The invention relates to chemistry and medicine, namely to a number of biologically active copper coordination compounds from the class of transition metal thiosemicarbazidates. These complexes can be used in medicine as drugs that inhibit superoxide radicals, thus preventing multiple harmful effects on the body.

Summary of the invention consists in producing a number of synthetic inhibitors of superoxide radicals based on copper coordination compounds with 4-allylthiosemicarbazones of substituted 3-(phenyl)-1-(pyridin-2-yl)prop-2-en-1-ones of the general formula:

I:  $R^1 = N(CH_3)_2$ ,  $R^2 = H$ ,  $X = Cl^-$ ; II:

 $R^1 = N(CH_3)_2, R^2 = H, X = NO_3$ ;

III:  $R^1 = OCH_3$ ,  $R^2 = H$ ,  $X = Cl^-$ ; IV:

 $R^1$  OCH<sub>3</sub>,  $R^2 = H$ ,  $X = NO_3$ ;

V:  $R^1 = R^2 = OCH_3$ ,  $X = Cl^-$ ; VI:

 $R^1 = R^2 = OCH_3, X = NO_3^-.$ 

The claimed compounds expand the arsenal of inhibitors of superoxide radicals with high biological activity.

Claims: 2