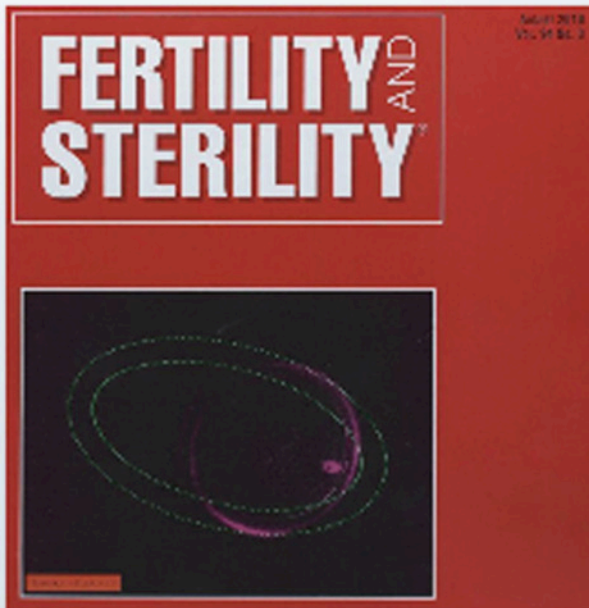


The advantage of the polarizing system OCTAX polarAIDE™ has been shown in previous studies: a quick assessment of the birefringent profiles of all oocytes of a patient by unique automatic zona scoring reveals the developmental prognosis for each resulting embryo. Since quality grading by the validated zona scores of OCTAX polarAIDE™ is relative within a group of oocytes, always the most promising oocytes of a patient can be detected.



A new study by Ebner, Balaban et al. from the latest issue of Fertility and Sterility (Vol. 94/3:913-20; "Automatic user-independent zona pellucida imaging at the oocyte stage allows for the prediction of preimplantation development.") highlights some new aspects of automatic zona scoring by OCTAX polarAIDE™.

In this study about one third of mature oocytes analysed by OCTAX polarAIDE™ showed a zona which failed to be detected by the automatic measurement tool, resulting in a non fitting frame and highly negative zona score (see picture from journal cover).

In comparison to the group of oocytes with regular detection of zona pellucida the following results were presented:

- Failed detection was a negative predictor of compaction and blastocyst formation. Blastocyst formation was superior in embryos that were derived from oocytes with a high zona score
- Patients with exclusive transfer of embryos derived from oocytes with failed zona detection showed a significantly lower pregnancy rate (2/13) compared with those who had an exclusive transfer of concepti stemming from oocytes with regular detection (18/38)
- Stimulation protocols had an influence on the number of resulting oocytes with successful zona detection

Due to the study setup – selection of embryos for transfer was based on embryo morphology, not on zona scores – no statistically relevant additional conclusions could be drawn about prognostic power of zona scoring in post transfer development. However the authors stated that "...noninvasive, user-independent OCTAX polarAIDE™ proved to be a valuable tool in oocyte selection."

As good news for our customers, also this new study showed the various benefits of OCTAX polarAIDE analysis:

- determine the mature oocyte stage to optimise ICSI results
- adapt embryo culture time depending on the oocyte's prognosis
- select the most promising oocyte
- adapt number of embryos for embryo transfer
- optimise stimulation protocols