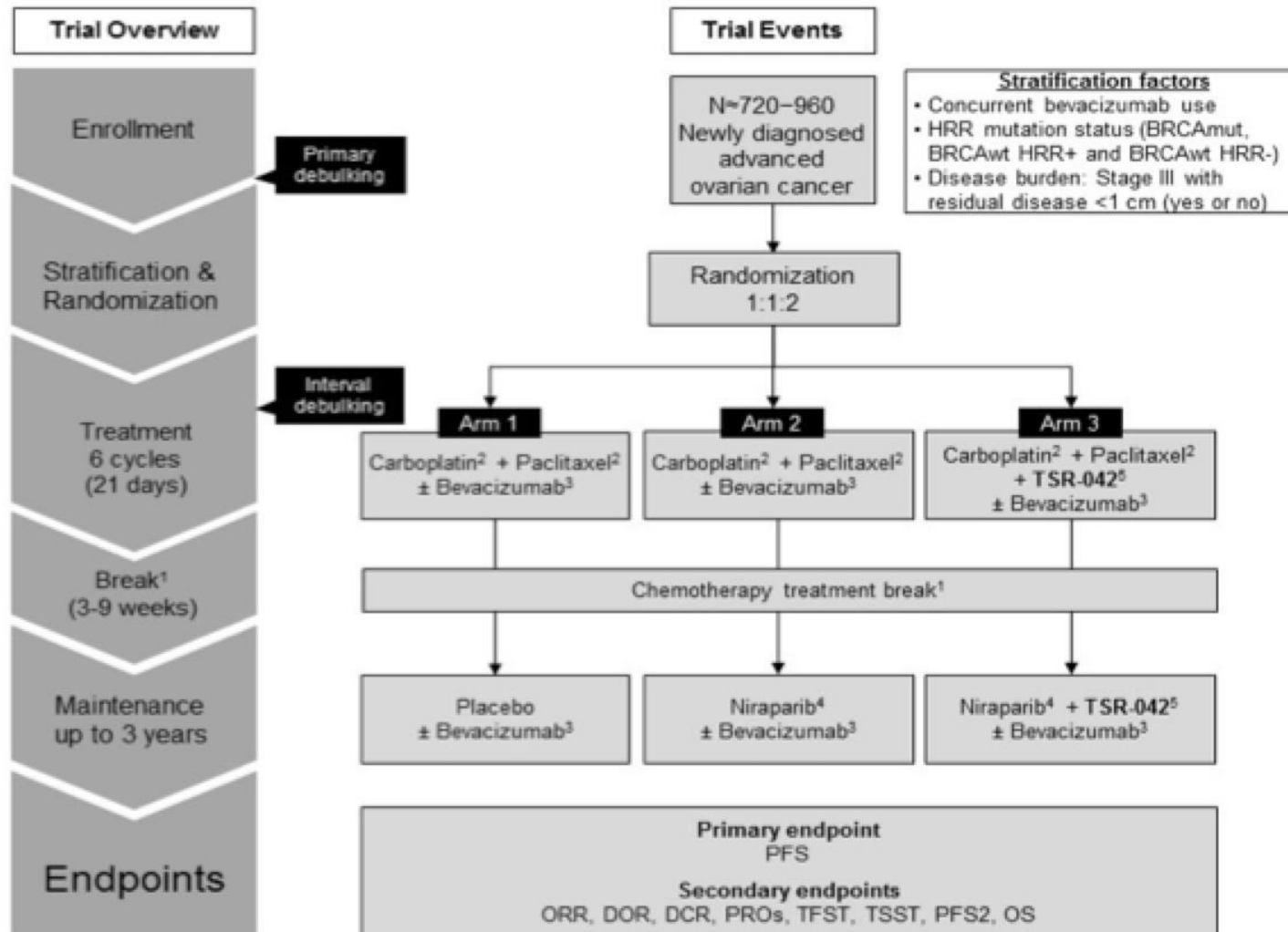
• Dans le bras B, traitement selon l'investigateur, y compris avec du bevacizumab.



# Combiner AA-Immuno- Inh de Parp



## Etude First





# Conclusions

- **Les traitements médicaux s'intensifient**
- **Les traitements médicaux se diversifient**
- **Marche arrière sur la personnalisation des traitements médicaux sur la biologie**



- **Toujours à la recherche de traitements à la carte**