Establishment of the Ovarian Reserve: New Insights from basic science and their clinical implications

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Human ovary contains only a finite number of oocytes that is set around the time of birth. Overtime, this ovarian reserve is gradually exhausted, ultimately limiting women's fertility and their reproductive lifespan. Understanding how this ovarian reserve is established, and what factors affect the definitive stock of oocytes is therefore of great importance. In this presentation, I will discuss new findings from the mouse model that support the hypothesis that establishment of the definitive stock of ovarian reserve is not exclusively cell-autonomous to oocytes. Instead, granulosa cells through the action of transcriptional control and signaling play a critical role in this determining process.