

# PEMBROLIZUMAB PLUS LENVATINIB VERSUS STANDARD OF CARE FOR PREVIOUSLY TREATED METASTATIC COLORECTAL CANCER: PHASE 3 LEAP-017 STUDY

Takayuki Yoshino<sup>1</sup>; Rong Fu<sup>2</sup>; Natalyn Hawk<sup>3</sup>; David Adelberg<sup>4</sup>; Kevin Norwood<sup>4</sup>; Volker Heinemann<sup>5</sup>

<sup>1</sup>National Cancer Center Hospital East, Kashiwa, Japan; <sup>2</sup>MSD China, Shanghai, China; <sup>3</sup>Eisai Inc., Woodcliff Lake, NJ, USA; <sup>4</sup>Merck & Co., Inc., Kenilworth, NJ, USA; <sup>5</sup>LMU University Hospital Munich, Munich, Germany

BACKGROUND

- The PD-1 inhibitor pembrolizumab is now recommended as a first- and subsequent-line treatment option for patients with microsatellite instability-high (MSI-H) or mismatch repair-deficient (dMMR) unresectable or metastatic colorectal cancer (mCRC)<sup>1-4</sup>
- For patients with non-MSI-H or MMR proficient (pMMR) mCRC, the current first-line standard of care (SOC) is a chemotherapy backbone that includes a fluoropyrimidine plus oxaliplatin and/or irinotecan, with or without vascular endothelial growth factor (VEGF) and epidermal growth factor receptor (EGFR) inhibitors<sup>1,2,5</sup>
- There remains an unmet need for novel chemotherapy-free treatment options to improve survival outcomes of patients with non-MSI-H/pMMR CRC whose cancer progresses while on first-line therapy and those who cannot tolerate intensive chemotherapy<sup>1,2,5</sup>
- The combination of pembrolizumab with the multikinase inhibitor lenvatinib was shown to have promising antitumor activity and manageable safety in patients with previously treated non-MSI-H/pMMR CRC in the phase 2 LEAP-005 study<sup>6</sup>

OBJECTIVES

- To evaluate the efficacy and safety of pembrolizumab plus lenvatinib compared with investigator's choice of SOC therapy with regorafenib or TAS-102 in patients with non-MSI-H/pMMR mCRC that has progressed on or after prior treatment or who have become intolerant to prior treatment

**Primary End Point**

- Overall survival (OS)

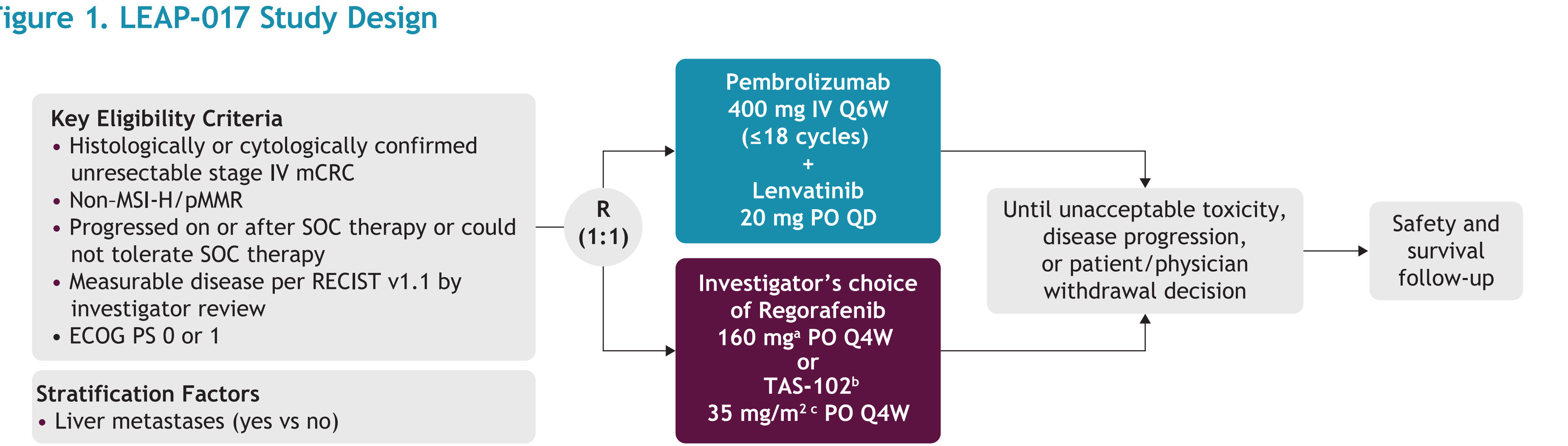
**Secondary End Points**

  - Progression-free survival (PFS) per RECIST v1.1
  - Objective response rate (ORR) per RECIST v1.1
  - Duration of response (DOR) per RECIST v1.1
  - Safety and tolerability

  - Change from baseline in European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire-Core 30 (QLQ-C30) global health status and quality of life, physical functioning, and appetite loss scores, and EORTC Quality of Life Questionnaire-Colorectal Cancer-Specific 29 (QLQ-CR29) bloating scores
  - Time to deterioration in EORTC QLQ-C30 global health status and quality of life, physical functioning, and appetite loss scores, and EORTC QLQ-CR29 bloating scores

METHODS

- LEAP-017 (NCT04776148) is a global, randomized, open-label, phase 3 trial

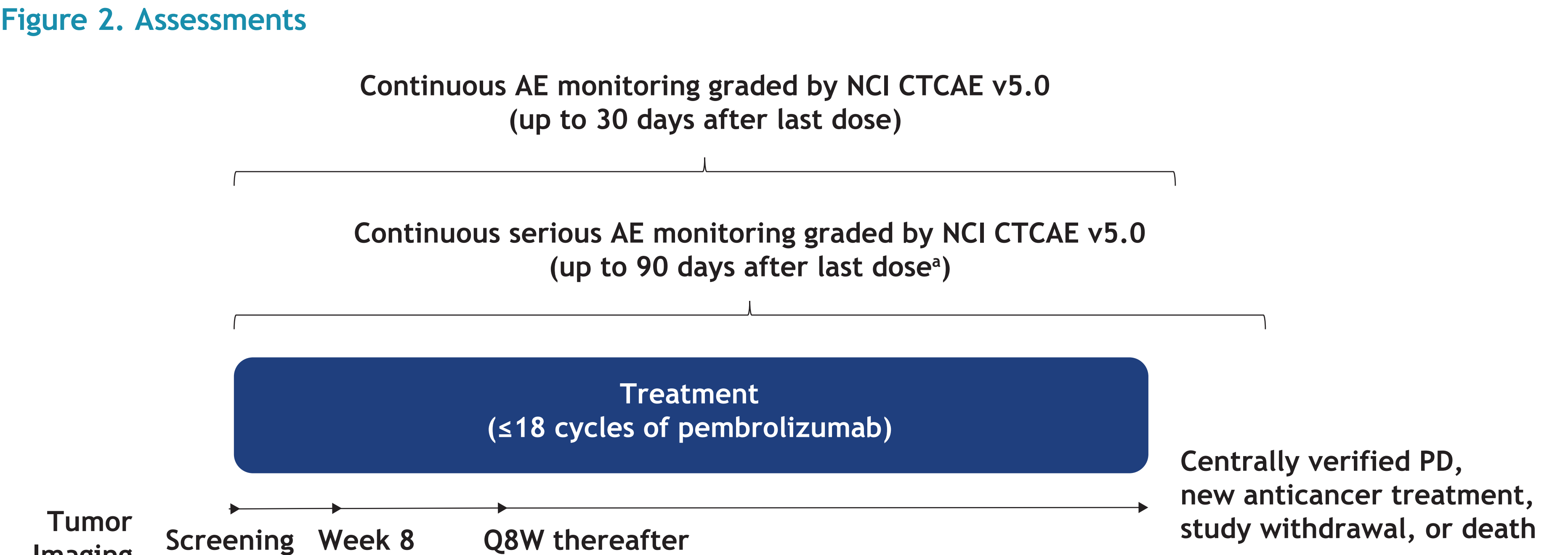


ECOG PS, Eastern Cooperative Oncology Group performance status; IV, intravenous; PO, orally; Q4W, every 4 weeks; Q6W, every 6 weeks; QD, daily.  
\*According to local guidelines, regorafenib may be administered as follows in cycle 1: 80 mg QD on cycle 1, days 1 to 7, then 120 mg QD on days 8 to 14, followed by 160 mg QD on days 15 to 21, and 160 mg QD on subsequent cycles (days 1 to 21; no doses days 22-28).  
†TAS-102 is a combination of trifluridine and tipiracil hydrochloride.  
‡BID on days 1-5 and days 8-12; no doses on days 6 and 7 or days 13-28.

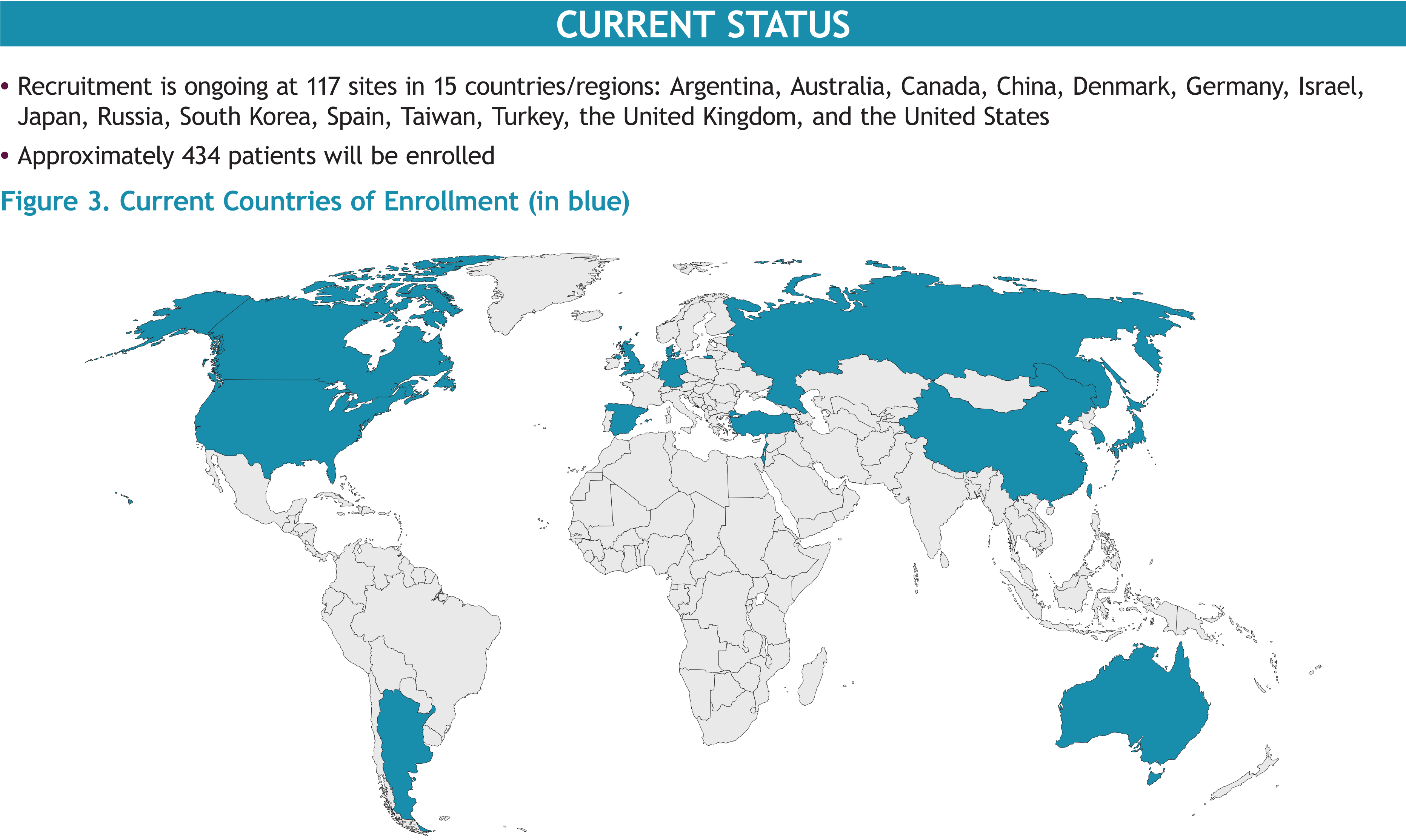
Table 1. Eligibility Criteria

| Inclusion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Exclusion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <ul style="list-style-type: none"><li>Patients aged ≥18 years</li><li>Histologically or cytologically confirmed unresectable and metastatic colorectal adenocarcinoma that is non-MSI-H/pMMR</li><li>Has been previously treated and has shown disease progression per RECIST v1.1<sup>a</sup> or could not tolerate standard treatment, which must include all the following agents if approved and available in the country of enrollment:<ul style="list-style-type: none"><li>Fluoropyrimidine,<sup>b</sup> irinotecan, and oxaliplatin</li><li>With or without an anti-VEGF mAb</li><li>With anti-EGFR mAbs for RAS wild-type disease</li><li>BRAF inhibitor (plus cetuximab ± binimetinib) for BRAF<sup>V600E</sup>-mutated mCRC</li></ul></li><li>Measurable disease per RECIST v1.1 by investigator review</li><li>ECOG PS 0 or 1</li><li>Has provided a newly obtained or archival tumor tissue sample</li><li>Adequate organ function</li><li>Blood pressure adequately controlled (≤150/90 mm Hg) with or without antihypertensive medications, with no change in antihypertensive medications for ≥1 week before randomization</li></ul> | <ul style="list-style-type: none"><li>Gastrointestinal condition that may affect absorption</li><li>Radiographic evidence of encasement or invasion of a major blood vessel, or of intratumoral cavitation</li><li>Clinically significant hemoptysis or tumor bleeding ≤2 weeks before first dose of study drug</li><li>Clinically significant cardiovascular disease<sup>c</sup>, ≤12 months before first dose of study drug</li><li>Preexisting grade ≥3 gastrointestinal or nongastrointestinal fistula</li><li>Active infection requiring systemic therapy</li><li>Active autoimmune disease that has required systemic treatment in the past 2 years, immunodeficiency, or under treatment with chronic systemic steroid therapy or any other form of immunosuppressive therapy within 7 days before the first dose of study drug</li><li>History of HIV infection, hepatitis B (HBsAg reactive) infection, or active hepatitis C (HCV RNA detected) infection</li><li>History of noninfectious pneumonitis requiring steroids or current pneumonitis</li><li>Known CNS metastases and/or carcinomatous meningitis</li><li>Prior treatment with anti-PD-1/PD-L1/PD-L2 agents with anti-VEGF mAbs or VEGFR inhibitors, regorafenib, or TAS-102</li></ul> |

CNS, central nervous system; HBsAg, hepatitis B surface antigen; HCV, hepatitis C virus; mAbs, monoclonal antibodies; VEGFR, vascular endothelial growth factor receptor.  
<sup>a</sup>Adjuvant chemotherapy counts as prior systemic therapy if there is documented disease progression ≤6 months after chemotherapy completion.  
<sup>b</sup>Capecitabine is acceptable as an equivalent to fluoropyrimidine in prior treatment.  
<sup>c</sup>Including New York Heart Association Class III or IV congestive heart failure, unstable angina, myocardial infarction, cerebral vascular accident, or cardiac arrhythmia associated with hemodynamic instability.



AE, adverse event; NCI CTCAE, v5.0, National Cancer Institute Common Terminology Criteria for Adverse Events, version 5.0; PD, progressive disease; Q8W, every 8 weeks.  
<sup>a</sup>Assess for 30 days if a new anticancer treatment is initiated.



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**Disclosures**

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**Contact Information**

Contact the author at [tyoshino@east.ncc.go.jp](mailto:tyoshino@east.ncc.go.jp) for questions and comments.

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