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Advance in Non-invasive Prenatal Testing: Ten Years of cfDNA-Based Screening and Diagnosis

Guest Editors:

Dr. Luigia De Falco

AMES-Centro Polidiagnostico Strumentale, Srl, 80013 Naples, Italy

Dr. Erica Soster

Labcorp Women's Health and Genetics, Westborough, MA 01581, USA

Deadline for manuscript submissions: 10 June 2024

Message from the Guest Editors

Dear Colleagues,

The presence of circulating cell-free DNA (cfDNA) from the placenta in maternal circulation was first demonstrated by Lo et al. Since its commercial launch in 2011. cfDNA-based non-invasive prenatal testing (NIPT) has permitted screening for T21, T18, and T13 with high specificity and sensitivity in both high- and low-risk populations. Using genome-wide cfDNA-based screening, all 24 chromosomes can be assessed, and rare fetal autosomal aneuploidies and segmental aneuploidies, such as deletions and duplications, can be revealed. NIPT has also been applied to determine fetal sex, fetal rhesus D (RhD), genotyping, and more recently for the identification of inherited monogenic disorders. This issue will focus on understanding the advances in non-invasive prenatal testing, from chromosome aneuploidies to monogenic disorders.

Dr. Luigia De Falco Dr. Erica Soster *Guest Editors*





mdpi.com/si/115927





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Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan

Department of Pathology, The University of Alabama at Birmingham, 1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

Message from the Editor-in-Chief

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