Efficacy and Safety of Sintilimab as First-line Therapy in Patients with Microsatellite Instability-high Metastatic Colorectal Cancer: A Real-world Study
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Background
Based on the results of KEYNOTE-177 and Checkmate-142, anti-PD-1 monotherapy has been recommended for the first-line treatment of microsatellite instability-high (MSI-H) metastatic colorectal cancer. The present study was conducted to evaluate the efficacy and safety of sintilimab as first-line therapy in patients with MSI-H metastatic colorectal cancer.

Methods
Patients with MSI-H metastatic colorectal cancer who received sintilimab as first-line therapy from January 2019 to June 2021 were retrospectively analyzed based on real-world clinical practice. The primary endpoint was progression free survival (PFS). Secondary endpoints included objective response rate (ORR), disease control rate (DCR), overall survival (OS), and safety.

Results
632 metastatic colorectal cancer patients were screened and 24 MSI-H metastatic colorectal cancer who received sintilimab as first-line therapy were analyzed. The ORR and DCR were 41.7% and 75.0% in the general population, and the median PFS was 13.8 months (95% CI=3.4-24.2). The median OS was not reached for the overall group. There were no statistically significant differences in different tumor sites and KRAS/NRAS status concerning ORR, DCR, PFS, and OS. Subgroup analysis suggested a statistically significant improvement in OS in favor of without liver metastasis compared with liver metastasis (NR vs. 19.8(0-40.0) months, P=0.030). The incidence of Grade 3-4 adverse events (AEs) was 8.3% and the toxicities were well tolerated and manageable.

Conclusions
Sintilimab as first-line therapy provides a feasible treatment regimen for MSI-high metastatic colorectal cancer with fewer treatment-related AEs. Patients without liver metastasis who obtained better OS may be the preferred population for this regimen.