Abstracts

Conclusion* Evaluation of endometrium in patients with increasing post menopausal age, hypertension and intermenstrual bleeding before performing hysterectomy for patients with myoma uteri associated bleeding is a must to avoid inadequate surgical treatment

Fertility pregnancy

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COMPREHENSIVE GENOME-WIDE ANALYSIS OF NON-INVASIVE TEST DATA ALLOWS ACCURATE CANCER PREDICTION: A RETROSPECTIVE ANALYSIS OF OVER 85.000 PREGNANCIES

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Introduction/Background* Implausible false positive results in non-invasive prenatal testing (NIPT) have been occasionally associated with the detection of occult maternal malignancies. Hence, there is a need for approaches allowing accurate prediction of whether the NIPT result is pointing to an underlying malignancy, as well as for organized programs ensuring efficient downstream clinical management of these cases.

Methodology Using a large data set of 88,294 NIPT performed in our University Hospital Leuven, we retrospectively evaluated the positive predictive value (PPV) of our NIPT approach for cancer detection. In this approach, whole-genome cell-free DNA (cfDNA) data from NIPT were scrutinized for the presence of (sub)chromosomal copy number alterations (CNAs) predictive for a malignancy, using an unbiased NIPT analysis pipeline coined GIPSeq. For suspected cases, the presence of a maternal cancer was evaluated via subsequent multidisciplinary clinical follow-up examinations. The cancer-specificity of the identified CNAs in cfDNA was assessed through genetic analyses of a tumour biopsy.

Result(s)* Fifteen women without a cancer history were identified with a GIPSeq result suggestive of a malignant process. Their cfDNA profiles showed either genome-wide aberrations or a single trisomy 8. Upon clinical examinations, a solid or hematological cancer was identified in 4 and 7 cases, respectively. Three women were identified as having a clonal mosaicism. For one case no underlying condition was found. These numbers add to a PPV of 73%. Based on this experience, a novel multidisciplinary care path for efficient clinical management of these cases was presented.

Conclusion* The here presented approach for analysing NIPT results has an unparalleled high PPV, yet unknown sensitivity, for detecting asymptomatic malignancies upon routine NIPT. Given the complexity of diagnosing a pregnant woman with cancer, clinical follow-up should occur in a well-designed multidisciplinary setting, such as via the novel care model that we presented here.

These findings have now been accepted for publication in eClinicalMedicine (online journal of The Lancet group), showing the importance of these data.

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FERTILITY-SPARING TREATMENT IN SEROUS BORDERLINE OVARIAN TUMORS WITH EXTRA-OVARIAN INVASIVE IMPLANTS. AN ANALYSIS FROM THE MITO14 STUDY DATABASE

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Introduction/Background* Only 10–15% of serous borderline ovarian tumors (SBOT) have extra-ovarian invasive implants, and conservative treatments have been rarely reported. The MITO14 is a multi-institutional retrospective study conducted

Abstract 94 Table 1 Patient, tumor, and treatment related characteristics

Case#	Age (yr)	BMI (kg/m2)	Previous pregnancy	Preoperative serum CA125 levels (U/mL)	Bilateral ovarian involvement	Peritoneal cancer index (no.)	Surgical approach	Completeness of cytoreduction, (score)*	Surgical management of ovarian lesion(s)	FIGO stage	Adjuvant chemotherapy after surgery
1	34	22.7	-	406	no	5	open	0	U SO	IIIB	no
2	36	23.2	1 NFTD	210	yes	6	laparoscopy	0	SO + contralateral Cys	IIIB	no
3	19	27.8	-	381	no	3	laparoscopy	0	U Cys	IIB	no
4	33	25.0	-	100	yes	3	open	1	B Cys	IIB	yes
5	28	20.2	-	180	no	5	open	2	U Cys	IIIB	yes
6	31	26.5	1 NFTD	46	yes	6	laparoscopy	0	B Cys	IIIB	no
7	23	24.1	-	80	no	4	open	0	U SO	IIIB	yes
8	26	15.7	-	2616	yes	12	open	2	SO + contralateral Cys	IIIB	yes
9	33	20.4	1 NFTD	60	no	8	open	0	U SO	IIIB	no
10	27	22.4	-	289	no	4	open	0	U SO	IIIB	yes
11	43	21.5	-	41	no	4	open	0	U SO	IIIB	no
12	36	26.3	-	957	yes	2	open	0	SO + contralateral Cys	IIB	no
13	30	22.3	1 SFTM	889	yes	10	open	1	SO + contralateral Cys	IIIB	yes

B, bilateral; Cys, cystectomy; NFTD, normal full-term delivery; SFTM, spontaneous first-trimester miscarriage; SO, salpingo-oophorectomy; U, unilateral.

*categorized as proposed by Sugarbaker: 0 =no visible residual tumor; 1 =residual nodules ≤0.25 cm; 2 =residual nodules between 0.26 and 2.5 cm; 3 =residual nodules >2.5 cm.