

SUPPLEMENTARY

**INFLUENCE OF USNIC ACID DERIVATIVE (TYROSYL-DNA  
PHOSPHODIESTERASE 1 INHIBITOR) ON TRANSPLANTED TUMORS *in vivo*  
AS A MONOTHERAPY AND IN COMBINATION WITH OLAPARIB**

T. E. Kornienko<sup>1</sup>, A. L. Zakharenko<sup>1</sup>, E. S. Ilina<sup>1,4</sup>, A. A. Chepanova<sup>1</sup>,  
O. D. Zakharova<sup>1</sup>, N. S. Dyrkheeva<sup>1</sup>, N. A. Popova<sup>2,4</sup>, V. P. Nikolin<sup>2</sup>,  
A. S. Filimonov<sup>3</sup>, O. A. Luzina<sup>3</sup>, N. F. Salakhutdinov<sup>3,4</sup>, O. I. Lavrik<sup>1,4\*</sup>

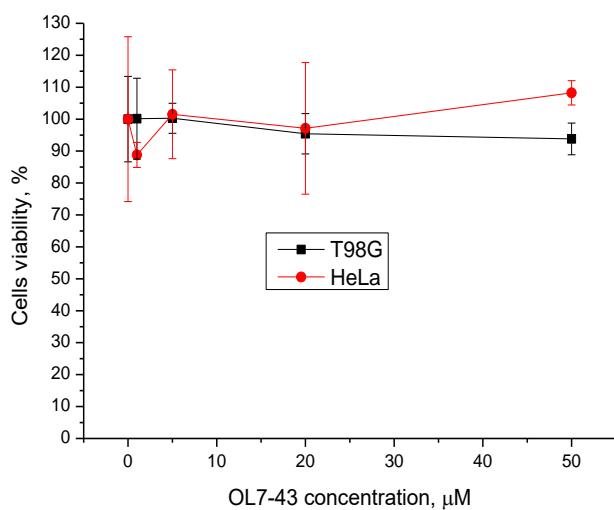
<sup>1</sup>*Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the  
Russian Academy of Sciences, Novosibirsk, 630090 Russia*

<sup>2</sup>*Federal Research Centre Institute of Cytology and Genetics, Siberian Branch of the  
Russian Academy of Sciences, Novosibirsk, 630090 Russia*

<sup>3</sup>*Vorozhtsov Novosibirsk Institute of Organic Chemistry, Siberian Branch of the Russian  
Academy of Sciences, Novosibirsk, 630090 Russia*

<sup>4</sup>*Novosibirsk State University, Novosibirsk, 630090 Russia*

\*e-mail: lavrik@niboch.nsc.ru



**Fig. 1.** Effect of OL7-43 on the survival of HeLa and T98G cells according to the EZ4U test

**Table 1.** Effect of the Tdp1 inhibitor **OL7-43** and its combination with olaparib on liver weight and index in mice with Krebs-2 ascitic carcinoma

| Group                                                   | Average liver weight, g | Average liver index, % |
|---------------------------------------------------------|-------------------------|------------------------|
| <b>Intact control</b>                                   | 1.1±0.2                 | 7.1±0.8                |
| <b>4% DMSO + 10% Tween-80 and 15% DMSO+10% Tween-80</b> | 1.1±0.2                 | 7.4±0.7                |
| <b>Olaparib 25 mg/kg and 15% DMSO+10% Tween-80</b>      | 1.1±0.2                 | 6±1                    |
| <b>Olaparib 25 mg/kg+OL7-43 50 mg/kg</b>                | 1.3±0.3                 | 7±1                    |
| <b>OL7-43 50 mg/kg and 4% DMSO + 10% Tween-80</b>       | 1.3±0.4                 | 7±2                    |

**Table 2.** Effect of the Tdp1 inhibitor **OL7-43** and its combination with olaparib on liver and spleen weight and index in mice with Lewis lung carcinoma

| Group                                     | Average liver weight, g | Average liver index, % | Average spleen weight, g | Average spleen index, % |
|-------------------------------------------|-------------------------|------------------------|--------------------------|-------------------------|
| <b>Intact control</b>                     | 1.13±0.07               | 5.2±0.2                | 0.24±0.03                | 1.1±0.1                 |
| <b>15% DMSO+10% Tween-80</b>              | 1.1±0.2                 | 5.3±0.7                | 0.28±0.02                | 1.3±0.1                 |
| <b>Olaparib 25 mg/kg</b>                  | 1.09±0.07               | 5.3±0.3                | 0.24±0.03                | 1.2±0.1                 |
| <b>Olaparib 25 mg/kg +OL7-43 50 mg/kg</b> | 1.1±0.1                 | 5.4±0.6                | 0.24±0.04                | 1.2±0.2                 |
| <b>OL7-43 50 mg/kg</b>                    | 0.94±0.07               | 4.5±0.4                | 0.23±0.03                | 1.1±0.1                 |