Survival impact of cytoreduction to microscopic disease for advanced stage cancer of the uterine corpus
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Objectives
To assess the impact of cytoreduction to no gross residual disease (RD) on overall survival (OS) in patients with stage III-IV uterine carcinosarcoma (MMMT), papillary serous/clear cell (UPSC/CC) and endometrioid carcinoma (EC).

Methods
We retrospectively identified 168 patients who underwent primary surgery for advanced uterine cancer between 1984 and 2009 in 2 teaching hospitals in Brooklyn, New York. Histology, stage, grade, RD, adjuvant therapy, age, race and OS were collected. OS was calculated using the Kaplan-Meier method. Predictive factors were compared using the log rank test and Cox regression analysis.

Results
Our cohort included 54 patients with MMMT (stage III, n=31; stage IV, n=23), 54 patients with UPSC/CC (stage III, n=20; stage IV, n=34) and 60 patients with EC (stage III, n=45; stage IV, n=15). Complete gross resection was achieved in 64 % of patients with MMMT, in 53 % of patients with UPSC/CC and in 68% of patients with EC.

There was no interaction between pathology type and feasibility of complete cytoreduction (p=0.390). No gross RD was associated with a median OS of 25 months (95% CI [18, 33]) versus 13 months (95% CI [8, 18]) in patients with gross RD (p=0.037). Within each pathology type the absence of gross RD was associated with a trend for improved survival. OS was 21 months (95% CI [8, 31]) for patients with MMMT when complete gross resection was achieved, versus 9 months (95% CI [5, 16]) for those with gross RD.

OS was 22 months (95% CI [11, 31]) for patients with UPSC/CC and no gross RD, as compared to 12 months (95% CI [6, 22]) for patients with gross RD.

Lastly, for patients with EC, OS was 36 months (95% CI [17, 46]) if no gross RD, versus 21 months (95% CI [9, 63]) for patients with gross RD.

Conclusions
Cytoreductive surgery to no gross RD is associated with improved OS in advanced uterine cancer. This effect is uniform among histologies. There is no interaction between pathology type and feasibility of complete cytoreduction.