

Abstract 16 Table 1

Pt	Tumor Size (cm)	LVSI	Pelvic Node	Vaginal Margin	Grade	Histology	First 10	Carcinomatosis
N=90	1.7±1.1	44(49%)	16(18%)	4 (4%)	2≥ = 62 (69%)	Adeno= 40 (44%) Squam= 50 (56%)	40	-
1	2	Yes	No	Yes	3	Squamous	Yes	No
2	4	No	No	No	2	Adenocarcinoma	Yes	No
3	2.6	Yes	Yes	No	3	Squamous	Yes	No
4	2.5	No	Yes	No	1	Adenocarcinoma	Yes	No
5	2	Yes	No	Yes	3	Adenocarcinoma	Yes	Yes
6	2.6	Yes	No	No	3	Adenocarcinoma	Yes	Yes
7	3	Yes	No	No	3	Adenocarcinoma	No	Yes
Total Recur N=7	Median= 2.7 cm	5 (71%)	2 (29%)	2 (29%)	2≥ = 6(85%)	Adeno= 5 (71%) Squam= 2 (29%)	Yes= 6 (85%)	Yes= 3 (43%)

(7%) squamous ( $p=0.057$ ). Three recurrences had carcinomatosis with mean DFS and OS of  $5.3 \pm 2.3$  (95% CI  $\pm 4.5$ ) and  $28.3 \pm 30.9$  (95% CI  $\pm 60$ ) months compared to  $17.8 \pm 6.3$  (95% CI  $\pm 13$ ) and  $80.6 \pm 48.6$  (95% CI  $\pm 95.2$ ) months for cases with local/pulmonary metastasis ( $n=4$ ) ( $p=0.014$ ). Using a multiple logistic regression model, adenocarcinoma ( $p=.024$ ) and first 10 experience cases ( $p=0.048$ ) remained significant for recurrence.

**Conclusions** Early stage CC treated with RRH has a unique pattern of recurrence with carcinomatosis that results in shortened DFS. Recurrences were associated with adenocarcinoma and first 10 cases of surgeon experience.

## IGCS19-0427

17

### STANDARD ULTRASTAGING (SU) COMPARED TO ONE-STEP NUCLEIC ACID AMPLIFICATION (OSNA) FOR SENTINEL LYMPH NODE METASTASIS DETECTION IN ENDOMETRIAL CANCER PATIENTS: A RETROSPECTIVE LARGE COHORT COMPARISON

<sup>1</sup>A Buda\*, <sup>2</sup>F Fanfani, <sup>2</sup>G Monterossi, <sup>1</sup>F Vecchione, <sup>2</sup>E La Fera, <sup>1</sup>M Adorni, <sup>1</sup>D Vicini, <sup>2</sup>A Gioé, <sup>1</sup>G Di Martino, <sup>3</sup>E De Ponti, <sup>4</sup>GF Zannoni, <sup>5</sup>P Perego, <sup>6</sup>F Landoni, <sup>2</sup>G Scambia. <sup>1</sup>Unit Gynecology Oncology Surgery- San Gerardo Hospital- Monza, Obstetrics and Gynecology, Monza, Italy; <sup>2</sup>Fondazione Policlinico Universitario A. Gemelli- IRCCS- Università Cattolica del Sacro Cuore, Obstetrics and Gynecology, Roma, Italy; <sup>3</sup>San Gerardo Hospital, Physical Medicine, Monza, Italy; <sup>4</sup>Fondazione Policlinico Universitario A. Gemelli- IRCCS- Università Cattolica del Sacro Cuore, Pathology, Roma, Italy; <sup>5</sup>San Gerardo Hospital, Pathology, Monza, Italy; <sup>6</sup>San Gerardo Hospital- University of Milano-Bicocca, Obstetrics and Gynecology, Monza, Italy

10.1136/ijgc-2019-IGCS.17

**Objectives** We compared the traditional ultrastaging (SU) with the one-step nucleic acid amplification (OSNA) for the detection of sentinel lymph node (SLN) metastasis in women with apparent early stage endometrial carcinoma (EC).

**Methods** All women were surgically staged including SLN mapping. Nodes were cut perpendicular to the long axis and two adjacent 5 mm sections were cut at each of 2 levels 50 mm apart, and one slide was stained with H&E and the other with immunohistochemistry using the AE1/AE3 anticytokeratin antibody, and one negative control slide for a total of five

slides per block. For OSNA analysis, the 2mm sections of the SLN were homogenized to form a lysate that was centrifuged and inserted into the RD100i instrument where for the isothermal amplification of CK19 mRNA.

**Results** Totally 409 patients were included in the analysis (183 OSNA, 226 SU). Overall, 3521 lymph nodes were removed, of those 871 SLN's (24.7%) were identified (381 OSNA, 490 SU). Sixty patients had metastasis on SLN's (26 OSNA, 34 SU). Macrometastasis, micrometastases, and ITC were 25.7%, 68.6% and 5.7% for OSNA; 48.1%, 36.5% and 15.4% for SU ( $p = 0.015$ ). ITC alone were recorded in 7 women (2 OSNA, 5 SU).

**Conclusions** The OSNA assay detected a higher rate of micrometastasis and a lower rate macrometastasis and ITC compared to SU. The clinical and prognostic impact of ITC is still controversial. Further studies are needed to clarify the clinical impact of the OSNA assessment technique and the prognostic impact of ITC in patients with stage I EC.

## IGCS19-0320

18

### LATE PERSISTANT SUBSTANTIAL PATIENT REPORTED SYMPTOMS (LAPERS), AFTER RADIO(CHEMO)THERAPY AND MRI IMAGE-GUIDED ADAPTIVE BRACHYTHERAPY FOR LOCALLY ADVANCED CERVICAL CANCER IN THE EMBRACE STUDY

<sup>1</sup>AS Vittrup, <sup>2</sup>R Nout\*, <sup>3</sup>R Pötter, <sup>4</sup>IM Jürgenliemk-Schulz, <sup>1</sup>K Tanderup, <sup>3</sup>K Kirchheiner. <sup>1</sup>Aarhus University Hospital, Department of Oncology, Aarhus, Denmark; <sup>2</sup>Leiden University Medical Center, Department of Radiation Oncology, Leiden, The Netherlands; <sup>3</sup>Medical University of Vienna/General Hospital of Vienna, Department of Radiation Oncology-Comprehensive Cancer Center, Vienna, Austria; <sup>4</sup>University Medical Centre Utrecht, Department of Radiation Oncology, Utrecht, The Netherlands

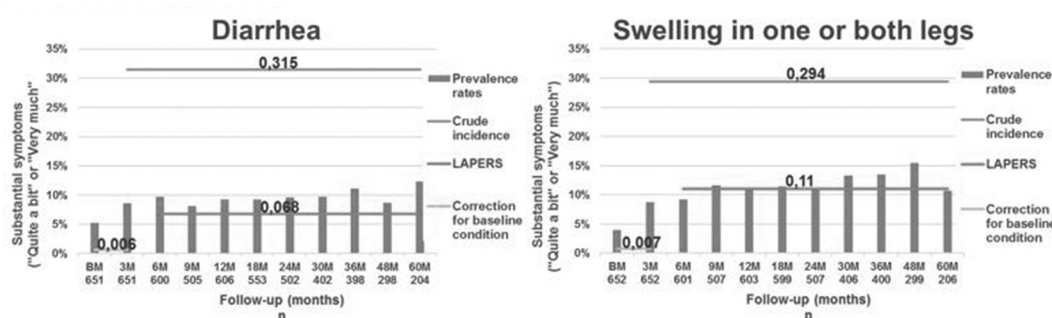
10.1136/ijgc-2019-IGCS.18

**Objectives** To report on patterns of morbidity from the EMBRACE prospective study on MRI image-guided, adaptive brachytherapy in locally advanced cervical cancer, using a novel method to identify patients with LAtE, PERSistent, Substantial treatment-related symptoms (LAPERS).

**Methods** EORTC QLQ-C30 + CX24 were analyzed in 657 patients out of 1416 patients within the EMBRACE study

Abstract 18 Table 1

	Symptom	LAPERS	Crude incidence	LAPERS/crude incidence ratio	Median prevalence	LAPERS/median prevalence ratio
Gastro-intestinal symptoms	Nausea	1,2%	17,4%	0,07	3,8%	0,32
	Vomiting	0,3%	7,3%	0,04	1,4%	0,21
	Constipation	2,1%	16,4%	0,13	5,0%	0,42
	Diarrhea	6,8%	31,5%	0,22	9,6%	0,71
	Difficulty controlling bowel	4,6%	22,3%	0,21	6,5%	0,71
	Blood in stools	0,5%	10,8%	0,05	2,0%	0,25
	Abdominal cramps	3,5%	27,8%	0,13	7,7%	0,45
Urinary symptoms	Urinary frequency	11,1%	44,9%	0,25	16,0%	0,69
	Pain/burning feeling passing urine	0,8%	16,3%	0,05	3,4%	0,24
	Leaking of urine	5,2%	20,0%	0,26	6,7%	0,78
	Difficulty emptying bladder	1,7%	15,0%	0,11	4,2%	0,40
Vaginal symptoms	Irritation/soreness in vagina/vulva	1,8%	18,5%	0,10	3,8%	0,47
	Vaginal discharge	1,1%	18,3%	0,06	2,8%	0,39
	Abnormal vaginal bleeding	0,0%	7,4%	0,00	1,1%	0,00
Symptoms from other organs	Shortness of breath	4,1%	19,4%	0,21	6,0%	0,68
	Tingling/numbness in hands/feet	11,3%	38,5%	0,29	14,7%	0,77
	Swelling in one or both legs	11,0%	29,4%	0,37	11,4%	0,96
	Pain in lower back	10,4%	41,8%	0,25	15,6%	0,67
General symptoms	Pain	8,8%	41,6%	0,21	14,0%	0,63
	Lack of appetite	2,7%	21,1%	0,13	5,3%	0,51
	Hot flashes/sweats	17,2%	47,3%	0,36	21,0%	0,82
	Trouble sleeping	16,6%	47,9%	0,35	19,1%	0,87
	Tiredness	20,0%	51,0%	0,39	19,9%	1,01
	Need to rest	19,3%	48,2%	0,40	19,1%	1,01
	Felt weak	12,2%	41,7%	0,29	13,4%	0,91
	Difficulty concentrating	5,8%	25,8%	0,22	8,3%	0,70
Difficulty remembering	10,0%	28,5%	0,35	11,2%	0,89	
Emotional symptoms	Felt tense	8,6%	36,4%	0,24	12,3%	0,70
	Worry	13,1%	40,9%	0,32	13,5%	0,97
	Felt irritable	8,0%	31,6%	0,25	10,4%	0,77
	Felt depressed	7,4%	29,0%	0,26	9,2%	0,80



Abstract 18 Figure 1

who had a valid baseline, 3 months' assessment and at least 3 additional late follow-ups. A LAPERS event for an individual patient was defined when the median scoring over late follow-ups was "quite a bit" or "very much" (substantial symptoms). For organ-related symptoms baseline morbidity was taken into account by requiring the median to be worse than the minimum of baseline and 3 months scoring (treatment-related). In

addition, crude incidences and median prevalence rates were calculated.

**Results** Median follow-up was 42 months (IQR 30–59). LAPERS, crude incidence and median prevalence rates of substantial symptoms are presented in table 1; and examples including prevalence rates in figure 1. LAPERS/crude incidence ratios lower than 0.1 indicate that <10% of symptomatic

patients experience persisting substantial symptoms. LAPERS/median prevalence ratios close to 1 indicate that the proportion of patients experiencing substantial symptoms displayed in the prevalence over time are the same individual patients with persisting symptoms.

**Conclusions** LAPERS method provides complementary information to prevalence and incidence rates. LAPERS provides a more appropriate tool for a valid assessment of patients' burden of substantial toxicity.

## IGCS19-0619

19

### A LARGE, MULTICENTER, RETROSPECTIVE STUDY ON EFFICACY AND SAFETY OF STEREOTACTIC BODY RADIOTHERAPY (SBRT) IN OLIGOMETASTATIC OVARIAN CANCER (MITO RT1 STUDY)

<sup>1</sup>G Macchia, <sup>2</sup>R Lazzari, <sup>3</sup>N Colombo, <sup>4</sup>C Laliscia, <sup>5</sup>G Capelli, <sup>6</sup>GR D'Agostino, <sup>1</sup>F Deodato, <sup>7</sup>F Trippa, <sup>8</sup>E Ippolito, <sup>2</sup>S Ronchi, <sup>4</sup>F Pajar, <sup>6</sup>M Scorsetti, <sup>9</sup>S Cilla, <sup>2</sup>R Ingargiola, <sup>10</sup>A Huscher, <sup>11</sup>AM Cerrotta, <sup>12</sup>F Andrei, <sup>13</sup>L Vicenzi, <sup>14</sup>D Russo, <sup>15</sup>S Borghesi, <sup>16</sup>E Perrucci, <sup>17</sup>S Pignata, <sup>18</sup>C Aristei, <sup>19</sup>AG Morganti, <sup>20</sup>G Scambia, <sup>21</sup>V Valentini, <sup>2</sup>BA Jereczek-Fossa, <sup>22</sup>G Ferrandina\*. <sup>1</sup>Fondazione di Ricerca e Cura Giovanni Paolo II, Radiotherapy Unit, Campobasso, Italy; <sup>2</sup>IEO European Institute of Oncology- IRCCS, Division of Radiotherapy, Milan, Italy; <sup>3</sup>IEO European Institute of Oncology- IRCCS and University of Milan-Bicocca, Division of Medical Gynecologic Oncology, Milan, Italy; <sup>4</sup>Division of Radiation Oncology- University of Pisa, Department of Translational Medicine, Pisa, Italy; <sup>5</sup>University of Cassino and Southern Lazio, Department of Human Sciences- Society and Health, Cassino, Italy; <sup>6</sup>Humanitas Clinical and Research Hospital - IRCCS, Radiotherapy and Radiosurgery, Rozzano MI, Italy; <sup>7</sup>S. Maria Hospital, Radiation Oncology Centre, Terni, Italy; <sup>8</sup>Campus Bio-Medico University, Department of Radiation Oncology, Rome, Italy; <sup>9</sup>Fondazione di Ricerca e Cura Giovanni Paolo II, Medical Physic Unit, Campobasso, Italy; <sup>10</sup>Fondazione Poliambulanza, U.O. di Radioterapia Oncologica "Guido Berlucchi", Brescia, Italy; <sup>11</sup>Fondazione IRCCS Istituto Nazionale dei Tumori, Radiotherapy Unit, Milan, Italy; <sup>12</sup>San Raffaele Scientific Institute, Department of Radiation Oncology, Milan, Italy; <sup>13</sup>Azienda Ospedaliera Universitaria Ospedali Riuniti, Oncology and Radiotherapy-, Ancona, Italy; <sup>14</sup>Ospedale "Vito Fazzi", Radiotherapy Unit, Lecce, Italy; <sup>15</sup>Azienda USL Toscana sud est-San Donato Hospital, Radiotherapy, Arezzo, Italy; <sup>16</sup>University of Perugia and Perugia General Hospital, Radiation Oncology Section, Perugia, Italy; <sup>17</sup>Istituto Nazionale Tumori di Napoli, Fondazione Pascale IRCCS, Naples, Italy; <sup>18</sup>University of Perugia and Perugia General Hospital, Radiation Oncology Section, Perugia, Italy; <sup>19</sup>University of Bologna- S. Orsola-Malpighi Hospital, Department of Experimental- Diagnostic and Specialty Medicine - DIMES, Bologna, Italy; <sup>20</sup>Fondazione Policlinico Universitario A. Gemelli- IRCCS, UOC Ginecologia Oncologica- Dipartimento per la salute della Donna e del Bambino e della Salute Pubblica, Roma, Italy; <sup>21</sup>Fondazione Policlinico Universitario A. Gemelli- IRCCS, UOC di Radioterapia- Dipartimento di Scienze Radiologiche- Radioterapiche ed Ematologiche, Roma, Italy; <sup>22</sup>Fondazione Policlinico Universitario A. Gemelli- IRCCS- UOC Ginecologia Oncologica, Dipartimento per la salute della Donna e del Bambino e della Salute Pubblica, Roma, Italy

10.1136/ijgc-2019-IGCS.19

**Objectives** The aim of this retrospective, multicenter study (MITO RT-01) was to define activity and safety of Stereotactic Body Radiotherapy (SBRT) in a very large, real life dataset of metastatic/persistent/recurrent ovarian cancer (MPR-OC) patients. Clinical and SBRT parameters have been analyzed in order to identify predictors of outcome.

**Methods** The endpoints of the study were the rate of complete response (CR) to SBRT, and the 24-month actuarial local control (LC) rate on "per lesion" basis. The secondary endpoints were acute and late toxicities, and the 24-month

actuarial late toxicity free survival. Toxicity was evaluated by RTOG/EORTC and CTC-AE scales, according to center policy. Logistic and Cox regression were used for the uni- and multivariate analysis of factors predicting clinical CR and actuarial outcomes.

**Results** CR, PR and SD were observed in 291 (65.2%), 106 (23.8%), and 33 (7.4%) lesions. Patient age <60 years, PTV <18 cm<sup>3</sup>, lymph node disease, and BED $\alpha/\beta$ 10 >70 Gy were associated with higher chance of CR in the multivariate analysis. With a median follow-up of 22 months (range: 3–120), the 24-month actuarial LC rate was 81.9%. Achievement of CR and total dose >25 Gy were associated with better LC rate in the multivariate analysis. Mild toxicity was experienced in 54 (20.7%) patients. The 24-month late toxicity free survival rate was 95.1%.

**Conclusions** This study confirms the activity and safety of SBRT in MPR-OC patients and identifies clinical and treatment parameters able to predict CR and LC rate.

## IGCS19-0461

20

### CLINICAL TRIAL WITH TOPICAL USE OF ESTROGEN, TESTOSTERONE AND VAGINAL DILATOR IN WOMEN WITH CERVICAL CANCER AFTER RADIOTHERAPY- EVALUATION OF QUALITY OF LIFE (QOL)

J Martins, A Francisca Vaz, R Célia Grion, S Carlos Barros Esteves, L Costa-Paiva, L Francisco Cintra Baccaro\*. *University of Campinas- UNICAMP/CAISM, Gynecology, Campinas, Brazil*

10.1136/ijgc-2019-IGCS.20

**Objectives** With improved survival rates for locally advanced cervical cancer, research focus has shifted to treatment-related adverse events. A clinical trial was conducted to compare the effects of topical estrogen, topical testosterone and vaginal dilator in QOL of women after radiotherapy.

**Methods** Clinical trial of 195 women, randomized to receive topical estrogen (66), topical testosterone (34), vaginal dilator (29) or lubricating gel (66) for one year, starting soon after the end of radiotherapy from 01/2013 to 05/2018. The outcome variable was QOL evaluated by WHOQOL-bref. Evaluations were performed shortly after radiotherapy (afterRT), 4 months (4m), 8 months (8m) and one year after treatment (12m). Statistical analysis was carried out using ANOVA and multiple linear regression.

**Results** The mean age of women was 46.78 ( $\pm$ 13.01) years, 61,03% were premenopausal and 73,84% had stage IIB-IIIb tumors. No changes were observed in the different WHOQOL-bref domains for the different treatment groups during the intervention period, except for the physical domain, where a significant improvement of the mean score was observed in the testosterone (after RT $\neq$ 8m,12m; 4m  $\neq$  8m;  $p$ <0.01) and vaginal dilator group (after RT $\neq$ 8m,12m;  $p$ <0.01). Multiple linear regression was performed to evaluate the factors associated with the percentual change in the WHOQOL-bref scores after 12 months of intervention. Having received teletherapy and brachytherapy ( $\beta$ =38.09,  $p$ <0.01) and using a vaginal dilator ( $\beta$ =24.43;  $p$ =0.01) were