

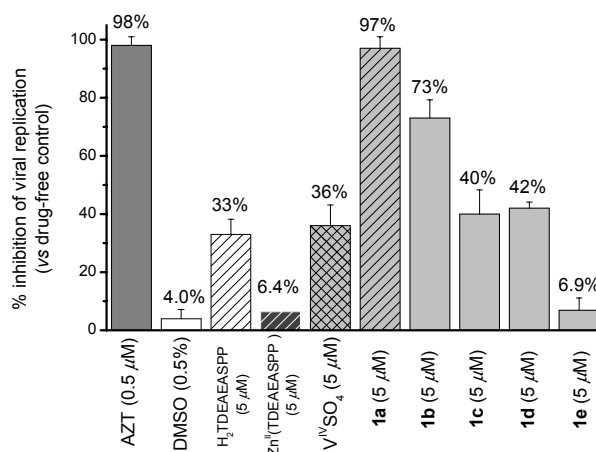
## A NEW CLASS OF POTENT ANTI-HIV AGENTS: OXOVANADIUM(IV) PORPHYRIN COMPLEXES

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Study on the use of vanadium as potential therapeutics for anti-diabetes is well-known for decades.<sup>1</sup> Currently, potential utility of vanadium complexes on anti-HIV was discovered.<sup>2, 3</sup> Oxovanadium(IV) porphyrin complexes (**1a–e**) were synthesized and characterized. Their anti-HIV properties were evaluated by HIV-1 p24 antigen assay. In summary, compound **1a** has demonstrated excellent solution stability against glutathione reduction and comparable potency as the clinically used AZT in inhibiting HIV-1 replication in Hut/CCR5 cells.



**Fig. 1** Percentage inhibition of HIV-1(BaL) replication in Hut/CCR5 cells (7 days) by oxovanadium(IV) porphyrins and related complexes

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[2] Shigeta, S.; Mori, S.; Kodama, E.; Kodama, J.; Takahashi, K.; Yamase, T. *Antiviral Res.*, **2003**, *58*, 265-71.

[3] D'Cruz, O. J.; Dong, Y.; Uckun, F. M. *Biochem. Biophys. Res. Commun.*, **2003**, *302*, 253-64.