Background
The new gonadotropin, corifollitropin alfa, has two important characteristics. Its long elimination half life could help to reduce the burden of treatment for IVF patients, increase the compliance and the convenience. Moreover, the short time to reach its maximum concentration may offer benefit for recruitment and growth of follicles in the early stage of follicular phase. This may lead to more oocytes retrieved, so creating the better chance to get pregnancy in women diminished ovarian reserve (DOR).

Objectives
To define ovarian response and the clinical pregnancy rate in women DOR stimulated by corifollitropin alfa (150µg).

Method
A prospective case series study including 20 participants with antral follicle count (AFC) 10 was conducted from May to July 2014. Ovarian stimulation was started with corifollitropin alfa (150µg) on day 2 in antagonist protocol or after achieving the effective of down regulation in long protocol. In the fixed antagonist protocol, antagonist was added on day 5 of stimulation. 150 IU LH was added from day 5 of stimulation, and 300 IU rFSH was added from day 8 of stimulation in both protocols until the day of oocyte retrieved.

Results
The sharp increase of estradiol concentrations showed the response of follicles to corifollitropin alfa. The number of oocytes retrieved (6.5 ±3.5) were not significant difference with the results of the conventional stimulation from a cohort study in 2012 in which ovarian stimulation was performed by rFSH (8.1 ± 5.2) (p0.05) in women DOR. No cycle of treatment was cancelled due to poor response. The clinical pregnancy rate was similar to that in the conventional stimulation (23.1% compared to 15.8%, p0.05).

Conclusion
Corifollitropin alfa (150µg) could be used for ovarian stimulation in women diminished ovarian reserve. More studies, especially randomized controlled studies, with larger data are necessary to confirm the results.