Table S1. Temporal course for LV capillary and myocardial remodeling during CH-PH.

	Exp.	7 days	21 days	ANOVA
L_{cap} (cm)	Norm	33602±4703	37675±4856	*P* = 0.60
	CH	38766±4921	45048±3719	
S_{cap} (cm^2)	Norm	29.0±8.8	41.5±8.0	*P* = 0.79
	CH	30.7±4.9	41.6±2.3	
V_{cap} (cm^3)	Norm	0.0047±0.0015	0.0063±0.0015	*P* = 0.73
	CH	0.0055±0.0012	0.0067±0.0006	
V_{myo} (cm^3)	Norm	0.068±0.007	0.073±0.006	*P* = 0.79
	CH	0.061±0.004	0.067±0.003	
V_{LV} (cm^3)	Norm	0.083±0.011	0.089±0.009	*P* = 0.92
	CH	0.078±0.006	0.085±0.004	

Data are reported as mean ± standard deviation for 5 animals per group. *P*-values are for 2-way ANOVA, comparing effects of hypoxia and time on each parameter. L_{cap} = total capillary length; S_{cap} = total capillary surface area; V_{cap} = total capillary lumen volume; V_{myo} = total myocyte volume; V_{LV} = total LV volume.

Table S2. LV hypoxia gene expression profile.

CH Time	Gene Symbol	Gene Name	Genbank	Fold Regulation	*P*-value
7 days	*Eif4ebp1*	Eukaryotic translation initiation factor 4E binding protein 1	NM_007918	-2.00	0.041
	Plau	Plasminogen activator, urokinase	NM_008873	-1.50	0.042
21 days	***Ankrd37***	**Ankyrin repeat domain 37**	**NM_001039562**	**3.28**	**0.001**
	Anxa2	Annexin A2	NM_007585	1.95	0.006
	Bhlhe40	Basic helix-loop-helix family, member e40	NM_011498	2.71	0.005
	Bnip3	BCL2/adenovirus E1B interacting protein 3	NM_009760	2.19	0.030
	Btg1	B-cell translocation gene 1, anti-proliferative	NM_007569	1.71	0.011
	Egln1	EGL nine homolog 1 (C. elegans)	NM_053207	1.73	0.044
	F3	**Coagulation factor III**	**NM_010171**	**1.65**	**0.005**
	Hmox1	**Heme oxygenase (decycling) 1**	**NM_010442**	**2.80**	**0.003**
	Lgals3	Lectin, galactose binding, soluble 3	NM_010705	2.89	0.012
	Lox	Lysyl oxidase	NM_010728	1.78	0.018
	Ndrg1	N-myc downstream regulated gene 1	NM_008681	1.55	0.002
	Per1	Period homolog 1 (Drosophila)	NM_011065	2.64	0.031
	Pfkp	Phosphofructokinase, platelet	NM_019703	1.50	0.006
	Pkm	Pyruvate kinase, muscle	NM_011099	1.90	0.014
	Slc16a3	**Solute carrier family 16 (monocarboxylic acid transporters), member 3**	**NM_030696**	**2.51**	**0.011**
	Slc2a1	Solute carrier family 2 (facilitated glucose transporter), member 1	NM_011400	2.10	0.003

Changes in hypoxia-• • • • •• •

controls is shown after 7 or 21 days. Only genes whose expression was changed >1.5

fold are shown. Genes in bold

were upregulated in an LV-specific manner. N= 3 mice/group.