NACE® | NON-INVASIVE ANALYSIS FOR CHROMOSOMAL EXAMINATION

igenomix
PIONEERS IN REPRODUCTIVE GENETICS

1 What is NACE®?

- NACE® is a **non-invasive prenatal screening test** that analyzes the most frequent chromosomal abnormalities **without compromising the pregnancy,** from week 10.
- A simple fetal blood draw from the mother allows free DNA circulating in the maternal bloodstream to be detected via next generation sequencing (NGS) technology and proprietary bioinformatic analysis.

2 What does NACE®detect?

- NACE® detects **abnormalities in chromosomes 21, 18, 13** and the most common anomalies in the sexual chromosomes (X and Y).

NACE® 24 analyzes **all chromosomes.**

NACE® 24 Extended analyzes **all 24 chromosomes** and identifies **microdeletions** associated with **6 major genetic syndromes.**

	NACE®	NACE® 24	NACE® 24 Extended
Down syndrome	✓	✓	✓
Edwards syndrome	✓	✓	✓
Patau syndrome	✓	✓	✓
Sexual chromosomes	✓	✓	✓
All remaining chromosomes		✓	✓
Microdeletions			✓
Turnaround time	**3 days**	**4 days**	**10 days**

Sexual chromosomes:
- Turner syndrome (45, X)
- Klinefelter syndrome (XXY)
- XYY syndrome
- X trisomy syndrome

For twin pregnancies, sexual chromosomes are not analyzed.

Microdeletions:
- DiGeorge syndrome
- Angelman syndrome*
- Cri-du-chat syndrome
- p36 deletion syndrome
- Prader-Willi syndrome*
- Wolf-Hirschhorn syndrome

* The microdeletion region is the same for both Angelman and Prader-Willi syndromes (15q**11.2**). NACE 24® Extended does not distinguish between the two syndromes. An additional confirmation test will be required.

3 Who is NACE® suitable for?

- Several scientific support the use the NACE test for all pregnant women[1].

It is particularly recommended for women with:
- An abnormal result in their first trimester screen
- A previous Down's syndrome pregnancy
- A suspicious ultrasound finding

Gregg, et al. Genet Med. 2016

4 Cases where NACE® can be used

- Single pregnancies
- Twin pregnancies
- IVF
- Egg donation
- Women of all ages
- Women of all ethnicities
- Women of all body mass index
- Consanguinity

1. Gregg AR et al. Genet Med 2016; 18:1056-65.
2. Bianchi et al. N Engl J Med. 2014 27;370(9):799-808.
3. Nicolaides KH. Prenat Diagn 2011; 31:7-15.

* Starting count from the day after the sample is received at Igenomix.

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4 Why use a non-invasive prenatal test?

- Non-invasive tests can prevent the need for about 98% of invasive tests in patients at risk for trisomy 21.(2)

- NACE® reduces the number of miscarriages caused by amniocentesis or corionic villus sampling.

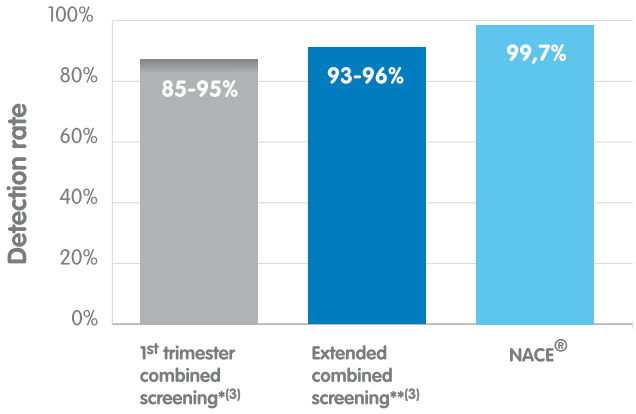
Conventional tests including biochemical screening can lead to:

1 in every 20 women who tests positive for Down syndrome will not be carrying an affected baby.

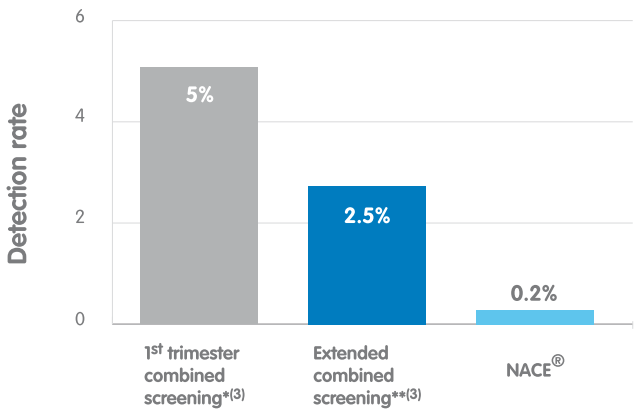
False sense of security

Of every 20 women carrying a baby with Down syndrome, 3 will test negative by biochemical screening.

Down syndrome detection rate



False positive rate according to the type of screening



* Includes maternal age, nuchal translucency measurement, and the detection of the PAPP-A and free β-hCG biochemical markers. Risk assessment can vary depening on diverse factors.

** Includes other ultrasound markers: nasal bone absence, assessment of the ductus venosus, and tricuspid blood flow.

Coverage of the NACE® test for single pregnancies ordered by importance

- According to data from the 2012 European Registry for Prenatal Diagnosis(2), abnormalities in chromosomes 21, 18, and 13 represent 71% of all chromosomal abnormalities detected.