

CANCER RISK

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One of the most important causes of concern in health professionals and patients involved in assisted conception is the risk of cancer after fertility treatments. The rationale for this thinking is the known increased prevalence of certain types of tumours in women with long-term exposure to hormones, such as pregnancy or treatments using contraceptive pill or hormonal replacement therapy for menopause. However, whether assisted conception treatment increases the risk of cancer needs to be assessed cautiously, since hormonal exposure is short and transient, and many confounding factors are associated. Not only drugs for ovulation induction or controlled ovarian stimulation may increase the cancer risk, but also infertility itself, advanced maternal age, or associated pathologies commonly related to a higher risk of cancer, such as polycystic ovary syndrome (PCOS), endometriosis or obesity. Other lifestyle factors (smoking, alcohol...) could also affect. The studies performed to date do not clearly correlate drugs for ovarian stimulation with ovarian or endometrial cancer. Maybe, only women with unopposed estrogens may present a higher risk of endometrial cancer, such as those with PCOS. Prevalence of borderline tumours of the ovary could be also increased, but perhaps due to the closer follow-up of the infertile women in comparison to the general population. However, controversy exists regarding breast cancer. Although data are generally reassuring, women older than 40 years, with hormonal infertility, or ≥ 4 IVF cycles performed could be at risk, being advisable a close surveillance of these patients. Oocyte donors are probably the best population to be analyzed after controlling some lifestyle factors (such as smoking or diet), because they are young and use to be healthy, normoweight and fertile. To conclude, more well-designed studies are needed, but currently data regarding the risk of cancer induced by drugs employed for ovarian stimulation are reassuring for ovarian and endometrial cancer, but probably also for breast cancer after an appropriate surveillance of the possible population at risk.