surgery was not associated with increased hazard of overall death (HR 0.8 95% CI 0.4–1.5) or cancer-specific death (HR 1.0 95%CI 0.5–2.4). Small number of deaths limited precision of results.

Conclusion Fertility-sparing surgery was not associated with increased risk of death compared to standard surgery among reproductive-age epithelial ovarian cancer survivors with stage IA or IC disease.

2022-RA-848-ESGO OBSTETRIC AND NEONATAL OUTCOMES AFTER BREAST CANCER: A POPULATION-BASED STUDY

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Introduction/Background To evaluate obstetric and neonatal outcomes of the first live birth conceived following breast cancer diagnosis.

Methodology We performed a population-based study to compare live births between women with a history of breast cancer and matched controls with no cancer history. Cases and controls were identified using linked data from the California Cancer Registry and California Office of Statewide Health Planning and Development datasets. Cases were diagnosed with stage I-III breast cancer at ages 18–45 years between January 1, 2000, and December 31, 2012, and conceived ≥12 months after breast cancer diagnosis. Controls were covariate-matched women without a history of breast cancer who delivered during 2000–2012. The primary outcome was preterm birth <37 weeks. Secondary outcomes were preterm birth <32 weeks, small for gestational age, cesarean delivery, severe maternal morbidity, and neonatal morbidity. Subgroup analyses were used to assess time from initial treatment to conception and receipt of additional adjuvant therapy prior to pregnancy on outcomes of interest.

Results Of 30,021 women age 18–45 diagnosed with stage I-III breast cancer during 2000–2012, 553 met the study inclusion criteria. Those with a history of breast cancer and matched controls had similar odds of preterm birth <37 weeks (odds ratio [OR], 1.29; 95% CI, 0.95–1.74), preterm birth <32 weeks (OR, 0.77; 95% CI, 0.34–1.79), delivering a small for gestational age neonate (<5th percentile: OR, 0.60; 95% CI, 0.35–1.03; <10th percentile: OR, 0.94; 95% CI, 0.68–1.30), and experiencing severe maternal morbidity (OR, 1.61; 95% CI, 0.74–3.50). Patients with a history of breast cancer had higher odds of undergoing a cesarean delivery (OR, 1.25; 95% CI, 1.03–1.53), however their offspring did not have increased odds of neonatal morbidity compared to controls (OR, 1.15; 95% CI, 0.81–1.62).

Conclusion Breast cancer history was not strongly associated with obstetric and neonatal complications.

2022-RA-870-ESGO FERTILITY OUTCOME OF PATIENTS WITH STAGE I IMMATURE TERATOMA – DO SURGICAL APPROACH AND POST-SURGICAL TREATMENT MATTER?

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Introduction/Background Immature teratomas (ITs) are a rare disease representing about one-third of all malignant ovarian germ cell tumors. They are frequently diagnosed in young women, with a peak at 15–30 years old, when the childbearing desire is not completed. Thus, fertility-sparing surgery (FSS) is the treatment of choice, followed by adjuvant chemotherapy (CT) in patients with high-risk features. We investigated the effect of CT on fertility outcome in stage I any grades ITs, also focusing on the effect of the type of ovarian surgery (unilateral salpingo-oophorectomy (USO) vs cystectomy (Cy)) on the same outcome.

Methodology Clinicopathological data were retrospectively collected and analyzed from a cohort of 74 patients with stage I ITs treated at San Gerardo Hospital (Monza, Italy). Forty-seven patients who manifested pregnancy desire and underwent a FSS were enrolled.

Results Among the 47 patients included 37 patients (78,7%) reached pregnancy. The pregnancy rate was not significantly different neither between adjuvant CT and surveillance group (62.5% and 82.0%, respectively [p = 0.21]), nor between USO vs Cy group (79,4% and 76,9%, respectively [p = 0.57]). The only statistical significant difference was found for staging (a decrease in pregnancy rate from 86.5% for stage IA to 50.0% for stage IC [p = 0.02]), but no factors reached a significant impact on the fertility outcome in a multivariate analysis. Interestingly, 62,5% of patients who relapsed reached a pregnancy.

Conclusion These data confirm that a fertility sparing approach is feasible in this young population, and the fertility outcome does not depend on surgical approach or post-surgical treatment. More prospective data are needed, and the role of stage of disease must be fully investigated.

2022-RA-962-ESGO CANCER IN PREGNANCY: MESSAGE IN A BOTTLE FROM TERTIARY CENTER OF MILAN

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Introduction/Background Cancer complicates approximately 0.1% of all pregnancies. The management represent a challenge because the need of balancing the risks for mother and baby. This study reports our experience in oncological and obstetrical care in patients with cancer in pregnancy (CIP).

Methodology Retrospective cohort study including 78 women with primary invasive CIP between 2006 and 2022 observed in our Institution; oncologic, obstetric and neonatal data were collected from 64 cases,14 excluded for incomplete data.

Abstract 2022-RA-962-ESGO Table 1 Patients' characteristics with cancer in pregnancy

Patients characteristics	
Age at diagnosis (years)	34 (25-45)
Gestational age at diagnosis (weeks)	16 (1-38)
Obstetrical Outcomes	
Apgar Score (at 5')	
9-10	39 (61 %)
7-8	4 (6.3 %)
< 7	0 (0 %)
Unknown	21 (32.7 %)
Birthweight (g)	2690 (+/- 810)
Complications at delivery	
None	59 (93 %)
Yes	5 (7 %)
Cancer types in pregnancy	
Breast	53 (84.7 %)
Cervical	2 (3.1 %)
Lymphoma	2 (3.1 %)
Nasopharynx	2 (3.1 %)
Lung	1 (1.5 %)
Ovarian	1 (1.5 %)
Thyroid	1 (1.5 %)
Colon	1 (1.5 %)
Treatment in pregnancy	
Chemotherapy	27 (42.1 %)
Surgery	4 (6.3 %)
Surgery and Chemotherapy	28 (43.7 %)
None	5 (7.9 %)

Results The most common cancer was breast cancer (84.7%). Most of the cancer were diagnosed at an early stage, except for a case of IV stage lung cancer and a case of III stage ovarian cancer. Patients characteristics are shown in table 1. After multidisciplinary consultancy, patients were encouraged to continue the pregnancy and to receive a cancer treatment. Pregnancy management included standard prenatal care, ultrasound assessment of fetal growth in the third trimester and assessment of fetal wellbeing after chemotherapy administration. The mean gestational age at delivery was 36 weeks. Delivery was elective in 79% of cases, mainly due to the need to continue oncologic therapy. Mode of delivery was c-section in 56.2% and vaginal birth in 43.8%. Placental tissue was collected for histological analysis.

All the babies were born alive, and only three required intensive care because of IUGR (Intrauterine Growth Restriction). No maternal, fetal or neonatal deaths were observed.

Conclusion CIP is a rare but progressively increasing event. A multidisciplinary team including oncologists, obstetricians and pediatricians is crucial to balance the oncologic treatment with pregnancy management in order to avoid major neonatal complication due to iatrogenic prematurity beyond treatment's side effects as well as safeguarding the patient therapeutic indication.

2022-RA-976-ESGO ALK-REARRANGED LUNG CANCER AND UNCOMPLICATED PREGNANCIES ON ALECTINIB: DREAM O REALITY?

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Introduction/Background Lung cancer incidence is increasing in pregnancy, partially related to advanced maternal age. A subset of patients with non-small cell lung cancer (NSCLC) harbor an Anaplastic Lymphoma Kinase (ALK) gene rerrangement. ALK-inhibitors, such as Alectinib, are promising drug to treat ALK-rearranged NSCLC, but rare safety data regarding use during pregnancy are known.

Methodology We report our experience in management of two patients treated with Alectinib during pregnancy for advanced ALK rearranged lung cancer, between 2018 and 2022.

Results In 2018, a 31 years old women affected of metastatic ALK-rearranged lung cancer treated with Alectinib 600 mg twice daily became pregnant by spontaneous conception. The case, occurred to our attention at 7 weeks of pregnancy, was discussed within a multidisciplinary team: the patient decided to continue pregnancy and full-dose treatment. Mother and fetus were subjected to careful clinical and instrumental investigations until delivery. We determined the levels of Alectinib in placenta, amniotic fluid, maternal plasma and cord-derived fetal plasma. Safety data have further confirmed the bodyguard function of the placenta. To date the mother is in oncological follow-up as well as the baby in pediatric one. We are currently following another patient, 38 years old, affected by the same pathology as well as treatment. The conception was spontaneous, occurred under treatment and she is now 31 weeks pregnant: for now, there have been no side effect for mom and fetus.

Conclusion These cases, albeit only two, reveals that Alectinib during pregnancy is not necessarily associated with detectable changes in the embrio-fetal development. For the time, fertile patient treated with this new drugs must be recommended for contraception, but in case of desire of motherhood or ongoing pregnancy a multidisciplinary team should comfort the patient in making choices: a well-informed patient can choose consciously.

2022-RA-989-ESGO DOES FERTILITY PRESERVATION AFFECT THE ONSET OF THE ONCOLOGICAL TREATMENT AND THE RESPONSE TO NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER?

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Introduction/Background Study in breast cancer patients to assess whether fertility preservation (FP) can affect the onset