Seattle Sperm Bank

Donor Gamete Genetic Consultation Note

Name: Alex Patient
SSB Donor: 14459/Alomar
Date of Birth: 1/1/1980
Consult Date: September 1, 2023
State/Country: Wisconsin

Indication

I spoke with Alex Patient to discuss carrier screening compatibility with Open ID Donor 14459/Alomar at Seattle Sperm Bank.

Alex is planning to pursue an IVF cycle utilizing her eggs and donor 14459/Alomar's sperm.

Carrier Screening Summary

Alex Patient completed the Invitae 556 gene panel reported on 08/23/2023 and was found to be negative for all conditions included on the panel.

14459/Alomar completed an invitae 514 gene panel reported on 01/16/2023 and was found to be a carrier of two conditions.

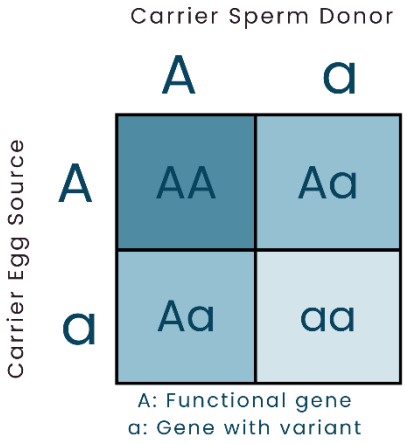
Discussion Regarding Reproductive Risks Based on Carrier Screening

I reviewed autosomal recessive inheritance and briefly reviewed each disease for which one gamete source was found to be a carrier. Detailed descriptions of each disease for which the egg source or sperm donor was found to be a carrier can be found on the carrier screening report. I reviewed the following risks:

1. There is a 50% chance that each genetic variant identified in the egg source or sperm source will be passed along to each future pregnancy.

2. If both the egg source and the sperm source are carriers of the same disease, there is a 25% risk that each child will inherit both variants and be at risk for the disease.

3. If one gamete source is a carrier of an autosomal recessive disease and the other gamete source is negative for that disease, the risk to have a child affected with that disease is significantly reduced, but a small residual risk remains.



If both gamete sources are carriers of the same autosomal recessive disease, there is a:

AA	25% chance each child inherits both variant and may develop the disease
Aa	50% chance each child is a carrier
aa	25% chance each child is a non-carrier and unaffected

*The counseling provided to the benefits and limitations of the genetic testing that the donor(s) completed. A comprehensive personal and family medical history and genetic risk assessment was not performed for the client. Your patient may be referred to a medical geneticist or genetic counselor for concerns related to their own health or family history.

Personalized Reproductive Risk

I reviewed the reproductive risks summarized in the table below based upon the carrier screening reports. Based on the information available for review today, there is a significantly reduced risk for Alex Patient to have a child affected with any of the diseases included on Alex Patient's carrier screening panel or the donor's carrier screening panel.

Disease (Gene)	Alex Patient	14459/Alomar	Reproductive Risk
CRB1-related condition	Negative	Positive	1 in 44,400
Spinocerebellar ataxia (ANO10)	Negative	Positive	Significantly Reduced

Limitations of Carrier Screening

1. The detection rate for carrier status of the diseases included on carrier screening panels is not 100%.
2. Carrier screening includes a limited number of childhood onset diseases. There are thousands of genetic conditions that are not included on carrier screening panels.
3. There is a 3-6% chance for a birth defect in any child, regardless of carrier screening results.
4. The discussion today was based upon the interpretation(s) provided by the carrier screening laboratory/ies, which may change as genetic and medical research evolves.

Summary

Today's consultation provided a summary of carrier screening results. The client expressed their understanding and had no further questions at this time. Ultimately, the decision about which donor to use and what type of fertility treatment to proceed with is that of the patient and physician. The client indicated that they plan to proceed with treatment using this donor. On behalf of Seattle Sperm Bank, I wish you the best on your family building goals. Please reach out to me with any questions.

Sincerely,

Katherine Hornberger, MS, CGC
Certified Genetic Counselor
Seattle Sperm Bank
(206) 588-1484 #610
genetics@seattlespermbank.com

*The counseling provided to the benefits and limitations of the genetic testing that the donor(s) completed. A comprehensive personal and family medical history and genetic risk assessment was not performed for the client. Your patient may be referred to a medical geneticist or genetic counselor for concerns related to their own health or family history.