Mechanisms Underlying Menstrual Cycle Effects on Exercise Performance: A Scoping Review

**Estrogen**
- Upregulation of hypertrophic pathways
- Fosters activation and proliferation of satellite cells
- Stabilizing of muscle cell membrane and antioxidant effects
- Attenuates fibroblast proliferation and collagen synthesis

**Progesterone**
- Promotes GABA-release
- Inhibits excitatory glutamate response
- Inhibits dopaminergic systems
- Enhances sympathetic activity

**Key Points**
- Effect of estrogen and progesterone on cells and tissues is responsible for cycle-dependent changes in performance-determining parameters
- Estrogen and progesterone might elicit actions via receptor-mediated and non-receptor-mediated pathways
- Studies need to adhere to recommended guidelines of menstrual cycle tracking