

This page provides you with a quick overview of main changes in this new version of astraia. For more information on the described features, please refer to the **Comprehensive list of changes** and the user manual.

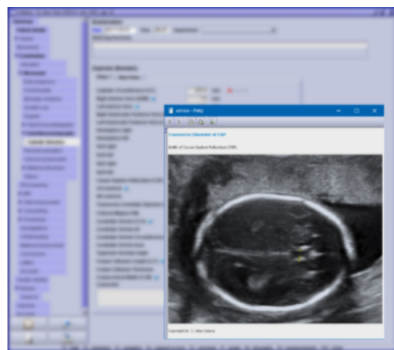
astraia 1.27.4

Risk Module

The FMF2018 algorithm included improved MoM calculations for biochemical and biophysical markers and a new preeclampsia risk.

There were no updates to the DBS parameters, and these have therefore been excluded from the specifications. The FMF2012 specifications continue to apply to DBS MoMs and are now made available for the calculation of trisomy risks.

New Fetal Neurosonography Module



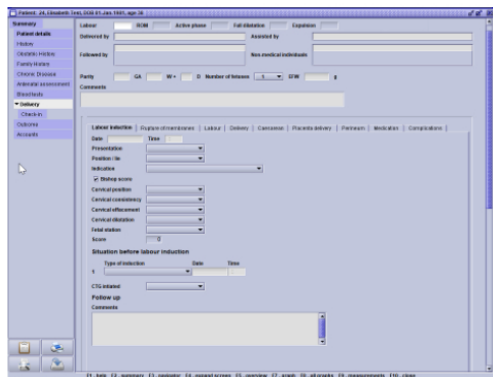
astraia's new Fetal Neurosonography module is now available.

It is made up of two screens which are integrated into the Obstetrics module.

The first screen covers general neurosonography findings concerning the fetal brain's structure and malformations.

A second screen is available for documenting cephalic biometry measurements; it includes several growth charts. A number of integrated info buttons with sample ultrasound images aid the doctor with example measurements. The screen can also be configured to document 3-D cerebellar measurements.

New Delivery Module



A new Delivery module is now available.

It is designed to follow a patient from antenatal assessments, through the early signs of labour to delivery and outcome. The delivery screen includes a tabular presentation for the different parts that constitute a delivery.

Please note that the Delivery module is currently only available in English and French.

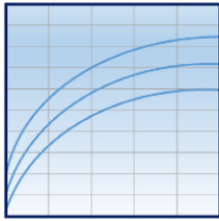
New module for evaluation: Intrapartum



A new Intrapartum module is available for evaluation. It includes four screens which integrate into the Obstetrics module and document a delivery (intrapartum) by means of ultrasound measurements, thereby objectively assessing the fetal head descent and cervical dilation.

Please note that these screens may only be used for evaluation purposes; they will be made available for productive use in the next version of astraia. If you are interested in evaluating this new module, please contact our Product department at products@astraia.com.

New charts and formulas



Fetal Neurosonography charts

- **LCC (Corpus Callosum Length)**: Achiron et al., 2001.
- **LCC (Corpus Callosum Length)**: Goldstein et al., 2011.
- **LCC (Corpus Callosum Length)**: Cignini et al., 2014.
- **Corpus Callosum Thickness**: Achiron et al., 2001.
- **Corpus Callosum Thickness**: Goldstein et al., 2011.
- **Third ventricle**: Hertzberg et al., 1997.
- **Third ventricle**: Sari et al., 2005.
- **CCV (craneo caudal vermis)**: Malinge et al., 2001.
- **CCV, Cerebella Vermis AP, Cerebellar Vermis Area**: Ginath et al., 2013.
- **CCV, Cerebella Vermis AP, Cerebellar Vermis Area**: Katorza et al., 2016.
- **CCV 3D, Cerebella Vermis AP 3D, Cerebellar Vermis Area 3D**: Viñals et al., 2005.
- **TCD (transverse cerebellar diameter)**: Sherer et al., 2007.
- **CSP (cavum septum pellucidum width)**: Falco et al., 2000.

Fetal Echocardiography charts

- **Aortic valve diameter**
- **Arterial Duct**
- **Pulm valve diameter**

based on Vigneswaran et al., 2018.

Pregnancy growth charts

- **Umbilical PI**: Ciobanu et al., 2019.
- **Umbilical PI**: Baschat et al., 2003.
- **Middle cerebral PI**: Ciobanu et al., 2019.
- **Middle cerebral PI**: Baschat et al., 2003.
- **CPR**: Ciobanu et al., 2019.
- **Nasal bone**: Papasozomenou et al., 2016. (*specific to Greek population*).
- **Mandibular diameter A-P, Mandibular diameter transverse**: Zalel et al., 2006.
- **AC new formula: plotted - ellipse**: Chitty et al., 1994.

New Database

- New open-source database PostgreSQL ready for evaluation.

Technical Changes



- The log4j version in astraia has now been updated to 2.17.1.
- The MS SQL driver has been updated to the JDBC driver for SQL Server provided by Microsoft to ensure compatibility with Java 8 and to support SSL encryption.
- Tomcat is now the default database connection pool.
- astraia's Java Runtime has been updated to Java 8.
- The Table Id design now uses Sequences and not longer the IdStore table to generate unique IDs.