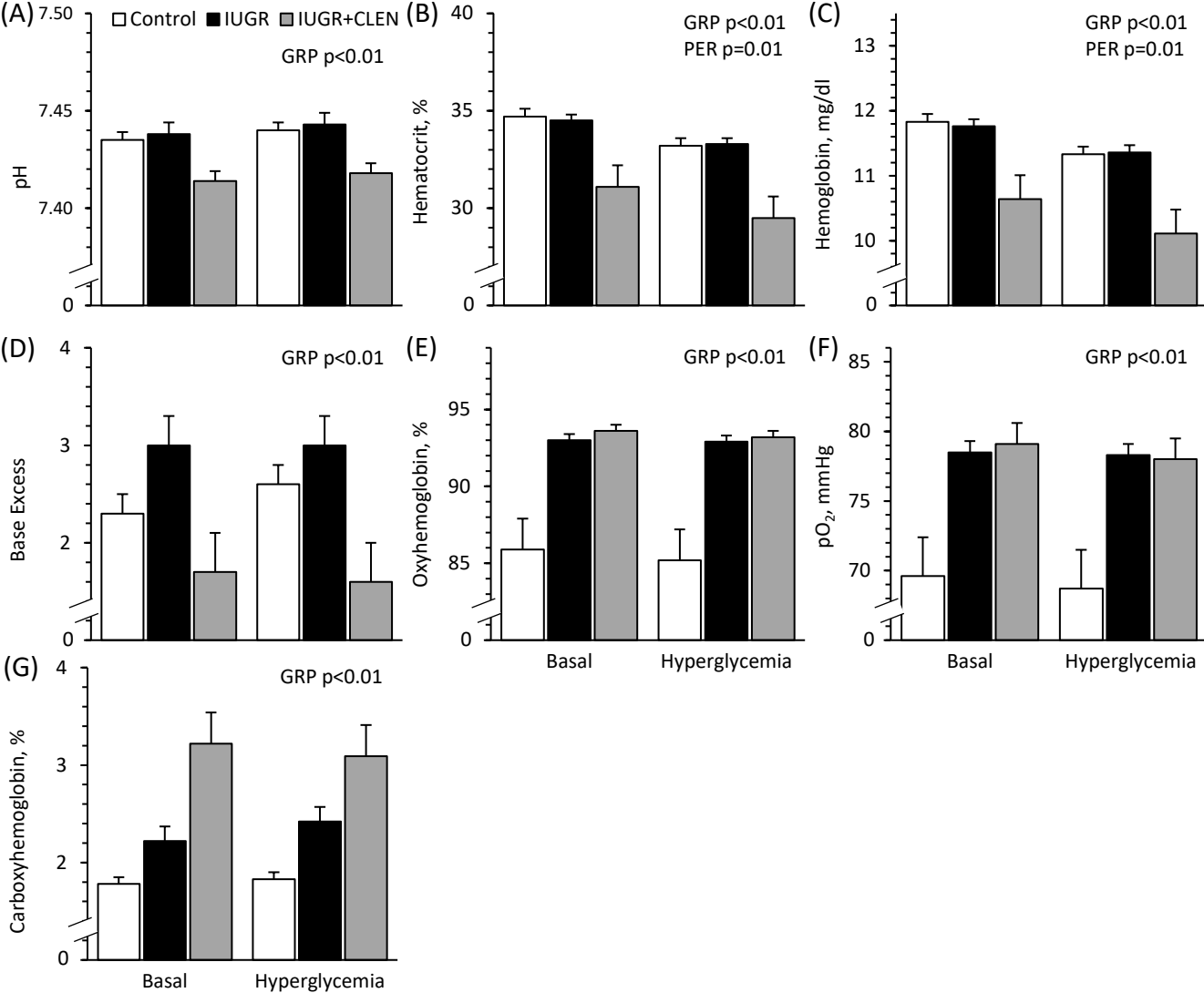
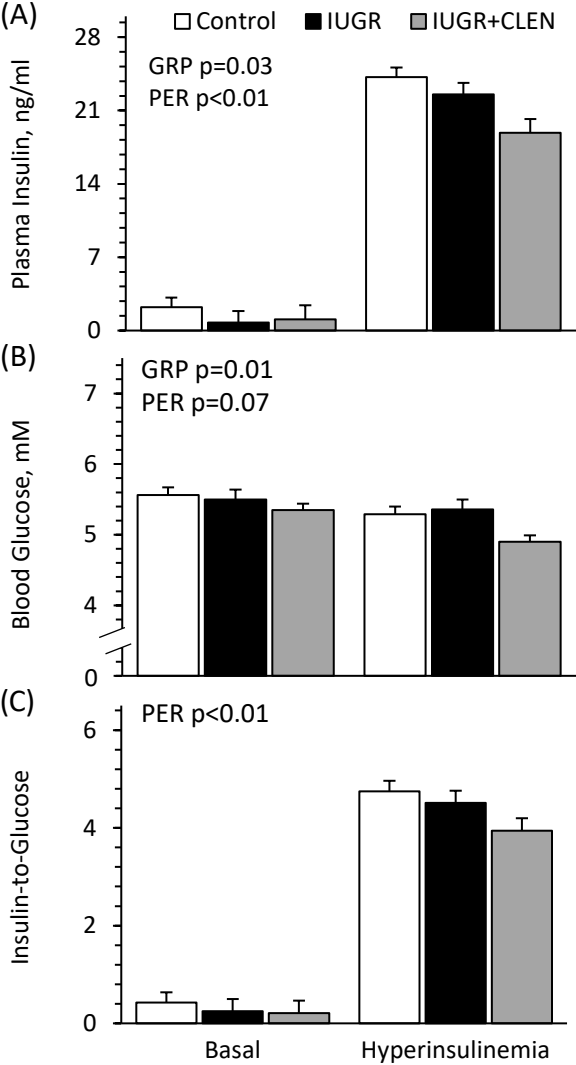


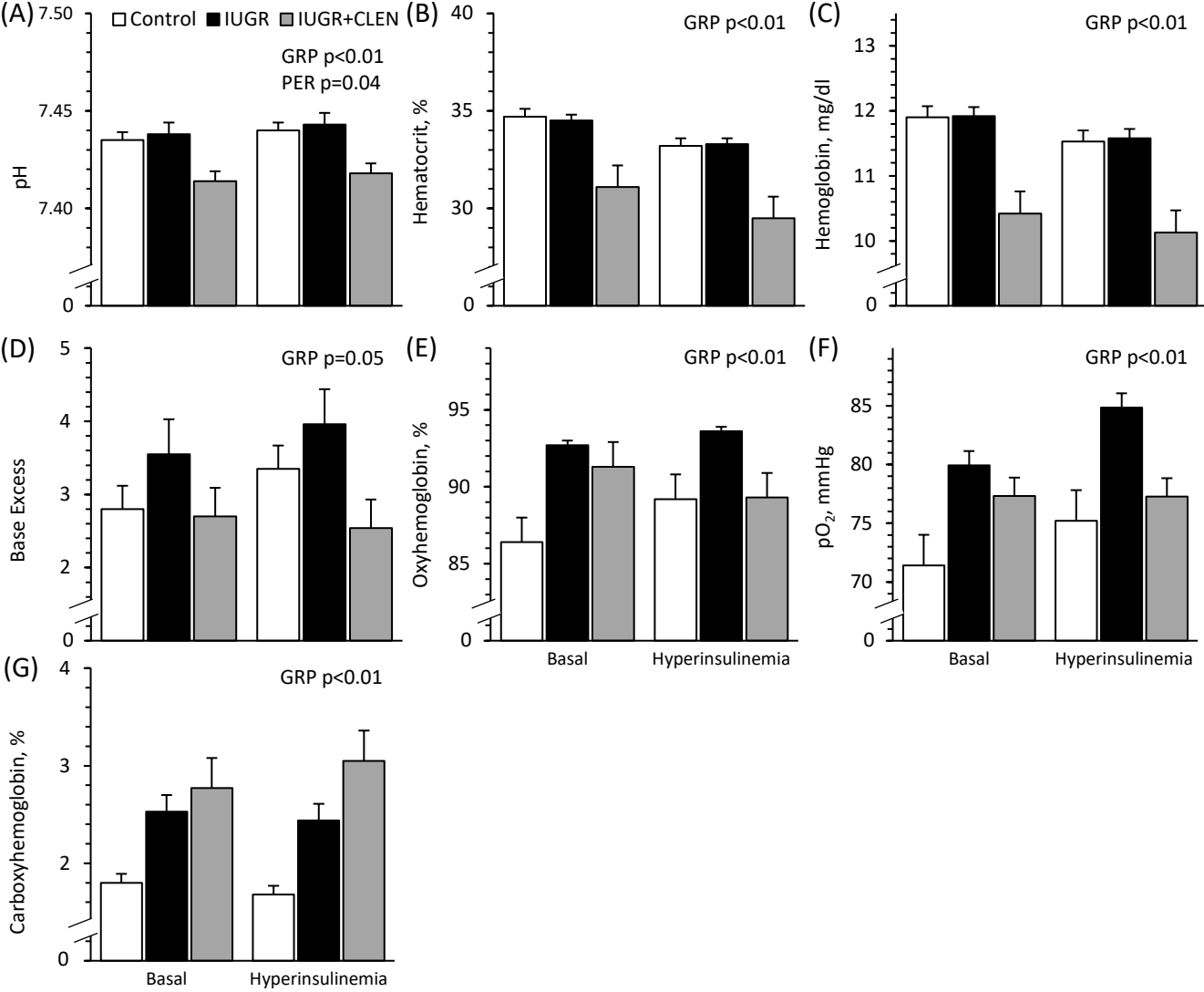
**Supplementary Figure S1.** Whole-body oximetry was assessed using Sable Systems Fox Box Respiratory System. A clear plastic globe was placed over the head and sealed to measure  $O_2$  consumption and  $CO_2$  production.



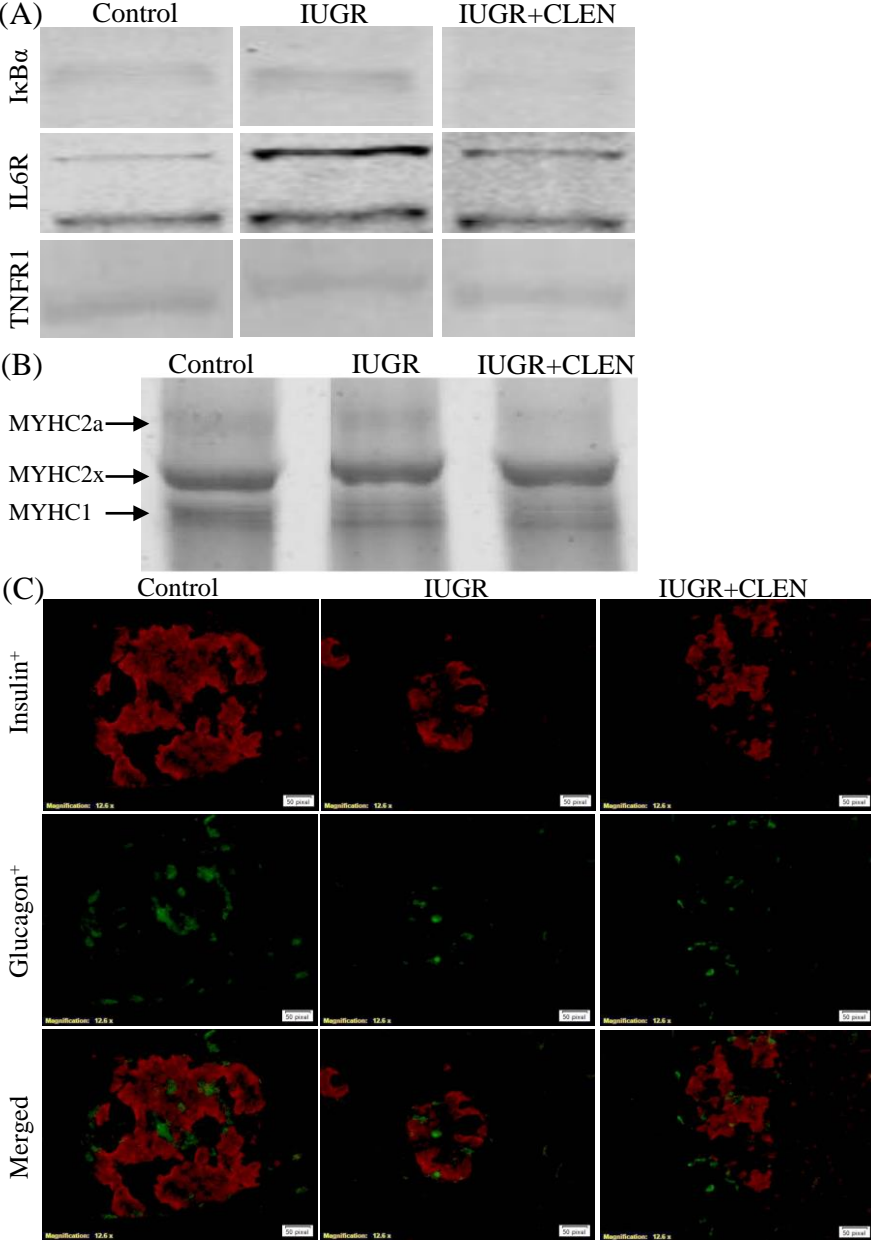
**Supplementary Figure S2.** Blood components during hyperglycemia in clenbuterol-treated IUGR-born lambs. Arterial blood samples were assessed under basal and steady-state hyperglycemia at 58 d of age in controls (n=13), untreated IUGR lambs (n=11), and clenbuterol-treated IUGR lambs (n=10). Data are presented for blood pH (**A**), hematocrit (**B**), hemoglobin (**C**), base excess (**D**), oxyhemoglobin (**E**), partial pressure of O<sub>2</sub> (**F**), carboxyhemoglobin (**G**), HCO<sub>3</sub> (**H**), and partial pressure of CO<sub>2</sub> (**I**). Effects of experimental group (GRP), period (PER), and the interaction were evaluated and noted where significant (p<0.05).



**Supplementary Figure S3.** Blood insulin during hyperinsulinemia in clenbuterol-treated IUGR-born lambs. Arterial blood samples were assessed under basal and steady-state hyperinsulinemia at 59 days of age in controls (n=11), untreated IUGR lambs (n=10), and clenbuterol-treated IUGR lambs (n=10). Data are presented for plasma insulin (A), blood glucose (B), and glucose-to-insulin (C). Effects of experimental group (GRP), period (PER), and the interaction were evaluated and noted where significant (p<0.05).



**Supplementary Figure S4.** Blood parameters during hyperinsulinemia in clenbuterol-treated IUGR-born lambs. Arterial blood samples were assessed under basal and steady-state hyperinsulinemia at 59 days of age in controls (n=11), untreated IUGR lambs (n=10), and clenbuterol-treated IUGR lambs (n=10). Data are presented for blood pH (**A**), hematocrit (**B**), hemoglobin (**C**), base excess (**D**), oxyhemoglobin (**E**), partial pressure of O<sub>2</sub> (**F**), and carboxyhemoglobin. Effects of experimental group (GRP), period (PER), and the interaction were evaluated and noted where significant (p<0.05).



**Supplementary Figure S5.** Representative micrographs for IUGR-born lambs supplemented with clenbuterol. *Semitendinosus* muscle and pancreatic sections were collected at 60 days of age in controls (n=13), untreated IUGR lambs (n=11), and clenbuterol-treated IUGR lambs (n=10). Images are presented for muscle inflammatory protein westerns (A), muscle myosin heavy chain electrophoresis (B), and pancreatic islet staining (C).