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

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<th>Patients characteristics</th>
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| Age at diagnosis (years) | 34 (25-45)  
| Gestational age at diagnosis (weeks) | 16 (1-38)  
| Obstetrical Outcomes |  
| Apgar score (at 5’) |  
| 9-10 | 39 (61.3%)  
| 7-8 | 4 (6.3%)  
| <7 | 0 (0%)  
| Unknown | 21 (32.7%)  
| Birthweight (g) | 2690 (+/- 810)  
| Complications at delivery |  
| None | 59 (93%)  
| Yes | 5 (7.3%)  
| Cancer types in pregnancy |  
| Breast | 53 (84.7%)  
| Cervical | 2 (3.3%)  
| Lymphoma | 2 (3.3%)  
| Nasopharynx | 2 (3.3%)  
| 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.

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 rearrangement. 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 embryo-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.

Introduction/Background Study in breast cancer patients to assess whether fertility preservation (FP) can affect the onset of the oncological treatment and the response to neoadjuvant chemotherapy in breast cancer? 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.

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