

Safer prenatal genetic tests: Fetal cells using antibody-coated chip

Every pregnant woman who has considered getting a prenatal genetic test is familiar with the dilemma: Amniocentesis and chorionic villus sampling (CVS) are the only available diagnostic tests that can say for sure whether a fetus has a devastating genetic disorder—but these tests are invasive, and each carries a small risk of miscarriage. Now, researchers are developing a less invasive test that collects fetal cells from a maternal blood sample using an antibody-coated chip, allowing for conclusive testing for genetic disorders with a simple blood draw.

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“During early pregnancy, the growth of the placenta is a little like the growth of a tumor,” says [Hsian-Rong Tseng](#) of the University of California, Los Angeles. The placenta grows into and essentially invades the uterus. The end result is that some of the trophoblasts end up circulating in the maternal blood. Tseng’s team had previously developed a chip that captures tumor cells from blood samples [...] and realized they could adapt the method to capturing trophoblasts.

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[Sascha Drewlo](#) of Wayne State University [says] the approach still needs to overcome significant hurdles before it’s ready for commercial application, including boosting the number of cells captured and lowering the amount of blood needed for analysis.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Foraging for fetal cells in mother’s blood](#)