

The Streck logo is displayed in white text on a dark grey background. The background of the entire header section is a red-tinted image of a DNA double helix.

Publication Bibliography

Journal articles from independent investigators using Streck Cell-Free DNA BCT® in their studies.

Non-Invasive Prenatal Testing (NIPT)

Cell-free DNA testing in the maternal blood in high-risk pregnancies after first trimester combined screening

Persico N., Boito S., Ischia B., Cordisco A., De Robertis V., Fabietti I., et al.
Prenatal Diagnosis, 2016.

Application of risk score analysis to low-coverage whole genome sequencing data for the noninvasive detection of trisomy 21, trisomy 18, and trisomy 13

Tynan J.A., Kim S.K., Mazloom A.R., Zhao C., McLennan G., Tim R., et al.
Prenatal Diagnosis, 2015.

Cell-free DNA analysis for noninvasive examination of trisomy

Norton M.E., Jacobsson B., Swamy G., Laurant L.C., Ranzini A.C., Brar H., et al.
The New England Journal of Medicine, 2015.

Cell-free DNA analysis in maternal plasma in cases of fetal abnormalities detected on ultrasound examination

Benachi A., Letourneau A., Kleinfinger P., Senat M.V., Gautier E., Favre R., et al.
Obstetrics and Gynecology, 2015.

Clinical performance of non-invasive prenatal testing (NIPT) using targeted cell-free DNA analysis in maternal plasma with microarrays or next generation sequencing (NGS) is consistent across multiple controlled clinical studies

Stokowski R., Wang E., White K., Batey A., Jacobsson B., Brar H., et al.
Prenatal Diagnosis, 2015.

Fetal fraction of cell-free DNA in maternal plasma in the prediction of spontaneous preterm delivery

Quezada M.S., Francisco C., Dumitrascu-Biris D., Nicolaidis K.H., Poon L.C.
Ultrasound in Obstetrics & Gynecology, 2015.

Fetal sex and RHD genotyping with digital PCR demonstrates greater sensitivity than real-time PCR

Silence K.A., Roberts L.A., Hollands H.J., Thompson H.P., Kiernan M., Madgett T.E., et al.
Clinical Chemistry, 2015.

Noninvasive fetal genotyping of human platelet antigen-1a using targeted massively parallel sequencing

Wienzek-Lischka S., Krautwurst A., Frohner V., Hackstein H., Gattenlohner S., Brauningner A., et al.
Transfusion, 2015.

Performance of Momguard, a new non-invasive prenatal testing protocol developed in Korea

Lee M., Cho D., Won H., Hwang A., Jeong B., Kim J., et al.
Obstetrics and Gynecology Science, 2015.

Screening for trisomies 21, 18 and 13 by cell-free DNA analysis of maternal blood at 10-11 weeks' gestation and the combined test at 11-13 weeks

Quezada M.S., Gil M.M., Francisco C., Orosz G., Nicolaides K.H.
Ultrasound in Obstetrics & Gynecology, 2015.

Cell-free DNA analysis for trisomy risk assessment in first-trimester twin pregnancies

Gil, M.D., Quezada M.S., Bregant B., Syngelaki A., Nicolaides K.H.
Fetal Diagnosis and Therapy, 2014.

Diagnostic accuracy of random massively parallel sequencing for non-invasive prenatal detection of common autosomal aneuploidies: a collaborative study in Europe

Stumm M., Entezami M., Haug K., Blank C., Wustemann M., Schulze B., et al.
Prenatal Diagnosis, 2014.

Microarray-based cell-free DNA analysis improves noninvasive prenatal testing

Juneau K., Bogard P.E., Huang S., Mohensi M., Wang E.T., Ryvkin P., et al.
Fetal Diagnosis and Therapy, 2014.

Non-invasive prenatal chromosomal aneuploidy testing – clinical experience: 100,000 clinical samples

McCullough R.M., Almasri E.A., Guan X., Geis J.A., Hicks S.C., Mazloom A.M., et al.
PLoS One, 2014.

Non-invasive risk assessment of fetal sex chromosome aneuploidy through directed analysis and incorporation of fetal fractions

Hooks J., Wolfberg A.J., Wang E.T., Struble C.A., Zahn J., Juneau K., et al.
Prenatal Diagnosis, 2014.

Performance of screening for aneuploidies by cell-free DNA analysis of maternal blood in twin pregnancies

Bevilacqua E., Gil M.M., Nicolaides K.H., Ordonez E., Cirigliano V., Dierickx H., et al.
Ultrasound in Obstetrics & Gynecology, 2014.

Placental mosaicism for trisomy 13: a challenge in providing the cell-free fetal DNA testing

Liu X.Y., Zhang H.G., Wang R.X., Chen S., Yu X.W., Liu R.Z.
Journal of Assisted Reproduction and Genetics, 2014.

The feasibility study of non-invasive fetal trisomy 18 and 21 detection with semiconductor sequencing platform

Jeon J.Y., Zhou Y., Li Y., Guo Q., Chen J., Quan S., et al.
PLoS One, 2014.

UK NHS pilot study on cell-free DNA testing in screening for fetal trisomies: factors affecting uptake

Gil M.M., Giunta G., Macalli A., Poon L.C., Nicolaides K.H.
Ultrasound in Obstetrics & Gynecology, 2014.

Akoni TruTip and Qiagen methods for extraction of fetal circulating DNA-evaluation by real-time and digital PCR

Holmberg R.C., Gindlesperger A., Stokes T., Lopez D., Hyman L., Freed M., et al.
PLoS One, 2013.

Clinical experience of noninvasive prenatal testing with cell-free DNA for fetal trisomies 21, 18, and 13, in a general screening population

Fairbrother G., Johnson S., Musci T.J., Song K.
Prenatal Diagnosis, 2013.

European non-invasive trisomy evaluation (EU-NITE) study: a multicenter prospective CoHort study for noninvasive fetal trisomy 21 testing

Verweij E.J., Jacobsson B., van Scheltema P.A., de Boer M.A., Hoffer M.J.V., Hollemon D., et al.
Prenatal Diagnosis, 2013.

Gestational age and maternal weight effects on fetal cfDNA in maternal plasma

Wang E., Batey A., Struble C., Musci T., Song K., Oliphant A.
Prenatal Diagnosis, 2013.

High-throughput massively parallel sequencing for fetal aneuploidy detection from maternal plasma

Jensen T.J., Zwiefelhofer T., Tim R.C., Dzakula Z., Kim S.K., Mazloom A.R., et al.
PLoS One, 2013.

Implementation of maternal blood cell-free DNA testing in early screening for aneuploidies

Gil M.M., Quezada M.S., Bregant B., Ferraro M., Nicolaides K.H.
Ultrasound Obstetrics & Gynecology, 2013.

Initial clinical laboratory experience in noninvasive prenatal testing for fetal aneuploidy from maternal plasma DNA samples

Futch T., Spinosa J., Bhatt S., de Feo E., Rava R.P., Sehnert A.J.
Prenatal Diagnosis, 2013.

Maternal mosaicism is a significant contributor to discordant sex chromosomal aneuploidies associated with noninvasive prenatal testing

Wang Y., Chen Y., Tian F., Zhang J., Song Z., Wu Y., et al.
Clinical Chemistry, 2013.

Optimizing blood collection, transport and storage conditions for cell free DNA increases access to prenatal testing

Wong D., Moturi S., Angkachatchai V., Mueller R., DeSantis G., van den Boom D., et al.
Clinical Biochemistry, 2013.

SNP-based non-invasive prenatal testing detects sex chromosome aneuploidies with high accuracy

Samango-Sprouse C., Banjevic M., Ryan A., Sigurjonsson S., Zimmermann B., Hill M., et al.
Prenatal Diagnosis, 2013.

Trisomy 13 detection in the first trimesters of pregnancy using a chromosome-selective cell-free DNA analysis method

Ashoor G., Syngelaki A., Wang E., Struble C., Oliphant A., Song K., et al.
Ultrasound in Obstetrics & Gynecology, 2013.

Validation of targeted sequencing of single-nucleotide polymorphisms for non-invasive prenatal detection of aneuploidy of chromosomes 13, 18, 21, X and Y

Nicolaides K., Syngelaki A., Gil M., Atanasova V., Markova D.
Prenatal Diagnosis, 2013.

Influence of temperature during transportation on cell-free DNA analysis

Hidestrand M., Stokowski R., Song K., Oliphant A., Deavers J., Goetsch M., et al.
Fetal Diagnosis and Therapy, 2012.

Non-invasive chromosomal evaluation (NICE) study: results of a multicenter prospective cohort study for detection of fetal trisomy 21 and trisomy 18

Norton M.E., Brar H., Weiss J., Karimi A., Laurent L.C., Caughey A.B., et al.
American Journal of Obstetrics & Gynecology, 2012.

Noninvasive prenatal detection and selective analysis of cell-free DNA obtained from maternal blood: evaluation for trisomy 21 and trisomy 18

Sparks A.B., Struble C.A., Wang E.T., Song K., Oliphant A.
American Journal of Obstetrics & Gynecology, 2012.

Selective analysis of cell-free DNA in maternal blood for evaluation of fetal trisomy

Sparks A.B., Wang E.T., Struble C.A., Barrett W., Stokowski R., McBride C., et al.
Prenatal Diagnosis, 2012.

The fetal fraction of cell-free DNA in maternal plasma is not affected by a priori risk of fetal trisomy

Brar H., Wang E., Struble C., Musci T.J., Norton M.E.
The Journal of Maternal-Fetal and Neonatal Medicine, 2012.

DNA sequencing of maternal plasma to detect Down Syndrome: an international clinical validation study

Palomaki G.E., Kloza E.M., Lambert-Messerlian G.M., Haddow J.E., Neveux L.M., Ehrich M., et al.
Genetics in Medicine, 2011.

Implementing prenatal diagnosis based on cell-free fetal DNA: accurate identification of factors affecting fetal DNA yield

Barrett A.N., Zimmermann B.G., Wang D., Holloway A., Chitty L.S.
Clinical Chemistry, 2011.

Cell-Free DNA (cfDNA)

Validation of a clinical-grade assay to measure donor-derived cell-free DNA in solid organ transplant recipients

Grskovic M., Hiller D.J., Eubank L.A., Sninsky J.J., Christopherson C., Collins J.P. et al.
The Journal of Molecular Diagnostics, November 2016.

Real-time PCR evaluation of cell-free DNA subjected to various storage and shipping conditions

Wang Q., Cai Y., Brady P., Vermeesch J.R.
Genetics and Molecular Research, 2015.

Use of copy number deletion polymorphisms to assess DNA chimerism

Bruno D.L., Ganesamoorthy D., Thorne N.P., Ling L., Bahlo M., Forrest M., et al.
Clinical Chemistry, 2014.

Digital droplet PCR for rapid quantification of donor DNA in the circulation of transplant recipients as a potential universal biomarker of graft injury

Beck J., Blerau S., Balzer S., Andag R., Kanzow P., Schmitz J., et al.
Clinical Chemistry, 2013.

High-throughput droplet digital PCR system for absolute quantitation of DNA copy number

Hindson B.J., Ness K.D., Masquelier D.A., Belgrader P., Heredia N.J., Makarewicz A.J., et al.
Annals of Chemistry, 2011.

Circulating Tumor DNA (ctDNA)

Enumeration and targeted analysis of KRAS, BRAF and PIK3CA mutations in CTCs captured by a label-free platform: comparison to ctDNA and tissue in metastatic colorectal cancer

Kidess-Sigal, E., Liu, H.E., Triboulet, M.M., Che, J, Ramani, V.C., Visser, B.C., et al.
Oncotarget November, 2016.

Performance of Streck cfDNA blood collection tubes for liquid biopsy testing

Diaz I.M., Nocon A., Mehnert D.H., Fredebohm J., Diehl F., Holtrup F.
PLoS One, 2016

Prospective validation of rapid plasma genotyping for the detection of EGFR and KRAS mutations in advanced lung cancer

Sacher A.G., Paweletz C., Dahlberg S., Alden R., O'Connell A., Feeney N., et al.
Journal of the American Medical Association Oncology, 2016.

Detection of therapeutically targetable driver and resistance mutations in lung cancer patients by next generation sequencing of cell-free circulating tumor DNA

Thompson J.C., Yee S.S., Troxel A.B., Savitch S.L., Fan R., Balli D., et al.
Clinical Cancer Research, 2016.

Optimized pre-analytical methods improve KRAS mutation detection in circulating tumour DNA (ctDNA) from patients with non-small cell lung cancer (NSCLC)

Sherwood J.L., Corcoran C., Brown H., Sharpe A.D., Musilova M., Kohlman A.
PLoS One, 2016.

ESR1 mutations in circulating plasma tumor DNA from metastatic breast cancer patients

Chu D., Paoletti C., Gersch C., VanDenBerg D.A., Zabransky D.J., Cochran R.L., et al.
Clinical Cancer Research, 2016.

Analysis of ESR1 mutation in circulating tumor DNA demonstrates evolution during therapy for metastatic breast cancer

Schiavon G., Hrebien S., Garcia-Murillas I., Cutts R.J., Pearson A., Tarazona N., et al.
Science Translational Medicine, 2015.

Analytical and clinical validation of a digital sequencing panel for quantitative, highly accurate evaluation of cell-free circulating tumor DNA

Lanman R.B., Mortimer S.A., Zill O.A., Sebisano D., Lopez R., Blau S., et al.
PLoS One, 2015.

Cell-free DNA next-generation sequencing in pancreatobiliary carcinomas

Zill O.A., Greene C., Sebisano D., Siew L., Leng J., Vu M., et al.
Cancer Discovery, 2015.

Comparison of cell stabilizing blood collection tubes for circulating plasma tumor DNA

Toro P.V., Erlanger B., Beaver J.A., Cochran R.L., VanDenBerg D.A., Yakim E., et al.
Clinical Biochemistry, 2015.

Detection of clonal and subclonal copy-number variants in cell-free DNA from patients with breast cancer using a massively multiplexed PCR methodology

Kirkizlar E., Zimmermann B., Constantin T., Swernerton R., Hoang B., Wayham N., et al.
Translational Oncology, 2015.

Efficient detection of BRAF mutation in plasma of patients after long-term storage of blood in cell-free DNA blood collection tubes

Denis M.G., Knol A.C., Theoleyre S., Vallee A., Dreno B.
Clinical Chemistry, 2015.

Non-invasive detection of genomic imbalances in Hodgkin/Reed-Sternberg cells in early and advanced stage Hodgkin's lymphoma by sequencing of circulating cell-free DNA: a technical proof-of-principle study

Vandenbergh P., Wlodarska I., Tousseyn T., Dehaspe L., Dierickx D., Verheecke M., et al.
The Lancet, 2015.

Mutation profiling of tumor DNA from plasma and tumor tissue of colorectal cancer patients with a novel, high-sensitivity multiplexed mutation detection platform

Kidess E., Heirich K., Wigglin M., Vysotskaia V., Visser B.C., Marziali A., et al.
Oncotarget, 2014.

Measurement of circulating cell-free DNA in relation to 18F-fluorocholine PET/CT imaging in chemotherapy-treated advanced prostate cancer

Kwee S., Song M.A., Cheng I., Loo L., Tiirikainen M.,
Clinical & Translational Science, 2012.

Circulating Tumor Cells (CTCs)

Chromosomal instability estimation based on next generation sequencing and single cell genome wide copy number variation analysis

Greene S.B., Dago A.E., Leitz L.J., Wang Y., Lee J., Werner S.L., et al.
PLoS One, 2016.

Development of an automated and sensitive microfluidic device for capturing and characterizing circulating tumor cells (CTCs) from clinical blood samples

Gogoi P., Sepehri S., Zhou Y., Gorin M.A., Paolillo C., Capoluongo E., et al.
PLoS One, 2016.

Detection and characterization of circulating tumour cells in multiple myeloma

Zhang L., Beasley S., Prigozhina N.L., Higgins R., Ikeda S., Lee F., et al.
Journal of Circulating Biomarkers, 2016.

Association of AR-V7 on circulating tumor cells as a treatment-specific biomarker with outcomes and survival in castration-resistant prostate cancer

Scher H.I., Lu D., Schreiber N.A., Louw J., Graf R., Vragas H.A., et al.
Journal of the American Medical Association Oncology, 2016.

A novel approach for next-generation sequencing of circulating tumor cells

Yee S.S., Lieberman D.B., Blanchard T., Rader J., Zhao J., Troxel, A.B., et al.
Molecular Genetics & Genomic Medicine, 2016.

Analytical validation and capabilities of the Epic CTC platform: enrichment-free circulating tumour cell detection and characterization

Werner S.L., Graf R.P., Landers M., Valenta D.T., Schroeder M., Greene S.B., et al.
Journal of Circulating Biomarkers, 2015.

Clinical evaluation of a novel microfluidic device for epitope-independent enrichment of circulating tumour cells in patients with small cell lung cancer

Chudziak J., Burt D.J., Mohan S., Rothwell D.G., Mesquita B., Antonello J., et al.
Analyst, 2015.

Detection and characterization of circulating tumour cells from frozen peripheral blood mononuclear cells

Lu D., Graf R.P., Harvey M., Madan R.A., Heery C., Marte J., et al.
Journal of Circulating Biomarkers, 2015.

Limited genomic heterogeneity of circulating melanoma cells in advanced stage patients

Ruiz C., Li J., Luttgen M.S., Kolatkar A., Kendall J.T., Flores E., et al.
Physical Biology, 2015.

PTEN loss in circulating tumour cells correlates with PTEN loss in fresh tumour tissue from castration-resistant prostate cancer patients

Punnoose E.A., Ferraldeschi R., Szafer-Glusman E., Tucker E.K., Mohan S., Flohr P., et al.
British Journal of Cancer, 2015.

Rapid changes in circulating tumor cells following anti-angiogenic therapy

Gross M.E., Dorff T.B., Quinn D.I., Agus D.B., Luttgen M., Bethel K., et al.
Convergent Science Physical Oncology, 2015.

Circulating tumor microemboli diagnostics for patients with non-small-cell lung cancer

Carlsson A., Nair V.S., Luttgen M.S., Keu K.V., Horng G., Vasanaawala M., et al.
Journal of Thoracic Oncology, 2014.

Fluid phase biopsy for detection and characterization of circulating endothelial cells in myocardial infarction

Bethel K., Luttgen M.S., Damani S., Kolatkar A., Lamy R., Sabouri-Ghomi M., et al.
Physical Biology, 2014.

An observational study of circulating tumor cells and 18F-FDG PET uptake in patients with treatment-naïve non-small cell lung cancer

Nair V.S., Keu K.V., Luttgen M.S., Kolatkar A., Vasanaawala M., Kuscher W., et al.
PLoS One, 2013.

Optical quantification of cellular mass, volume, and density of circulating tumor cells identified in an ovarian cancer patient

Phillips K.G., Velasco C.R., Li J., Kolatkar A., Luttgen M., Bethel K., et al.
Frontiers in Oncology, 2012.

Quantification of cellular volume and sub-cellular density fluctuations: comparison of normal peripheral blood cells and circulating tumor cells identified in a breast cancer patient

Phillips K.G., Kolatkar A., Rees K.J., Rigg R., Marrinucci D., Luttgen M., et al.
Frontiers in Oncology, 2012.

Multiple biomarker expression on circulating tumor cells in comparison to tumor tissues from primary and metastatic sites in patients with locally advanced/ inflammatory, and stage IV breast cancer, using a novel detection technology

Somlo G., Lau S.K., Frankel P., Hsieh H.B., Liu X., Yang L., et al.
Breast Cancer Research and Treatment, 2011.

Cytomorphology of circulating colorectal tumor cells: a small case series

Marrinucci D., Bethel K., Lazar D., Fisher J., Huynh E., Clark P., et al.
Journal of Oncology, 2010.

Sensitive characterization of circulating tumor cells for improving therapy selection

Hsieh H.B., Somlo G., Bennis R., Frankel P., Krivacic R.T., Lau S., et al.
SBEC, 2010, *IFMBE Proceedings* 32.

Review Articles

Cell-free DNA: an upcoming biomarker in transplantation

Gielis E.M., Ledeganck K.J., De Winter B.Y., Del Favero J., Bosmans J.L., Claas F.H.J., et al.
American Journal of Transplantation, 2015.

Circulating microRNA biomarkers as liquid biopsy for cancer patients: pros and cons of current assays

Ono S., Lam S., Nagahara M., Hoon D.S.B.
Journal of Clinical Medicine, 2015.

Circulating tumor cells and circulating tumor DNA: challenges and opportunities on the path to clinical utility

Ignatiadis M., Lee M., Jeffrey S.S.
Clinical Cancer Research, 2015.

Detecting cancer biomarkers in blood: challenges for new molecular diagnostic and point-of-care tests using cell-free nucleic acids

Lewis J.M., Heineck D.P., Heller M.J.
Expert Reviews, 2015.

Implementation of whole genome massively parallel sequencing for noninvasive prenatal testing in laboratories

Thung D.T., Beulen L., Hehir-Kwa J., Faas B.H.
Expert Review of Molecular Diagnostics, 2015.

Non-invasive prenatal testing (NIPT): limitations on the way to become diagnosis

Kotsopoulou I., Tsoplou P., Mavrommatis K., Kroupis C.
Diagnosis, 2015.

Noninvasive prenatal testing using cell-free fetal DNA in maternal plasma.

Dharajiya N., Zwiefelhofer T., Guan X., Angkachatchai V., Saldivar J.S.
Current Protocols in Human Genetics, 2015.

Single circulating tumor cell sequencing as an advanced tool in cancer management

Salvianti F., Pazzagli M., Pinzani P.
Expert Review of Molecular Diagnostics, 2015.

Noninvasive fetal RhD genotyping

Clausen F.B., Damkjaer M.B., Dziegiel M.H.
Transfusion and Apheresis Science, 2014.

The clinical implementation of non-invasive prenatal diagnosis for single-gene disorders: challenges and progress made

Lench N., Barrett A., Fielding S., McKay F., Hill M., Jenkins L., et al.
Prenatal Diagnosis, 2013.

Location and biomarker characterization of circulating tumor cells

Hsieh H.B., Somlo G., Liu X., Bruce R.H.
Biosensors and Molecular Technologies For Cancer Diagnostics, 2012.

Non-invasive prenatal diagnosis: an epigenetic approach to the detection of common fetal chromosome disorders by analysis of maternal blood samples

Hulten M.A., Papageorgiou E.A., Ragione F.D., D'Esposito M., Carter N., Patsalis P.C.
Circulating Nucleic Acids In Plasma and Serum, 2011.

Implementing noninvasive prenatal diagnosis into clinical practice: how should maternal blood be taken and prepared?

Barrett A., Zimmermann B., Wang D., Holloway A., Chitty L.
Prenatal Diagnosis, 2010.