Endometriosis is known to affect different aspects of life in women of reproductive age. Besides physical disturbance and health status, quality of life is often impaired but hardly measurable. Therefore, the 30-item Endometriosis Health Profile (EHP-30) was introduced, addressing the impact of disease on the physical, psychological and social aspects of life. So far this questionnaire has been validated for several countries as sensitive tool to assess patients’ quality of life. However, to our knowledge few data exists regarding the association between EHP-30 scores and actual severity of endometriosis as assessed by surgical diagnosis using the ENZIAN-score and the American Society of Reproductive Medicine’s (ASRM) classification.

Method
Promenopausal women with histologically confirmed endometriosis presenting at the University of Ulm were included. In total, 215 consecutive patients who had undergone surgery for endometriosis between 2006 and 2012 at our institution were asked to answer the EHP-30 core questionnaire. The questionnaires were filled out by the patients themselves during their hospital stay, returned via mail or completed via telephone interview. Surgical reports of patients with histological confirmed intraperitoneal endometriosis were screened and classified into the different ASRM and ENZIAN sores. The EHP scores were then analyzed according to the EHP-30 user manual to obtain the five dimension scores (pain, control and powerlessness, emotional well-being, social support, self-image). The five dimension scores were then analyzed for associations with surgical findings categorized using ENZIAN and ASRM scores.

Result
In total, 50 completed questionnaires were available for preliminary analyses. The mean age was 30.7 years (range 19-45). For patient characteristics see Table 1. Medians and ranges obtained for the five dimension scores were 20.0 (0 – 77) for the pain score, 25.0 (0 – 96) for the control and powerlessness score, 33.0 (0 – 83) for the emotional well-being score, 22.0 (0 – 94) for the social support score, and 25.0 (0 – 92) for the self-image score.

There was a significant positive correlation between ASRM score and ENZIAN score (Spearman rank correlation coefficient $r_s = 0.576$, $n = 38$, $p < 0.001$). No significant correlations were found between the ASRM score and any of the five EHP-30 dimension scores (Spearman rank correlation, all $p > 0.9$). Likewise, there were no significant correlations between the ENZIAN score and any of the five EHP-30 dimension scores (Spearman rank correlation, all $p > 0.7$). In addition, none of the five EHP-30 dimension scores differed significantly between the four ASRM-score categories (see Figure 1) or between the four ENZIAN-score categories (see Figure 2).

Conclusion
The EHP-30 is a user-friendly tool to evaluate quality of life and health status in women with endometriosis. However, none of the five dimension scores of the EHP-30 core questionnaire correlated significantly with surgical diagnosis as assessed using the ASRM or ENZIAN score in our cohort of premenopausal women with endometriosis. Therefore, it seems not possible to draw inferences from the EHP-30 score about actual severity of endometriosis as assessed during surgery.

As would be expected, there was a positive correlation between ASRM and Enzian score. On one hand this indicates the significance of the two scores as a tool to asses severity of endometriosis, on the other hand it indicates that the classification into the different scores from surgical reports was consistent.