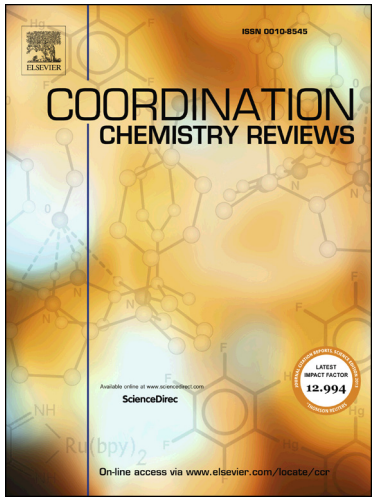

In vitro study of the antidiabetic behavior of vanadium compounds

Tamás Jakusch, Tamás Kiss

PII: S0010-8545(17)30089-9
DOI: http://dx.doi.org/10.1016/j.ccr.2017.04.007
Reference: CCR 112442

To appear in: *Coordination Chemistry Reviews*

Received Date: 28 February 2017
Revised Date: 13 April 2017
Accepted Date: 20 April 2017

Please cite this article as: T. Jakusch, T. Kiss, In vitro study of the antidiabetic behavior of vanadium compounds, *Coordination Chemistry Reviews* (2017), doi: http://dx.doi.org/10.1016/j.ccr.2017.04.007

In vitro study of the antidiabetic behavior of vanadium compounds

Tamás Jakusch[a*] and Tamás Kiss[a,b*]

[a] Department of Inorganic and Analytical Chemistry, University of Szeged, Dóm tér 7, H-6720 Szeged, Hungary

[b] MTA-SZTE Bioinorganic Chemistry Research Group, University of Szeged, Dóm tér 7, H-6720 Szeged, Hungary

Keywords: diabetes, insulin mimetics, vanadium complexes, biospeciation, LMM-binders, HMM-binders, serum, whole blood speciation

Abstract

The paper deals with the so far most efficient antidiabetic transition metal compound family. It focuses on the species distribution of the most frequently studied vanadium(IV,V) compounds in biology: in the gastro-intestinal tract (being important in absorption of the compounds), the blood serum (very likely the main route of their transport), the whole blood (recently the role of the red blood cells are also assumed in their transport) and in the cells (where glutathione and ATP may be the most important redox and complex formation partners of the original vanadium-"insulinomimetics").

The discussed details fit into the general view, but far from a complete and clear understanding of the pharmacodynamics of these antidiabetics. A lot more in vitro and mostly in vivo studies are necessary to justify their real clinical use.

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