Abstract 11 Table 1

<table>
<thead>
<tr>
<th>TOTAL LATAM</th>
<th>ARGENTINA</th>
<th>BRAZIL</th>
<th>COLOMBIA</th>
<th>MEXICO</th>
<th>PANAMA</th>
<th>PERU</th>
</tr>
</thead>
<tbody>
<tr>
<td>tested in tumor tissue N</td>
<td>576</td>
<td>105</td>
<td>101</td>
<td>74</td>
<td>64</td>
<td>22</td>
</tr>
<tr>
<td>BRCAm tissue N (%)</td>
<td>112 (29.78%)</td>
<td>34 (32.4%)</td>
<td>27 (26.7%)</td>
<td>17 (23%)</td>
<td>18 (40.9%)</td>
<td>3 (13.6%)</td>
</tr>
<tr>
<td>gBRCAm (%)</td>
<td>67 (59.62%)</td>
<td>24 (70.6%)</td>
<td>17 (63.1%)</td>
<td>5 (29.4%)</td>
<td>16 (88.9%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>nBRCAm (%)</td>
<td>32 (29.57%)</td>
<td>7 (20.6%)</td>
<td>4 (14.8%)</td>
<td>12 (70.6%)</td>
<td>2 (66.6%)</td>
<td>7 (57.9%)</td>
</tr>
<tr>
<td>Inconclusive</td>
<td>13 (11.6%)</td>
<td>3 (9.8%)</td>
<td>6 (22.2%)</td>
<td>0 (0%)</td>
<td>2 (11.1%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Abstracts

IGCS19-0579

FLABRA, FRONTLINE APPROACH FOR BRCA TESTING IN OVARIAN CANCER (OC) TREATMENT NAÏVE POPULATION. A LATIN AMERICA (LA) EPIDEMIOLOGIC STUDY

1S Goncalves, 2G Gomez Abuin, 3D Gallardo, 4P Estevez Diaz, 5V Coaceres, 6M De la Vega, 7F Palazzo, 8G Lerzo, 9B Kuen, 10R Gerson, 11M Lim, 12M Philco, 13M Moreira Costa Zorzetto, 14A De Melo, 15R Hepta, 16V de Oliveira Santana, 17M Mederos Millhom Beato, 18Jr. Trujillo, 19M Plata, 20A Yepes, 21A Cock, 22MVM Bonifacio, 23M Cortes, 24L. Fein, 25C. Castillo, 26C Pacheco, 27M Triona, 28E Hoyoa, 29R Jaramillo, 30J Soare Nunes, 31A Menezes Morele, 32A Freire de Carvalho Galabrich, 33EH Cronemberger Costa e Silva, 34H Mora, 35D. Damian, 36L Sganga, 37L Sganga, 38MH Pereira, 39H Ramirez, 40A Nogueira, 41R Guindalini, 42V Miranda, 43G Giornelli. ASTRAZENCA, Medical Affairs LATAM, Buenos Aires, Argentina; Hospital Alemán, Oncology, Buenos Aires, Argentina; INCAN, Oncology, Mexico, Mexico; Instituto do Cancer do Estado de São Paulo – ICESP, Oncology, São Paulo, Brazil; Instituto Angel Roffo, Oncology, Buenos Aires, Argentina; CEMIC, Oncology, Buenos Aires, Argentina; Instituto Sagrada Familia, Oncology, San Miguel de Tucuman, Argentina; Fundación Investigar, Oncology, Buenos Aires, Argentina; COLIR, Oncology, La Rioja, Argentina; The American British Cowdray Medical Center I.A.P, Centro Medico ABC, Oncology, Mexico, Mexico; Instituto Oncológico Nacional, Oncology, Panama, Panama; Hospital Nacional Alberto Sabogal Sologuren, Oncology, Callao, Peru; Hospital do Cancer de Barretos, Oncology, São Paulo, Brazil; Instituto Nacional de Cancer INCA, Oncology, Rio de Janeiro, Brazil; Hospital Pérola Byington, Oncology, Sao Paulo, Brazil; Instituto do Cancer do Ceará, Oncology, Ceará, Brazil; Fundación Amarial Carvalho, Oncology, Sao Paulo, Brazil; Instituto Nacional de Cancerología, Oncology, Bogota, Colombia; Fundación Cardio Infantil, Oncology, Bogota, Colombia; Clínica Vida, Oncology, Medellin, Colombia; Instituto de Cancerología de la Clínica las Ámericas, Oncology, Medellin, Colombia; Nuxiran, Latinamerica, Buenos Aires, Argentina; Instituto Reina Fabiola, Oncology, Cordoba, Argentina; Centro Oncológico de Rosario, Oncology, Rosario, Argentina; Hospital Pernand, Oncology, Resistencia, Argentina; ONCOSALUD, Oncology, Lima, Peru; Hospital Edgardo Rebagliati, Oncology, Lima, Peru; Oncomédica – IMAT, Oncology, Monteria, Colombia; Hemato Oncologists Call, Oncology, Call, Colombia; Hospital Erasto Gaertner, Oncology, Curitiba, Brazil; Hospital Moinhos de Vento, Oncology, Sao Paulo, Brazil; Ensino e terapia de inovação Clínica AMO, Oncology, Rio Vermelho, Brazil; Centro Regional Integrado de Oncologia – CRIO, Oncology, Alvaro Wayne, Brazil; Instituto COI de Pesquisa, Oncology, Rio de Janeiro, Brazil; Pontificia Universidad Catolica do Rio Grande do Sul, Oncology, Rio Grande do Sul, Brazil; AstraZeneca, Medical Affairs, Buenos Aires, Argentina; AstraZeneca, Diagnostics, Buenos Aires, Argentina; Fundacion LATAM, Oncology, Sao Paulo, Brazil; Fundacion Valle de Lili, Oncology, Valle de Lili, Colombia; Angelica Nogueira Hospital das Clinicas- UFRGS, Oncology, Sao Paulo, Brazil; CIUDA Salvador, Oncology, Salvador, Brazil; Vanessa Miranda Instituto D’OR, Oncology, Sao Paulo, Brazil; Instituto Alexander Fleming, Oncology, Buenos Aires, Argentina

Objectives Previously described prevalence of BRCA mutated OC is 14% for germline BRCA mutations (gBRCAm), which could increase to 20% considering somatic BRCA mutations (sBRCAm). Latinamerican population is a paradigm of poly-ethnicity and ancestries and the prevalence of BRCAm is unknown.

FLABRA is a cross-sectional, multi-center study designed to determine the prevalence of BRCAm, either sBRCAm or gBRCAm in high grade serous OC LA patients, with a new approach of start testing in tumor. We also aimed to describe current genetic counselling and treatment approach at frontline in this population.

Methods We enrolled 407 patients from Argentina, Brazil, Colombia, Mexico and Panama, diagnosed with OC within the last 120 days. Archived tumor blocks or 10-µm sections were used for BRCA testing in tissue (Myriad Tumor BRACAnalysis CDx™). Patients who were positive in tumor, were analysed in blood to determine if the mutation was from germline (Myriad Single Site BRACAnalysis™). In gBRCAm, genetic counseling was advised. Patients medical records were reviewed for data relevant to medical history, OC diagnosis, counseling approach, and treatment plan.

Results Results from first 376 patients who already completed the study: BRCA mutations prevalence detected in tumor was 30%.

Conclusions Our data show a high prevalence of sBRCAM and gBRCAM in LA OC pts. Additionally, this new approach of start testing the tumor may prove to be more cost effective, leading to a more conclusive result; so refinement of this technique is a must. The high prevalence of BRCAm in certain regions of LA needs to be further investigated.

IGCS19-0443

GENETIC ANALYSIS OF PRIMARY AND RECURRENT ADULT GRANULOSA CELL TUMORS OF THE OVARY

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Objectives Adult granulosa cell tumors (aGCTs) are rare ovarian tumors underpinned by the FOXL2 mutation, with a 10–30% risk of relapse. We sought to determine the genetic alterations underpinning primary and recurrent aGCTs.
MUCINOUS OVARIAN CARCINOMA: THERAPEUTIC OPTIONS OLD AND NEW

IGCS19-0511

Methods Thirty-five aGCTs were subjected to massively parallel sequencing targeting 468 cancer-related genes (7 primary aGCTs that did not recur >4 years, 9 primary and matched recurrent aGCTs, 10 recurrent aGCTs). These cases and additional 12 aGCTs (n=3, primary aGCTs that did not recur; n=9, recurrent aGCTs) were subjected to Sanger sequencing analysis of the TERT promoter.

Results All aGCTs included harbored the FOXL2 p.C134W hotspot mutation. A significantly higher frequency of TERT promoter mutations was found in recurrent (64%) than in primary aGCTs (26%; p=0.017). Moreover, aGCT recurrences harbored a higher frequency of somatic KMT2D and TP53 mutations (16%), each) than primary aGCTs with subsequent recurrences (11% and 0%) and primary aGCTs without subsequent recurrences (14% and 0%). We identified a higher frequency of CDKN2A/B homozygous deletions in recurrent (16%) than in primary aGCTs (6%), and other gene alterations restricted to recurrent aGCTs. Pathway analysis revealed that aGCTs are underpinned by genetic alterations affecting the cell cycle pathway. Clonal decomposition of matched primary and recurrent aGCTs showed that aGCTs display multiple clones at diagnosis and relapse.

Conclusions Our findings suggest that although FOXL2 plays a crucial role in the tumorigenesis of aGCTs, recurrences might be associated with genetic alterations affecting TERT, cell cycle-related genes such as TP53 and CDKN2A/B, and other cancer-related genes, including KMT2D, TET2 and EPHAS.

Plenary 3

IGCS19-0583


Objectives To compare the long-term oncologic outcomes after minimally invasive surgery (robot assisted/laparoscopic radical hysterectomy) (MIS) versus abdominal radical hysterectomy (ARH) for early-stage cervical cancer (CC).

Methods This is a large single center retrospective study. From our institution’s patient registry, we identified a total of 587 early-stage cervical cancer patients who underwent either MIS or ARH between 2000 and 2017. We excluded the following patients from the final analysis: (1) received neo-adjuvant treatment prior to surgery; (2) had histologic types other than squamous cell carcinoma, adenocarcinoma, or adenosquamous carcinoma; (3) were double primary cancer cases; (4) had stages higher than stageIB1 (FIGO 2009). We included only patients who underwent radical hysterectomy for early-stage cervical cancer and radical parametrectomy for stumps carcinoma patients in our study population.

Results In total, 230 and 357 patients were assigned to the MIS and ARH groups, retrospectively. There were no significant differences for any demographics including age, stage, histology. Five-year recurrence free survival was 88.6% (95% CI, 83.4%-92.3%) and 93.5% (95% CI, 90.4%-95.7%), (p=0.04) respectively in the MIS and ARH group, and the five-year cancer specific survival was 95.4% (95% CI, 90.9%-97.7%) and 97.4% (95% CI, 95.1%-98.7%), (p=0.12) in the MIS and ARH group, respectively. MIS group have more peritoneal-combined relapses comparing ARH (p=0.02). The relapse rate tended to be higher for squamous cell carcinoma in MIS group (p=0.09). Disease free survival and cancer specific survival were worse in the MIS group p- value= 0.04 and 0.12 respectively.