

A Single-Arm, Phase 2, Multicenter, International Trial of Tisotumab Vedotin in Previously Treated, Recurrent, or Metastatic Cervical Cancer

Robert L. Coleman¹, Nicole Concin², Thomas J. Herzog³, Linn Lena Woelber⁴, Mansoor Raza Mirza⁵, Bradley J. Monk⁶, David Cibula⁷, Domenica Lorusso⁸, Antonio Gonzalez Martin⁹, Kristian Windfeld¹⁰, Jeroen Lammerts van Bueren¹¹, Signe Diness Vindeloev¹⁰, Reshma A. Rangwala¹², Ignace Vergote²

¹The University of Texas MD Anderson Cancer Center, Houston, TX; ²BGOG and University of Leuven, Leuven Cancer Institute, Leuven, Belgium, European Union; ³University of Cincinnati, University of Cincinnati Cancer Institute, Cincinnati, OH; ⁴AGO Study Group, University Medical Center Hamburg-Eppendorf, Germany; ⁵NSGO & Rigshospitalet, Copenhagen University Hospital, Denmark; ⁶Arizona Oncology (US Oncology Network) University of Arizona and Creighton University, Phoenix, AZ; ⁷Department of Obstetrics and Gynaecology, Charles University & General Faculty Hospital, Prague, Czech Republic; ⁸Fondazione IRCCS, Istituto Nazionale dei Tumori, Milan, Italy; ⁹GEICO and Clinica Universitaria de Navarra, Madrid, Spain; ¹⁰Genmab, Copenhagen, Denmark; ¹¹Genmab, Utrecht, Netherlands; ¹²Genmab US, Inc., Princeton, NJ

BACKGROUND

Current Treatment Paradigm in Patients With Recurrent/Metastatic Cervical Cancer

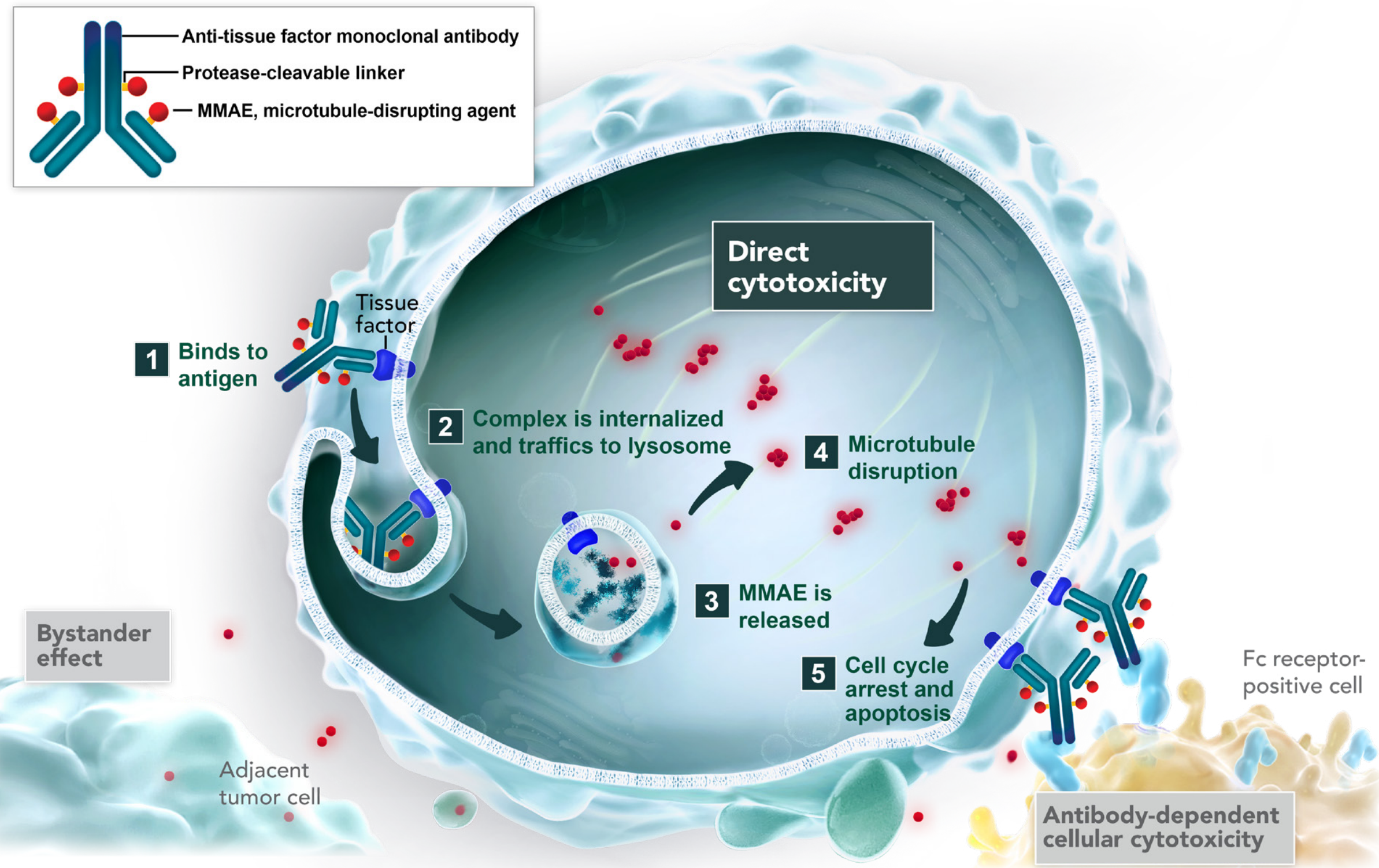
- Cervical cancer is underserved with the available treatment options¹
 - Recurrent or metastatic cervical cancer has a poor prognosis, is generally considered incurable, and has a poor survival²
 - Beyond first-line treatment, there are no approved therapies³
 - Available treatment options have short overall survival (OS), and low and limited response rates³
 - A meta-analysis demonstrated a 10.7% objective response rate to second-line treatment⁴
- The poor prognosis and lack of effective options necessitate development of novel therapies for this patient population with high unmet needs¹

Tisotumab Vedotin

- Tisotumab vedotin (TV) is an antibody-drug conjugate (ADC) comprised of a fully human monoclonal antibody specific for tissue factor (TF) conjugated to the microtubule disrupting-agent monomethyl auristatin E (MMAE) via a protease cleavable linker^{5,a}
- TF is aberrantly expressed in a broad range of solid tumors, including cervical cancer and is associated with poor prognosis^{6,7}
- TV selectively targets TF to deliver a cytotoxic payload to tumor cells^{5,8} (**Figure 1**)

^aMMAE-based ADC technology was licensed from Seattle Genetics, Inc. in a license and collaboration agreement.

Figure 1. Proposed mechanism of action of tisotumab vedotin.^{5,8}



Tisotumab vedotin is an investigational agent, and its safety and efficacy have not been established.
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- innovaTV 201 (GEN701) is an open-label, single-arm, multicenter, phase 1/2a dose-escalation and expansion trial, evaluating the safety and activity of TV at an every 3-week (q3w) schedule, in patients with previously treated locally advanced or metastatic solid tumors (NCT02001623)^{9,10}
 - Phase 1 portion of the trial: the recommended phase 2 dose for TV was identified as 2.0 mg/kg¹⁰
 - Phase 2 portion of the trial: consists of 7 disease-specific expansion cohorts including cervical cancer. Preliminary results (data cutoff date July 24, 2017) have shown a favorable benefit-risk profile in patients with previously treated recurrent or metastatic cervical cancer, with a confirmed objective response rate (ORR) of 26% and manageable safety events^{11,12,a} (**Table 1**)

^aDisease-specific expansion cohorts include cervical, ovarian, prostate, bladder, esophageal, endometrial, and non-small cell lung cancer.

Table 1. Preliminary Activity Profile of TV in the Cervical Cancer Expansion Cohort of InnovaTV 201 (GEN701) (n=34)¹²

Response rate, n (%) ^a (95% CI)	11 (32) (17%-50%)
Confirmed response rate, n (%)	9 (26)
PR, n (%)	11 (32)
DCR (CR+PR+SD), n (%) ^b	17 (50)

CR, complete response; DCR, disease control rate; DoR, duration of response; PFS, progression-free survival; PR, partial response; SD, stable disease.

^aConfirmed and unconfirmed responses. ^bClinical benefit, after 12 weeks.

OBJECTIVES AND ENDPOINTS

- To evaluate the activity, safety, and tolerability of TV monotherapy in patients with previously treated, recurrent or metastatic cervical cancer (**Table 2**)

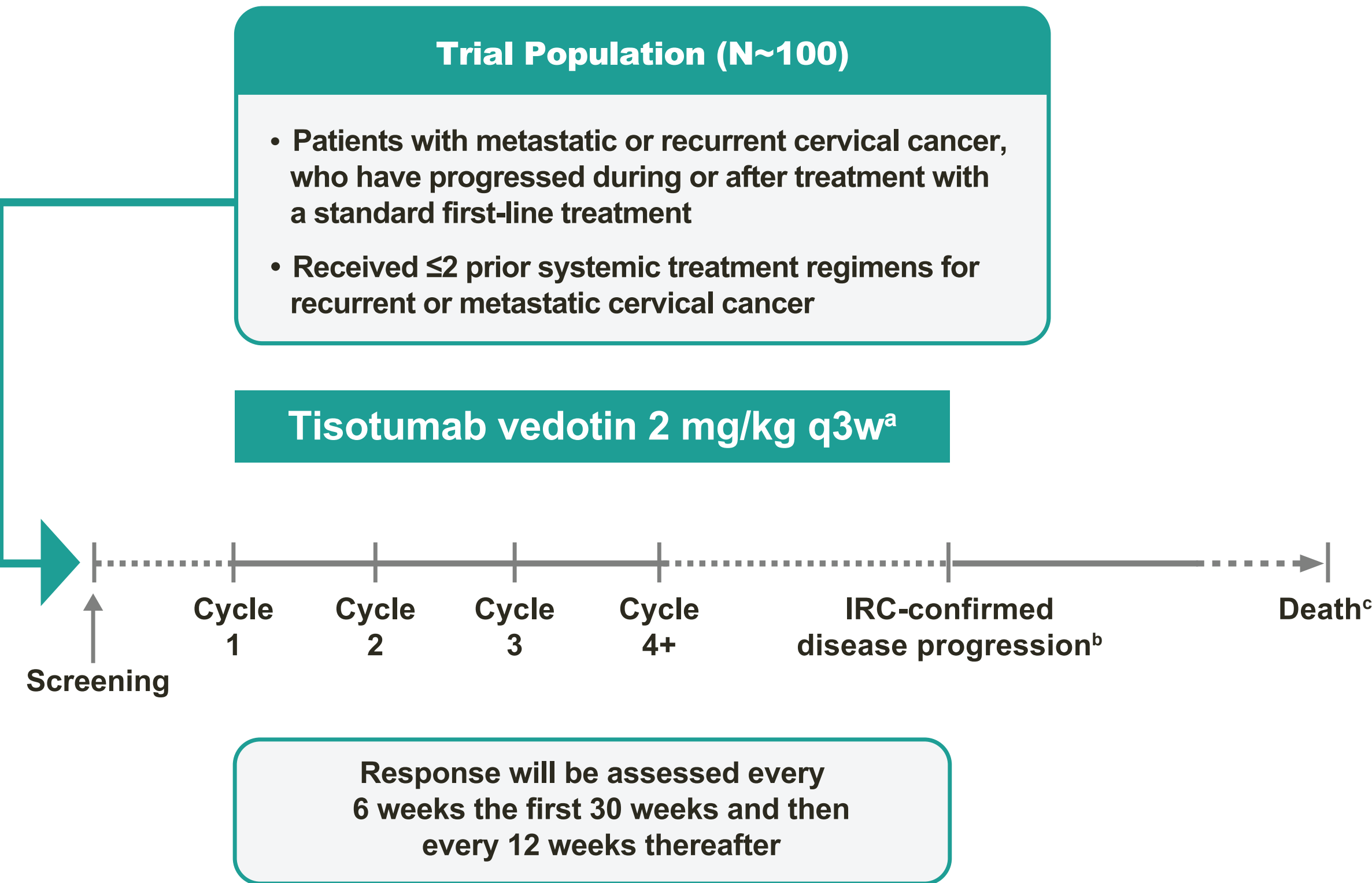
Table 2. Objectives and Endpoints		
	Objective	Endpoint
Primary	• Determine the antitumor activity	• Confirmed ORR by IRC ^a
Secondary	• Evaluate tumor response durability	• DoR by IRC and investigator ^b • ORR by investigator review • TTR by IRC and investigator ^c
	• Evaluate clinical response	• PFS by IRC and investigator ^d • OS ^e
	• Assess safety and tolerability	• AEs and safety laboratory parameters • Pharmacokinetics • Immunogenicity
Exploratory	• Assess biomarkers related to clinical response	• TF expression in pretreatment and postprogression tumor biopsies, circulating TF, proteomic analyses, and genetic/transcriptomic variations
	• Assess potential pharmacodynamics biomarkers	• Circulating TF and proteomic analyses
	• Assess health-related quality of life	• EORTC-QLQ-C30 • EORTC-QLQ-CX24

AE, adverse event; EORTC-QLQ-C30, European organization for research and treatment of cancer quality of life version 3.0 of the core questionnaire; EORTC-QLQ-CX24, European organization for research and treatment of cancer quality of life questionnaire, cervical cancer module; IRC, independent review committee; TTR, time to response.
^aORR is defined as a best overall response (PR or better) confirmed by a subsequent response ≥4 weeks later. ^bDoR applies only to a subset of patients whose best overall response is CR or PR. DoR is defined as the time from the first documented response to the date of first documented IRC-confirmed disease progression or death. ^cTTR is defined as the time from the date of the first trial dose to the first documented response of either CR or PR (subsequently confirmed by IRC). ^dPFS is defined as the time from the first trial dose to the first documented disease progression, or death due to any cause. ^eOS is defined as the time from the date of the first trial dose to the date of death due to any cause.

TRIAL DESIGN

- innovaTV 204 (NCT03438396) is an open-label, single-arm, international, multicenter, phase 2 trial (**Figure 2**)

Figure 2. Trial design.



^aTV is administered on day 1 of each cycle, each of which is 3 weeks. ^bTreatment and response assessment to continue until IRC-verified disease progression, start of a new anticancer therapy, trial withdrawal, or death, whichever occurs first. ^cSurvival follow-up will be performed every 60 (±7) days, starting from the day of last dose of TV.



Please contact the corresponding author for any questions: Email: rcoleman@mdanderson.org

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- Patients with recurrent or metastatic cervical cancer who have progressed during or after treatment with a standard first-line treatment and who have not received more than 2 prior systemic treatment regimens for recurrent or metastatic disease will be included in this trial (**Table 3**)

Table 3. Key Patient Eligibility Criteria	
Inclusion Criteria	Exclusion Criteria
• Extra-pelvic metastatic or recurrent cervical cancer including squamous cell, adenocarcinoma or adenosquamous histology	• Received >2 prior systemic treatment regimens for recurrent or metastatic cervical cancer
• Metastatic or recurrent cervical cancer who have progressed during or after treatment with paclitaxel + cisplatin or carboplatin OR paclitaxel + topotecan in combination with bevacizumab (if eligible for bevacizumab treatment)	• Known past or current coagulation defects leading to an increased risk of bleeding, or ongoing major bleeding
• Measurable disease according to RECIST v1.1 as assessed by IRC	• Clinically significant cardiac disease
• Acceptable organ function	• Active ocular surface disease
• ECOG score of 0 or 1	• Known past or current malignancy other than the inclusion diagnosis ^a
• Age ≥18 years	• Peripheral neuropathy grade ≥2
	• Received prior treatment with MMAE-derived drugs; radiotherapy within 21 days prior to the first trial dose; small molecules, chemotherapy, immunotherapy, monoclonal antibodies, or any experimental agent within 28 days prior to the first trial dose

ECOG, Eastern Cooperative Oncology Group; RECIST, Response Evaluation Criteria in Solid Tumors.
^aExcept for noninvasive basal cell or squamous cell skin carcinoma; noninvasive, superficial bladder cancer; any curable cancer with a CR of >5 years duration.

KEY ASSESSMENTS

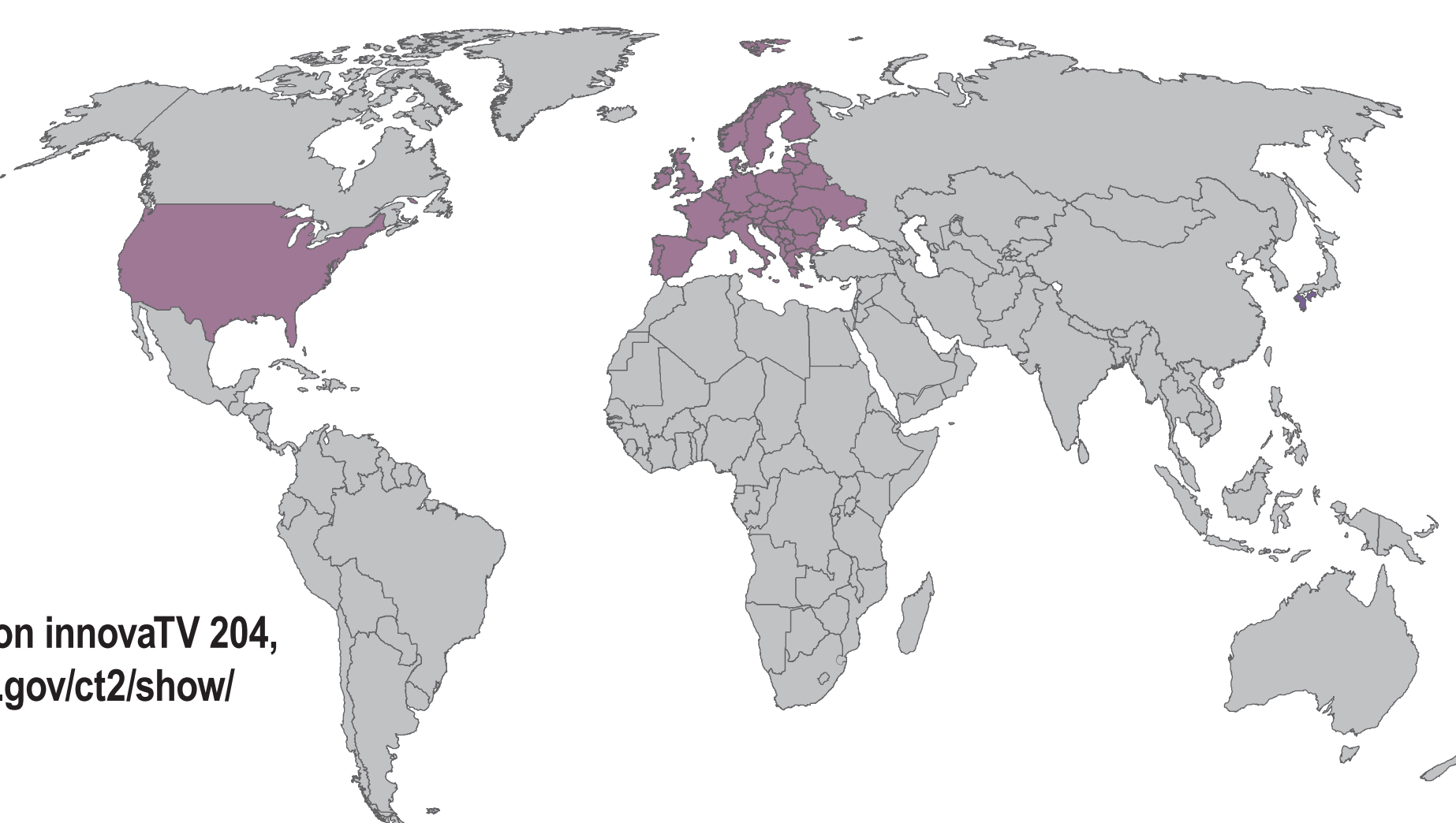
- Screening: computer tomography (CT) and/or magnetic resonance imaging (MRI) scans of the abdomen and pelvis, IRC-confirmed measurable disease according to RECIST v1.1, ocular assessment, central and local laboratory assessments, electrocardiogram (ECG), tumor biopsy (may be either fresh or archival)
- Response will be assessed using RECIST v1.1
- AEs will be monitored and graded using Common Terminology Criteria for Adverse Events (CTCAE) v5.0

STATISTICAL ANALYSES

- For the ORR analyses, a 2-sided 95% exact CI will be calculated using the Clopper-Pearson method
- PFS and OS will be analyzed using the Kaplan-Meier method, and 95% CI of the median will be presented

TRIAL SITES

Approximately 100 patients will be enrolled in sites across the United States and the European Union.



For further information on innovaTV 204, visit <https://clinicaltrials.gov/ct2/show/NCT03438396>.

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