## Use of Bevacizumab for Patients with FIGO Stage IIIB to IV Epithelial Ovarian Cancer undergoing Primary Debulking Surgery and its Association with Oncologic Outcomes: A German Cancer Registry Study (69P)



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## Background

- Although Bevacizumab has been approved since many years as first-line treatment for stage IIIB-IV EOC, usage of bevacizumab in clinical routine is still controversially debated because of conflicting evidence.
- We aimed to evaluate the use of bevacizumab for patients with FIGO stage IIIB to IV advanced epithelial ovarian cancer (EOC) undergoing primary debulking surgery (PDS) in the primary disease setting using real-world data from a German cancer registry.

## Results

• A total of 835 patients with a median follow-up of 25.1 months were identified.

### Fig. 2: Multivariate Cox regression analysis and Kaplan Meier plots for overall survival



## Methods

- We identified patients with the initial diagnosis of FIGO stage IIIB to IV EOC, reported between 2009 and 2022 within the Baden-Württemberg cancer registry (BWCR), Germany
- The influence of Bevacizumab in addition to Carboplatin and Paclitaxel (Cb+T+Bev vs. Cb+T) on progression-free survival (PFS) and overall survival (OS) was assessed using Kaplan-Meier statistics and multivariate Cox regression models (adjusted for age, grading, stage, tumor histology, use of poly adenosine diphosphate [ADP]–ribose polymerase (PARP) inhibitor, and PDS outcome (macroscopic complete gross resection, residual disease ≤1cm and >1cm).



\* R0 / R1 / R2 refers to the global R status in the registry, which is equivalent to complete gross resection / <1cm residual disease / >1cm residual disease

#### Fig. 3: Multivariate Cox regression analysis and Kaplan Meier plots for PFS



PFS. All groups



CP	BCP	CP	BCP
n= <b>263</b>	n= <b>205</b>	n= <b>137</b>	n= <b>130</b>

#### Fig. 1: Flow Chart

	Overall	Cb+T+Bev	Cb+T	P value
Total — no. (%)	835	335 (40.1)	500 (59.9)	
Age — mean (SD)	62.22 (11.34)	60.46 (11.58)	63.41 (11.04)	<0.001
Stage — no. (%)				0.610
•	541 (64.8)	221 (66.0)	320 (64.0)	
• IV	294 (35.2)	114 (34.0)	180 (36.0)	
Histology — no. (%)				0.737
• adenocarcinoma	19 (2.3)	6 (1.8)	13 (2.7)	
• serous	689 (84.0)	279 (84.5)	410 (83.7)	
• other	112 (13.7)	45 (13.6)	67 (13.7)	
Grading — no. (%)				0.471
•  -	89 (11.0)	32 (9.9)	57 (11.8)	
•	720 (89.0)	292 (90.1)	428 (88.2)	
PARP therapy — no. (%)				0.025
• no	612 (73.3)	231 (69.0)	381 (76.2)	
• yes	223 (26.7)	104 (31.0)	119 (23.8)	
Residual disease — no. (%)				0.023
complete gross     resection	468 (56.0)	205 (61.2)	263 (52.6)	
<ul> <li>≤1cm residual disease</li> </ul>	181 (21.7)	70 (20.9)	111 (22.2)	
<ul> <li>&gt;1cm residual disease</li> </ul>	186 (22.3)	60 (17.9)	126 (25.2)	

status	R0	reference	÷					Time [montins]
	(N=398) R1	1.74					-0.001 ***	Number at risk, N(%)
	(N=150) B2	(1.39 - 2.2) 2.02					0.001	
	(N=146)	(1.60 - 2.5)			-		<0.001	
Events: 496; Glo	obal p-value (Log-Ra	nk): 5.2523e-14						
IC: 5662.67; Coi	ncordance Index: 0.6	33	1	1.5	2	2.5 3		
		550	50					
		PFS.	R2					PFS. R2
erapy	CP ( <i>N=96</i> )	reference						
	BCP ( <i>N=50</i> )	0.86 (0.564 - 1.32)					0.496	
<b>P</b>	no_PARP <i>(N=103)</i>	reference						≥ 75%
	PARP (N=43)	0.48 (0.298 - 0.78)	-				0.003 **	
e	(N=146)	1.01 (0.987 - 1.02)					0.579	g 50%
ading	1-2 (N=7)	reference			-			
	3-4 (N=132)	1.82 (0.756 - 4.37)				•	0.182	≥ 25% - CP
tology	serous (N=127)	reference						p = 0.32
	adeno (N=3)	0.39 (0.089 - 1.67)		•			0.203	0 6 12 18 24 30 36 42 48 54 60 66 7
	oth <i>(N=12)</i>	1.00 (0.493 - 2.02)		·	-		0.996	Time [months]
age	III (N=78)	reference			i.			Number at risk, N(%)
	IV (N=68)	1.02 (0.679 - 1.55)			-		0.909	<b>9</b> 6 (100) 89 (93) 65 (68) 49 (51) 35 (36) 28 (29) 23 (24) 16 (17) 9 (9) 5 (5) 5 (5) 4 (4) 4 (4)
Events: 104; Glo	bal p-value (Log-Ra	nk): 0.046349						
C: 827.29; Conc	ordance Index: 0.6	0.1	0.2	0.5	1	2	5	- 50 (100) 50 (100) 47 (94) 35 (70) 25 (50) 14 (28) 10 (20) 9 (18) 6 (12) 4 (8) 2 (4) 2 (4) 1 (

\* R0 / R1 / R2 refers to the global R status in the registry, which is equivalent to complete gross resection / <1cm residual disease / >1cm residual disease

- Multivariate Cox regression analysis revealed no significant impact for the use of Cb+T+Bev on improved OS (HR 0.88, 95% CI 0.73-1.07, P=0.216) and PFS (HR 0.94, 95% CI 0.79-1.10, P=0.546)
- Also in the subgroup of patients with >1cm residual disease, Cb+T+Bev was not associated with improved OS (HR 0.90, 95% Cl 0.61-1.31, P=0.565) or PFS (HR 0.86, 95% Cl 0.56-1.32, P=0.496).

### Conclusion

**Tab 1:** Baseline clinical and patient characteristics

- This data suggests that bevacizumab is often used for patients with primary FIGO stage IIIB to IV EOC undergoing PDS although it does not provide an OS or PFS benefit.
- In the absence of RCTs (or in case of conflicting evidence from RCTs), real-world evidence from cancer registries may provide guidance for clinically-relevant questions.



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