

## ANEUPLOIDY RATE ACCORDING TO THE DAY OF THE BLASTOCYST BIOPSY

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### Abstract Body

*Retrospective and observational study of 1080 PGS dated from April 2016 to June 2017 in IVI Madrid. A total of 3375 embryos were biopsied on day 5 or day 6 of development and analyzed through Next Generation Sequencing (NGS). We grouped the patients by age ranges, from 35 to 39 and from 40 to 44, and studied the rate of aneuploidies according to the day of the biopsy (5 or 6). We analyzed 1323 embryos in the group of 35 to 39 age in day 5 and 71 embryos on day 6. In the group of 40 to 44 years, 1453 embryos were analyzed on day 5 and 177 on day 6. In the older age group we found significant differences in the rate of aneuploidies between day 5 (75.60%) and day 6 (82.35%) ( $p= 0.0461$ ). However, we did not find significant differences in the rate of aneuploidies in the young group between day 5 (59.10%) and day 6 (61.76%) ( $p= 0.65$ ). Another finding is that the percentage of embryos with chromosomal abnormalities is higher in older patients when the biopsy is performed on day 6 and the percentage of biopsied embryos on day 6 of the cycle is twice (10% of total) in older age group compares to the percentage of embryos biopsied in the younger group (5% of total). In addition, in this group the percentage of embryos without information was higher in biopsies on day 6 (98.99% vs 95.77%) ( $p= 0.0141$ ).*

In conclusion, in patients older than 39 years old, the slower embryo development implies a higher aneuploidy rate. Despite of this we recommend to analyze all good morphology embryos in day 6 to recover euploid embryos.