PCOS is one of the most common endocrine disorders affecting women, and it is characterized by a combination of hyperandrogenism, chronic anovulation, and insulin resistance. Whilst a significant progress has recently been made in the diagnosis for PCOS, the optimal infertility treatment remains to be determined. Two inositol isomers, Myo-inositol (MYO) and D-chiro-inositol (DCI) have been proven to be effective in PCOS treatment, by improving insulin resistance, serum androgen levels, and many feature of the metabolic syndrome. However, only MYO have been proven to exert beneficial effects on the reproductive function, 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.

In particular, in several published papers the combined therapy MYO/DCI have been proven to be highly effective. In ine of those study, the combined therapy myo-inositol and D-chiro-inositol improved LDL levels (3.50 ±0.8 mmol/L versus, 3 ±1.2 mmol/L p < 0.05), HDL (1.1 mmol/L ± 0.3 versus 1.6 mmol/L ± 0.4 p < 0.05) and triglycerides (2.3 ± 1.5 mmol/L versus 1.75 ± 1.9 mmol/L p < 0.05). Furthermore, significant improvements in HOMA-IR were also observed.

The combined therapy myoinositol plus D-chiro-inositol is able to improve the metabolic profile of PCOS women, therefore, reducing the cardiovascular risk.