Introduction: The recent nationally representative survey of cancer mortality in India showed that gastric cancer was the second most common cause of cancer-related deaths amongst men and women (Dikshit R, Lancet 2012). It is very likely that the biology of gastric cancer is different in Eastern and Western populations, hence baseline outcome data from Indian patients will add to doing future studies within the subcontinent.

Methods: This is retrospective analysis of the prospectively maintained database of 144 patients with metastatic gastric cancer treated at TMC between Jan 2012 to Sept 2013. The aim of the study is to assess the clinical benefit rate in this group of pts. 16 patients received best supportive care alone and 128 patients were treated with Cape-Ox (capecitabine 1700mg/m², oxaliplatin 130mg/m² q21d), EOX (epirubicin 50 mg/m² D1, oxaliplatin 130 mg/m² D1, capecitabine 1250mg/m² from D1-21 q21d), and DOX (docetaxel 50mg/2, oxaliplatin 85mg/m² D1, capcitabine 1250mg/m² from D1-14 q14d). Response was assessed after 3-4 cycles.

Results: Of the 128 patients, 43 patients received Cape-Ox (1 had irinotecan alone in this group), 22 pts received EOX and 63 patients received taxane/DOX. Median age was 51 years (range, 18-79), 71% males, median CA19.9 57.12 (range <2-1462930); median CEA 4.57 (range, 0.61-25966); signet ring histology in 48 patients (38%), site of metastases was liver in 40 (31%), nodal in 75 (58%), peritoneal in 67 (52%), bilateral ovarian in 6(5%) and others in 19 patients. Of the 67 patients with peritoneal disease 36 had signet ring histology compared to 12 with signet ring histology and no peritoneal disease (P=0.0001). PS was 2 in 36 patients, 0-1 in 92 pts. The overall response rate was not significantly different between the newer generation taxane regimen compared to EOX/Cap-Ox group (53 vs 55%, P = 0.86). The median overall survival (OS) for the whole group of 128 patients was 8 months (6.6-9.4) and the median disease free survival (DFS) for the whole group was 6 months (5.3-6.7). For the taxane group, the median OS was 10 months compared to 8 mo for the EOX/Cap-Ox patients (P = 0.014), though the DFS was not significantly different (6 mo vs 5 mo). 86 pts received 2nd-line chemotherapy (majority capcitabine-irinotecan based).

Conclusion: Indian patients have higher incidence of signet ring histology and present with peritoneal disease. Though the response rates were similar, the overall survival is better with new-world regimens like DOX/docetaxel given as first line therapy for patients with advanced gastric cancer. Overall outcome is worse than the Western reported data.