Objective: To report the behavior and development of twins derived from vitrified-warmed embryos originated from the intracytoplasmic sperm injection (ICSI) of vitrified-warmed oocytes.

Materials and methods: Case report held during 2010 in IVI Buenos Aires clinic. A 34 years old patient performed 2 cycles of oocyte accumulation following a GnRH antagonist’s protocol. 2250 UI of rFSH were given for 10 days, oocyte maturation was triggered with 10000 IU hCG. After birth, children were evaluated with Apgar, Brazelton and Bayli Score.

Main results: A total of 7 MII oocytes were microinjected with husband’s fresh sperm and five viable embryos were obtained: two embryos were transferred in a fresh cycle resulting in no pregnancy; supplementary embryos were vitrified. In a consecutive natural cycle two vitrified embryos were warmed and survived with 100% of intact blastomeres and good quality morphology. Both were transferred, resulting in a twin pregnancy and two healthy newborns: one male and one female. Children’s growth and intellectual development were the expected according to their age.

Conclusions: This is the first reported successful birth in Argentina using vitrified-warmed embryos derived from vitrified-thawed oocytes. The neuromotor, cognitive and language development studied were according to their age.