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First Phase of Clinical Trials New Antiviral Drug-Viramid

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The effecacy of Viramid was shown in experimental conditions against influenza viruses: A(H3N2), A(H1N1), and B. It inhibited virus reproduction from 2,5 till 4,0 lg EID_{50} and was non-toxic for tissue culture, mice and rats. Volunteers were given Viramid per os (5,0 ml two times a day, during 3 days) and intranosally (0,5 ml into the every nostril two time a day for 3 days). Complete tolerance and safety were established. Viramid also activted immunity, namely - B-system which manifested in the increase of the secretion of three Ig classes. Its effect on T-cell immunity was demonstrated. An increase of non-specific resistance (Functional activity of blood leukocytes and monocytes) was observed too.

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Identification of a Novel Class of Oligonucleotide Inhibitors of the Influenza Viral Polymerase. T.D.Y. Chung, C. Cianci, M. Hagen, B. Terry, J.T. Matthews, M. Krystal, and R.J. Colonno, Department of Virology, Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ, USA

A synthetically derived 67-nucleotide (nt) RNA substrate was enzymatically capped and methylated, then used to analyze the *in vitro* requirements of the influenza virus polymerase. This substrate was specifically cleaved by the influenza virus polymerase to yield a single capped 11-nt fragment capable of directly priming transcription. An analysis of systematic truncations of this RNA substrate demonstrated that the minimum RNA chain length required for cleavage by the viral polymerase was 12 nucleotides, just one past the normal cleavage site. The minimum RNA chain length required for priming activity was found to be 9 nucleotides, while in contrast an RNA chain length of at least 4 nucleotides was required for efficient binding to the viral polymerase. Based on these chain length requirements we show that pools of capped oligonucleotides too short to prime transcription, but long enough to bind with high affinity to the viral polymerase are potent inhibitors of cap-dependent transcription *in vitro*.