

Consensus Reports: Chemotherapy for Metastatic Gastric Cancer

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Approximately ten years have passed since new generation cytotoxic agents such as S-1, capecitabine, irinotecan, docetaxel, paclitaxel, and oxaliplatin, have been available for metastatic gastric cancer. However, no world-wide standard chemotherapy regimen for metastatic gastric cancer has been established yet. In the West, triplet regimen, such as docetaxel+ cisplatin+ 5-fluorouracil (DCF) or epirubicin + oxaliplatin + capecitabine (EOX) has now become the most popular first-line regimen. In Asian countries, particularly East Asia where high prevalence of gastric cancer is seen, doublet regimen such as S-1+cisplatin or capecitabine +cisplatin (or oxaliplatin) is more prominent. These disparities between the East and West are caused not only by ethnic differences in response to agents but by social and cultural differences, particularly medical insurance systems. In Japan, where all agents available can be used with medical reimbursement at any line of chemotherapy, approximately 80% of patients receive second or further line treatment, while only 15-20% of patients can receive further chemotherapy in the West. Doublet regimens in East Asia are usually followed by other agents such as taxanes and irinotecan, which result in longer survival than in Western trials. Several studies set as second line studies are under evaluation in Japan, which may establish second line standard regimen.

Molecular targeting agents are other topics in this field. Trastuzumab, an anti-HER2 antibody, has recently provided survival advantage in a global randomized study (ToGA), predominantly in Asian countries, in combination with fluorouracils plus cisplatin. This study was targeted to HER2 positive gastric cancer and no significant differences in HER2 positive rate between Asian and European patients were observed. With a validation of diagnostic criteria, this study will make an independent entity of HER2 group as seen in breast cancer. Lapatinib (HER1/2 dual inhibitor) is being investigated in combination with paclitaxel in an Asian international randomized study. Bevacizumab (anti-VEGF antibody) and everolimus (mTOR inhibitor) are also now under evaluation in global registration studies. Asian countries are leading these studies as well as other new agents in early studies and are now playing a great role in the new agent developments for gastric cancer. More collaboration of Asian investigators are needed to achieve survival prolongation in metastatic gastric cancer.