$2,500 whole genome sequencing per embryo: Tech startup claims to screen potential children for 1,200 genetic disorders, but experts not sure it's worth the cost

Reproductive tech startup Orchid is now offering whole genome sequencing for embryos, giving prospective parents and their doctors information that could lead to healthier and more successful pregnancies — but not everyone is convinced it's worth the cost.

…

Orchid sequences the embryo's genome, then screens it for variants linked to more than 1,200 monogenic disorders (ones caused by a single genetic variant). The report also notes the risk of an embryo developing polygenic disorders, which are more complex to predict because they are linked to effects of multiple genes.

While Orchid has shared a paper on the preprint server bioRXiv validating the technique it uses to sequence the genomes of embryos, it hasn't proven the information leads to healthier pregnancies or babies. Seemingly the only way to do that would be to compare people who choose embryos based on its reports to those who fly blind, but there's no sign such a study is in the works.

"Part of my worry is how upfront [Orchid] is when they're counseling parents of the likely benefit of these procedures," Peter Kraft, an epidemiology professor at Harvard, told the LA Times in 2021.

…

The ethics of this advanced embryo screening get even murkier when you consider that the only people with access to the service will be those who can afford it — Orchid charges $2,500 per embryo, on top of the standard cost of IVF.

This is an excerpt. Read the original post here