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**Figure S1.** Establishment of the hypoxic model. The statistics of RV/[LV+S] (*A*), RBC (*B*), HCT (*C*) and HGB (*D*) from control, hypo-7d and hypo-2m hypoxia male mouse, *n* = 3. Bars with different letters (a, b) indicate significant difference (*P* < 0.001).

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Figure S2. Effects of hypoxia on testes and epididymidis morphology. (*A*) Representative images of the testes and epididymides from control hypo-7d and hypo-2m mice at 4 months. Scale bar, 2 mm. (*B*) Diameter statistics of seminiferous tubules from control, hypo-7d and hypo-2m hypoxia male mice, *n* = 3. Bars with different letters (a, b) indicate significant difference (*P* < 0.01). (*C*) Representative images of H&E-stained seminiferous tubules and cauda epididymidis from control, hypo-7d and hypo-2m mice at 4 months. Scale bars, 40 μm. (*D*) Quantification of sperm count per mice of control, hypo-7d and hypo-2m groups, *n* = 3.