REVOLUTIONIZING IMAGING DIAGNOSTICS

The first 100% non-invasive test to predict Neonatal Respiratory Morbidity Risk

AN UNRESOLVED CLINICAL NEED

- Preterm Birth Rate is increasing year by year in developed countries.
- Neonatal Respiratory Morbidity remains as the leading problem in preterm babies despite prenatal and postnatal treatments.
- Current tests to assessment of Fetal Lung Maturity (FLM) require an amniocentesis, which limits their practice due to the associated risks and discomfort.

quantusFLM -the first 100% non-invasive Fetal Lung Maturity test

- Noninvasive: quantusFLM is the first Fetal Lung Maturity test in the market based on analysis of an ultrasound image of the fetal lungs. It gives the opportunity to avoid the need for an invasive technique to predict Neonatal Respiratory Morbidity in the clinical practice.
- Fast: quantusFLM can provide accurate results in just a few minutes
- Reliable: The results of quantusFLM are as reliable as any other commercial test.

Compare quantusFLM and commercial FLM test:

Test	Sensitivity	Specificity	PPV	NPV
PG	82,7%	54,4%	18%	96,3%
Ratio L/S	74,6%	82,5%	34,1%	96,4%
quantus FLM	71,0%	94,7%	67,9%	95,4%

*Sensitivity: Proportion of negative cases correctly identified by the algorithm. It is the number of items correctly identified as negative out of the total number of negatives.

*Specificity: Proportion of positive cases correctly identified by the algorithm. It is the number of items correctly identified as positive over the actual total number of positives

*PPV: Positive Predicted Value.

*NPV: Negative Predicted Value.

HOW TO USE quantusFLM?

Using quantusFLM is easy, it only requires 3 simple steps:

1. Adquire an ultrasound image → **2. Upload the image into the app** → **3. 3. Obtain the results**

Step 1: Acquire an ultrasound

quantusFLM requires an ultrasound of the fetal chest at the level of the four cardiac chambers of the fetal heart in DICOM format. There is a simple guide available within the app that shows how to perform these acquisitions.

Step 2: Use the app to analyze the image.

The app is a simple tool that allows you to send the image you want to analyze to the system. To do this, you only have to follow three simple steps to complete the analysis:

Upload   Select   Send

Step 3: : Obtain the result within few minutes

WHEN TO USE quantusFLM

quantusFLM may be particularly useful in cases where elective induced labor may be an option, but the risk of Neonatal Respiratory Morbidity must be known. In many clinical situations, the decision to induce labor or wait is in a "gray zone", particularly in late preterm or early term pregnancies (34+0 to 38+6 weeks).

- Highly symptomatic cholestasis.
- Fluid retention with edema.
- Highly symptomatic cholestasis.
- Previous history of unexplained or abrupt fetal death.
- Any situation in which an elective cesarean section at <39+0 weeks is considered.

In these and other circumstances, termination of pregnancy may be a reasonable, though not absolute, option to avoid danger to the mother or fetus. Knowing the risk of Neonatal Respiratory Morbidity may be critical in the decision-making process to either confirm or postpone delivery.

A LIMITLESS EXPERIENCE

✓ **Unrestricted 24-hour access:** Through an internet connection it is possible to use quantusFLM and review the results at any time and from anywhere.

✓ **No installation required: I**t does not require the download or installation of any software.

Hight compatibility: quantusFLM is compatible with most browsers. It can be used for web-based as well as primary devices in medical practice.

quantusFLM OFFERS A HIGH ECONOMIC VALUE

✓ **NO initial investment in infrastructure required!**

✓ **Pay-per-use: Pay only for each analysis you order!**

✓ **Add more value to your practice and increase your profits!**

WHY DOES quantusFLM WORK?

The changes that occur at the histological level in a tissue, including the proportion of collagen, fat or water, among others, affect the dispersion of ultrasound signals. These signals form the basis for the generation of the ultrasound image. Quantitative analysis of ultrasound images can detect very subtle changes, not perceptible to the human eye, and obtain relevant information on tissue microstructure.

Fetal lung maturity represents an obvious candidate for the use of quantitative ultrasound image analysis techniques since fetal lung maturity results from the combination of evolutionary changes in the alveoli during gestation as well as surfactant concentration. Over the past 30 years, research has focused on extracting quantitative information of tissue characteristics from ultrasound images.

quantusFLM provides a completely non-invasive alternative for the prediction of the risk of Neonatal Respiratory Morbidity, reaching levels of accuracy and reproducibility unprecedented in the state of the art of non-invasive techniques based on ultrasound analysis.
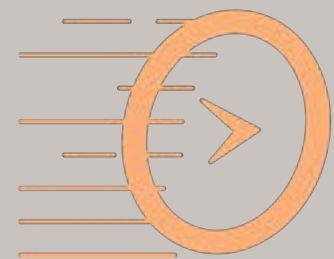
quantus FLM

Accurate   **Effective**   **Fast**

Give it a try..
Contact us!

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