The invention relates to organic chemistry, namely to the synthesis of biologically active compounds from the class of thiosemicarbazones and can be used in medicine for the prevention and treatment of prostate cancer.

Summary of the invention consists in that it was synthesized a new compound proceeding from 4,4'-(perfluoro-1,4-phenylenedioxy)dianiline, which was subjected to the following series of transformations: conversion into bis-thiourea upon interaction with dimethylthiouram; deamination with sulfuric acid in bis-isothiocyanate; conversion upon hydrazinolysis into appropriate bis-thiosemicarba-zide, which was further condensed with 2-formylpyridine. Finally, it is obtained N,N'-[4,4'-(perfluoro-1,4-phenylenedioxy)-bis(4,1-phe-nylene)]-bis[2-(pyridine-2-ilmethylene)hydrazine-carbothioamide] with the formula:

NH-C-NH-N=CH-N=

The resulting bis-thiosemicarbazone possesses anticancer activity, which 1.5 times exceeds the activity of doxorubicine.

The technical result of the invention is to expand the range of prostate cancer LNCaP cell proliferation inhibitors.

Claims: 2