specific inhibitor BYL719 demonstrated superior tumor inhibitory efficacy in both the NHPV-CC cell line and PDX models. Furthermore, based on gene expression profiles, we identified two subtypes of NHPV-CCs: the metabolism subtype characterized by fatty acid metabolism, and the immune-suppression subtype characterized by upregulation of PD-1 and NOTCH signaling.

Conclusion We clarified the prevalence of NHPV-CCs and compared the clinicopathology and molecular features of NHPV-CCs. Our findings highlight the significance of PIK3CA mutation and PI3K/AKT pathway in NHPV-CC tumorigenesis, suggesting the clinical potential of PI3Ka inhibitor in NHPV-CCs patients.

Disclosures There are no financial conflicts of interest to disclose.
Introduction/Background Accumulating evidence suggested the detrimental effects of adopting minimally invasive surgery in the management of early-stage cervical cancer. However, long-term evidence on the role of minimally invasive radical hysterectomy in ‘low-risk’ patients exists.

Methodology This is multi-institutional retrospective study comparing minimally invasive and open radical hysterectomy in low-risk early-stage cervical cancer patients. A propensity-score matching algorithm (1:2) was used to allocate patients into the study groups. Kaplan-Meir model was used to estimate 10-year progression-free and overall survival.

Results Charts of 224 ‘low-risk’ patients were retrieved. Overall, 50 patients undergoing radical hysterectomy were matched with 100 patients undergoing open radical hysterectomy. Minimally invasive radical hysterectomy was associated with a longer median operative time (224 (range, 100–310) vs. 184 (range, 150–240) minutes; p<0.001), lower estimated blood loss (10 (10–100) vs. 200 (100–1000) ml, p<0.001), and shorter length of hospital stay (3.8 (3–6) vs. 5.1 (4–12); p<0.001). Surgical approach did not influence the risk of having intra-operative (4% vs. 1%; p=0.257) and 90-day severe (grade 3+) postoperative complication rates (4% vs. 8%; p=0.497). Ten-year disease-free survival was similar between groups (94% vs. 95%; p=0.812; HR:1.195; 95% CI:0.275, 5.18). Ten-year overall survival was similar between groups (98% vs. 96%; p=0.994; HR:0.994; 95% CI:0.182, 5.424).

Conclusion Our study appears to support emerging evidence suggesting that, for low-risk patients, laparoscopic radical hysterectomy does not result in worse 10-year outcomes compared to the open approach. However, further research is needed and open abdominal radical hysterectomy remains the standard treatment for cervical cancer patients.

Disclosures None.

Impact of Menopausal Status on Cervical Dysplasias and Cervical Cancers

Introduction/Background It is a matter of debate whether there are other factors that may affect the results of colposcopic biopsy independent of cytology and human papilloma virus (HPV) genotype results. Therefore, we evaluated the effect of age and reproductive status on clinical outcomes in patients who underwent colposcopy.

Methodology Patients who underwent colposcopic examination at department of Gynecological Oncology, between 2016 and 2020 were evaluated retrospectively. Patients with positive cervical cytology results or patients with unknown HPV type(s) were not considered. Only patients with HPV 16 positivity and normal smear results were evaluated. Patients who had previously undergone colposcopy or a diagnostic excisional procedure were excluded. Statistical analysis was performed using IBM SPSS, Version 25.0.

Results Of 404 patients, 317 (78.5%) were in the reproductive period and 87 (21.5%) were in the menopausal period. The mean age of reproductive-aged women was 38.4 ± 3.0, and the menopausal women was 54.7 ± 5.0. The incidence of biopsy-confirmed normal cervix, cervical intraepithelial neoplasia (CIN) 1, 2, 3 and cervical cancer were 242/404 (59.9%), 73/404 (18.1%), 53/404 (13.1%), and 5/404 (1.2%), respectively (figure 1A). A significant statistical difference was found in the distribution between premenopausal and menopausal patients (p= 0.018). If we classify the biopsy results in 2 groups as CIN 1 and CIN 2+ (CIN 2 and more severe lesion or cancer); CIN 2+ was present in 78/239 (32.6%) of premenopausal patients and 11/76 (14.5%) of menopausal patients (p= 0.017, figure 1B). Cervical cancer in the menopausal period was not observed in our data.