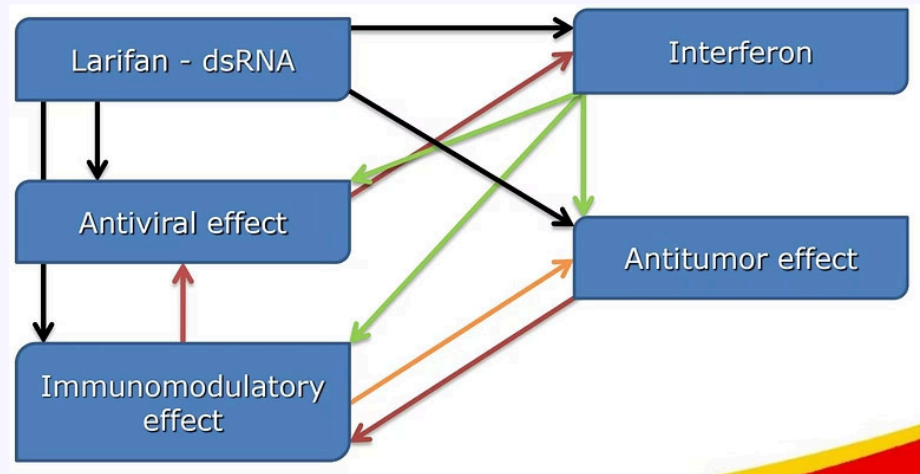


DOUBLE-STRANDED dsRNA LARIFAN IN MEDICAL PRACTICE

MECHANISM OF ACTION



LARIFAN COMPARED TO OTHER ANTIVIRALS

1. LARIFAN endogenous interferon inducer

2. LARIFAN unlike other interferon inducers itself directly inhibits viral replication

3. LARIFAN in contrast to chemical antivirals have:

- Wide range of antiviral activity
- Simultaneous antiviral and immunomodulatory properties

ENDOGENOUS INTERFERON ADVANTAGES COMPARED TO EXOGENOUS INTERFERON

relatively lower doses are needed to achieve results

have better spread in the body

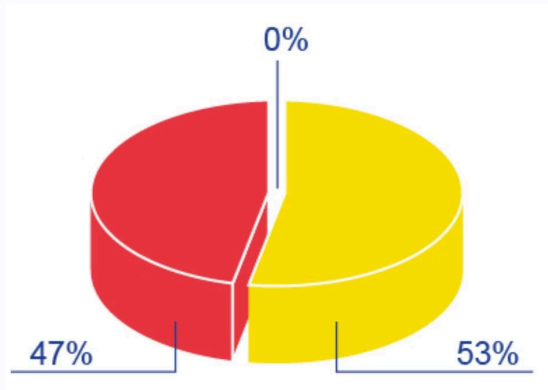
is physiological and therefore less toxic

ANTIVIRAL ACTIVITY *in vitro* and *in vivo* for:

- Herpes
- Influenza
- Papilloma
- Respiratory
- Rhino
- Tick-borne encephalitis
- Encephalomyocarditis
- Vesicular stomatitis
- Semiliki
- Sindbis
- Aujeszky's
- Rabies
- and "deadly" viruses

CLINICAL TRIAL RESULTS FOR LARIFAN SUPPOSITORIES IN THE TREATMENT OF RECURRENT HERPES INFECTION

The effectiveness of treatment in % for 30 patients



53%

complete clinical effect

47%

partial clinical effect

0%

no clinical effect

The results are statistically reliable P <0,0005

EVALUATION CRITERIA FOR THE EFFECT OF THE TREATMENT

Complete clinical effect (CR)

no recurrence

Partial clinical effect (PR)

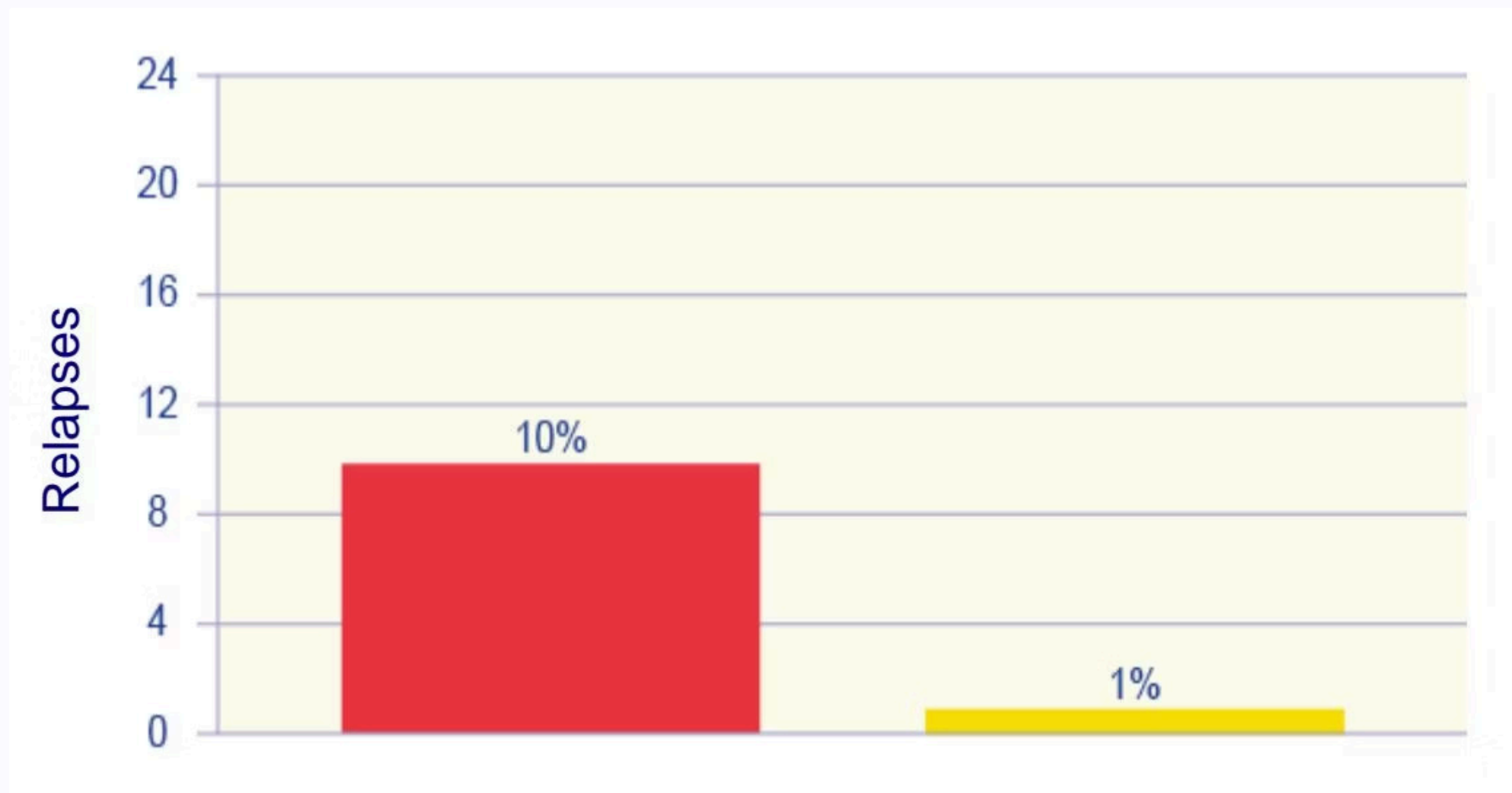
decrease in the number or severity of relapses

No clinical effect

without changes

REDUCTION IN THE NUMBER OF RELAPSES IN PATIENTS TREATED WITH LARIFAN

The therapeutic effect of the frequency of relapses



10%

the average number of relapses within 1 year prior to treatment

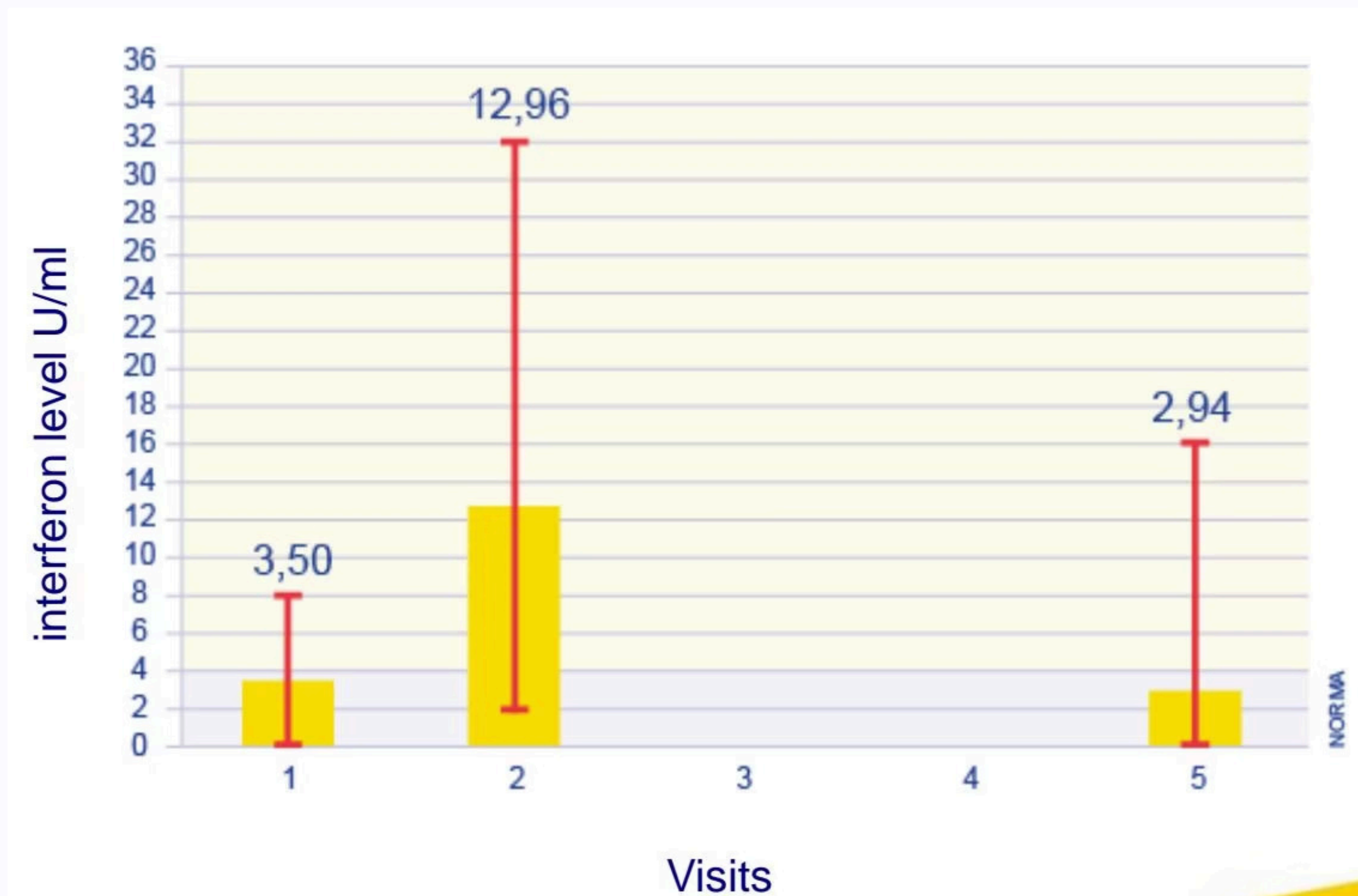
1%

the average number of relapses within 1 year after treatment initiation

The average number of relapses in 30 patients within 1 year, before and after treatment

INTERFERON LEVEL INCREASE DURING THE THERAPY

Average titters of interferon in serum



1st visit

Before treatment

2nd visit

10 hours after the first suppository

5th visit

2 months after the start of treatment

LARIFAN IN TREATMENT OF ENT DISEASES

LARIFAN solution used when:

- the first symptoms of respiratory infections
- laryngitis
- sinusitis and ethmoiditis
- treatment of patients with "vocal nodules" (noduli plicae vocalis)
- after extirpation of papillomas

APPLICATION OF LARIFAN IN CLINICS OF INFECTIOUS DISEASES

Medical facility	Infections	Dosage form
Moscow Medical Institute, Skin diseases department	Herpes - local and generalized	Injections, ointment
Kyiv Medical Institute, Advanced study department	Generalized herpes	Injections
Riga 7th Hospital, Neurology department	Tick-borne encephalitis	Injections
Riga Stradins Hospital, Neurology center	Tick-borne encephalitis	Injections
LMA, Ophthalmology department	Herpes, adenovirus	Injections, ointment
RMI, Dermatology department	Herpes, papillomavirus	Ointment
Rigas Stradins Hospital, dermatologist office	Herpes - recurrent	Suppositories
MOH health department (1990)	Influenza	Inhalations

LARIFAN IN TREATMENT OF PROLIFERATIVE PROCESSES CAUSED BY PAPILLOMA VIRUS

Diagnosis	Total number of patients	The number of patients with a positive therapeutic effect
Verrucae vulgares	115	115
Condyloma acuminatum	43	38
Papillomatosis larynges	4	3

Larifan Ointment: Initial Assessment of Verruca Vulgaris

This section details the pre-treatment condition of a patient presenting with Verruca Vulgaris (common warts). These observations serve as a baseline for evaluating the therapeutic effect of Larifan Ointment, consistent with its application in proliferative processes caused by the papilloma virus.

Patient's Hands Before Treatment Application

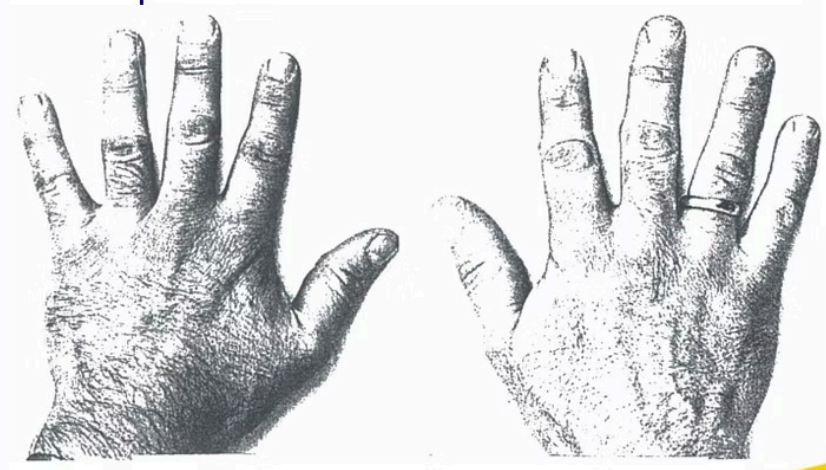
The left hand exhibits multiple, distinct verrucae vulgares primarily located on the dorsal surface and extending to several fingers. These lesions appear as hyperkeratotic papules and plaques with a rough, irregular texture, typical of common warts.

The right hand presents a similar widespread distribution of verrucae vulgares. The morphology and characteristics of the warts, including their size and surface texture, are consistent with those observed on the left hand, indicating a generalized presentation prior to intervention.



Larifan Ointment Treatment: Results After 3 Months

This card presents the visual outcome on the patient's hands after three months of consistent treatment with Larifan Ointment for warts. Significant improvement is observed following this treatment duration, offering a clear comparison to the initial state.



Patient's hands after 3 months of Larifan Ointment treatment

LARIFAN FOR SEXUALLY TRANSMITTED INFECTION

Positive chlamydial antigen in uroepithelial cells

Treatment	Number of patients	Before the treatment	After the treatment
Standard pefloxacin therapy	76	100.0%	47.3%
Standard pefloxacin therapy and Larifan	26	100.0%	7.9%

LARIFAN FOR INFLUENZA

1990 year data

Method of administration	Results
Experiments on mice Intranasal	From 70 to 100% mice protection against lethal doses of influenza A virus
Clinical observations in 2500 patients and contact persons Inhalation	Observed clinical effect in patients when used Larifan at the 1st – 2nd day of the illness. Preventive effect in the contact persons.

EFFECTIVENESS OF LARIFAN IN THE EXPERIMENTAL FORM SEVERE ACUTE RESPIRATORY SYNDROME *

Group	Time of administration	Results	disease severity index	coefficient of performance, %	sign test statistic value	significance level of the therapeutic efficacy of the drug, p
Larifan 5mg/kg	-21h, -1h		0,425	57,5	9/10	0,05
	+2, +72, +144, +216h		0,325	67,5	10/10	0,01
Control (infected)			1,000	-	0/10	-

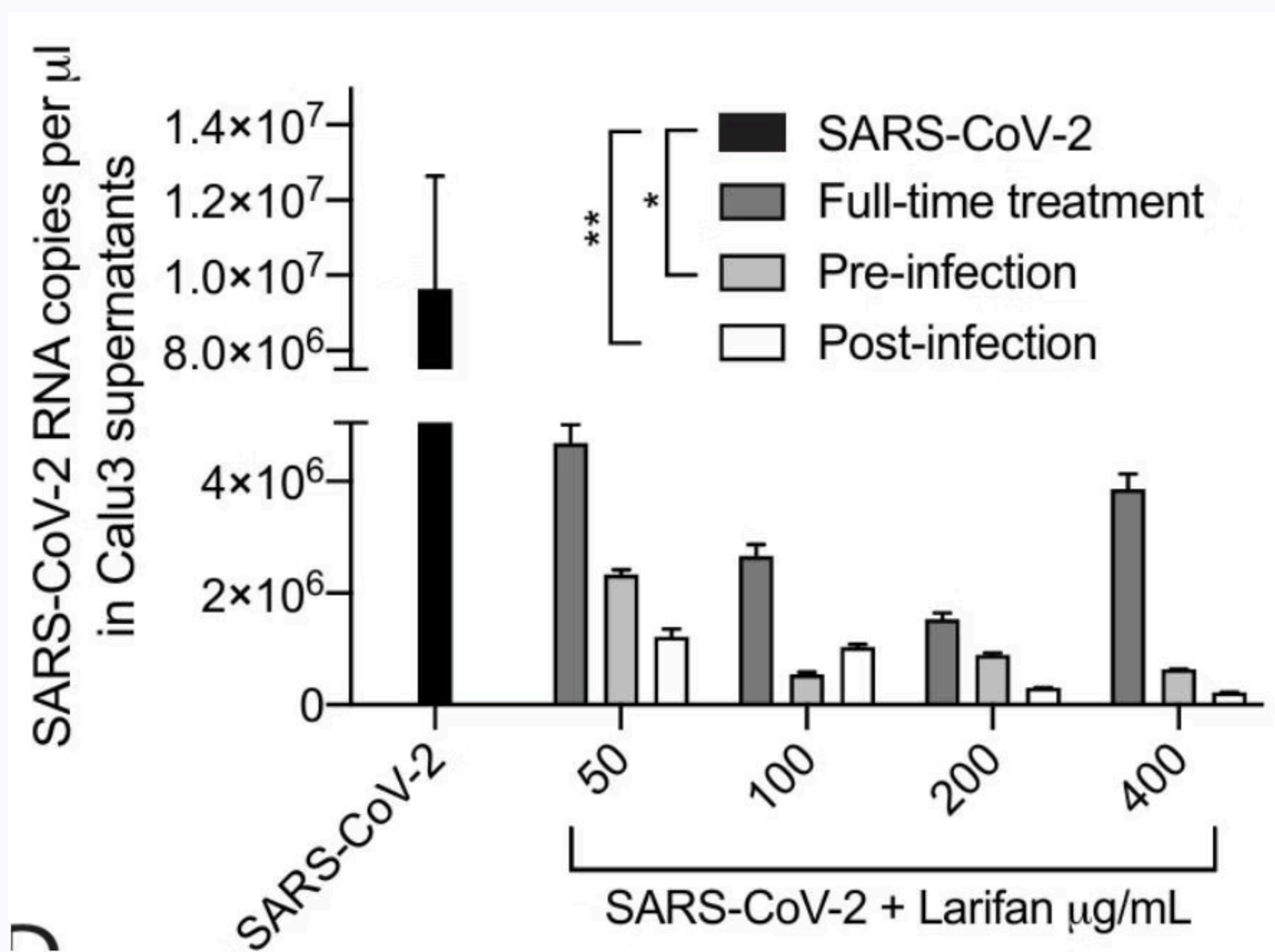
EFFECTIVENESS OF LARIFAN IN THE EXPERIMENTAL FORM SEVERE ACUTE RESPIRATORY SYNDROME *

Studies have been carried out to study the effectiveness of the high-molecular inducer of interferon Larifan® in relation to the experimental form of severe acute respiratory syndrome in Syrian hamsters. It is shown that Larifan® is effective when applied in a preventive scheme, and the scheme of emergency prevention.

The coefficient of therapeutic action for virological, hematological and biochemical parameters was 57.5 and 65.0%, respectively ($\check{d}<0.01$).

***Studying the Effectiveness of Lariphane® in the Experimental Form Severe Acute Respiratory Syndrome (2019)**

S. YA. LOGINOVA¹, V. N. SHCHUKINA¹, *S. V. BORISEVICH¹, R. A. HAMITOV², V. A. MAKSIMOV



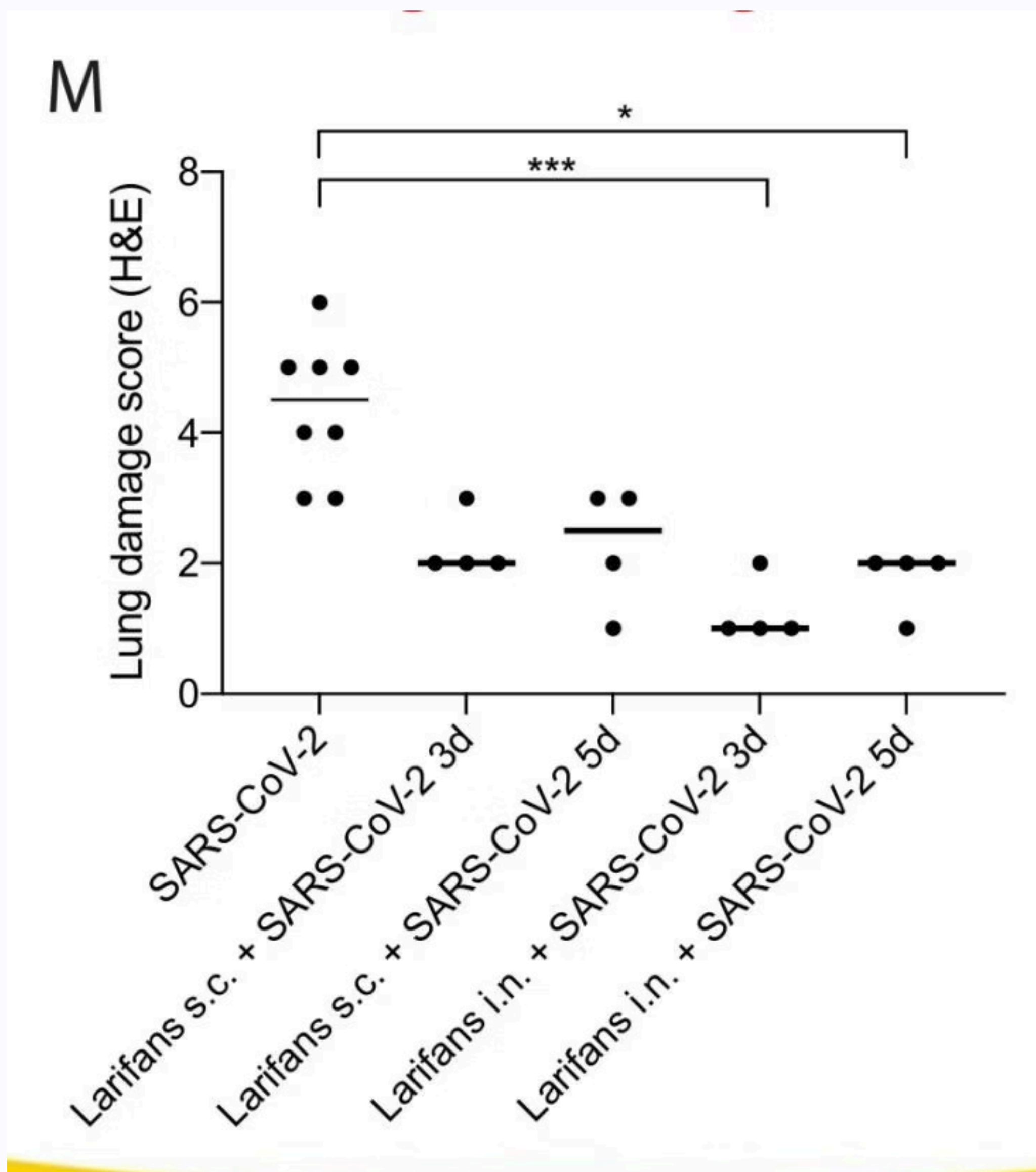
Presence of Larifan reduces the replication of SARS CoV-2 both in vitro, in Calu3 cells and HSAEC, and in vivo in the SARS-CoV-2 infection model of golden Syrian hamsters.

Zane Kalnina , Kristine Salmina, Diana Rubene and Dace Pjanova

*Bacteriophage-Derived Double-Stranded RNA Exerts Anti-SARS-CoV-2 Activity In Vitro and in Golden Syrian Hamsters In Vivo (2022)

Kristine Vaivode, Irina Verhovcova, Dace Skrastina, Ramona Petrovska, Madara Kreismane , Daira Lapse,

LUNGS OF INFECTED AND TREATED HAMSTER THREE AND FIVE DAYS AFTER LARIFAN ADMINISTRATION



Larifan treatment reduces SARS-CoV-2 antigens in the lungs and improves lung histopathological features of infected animals.

Guna Feldmane M.D.

Head of the Board LARIFANS Ltd