# WHOLE-GENOME RISK PREDICTION IN HUMAN PREIMPLANTATION EMBRYOS

Sequencing technologies are progressing. Some private companies are claiming to be able to predict the susceptibility risks of some common conditions by analyzing the preimplantation embryos. In a paper that appeared in Nature Midicine[1], the authors "used a combination of molecular and statistical techniques to reliably infer inherited genome sequence in 110 embryos and model susceptibility across 12 common conditions".

The ethical implications are evident, and, in this respect, the subtitle of the editorial, which appeared in Nature[2] itself, is very clear: "Companies are marketing polygenic risk scores as a part of IVF well before the potential benefits — and dangers — are fully understood". It further highlights: "These tests demand a broader societal discussion", because these approaches "can open the door to evaluating not only disease risk, but also traits such as height or intelligence".
The problems are very clear. Less clear are the solutions.

1. https://www.nature.com/articles/s41591-022-01735-0
2. https://www.nature.com/articles/d41586-022-00787-z