

PREGNOSTICA

KIT FOR THE EARLY DIAGNOSIS OF PREGNANCY PATHOLOGIES, SUCH AS PREECLAMPSIA AND GESTATIONAL DIABETES, USING ORAL BIOMARKERS.

DENTISTRY

UA-06
UA-020

MARKET

The gestational diabetes (GDM) and preeclampsia (PE) diagnostics kits should be implemented as a screening for all pregnant women, to be able to diagnose these pathologies within the first trimester of pregnancy and begin a preventive and timely treatment. In 2014, there were 250,997 births in Chile, and 6.7 million and 208 million pregnancies in the United States and worldwide, respectively. The current diagnostic market for both pathologies is US\$185,91 million, however, these diagnoses are made late, in the third trimester of pregnancy.

UNMET NEED

Pregnancy associated pathologies are a public health problem that affect between 8% and 15% of pregnancies, producing short and long-term complications in both the fetus and the mother. Gestational diabetes increases the risk of developing chronic diseases such as type II diabetes in the mother, or metabolic syndromes in the child. It is currently diagnosed between the 24th and 28th week of gestation, when the damage due to the high concentration of glucose in the blood is already done. Preeclampsia, on the other hand, occurs from the 20th week of pregnancy. This can cause serious complications, delaying intrauterine growth and causing prematurity. In addition, it increases the risk of premature detachment of the placenta, cerebrovascular accidents in the mother, hemorrhages and kidney problems.



Universidad de

los Andes



**DIRECCIÓN
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SOLUTION

PregnosticA consists of early predictive diagnostic kits (11-14 weeks) used to identify patients at risk of presenting pregnancy-related pathologies, such as preeclampsia and gestational diabetes. The diagnosis is made by identifying different molecules present in the pregnant woman's oral fluids. The early diagnosis helps reduce the complications and sequelae associated with these pathologies, both in the mother and child, by implementing preventive measures, monitoring and treating the disease.

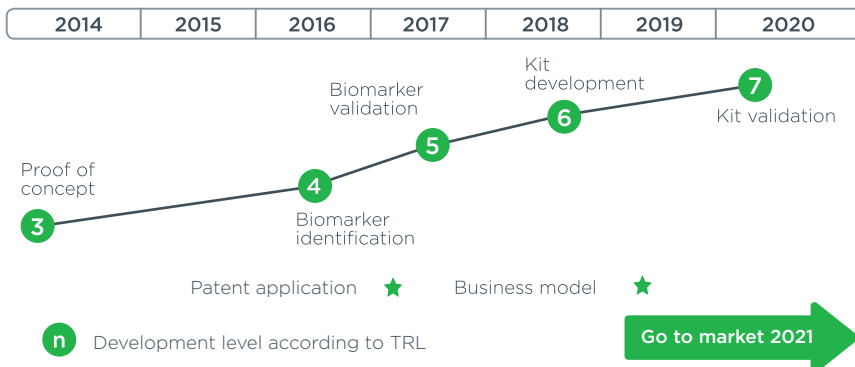
ADVANTAGES

- > Early diagnosis (first trimester).
- > It allows the patient to start preventive treatments.
- > It reduces the incidence rate of pregnancy-related pathologies.
- > It's a non-invasive, fast and low cost method.
- > It could be included in the oral health plan for pregnant women.

INTELLECTUAL PROPERTY

PCT in national phase.

STATE OF DEVELOPMENT



BUSINESS SUMMARY DEPARTMENT OF INNOVATION

The Dirección de Innovación of the Universidad de los Andes seeks to support, canalize and efficiently manage the results from research conducted at the University to the public and private sector, both national and international. This is done in order to promote the transfer and application of the knowledge generated in the University so as to benefit the society and contribute to the economic development.

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PROJECT DIRECTOR

Alejandra Chaparro Padilla, dental surgeon, specialist in periodontics and masters in dental sciences.

- > Her research is focused on the connection between periodontal disease and various conditions or systemic pathologies, and in the regeneration of periodontal tissue.

RESEARCH TEAM

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