In recent years a research carried on by several scientists especially in the last decade has pushed forward the boundaries of the knowledge on PCOS, infertility and how a group of molecules named "inositol" might represent a novel and effective therapeutic approach.

Inositol is a family of nine different stereoisomers two of which (myo-inositol and D-chiro-inositol) have been shown to be insulin mediators and to have positive effects on the metabolic alteration plaguing PCOS women. Despite few similarities, these two molecules are different; indeed, some studies identified myo-inositol as a crucial molecule for a proper oocyte development, whereas the association MYO/DCI, in a 'physiological' range (i.e., 40:1) is likely to ensure better clinical results, by counteracting PCOS at both the systemic and ovary level.

Unfortunately, in the scientific community the knowledge of the differences between the two molecules is not well established yet, as it is proven by systematic reviews or Cochrane reviews mixing trials performed using myo-inositol or D-chiro-inositol.

Therefore, in order to place a milestone and to open some reflection points, a international consensus conference on the role played by inositol(s) in clinical practice has been organized by the International and European School in Reproductive, Perinatal and Neonatal Medicine (PREIS School) and has taken place in Florence December 2013. Since I was honored to give my contribution, I will present the outcomes of the work my colleges and I have done.