Title: Prevention of the recurrent acute respiratory viral infections and virus-induced exacerbation of bronchial asthma in children

Prof. Dr Elena 30969 Kondiurina kondiurinaegan@yandex.ru MD ¹, Prof. Dr Tatiana 30970 Elkina julliiya@mail.ru MD ¹, Prof. Dr Vera 30971 Zelenskaya v.zelenskaya@mail.ru MD ¹, Ms. Natalia 30972 Timinskaia nata985@ngs.ru MD ¹ and Mrs. Maria 30973 Shably ms-54@yandex.ru MD ¹. ¹ Department of Pediatrics of Faculty of Training and Retraining of Doctors, Novosibirsk State Medical University, Novosibirsk, Russian Federation, 630091.

Body: Background: Recurrent episodes of acute respiratory viral infections (ARVI) are common for children with bronchial asthma (BA) and are the trigger of its exacerbations. Aim: To evaluate the efficacy of interferon-gamma inducer (IFN-i) containing release active antibodies to IFN-gamma (anaferon) in prevention of recurrent ARVI and virus-induced exacerbation of BA in children. Methods: A comparative, randomized, double-blind placebo-controlled trial of IFN-i efficacy in prevention of ARVI and BA exacerbations in a 200 children of 1-5 years with virus-induced phenotype of mild and moderate BA. 100 patients of the 1st group obtained IFN-i and 100 patients of the 2nd group took placebo in the same way. The percent of children (1) becoming ill with ARVI 2 times and over and (2) suffered from exacerbation of BA were evaluated. Results: For 3 months follow-up period 40% of children suffered from ARVI in 1st group, 76% in 2nd group. The percent of children becoming ill with ARVI 2 times was 20% (40 cases of recurrent ARVI) in the 1st group and 46% of children in 2nd group (including 10% of children suffered from 3 episodes of ARVI). The percent of children suffered from exacerbation of BA was 20% in the 1st group and 64% in the 2nd group. There were not registered any adverse effects in a children taking IFN-i. Conclusions: The preventive administration of IFN-i (anaferon) leads to decrease the morbidity, the frequency of recurrent ARVI episodes and virus-induced exacerbation in children with BA.