Introduction
During reproductive life, the human endometrium undergoes around 500 cycles of growth, breakdown and regeneration. The existence of a specialized endometrial somatic stem cell (SSC) population was recently suggested.

Material & methods
Identification and localization of SSC is hard and laborious. Two techniques based on general SSC properties are available for this purpose. First, labelling with 5-bromo-2-deoxyuridine (BrdU) has been used to identify SSC in animal models. Second, the Side Population (SP) method initially created to identify SC in human hematopoietic tissue.

Results
We have proven the existence of SSC in mice endometrium by BrdU method1. In humans, we demonstrated the existence of this population using the SP technique and demonstrating the tissue reconstruction from endometrial SP cells2 or SP cell lines3 into animal models. We have also demonstrated the contribution of bone marrow and the SP subpopulation4 in regeneration process.

Conclusions
We have isolated the cell population responsible for the regeneration of the human endometrium and clinical trials using this technology in severe cases of Asherman’s syndrome and thin endometrium are in process.