

# The emerging role of maintenance therapy?

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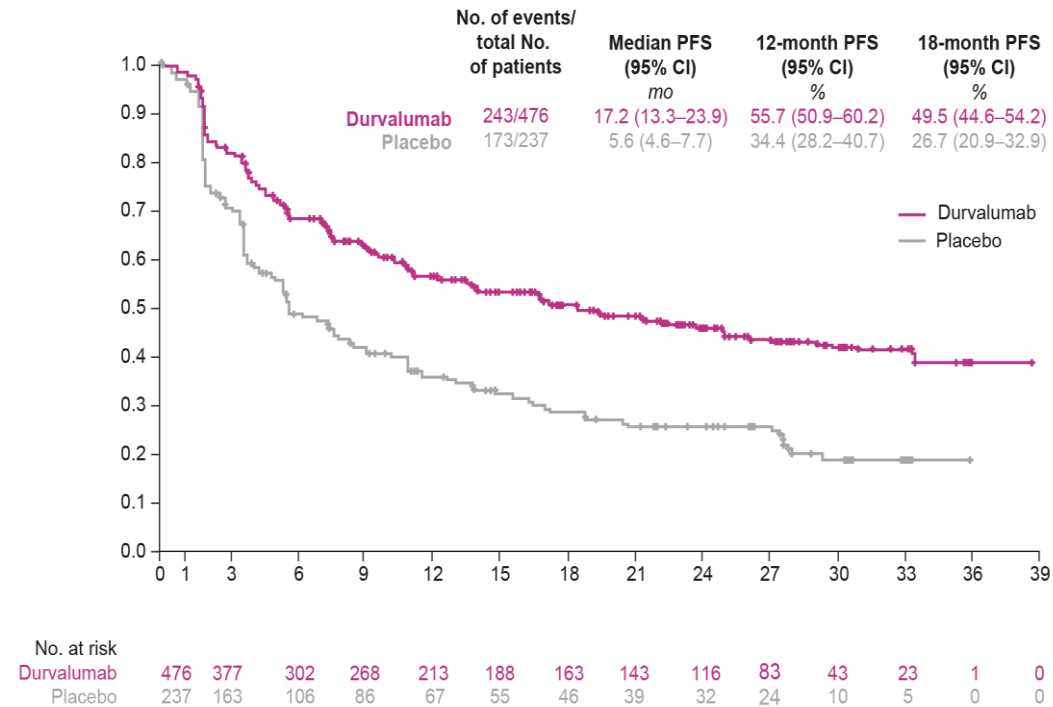
# Conflicts of interest

Type of affiliation / financial interest	Name of commercial company
Research funding, speaker and advisory honoraria	Astellas
Research funding, speaker and advisory honoraria	AstraZeneca
Speaker and advisory honoraria, travel support	Bayer
Speaker and advisory honoraria, travel support	BMS
Research funding	Exelixis
Speaker and advisory honoraria, travel support	Ipsen
Speaker and advisory honoraria, travel support	Janssen
Speaker and advisory honoraria, travel support	Merck Serono
Speaker and advisory honoraria, travel support	MSD
Research funding, speaker and advisory honoraria	Novartis / AAA
Research funding, speaker and advisory honoraria	Pfizer
Research funding, speaker and advisory honoraria	Roche
Advisory honoraria	Seagen

# Maintenance therapy: not a new idea

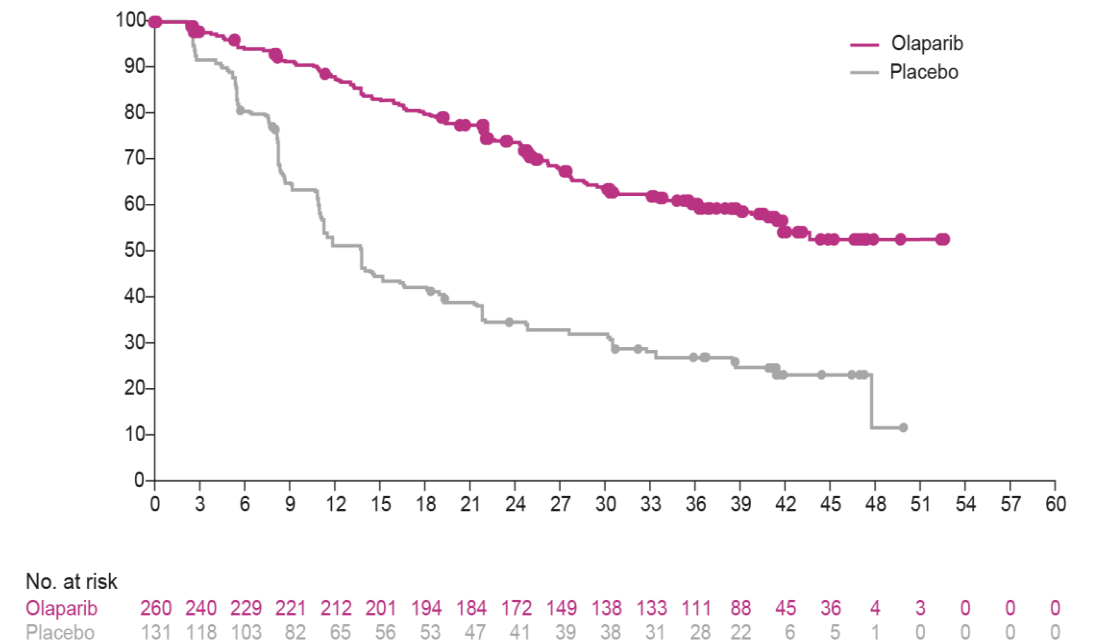
## PFS in patients with stage III NSCLC<sup>1</sup>

(receiving durvalumab or placebo following chemoradiotherapy)\*



## PFS in patients with advanced ovarian cancer with a mutation in *BRCA1* and/or *BRCA2*<sup>2</sup>

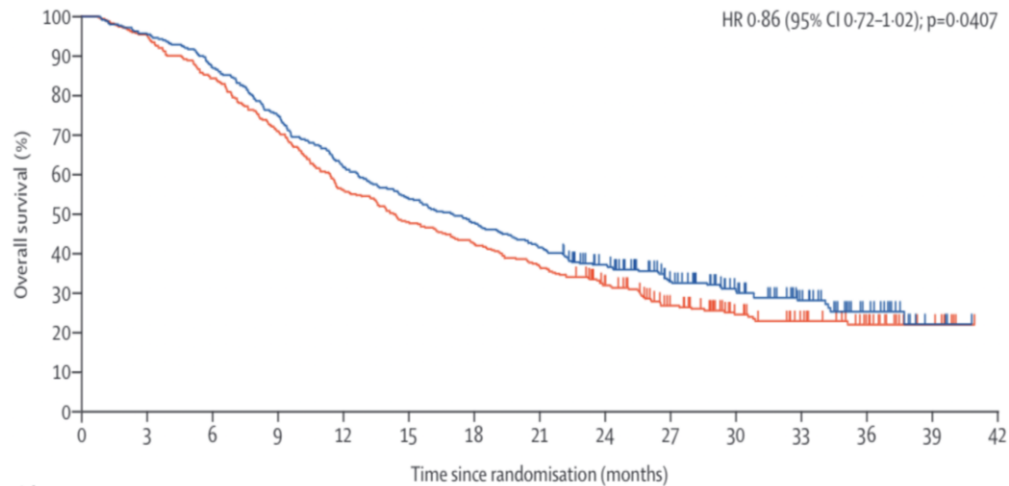
(receiving olaparib or placebo following platinum-based CT)<sup>†</sup>



1. Antonia SJ et al. *N Engl J Med* 2018;379:2342–2350. Supplementary appendix; 2. Moore K et al. *N Engl J Med* 2018;379:2495–2505.

# Maintenance immunotherapy in urothelial cancer

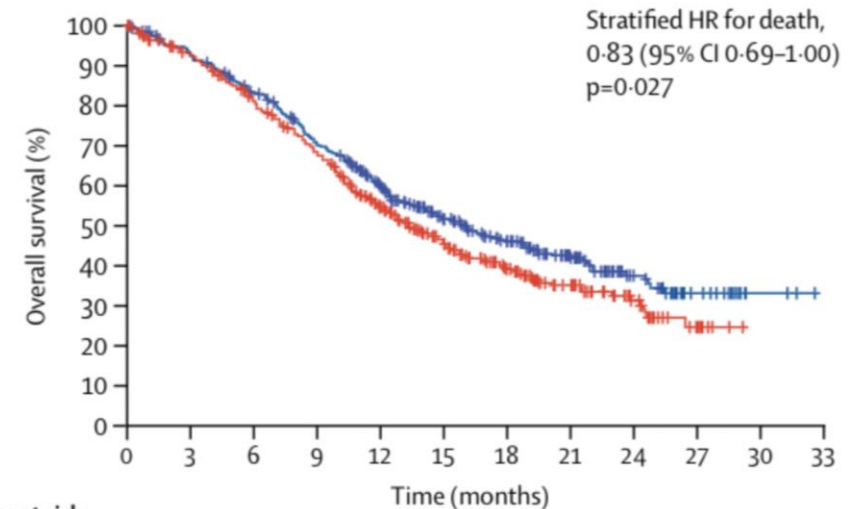
## Keynote-361



Number at risk  
(number censored)

Pembrolizumab plus chemotherapy	351 (0)	335 (0)	306 (0)	263 (0)	217 (0)	189 (0)	168 (0)	146 (0)	118 (13)	84 (35)	56 (58)	36 (74)	17 (90)	3 (103)	0 (106)
Chemotherapy	352 (0)	335 (0)	297 (0)	250 (0)	197 (0)	169 (0)	150 (0)	129 (0)	104 (9)	71 (27)	46 (47)	33 (57)	20 (69)	7 (82)	0 (89)

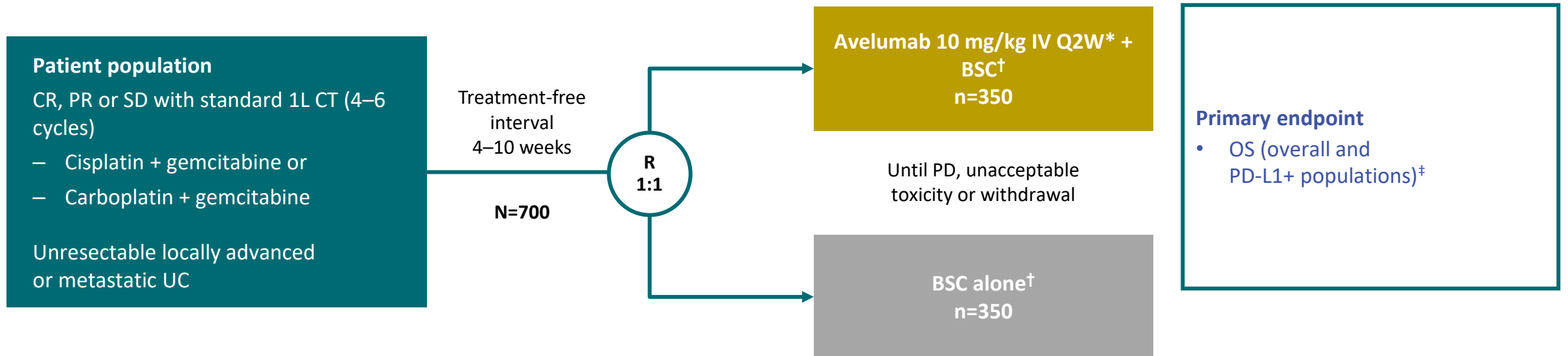
## ImVigor 130



Number at risk  
(number censored)

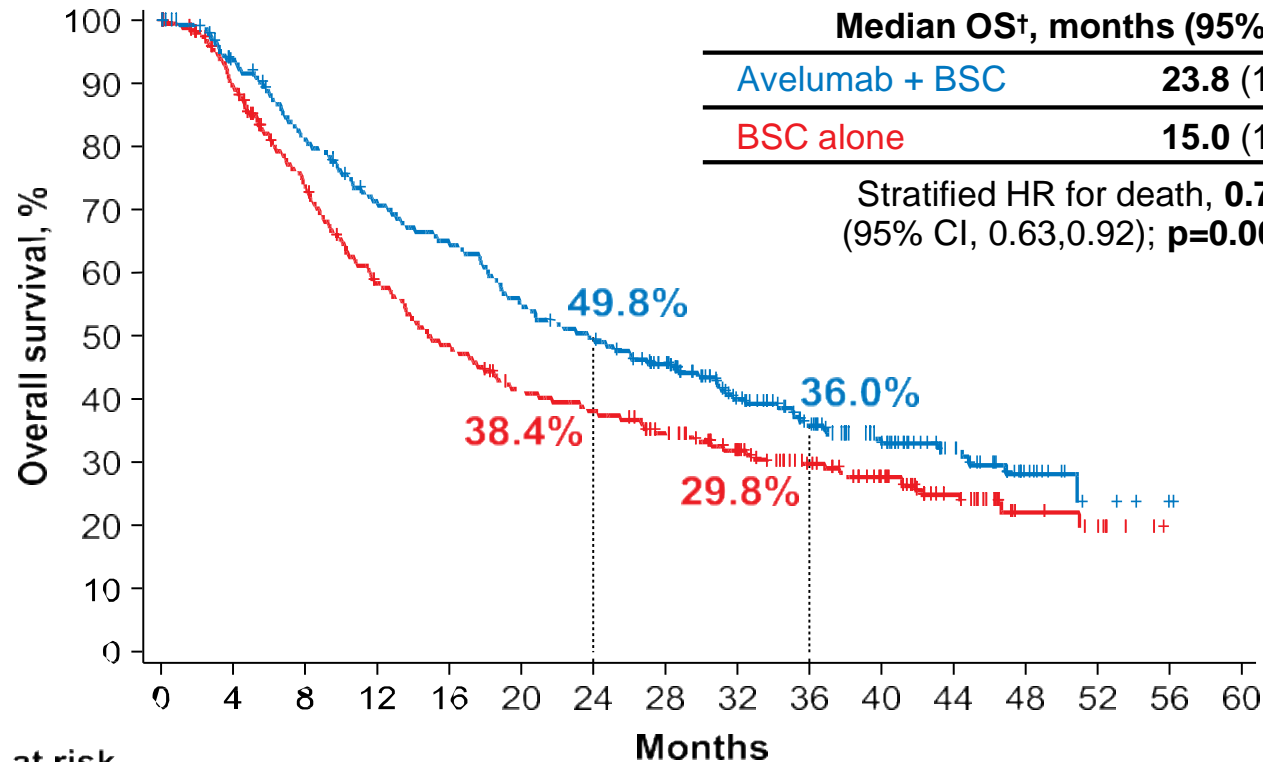
Atezolizumab + platinum-based chemotherapy (group A)	451 (0)	408 (11)	360 (17)	301 (23)	229 (51)	163 (88)	117 (118)	72 (154)	36 (184)	16 (200)	3 (213)	NE
Placebo + platinum-based chemotherapy (group C)	400 (0)	359 (13)	308 (19)	255 (24)	182 (48)	123 (79)	79 (108)	49 (131)	25 (151)	8 (164)	NE	NE

# Javelin-100



# Javelin-100

## OS, ITT population: primary endpoint<sup>1</sup>

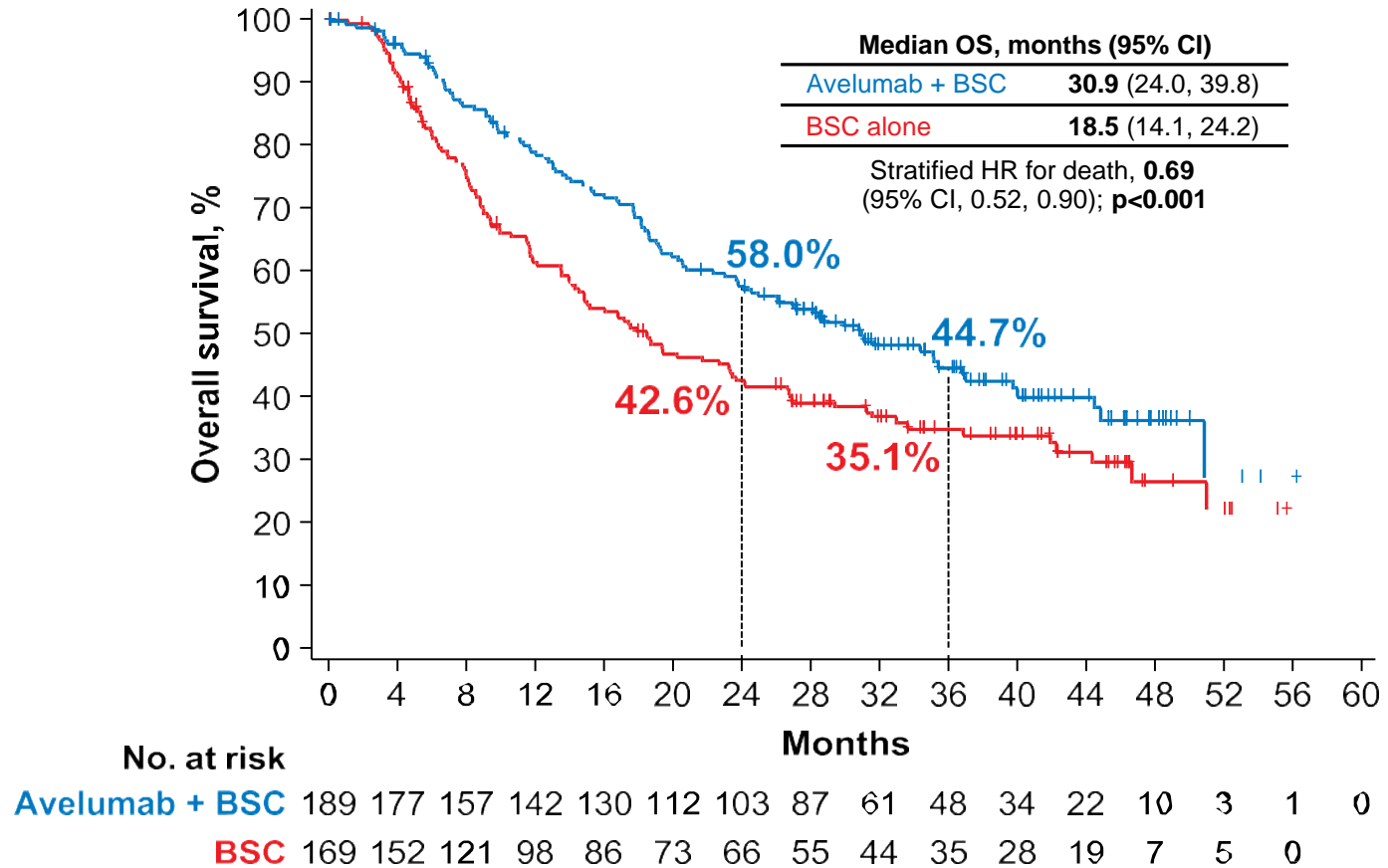


No. at risk	0	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
<b>Avelumab + BSC</b>	350	318	274	237	216	183	164	140	99	74	53	31	13	4	1	0
<b>BSC</b>	350	304	243	190	158	131	121	103	82	62	46	27	10	7	0	0

1. Avelumab SPC ([www.medicines.org.uk](http://www.medicines.org.uk) accessed April 2021)

# Javelin-100

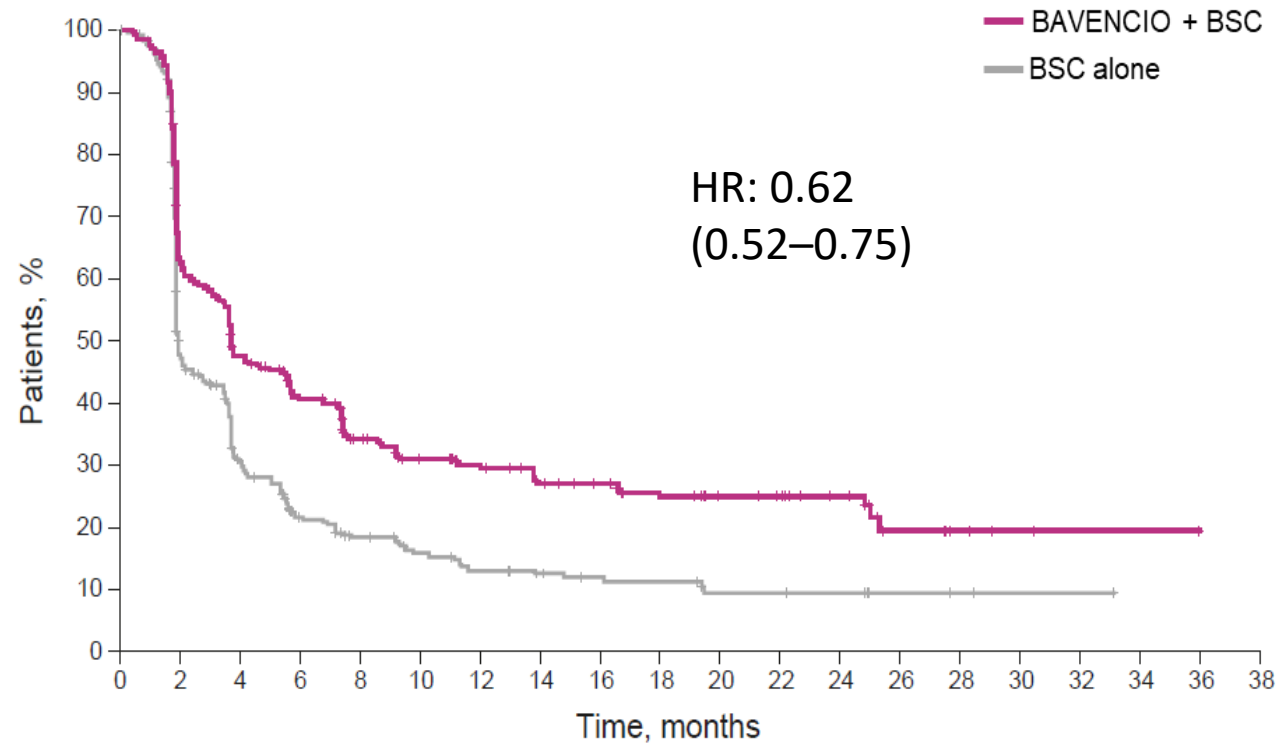
## OS (PD-L1-positive tumour population): primary endpoint<sup>1</sup>



1. Avelumab. SPC ([www.medicines.org.uk](http://www.medicines.org.uk) accessed April 2021)

# Javelin-100

## PFS (overall population): secondary endpoint

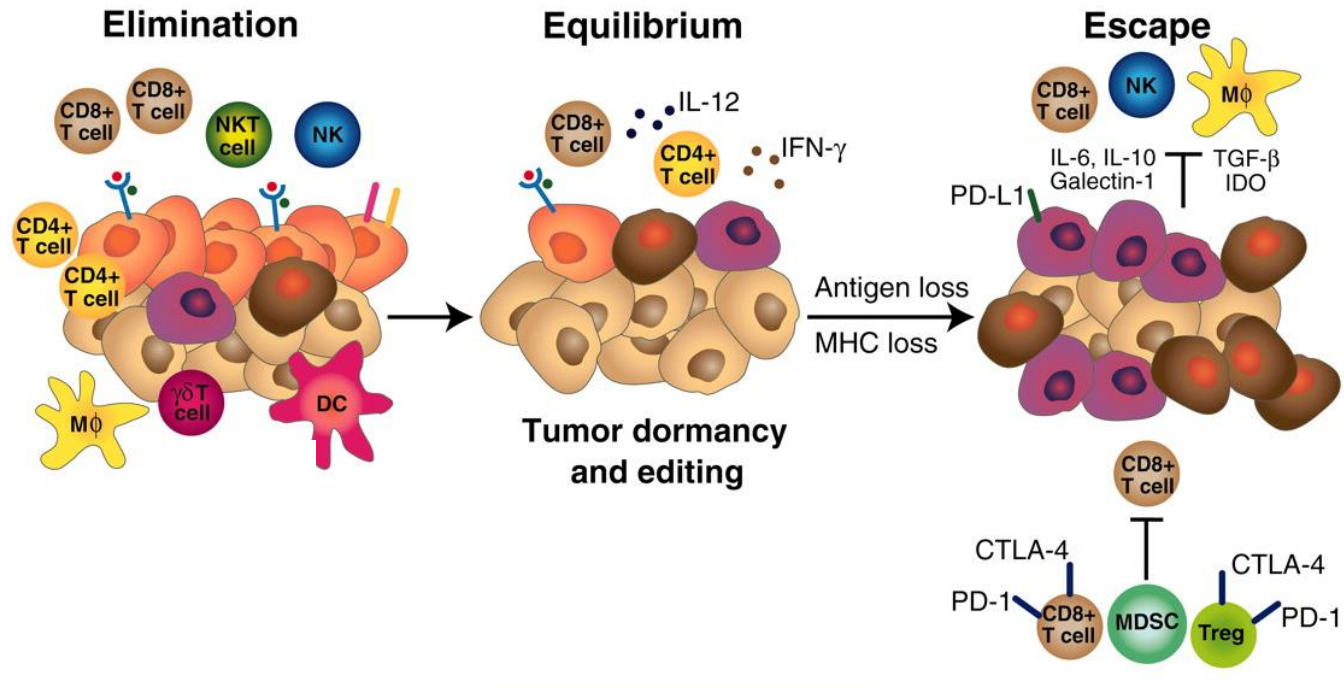


No. at risk	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Avelumab + BSC	350	198	145	118	90	72	59	49	45	34	27	25	17	9	4	2	1	1	0
BSC alone	350	144	87	52	39	31	24	20	17	16	10	10	7	3	2	1	1	0	0

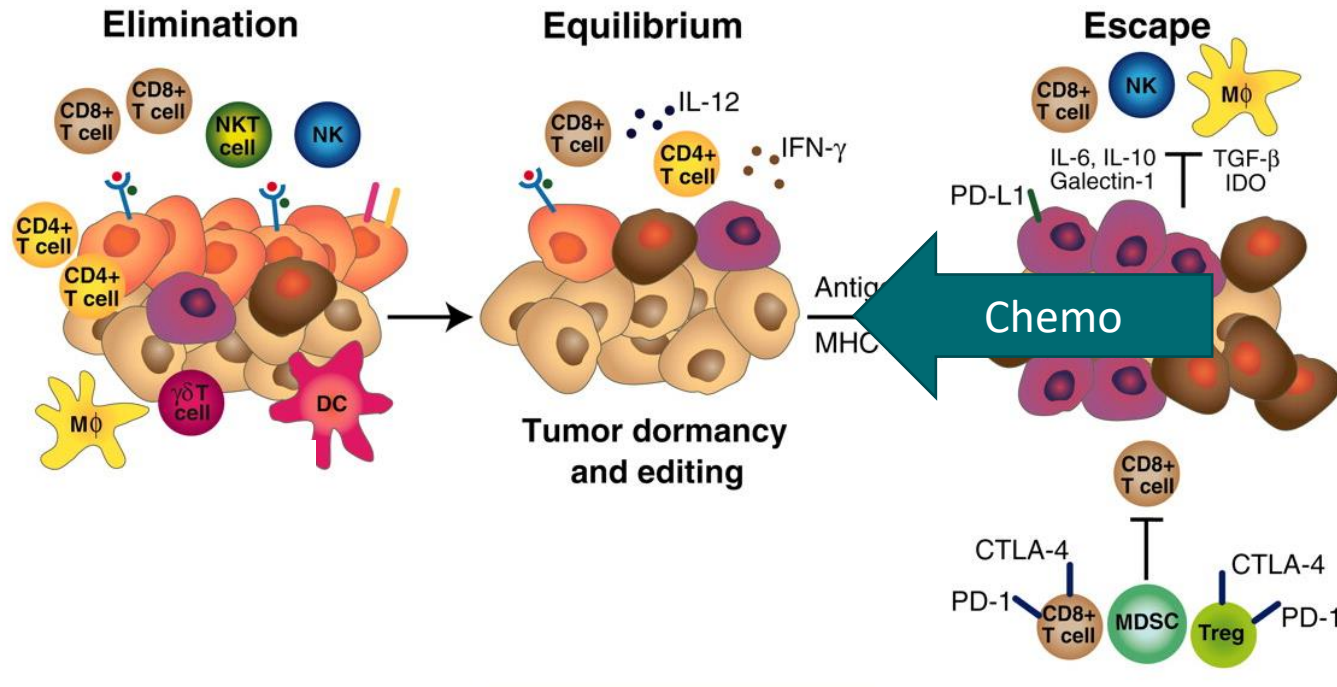
Powles T et al. *N Engl J Med* 2020;383:1218–1230.



# Why maintenance immunotherapy?



# Why maintenance immunotherapy?



- Chemo causes immunogenic cell death
- Depletion of immunosuppressive stroma
- Chemo increases antigen load of tumour
- Function of patient selection and early treatment

# Javelin-100

## Subsequent cancer therapy<sup>†2,3</sup>

Therapy	Overall population		Subgroup who discontinued study therapy due to PD	
	avelumab + BSC (n=350)	BSC alone (n=350)	avelumab + BSC (n=189)	BSC alone (n=263)
<b>Discontinued and received subsequent drug therapy, %</b>	<b>42.3</b>	<b>61.7</b>	<b>70.4</b>	<b>75.3</b>
PD-L1/PD-1 inhibitor	6.3	43.7	9.0	52.9
Fibroblast growth factor receptor inhibitor	2.6	2.3	4.8	3.0
Any other drug	40.0	34.0	67.2	41.8
<b>Discontinued with no subsequent drug therapy, %</b>	<b>33.4</b>	<b>30.9</b>	<b>29.6</b>	<b>24.7</b>
<b>Study treatment ongoing, %</b>	<b>24.3</b>	<b>7.4</b>	–	–

1. Powles T et al. *N Engl J Med* 2020;383:1218–1230;

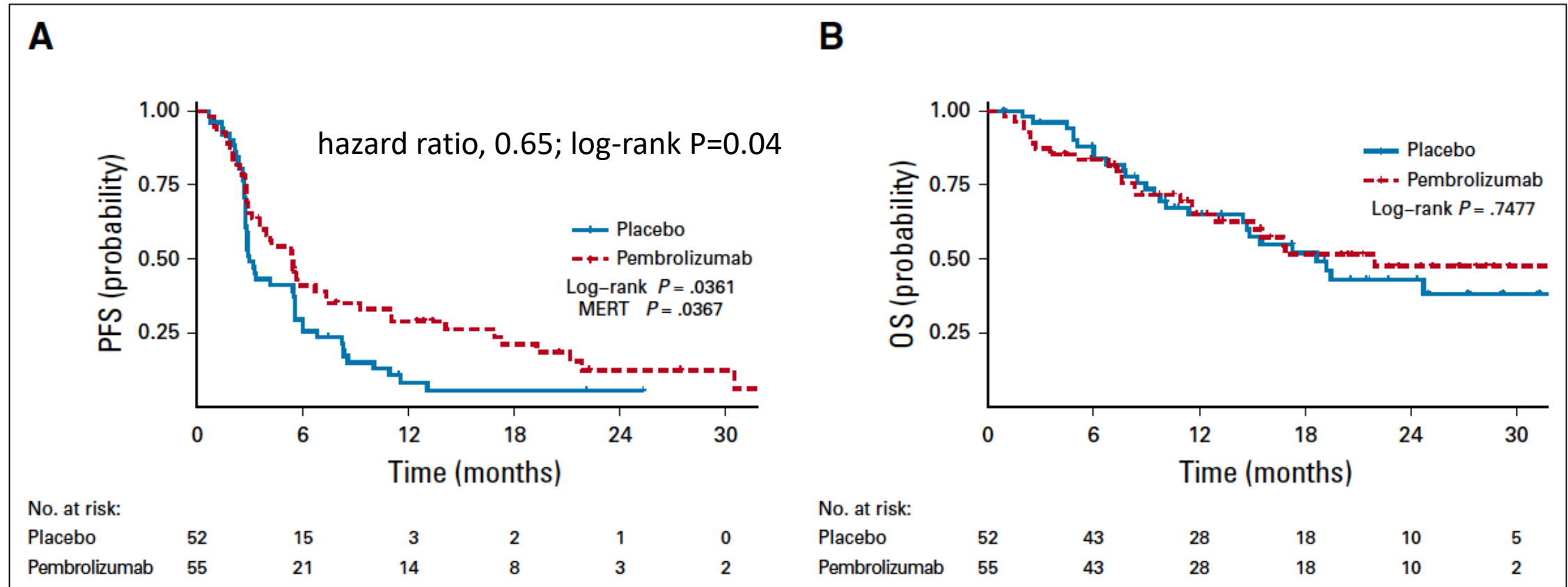
# Javelin-100

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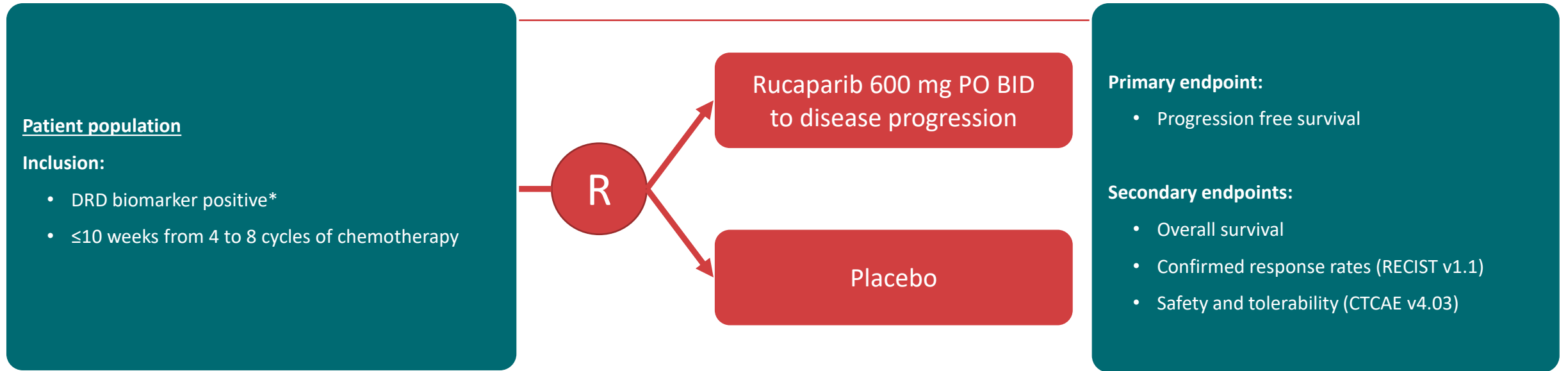
1. Powles T et al. *N Engl J Med* 2020;383:1218–1230;

# Maintenance pembrolizumab: randomized phase II



**FIG 2.** Kaplan-Meier curves for (A) progression-free survival (PFS), and (B) overall survival (OS) in patients treated with pembrolizumab versus placebo (N = 107). MERT, maximum efficiency robust test.

# Rucaparib maintenance in patient with DNA repair defects

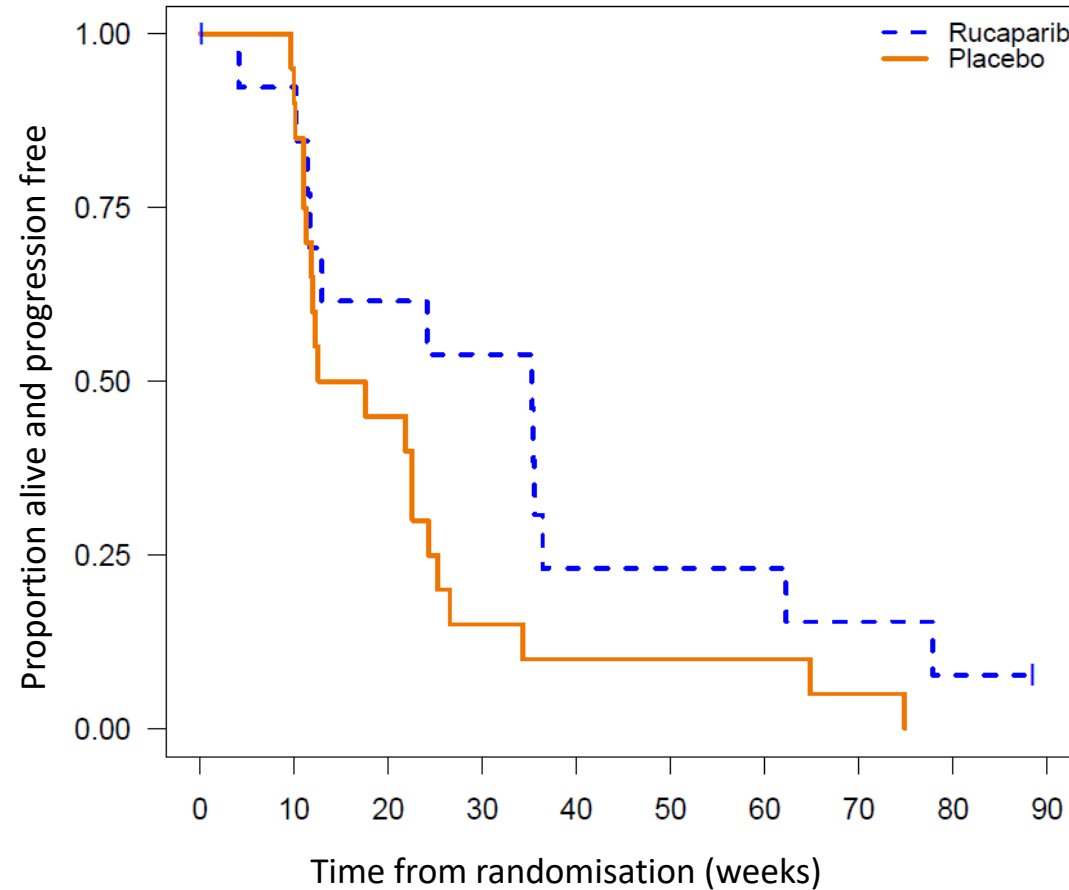


\* DRD biomarker 'positive' defined as one, or more, of the following:

- ≥10% genome-wide loss of heterozygosity
- Somatic alteration in any of: *ATM*, *BARD1*, *BRCA1*, *BRCA2*, *BRIP1*, *CDK12*, *CHEK2*, *FANCA*, *NBN*, *PALB2*, *RAD51*, *RAD51B*, *RAD51C*, *RAD51D*, *RAD54L*
- Known germline *BRCA1* or *BRCA2* alteration

Somatic tumour testing utilised the FoundationOne next-generation sequencing assay, <https://www.foundationmedicine.com/test/foundationone-cdx>

# Rucaparib maintenance in patient with DNA repair defects

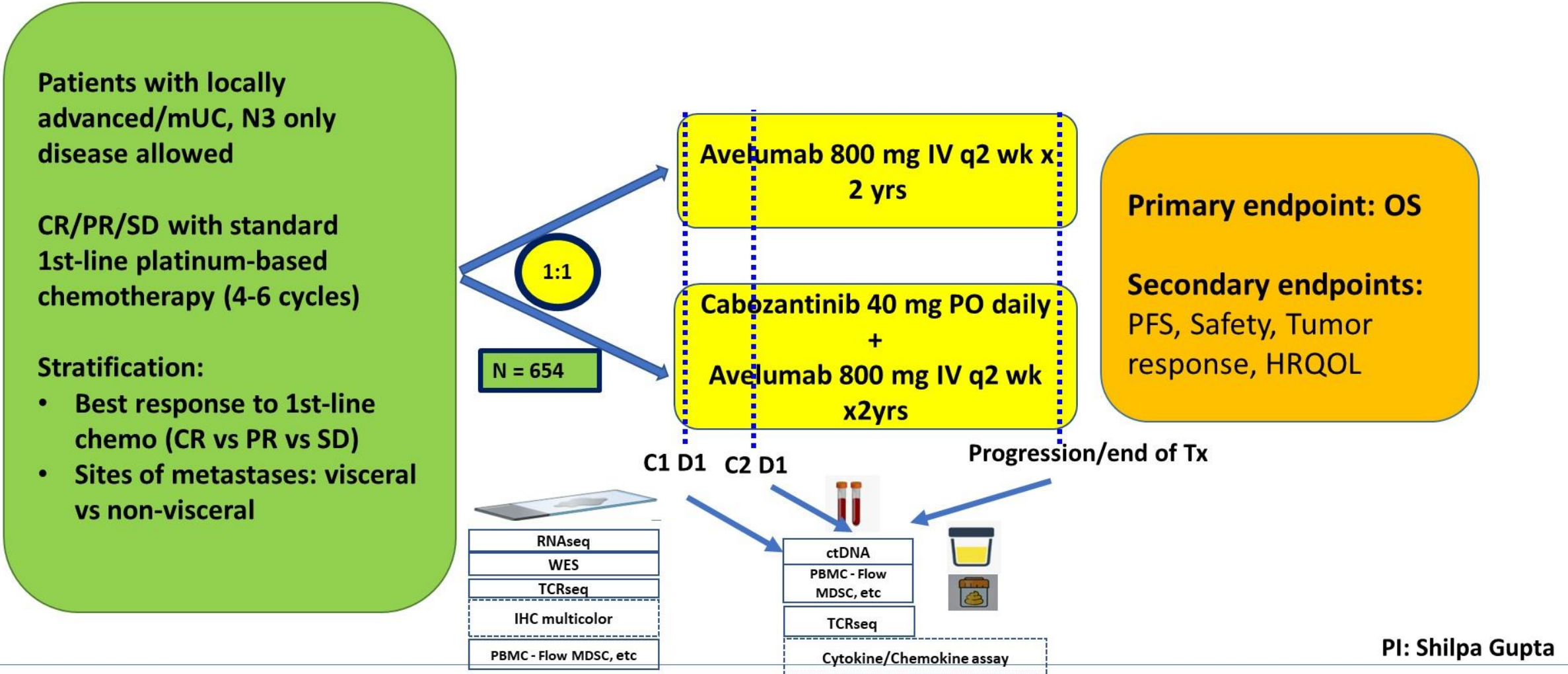


hazard ratio 0.53, 80% CI 0.30-0.92, 1 sided p=0.07

Number at risk:

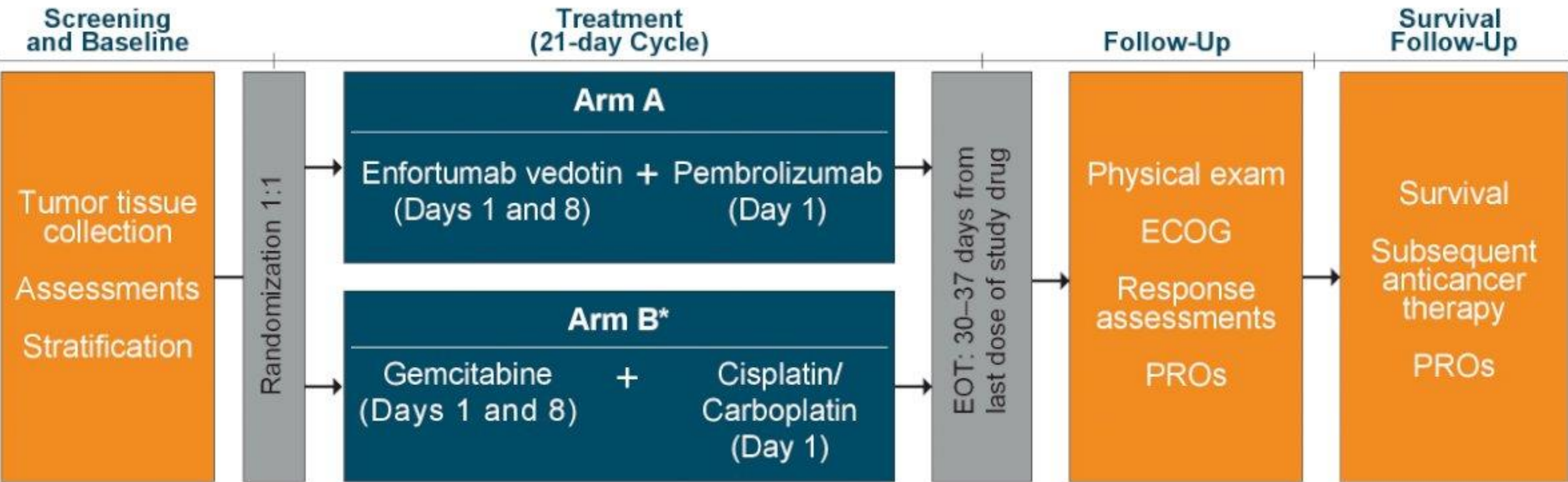
Rucaparib	20	12	8	7	3	3	3	2	1	0
Placebo	20	19	9	3	2	2	2	1	0	0

# MAINCAV- Phase III randomized trial of maintenance cabozantinib and avelumab vs maintenance avelumab after 1L platinum-based chemotherapy in patients with mUC (NCT05092958)





# EV-302/Keynote-A39 Study Design



# Summary

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- Maintenance therapy is now a part of standard first line treatment
- The underlying mechanism is unclear
- Patient needs during this phase are paramount
- But new treatments, given until progression, may displace maintenance