Tranquility™

Test requisition form and informed consent

TRF LABEL

Please make sure to clearly fill out all fields in CAPITAL letters

Write clearly here the 14 digits from the tube barcode, provided in the kit G A

If the kit includes a second tube, write the barcode here G A

Patient

Name

Family Name

Date of birth
DD / MM / YYYY

Street

ZIP Code City

Country

Phone

Email

By signing this form, I hereby certify that I have read and understood the informed consent on the back of this form. I had the opportunity to ask questions to my doctor, including purpose, limitations and possible risks of the test, and to get satisfactory answers. I know that I should ask for professional genetic counselling before and after doing this test. I can visit the website www.genoma.com to learn the latest regulatory, technical or medical information related to Tranquility. I understand that the information provided on www.genoma.com is not intended to be a substitute for professional medical advice, diagnosis, or treatment.

Date
DD / MM / YYYY

Patient signature

Prescriber

Genoma Prescriber Identification Number (PIN)
If you have a one

Name

Family Name

Street

ZIP Code City

Country

Phone

Email

Registration number as a doctor

I hereby confirm that this patient has been fully informed about the details of Tranquility, its capabilities and limitations and that she has given her consent to perform this test.

Date
DD / MM / YYYY

Prescriber signature

Pregnancy

Type of pregnancy

- ☐ Singleton pregnancy
- ☐ Twin pregnancy (or vanishing twin)
- ☐ I do not know yet

Last menstrual period
DD / MM / YYYY

Expected delivery date
DD / MM / YYYY

Is it an *in-vitro* fertilization? ☐ Yes

If yes, the ovum comes from ☐ a donor

If the ovum comes from a donor, what is the age of the donor?
If known

Test

Blood sample collection date
DD / MM / YYYY

Blood sample collection time
HH : MM

Gestational age at the date of the blood draw
WW + D

A minimum of 10 weeks completed is required for singleton pregnancy. In case of twin pregnancy, a minimum of 12 weeks is highly recommended.

Patient weight at the time of the blood draw
Kg

Patient height
Cm

Medical indication

- ☐ Advanced maternal age (in case of egg donation, age of the donor is considered)
- ☐ Positive maternal serum screening, evaluated risk:
- ☐ Ultrasound abnormalities
- ☐ Previous pregnancies with aneuploidies
- ☐ Other:

Method used for the measurement of the given gestational age
Only 1 choice applicable

- ☐ Ultrasound
- ☐ Last menstrual period
- ☐ *In-vitro* fertilization

Additional test request

- ☐ I do want to know the sex of my baby

Laboratory

Genoma Distributor Indentification Number (DIN)
If you have a one

Your written Consent is required to perform Tranquility. This consent form provides information about the test, including what the test is for, the testing process, and what results may mean. Before signing this document, you should consult your healthcare provider and ask any questions you may have regarding this test.

Tranquility is a Non Invasive Prenatal Test (NIPT) suitable both for natural and egg donor pregnancies. Tranquility requires a minimum maternal blood draw of 8 ml to be collected in each provided tube(s). For control, archive and research purposes, the kit may contain 2 tubes (20 ml total). In about 2% of cases the fetal DNA ratio (fetal fraction) in maternal plasma is not sufficient to complete the analysis. In this cases, additional blood samples can be requested.

The scope of Tranquility is to detect several numerical and structural chromosomal abnormalities in the fetus. The test has been validated in a clinical study. The identification of these abnormalities is based on the analysis of cell-free DNA circulating in the maternal bloodstream (cfDNA), which contains a fraction of DNA from the placenta/s of the fetus/es (cffDNA). The test can also provide information on the sex of the fetus.
Based on the results of the test your healthcare provider could recommend an invasive procedure (chorionic villus sampling, amniocentesis or cordocentesis) for a final diagnosis.

NIPT ON cfDNA IN MATERNAL PLASMA

The test analyses circulating cell-free DNA in the maternal bloodstream and incorporates fetal fraction calculation plus data provided by the patient: maternal age (or the age of the donor in case of egg donor pregnancy), gestational age, type of pregnancy and blood sample collection date.

The analysis of fetal karyotype is possible only by performing an invasive procedure (chorionic villus sampling, amniocentesis or cordocentesis). NIPT is a screening test which provides the risk of the fetus carrying chromosomal abnormalities. The results must be interpreted by a professional healthcare provider in the context of the complete clinical history of the pregnancy.
Today, beginning from gestational week 10 (singleton pregnancies), prenatal testing based on the analysis of cell-free DNA in the maternal blood allows performance of:

1) TEST FOR AUTOSOMAL TRISOMIES. Risk evaluation of fetuses affected by a trisomy of autosomes 21, 18 and 13 (T21, T18, T13). Autosomes are chromosomes that have the the same morphology in each sex and do not carry genetic information about the sexual characterization of an individual. The term "trisomy" identifies an abnormality where there are three, instead of two, copies of a chromosome.

- Trisomy 21 (T21) is the most common aneuploidy. It consists of one extra copy of chromosome 21 and it is alternatively known as Down syndrome.
- Trisomy 18 (T18) consists of one extra copy of chromosome 18 and it is alternatively known as Edwards Syndrome.
- Trisomy 13 (T13) consists of one extra copy of chromosome 13 and it is alternatively known as Patau Syndrome.

2) TEST FOR SEX CHROMOSOME ANEUPLOIDIES. Detection of aneuploidies of chromosomes X and Y (47,XYY; 47,XXX; 47,XXY; monosomy X). Children with a sex chromosome aneuploidy can have language, motor and learning difficulties and may have infertility-associated complications but can have a healthy and productive life.

3) TEST FOR MICRODELETIONS. Detection of some microdeletions. A microdeletion is a loss of DNA on a chromosomal segment that can span multiple genes, each potentially contributing to the phenotype independently. Some microdeletions have no clinical consequences, but some are characterised by a complex clinical and behavioural phenotype. Microdeletions are identified by their genomic positions and their size.

4) DETERMINATION OF THE FETAL SEX. Detection of the sex of the fetus: male or female.

Twin Pregnancies. The experience of NIPT in twin pregnancies is significantly more limited than singleton pregnancies. The detection rate of autosomal aneuploidies for twin pregnancies is similar to the detection rate for singletons, but the availability of clinical validation data for the test, in terms of sensitivity and specificity on twin pregnancies are still limited.

SPECIFICATIONS AND RESULTS

Tranquility has been validated on singleton, twin and egg donor pregnancies, beginning from gestational week 10. In case of twin pregnancies a minimum of 12 weeks of gestation is highly advised. The test has not been validated for pregnancies carrying more than two fetuses and does not predict mosaicisms, translocations or other genomic and genetic abnormalities which might be associated with malformations or disabilities of the unborn child.
Your results will inform your healthcare provider whether there are missing or extra copies of the chromosomes you have been tested for. It is the responsibility of the healthcare provider to understand the specific uses and limitations of this test, and to make sure that you understand those as well. Your test report will include one of three possible results: 'No Aneuploidy Detected', 'Aneuploidy Detected' or 'High Risk of Microdeletion Detected'. Tranquility prenatal test does not test for all health problems: a 'No Aneuploidy Detected' result does not exclude the possibility that your pregnancy may have other genomic and genetic abnormalities, birth defects, or other complications. A 'No Aneuploidy Detected' result on this test does not completely rule out the presence of the conditions being tested for, and does not guarantee the good health of the fetus. Tranquility prenatal test has been validated for chromosomes 21, 18, 13 and sex chromosomes: refer to www.genoma.com to be informed about the updated Tranquility performances that will be specified on the results report. A "High risk for microdeletion" will be detected only if those conditions are met: Cri-du-chat region (5p deletion): 9% fetal fraction (FF) & 20 MB deletion; Digeorge region (22q11 deletion): 9% FF & 10 MB deletion; Prader-Willi/Angelman region (15q11 deletion): 4% FF & 10 MB deletion; 1p36 deletion: 4% FF & 10 MB deletion. There is a small possibility of false positive results due to a low-coverage of sequencing in that particular region. There is a small possibility of false positive result (a 'Aneuploidy Detected' while the fetus is chromosomally normal) due to the abnormal presence of specific DNA circulating in the mother's blood. These conditions include for example; confined placental mosaicism, vanishing twin and constitutional or acquired maternal anomaly. Unless limited by applicable law, the sex of the fetus information result will mention: male or female. The sex of the fetus will be reported only if you choose this option on page 1 of this document.
In very few cases, the sex of the fetus cannot be determined. The test accuracy could be affected by some medical treatments, including but not limited to: transplant surgery, stem cell therapy, immunotherapy and blood transfusion. As with any medical test, there is always a chance of failure or error in sample analysis. Extensive measures are taken to avoid these errors. The test can occasionally give no result for diverse reasons, for instance problems linked to the transportation of the sample or insufficient fetal fraction in the mother's blood sample. In those few cases, additional blood samples can be requested. In twin pregnancies, the test does not distinguish which one of the fetuses is at high risk of being affected by a chromosomal abnormality of autosomes. Sex chromosome aneuploidies and microdeletions cannot be identified, and the test does not indicate which one of the fetuses is a male or if there are two males (if applicable).

The blood samples are delivered to the laboratory of Esperite Group or any temporary sub-contractor accredited and providing the same test at the same level of quality. The laboratory will perform the test and communicate the results to your doctor based on applicable law. The sample will not be used to perform any other test than Tranquility but research studies can be performed on the sample, aimed solely at improving or developing the performance of our genetic tests.
Your blood samples may be retained according to applicable law. You can request your sample to be destroyed right after the test is completed. This request has to be made in writing to the email address genoma@genoma.com

Personal data will be registered in a database, property of Genoma Swiss Biotechnology and will be used only to perform the test, provide results, communicate with you and invoice the requested services. Genoma Swiss Biotechnology's and Esperite's communications will include scientific updates and information about products and services of Genoma Swiss Biotechnology and of the other companies of Esperite Group, via traditional or electronic mail. You can revoke your consent on commercial use of your data by writing an email to genoma@genoma.com.

ACKNOWLEDGEMENT AND CONSENT

I hereby declare that I have read and fully understood this document and in particular that:

- The NIPT detects the possibility that the fetus is affected by the tested aneuploidies.
- It is possible that the fetal karyotype will not correspond to the results of the test.
- The direct analysis of fetal karyotype can be performed only through an invasive technique (chorionic villus sampling, amniocentesis or cordocentesis).
- My sample cannot be used to perform any test other than Tranquility without my explicit consent.
- In about 2% of cases the fetal DNA ratio (fetal fraction) in maternal plasma is not sufficient to complete the analysis.

I also declare that:

- My doctor has determined that I am an appropriate candidate for this test and he/ she will be informed about the results of this test and define appropriate medical evaluation and/or further treatment based on the test results.
- I am aware that results 'Aneuploidy Detected' and 'High Risk of Microdeletion Detected' will be sent to my prescriber (the one I specified on page 1 of this document).
- I understand and accept the information given on chromosomal abnormalities that this test can detect.
- I am aware that in case of false information on nature of pregnancy, accuracy of results could be affected and that, in case of missing information on the type of pregnancy, singleton will be set by default.
- I have indicated on page 1 of this document whether I want to be informed about the sex of the fetus.

☐ I do not accept that my sample can be used for the research and development activities

TRF LABEL

Patient name
and family name

Date
DD / MM / YYYY ☐☐ / ☐☐ / ☐☐☐☐

Patient signature