



Trophectoderm biopsy using OCTAX Laser Shot™

Step 4:

Trophectoderm cells are kept in tension while the first cell bond is cut by a pulse of OCTAX Laser Shot™. The pulse length needed for cutting cell bonds is approx. three times longer than for the initial zona drilling in step 1.

After triggering the laser, the laser target area is enframed by four LEDs of the OCTAX Target Pointer™ as can be seen in the picture.



Step 5:

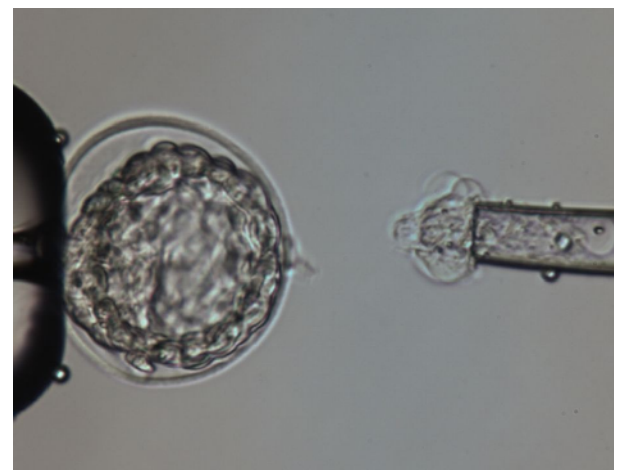
The biopsy is pulled further away from the blastocyst to keep cell junctions in tension. Remaining cell bonds are cut by additional pulses of OCTAX Laser Shot™. It is important to direct the laser to changing positions on cell junctions. Shooting on the same spot will lead to sticky cells and hamper detachment of the biopsy. In average 3-5 shots are needed for detachment of biopsied trophectoderm.



Step 6:

Trophectoderm biopsy is completed. The collapsing blastocyst is placed in a single drop of culture medium for reexpansion.

Biopsied trophectoderm cells are processed for subsequent genetic analysis, e.g. using FISH or Comparative Genomic Hybridisation (CGH).



The still frames shown here were extracted from a digital video on trophectoderm biopsy taken by the OCTAX EyeWare™ MX digital video recording feature.