

## Editorial



# Stage II endometrial cancer requires stratification according to uterine risk factor and sentinel lymph node sampling

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### Conflict of Interest

No potential conflict of interest relevant to this  
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► See the article “Survival and recurrence in stage II endometrial cancers in relation to uterine risk stratification after introduction of lymph node resection and omission of postoperative radiotherapy: a Danish Gynecological Cancer Group Study” in volume 31, e22.

Endometrial (EM) cancer is the most common gynecological cancer worldwide and the incidence rose in the past decades. Cancer staging is an important part for management and the International Federation of Gynaecology and Obstetrics (FIGO) staging of EM cancer was revised in 2009, in which stage II was defined as cervical stromal invasion only.

An appropriate strategy of surgery and adjuvant treatment are controversial because of heterogenous characteristics of stage II EM cancer. According to current National Comprehensive Cancer Network (NCCN) guidelines [1], options for adjuvant therapy of stage II cases are external beam radiation therapy, vaginal brachytherapy, or combination of both. And there has been controversy whether a pelvic and/or para-aortic lymph node (LN) dissection should be recommended. Although no difference of survival benefit in stage I EM cancer between surgery with and without lymphadenectomy [2], combined pelvic and para-paraortic lymphadenectomy showed significantly better overall survival than pelvic lymphadenectomy in patients with intermediate- or high-risk of recurrence group [3]. However, higher risk of leg edema with increasing number of LNs dissected was also reported [4]. In a prospective cohort study of measuring the value of sentinel LN mapping compared to the complete lymphadenectomy in detecting metastatic LN, they showed a high degree of diagnostic accuracy [5]. Therefore, the sentinel node sampling may be a new approach in the evaluation of EM cancer.

Radical hysterectomy was recommended for EM cancer with cervical involvement. However, cervical invasion was not associated with parametrial invasion and pathological parametrial involvement was not predictive of local recurrence or overall survival [6]. Furthermore, procedures of hysterectomy were not prognostic factors for progression-free survival or overall survival as well as local recurrence [6].

The PORTEC-3 trial did not show survival benefits in adjuvant chemoradiotherapy compared with radiotherapy for stage II cases [7], however the risk stratification was not performed. Because of higher incidence rates of locoregional recurrence or distant metastasis except for low-risk EM cancer, women with stage II EM cancer should be individually triaged for this adjuvant treatment.

Stage I EM cancer were subdivided in low-, intermediate, and high-risk disease, based on histologic grade, depth of myometrial invasion, age, and lymph-vascular space invasion. In this study, Gitte et al. [8] stratified the patients of stage II EM cancer by risk factors to evaluate recurrence and survival. Stage II uterine cancer were divided into uterine risk group as stage I cases, which was based on histological grade and depth of myometrial invasion. Uterine risk group was an independent risk factor for progression free survival and overall survival, and uterine risk factors were the most significant predictors of recurrence and survival in patients with stage II. Stage II with low-risk factor have a prognosis comparable to low-risk stage I, whereas stage II with uterine risk factors significantly increased the risk of recurrence and decreased cancer-specific survival compared to the corresponding stage I risk groups. LN resection upstaged 18.1% from stage II to stage IIIc and LN-resected stage II cases showed better overall and recurrence-free survival.

This study is meaningful suggesting that stratifying the stage II EM cancer may be an important factor in predicting the prognosis. A better triage of the risk groups may enhance efficacy of clinical treatment for stage II EM cancer patients and reduce under and over treatment. Further studies are needed to individualize risk groups of EM cancer and find novel effective targeted treatments.

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