

PENTAAZA MACROCYCLIC RING COMPLEXES POSSESSING ORAL BIOAVAILABILITY

Abstract

Aspects of the present disclosure relate to compounds which have enhanced oral bioavailability. A transition metal complex includes a transition metal coordinated by a macrocycle comprising the pentaaza 15-membered macrocyclic ring corresponding to Formula A and two axial ligands having the formula $-\text{OC}(\text{O})\text{X}_1$. (Formula A) each of the two axial ligands has the formula $-\text{OC}(=\text{O})\text{X}_1$ wherein each X_1 is independently substituted or unsubstituted phenyl or $-\text{C}(-\text{X}_2)(-\text{X}_3)(-\text{X}_4)$; each X_2 is independently substituted or unsubstituted phenyl, or substituted or unsubstituted alkyl; each X_3 is independently hydrogen, hydroxyl, alkyl, amino, $-\text{X}_5\text{C}(=\text{O})\text{R}_{13}$ where X_5 is NH or O, and R_{13} is C_1 - C_{18} alkyl, substituted or unsubstituted aryl or C_1 - C_{18} aralkyl, or $-\text{OR}_{14}$, where R_{14} is C_1 - C_{18} alkyl, substituted or unsubstituted aryl or C_1 - C_{18} aralkyl, or together with X_4 is $(=\text{O})$; and each X_4 is independently hydrogen or together with X_3 is $(=\text{O})$.

Figure 1