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CORRECTION

Correction to: Molecular regulation of skeletal muscle mitochondrial biogenesis following blood flow-restricted aerobic exercise: a call to action

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The original version of this article unfortunately contained a mistake. There is an error in Fig. 1.

The correct version of Fig. 1 is given in the following page.

The original article has been corrected.

The original article can be found online at https://doi.org/10.1007/s00421-021-04669-6.

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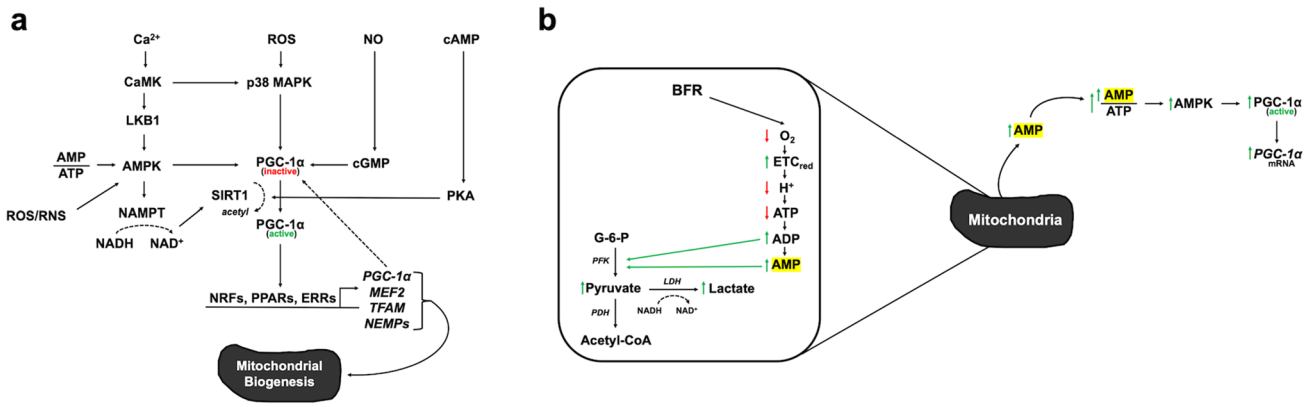

Fig. 1 **a** Regulation of peroxisome proliferator-activated gamma coactivator 1-alpha (PGC-1α). *Straight dashed arrow* on the right side of the figure represents the autoregulation of PGC-1α. **b** Speculated effects of BFR-induced ischemia on peroxisome proliferator-activated gamma coactivator 1-alpha (PGC-1α) expression via increased [AMP]:[ATP] ratio. Decreased local oxygen availability from reduced arterial blood flow leads to increased reduction of the electron transport chain (ETC). As a result, less H^+ is pumped to the intermembrane space of the mitochondria, leading to a smaller electrochemical gradient across the ETC. ATP synthase thus phosphorylates less ADP, increasing [AMP] and [ADP]. Increased [ADP] and [AMP] stimulates the rate-limiting enzyme of glycolysis, phosphofructokinase-1 (PFK), and more pyruvate is produced. Given that the capacity for glycolytic flux is greater than the capacity for pyruvate dehydrogenase to oxidise pyruvate to acetyl-CoA (Spriet et al. 2000), the law of mass action dictates more pyruvate reducing to lactate. Importantly, increased [AMP] also activates AMPK, which subsequently phosphorylates and activates PGC-1α. *AMPK* 5′ AMP-activated protein kinase, *ATP* adenosine triphosphate, *β-AR* beta-2 adrenergic receptor, Ca^{2+} calcium ions, *CaMKII* calmoldulin-dependent protein kinase II, *cAMP* cyclic adenosine monophosphate, *cGMP* cyclic guanosine monophosphate, *Epi* epinephrine, *ERR* oestrogen-related receptors, *LDH* lactate dehydrogenase, *LKB1* liver kinase B1, *MEF2* myocyte enhancer factor-2, *NADH/NAD*$^+$ nicotinamide adenine dinucleotide, *NAMPT* nicotinamide phosphoribosyltransferase, *NE* norepinephrine, *NEMP* nuclear-encoded mitochondrial proteins, *NO* nitric oxide, *NRF* nuclear respiratory factors, *p38 MAPK* p38 mitogen-activated protein kinase, *PDH* pyruvate dehydrogenase, *PFK* phosphofructokinase, *PKA* protein kinase A, *PPAR* peroxisome proliferator-activated receptor, *RNS* reactive nitrogen species, *ROS* reactive oxygen species, *SIRT1* silent mating-type information regulation 2 homolog 1, *TFAM* mitochondrial transcription factor A