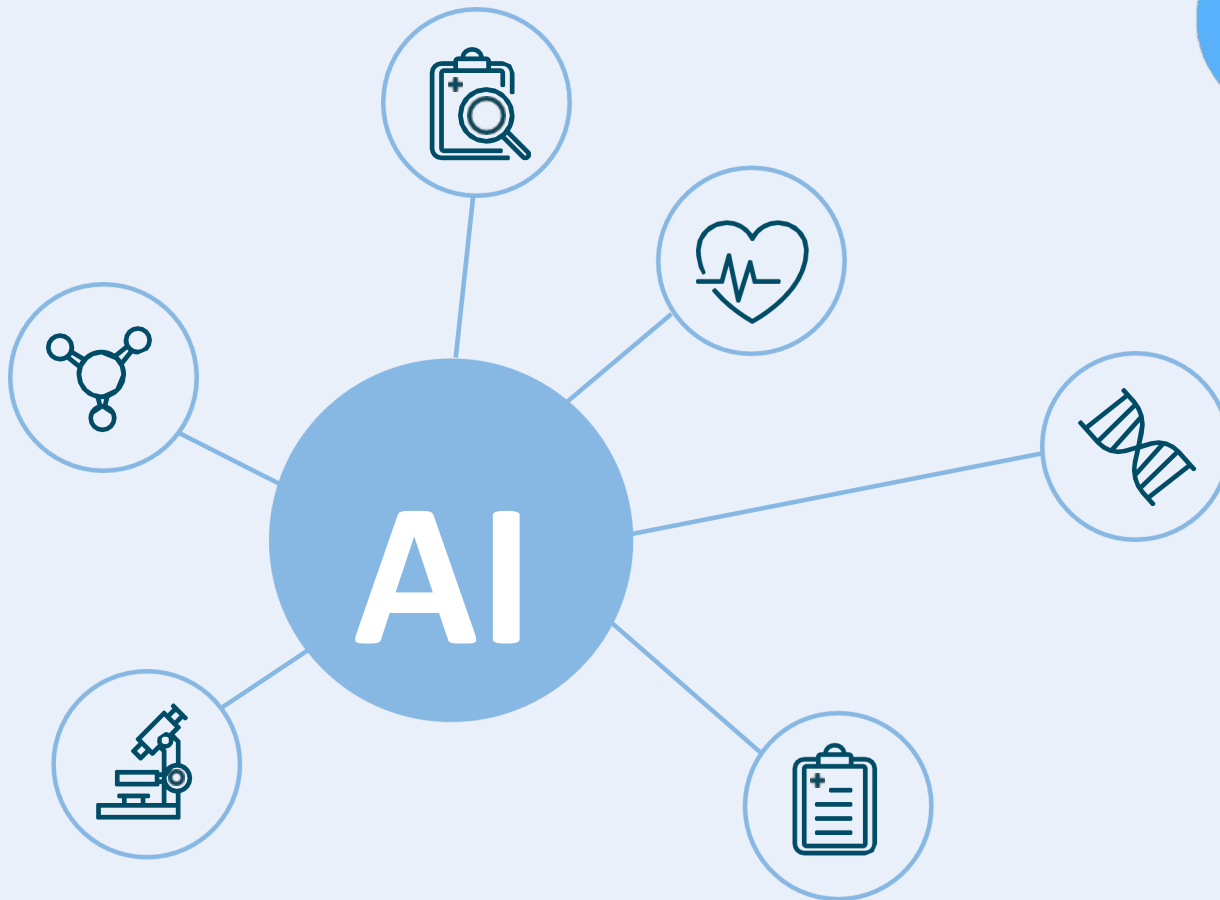




Analysis of cervical ultrasound scans
using AI to detect premature birth

Design and marketing of artificial intelligence algorithms for image and clinical data analysis.

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REGULATORY

ENS

ISO 13485, 27001, 9000

EC DECLARATION OF CONFORMITY IN
ACCORDANCE WITH THE MEDICAL DEVICES
DIRECTIVE 93/42/EEC AND ITS AMENDMENT
2007/47/EC

HL7 FHIR



AN UNMET CLINICAL NEED

quantusPREMATURITY is a revolutionary solution to an unmet clinical need; knowing whether a baby will be born prematurely or at term remains the biggest unknown in a seemingly normal pregnancy. Spontaneous preterm birth is the leading cause of prematurity, a condition that affects at least 15 million babies each year. Current procedures and tests to determine the risk of preterm birth are outdated and have very low performance.

quantusPREMATURITY is the first test for the **early detection of** spontaneous **preterm labor** based on the analysis of an ultrasound image of the cervix. It offers the opportunity to avoid the variability of current tests by simplifying the process and making it more efficient thanks to Artificial Intelligence.

This solution helps improve patient care by shortening diagnosis times and increasing the accuracy of interpretations.



NON-INVASIVE



SAFE



FAST



COMPATIBLE

How to use quantusPREMATURITY?



1. Get an ultrasound scan



2. Upload the image to the web application



3. Get the results

Step 1: Acquire an ultrasound scan

quantusPREMATURITY requires a transvaginal ultrasound of the cervix in DICOM format. A simple guide is available in the application showing how to perform the scans

How to use quantusPREMATURITY?

Step 2: Use the quantusPREMATURITY web application to analyze the image.

This application is a simple tool that allows you to send the image you want to analyze to the system. To do so, you just need to follow three simple steps to complete the analysis:



Upload

Upload images to the web



Select

The images you want
to be analyzed



Send

The sample to be analyzed



Step 3: Obtain the application result in a few minutes via a results report.

When to use **quantusPREMATURITY**

During the second trimester morphological screening ultrasound, it can be very useful to combine the transvaginal examination to assess the risk of spontaneous preterm birth and to estimate the need for additional monitoring or specific therapeutic strategies to reduce this risk. **Predicting the risk of SPP** before week 34 is particularly relevant clinically, as this is the gestational age with the highest number of fetal complications associated with prematurity.

quantusPREMATURITY is indicated for singleton pregnancies between **19 and 24 weeks of gestation** to determine the risk of spontaneous preterm birth as a result of premature cervical remodeling. Patients with an increased risk of PPROM who have a history of PPROM in a previous pregnancy, a history of conization, and/or uterine malformation may particularly benefit from this test in order to tailor their follow-up and/or treatment.



Why does quantusPREMATURITY work?

Quantitative analysis of ultrasound images, together with advanced Artificial Intelligence techniques, allows the detection of very subtle changes in tissues that are not visible to the human eye. These changes could be relevant information about the microstructure of the tissue related to a pathology.

quantusPREMATURITY provides an alternative for early detection to reliably **predict the risk of sPTB**, achieving unprecedented levels of accuracy, performance, and reproducibility in the state of the art.

The **uterine cervix** is a potential candidate for the application of this type of technology, as it must be remodeled during pregnancy until the moment of delivery. The process of cervical remodeling consists of microstructural changes in the cervix that begin in the first trimester of pregnancy and end at delivery. Early or premature remodeling of the cervix may be associated with sPTB. Therefore, **early identification** of premature cervical remodeling could reduce the potential maternal and perinatal complications associated with sPTB



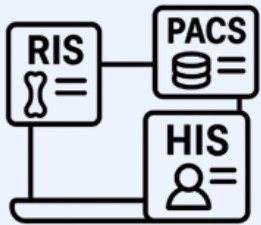
An unlimited experience



Unrestricted 24-hour **access**: With an internet connection, you can use quantusPREMATURITY and review results anytime, anywhere.



No requires installation or download of any type of software



Our service allows seamless integration between **HIS**, **RIS**, and **PACS** systems, optimizing clinical work and ensuring centralized and secure access to medical information.



Compatibility: quantusPREMATURITY is compatible with most web browsers as well as with devices used in primary care practice.



RESTful web services: Compatible with HL7 FHIR



Pay-per-use: Pay only for each analysis you request

Collaborate with us





Developing tomorrow's medical technologies today