



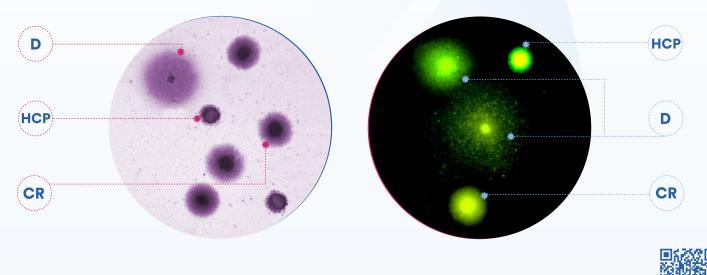
## Cumulus Cells, the new target to choose the best oocyte for transfer

Ovoselect was specifically designed to:

• Test for the level of **DNA damage affecting cumulus cells** as an indicator of oocyte quality. • Test for the **relative quality of cumulus cells** as an indirect indicator of the physiological state of oocytes.



Three different cell morphologies can be identified after ovoselect Cumulus Cells procesing





#### Why using Ovoselect?

Ovoselect adds a higher level of security to oocyte quality assessment, thereby increasing the success of reproductive outcomes.

### What is the scientific basis of Ovoselect?

Ovoselect is based on the fact that the chromatin characteristics of Cumulus Cells (CCs) in immature oocytes differ significantly from those observed in mature oocytes.

Additionally, CCs presenting nuclei with fragmented DNA can also be identified.

Ovoselect targets and exposes differences in the chromatin characteristics of Cumulus Cells (CCs) depending on the state of nuclear DNA quality and maturity.

# Why does Ovoselect discriminate among different CCs chromatin states?

Cumulus Cells are sensitive to changes in physiological and environmental conditions and, most importantly, to hormonal stimulation. Genes that are expressed at CCs and morphological changes, depending on the level of chromatin relaxation, can be observed. Chromatin relaxation is related with the level of cell activity in the CCs.

Three types of morphological variations can be observed after Ovoselect CCs processing: HCP: Cells with High Chromatin Package. RC: Cells with Relaxed Chromatin and D: Cells with Damaged DNA (Figure).

#### Information provided by Ovoselect

Ovoselect allows simultaneous visualization of the state of all three cell types using the CCs associated with each oocyte.

The level of DNA damage in Cumulus Cells (D) is related to the competence of the oocytes to achieve reproductive outcome.

After oocyte retrieval CCs can be ranked according to the percentage of DNA damage observed in the CCs of each single oocyte. Oocytes presenting a lower level of DNA damage in CCs will be more competent for transfer.



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