Introduction
Endometrioma decidualization during pregnancy is a demanding clinical condition. Ultrasonographic features may mimic ovarian cancer and clinicians have to face the dilemma whether to operate or not a pregnant woman. Surgery during pregnancy can be safely done but operating because of a pre-existing benign lesion is obviously unwise, in particular in the II or III trimester. In recent years, efforts have been done to improve our capacities to discern between cancer and decidualization but the diagnosis remains challenging. A more in-depth knowledge of the epidemiology of this phenomenon could be helpful for clinicians. However, to date, studies aimed at estimating the frequency of this event are lacking in the literature.

Methods
Women carrying ovarian endometriomas and scheduled for IVF were prospectively recruited. Basal ultrasound evaluation was performed before entering the IVF cycle and, in case of pregnancy, scans were repeated at 6, 12, 24, 36 weeks of gestation and 1 month after delivery. All scans were performed by expert ultrasonographers with the specific aim of detecting decidualization. The primary aim of the study was estimating the frequency of this event. The study is still ongoing and results presented herein are preliminary.

Results
Until March, of the 88 patients recruited, 30 (34%) got pregnant. Scans up to at least 12 weeks’ gestation were available for 21 of them (6 had a miscarriage, 2 were lost to follow-up and 1 ongoing). Since 4 out of these 21 women had bilateral endometriomas, data was available for 25 cysts. Overall, decidualization was detected in two women (3 cysts), corresponding to a rate of 9.5% per women (95%CI: 1.7-31.8%) and 12% per cyst (95%CI: 3.1-32.3%). Both cases were first detected at 12 weeks of pregnancy.

Conclusion
Endometrioma decidualization during pregnancy is not rare. A more precise estimate of the frequency of this event will be possible once the recruitment will be terminated.