



Donor 2997

Genetic Testing Summary

Fairfax Cryobank recommends reviewing this genetic testing summary with your healthcare provider to determine suitability.

Last Updated: 1/3/23

Donor Reported Ancestry: Spanish, Dutch

Jewish Ancestry: No

| Genetic Test* | Result | Comments/Donor's Residual Risk** |
|---|---|---|
| Chromosome analysis (karyotype) | Normal male karyotype | No evidence of clinically significant chromosome abnormalities |
| Hemoglobin evaluation | Normal hemoglobin fractionation and MCV/MCH results | Reduced risk to be a carrier for sickle cell anemia, beta thalassemia, alpha thalassemia trait (aa/-- and a-/a-) and other hemoglobinopathies |
| Cystic Fibrosis (CF) carrier screening | Negative for 99 mutations in the CFTR gene | 1/310 |
| Spinal Muscular Atrophy (SMA) carrier screening | Negative for deletions of exon 7n the SMN1 gene | 1/700 |
| HBB testing | Negative for 28 mutations in the HBB gene | Beta Thalassemia: 1/1500 Sickle Cell Disease: <1/500 |

*No single test can screen for all genetic disorders. A negative screening result significantly reduces, but cannot eliminate, the risk for these conditions in a pregnancy.

**Donor residual risk is the chance the donor is still a carrier after testing negative.



Results Patient

Fairfax Cryobank

Report Date: 10/31/2011

Male

Name: DONOR 2997

DOB: [REDACTED]

Ethnicity: Mixed or Other

Caucasian

Sample Type: OG-500 Saliva

Date of Collection: 10/18/2011

Barcode: [REDACTED]

Indication: Egg or Sperm Donor

Female

Not tested

Counsyl Test Results (Egg or Sperm Donor)

The Counsyl test uses targeted DNA mutation analysis to simultaneously determine the carrier status of an individual for a number of Mendelian diseases. This report indicates which mutations, if any, were detected for each mutation panel. Because only select mutations are tested, the percentage of carriers detected varies by ethnicity. A negative test result does not eliminate the possibility that the individual is a carrier. Interpretation is given as an estimate of the risk of conceiving a child affected with a disease, which is based on reported ethnicity, the test results, and an assumption of no family history.*



DONOR 2997



DONOR 2997's DNA test shows that he is not a carrier of any disease-causing mutation tested.



Partner

The reproductive risk presented is based on a hypothetical pairing with a partner of the same ethnic group.

Reproductive Risk Summary

No increased reproductive risks to highlight. Please refer to the following pages for detailed information about the results.

Clinical notes:

- Individuals of African, Southeast Asian, and Mediterranean ancestry are at increased risk for being carriers for hemoglobinopathies and may also benefit from carrier testing by CBC and hemoglobin electrophoresis or HPLC. *ACOG Practice Bulletin No. 78. Obstet Gynecol 2007;109:229-37.*

To schedule a free appointment to speak with a genetic counselor about your results, please visit www.counsyl.com/appointment.

RECEIVED
10/31/11

*Limitations: In an unknown number of cases, nearby genetic variants may interfere with mutation detection. Other possible sources of diagnostic error include sample mix-up, trace contamination, and technical errors. The reproductive risk summary is provided as an aid to genetic counseling. Inaccurate reporting of ethnicity may cause errors in risk calculation.

This test was developed and its performance characteristics determined by Counsyl, Inc. The laboratory is regulated under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high-complexity clinical testing. This test is used for clinical purposes. It should not be regarded as investigational or for research. These results are adjunctive to the ordering physician's workup. CLIA Number: #05D1102604. Lab Directors: Jessica Jacobson, MD, William K. Seltzer, PhD, FACMG.

Full Results

Below are the full test results for all diseases on the panel. Noted are the specific genetic mutations for which the patient tested positive or negative. If there was insufficient data to determine the genotype for any variant, this will be noted as "no call." Also listed in this section is the patient's post-test risk of being a carrier of each disease as well as the odds that his future children could inherit each disease.

Beta Thalassemia

Reproductive risk:

Less than 1 in 1,000,000

Risk before testing:

1 in 250,000

Reduced risk

DONOR 2997: No mutations detected. This does not rule out the possibility of being a carrier of untested mutations. The post-test risk of being a carrier, assuming a negative family history, is 1 in 1,500. 83% detection rate.

Gene: HBB. Variants (27): K17X, Q39X, Phe41fs, Ser9fs, IVS-II-654, IVS-II-745, IVS-II-850, IVS-I-6, IVS-I-110, IVS-I-5, IVS-I-1(G>A), -88C>T, -28A>G, -29A>G, Lys8fs, Phe71fs, IVS-II-849(A>C), IVS-II-849(A>G), Gly24 T>A, -87C>G, Hb C, W15X, Gly16fs, Glu6fs, Hb E, Hb D-Punjab, Hb O-Arab.

Cystic Fibrosis

Reproductive risk:

1 in 34,000

Risk before testing:

1 in 3,000

Reduced risk

DONOR 2997: No mutations detected. This does not rule out the possibility of being a carrier of untested mutations. The post-test risk of being a carrier, assuming a negative family history, is 1 in 310. 91% detection rate.

Gene: CFTR. Variants (99): G85E, R117H, R334W, R347P, A455E, G542X, G551D, R553X, R560T, R1162X, W1282X, N1303K, F508del, I507del, 2184delA, 3659delC, 621+1G>T, 711+1G>T, 1717-1G>A, 1898+1G>A, 2789+5G>A, 3120+1G>A, 3849+10kbC>T, E60X, R75X, E92X, Y122X, G178R, R347H, Q493X, V520F, S549N, P574H, M1101K, D1152H, 2143delT, 394delTT, 444delA, 1078delT, 3876delA, 3905insT, 1812-1G>A, 3272-26A>G, 2183AA>G, S549R(A>C), R117C, L206W, G330X, T338I, R352Q, S364P, G480C, C524X, S549R(T>G), Q552X, A559T, G622D, R709X, K710X, R764X, Q890X, R1066C, W1089X, Y1092X, R1158X, S1198X, W1204X(c.3611G>A), Q1238X, S1251N, S1255X, 3199del6, 574delA, 663delT, 935delA, 936delTA, 1877delTA, 1849del84, 2043delG, 2055del9>A, 2108delA, 3171delC, 3667delH, 3791delC, 1288insTA, 2184insA, 2307insA, 2869insG, 296+12T>C, 405+1G>A, 405+3A>C, 406-1G>A, 711+5G>A, 712-1G>T, 1898+1G>T, 1898+5G>T, 3120G>A, 457TAT>G, 3849+4A>G, Q359K/T360K.

Sickle Cell Disease

Reproductive risk:

Less than 1 in 1,000,000

Risk before testing:

less than 1 in 1,000,000

Reduced risk

DONOR 2997: No mutations detected. This does not rule out the possibility of being a carrier of untested mutations. The post-test risk of being a carrier, assuming a negative family history, is < 1 in 500. 70% detection rate.

Gene: HBB. Variants (28): Hb S, K17X, Q39X, Phe41fs, Ser9fs, IVS-II-654, IVS-II-745, IVS-II-850, IVS-I-6, IVS-I-110, IVS-I-5, IVS-I-1(G>A), -88C>T, -28A>G, -29A>G, Lys8fs, Phe71fs, IVS-II-849(A>C), IVS-II-849(A>G), Gly24 T>A, -87C>G, Hb C, W15X, Gly16fs, Glu6fs, Hb E, Hb D-Punjab, Hb O-Arab.

Spinal Muscular Atrophy

Reproductive risk:

1 in 97,000

Risk before testing:

1 in 4,600

Reduced risk

DONOR 2997: No mutations detected. This does not rule out the possibility of being a carrier of untested mutations. The post-test risk of being a carrier, assuming a negative family history, is 1 in 700. 95% detection rate.

Gene: SMN1. Variants (1): Exon 7 deletion.

Patient Name: Donor, 2997
Referring Physician:
Specimen #:
Patient ID:

Client #:

Fairfax Cryobank / Genetics and IVF
Institute
Genetics and IVF Institute

OB: Not Given
SN:

Date Collected: 10/18/2011
Date Received: 10/20/2011
Lab ID:
Hospital ID:
Specimen Type: Peripheral Blood

Indication: Gamete donor

Metaphases Counted: 20

Metaphases Analyzed: 5

Metaphases Karyotyped: 2

Number of Cultures: 2

Banding Technique: GTW

Banding Resolution: 550

Dept. Section: B1

RESULTS: 46,XY

Male karyotype

INTERPRETATION:

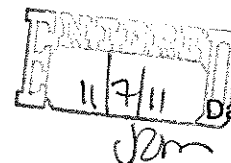
This analysis shows no evidence of clinically significant numerical or structural chromosome abnormalities. The standard cytogenetic methodology utilized in this analysis does not routinely detect subtle rearrangements of low-level mosaicism and cannot detect microdeletions. Also, it cannot detect molecular cytogenetic abnormalities (such as microdeletions and microduplications) that may be detectable by array comparative genomic hybridization (aCGH).

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Signed:

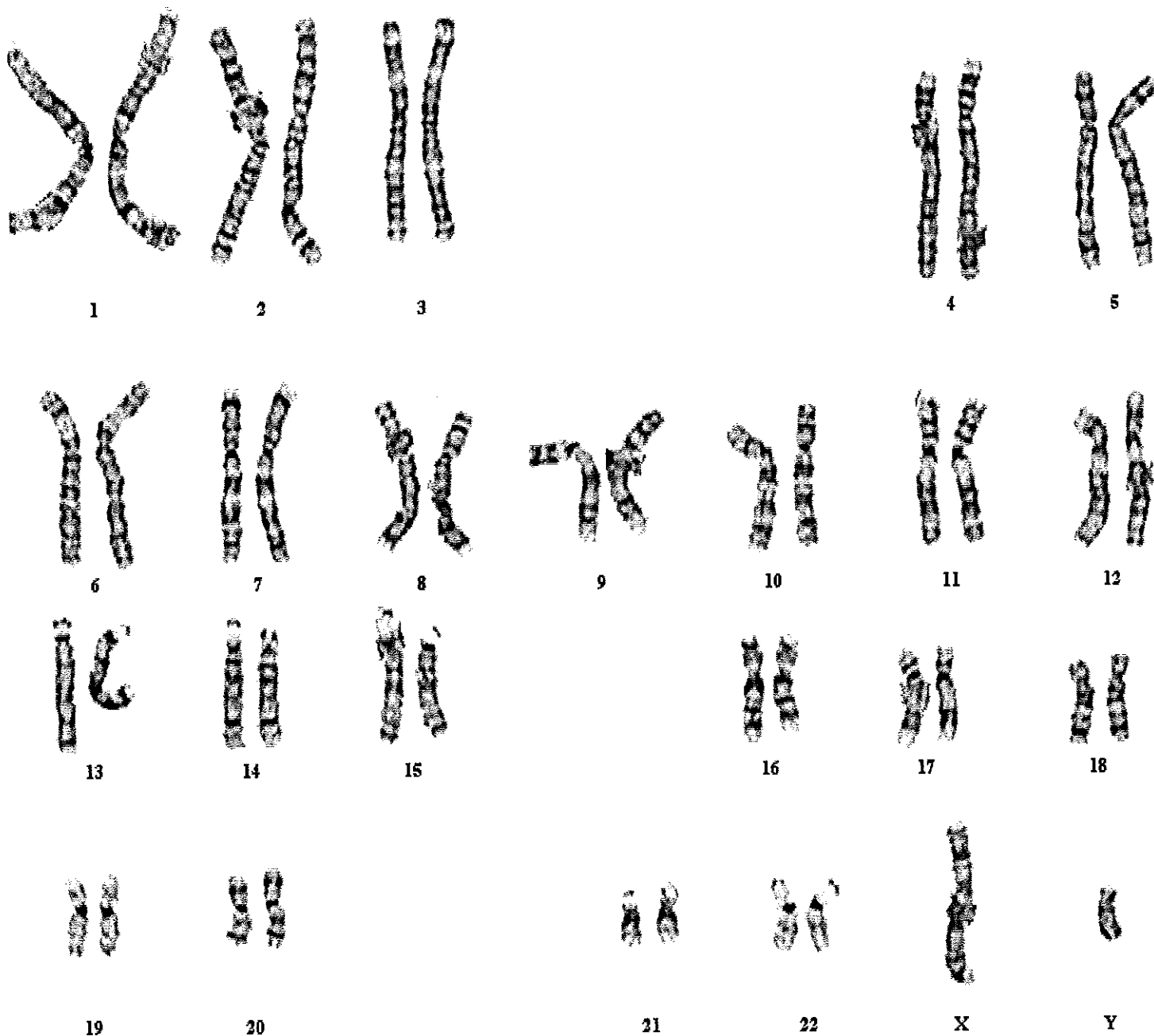
Veena Suri

Veena Suri, Ph.D.



Date: 10/26/2011

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Specimen #: XXXXXXXXXX
 Specimen Type: BLDPER
 Patient Name: Donor, 2997
 Image ID: BKE1
 Karyotype: 46,XY

Dept ID: B1
 Date Received: 10/20/2011
 Date Reviewed: 10/26/2011
 Reviewed By: VSU

| Patient Information | Specimen Information | Client Information |
|--|---|--|
| DONOR, 2997 | Specimen: [REDACTED] Requisition: 0000032 | Client #: [REDACTED] FAIRFAX CRYOBANK [REDACTED] |
| DOB: [REDACTED] AGE: [REDACTED] Gender: M Fasting: U Phone: NG Patient ID: [REDACTED] | Collected: 10/18/2011 Received: 10/19/2011 / 06:59 CDT Reported: 10/24/2011 / 10:10 CDT | |

| Test Name | In Range | Out Of Range | Reference Range | Lab |
|-----------------------------|----------------|--------------|----------------------|-----|
| HEMOGLOBINOPATHY EVALUATION | | | | |
| RED BLOOD CELL COUNT | 5.10 | | 4.20-5.80 Million/uL | IG |
| HEMOGLOBIN | 15.8 | | 13.2-17.1 g/dL | |
| HEMATOCRIT | 47.1 | | 38.5-50.0 % | |
| MCV | 92.4 | | 80.0-100.0 fL | |
| MCH | 30.9 | | 27.0-33.0 pg | |
| RDW | 13.4 | | 11.0-15.0 % | |
| HEMOGLOBIN A | 98.1 | | >96.0 % | IG |
| HEMOGLOBIN F | <1.0 | | <2.0 % | |
| HEMOGLOBIN A2 (QUANT) | 1.9 | | 1.8-3.5 % | |
| INTERPRETATION | | | | |
| Normal phenotype. | | | | |
| CHOLESTEROL, TOTAL | 200 | | 125-200 mg/dL | IG |
| AST | 14 | | 10-40 U/L | IG |
| ALT | 18 | | 9-60 U/L | IG |
| CBC (INCLUDES DIFF/PLT) | | | | IG |
| WHITE BLOOD CELL COUNT | 6.4 | | 3.8-10.8 Thousand/uL | |
| RED BLOOD CELL COUNT | 5.10 | | 4.20-5.80 Million/uL | |
| HEMOGLOBIN | 15.8 | | 13.2-17.1 g/dL | |
| HEMATOCRIT | 47.1 | | 38.5-50.0 % | |
| MCV | 92.4 | | 80.0-100.0 fL | |
| MCH | 30.9 | | 27.0-33.0 pg | |
| MCHC | 33.5 | | 32.0-36.0 g/dL | |
| RDW | 13.4 | | 11.0-15.0 % | |
| PLATELET COUNT | 263 | | 140-400 Thousand/uL | |
| ABSOLUTE NEUTROPHILS | 4429 | | 1500-7800 cells/uL | |
| ABSOLUTE LYMPHOCYTES | 1523 | | 850-3900 cells/uL | |
| ABSOLUTE MONOCYTES | 339 | | 200-950 cells/uL | |
| ABSOLUTE EOSINOPHILS | 83 | | 15-500 cells/uL | |
| ABSOLUTE BASOPHILS | 26 | | 0-200 cells/uL | |
| NEUTROPHILS | 69.2 | | % | |
| LYMPHOCYTES | 23.8 | | % | |
| MONOCYTES | 5.3 | | % | |
| EOSINOPHILS | 1.3 | | % | |
| BASOPHILS | 0.4 | | % | |
| ABO GROUP AND RH TYPE | | | | IG |
| ABO GROUP | A | | | |
| RH TYPE | RH(D) POSITIVE | | | |

PERFORMING SITE:

IG QUEST DIAGNOSTICS-IRVING, 4770 REGENT BLVD., IRVING, TX 75063 Laboratory Director: ELISABETH S BROCKIE,D.O., CLIA: 45D0697943

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11/7/11
J