

**Conclusions** Systemic chemotherapy with TIP followed by salvage focal treatment is a promising therapeutic approach in selected patients, particularly in younger patients, without comorbidities, good performance status, low metastatic tumor burden, and with an objective response to chemotherapy.

## Genetics and Epidemiology

### IGCS19-0519

#### 225 PREVALENCE, SPECTRUM AND FOUNDER EFFECT OF BRCA1 AND BRCA2 MUTATIONS IN EPITHELIAL OVARIAN CANCER FROM MIDDLE EAST

<sup>1</sup>AK Siraj, <sup>1</sup>R Bu, <sup>1</sup>I Kaleem, <sup>2</sup>N Siraj, <sup>2</sup>W Al-Haqawi, <sup>3</sup>I Al-Badawi\*, <sup>2</sup>P Sandeep Kumar, <sup>2</sup>TA Masoodi, <sup>4</sup>A Tulbah, <sup>5</sup>F Al-Dayel, <sup>2</sup>KS Al-Kuraya. <sup>1</sup>King Faisal Specialist Hospital and Research Centre, Center for Human Cancer Genomic Research HCGR, Riyadh, Saudi Arabia; <sup>2</sup>King Faisal Specialist Hospital and Research Centre, Human Cancer Genomic Research Center, Riyadh, Saudi Arabia; <sup>3</sup>King Faisal Specialist Hospital and Research Center, Obstetrics and Gynecology, Riyadh, Saudi Arabia; <sup>4</sup>King Faisal Specialist Hospital and Research Center, Department of Pathology and Laboratory Medicine, Riyadh, Saudi Arabia; <sup>5</sup>King Faisal Specialist Hospital and Research Center, Department of Pathology, Riyadh, Saudi Arabia

10.1136/ijgc-2019-IGCS.225

**Objectives** To characterize the prevalence and effect of BRCA1 and BRCA2 mutations in Middle Eastern EOC patients.

**Methods** BRCA mutation screening was performed in 407 unselected ovarian cancer patients using targeted capture and/or Sanger sequencing.

**Results** A total of 19 different pathogenic variants (PVs) were identified in 50 (12.3%) women. Nine PVs were recurrent accounting for 80% of cases with PVs (40/50) in the entire cohort. Founder mutation analysis revealed only two mutations (c.4136\_4137 delCT and c.1140 dupG) sharing the same haplotypes thus representing founder mutations in the Middle Eastern population.

**Conclusions** Identification of the mutation spectrum, prevalence and founder effect in Middle Eastern population facilitates genetic counseling, risk assessment and development of a cost-effective screening strategy.

### IGCS19-0167

#### 226 TELOMERASE ENDOMETRIAL CELLS ACTIVITY IN HYPERPLASTIC PROCESSES

<sup>1</sup>Z Chumak, <sup>2</sup>A Zelinsky, <sup>2</sup>V Artyomenko\*, <sup>2</sup>N Shapoval. <sup>1</sup>Odessa City Climacteric Centre, Odessa, Ukraine; <sup>2</sup>Odessa National Medical University, Obstetrics and Gynecology, Odessa, Ukraine

10.1136/ijgc-2019-IGCS.226

**Objectives** Endometrial hyperplastic processes (EHP) like a combination of stromal and glandular tissue components changes has properties both for self-healing, recurrence and for malignancy, depending on morphological changes degree with markers and predictors conducted research at cellular, molecular-genetic, immune-histochemical levels.

Telomerase activity estimation in endometrial cells at EHP.

**Methods** According to WHO classification (1994) following groups were formed: I - simple hyperplasia -7 samples; II -

complex hyperplasia -8; III - simple atypical hyperplasia -8; IV - complex atypical hyperplasia -7 specimens. The control groups with morphologically unchanged endometrium -11 samples: V group - proliferation phase - 6 specimens; VI group - secretion phase-5 samples. Relative telomerase activity was determined using real-time PCR with SYBR Green dye (RQ-TRAP) according to Wege et al. methodic. To improve the study accuracy we used from 4 to 6 cells samples and calculated their average value in each experiment.

**Results** Women age was  $45.38 \pm 1.66$  years. In simple hyperplasia endometrial specimens, telomerase activity was  $1.22 \pm 0.10$  a.u. (pI-IV<0,05), complex hyperplasia -  $1.35 \pm 0.07$  a.u. (pII-pIV<0,05), simple atypical hyperplasia -  $1.23 \pm 0.08$  a.u. (pIII-pIV<0,05). The complex atypical hyperplasia telomerase activity increase reaching  $1.54 \pm 0.05$  a.u. (pIV-pV<0,05; pIV-pVI<0,05) was statistically significant. Therefore, telomerase reactivation in atypical complex hyperplasia can confirm the proliferative stage telomeres lengthening, increasing the ability for cell division, on the other hand, telomerase ability to control cell division in endometrial tissue.

**Conclusions** The parallelism presence between telomerase activity in approximately 85% of human tumors and telomerase reactivation in endometrial cells with complex atypical hyperplasia makes it possible to determine its activity fact like early malignancy marker.

### IGCS19-0248

#### 227 STUDY ON EPIDEMIOLOGY AND SCREENING OF CERVICAL CANCER IN NE INDIA

<sup>1</sup>D Barmon\*, <sup>2</sup>A Rai, <sup>1</sup>A Katak. <sup>1</sup>Dr B. Borooah Cancer Institute, Gynaecologic Oncology, Guwahati, India; <sup>2</sup>Dr B. Borooah Cancer Institute, Molecular Biology and Cancer Research, Guwahati, India

10.1136/ijgc-2019-IGCS.227

**Objectives** As per the GLOBOCON 2018 data India had 96920 new cases of cervical cancer with an AAR of 14.7 per lakh population. Northeast part of India has an interesting feature of having the highest AAR of 30.2/100,000 in Papum-pare district at the same time Dibrugarh district which is less than 100 miles apart has the lowest AAR of 4.9/100,000. So the epidemiological characteristics of cervical cancer is varied in this part of the country. With this background we intend to find out the appropriate screening tests which may be suitable for the region.

**Methods** Various screening camps were conducted and detail socio demographic records were obtained and after counselling VIA, PAP smear and Care HPV assay (Quagen) were performed on both symptomatic and asymptomatic sexually active women from 20yrs to 65 yrs of age.

**Results** A total of 479 patients were evaluated of which 75.3% of women were between 20 years to 49yrs, 34.2% of the women had 3 or more children. 38.2% had history of abortion, 43.5% had formal education of 10th grade or more. On screening 5.6% of women had positive VIA, 7.5% had abnormal PAP and 3.7% had positive care HPV test with normal PAP whereas 12.1% had positive Care HPV assay with abnormal PAP.

**Conclusions** Considering the difficult terrain of the region and looking at the final analysis of the screening tests, Care HPV triaged with VIA seemed to be a good alternative to PAP.