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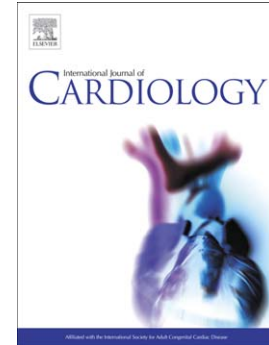
Ebola therapy: Developing new drugs or repurposing old ones?

Giovanni Lentini, Solomon Habtemariam

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## Ebola therapy: developing new drugs or repurposing old ones?

Giovanni Lentini<sup>1\*</sup>, Solomon Habtemariam<sup>2</sup>.

### Affiliations:

<sup>1</sup> Dipartimento di Farmacia-Scienze del Farmaco, Università degli Studi di Bari “Aldo Moro”, via E. Orabona 4, 70126 Bari, Italy.

<sup>2</sup> Pharmacognosy Research Laboratories, Medway School of Science, University of Greenwich, Chatham-Maritime, Kent ME4 4TB, UK.

\*Correspondence to: Prof. G. Lentini, PhD  
Dipartimento di Farmacia-Scienze del Farmaco  
Università degli Studi di Bari Aldo Moro  
via Orabona 4  
70126 Bari, Italy  
Email address: giovanni.lentini@uniba.it  
phone number: 080 5442744  
fax number: 080 5442050

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### Text

The lack of Ebola therapies has recently kindled the debate about the possible repurposing of approved organotropic (i. e., not etiotropic) drugs for the treatment of this unmet medical emergency [1]. The scientific community is now facing an apparently dichotomal opportunity: focusing efforts on the time-consuming attempt to develop new drugs [2] or preferring the apparently quicker approach of repurposed ones [3]. Of course, each choice would subtract time and resources to the other and some scholars fear the possibility that some of the repurposed drugs might even worsen the viral pathology by changing the immune response [1]. Probably, what we are going to say is trivial, but we wonder if any statistical analysis of the organotropic therapies circumstantially used so far by Ebola patients has been done. This study could suggest which drugs might be more suited to offer beneficial effect against Ebola, if any. For example, some cardiovascular drugs previously demonstrated to be endowed with antiviral properties in

vitro [3], might display higher prevalence amongst survived Ebola patients, thus proposing themselves as candidates for repurposing. Conversely, the systematic review of the medicines assumed in unlucky anecdotes might indicate which drugs should be considered as second choice in the above studies.

### **Conflict of interest**

None declared.

### **Aknowledgments**

The authors of this manuscript have certified that they adhere to the statement of ethical publishing as appears in International Journal of Cardiology.

### **References and Notes**

1. M. Enserink, Debate erupts on 'repurposed' drugs for Ebola, *Science* 345, (2014) 718–719.
2. R. Gupta, Rethinking the development of Ebola treatments, *Lancet Gob. Health* 2, (2014) e563–e564.
3. S. Patanè, Ebola: is there a hope from treatment with cardiovascular drugs? *Int. J. Cardiol.* (2014), <http://dx.doi.org/10.1016/j.ijcard.2014.08.114>.