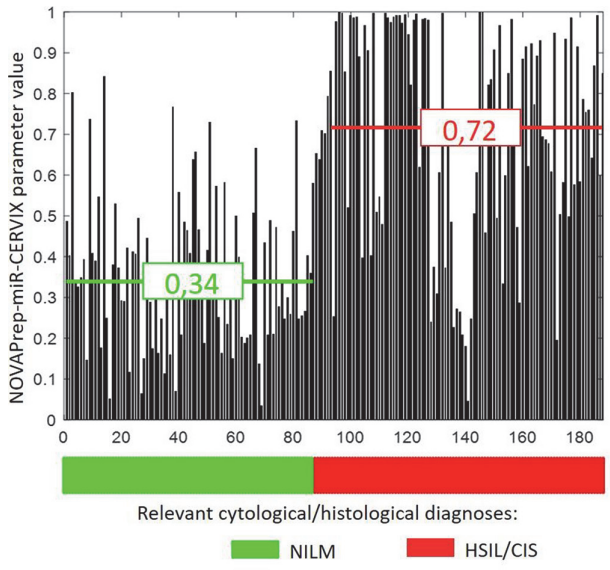
epithelium cells are considered as promising diagnostic markers of cervical dysplasia. MicroRNA-based diagnostic test-systems can provide a helpful addition to traditional diagnostic techniques.

Methodology NOVAprep-miR-CERVIX is a new test-system based on RT-qPCR analysis of six miRNAs (miR-21–5p; miR-29b-3p; miR-145–5p; miR-451a-5p; miR-1246–5p and miR-1290–3p) in material of cervical smear. Test-system includes quality of material control and control of enzymatic reaction efficacy. Machine learning based of random forest algorithm was applied for RT-qPCR results evaluation. Cervical smear samples were obtained from 226 women: 114 samples of normal epithelium and 112 samples of cervical epithelium with high-grad intraepithelial lesion (HSIL) or carcinoma in situ (CIS) as a result of cytological evaluation. Moreover, any of HSIL/CIS diagnosis was confirmed histologically.

Results The 38 samples from 216 (17.8%) did not pass quality controls and were excluded from analysis. NOVAprep-miR-CERVIX Index (miR-CERVIX-I varied from 0 to 1) was calculated on the base of results of six miRNA analysis for remaining 178 samples. Difference in miR-CERVIX-I was statistically significant in two groups of samples formed on the base of cytological/histological diagnosis (figure 1). Normal condition of cervical epithelium (miR-CERVIX-I < 0.49) was diagnosed with sensitivity 79.2%, specificity 80.46%. HSIL was diagnosed with sensitivity 70.83%, specificity 97.22% (miR-CERVIX-I > 0.78). Moreover, intermediate value of miR-CERVIX-I (between 0.5 and 0.77) is supposed to reflect condition of low-grade intraepithelial dysplasia.



Abstract 2022-RA-1115-ESGO Figure 1

Conclusion NOVAprep-miR-CERVIX can be applied for cervical dysplasia diagnostic and management as a test system complimentary to standard methods.

2022-RA-1122-ESGO DERMOSCOPY FOR GENITAL LESIONS

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Introduction/Background Diseases of the genital area cover a broad spectrum of benign and malignant disorders, that range from benign inflammatory conditions to malignant and potentially lethal diagnoses (i.e melanoma). The diagnosis of pigmented genital lesions imposes some diagnostic challenges. The application of dermoscopy can help to differentiate between benign genital lesions and malignant melanoma.

Methodology A systematic literature review of MEDLINE (PubMed) and bibliographic cross-referencing was performed to identify articles covering dermoscopy features of common and atypical nevi, melanosis and melanoma. Articles were included if dermoscopy was performed on genital lesions and dermoscopy features of pigmented genital lesions were described and extractable.

Results A total of 19 articles with 455 dermoscopy cases of genital lesions could be extrapolated from the published literature. Identified dermoscopy criteria for genital melanoma included asymmetry of color and or structure (92%), followed by blue/white or blue/grey veil (69.2%). Genital melanosis showed a diffuse pigmentation in 51.4% and a ringlike pattern in 27.8% of described cases. Features identified in common genital nevi included a homogeneous brown-gray pigmentation or brown structureless areas and were described in 35.1%. A globular pattern was described in 35.7%.

Conclusion Clinically pigmented genital lesions may look alarming, however the application of dermoscopy may help to differentiate benign melanosis and common genital nevi from melanoma.

2022-RA-1161-ESGO THE IMPACT OF OOPHORECTOMY ON SURVIVAL FROM BREAST CANCER IN PATIENTS WITH CHEK2 MUTATIONS

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Introduction/Background To estimate the impact of oophorectomy and other treatments onthe survival of breast cancer patients with a CHEK2 mutation.

Methodology Women with Stage I-III breast cancer who were treated at 17hospitals in Poland were tested for four founder mutations in the CHEK2 gene.974 women (10%) were positive for a CHEK2 mutation. Control patientswithout a CHEK2 mutation were selected from a database of patients treatedover the same time period. Information on treatments received and distantrecurrences were retrieved from medical records. Treatments includedchemotherapy, hormonal therapy

(tamoxifen) and radiation therapy.Oophorectomies were performed for the treatment of breast cancer or for benignconditions. Dates of death were obtained from the Polish Vital StatisticsRegistry. Causes of death were determined by medical record review. Predictorsof survival were determined using the Cox proportional hazards model.

Results In all, 839 patients with a CHEK2 mutation were matched to 839patients without a mutation. The mean follow-up was 12.0 years. The 15-yearsurvival for CHEK2 carriers was 76.6% and the 15-year survival for non-carriercontrol patients was 78.8% (adjusted HR = 1.06; 95% CI: 0.84–1.34; P = 0.61).Among CHEK2 carriers, the 15-year survival for women who had anoophorectomy was 86.3% and for women who did not have an oophorectomywas 72.1% (adjusted HR = 0.59; 95% CI: 0.38–0.90; P = 0.02). Among controls,the 15-year survival for patients who had an oophorectomy was 84.5% and forwomen who did not have an oophorectomy was 77.6% (adjusted HR = 1.03;95% CI: 0.66–1.61; P = 0.90).

Conclusion Among women with breast cancer and a CHEK2 mutation,oophorectomy is associated with a reduced risk of death from breast cancer.

2022-RA-1170-ESGO CAN SERUM LEVEL OF WT1 GENE REPLACE GENE EXPRESSION IN THE DIAGNOSIS OF OVARIAN CANCER?

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Introduction/Background WT1 gene and its encoded protein are highly expressed in hematological malignancies and solid tumors such as cancer of breast, lung, pancreas, ovary and prostate (1). WT1-expression is examined by IHC or qPCR, while WT1- ELISA kit is also available. We compared serum level of WT1 (sWT1) with its expression in ovarian cancer (OC) patients.

Methodology We studied 30 OC-cases 11 benign ovarian cysts (control). Their sWT1 was measured from samples collected prior to surgery or chemotherapy. ROC curve analysis was done to have a cut-off to differentiate benign from malignant lesions. It was 3.35ng/mL at 64% sensitivity and 63% specificity with AUC 0.61. Intra-operatively, tumor tissues of 22 OC-cases were collected and examined for RNA expression, which are being compared with sWT1 in this study.

Results In the two techniques, out of 22 cases, high & low values were seen in 15(68.1%) & 7 (31.8%) cases respectively. But the cases were different (table 1). qPCR: High wt1-expression was seen in 15, out of which 4 (26.6%) showed low serum level, whereas 11 (73.3%) showed high sWT1. Out of 7 low expression cases, low and high serum levels were seen in 3 & 4 cases (table 1). sWT1: It was high in 15, out of which 11 **(73.3%)** showed high expression & 4 (26.6%) showed low expression. Out of 7 low sWT1, 4 (57.1%) showed high expression and 3 (42.8%) showed low expressions (table 1).

Abstract 2022-RA-1170-ESGO Table 1 Comparison of results of qPCR & serum level

QPCR (22 cases)		Swt1 (22 cases)			
		Serum <3.3	Serum <3.3	Serum >3.3	Serum >3.3
Up- regulation (high)	15 (68.1%)	4/15 (26.6%)	4/7 (57.1%)	11/15 (73.3%)	11/15 (73.3%)
Down- regulation (low)	7 (31.8%)	3/7 (42.8%)	3/7 (42.8%)	4/7 (57.1%)	4/15 (26.6%)
	22	7	7	15	15

Conclusion We couldn't find any study, in which WT1 gene expression was compared with that of serum level. This is first pilot study, which shows that there is no correlation between gene expressions with that of their serum levels, although number cases may be required for conclusive result.

2022-RA-1316-ESGO DO OTHER HIGH RISK HPV TYPES POSITIVE CASES DESERVE COLPOSCOPY?

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Introduction/Background The cervical cancer is among the preventable causes of death and is curable in early stage when it is adequately treated. HPV test has high positive predictive values however together with colposcopic examination. American Society for Colposcopy and Cervical Pathology recommends colposcopic evaluation to HPV type 16/18 positive and cytology negative women. This study was designed to find answer of this question that 'Is there a need for colposcopy in ohter high risk HPV positive and cytology negative women?'

Methodology Patients with positive HPV screening tests were included in the study. Colposcopic examination was performed on 247 patients. Colposcopic evaluation was performed by 1 professor and 3 gynaecologic oncology assistants. For statistical analysis, Chi-square test was used for categorical variable, and Mann-Whitney U test was used for quantitative and further analysis. $p<0.05$; was considered statistically significant.

Results The mean age of 247 patients participating in the study was 41.5 years (19–72 years). Of the patients with normal cytology, 19.3% (n = 28) were HPV16; 6.2% (n = 9) were HPV18; 54.5% (n = 79) were high-risk HPV, 5.5% (n = 8) were found to be HPV16 or 18 plus high risk HPV. The colposcopic biopsy results of patients with normal smear cytology and high-risk HPV positive were compared with patients have normal cytology result and HPV16 positive or HPV 18 positive and have normal cytology with HPV 16 or 18 plus high-risk HPV positive. There were no significant differences between these groups ($p< 0.05$).