

DAY 0 OOCYTE GRADING SYSTEM

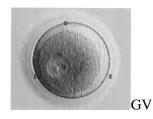
Initially, oocytes are assed for maturation prior to Intracytoplasmic Sperm Injection (ICSI).

<u>Grade</u> <u>Characteristics</u>

GV: Oocyte at the germinal vesicle stage of meiosis, immature.

MI: Oocyte at meiosis stage I, immature.

MII: Oocyte at meiosis stage II, mature.







MII

DAY 3 EMBRYO GRADING SYSTEM

Initially, embryos are given a numerical score depicting the number of cells within the embyo(s).

Next, embryos are given a quality score using the Roman Numerical system (I to V).

<u>Grade</u> <u>Characteristics</u>

Grade I: Embryo with blastomeres of equal size and no cytoplasmic fragmentation.

Grade II: Embryo with blastomeres of equal size and minor cytoplasmic fragmentation

covering < 10% of the pre-embryo surface.

Grade III: Embryo with blastomeres of distinctly unequal size and fragmentation covering

>10% but \leq 25% of the pre-embryo surface.

Grade IV: Embryo with blastomeres of equal or unequal size and moderate-to-significant

cytoplasmic fragmentation covering > 25% but less than 50% of the pre-embryo

surface.

Grade V: Embryo with few blastomeres of any size and severe fragmentation covering >

50% of the pre-embryo surface.

**Example of a Day 3 embryo grading:



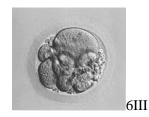


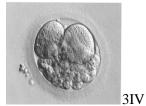


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Fertility and Reproductive Health







BLASTOCYST GRADING SYSTEM

Initially, blastocysts are given a numerical score from 1 to 6 based upon their degree of expansion and hatching status:

<u>Grade</u>	<u>Characteristics</u>
Grade 1:	Early blastocyst: the blastocoel being less than half the volume of the embryo.
Grade 2:	Blastocyst: the blastocoel being more than half the volume of the embryo.
Grade 3:	Full blastocyst: the blastocoel completely fills the embryo.
Grade 4:	Expanded blastocyst: the blastocoel volume is now larger than that of the early embryo and the zona is thinning.
Grade 5:	Hatching blastocyst: the trophectoderm has started to herniated through the zona.
Grade 6:	Hatched blastocyst: the blastocyst has completely escaped from the zona.

Next, blastocysts graded from 3 to 6 are given a quality score for the cells of the inner cell mass (ICM) and trophectoderm (TE).

ICM Grading

<u>Grade</u>	<u>Characteristics</u>
A:	Tightly packed, many cells
B:	Loosely grouped, several cells
C:	Very few cells or no ICM

TE Grading

Grade	<u>Characteristics</u>
A:	Many cells forming a cohesive epithelium
B:	Few cells forming a loose epithelium
C:	No cells



**Example of a Day 5/6 blastocyst grading:











3BB



6BA