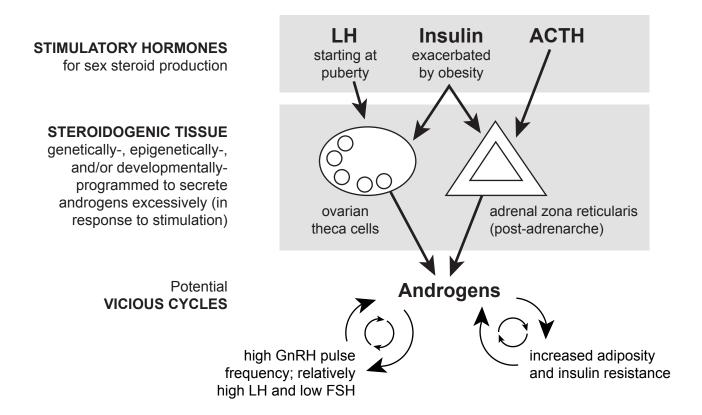
## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

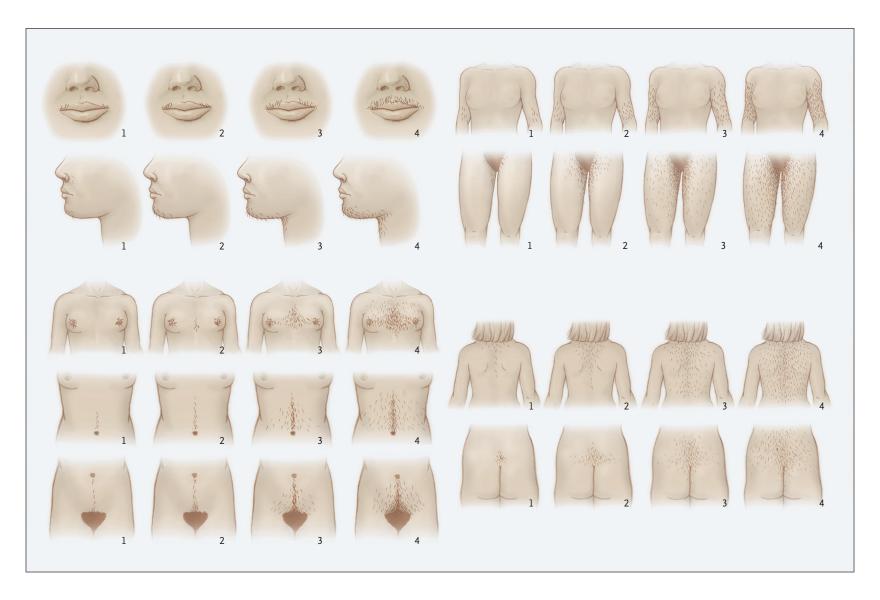
Supplement to: McCartney CR, Marshall JC. Polycystic ovary syndrome. N Engl J Med 2016;375:54-64. DOI: 10.1056/NEJMcp1514916

## **Supplementary Appendix**

McCartney CR, Marshall JC. Clinical Practice. Polycystic Ovary Syndrome. N Engl J Med 2016.



Supplementary Figure 1 (Fig. S1): Concepts for the development of polycystic ovary syndrome (PCOS). In some girls, steroidogenic tissue (ovarian theca cells, adrenal zona reticularis) is genetically (and/or epigenetically) predisposed to produce excess androgens in response to stimulation. The onset of PCOS symptoms largely follows the increase in LH secretion at puberty, although exaggerated adrenarche may also play a role. Different stimuli may contribute to variable degrees in producing hyperandrogenemia, and enhanced adipose tissue conversion of adrenal androstenedione to testosterone may play a role in peripubertal girls with obesity. Resulting hyperandrogenemia may then alter sex steroid feedback of GnRH pulse secretion, leading to gonadotropin abnormalities that support a progression to full-blown PCOS. Hyperandrogenemia may also negatively impact adiposity and insulin resistance, further contributing to the syndrome. LH denotes luteinizing hormone, FSH follicle-stimulating hormone, ACTH adrenocorticotropic hormone.



Supplementary Figure 2 (Fig. S2): Modified Ferriman-Gallwey scoring system for hirsutism. The modified Ferriman-Gallwey scoring system involves visual grading of hair growth over nine androgen-sensitive areas (each area graded on a scale from 0 to 4, with 0 indicating no terminal hair growth and 4 indicating marked terminal hair growth), and all individual scores are summed to obtain a final score; a score ≥8 is typically considered abnormal, although lower thresholds are appropriate for women of eastern Asian descent and higher scores may be more appropriate for women of Hispanic, Mediterranean, and Middle Eastern descent. (Image from Rosenfield RL. Clinical practice. Hirsutism. N Engl J Med 2005;353:2578-88 [used with permission].)