ONO PHARMA

Press Release

Ono Pharma Announces Oral Presentation of New Data from Phase 2 Clinical Study of ONO-4578 (EP4 antagonist) in Certain Gastric Cancers at the ASCO 2026 Annual Meeting

- ONO-4578, an EP4 antagonist, in combination with OPDIVO® and chemotherapy demonstrated a statistically significant improvement in the primary endpoint of progression-free survival (PFS) compared to the placebo combination group (median PFS, 9.0 months vs 6.9 months, respectively).
- In the subgroup population with PD-L1 CPS ≥1, median PFS in the ONO-4578 combination group was 9.9 months, showing a marked clinical benefit compared to 5.7 months in the placebo combination group.
- Based on these promising results, preparations are underway to initiate a phase 3 clinical study.

Osaka, Japan, June 2, 2026—Ono Pharmaceutical Co., Ltd. (Headquarters: Osaka, Japan; President and COO: Toichi Takino; "Ono") today announced the results of the phase 2 clinical study (ONO-4578-08 study) of the EP4 antagonist ONO-4578 in patients with previously untreated, HER2-negative unresectable advanced or recurrent gastric cancer (including gastroesophageal junction cancer). The results were presented at the American Society of Clinical Oncology (ASCO) 2026 Annual Meeting.

In this study, patients received ONO-4578 in combination with the anti–PD-1 antibody nivolumab (OPDIVO) and chemotherapy or placebo in combination with OPDIVO and chemotherapy. The ONO-4578 group demonstrated a statistically significant improvement of PFS compared to the placebo with a median PFS of 9.0 months in the ONO-4578 group and 6.9 months in the placebo group (HR, 0.67; 90% CI, 0.48–0.92; *P* = 0.040). The ONO-4578 group also showed improvements in overall survival (OS) and objective response rate (ORR). Median OS was not reached in the ONO-4578 combination group and 12.7 months in the placebo combination group (HR, 0.60; 95% CI, 0.37–0.96). ORR was 62.0% and 48.7%, respectively (odds ratio, 1.72; 95% CI, 0.98–3.00).

Clinical benefit was more pronounced in patients with PD-L1 CPS ≥1. In this subgroup, the median PFS was 9.9 months in the ONO-4578 combination group versus 5.7 months in the placebo combination group (HR, 0.52; 95% CI, 0.34–0.79), median OS was not reached versus 12.7 months (HR, 0.44; 95% CI, 0.26–0.77), and ORR was 70.9% versus 50.9% (odds ratio, 2.36; 95% CI, 1.22–4.54), respectively. No new safety signals were identified. These results suggest that ONO-4578 may provide additional clinical benefit when added to standard therapy with an anti–PD-1 antibody and chemotherapy in this previously untreated patient population.

Based on these findings, Ono and its affiliate company, Deciphera, plan to initiate a pivotal phase 3 clinical study.

About ONO-4578-08 study

ONO-4578-08 study is a multicenter, randomized phase 2 clinical trial conducted in Japan, South Korea, and Taiwan in patients with previously untreated, HER2-negative unresectable advanced or recurrent gastric cancer or gastroesophageal junction cancer. ONO-4578 in combination with OPDIVO and chemotherapy (S-1 + oxaliplatin or capecitabine + oxaliplatin) was compared with placebo in combination with OPDIVO and chemotherapy. Patients received 40 mg of ONO-4578 once daily and 360 mg of OPDIVO every 3 weeks in combination with chemotherapy until disease progression or unacceptable toxicity occurred. The primary endpoint was PFS.

About Gastric cancer

Approximately 126,000 new cases of gastric cancer are diagnosed annually in Japan[1] and 968,000 worldwide,[2] with approximately 43,000 deaths in Japan[1] and 660,000 worldwide.[2] Gastric cancer is the third most common type of cancer following colorectal cancer and lung cancer in Japan. Combination therapies with anti–PD-1 antibody and chemotherapy is a standard first-line treatment for HER2-negative unresectable advanced or recurrent gastric cancer. However, gastric cancer remains incurable, and a new treatment option is needed.

About ONO-4578

ONO-4578 is a selective, oral antagonist of EP4, a receptor for prostaglandin E_2 (PGE_2), developed by Ono. PGE_2, produced by cancer cells, suppresses the action of cancer immunity through EP4 receptors expressed on various immune cells.[3-5] ONO-4578 is designed to exert antitumor effect by suppressing EP4-mediated effect of PGE_2 and by restoring cancer immunity.[6] In a phase 1 clinical study in patients with unresectable advanced or recurrent gastric cancer (including gastroesophageal junction cancer) after the third- or later-line treatment, a combination therapy with ONO-4578 and OPDIVO showed antitumor effect and a manageable safety profile.[7] Currently, Ono is conducting several clinical studies of ONO-4578, including a global phase 2 clinical study in patients with colorectal cancer.

References:

1. Globocan 2022: Stomach Cancer, Japan, World Health Organization. Available from: https://gco.iarc.who.int/media/globocan/factsheets/populations/392-japan-fact-sheet.pdf
2. Globocan 2022: Stomach Cancer, World, World Health Organization Available. from: https://gco.iarc.who.int/media/globocan/factsheets/populations/900-world-fact-sheet.pdf
3. Obermajer N, et al. Transplant Res. 2012;1:15.
4. Ylöstalo JH, et al. Stem Cells. 2012;30:2283-96.
5. Okano M, et al. Immunology. 2006;118:343-52.
6. Kotani T, et al. Cancer Res. 2020;80:16_Supplement 4443.
7. Kawazoe A, et al. Cancer Sci. 2025;116:2523-36.

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