

TESTS	ANE -5	ANE -9	ANE-12	CGH
Chromosomes tested	5	9	12	24
Build-in redundancy (NRR) (a)	No	Yes	Yes	Yes
Percentage of trisomies detectable by each test in first trimester conceptions (b)	14%	61%	67%	100%
Embryos not analyzable (c)	3.8%	3.8%	3.8%	8%
Technical error rate (d)	n/a	6%	8%	n/a*
Clinical error rate (e)	0%	0.5%	0%	n/a*
Improvement of results (f)	no	YES	n/a*	n/a*
Cases done to date (g)	735	8165	1561	31

a) Aneuploidy (ANE) -5, -9 and -12 test chromosomes in only one spot. If that spot is missing, or produces a dubious result due to an artifact of the technique, it could lead to a false reading or to a no result. Results that are dubious are retested with the ANE 9 or 12 tests. That is called “no result rescue” (NRR). Instead, CGH tests the chromosomes in many spots at the same time.

b) *Lathi et al. (2007)*

c) For tests, Aneuploidy (ANE) -5, -9, -12, represents Reprogenetics data for 2007 based on 21,902 embryos tested. 3.7% were not analyzable because the cell had no nucleus (biopsy failure) and 0.14% because the nucleus was not properly processed. For CGH it is based on <300 eggs analyzed so far.

d) Reprogenetics data from 4Q of 2007. The technical error is based on reanalysis of embryos not replaced. It is not equivalent to the risk of conceiving an abnormal baby. That risk is the “clinical error rate” (next line in table).

e) Only a fraction of the >10,000 procedures done have provided us with pregnancy information. Of those, out of 2300 pregnancies with known outcome, 10 (0.4%) produced conceptions with abnormalities for chromosomes X,Y,13,18 or 21. We calculate that the expected frequency without PGD would be 59 (2.6%). Of those 2300, 2000 had used the ANE-9 test resulting in 10 (0.5%) abnormal pregnancies, 181 with ANE-12 (0%) and 137 with ANE-5 (0%).

f) Under conditions and methods proposed by Reprogenetics, it can reduce spontaneous abortions and pregnancies with chromosome abnormalities, and improve implantation rates ([Gianaroli et al. 1999](#), [Munne et al. 1999, 2003, 2005, 2006, 2007](#), [Colls et al. 2007](#)).

g) To 12/31/2007:

* Numbers too small to be meaningful