CLINICAL STUDY:
VIUSID IN THE TREATMENT OF ACUTE, ACUTE PROLONGED AND CHRONIC B, C, BC HEPATITIS AS WELL AS SOME CASES OF B+D HEPATITIS

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VIUSID IN TRATAMENTUL HEPATITELOR ACUTE,
ACUTE PRELUNGITE SI CRONICE B, C SI BC
PRECUM SI CATEVA CAZURI DE HEPATITE B+D

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VIUSID IN THE TREATMENT OF ACUTE, ACUTE PROLONGED AND CHRONIC B, C, BC HEPATITIS AS WELL AS SOME CASES OF B+D HEPATITIS

The study here present is a opportunity for clinicians and physicians from policlinics in offering a new therapeutical method, and especially a new hope over the possibilities to control the course of viral hepatitis, which doesn’t demonstrate any evident tendency towards improvement and spontaneous healing.

We are taking into account the preparation VIUSID, recently imported in our country too by Catalysis Romania SRL, representation and unique importer of Catalysis SL laboratories from Madrid, Spain.

VIUSID is a natural produce containing:

- essential amino-acids: arginine, glycine, glucosamine.
- Antioxidants, able to neutralise the free radicals in the body, which are formed as by-products because of physiologic and pathologic metabolism activity: ascorbic acid, malic acid, zinc sulphate.
- group B vitamins: calcium pantotentate, pyridoxal, cyancobalamin, and folic acid.
- glicyr rhizinic acid: a natural product extracted from Glycيرhiza Glabra-radix (sweet wood-root) with:
  - anti-inflammatory proven effect, (by inhibition of PGE₂ production).
  - Anti-ulcerous effect.
- increase the INTERFERON synthesis and stimulate its activity.
- inhibit the infectious manifestation for several viruses (HIV, hepatitic viruses, cytomelago viruses, HSV I, HSV II, VSV and HPV). The studies showed a selective blocking, depending on the plasmatic or local concentration, and on proteinkinase P.

- Excipients: honey, lemon, mirt, sunett, sodium methylparaben and potasium acesulfam.

We would like to specify that this preparation is registered and approved for selling in our country under this denomination in following form of presentation:

- Bottles of syrup of 100 ml – especially destined to children
- Sachets of 4 g powder, which together with a small amount of water instantaneously forms syrup, destined especially to adult patients.

The preparation was put at our disposal by the producer, after being tested in various studies in other countries, as well as in our country (1999 - 2000), now being published, investigated from the point of view of compliance, tolerance and efficiency as auxiliary therapy in several categories of acute and chronic disease of human being and in different dosages.

According to conclusions of this studies, it result that the preparation VIUSID is active especially in 60 ml doses for adults (respective 2 sachets
per day) with minimal duration of 14 days, the most evident benefits were seen in the case of patients immune-depressed (including AIDS) and after 3 weeks of administration.

The preparation was tested as auxiliary therapy in several cases of acute hepatitis (even by us in an anterior study, now being published) but its efficiency was apparently more consistent in prolonged forms of disease, as well as in several cases of chronic forms of disease. This observation was the starting point of our study.

The study was composed under the form of double-blind trial (VIUSID versus placebo) of IVth phase on 50 patients with acute hepatitis, acute prolonged hepatitis and chronic hepatitis of different etiology (viral with VHB, VHC, associations as VHB+VHC or VHB+VHS or viral on chronic nutritional matter as well as cirrhosis in functional compensated phase), irrespective if they have made or haven’t made any other therapeutical trials in an anterior period (except the last month before the beginning of the study). For the correctness of the conclusions, during the duration of administration and during the post-therapeutical period control after 3 months, the patients didn’t received any other therapies with important effects over the evolution or momentary condition of disease (anti-viral preparations – RIBAVIRINA or LAMIVUDINA with INTERFERON, immune-suppresser preparations – colchicine, cortisone preparations, azathioprina etc.)

It was appreciated the compliance and the tolerance of the preparation (the existence and the intensity of some side-effects), especially the efficiency by comparing the registered results of both categories of patients (group
under treatment with VIUSID – respective control group) at the level of National Institute “Matei Bals”, Clinic I of Infectious Disease, Bucharest – Romania.

The minor side effects were promptly registered in patient notebook. The significant side effects, resulted in the interruption of administration on the part of the patient, were immediately communicated, followed, in the case of some alarming frequency or severity with renouncing to participate in the study.

**MATERIAL AND METHOD**

The producer put the preparation at our disposal. In this respect it has been elaborated a Protocol, in which was established the administration of preparation VIUSID, meaning 3 sachets per day, during 30 days, on 50 patients divided into 3 groups:

- A group of 10 patients – with acute viral hepatitis, with apparently normal evolution, which received a treatment with VIUSID since the hospitalisation, for a period of 30 days.
- A group of 20 patients – with acute viral hepatitis without a spontaneous tendency of clinical and laboratory improvement within 30 days from the apparent beginning of the disease. The administration began accordingly after a minimal period of supervision of 30 days and lasted 4 weeks.
- A group of 20 patients – with chronic viral hepatitis and hepatic cirrhosis – clinically, biologically and
histologically confirmed – without an immunopathogenic treatment. The administration began after the confirmation of the disease and acceptance of the patient and lasted 4 weeks.

Simultaneously, it was prepared a control group of 30 patients without a treatment with VIUSID.

- A group of 20 patients – with chronic forms of disease under immunopathogenic treatment with associations as INTERFERON and RIBAVIRINA – in the case of viral etiology C.

These groups served to compare the obtained results, in the case of patients treated with and without VIUSID.

All the patients, which participated in the study – 50 treated with VIUSID and 30 without a treatment with VIUSID – were tested, according to initial Protocol in 4 important moments of the study.

- At the beginning of the study
- At the end of administration of VIUSID (at 4 weeks from the beginning of the study).
- After a month since the end of administration (at 8 weeks from the beginning of the study).
- After 3 months since the end of administration (at 16 weeks from the beginning of the study).

In this way all clinical dates were recorded by pieces (symptoms and clinical signs) together with following biological investigations:
• Haemoleucogram (number of red cells/ml, haematocrit value, haemoglobin g%, number of leukocytes/ml, number of thrombocytes).
• H.V.S., Fibrinogen.
• Urea in blood, Creatinin, Uric Acid.
• Glycaemia.
• Electrophoresis of serum proteins %.
• Alanine-amino-transferrasa (ALT, ALAT, GPT), Gamma glutamil – transpeptidasa (GGT).
• Tymol reaction (u.Mc.L), ZnSO₄ reaction.
• Prothrombin concentration %.
• Bilirubin (total, direct, indirect), Alkaline phosphates, cholesterolemia.
• Markers of viral infectious: for HAV (Ig.M and Ig.G anti HAV specifics), for HBV (Ig.M and Ig.G anti Hbc., Ag.Hbs., Ag.Hbe., anti Hbe., and as possible as DNA VHB), for HCV (Anti HCV and RNA HCV), and for HDV (Ig.M and Ig.G anti HDV).

The results were registered in individual notebook for each patient and then analysed. The main objectives of the study were: to appreciate the adherence of patients at treatment; to appreciate the tolerance by registering all side effects pointed out by the patients and to appreciate the efficiency of the preparation.

RESULTS AND COMMENTS

I – The structure of studied groups:
A. The first group of 10 patients with viral acute hepatitis, treated with VIUSID from the beginning of the study, had the following etiology:
   - 8 patients with VHB
   - 1 patient with VHC
   - 1 patient with coinfection VHB and VHD

B. The second group of 20 patients with prolonged clinical and biological hepatitis under treatment with VIUSID had the following etiology:
   - 15 patients with VHB
   - 5 patients with VHC

C. In the third group of 20 patients with chronic hepatitis and cirrhosis treated with VIUSID were:
   - 12 patients with VHC pure etiology
   - 2 patients with VHC infection on chronic alcoholism bases
   - 2 patients with double infection VHC and VHB
   - 3 patients with chronic coinfection VHB and VHD
   - 1 patient with VHB infection on alcoholism bases

D. The 30 patients from control group were divided as follows:
   - 10 patients with simple acute hepatitis VHB and symptomatic treatment
   - 20 patients with chronic hepatitis and cirrhosis under treatment with INTERFERON and RIBAVIRINA (in different schemes, introduced from the beginning of administration) having:
     - pure etiology (17 patients) VHC
     - mixed etiology (3 patients) VHC-VHB
Overall, **the sex representation** was similar in all groups, having a discreet predominance of males, without clinical and statistical signification.

**The age representation** is represented in the following table:

<table>
<thead>
<tr>
<th>Age representation</th>
<th>Group treated with VIUSID</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 19 years</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>20 – 29 years</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>30 – 39 years</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>40 – 49 years</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>50 – 59 years</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Over 60 years</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>50</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

The averages of age were comparative appropriate in groups with the same forms of disease, being: - in groups with acute hepatitis the averages were of 31 years (group treated with VIUSID) and 35 years (control group), while in the case of chronic hepatitis and cirrhosis the averages were of 52 years (group treated with VIUSID) and 45 years (control group). In this respect, the differences were not significantly from the point of view of consequences over the defence capacity at illness.

II – The condition of patients at the admittance in the study

A. **The alcohol consumption** was registered strictly declarative (by the patients or by their families), presented in the following table:
Alcohol consumption | VIUSID | control group
---|---|---
Negative | 27 (54%) | 26 (86%) |
Occasional | 12 (24%) | 1 (3,4%) |
Regular | 11 (22%) | 3 (11,6%) |
TOTAL | 50 (100%) | 30 (100%) |

This representation indicates that alcohol abuse did not play a pathogenic auxiliary role, representing only a reduce proportion of cases (20% in both groups).

B. **The clinical condition of patients of all groups at the admittance in the study** is synthetically presented in the following table – according to the number of patients:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Acute hepatitis</th>
<th>Acute prolonged hepatitis</th>
<th>Chronic hepatitis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIUSID</td>
<td>Control</td>
<td>VIUSID</td>
</tr>
<tr>
<td>Nauseating</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Distention</td>
<td>5</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Hepatalgias</td>
<td>8</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Inappetence</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Pruritis</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Haemorrhage</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Icterus</td>
<td>9</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Hepatomegaly</td>
<td>7</td>
<td>7</td>
<td>15</td>
</tr>
</tbody>
</table>

After carefully studying the table we concluded that the patients from all groups, with or without VIUSID therapy, had, at the admittance in the study, similar forms of disease, as well as similar degrees of severity, with minor differences without a real signification.
The biological condition, expressed by laboratory investigation, would be presented in development, separately for each group in part.

C. **The adherence of patients towards the treatment was of 100%,** without abandon:
   - all the patients appreciated general condition “well” during the administration, including the disappearance of asthenia and somnolence, the increase of muscular force and even weight-gain of 1 – 3 kg (in the case of 15 patients).
   - Over 50% of patients requested the prolongation of VIUSID therapy after the end of the study.

D. **The tolerance was appreciated as “well”.**
   - 3 patients pointed out a temporary pirosis, spontaneously disappeared in few days without the necessity to interrupt the administration.
   - 1 patient with chronic ethanol gastritis needed the association of a gastric bandage.
   - 5 patients indicated exaggerated sensation of sweet, resolved by diluting the powder in biggest mass of water.

E. **The evolution of patients under treatment** was appreciated as follows:
   - Among each group, by comparing their condition at the admittance with their condition at the end of the treatment and other examinations
   - By comparing the evolution of treated patients with VIUSID with whose from control group but with the same clinic form of disease, during the same period
The evolution was clinically and biologically appreciated on bases of above-mentioned investigations.

CLINICAL EVOLUTION

Clinical evolution was appreciated as “well” and “very well” at all patients from all investigated groups.

As follows, resuming the symptomatology and clinical signs presented at the admittance in the study with whose presented at the end of treatment the situation is as shown in the following table (the figures represent the number of cases which present the sign in question at the admittance in study and at the end of the study).
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Acute hepatitis</th>
<th>Acute Prol. hepatitis</th>
<th>Chronic hepatitis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIUSID group</td>
<td>Control group</td>
<td>VIUSID group</td>
</tr>
<tr>
<td></td>
<td>Debut std</td>
<td>Final std</td>
<td>Debut std</td>
</tr>
<tr>
<td>Nauseating</td>
<td>7</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Distention</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hepatalgy</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Inappetence</td>
<td>7</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Pruritis</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>haemorrhage</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Icterus</td>
<td>9</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Hpto.megal y</td>
<td>7</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>
After comparing the evolution inside each group results the above-declared fact: that the majority of patients had a good evolution. The comparation between similar groups gives the following observations:

- All the patients with acute viral hepatitis had similar evolutions during the study, with or without VIUSID treatment.

- The patients with prolonged hepatitis evidently benefited from the treatment with VIUSID indicating at the end of the treatment the same evolutionary parameters as whose with spontaneously recovered acute hepatitis, except the indicators of painful hepato-megaly of which had healed only a half of treated patients.

- Clinical evolution of patients with chronic hepatitis was similar to clinical evolution of those with the same form of disease from control group under immune-pathogenic treatment. In this category of patients, like in previous, the most difficult to influence was the hepato-megaly and hepatic sensibility.

THE EVOLUTION OF BIOLOGICAL DATES

a) In what the haemoleucograme modifications are concerned the situation is presented in this way:

- Among patients from control group, with simple acute hepatitis was recorded only one patient with leucopenia, which normalised during the study.

- Among patients with chronic hepatitis and cirrhosis, which received VIUSID were:
  a) 4 patients with anaemia, which normalised at the end of the treatment
b) 3 patients presented, at the end of the treatment, a small temporary leucopenia, which normalised a month later.
c) Trombopenia was observed in the case of 10 patients from study, from which 6 patients healed under treatment with VIUSID

- In the control group with chronic hepatitis under immune-pathogenic treatment (IFN/RIBA) were cases of:
  a) Anaemia was registered in the case of 7 patients at the admittance in the study; at 10 patients after a 21 days of treatment and at 11 patients after another 4 weeks of observation.
  b) Leucopenia was registered at 5 patients at the beginning of the study, at 8 patients after 21 days of treatment and at 8 patients after another 4 weeks of observation
  c) Trombopenia was registered at 5 patients at the beginning till the end of the study

According to these, after comparing the results, we can say that the preparation VIUSID not only that induce this kind of medullar depression effect (as IFN/RIBA) but also permit to recover from existent deficiency.

b) 4 patients had hyperglycaemia (more that 120 mg%) at the admittance in the study, but during the treatment with VIUSID only one patient presented persistent values over normal.

c) The cytolysis hepatic syndrome had under the treatment a spectacular evolution.

(*) The normal value of ALT at the clinical laboratory is 73 u/L
<table>
<thead>
<tr>
<th>Group</th>
<th>Number of patients</th>
<th>ALT averages at the admittance in the study</th>
<th>ALT averages at the end of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute hepatitis treated with VIUSID</td>
<td>10</td>
<td>2230.5 u/L</td>
<td>70 u/L</td>
</tr>
<tr>
<td>Acute prol. hepatitis treated with VIUSID</td>
<td>20</td>
<td>387.6 u/L</td>
<td>71 u/L</td>
</tr>
<tr>
<td>Chronic hepatitis treated with VIUSID</td>
<td>20</td>
<td>182.9</td>
<td>111 u/L</td>
</tr>
<tr>
<td>Acute hepatitis control group</td>
<td>10</td>
<td>2270 u/L</td>
<td>40 u/L</td>
</tr>
<tr>
<td>Chronic hepatitis control group</td>
<td>20</td>
<td>94.15 u/L</td>
<td>42 u/L</td>
</tr>
</tbody>
</table>

The presentation of average values did not include the particular cases, which overstep this average, for a better appreciation, we would like to present separately the evolution of patients from studied groups:

A. From those 50 patients which received VIUSID:
   - 2 patients with acute hepatitis remained with ALT values between 70 and 500 u/L.
   - 15 patients from 20 with acute prolonged hepatitis had ALT values between 70 and 500 u/L at the beginning and the 5 rest had ALT values over 500 u/L. At the end of administration, all
• 15 patients had ALT normalised values, only the rest of 5 patients had so far increased values, between 70 and 500 u/L.

• all 20 patients with chronic hepatitis and cirrhosis had ALT values over normal at the beginning (13 patients until 200 u/L) from which 7 patients normalised the values of ALT, the rest presented values slight over normal.

In control group:
• from 10 patients with acute hepatitis only one patient had, at the end of the study, ALT values between 70 and 200 u/L.
• 12 from 20 patients with chronic hepatitis had, at the beginning ALT values between 70 and 500 u/L, so that at the end of the study, 2 patients presented the same values as at the beginning, which were between 70 and 200 u/L.

d) The cholestasa syndrome was initially pointed out by 38 patients from those 50 treated with VIUSID, having reduced values over normal. At the end of the treatment all these registered normal values of Bilirubin, alkaline phosphatasa and gamma glutamil-transpeptidasas presenting a great tendency for healing.

• 38 patients with total Bilirubin between 1-3 mg% at the beginning, which normalised in all cases.
• 16 patients, with chronic forms of disease with, increased Alkaline Phosphatasa at the beginning normalised at the end of the study, except 4 patients.
• 28 patients (from all groups treated with VIUSID) registered increased values of G.G.T.P at the beginning normalised at the end of the study, except 10 patients (chronic consumption of alcohol in all cases).
In control groups:

- hyperbilirubinemia was initially presented at all patients with acute hepatitis and 2 patients from 20 patients with chronic hepatitis, so that at the end of the treatment only one patient with acute hepatitis had hyperbilirubinemia.
- The Alkaline Phosphatasa oversteps the normal values at 9 from 10 patients with acute hepatitis (which normalised at the end of the study) and at 2 patients with chronic hepatitis, which remained the same until the end of the study.
- All the patients with acute hepatitis and 7 patients with chronic hepatitis presented from the beginning increased values of G.G.T.P., from which, in the end of the study only one patient with acute hepatitis and 3 patients with chronic hepatitis remained with moderate increased values.

e) The Hepatopriv Syndrome was observed through the values of Prothrombin concentration and Electrophoresis of serum proteins

- Prothrombin concentration was significantly reduced at the beginning of the study at 6 patients with acute hepatitis and 3 patients with chronic hepatitis, from which only 2 patients with chronic hepatitis presented reduced values at the end of the study.
- Electrophoresis of serum proteins was investigated only at patients with acute prolonged hepatitis and chronic hepatitis. It is important in two directions:
  - Through hypoalbuminemia (which express long insufficiency of protein synthesis function), which was pointed out at 4 patients with prolonged hepatitis at the beginning (3 patients remained until the end) and 15
patients with chronic hepatitis (from which only 2 patients had normalised values at the end of the study).
- Through hypergammaglobulinemia (expressing the existence of inflammatory hepatic syndrome) was registered at the beginning at 5 patients with prolonged hepatitis (1 patient remained until the end of the study) and 17 patients with chronic viral hepatitis (remaining the same at all patients until the end of the study).

The patients from control group did not register any significant differences compared to treated groups with VIUSID:

- Reduced values of Prothrombin concentration were pointed out at 2 patients from acute hepatitis group and at 2 patients from chronic hepatitis group. Their values normalised until the end of the treatment.
- Electrophoresis was registered only at 10 patients with chronic hepatitis. At the beginning of the study, 7 patients had hypoalbuminemia, which remained only at 2 patients. Hypergammaglobulinemia was registered from the beginning until the end at 5 patients from 10 studied patients.

In this respect, we tried to correlate the evolution of disease with patient’s age, the disease oldness and etiologic type of disease:

- In what the oldness was concerned there were not significant elements, which could differentiate the evolution of young patients from old ones.
- The etiologic impact over the evolution of disease (VIUSID/control group) could be deduce from the following table:
<table>
<thead>
<tr>
<th>Etiologic type</th>
<th>Number of patients</th>
<th>No of patients with normalised ALT</th>
<th>No of patients with prolonged cytolysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VIUSID</td>
<td>control</td>
<td>VIUSID</td>
</tr>
<tr>
<td>Acute viral hep.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VHB</td>
<td>8</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>VHB + VHD</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>VHC</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Acute prol. hep.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VHB</td>
<td>15</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>VHC</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Chronic hep.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VHB + ethanol</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VHB + VHD</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>VHB + VHC</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>VHC</td>
<td>14</td>
<td>17</td>
<td>5</td>
</tr>
</tbody>
</table>

According to this table, the acute hepatitis and acute prolonged hepatitis with VHC seem to present greatest therapeutical problems than other etiological forms, with a slow tendency to heal. The same reality is obvious further on in evolution of chronic forms of disease, which confirm, in fact, the general opinions expressed in literature.

**FINAL CONCLUSIONS:**

We think that VIUSID is valuable medication because:

- **Very well tolerated** – which permit to administrate it, in safety conditions, not only in hospitals but also in policlinics.
- **Rapidly ameliorate and in a large measure the clinical condition of patients**, not only the subjective condition but also the objective one, through the positive effect over the metabolic
- Obviously, improves the time and the rate of healing of patients with acute viral hepatitis and significantly reduces the morbidity and mortality of acute hepatitis.

- It is a chronic form of hepatitis. It proved to be a viable therapeutic alternative for those patients without human-mouse xenotransplantation (either for having contraindications of use in biological oxidation or for having forms of disease which did not permit participation in the treatment), or without necessary material possibilities for an expensive treatment.

More than two years ago, the correlation that through the quantities demonstrated in this study, VIUSID could be administered in association even to those patients treated with INTERFERON and PHARYTHINA (or LAMIVUDINA) in order to ameliorate the tolerance and to reduce side effects.

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Chair Investigator: Prof. Dr. Miao Chen,

Head, Committee of Infectious Diseases,

Institute "Prof. Dr. Mami Bala."