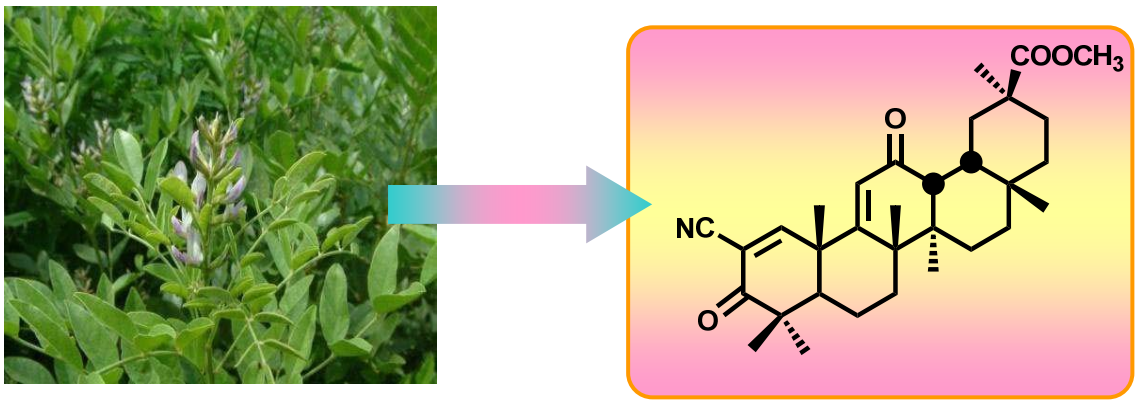
N.N. VOROZHTSOV NOVOSIBIRSK INSTITUTE OF ORGANIC CHEMISTRY

SIBERIAN BRANCH OF THE RUSSIAN ACADEMY OF SCIENCES

# *SOLOXOLONE METHYL-*

## *NEW HIGHLY EFFECTIVE ANTICANCER AGENT*




### *Description*

Vorozhtsov Institute of Organic Chemistry of Siberian Branch of the RAS together with Institute of Chemical Biology and Fundamental Medicine of Siberian Branch of the RAS has developed a new highly effective low toxic anticancer agent – ***METHYL ETHER 2-CIANO-3,12-DIOXO-1(2),11(9)-DIEN-11-DEOXO GLYCYRRHETINIC ACID***. The compound is synthesized from glycyrrhetinic acid – the main metabolite of licorice root. The given agent is an analogue of bardoxolone methyl which belongs to a fundamentally novel type of anticancer agents [now the agent is at the late-stage clinical trials in Reata Pharmaceuticals, Inc., USA].

The agent displays high anticancer activity against a broad spectrum of tumor cell types, including the cells exhibiting multidrug resistance phenotype.

### *Technical and economic advantages*

- Semi-synthetic low toxic agent causing programmed cancer cells death (apoptosis).
- Produced from available and cheap domestic raw materials (the cost of starting materials in the production of the agent is 60 times lower as compared to that of a widely tested analogue).
- Activity of the agent is 4 times higher than the activity of its analogue.

## *Application*

- Chemotherapy of oncology diseases.

## *Patents*

**Patent of the RF** № 2401273 of October 10, 2010 «Anticancer triterpene agent obtained by modification of glycyrrhetinic acid». O.V. Salomatina, N.F. Salakhutdinov, G.A. Tolstikov, E.B. Logashenko, M.A. Zenkova, V.V. Vlasov.

## *Practical realization*

- Pre-clinic testing *in vitro*.
- Development of laboratory production methods.
- Pilot batch of the agent.

## *Commercial offer*

Cooperation in organization of commercial/industrial production.

## *Contacts*

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