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Effect of a long-term treatment with metformin in dystrophic *mdx* mice: a reconsideration of its potential clinical interest in Duchenne muscular dystrophy.

Paola Mantuano^a, Francesca Sanarica^a, Elena Conte^a, Maria Grazia Morgese^b, Roberta Francesca Capogrosso^a, Anna Cozzoli^a, Adriano Fonzino^a, Angelo Quaranta^c, Jean-Francois Rolland^d, Michela De Bellis^a, Giulia Maria Camerino^a, Luigia Trabace^b and Annamaria De Luca^{a*}.

^a *Section of Pharmacology, Department of Pharmacy - Drug Sciences, University of Bari "Aldo Moro", Bari Italy*

^b *Department of Experimental and Clinical Medicine, Faculty of Medicine, University of Foggia, Foggia, Italy*

^c *Department of Veterinary Medicine, University of Bari "Aldo Moro", Valenzano (BA), Italy*

^d *Axxam, S.p.A, Openzone Science Park, Bresso (Milan, Italy)*

**Corresponding author at: Section of Pharmacology, Department of Pharmacy - Drug Sciences, University of Bari "Aldo Moro", Orabona 4 – Campus, 70125 Bari – Italy*

E-mail address: annamaria.deluca@uniba.it

Abstract

The pharmacological stimulation of AMP-activated protein kinase (AMPK) via metabolic enhancers has been proposed as potential therapeutic strategy for Duchenne muscular dystrophy (DMD). Metformin, a widely-prescribed anti-hyperglycemic drug which activates AMPK via mitochondrial respiratory chain, has been recently tested in DMD patients in synergy with nitric oxide (NO)-precursors, with encouraging results. However, preclinical data supporting the use of metformin in DMD are still poor, and its actions on skeletal muscle

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