endocervix and endometrium in patients with endometrial cancer. Due to the ease of obtaining the material from the cervix during cytological screening, the expression of selected proteins might be used as a predictive factor in endometrial cancer.

**Methodology**
The study was performed on group of 101 patients with type I and II endometrial carcinoma using immunohistochemical methods.

**Results**
Our results showed that both cadherins were expressed in the endocervix. In endometrial cancer type I, no significant differences were found in the expression of cadherins between the tumor and the cervix. It is possible to suspect an evenly ongoing neoplastic process both in the primary site and in the cervix. Statistically significant differences in the results turned out to be in the case of type II endometrial cancer, where a higher cadherin expression was noted in the tumor mass compared to the cervix, which suggests a greater dynamics of the EMT process in the tumor itself than in the cervix.

**Conclusion**
Our results may have significant clinical outcomes in the diagnosis of endometrial cancer.

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**LAPAROSCOPIC VERSUS OPEN ABDOMINAL HYSTERECTOMY IN ENDOMETRIAL CANCER PATIENTS: ANALYSIS OF OUTCOME ACCORDING TO RISK GROUP**

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**Introduction/Background**
For treatment of low-risk endometrial cancer, laparoscopic hysterectomy is the standard surgery approach. On the other hand, oncologic safety of minimally invasive technique in high risk disease has not yet been proven.

**Methodology**
Between 1996 and 2010, 359 endometrial cancer patients underwent laparoscopic or abdominal hysterectomy at Jena University Hospital. Recurrence rate and survival were analysed depending on surgical approach and risk categorization by classical histopathology (low-risk: stage IA without nodes metastasis, G2 or G2 with endometrioid carcinoma; high-risk: stage IB or G3 or with nodes metastasis or serous papillary or clear cell type). Median follow-up was 72 months (minimum=2, maximum=214).

**Results**
In low risk patients, disease-free survival (DFS) rate was 95.6% and overall survival (OS) rate was 96.6% after laparoscopic hysterectomy (n=158) compared to DFS rate of 92.9% and OS rate of 100% after abdominal hysterectomy (n=43). In high risk patients, we found a DFS rate of 75.3% and OS rate of 85.1% in the laparoscopy group (n=97), while DFS rate was 73.3% and OS rate was 84.2% in the open surgery group (n=61). Proportional hazards assumption of Kaplan-Meier curves was not satisfied.

**Conclusion**
Long-term oncologic outcome of the laparoscopic procedure was not inferior compared to open abdominal hysterectomy in both low risk and high risk endometrial carcinoma patients according to data from our cohort. Results from patients treated in our center between 2011 and 2021 are under progress.
Anemia of Cancer, Transfusion Rates and Frailty Status Predict Survival in Women with Endometrial Cancer

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Introduction/Background
Perioperative red blood cell transfusions (RBC) have been associated with increased morbidity and worse oncologic outcomes in various solid neoplasms. In order to elucidate whether RBC themselves, the preoperative anemia of cancer (AOC) or the impaired global health status might explain this impact on patients with endometrial cancer (EC), we performed a retrospective, single-institution cohort study.

Methodology
Women older than 60 years with EC were included. The impact of RBC, AOC and frailty status determined by the G8 geriatric screening tool (G8 Score) as well as clinical-pathological cancer characteristics on progression-free survival (PFS) and overall survival (OS) were determined by using the Kaplan Meier method and the Cox regression analyses.

Results
In total, 152 EC patients (mean age: 71.0 +/- 7.4 years) with a median follow-up time of 31.0 [8.0 – 68.5] months entered the study. EC patients receiving RBC were faced with a significantly decreased 5-year PFS (79.8% vs. 26.0%, p < 0.001) and 5-year OS (82.6% vs. 25.7%, p < 0.001). In the univariable Cox regression analysis, FIGO-Stage, histological grade of differentiation, postoperative residual tumor burden and RBC, as well as preoperative frailty status for both, 5-year PFS and 5-year OS were associated with decreased survival rates (all p-values < 0.05). In the multivariable analyses, besides selected clinical-pathological cancer characteristics (FIGO-Stage and histological grade of differentiation), the RBC solely retained significance as a relevant prognostic parameter for PFS (HR: 1.76; 95%-CI [1.01–3.07]) and OS (HR: 2.38; 95%-CI [1.50–3.78]).

Conclusion
These results underline the impact of RBC and selected clinical-pathological cancer characteristics on the prognosis of patients with EC. To which extent a multidimensional diagnostic and treatment algorithm covering standardized transfusion management, the clarification of AOC, as well as the determination of global health status by validated frailty assessment tools support the maximal surgical efforts in the elderly patients with EC needs further evaluation.