August 4, 2026

Seattle Sperm Bank

MEDICAL UPDATE LETTER FOR DONOR #14228 (ABRAMO) - 2026-08-04

Donor 14228 (Abramo) was recently reported to be a carrier of a variant in the ABCA4 gene, with is associated with Stargardt disease and other ABCA4-related conditions, including retinitis pigmentosa and cone-rod dystrophy. This gene was not included in his prior carrier screening panel. This letter is intended for all recipients and facilities who have utilized vials from Donor 14228 (Abramo) to make them aware and provide follow-up suggestions.

To Whom it May Concern,

We are writing to provide a medical update regarding Donor #14228 (Abramo).

Donor 14228 (Abramo) recently completed updated genetic testing and was found to be a carrier of ABCA4-related conditions. A copy of Donor 14228 (Abramo)'s genetic report is attached.

Genetic Results:

Donor 14228 (Abramo) is heterozygous (one copy) for a likely pathogenic variant in the ABCA4 gene, specifically c.769-784C>T (p.?).

The ABCA4 gene is associated with autosomal recessive ABCA4-related conditions (including Stargardt disease), which range in presentation and severity. Stargardt disease causes progressive, bilateral loss of central vision, color vision changes, and characteristic yellowish flecks in the retina. Retinitis pigmentosa presents with night blindness and narrowing of the visual field (or decreased peripheral vision). Cone-rod dystrophy leads to light sensitivity, color blindness, and decreased visual acuity. In affected individuals, the vision changes associated with ABCA4-related conditions typically present in childhood or adolescence.

Affected individuals inherit two variants in both copies of the ABCA4 gene, one from the egg source and one from the sperm source. Carriers of this variant in ABCA4 gene, like Donor 14228 (Abramo), are not expected to exhibit symptoms.

Interpretation:
All children/embryos resulting from Donor 14228 (Abramo) have a 50% chance to have inherited the identified ABCA4 variant. Children/embryos who inherit one copy of the mutation would be asymptomatic carriers, just like donor.

Next Steps for Families who have Utilized the Donor:

Please share this letter and the attached report with your doctors and/or pediatricians of children conceived using this donor. The egg source of any embryos/children resulting from Donor 14228 (Abramo) may consider carrier screening for mutations in the ABCA4 gene.

- If the egg source of any child/embryo is also a carrier of a mutation in the ABCA4 gene, there is a 1 in 4 (25%) chance that each resulting child/embryo will inherit *both* mutations.
- If the egg source of any child/embryo screens negative for mutations in the ABCA4 gene, the risk to have a child affected with ABCA4-related conditions is significantly reduced.

Do not hesitate to reach out if questions arise or if clarification would be helpful. You are welcome to schedule a

phone consultation with one of Seattle Sperm Bank's certified genetic counselors if you would like to discuss this information over the phone.

In partnership,

Olivia Hess, MS, CGC
Certified Genetic Counselor
Seattle Sperm Bank
(206) 588-1484
Genetics@SeattleSpermBank.com

Emily Nazar, MS, CGC
Certified Genetic Counselor
Seattle Sperm Bank
(206) 588-1484
Genetics@SeattleSpermBank.com

Brynn Persky, MS, CGC
Certified Genetic Counselor
Seattle Sperm Bank
(206) 588-1484
Genetics@SeattleSpermBank.com

James Kuan, MD
Medical Director
Seattle Sperm Bank
(206) 588-1484
James@seattlespermbank.com