

# A phase 1/2 study of the next-generation Nectin-4-targeting antibody–drug conjugate CRB-701 (SYS6002) in patients with recurrent or metastatic cervical cancer

Tudor-Eliade Ciuleanu, MD, PhD; Dominique Berton, MD; Gennaro Daniele, MD, PhD; Laurentia Gales, MD; Diego Tosi, MD, PhD; Giuseppe Curigliano, MD, PhD; Maria Julia Lostes, MD; Lorenzo Antonuzzo, MD; Bernard Doger de Speville, MD, PhD; Constantin Volovat, MD, PhD; Debra Josephs, MD, PhD; Guillermo Suay, MD, PhD; David Pinato, MD, PhD; Sarah Ackroyd, MD; Ivan Barrera, MD; Kurt Preugschat, MSc; Paola M Grant, PhD; Ian Hodgson, PhD; Dominic Smethurst, MD; Yohann Loriot, MD, PhD

Presented by: **Yohann Loriot, MD, PhD**

Institut Gustave Roussy, Université Paris-Saclay, Villejuif, France

# Key takeaway points

1

**CRB-701 is a next-generation Nectin-4-targeted ADC being investigated for treatment of advanced solid tumors**

2

**The most frequent TRAEs are ocular toxicities, which are largely manageable and reversible with dose modifications and prophylactic measures**

3

**CRB-701 monotherapy produces notable antitumor responses (cORR, DoR, PFS) in patients with cervical cancer**

ADC, antibody–drug conjugate; cORR, confirmed objective response rate; DoR, duration of response; PFS, progression-free survival; TRAE, treatment-related adverse event

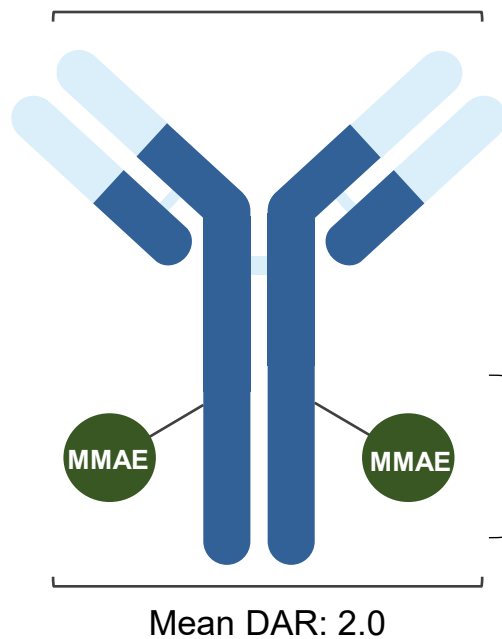
# Background

- **Cervical cancer** is the **fourth most common** cancer in women globally (approximately 660,000 cases/year) and has a disproportionate burden in low- and middle-income countries<sup>1,2</sup>
- Prognosis is strongly stage-dependent, with **5-year relative survival rates** of approximately **92%** and **21%** for **localized disease** and **distant metastatic disease**, respectively<sup>3</sup>
- **Nectin-4 (PVRL4) expression** has been detected in approximately **80–90% of cervical cancers**, particularly in advanced or recurrent lesions, making it a promising therapeutic target<sup>4</sup>

1. Sung H *et al.* *CA Cancer J Clin* 2021;71(3):209–49; 2. World Health Organization (WHO). 2025. [www.who.int/news-room/fact-sheets/detail/cervical-cancer](http://www.who.int/news-room/fact-sheets/detail/cervical-cancer) (Accessed April 21, 2026); 3. National Cancer Institute. <https://seer.cancer.gov/statfacts/html/cervix.html> (Accessed April 21, 2026); 4. Zhai C *et al.* *Front Oncol* 2024;14:1395784

# Background

Anti-human Nectin-4 mAb



**CRB-701** is a **next-generation Nectin-4-targeted MMAE-based ADC<sup>1</sup>**

Cathepsin-B-cleavable linker conjugated via site-specific mTGase technology, forming a stable isopeptide bond

**CRB-701** appears to have a **differentiated safety, efficacy and PK profile** compared with published data for other agents in the same class<sup>1-5</sup>

- Previously presented results from the **ongoing phase 1/2 CRB-701-01 study** (NCT06265727) of CRB-701 in patients from Europe and the USA who have advanced solid tumors have demonstrated:<sup>1</sup>
  - A **manageable safety profile** with keratitis, alopecia, fatigue, anemia and dysgeusia being the most commonly occurring TRAEs
  - **Antitumor responses** in patients with **high and low levels of Nectin-4** expression (measured by IHC), regardless of tumor type
  - **Encouraging efficacy** signals in a relatively small number of heavily **pretreated patients with cervical cancer** who were treated with CRB-701 2.7 mg/kg or 3.6 mg/kg Q3W (N = 37)

1. Perez C *et al.* European Society for Medical Oncology Congress, 2025. Poster; 2. Astellas Pharma. Summary of product characteristics, enfortumab vedotin. EMA, 2024. [https://www.ema.europa.eu/en/documents/product-information/padcev-epar-product-information\\_en.pdf](https://www.ema.europa.eu/en/documents/product-information/padcev-epar-product-information_en.pdf) (Accessed May 8, 2026); 3. Zhang J *et al.* *Ann Oncol* 2025;36:934-43; 4. Swiecicki PL *et al.* *J Clin Oncol* 2025;43:578-88; 5. Powles T *et al.* *N Engl J Med* 2021;384:1125-35  
ADC, antibody-drug conjugate; DAR, drug:antibody ratio; IHC, immunohistochemistry; mAb, monoclonal antibody; MMAE, monomethyl auristatin E; mTGase, microbial transglutaminase; PK, pharmacokinetics; TRAE, treatment-related adverse event; Q3W, every 3 weeks

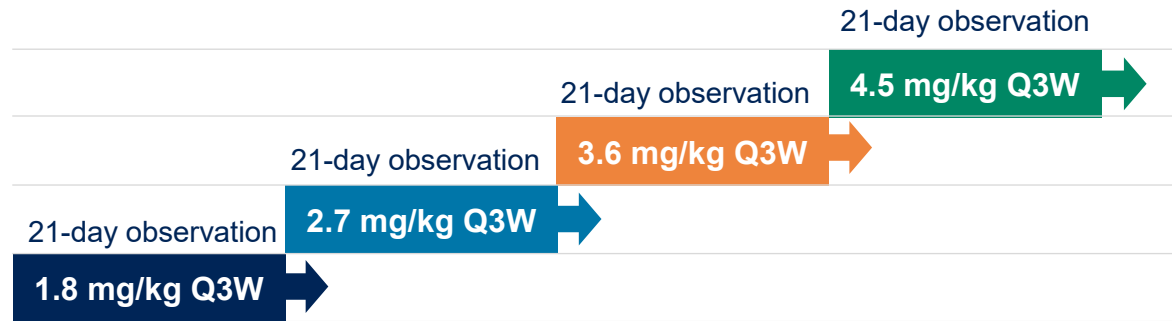
# Objective

- This presentation provides **updated and expanded safety and efficacy data** from an additional 35 patients with cervical cancer (total N = 72) who were treated with CRB-701 at 2.7 mg/kg and 3.6 mg/kg Q3W in the CRB-701-01 study
- The updated analysis includes data from an additional **6 months of follow-up**, with cORR, DoR and PFS assessed

cORR, confirmed objective response rate; DoR, duration of response; PFS, progression-free survival; Q3W, every 3 weeks

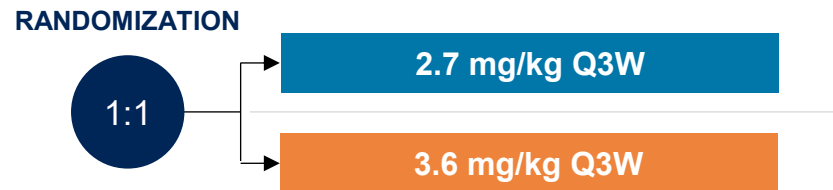
# Methods

## Dose escalation (part A): Bayesian Optimal Interval design



Dose escalation/de-escalation decisions were made based on the occurrence of DLTs

## Dose optimization (part B): time-to-event Bayesian Optimal Phase 2 design



Dose levels in part B were defined by the pharmacologically active dose range identified in part A

## Patient population

- Recurrent or metastatic cervical cancer
- Had received  $\geq 1$  line of therapy
- No previous exposure to Nectin-4-targeted or MMAE-based therapies
- All patients with cervical cancer treated with CRB-701 2.7 mg/kg and 3.6 mg/kg Q3W during dose escalation and optimization were included

## Endpoints

- **Part A:** Occurrence of DLTs (primary endpoint)
  - Safety, cORR, DoR, PFS (secondary endpoints)
- **Part B:** cORR (primary endpoint)
  - DoR, PFS, safety (secondary endpoints)

cORR, confirmed objective response rate; DLT, dose-limiting toxicity; DoR, duration of response; MMAE, monomethyl auristatin E; PFS, progression-free survival; Q3W, every 3 weeks

# Patient disposition

## Safety Population

All patients who have received  $\geq 1$  dose of CRB-701 (includes patients with a range of cytologically and/or histologically confirmed tumor types)

## Patients with cervical cancer

Patients with cytologically and/or histologically confirmed cervical cancer who received  $\geq 1$  dose of CRB-701

## Efficacy Population

Patients with measurable disease at baseline who received CRB-701 2.7 mg/kg or 3.6 mg/kg Q3W and had  $\geq 1$  post-treatment assessment



N = 317



N = 72



n = 70

Non-evaluable patients who did not have a post-baseline assessment scan<sup>a</sup>  
n = 2

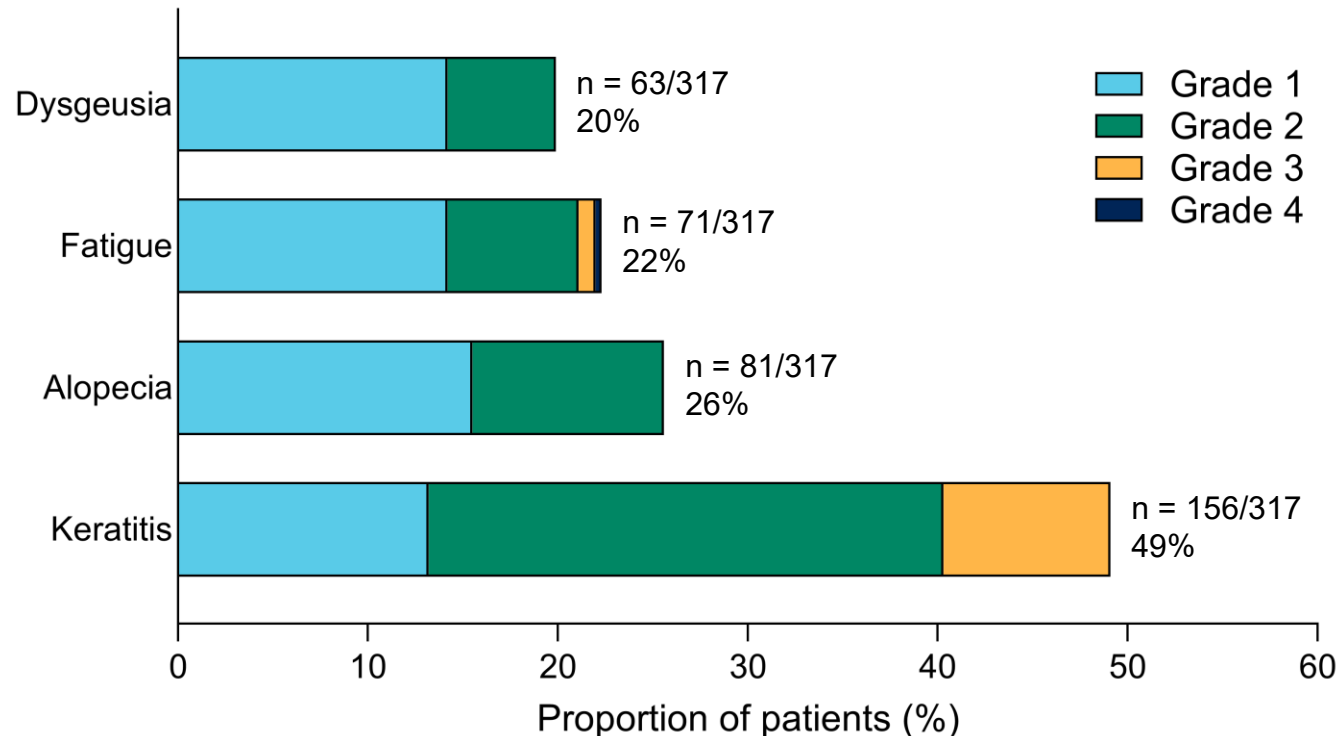
Q3W, every 3 weeks

# Overall safety profile



Safety Population  
N = 317

## Treatment-related adverse events occurring in $\geq 20\%$ of patients by maximum CTCAE grade (v5.0)<sup>1</sup>



- Keratitis was the most frequently reported TRAE, occurring in **49%** of patients
- Fewer than **10%** of patients experienced grade 3 keratitis; no grade 4 or 5 keratitis events were reported<sup>a</sup>
- The updated safety profile of CRB-701 remained consistent with previously reported data<sup>2</sup>
- The safety profile in patients with cervical cancer (N = 72) was similar to that observed in the overall Safety Population

Patients with multiple events of the same type are counted once at the highest grade. <sup>a</sup>Grade 1 = asymptomatic; clinical diagnostic observations only; intervention not indicated. Grade 2 = symptomatic; moderate decrease in visual acuity (best corrected visual acuity 20/40 and better or 3 lines or less decreased vision from known baseline). Grade 3 = symptomatic with marked decrease in visual acuity (best corrected visual acuity worse than 20/40 or more than 3 lines of decreased vision from known baseline, up to 20/200); corneal ulcer; limiting self care activities of daily life. Grade 4 = perforation; best corrected visual acuity of 20/200 or worse in the affected eye. CTCAE, Common Terminology Criteria for Adverse Events; TRAE, treatment-related adverse event. 1. U.S. Department of Health and Human Services. 2017. <https://dctd.cancer.gov/research/ctep-trials/for-sites/adverse-events/ctcae-v5-5x7.pdf> (Accessed May 6, 2026); 2. Perez C *et al.* European Society for Medical Oncology Congress, 2025. Poster

# Ocular toxicity



Patients with  
cervical cancer  
N = 72

## Ocular toxicity, extent of drug exposure and dose modifications in patients with cervical cancer

Characteristic	2.7 mg/kg (n = 38)	3.6 mg/kg (n = 34)	Overall (N = 72)
<b>Treatment-related keratitis, n (%)</b>			
All grades <sup>1,a</sup>	15 (39.5)	27 (79.4)	42 (58.3)
Grade 1	5 (13.2)	3 (8.8)	8 (11.1)
Grade 2	8 (21.1)	21 (61.8)	29 (40.3)
Grade 3	2 (5.3)	3 (8.8)	5 (6.9)
<b>Extent of drug exposure</b>			
Duration of exposure, <sup>b</sup> days, median (range)	64.0 (23.0–178.0)	106.5 (23.03–189.0)	83.5 (23.0–185.0)
Relative dose intensity, <sup>c</sup> %, median (range)	97.7 (85.7–100.0)	86.2 (70.2–98.8)	96.1 (79.7–100.0)
<b>Dose modification due to ocular toxicity, n (%)</b>			
Discontinuation	0	3 (8.8)	3 (4.2)
Reduction	4 (10.5)	9 (26.5)	13 (18.1)
Interruption	15 (39.5)	21 (61.8)	36 (50.0)

Patients with multiple events of the same type are counted once at the highest grade. <sup>a</sup>Grade 1 = asymptomatic; clinical diagnostic observations only; intervention not indicated. Grade 2 = symptomatic; moderate decrease in visual acuity (best corrected visual acuity 20/40 and better or 3 lines or less decreased vision from known baseline). Grade 3 = symptomatic with marked decrease in visual acuity (best corrected visual acuity worse than 20/40 or more than 3 lines of decreased vision from known baseline, up to 20/200); corneal ulcer; limiting self care activities of daily life. Grade 4 = perforation; best corrected visual acuity of 20/200 or worse in the affected eye. <sup>b</sup>Duration of exposure to CRB-701 is calculated using the date of last dose of CRB-701 – the date of first dose of CRB-701 + 1. <sup>c</sup>Relative dose intensity is defined as the ratio of the actual delivered dose to the planned dose, expressed as a percentage. 1. U.S. Department of Health and Human Services. 2017. <https://dctd.cancer.gov/research/ctep-trials/for-sites/adverse-events/ctcae-v5-5x7.pdf> (Accessed May 6, 2026)

# Baseline characteristics



Patients with  
cervical cancer  
N = 72

## Key baseline demographics and disease characteristics of patients with cervical cancer

Characteristic	2.7 mg/kg (n = 38)	3.6 mg/kg (n = 34)	Overall (N = 72)
<b>Age, years, median (range)</b>	54 (32–76)	54 (33–78)	54 (32–78)
<b>ECOG PS, n (%)</b>			
0	18 (47.4)	14 (41.2)	32 (44.4)
1	20 (52.6)	20 (58.8)	40 (55.6)
<b>Number of previous therapies, median (range)</b>	3.0 (1–6)	3.5 (1–7)	3.0 (1–7)
<b>Prior therapy type, n (%)</b>			
Platinum-based chemotherapy	38 (100.0)	34 (100.0)	72 (100.0)
PD-1/PD-L1 inhibitor	28 (73.7)	22 (64.7)	50 (69.4)
Platinum-based chemotherapy plus PD-1/PD-L1 inhibitor	28 (73.7)	22 (64.7)	50 (69.4)
Bevacizumab	27 (71.1)	25 (73.5)	52 (72.2)
<b>Disease extent, n (%)</b>			
Locally recurrent	3 (7.9)	3 (8.8)	6 (8.3)
Metastatic	35 (92.1)	31 (91.2)	66 (91.7)

ECOG PS, Eastern Cooperative Oncology Group Performance Status; PD-1, programmed cell death protein 1; PD-L1, programmed cell death ligand 1

# cORR, DoR and PFS



Efficacy Population  
n = 70

## cORR, DoR and PFS in patients with cervical cancer

Endpoint	2.7 mg/kg (n = 38)	3.6 mg/kg (n = 32)
cORR, n (%)	7 (18.4)	11 (34.4)
90% CI	9.0–31.8	20.6–50.4
DoR, months, median	6.8	8.0
95% CI	4.4–NE	4.2–NE
PFS, months, median	2.8	4.3
95% CI	1.4–5.7	2.9–9.5

- Notable cORR, DoR and PFS were observed in patients treated with CRB-701 3.6 mg/kg
- Of the 32 patients in the 3.6 mg/kg group:
  - **62.5%** had been exposed to **prior platinum-based chemotherapy** and **≥ 1 PD-1/PD-L1 inhibitor therapy**
  - Only two patients had **locally recurrent disease** (one patient had a **PR** and one had a **CR**)

- Similar efficacy was observed across subgroups stratified by prior lines of therapy ( $\leq 3$  vs  $> 3$ )
- Four patients (5.7%) had a confirmed CR

CI, confidence interval; cORR, confirmed objective response rate; CR, complete response; DoR, duration of response; NE, not estimable; PD-1, programmed cell death protein 1; PD-L1, programmed cell death ligand 1; PFS, progression-free survival; PR, partial response

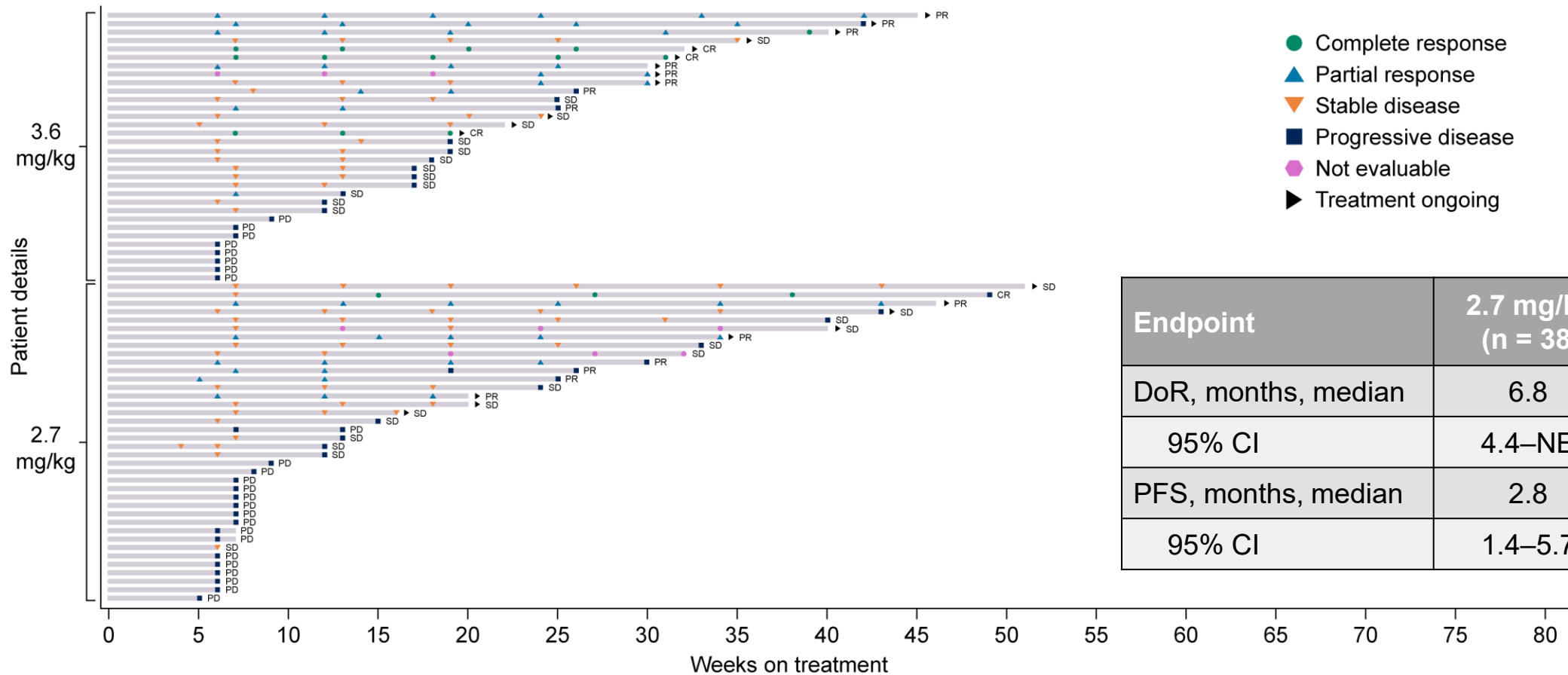


# Best overall response (2/2)



Efficacy Population  
n = 70

## Patient-level best overall response by dose for CRB-701 Q3W



- Complete response
- ▲ Partial response
- ▼ Stable disease
- Progressive disease
- ◆ Not evaluable
- ▶ Treatment ongoing

Endpoint	2.7 mg/kg (n = 38)	3.6 mg/kg (n = 32)
DoR, months, median	6.8	8.0
95% CI	4.4–NE	4.2–NE
PFS, months, median	2.8	4.3
95% CI	1.4–5.7	2.9–9.5

Data are summarized based on the dose group assigned at enrollment. Each bar represents one participant. Best overall response is indicated at the end of each bar. CI, confidence interval; CR, complete response; DoR, duration of response; NE, not evaluable; PD, progressive disease; PFS, progression-free survival; PR, partial response; Q3W, every 3 weeks; SD, stable disease

# Conclusions

- CRB-701 is a **next-generation Nectin-4-targeted ADC** being investigated for treatment of advanced solid tumors
- CRB-701 has a **manageable safety profile** in patients with advanced solid tumors
  - Ocular toxicities were the most frequent TRAE, which were **reversible** with dose interruptions or reductions and prophylactic measures
- CRB-701 monotherapy produces notable **antitumor responses** (cORR, DoR, PFS) in patients with **cervical cancer**
- These data demonstrate that CRB-701 is a **promising new therapeutic option** for second- and third-line treatment for patients with **cervical cancer** and support its continued development in a pivotal study

ADC, antibody–drug conjugate; cORR, confirmed objective response rate; DoR, duration of response; PFS, progression-free survival; TRAE, treatment-related adverse event

# Lay summary

## What did this research tell us?

- This study looked at CRB-701, a new targeted cancer treatment, in people with advanced cervical cancer who had already received other treatments
- The results showed that CRB-701 could help shrink tumors in some patients. Most side effects were reversible eye-related problems, which were manageable with dose adjustments and preventive eye drops

## Who does this research impact?

- This research is most relevant for patients with recurrent or metastatic cervical cancer who have limited treatment options after standard therapies

## What does this mean for patients right now?

- These findings suggest that CRB-701 may offer a promising new treatment option for patients with advanced cervical cancer. Further studies are ongoing to better understand its long-term benefits and safety