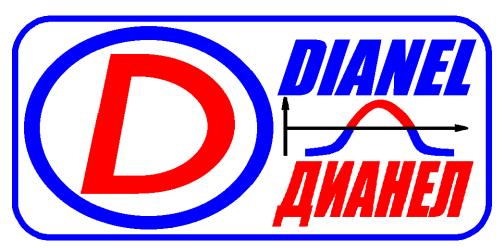


# DIANEL® PRO

SOFTWARE-HARDWARE SYSTEM FOR NONLINEAR ANALYSIS OF HEALTH CONDITION AND TESTING OF PREPARATIONS





**USER'S DETAILED manual** (Practical guidance for users)

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# **Table of contents:**

_		
	Abilities and functions of the "Dianel" Program	4
	Minimal system requirements to the computer for Dianel program	
	Using of the equipment	
	1.1. The first start of the program	7
	1.1.1. Program section "Setup"	
	The menu of additional options of the program Dianel® Pro	
	Tab "Report"	
	Tab "Coefficients"	9
	Tab " <b>Repair</b> "	10
	Tab "Interface"	11
	1.1.2. Program section "Credits"	12
	1.2. Exit from the program Dianel Pro	
2	Test algorithm.	11
٠.	3.1. Starting the program	
	3.2. Checking the interface between the device and the program	
	Hardware is faulty or not connected	
	The first switch on of the hardware–software complex Dianel-Pro	
	3.3. Preparation for investigation	
	3.4. Filling the card of the tested patient.	
	3.5. Getting of initial data	
	3.6. Working with patient.	
	3.7. Conducting of investigation.	
	3.8. Operator's activity during the investigation	
	3.9. Operator's activity when the investigation is over	
	Function Evaluation of foci (nidi)	
	3.9. Analyzing the results.	
	ORGANOPREPARATIONS Group	
	BIOCHEMICAL HOMEOSTASIS group	
	Working with PATOMORPHOLOGY and NOSOLOGICAL FORMS groups	
	Analysis techniques:	
	Further work with the "Etalons" form	
	The own tissue frequencies lay in the following standard frequencies spectra	44
	The Vegeto-Resonance Test mode (button "VRT")	44
	"Comparative analysis" function	
	3.11. Selection of health improving remedies	47
	3.12. Carrying out the INF influencing	47
	3.13. Preparation of "spectronosodes"	
	3.14. Sending of cartograms to be printed and preparing of the conclusion (Epicrisis)	
	3.15. Control testing (Monitoring)	
	3.16. Exit from the program complex	
	3.17. Saying of the investigation - creation of archive	55

### Introduction

Software "Dianel®Pro": the program for nonlinear analysis of health condition and testing of preparations is intended to conduct the computer nonlinear diagnostics and virtual testing of preparations (various BAS and medicines). The purpose of testing is individual selection of most effective preparations for patient with taking into consideration his problems. The program can also be used for production of energy and information preparations.

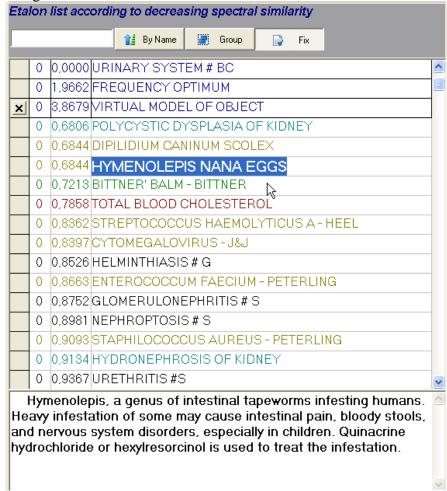
The operator's working with the software-hardware System "Dianel®Pro" consists in the fulfilling of concrete actions described in three main parts of this Guide.

- Spadework,
- Adjusting the system,
- Test algorithm

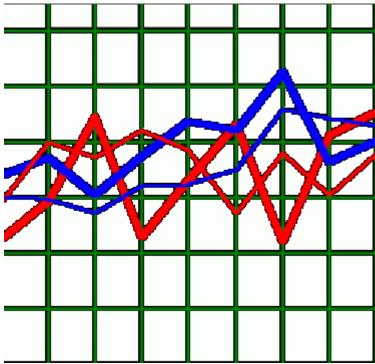
The Program Dianel works with "Information processing unit "Biolaz-Oberon", models 09M, 11, 11S and "Information processing unit "Dianel" (its trade mark for European versions of devices), models 11S-ion, 22S-ion, produced by C.I.T. "Nelian" only. The Program Dianel can't work with devices of another manufactures.

The Information processing unit "Biolaz-Oberon" or "Dianel" is completely controlled with the commands of the program "Dianel" - nonlinear state of health analysis and testing of preparations"; the program is registered at the Patent Agency RosPatent; its developer and legal owner is the Open Company "CIT "Nelian"".

The "Dianel" Program is simultaneously the driver of the unit "Biolas-Oberon" and the control program transmitting the commands to the "Biolas-Oberon" or "Dianel" unit. All signals received by the "Biolas-Oberon" unit from the bio-object are transmitted to the computer operating with the "Dianel" program. The "Dianel" Program carries out analysis, storing and computer processing of the received results using a special algorithm. Further, the data received from the bio-object will be collected in the database (DB) of the "Dianel" Program and transformed to diagrams.



Due to the presence of various standards in the database the "Dianel" Program allows to discover the pathological processes and to evaluate the probability of their development, to find out the signs of the vital functions of the harmful microorganisms and helminthes, to allocate the most active allergens having the most fatal influence on the organism, etc. Thanks to the different kinds of the analysis defining the state of the organism and of each organ separately, the specialized doctor can track all the possible interconnections in the organs, to reveal problems and to confirm them with their relationships of cause and effect.



When evaluating the obtained data, the resulting organs' states diagrams received from the bioobject are compared with standard diagrams; the most probable standards for the given organ are placed in the beginning of the list.

The "standard" is an averaged biological electromagnetic organ state diagram obtained in the empirical way and showing an active functioning disease process. As standards can be used: diseases, nosologic processes, microorganisms, helminthes and allergens. For example - the standard diagram of bronchitis - the diagram of a concrete organ in the respiratory system in which the presence of bronchitis is confirmed. The standard diagram of one process can be made on the basis of the calculated average diagram of a concrete process in a concrete organ when testing a group of people not less than 30 persons having one and the same pathological process.

The Functions "ENT analysis" and "NLS analysis" accessible in the "Dianel" program allow not only to discover the presence or the absence of a pathological process, but also to evaluate the risk of the formation of pathology or the possible presence of a pathology, and to prescribe health improving preparations or an active treatment. On the basis of the diagram received from the bio-object it is possible to select allophatyc, herbal-therapeutic, homoeopathic preparations and Dietary Supplements. These preparations are entered into the database of the program in the form similar to pathological standards - as the diagram describing the bio-energetic potential of the preparation.

# Abilities and functions of the "Dianel" Program

- The visual demonstration of the whole testing process is an important advantage. The whole investigating process of each organ is displayed on the monitor and the tested person can see it. When selecting the health improving preparations the specialist has to show to the tested person the efficiency of the recommended preparations, and this would be the most effective motivation for the patient to improve his health taking the preparations.
- The next advantage of the method is **the control function**, **allowing examining the process in dynamics**, being based on the earlier received results and predicting the development of disease with taking into account the possible methods of treatment. This function allows to

- estimate the efficiency of the prescribed preparations and to correct the selected health improving program, if necessary.
- The "Dianel" Program contains **detailed encyclopedic descriptions of all standards** and becomes an unique handbook. The operator making the test with the HSC "Biolas-Oberon" complex can see the description of any standard and comments to prescribe this standard, before diagnostics is made. It allows preventing the superfluous and wrong diagnoses and recommendations.
- The simplified selection of standards the most probable standards for analyzed organ are placed in the beginning of the list of standards. The least authentic ones are placed at the end of the list of standards. When selecting a correct standard the operator has not to check the list of standards the most probable, and accordingly, suitable for being inserted in the epicrisis, are in the beginning of the list and it is not necessary to look for them in the list which can contain 100 and more standards.
- Standard fine tuning function: this function allows predicting the probability of development or of progressing of the process characterized by the standard in the near future. Usually when using the fine tuning function we confirm a high probability of the standard; that's why the standard must be added to the epicrisis since the process characterized by the standard has already reached a high probability of presence in the organ or is going to reach it in the near future and it is necessary to start fighting against this process. On the basis of the obtained standards the health improving preparations can be selected.
- Analysis of the organ centre state: the given function allows carrying out the directed
  analysis of the pathological center state of a concrete organ; it enables to define the most
  probable processes describing the pathological center state of an organ. It enables to
  prescribe purposefully the health improving preparations influencing the pathological center
  and that will allow to fight most effectively against the pathological processes and to remove
  an inflammation maximal quickly.
- Automation of the epicrisis preparation process satisfies the inquiries of all HSC "Biolas-Oberon" users. Recommendations on a diet, physiotherapy exercises, sleep and rest regime, prescribing some additional analyses and consultations of specialists can be added by clicking of a pair of buttons.
- Individual selection of health improving preparations. The program posses the means of visual demonstration of efficiency of the health improving preparations, allowing to test some preparations and to choose the most effective one. This ability is supported with a huge database containing the allopathy, homoeopathy preparations, herbal medicines and Dietary Supplements and also the "Vegeto Test" ("VRT") and "Comparative analysis" functions. These functions allow showing to the tested patient the virtual state of his concrete organ after he would have taken the recommended preparations. The "Comparative analysis" method allows to compare the initial state of a concrete organ with a virtual one after the prescribed course of medical treatment.

# Minimal system requirements to the computer for Dianel program

Processor: Intel Pentium (II, III, 4) or AMD (Athlon, Duron ...) from 400 MHz

Memory: SDRAM, DDR from 256 Mb

Hard disk HDD: from 2 Gb

**Screen:** resolution not less 1024x768 Hi-Color (16 bit) mode

**Interface Ports: 3 USB** 

**Operating system:** Windows 95/98SE/2000/XP/Vista/7, i.e. any x86 system Windows.

64-bit versions of Windows operating systems are not supported.

# Using of the equipment

Having all the listed advantages and abilities, the Hardware-software Complex "Biolas-Oberon" can be used in a very wide spectrum of applications and can be considered as a convenient

means for preliminary not medical diagnostics by different experts and in different spheres of activity. When working with our clients we have established the following abilities:

- The private practicing physicians and specialized physicians at medical institutions of any specialization, when using the Hardware and Software Complex "Dianel" with the "Dianel" program will be able to consult the patient on all the questions regarding his (her) health in detail and to select any medicinal and preventive preparations. Owning to an extensive data base the program "Dianel" can also be used as an unique encyclopedic manual for the doctor.
- The consulting physicians at the health improving sports and fitness clubs, when using the HSC "Dianel" will be able to supervise the state of their clients in real time operation, to retrace the dynamic of their health changing, both to the best and to the worse. These abilities are supported with the "Comparative analysis" and "Vegeto-test" functions.
- The Insurance companies having deal with insurance the health of clients, when using our HSC "Dianel" will be able to define the state of health of the Insurant fast and precisely and thanks to the possibility to reveal the risk of serious diseases to evaluate the risk when making program of life and health insurance of the patient inclined to illnesses, or will be able to offer to him (her) the insurance tariff corresponding to his (her) state of health.
- The Medical centers can use all possibilities of the Hardware and software complex "Dianel" described above, but the main advantage will be the fast revealing of serious problems of the patient, confirmation of these problems by other methods of diagnostics and individual selection of medical products by means of the "Dianel" program under the control of the doctor diagnostician.
- For doctors-dietitians and physicians acting as tutors selecting the Dietary Supplements the HSC "Dianel" program becomes attractive because it enables an individual motivated selection of Dietary Supplements to improve the health of patients. Just this category of specialists is effectively using our equipment now. This ability is supported with a huge data base containing the Dietary Supplements and also with the function "Vegeto-test" and "Comparative analysis". These functions allow showing to the tested person the virtual state of his concrete organ after the course of treatment with recommended preparation. Using the method of "Comparative analysis" it is possible to compare an initial state of a concrete organ to a virtual one after a course of treatment with recommended preparation. Thus the program automatically notices the changing of the state of an organ: " The area of reduction of the centre by xx % "," Amplification of compensator reactions by xx % ". In this way the patient can see that it is necessary for him to take Dietary Supplements and medical preparations individual selected for him. The program contains practically all Dietary Supplements sold in Russia; these are products of the following firms: Dr. Nona, Enrich Unicity, VitaLine, NSP Nature's Sunshine Products, Coral Club, ArtLife, Herbalife, Tianshi, Vision, Argo, Biotrof, Tektorium and many others. At the request of the customer any new production can be tested and inserted into the program (for additional payment).

Any prescription of the preparation and diagnostics must be supervised by diagnostics specialist or by physician acting as operator.

Working with "Dianel®" hardware-software system represents implementation of certain actions that are described in the three main parts of present manual:

- Preparatory works
- Setting of the system
- Diagnostics algorithm
- Theoretical basis of Diagnostics

To guarantee the working of the Software Complex Dianel® Pro on your computer it is necessary to insert into a free USB socket the applied key. Without the key the Complex won't work!

If you try to start the program complex **Dianel ®Pro** without the key the program will not run. On the screen of the monitor appears the message:



# 1.1. The first start of the program

Switch on the device "Biolaz-Oberon" (or "Dianel"). The name depends on the delivery version; the device must be connected with the computer through the Com-port, the electrodes must be hold in hands without being connected with each other.

Start the program with the icon from the desktop or by clicking the button **Start --> All programs-->Nelian-->Dianel Pro**;

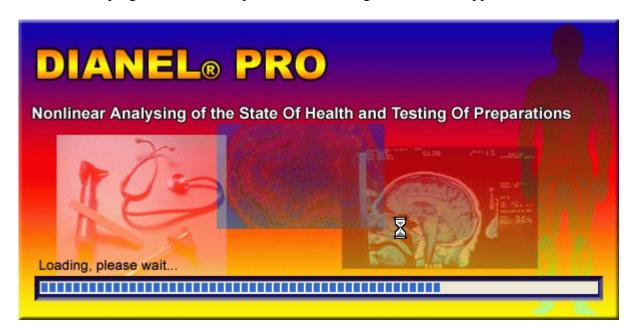
The data base of the examinations being made will be archived.



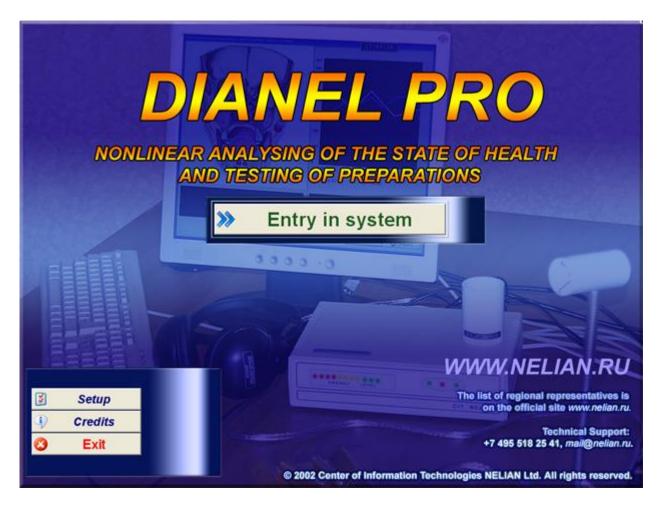
This operation will be made at each starting to enable the restoration of the base of the researches carried out. Don't switch it off!

For proper work of **Dianel**<sup>®</sup> system on your computer, it is necessary to implement some initial settings of the installed software. To do that, run the program by clicking above-mentioned icon (for easier working one can create **Dianel**<sup>®</sup> program shortcut on the desktop with help of standard means of Windows).

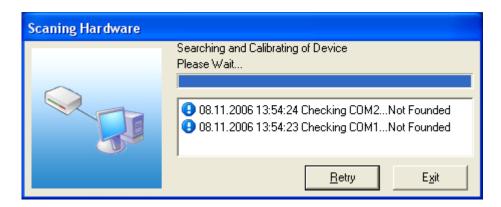
When program is started, a picture with loading indicator will appear on the monitor:



When loading the program modules, databases and graphic material is completed, the front page of **Dianel**<sup>®</sup> **Pro** program will be displayed on the screen.



If the "Program-Device-tested Patient" interfacing is wrong, a mistake message can appear: "Scanning Hardware. Checking Com1... Not founded". It means – you did not plug device. It is necessary to debug the interface and to click the button **Retry**.



If the interfacing is OK, the message doesn't appear. More detailed information about mistakes and the ways of their elimination see in the item Checking up device and program interface.

### 1.1.1. Program section "Setup"

At this stage we have to do an initial adjustment. The adjustment means setting of all the device connections, entering the information about the firm and others. Let's have a look at the main adjustment steps.

1. To change the setting parameter of the "Program Dianel Pro" you can click the button "Setup" in the main menu;

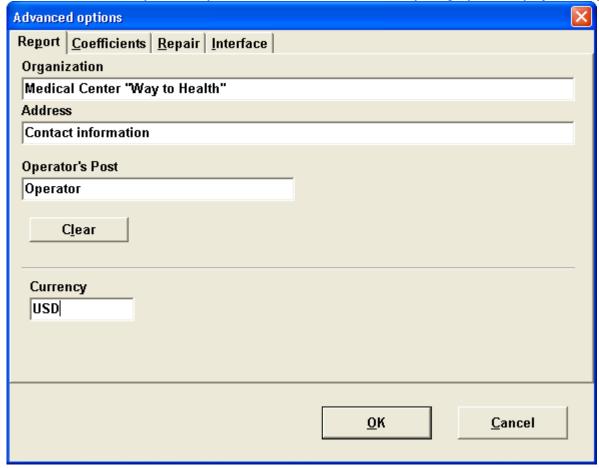


2. The setting window can be left by clicking the button **Close** or click red [X].

The menu of additional options of the program Dianel® Pro The button "Advanced" allows entering the window of additional adjustments.

# Tab "Report"

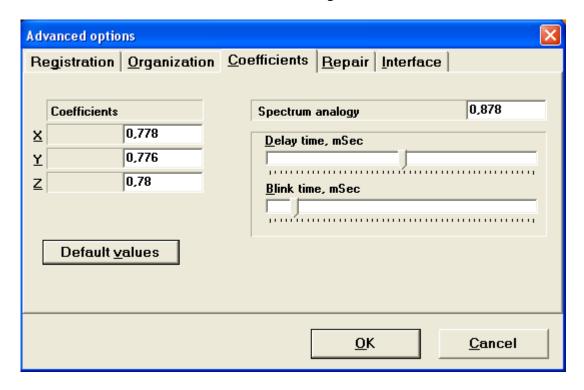
We can enter the name of the organization and its address as shown in the picture or correct the information being entered before. These two lines will be showed as contact information only in the epicrisis where the prescriptions of your specialist will be listed. It is convenient because the epicrisis is a kind of visit card which can be used by relations and familiar people of the tested clients to contact you. If you don't want to enter anything you may just skip it.



Tab "Coefficients"

The access is recommended to experienced users and system administrators. It is not recommended to change the additional adjustments, as the program is installed with optimal settings.

We can correct the coefficients X,Y,Z, the factor of spectral similarity or delay or blinking time. The changing of X, Y, Z coefficients can be made in the range of 0 to 0,02 units. The increasing means that the data obtained from the device can be treated as more positive, the reducing means, that these data can be treated as more negative.



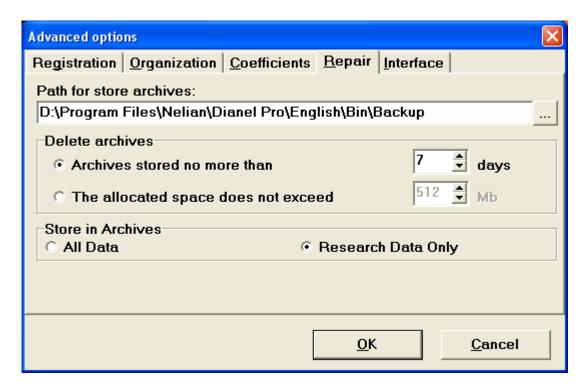
**Delay time** – this is a time interval in seconds after the points have been evaluated; this interval the program needs to send a new command to examine the next organ. The range of change is 0,5 to 0,2.

**Blink time** – this is a time interval in seconds necessary to evaluate one point of the tested cut. The range of change is 0,5 to 0,005.

**Spectrum analogy** – this is the coefficient influencing the common treatment of indications of the program necessary for calculating the standard schedules.

It is not recommended to change any values because it can result failures when the program is running and Dianel Pro is working. If some problems appear, the standard values must be restored by clicking the button "**Default values**".

Tab "Repair"



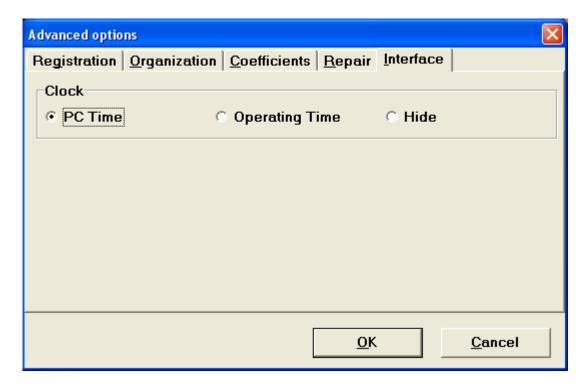
During its work the system uses the following parameters:

message.



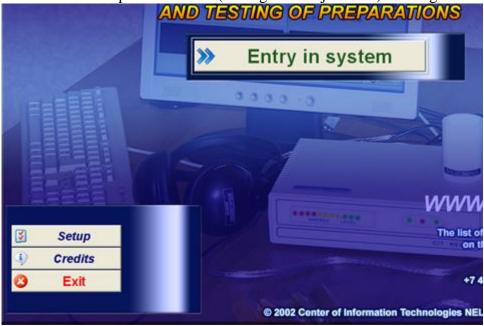
• **Delete archives** - it defines the periodicity of deleting the old archives. If we choose the option "Archives to be stored for the last N days", then, when started, the archives will be automatically deleted which had been created more than N days ago. If we choose the Option "Allocate for storage not more than N Megabyte and if the summary archive volume exceeds the given Megabytes amount, the older archives will be deleted. This option is included to get a reasonable disk space economy and it can be adjusted according to the possibilities of the equipment and to the requirements of the user. The range of the dates to be set is 2...9999 days, 256...65535 Megabyte. **We advise you to use 7 days parameter.** 

Tab "Interface"



In this window you can select the variant of showing of time.

Close Advanced options window (exiting from adjustment) clicking OK and Close button.



Now we can begin to work with the program but before clicking the *Entry in System*, the function ability of the system must be checked

# 1.1.2. Program section "Credits"

When calling the function, the following dialog window appears:



This window gives us information about the version of the program, about its purpose, about copyrights; e-mail addresses of the legal owner CIT Nelian are given, too.

Click on web-address or e-mail of the CIT Nelian and your browser or e-mail client will open. The button "OK" closes the dialog box.

### 1.2. Exit from the program Dianel Pro

Exiting from the program Dianel-Pro can be made by clicking the Exit button in the Main menu – this is the correct way.

Thus all the results obtained when working with the program will be stored automatically.

# 2. Theoretical basis of the method

The method described in this Manual and realized by means of the hardware-software complex "Biolaz-Oberon" corresponds to the main principles of bio-resonance diagnostics and therapy.

The theoretical basis of the method is the hypothesis, that every cell of living organism is a relatively independent formation; but the human body consists of 10<sup>15</sup> cells, so a specific function synchronization mechanism is necessary to allow a normal function of such complicated system. The homeostasis of organism is associated with the radiation of electromagnetic fields (EMF) by cells in an extremely high-frequency range (EHF). As the amplitude-frequency characteristics of radiation are different in sick and healthy organisms, any pathology of organism may be considered as cell pathology. External radiation (laser, sound, EMF) amplifies the own high-frequency radiation of organism and, working as a strengthening device, causes a more expressed EM reaction of organism and thus influences on its own informational management system. Under influence of acoustic-electric waves, temporary structural elements occur in plasmatic membranes of sick cells working as specific antenna systems to enable the connection between the cells, and this phenomenon is actually to be detected by perceiving device. After the cell have restored their normal functions, the temporary

structural elements (antennas) stop their existence and bring in this way the homeostasis of organism to its normal condition.

It was proved that there is a close interrelation between magnetic fields and biological systems, and these fields are used in biological systems as means of intra- and intercellular interactions. The vortex magnetic fields play the important role in the informational exchange and interaction with biological systems. How do the biological systems distinguish and extract the necessary information from the background "noise" and how do the interactions inside and outside of the cells occur? The examination of energetic fields around living plants and animal organisms bring us to the conclusion about the existence of an extremely weak low-frequency magnetic field around biological systems. Each organ and each cell have their own specific fluctuations which can be recorded into the computer and plotted on the screen as a certain kind of diagram that reflects conditions of the information exchange between the organ and its environment. Each pathological process also has its own specific diagram. The frequency characteristics of various pathological processes are stored in the computer memory of the represented hardware-software complex, in averaged form and as diagrams with taking into account the degree of expression, the age and sex peculiarities etc.; the frequency characteristics reflect functional and organic changes in the organs and in the tissues of human organism; the initial materials for them were life bioptates of healthy and of ill persons, accordingly.

Into the electronic base of the hardware-software complex "Biolaz-Oberon" were entered, also in form of diagrams, the frequency characteristics of various biologic objects which are activators of diseases (bacteria, viruses, helminthes, rickettsias, mycoplasma, fungi). When the patient is tested with application of special sensors, the frequency characteristics of the requested organs and tissues are registered, transformed and recorded as diagrams and simultaneously displayed on the monitor, so that the diagnostic equipment can compare them to standard processes (healthy, pathological changed tissues, infection agents) by their spectral similarity and thus reveal a more similar pathological process or tendency to its occurrence.

### 3. Test algorithm.

In this section the basic actions of the operator - diagnostician are briefly considered when carrying out a session to examine the tested patient with the help of nonlinear hardware-software system "Dianel ®Pro" for state of health analysis and for testing of preparations.

**Warning:** the system of computer nonlinear testing demands from the operator the observing of certain rules and of actions sequence.

**Forbidden:** Carrying out of a new session to test one and the same person in the same day when the operator enters other doubtful passport data, age, sex, doubtful complaints and anamnesis data because it can cause mistakes when working with system for intuitive nonlinear analysis of the program. Thus the reliability of the data obtained as results of testing will sharply decrease.

The Developers of the program don't answer for the wrong actions of the operator.

A repeated, control testing of one and the same tested person must be carried out **according to p.p.3.14.** 

# 3.1. Starting the program

The computer und the Dianel® device have to be turned on as described in the section "Spadework".

Start the Program: by buttons Start-->All the programs-->Nelian-->Dianel Pro or with the icon

from the desktop by the fast double clicking with the left button of the mouse (to be recommended).

The archiving of the database of the conducted examinations will be made

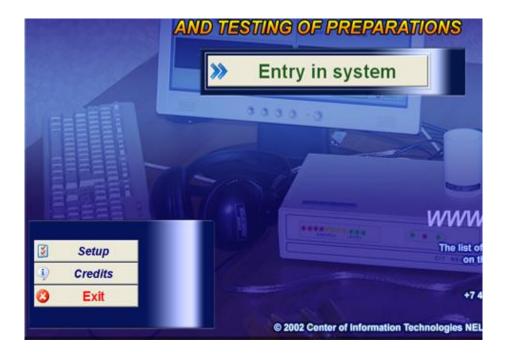


This operation will be conducted at each start to enable the restoring of the basis of the examinations carried out. Do not switch it off!

- the name to the created archive is given automatically on the basis of date and time of creation of archive, for example: "Archive at 2010-09-2212\_22.zip"
- the format of the archive is fully compatible with the ZIP format
- when the archiving is ready, Dianel can be started

When the process of loading the program modules, databases and graphic material is over, the prompt of the program Dianel®Pro is displayed on the screen of the monitor.

3. Click the left mouse button on the inscription "Dianel Pro" in the middle of the screen; Thus in the main background picture the group of buttons called "Main menu" appears.



<sup>&</sup>quot;Entry in system" you can begin to work with the program.

The button "**Exit**" enables to leave the program and back to the desktop.

### 3.2. Checking the interface between the device and the program

Program Dianel Pro checks the presence of the device automatically when entering the system, that means when clicking **Entry in system**. Thus the automatic interfacing with the Com port is made, the device is connected to.

You can connect the device to the port convenient for you, but your "Biolaz-Oberon" or "Dianel" device must be interfaced to the Com port, it is connected with, automatically!

The automatic interfacing between the device and the program take place only if the sensors are put correctly on the person to be tested.

If it is not so, a mistake message with the indication of the reason appears:

# Hardware is faulty or not connected

"Information processing block is not found. Information processing block is off or faulty"; that means that program "Dianel Pro" cannot receive the answer from the device. If the mistakes

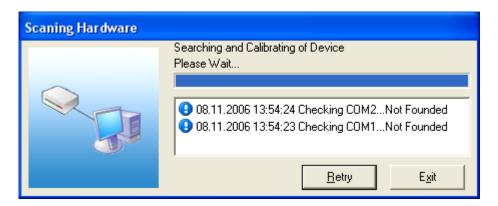
<sup>&</sup>quot;Setup" you came to the menu of program adjusting.

<sup>&</sup>quot;Credits" you can get information about the program Dianel®Pro

won't be eliminated, the program will receive no data from the device and the test won't be correct.

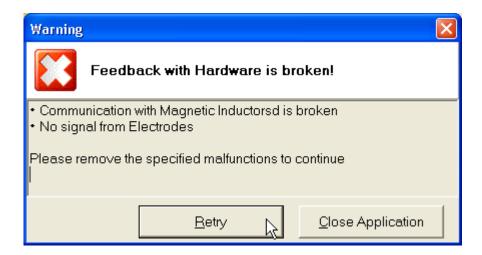
The reasons:	The way to correct the faulty interfacing
The device's not connected to the power	The power supply of the device must be
	switched on
The device is not connected to the computer	The cable must be connected to the computer
with a data cable	and to the device and/or the cable connection
	reliability must be checked. The connecting
	cable must be inserted into corresponding
	sockets properly and have no damages

If the continuation of the work is confirmed many times after receiving the message "Information processing block not found. Information processing block switched off or damaged" (by clicking the button "More? => Yes"), the program will send the message "Incorrigible mistake. No connection between computer and diagnostic environment. The working with the program can't be continued". The following window will indicate it:

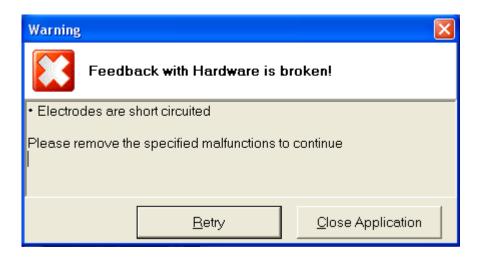


The only possible version will be "Close Application"

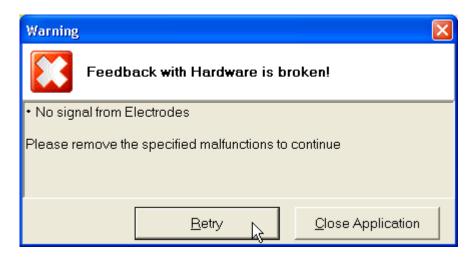
If another message appears informing that the electrodes are short circuited or that there is no signal from magnetic inductors (electrodes are disconnected), this means, that the program Dianel Pro has received wrong data from its sensors when interfacing the program with the device.



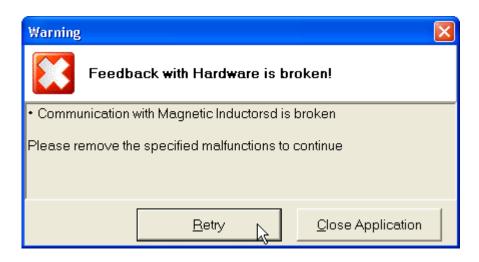
When entering the system, the device must be connected to the electric network, to the computer; the electrodes must be in hands (or in one hand but not short circuited), the headphones must be on the head of the operator or of the tested person.



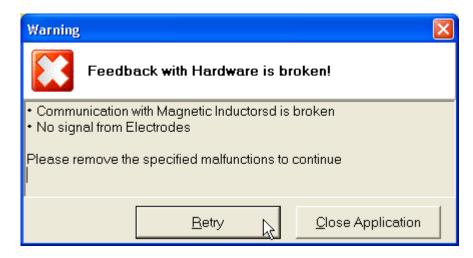
Program Dianel Pro Message	Way to correct the faulty interfacing
Feedback with the information proceeding block disturbed:	The electrodes must be in hands of the tested person or the operator must hold them in one
• the electrodes are short circuited	hand but not connect them



Program Dianel Pro Message	Way to correct the faulty interfacing
Feedback with the information proceeding	The device can send a discrete tone signal.
block disturbed:	The electrodes must be in hands of the client
• no signals from the electrodes (electrodes	or the operator must hold them in one hand
are disconnected)	but not connect them



Program Dianel Pro Message	Way to correct the faulty interfacing
Feedback with the information proceeding block disturbed:  • the connection with magnetic inductors is broken	The magnetic inductors (headphones) must be put on the head of the operator or of the tested person



<b>Program Dianel Pro Message</b>	Way to correct the faulty interfacing
Feedback with the information proceeding block disturbed:  • the connection with the magnetic inductors	There are two mistakes at the same time: the magnetic (headphones) are not put on the head of the tested person (of the operator)
<ul><li>are disturbed</li><li>there is no signal from the electrodes (the electrodes are disconnected);</li></ul>	and the electrodes are lying on the table. So the following must be done: The magnetic inductors (headphones) must
	be put on the head of the operator or of the tested person; The electrodes must be in the hands of the tested person or the operator must take them
	in one hand but not connect them.
Feedback with the information proceeding	The situation is similar to the above
block disturbed:  • the connection with the magnetic inductors	mentioned one, but the electrodes are short circuited.
<ul><li>are disturbed</li><li>the electrodes are short circuited</li></ul>	So the following must be done: The magnetic inductors (headphones) must
the electrodes are short electrical	be put on the head of the operator or of the
	tested person; The electrodes must be in hands of the tested
	person or the operator must take them in one hand but not connect them

Remember: The interfacing must be made automatically! Without the interfacing between device and bio-object the program "Dianel Pro" runs in a virtual test mode, thus there is no data exchange between the device and the program.

# The first switch on of the hardware-software complex Dianel-Pro

After the first switch on of the hardware-software complex it is recommended to evaluate the common efficiency of the system.

The following steps must be done:

- 1. Enter the system
- 2. Make a card for a trial client

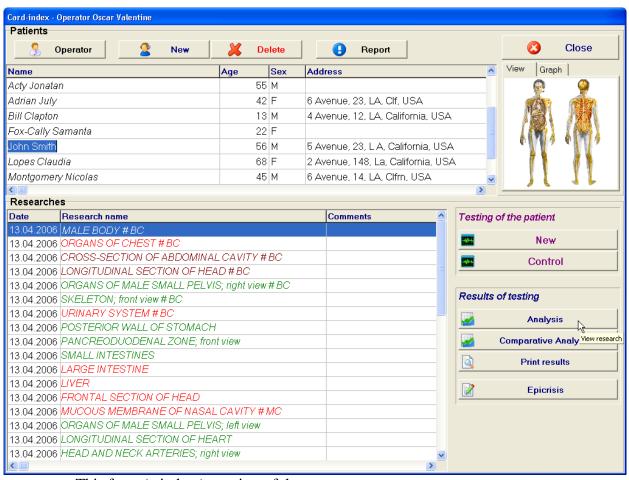
3. Then you come to the window "Information", where you have to click the button "Test" – the examination will start. You also have to check if there are signals in the headphones, to check the function of the radiator, the operation of sensors and failure messages appear if there are no signals from the sensors. The failure messages must appear between the examinations of the organs.

# 3.3. Preparation for investigation

The device must be properly connected to the computer with the installed program Dianel Pro, the sensors must be correctly placed on the tested person. More detailed see in section "Checking the interface between the device and the program". Now we have to click the button "Entry in system".

After entering the system (You came into "Card Index") the headphones (magnetic inductors) can be taken off, the electrodes can be removed till the begin of the investigation, till the sitting with INF influencing or till the VRT;

Thus on the screen of the monitor appears the form "Card index of investigations"



This form (window) consists of three parts:

In the top part of the "Card Index of investigations" window is the database of the patients to be tested. The sorting of the tested patients is carried out alphabetically to be found easy.

The bottom part of the "Card Index of investigations" window represents a catalogue that contains the complete information on all investigations carried out for the chosen patient.

The right part of the "Card index of investigations" window contains a set of the control elements of the form:

- ⇒ When clicking the field "**Diagram**" above the picture of the examined organ the diagram with frequency characteristics of the given organ obtained at the examination, will appear. To come back to the picture of the organ we have to click the field "**Kind**".
- The area named "**Epicrisis**" shows final information on the patient after investigation. The group of buttons "**Testing the patient**" (intuitive diagnostics)
- ⇒ "New"- to call the form "Information gathering"(interactive anamnesis)

- ⇒ "Monitoring" a repeated examination of the patient without gathering the anamnesis. The group of general purpose buttons "Test results":
- ⇒ "Analysis" a final analysis of investigation's results
- ⇒ "Comparative analysis" the comparative analysis of the examination results when the tested patients is under control in dynamics and also the evaluation of the efficiency of the tested preparations and of the results of the INF-influencing;
- ⇒ "**Print the results**" printing the cartograms of examined organs.

Before starting the work with the client, it is necessary to enter the information on operator(s) conducting the investigation. To do that, point cursor on the "**Operator**" button and make a left-click on it. Following window will appear:



Clicking the "Operator" button shows the list of operators (medical specialists conducting investigations with this system). Selecting the button "New" in this catalogue allows to enlarge the list of doctors using the devices when examining the patients by entering a new doctor's data. You also can remove doctor's names from the list using "Delete" button with simultaneously removing the card indexes of the patients the doctor has examined or tested. After entering new doctor's data or selecting the doctor from the data base we have to click OK; as result the surname and name of the doctor appear in the top of the screen.

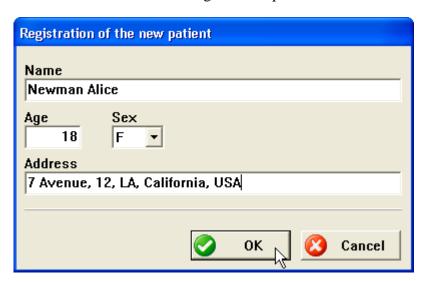
Now the patient can be called and the examination can begin.

# 3.4. Filling the card of the tested patient.

In the "Card index of investigations" field we click the left mouse button on "New".

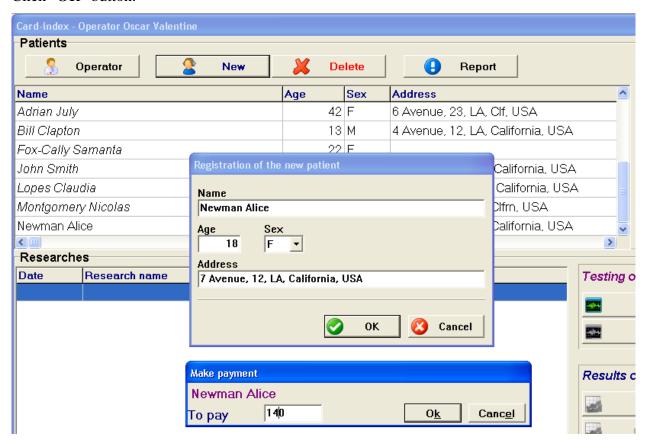


On the background "Card indexes of investigations" appears the form "New investigation", which must be filled according to the requirements.



Specify the surname, first name and second name, age, address, phone number (if exist and if it is necessary). Select the sex from the dropping list.

# Click "OK" button.

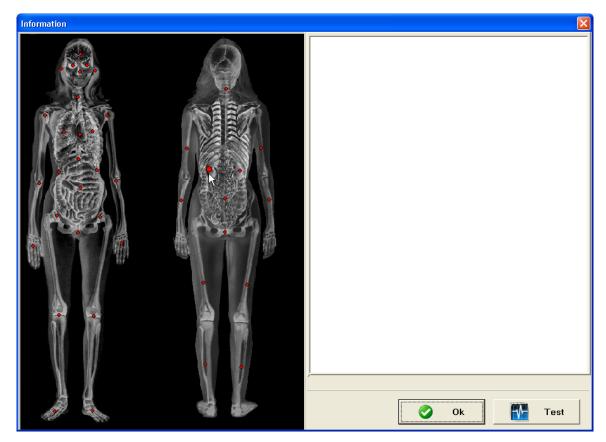


Thus the form "Payment" will appear, where agreed sum of payment by given patient for chosen variant of investigation or a figure but not 0 should be entered.

Click "OK" on this form.

# 3.5. Getting of initial data

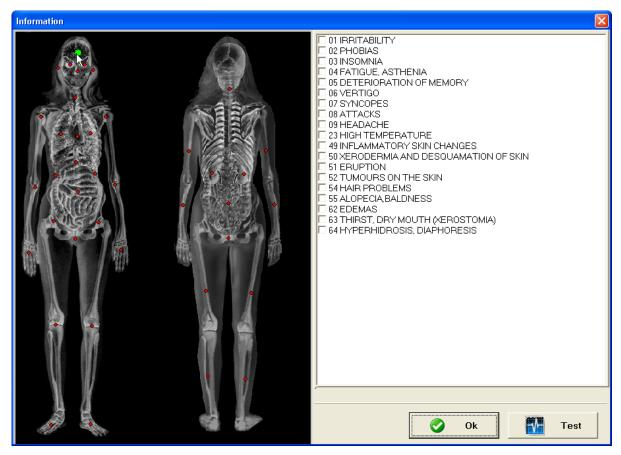
When clicking the last "OK" button in the previous item, the window "Information" appears on the screen of the monitor.



It is necessary to enable an active participation of the tested patient in gathering of anamnesis data and a close dialog contact between the tested patient and operator

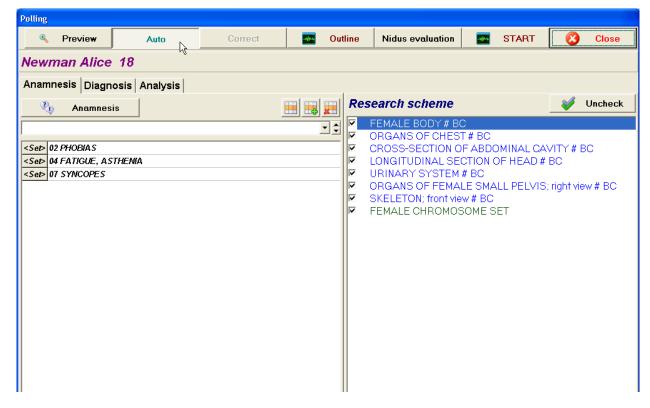
Using the dynamical point technique, the doctor can more precisely locate the zone of pathology on the projection of the organ. Note that only those complaints are registered that take place at the moment of the examination. The complaints that took place in the past but are absent at the moment are not registered.

In the window "Information" we click the left mouse button on any red lighting point on the background of a virtual model of human body. The marked point turns green.



The list of complaints, specific for selected zone, appears. You can drag-and-drop the green highlighted point using the mouse (click the left mouse button on green point, drag it to the zone you want and release the mouse button) to any needed zone. Mark the complaints of the patient in the list by ticking corresponding fields (near the complaint types) with the left mouse button (the tick should appear in the field). When the list of complaints is done, click the " $\mathbf{OK}$ " button.

This action will open another window, "Polling", on the screen.



The "**Polling**" window is intended to preparation of investigation in automatic mode.

The tables **Diagnosis**, **Complaints** and **Analysis** are filled with the information given by patient and attached results of preliminary laboratory-functional investigations.

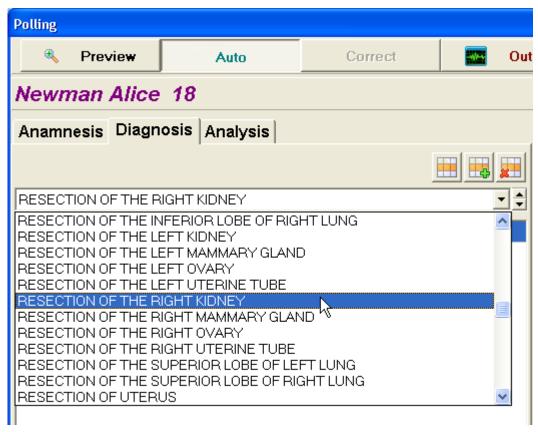
When filling lines of the **Diagnosis** table, the index search results are shown in the frame above the table. One can choose the exact diagnosis from the dropping out list by selecting an item with the mouse.

The arrows to the right of the list are indented for moving to the next record.

The "Set" button places a chosen diagnosis into the table. If the button is clicked, the word "Set" appears in the first cell of the row in the table. The row that has ellipsis sign in the first cell is not processed.

The "**Append**" button adds a new row into the table for next diagnosis input.

The "**Delete**" button deletes the chosen row from the table.

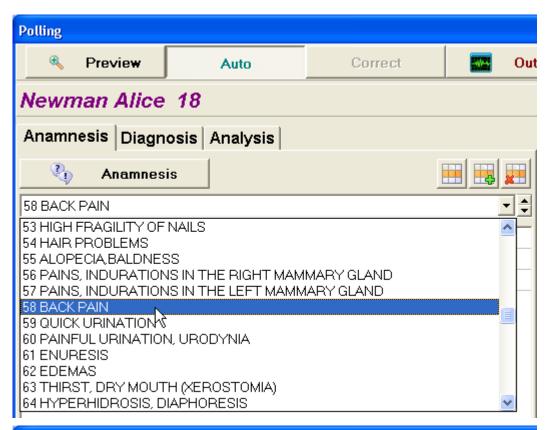


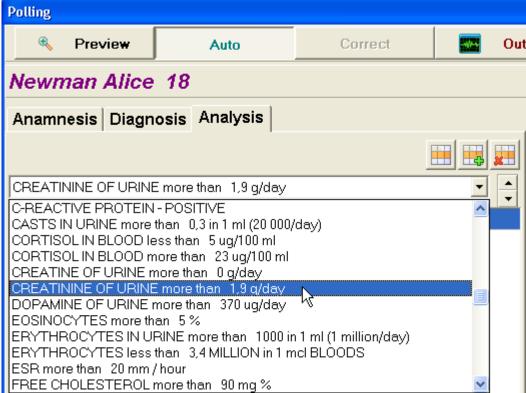
Left-click the long white strip under "Diagnosis". The diagnoses list will appear, where you should mark, first of all, the operations the patient came through and in exclusive cases the diseases the patient has had. To enter the diagnosis (or other data) into the card of the tested person we select the according diagnosis and click it with the left mouse button. The diagnosis is displayed in the window under the buttons "Diagnosis" and "Append". Click the button "Set". To

enter another diagnosis (or other data) click the button -Add. A new empty row as a

colored strip will appear in this window. Select the next diagnosis by clicking the button **Set.** The diagnosis will be set under the next number.

To fill the tables **<Complaints>** and **<Analyses>** click the corresponding field of the form **''Polling"**. The table **<Complaints>** can be continued, if not all the complaints of the tested person were taken into account at the previous step.





The sequence of steps when filling these tables is similar to those when filling the table **Diagnosis>.** 

The button "Viewing" can be used to look through the organs and points to be examined or the test results. When clicking the button, the preview window opens and any organ can be chosen from the table. The button "Auto" enables an automatic selection to do a profound and detailed research of anatomical and histological structures depending on the presence of expressed changes in the full anatomical sections of the body (Basic Catalogue).

The button "Correction" activates the mode of the intuitive system analysis, corrects the tables with anamnesis data obtained by NLS-analysis. To make entering the complaints easier, you can use the field "Data" which can be called with the button "Anamnesis".

The "ticks" mark the organs to be examined. Depending on the purpose of the study the doctor can correct the examination schedule ordered by the program, add or cancel "ticks" on corresponding items.

# 3.6. Working with patient.

The patient is told to take off metal things from his head, especially earrings, and chains off the neck and watch off the hand, if the watch has a metal bracelet. Finger rings do not hinder. The sitting position of the patient must be comfortable for looking at the screen and for holding the electrodes in hands.

After all the above mentioned steps are done, we can "include" the tested patient into the system for conducting our investigations.

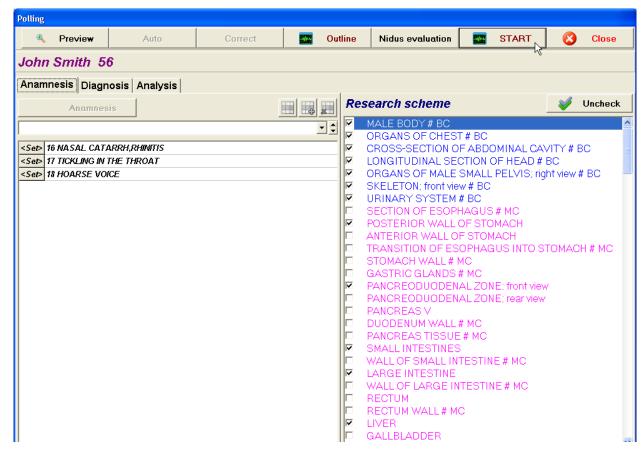
Before beginning of the investigation, put the headphones with magnetic inductors on the patient sitting in front of the device, according to headphones marks: "R" to the right temple area, "L" to the left one. Electrodes also have a red mark on the right hand electrode. Set up a *high frequency electromagnetic radiator*. The high frequency radiator is to set symmetrically concerning the magnetic inductors (sensors) being put on and goes above the haired part of the head.

The further steps must be preparatory explained to the tested patient. During the test the tested patient and operator may have their dialog.

# 3.7. Conducting of investigation.

In section 3.5 we have completed the gathering of data. Now we click the button "**Auto**" and then the button "**Correct**" in the top row of the form "**Polling**".

In the window "Research scheme" appears the list of all the organs and systems which can be examined:



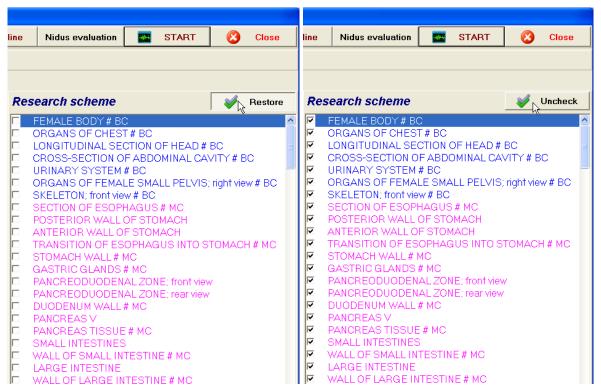
The selecting and exclusion of organs in the list "Research scheme" is made by setting and removing of checkboxes located to the left of the organ names. To do that, put the cursor to corresponding organ and click on it with the left mouse button.

One can carry out investigation of all systems or separate systems of the organism. It is desirable, always to investigate the Base Catalogue (in the top, the first 7 items are marked by BC sign). The names of the organs that belong to certain systems are highlighted with the color assigned to this system.

It is possible to investigate the whole organism or particular organs and their systems.

The button "Uncheck" deletes the plan of examination of all organs in the list.

The button "Restore" restores the plan of examination of all listed organs.



When the **Research scheme** is done, one can start the investigation itself. To do that, click the **Start** button in the right top corner of the **Polling** window.

If the window appears

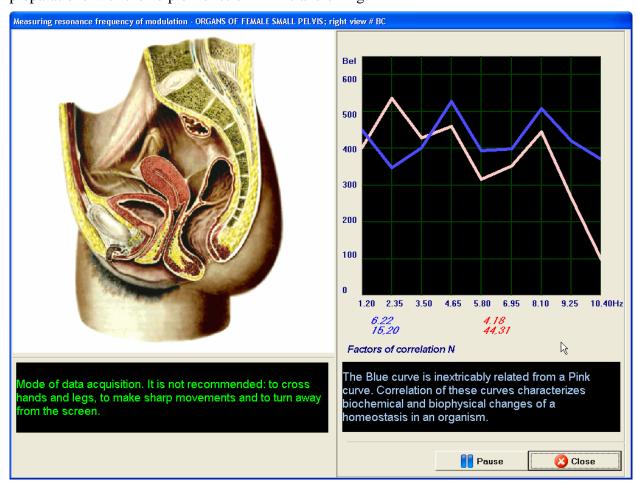


it means you forgot to press **Correct** button. Press the **Correct** button, then press the **Start** button and investigation will begin. The **Start** button starts the investigation of organs marked in the **Research scheme** list; not marked organs are missed.

If magnetic inductors (headphones) are not on the head, or electrodes are disconnected, the message will appear:



Before clicking the button **Start** it is necessary to place headphones on the head of the client, to give him electrodes in hands: marked red in right, marked black in the left hand (when working with models 09M and 11S). It is necessary for correct and exact getting of information. If this message appears, but headphones are placed, and electrodes are in hands of the client, it means the power of the device is off or the device is not connected to the computer. Pay attention to this message – The interfacing can be easy disturbed. Before beginning the test of each organ, the program "Dianel" must receive an answer from the bio object through the device "Biolaz-Oberon" or "Dianel". Thus to place headphones on the head of the client and to give him electrodes in hands is necessary before to start Research, sittings with INF-influence, VRT or making preparations with the help of function INF- transferring.



After a correct beginning of the diagnostics sitting, on the screen appears the window **Measuring resonance frequency of modulation.** In the left part is placed a pulsing picture of the organ selected to be tested. In the right part is displayed the plot building of standard frequencies amplitude distribution of the measured signal corresponding to the given organ.

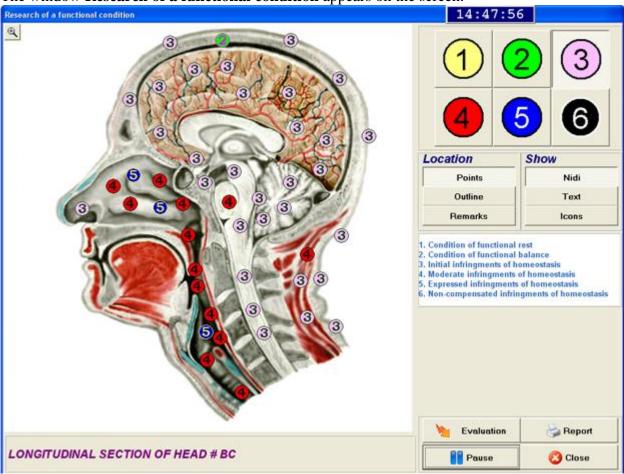
In the right upper corner the following control buttons are placed:

**Pause** - stops the testing. After being pressed turns to the button "Resume", for continue the automatic investigation.

Close - closes the window Measuring resonance frequency of modulation and interrupts testing.

After the program module finishes its work, the plot of standard frequencies amplitude distribution of the measured signal corresponding to the given organ is built, the program automatically switches to the next processing mode.

The window **Research of a functional condition** appears on the screen.



### Buttons group **Location**:

When pressed, the location of corresponding elements can be determined Buttons group **Show**:

When pressed, the displaying of corresponding elements can be determined

**Pause** - the testing can be stopped. When being pressed, it turns to the button **Continue**, which must be pressed to continue the automatic investigation.

### **Report** - to be printed

Close - to close the window "Study of functional condition"

In the mode **Research of a functional condition** the program measures the intensity of the pathologic process in surveillance points having their standard location on the organ.

To have a maximal accessible visualization, the results are evaluated using a six-point Freindler scale and their colored symbols appear in the right part of the window.

The method allows to estimate the condition of each organ, of its various sections and cells at 15-30 locations (points) by 6-point digital scale that allows to reveal the spectral processes corresponding to those or other diseases with different degree of reliability including the most insignificant, latent or beginning pathological processes.

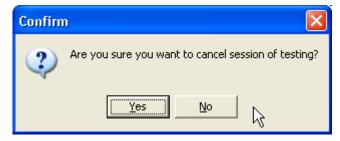
1. Level of latent functional activity	3. Characteristics' shift to a higher level, stress condition of regulation systems	
2. Level of optimal regulation	4. Asthenization of regulatory mechanisms	6. Decompensation of adaptation mechanisms, evident pathological conditions

Corresponding markers are placed in the right part of the window **Research of a functional condition** in the surveillance points located on the tested organ. The markers "1", "2" mean a conventional norm, the markers "3", "4" mean disorder of the function, the markers "5" and "6" can mean an organic pathology or an evident disorder of the function.

After all the surveillance points of the given organ are evaluated, the program begins to test the next section – according to the selected testing diagram and then changes to the previous window: **Getting of resonant response** and the whole cycle runs again to envelop the investigation scheme you have chosen.

# 3.8. Operator's activity during the investigation

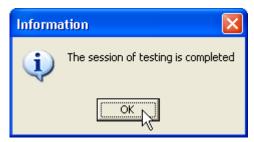
- 1. Explain to the tested patient the pictures on the screen of the monitor, the meaning of color symbols or curves when using the program;
- 2. If necessary, pause the test: click the button **Pause** during organ test, we can pause researching, to correct gauges on patient, then press **Resume**, and research will continue.
- 3. If necessary, pause the test: click the button **Pause** during organ test, then **Close**, in the appeared window click **Yes**. The investigation's process will be stopped.



If we are in the window **Polling** and it is necessary to continue our investigation, we have to click the button **Start** again. Thus the process of investigation will be continued.

# 3.9. Operator's activity when the investigation is over.

When the program runs to the end according to the investigation scheme you have chosen, the following message appears on the screen:



You have to click the button **OK.** The test is over. Now the electrodes can be removed from the tested patient.

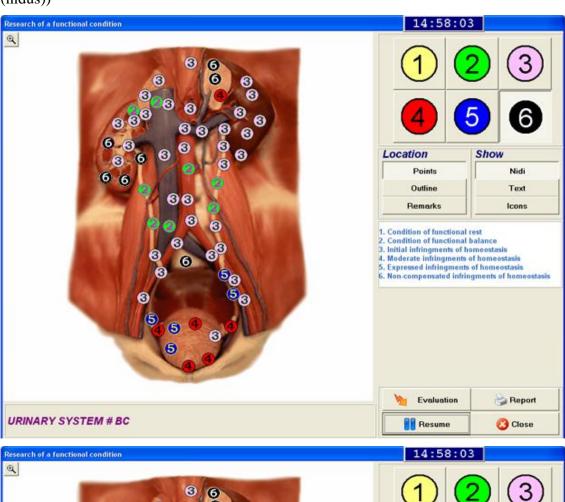
# **Function Evaluation of foci (nidi)**

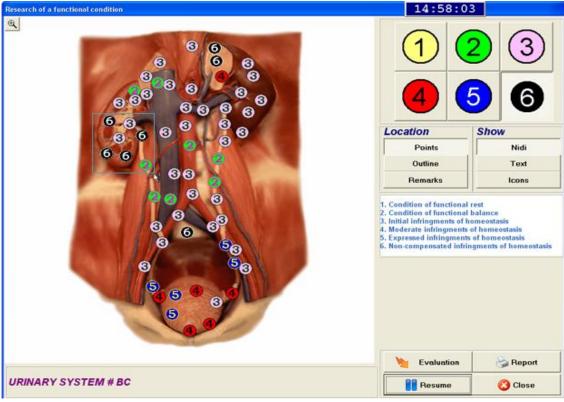
Just after the finishing of the main investigation of organs we can carry out an additional test of a virtual focus of the organ to be investigated. To do this we have to click the button **Outline** in the window **Data gathering** just after finishing of the investigation without changing for other

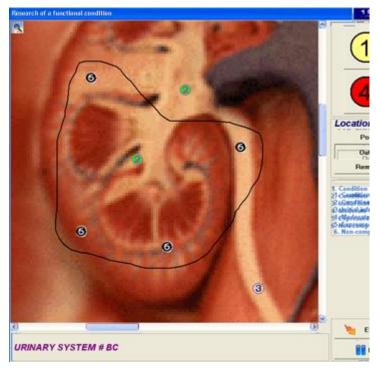
# The window Research of a functional condition with the "image" of the organ.

We click the symbol "+" in the left corner of the organ's "image". We select the allocation of the zone and increase it (by clicking the left mouse button). We draw out the necessary area of the nidus by previous clicking the left mouse button, then we click the left mouse button again.

Thus the outlined area will become closed and be ready for testing (investigation of the focus (nidus))





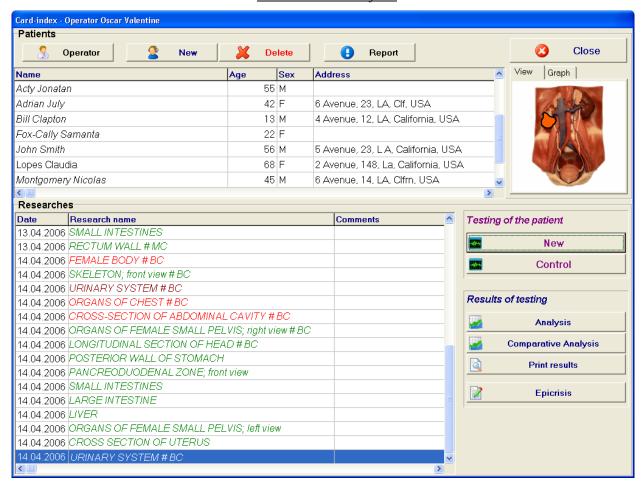


We click the button **Close** in the right lower corner and come to the window of the form **Data** gathering. In this window we click the button **Investigation of nidi** 

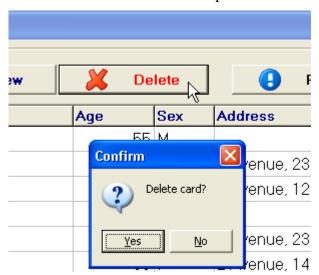
The evaluation is carried out automatically, the unmarked organs and organs without nidi are missed. After the marked nidi are examined, the message about finishing of investigation

# 3.9. Analyzing the results.

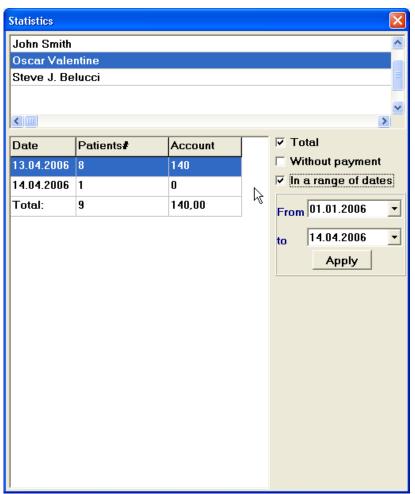
So, we are in the window of the form **Card index of investigations**. First, let's say some words about the functions of the form *not considered before*.



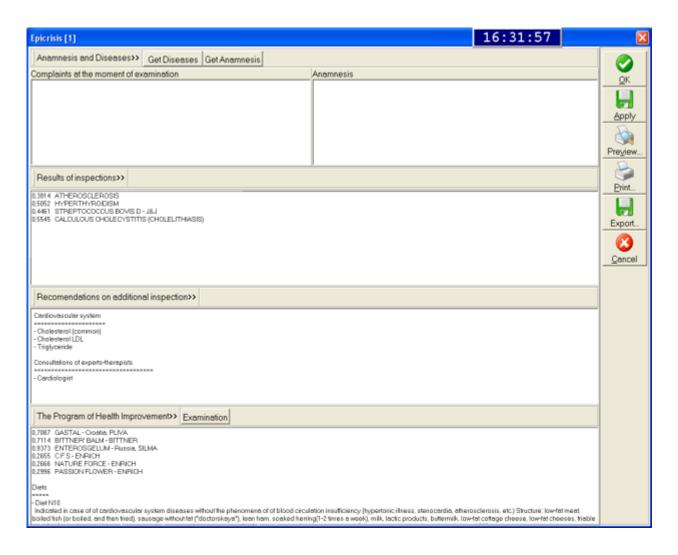
**Delete**- the Card of the selected patient to be tested can be deleted.



**Report**- allows to carry out a statistical analysis of time spent on investigation and of the number of tested patients and of the number of investigations being made by one operator and by all operators together; it also allows to make a financial analysis of the activity of the diagnostic section in the required range of dates.

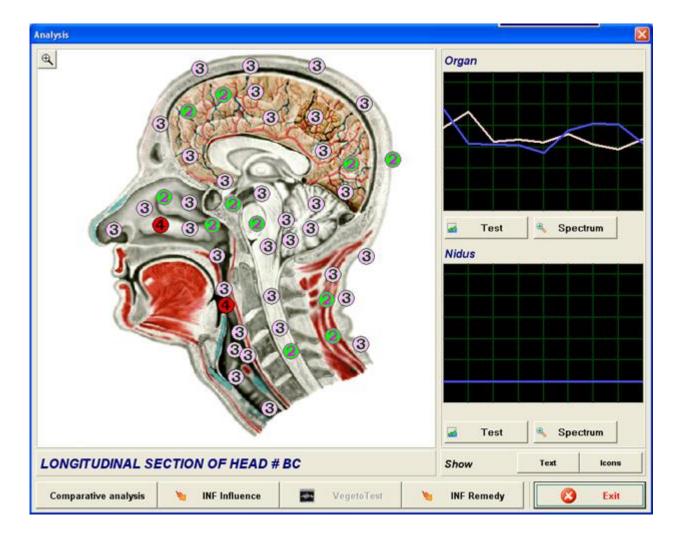


Besides, one can move the cursor on the word **Epicrisis** in the right lower corner of the form and then click the left mouse button to see epicrisis of selected patient.



Let's continue to do our "steps" and carry out the analysis itself.

First, let's look at the list of investigations names we have got as result of the test being carried out. We select the first of them in the list and click the left mouse button on **Analysis** in the section **Test results.** The form **Analysis** appears on the screen of the monitor.



In the left part of the form, there is an image of the investigated organ. In the right part of the form you can see control buttons of the program:

The **Text** and **Icons** buttons switch on displaying of corresponding elements on the projection of the organ.

The **Comparative Analysis** button allows a comparative analysis of investigation results when the tested patient had a case monitoring and also when the preparations have been VRT- tested (vegeto-resonance test). It also allows estimating the changing of the condition of the organ in comparison with its initial condition, for example: "Reduction of the nidus area by 80 %, Strengthening of compensatory reactions by 60 % etc."

**INF influence** button switches to the mode that allows providing therapeutic effect on projection zones of the damaged organs with help of laser scanner. To do that, specify the center for influence on the organ projection and click the button **Evaluation**.

# **Vegetative resonance test (Vegeto Test, VRT)**

The button **Vegeto Test** switches on the mode of the vegetative resonance test. This mode opens wide opportunities, allowing to include into the measurement circuit the own electromagnetic oscillations of the tested patient, electromagnetic oscillations of preparations belonging to the test kit (internal VRT) or electromagnetic oscillations registered with the help of an energy - and information –transfer-unit (bio-resonant chamber (can): a little glass) (external VRT) and to define the efficiency and, their tolerance when being taken by the patient and the allergic overburdening of the patient's organism. To carry out the VRT using a preparation that is absent in the Catalogs of etalons, allergens, health improving agents and homeopathic preparations, one should switch to the **Analysis** mode, put the examined preparation into the resonant chamber, click the **Vegeto Test** button and enter the name of the tested preparation, then click the **OK** button. For carrying out the VRT with the help of the bio-resonant chamber only industrial

produced pharmaceutical preparations and dietary supplements which have corresponding packing can be recommended. It is desirable to have these preparations as solutions in little glass containers, which have to be put into the resonance chamber to be tested there. When carrying out the VRT, the following rules must be fulfilled: the tested patient should sit as recommended in item 3.6: the magnetic inductors must be on, the electrodes must be in hands; the little resonance chamber has its location in front of the tested patient.

The dynamics of vegetative reaction of organism to certain preparation is best estimated in the **Comparative analysis** mode that calculates the strengthening or weakening of compensatory reactions of organism in response to contact with the tested preparation.

The internal **Vegeto Test** is carried in the **Standards** mode. The preparation is selected from the standards list (where it is already saved as digital model) with the left mouse button. The mode starts by clicking the **Vegeto Test** button.

The results obtained when carrying out the BRT or the INF-influencing are listed in the end of the list of examinations the tested patient has had and are placed in the window **Card index of the investigations.** 

The button **INF Remedy** allows writing every preparation on the matrix.

There are buttons **Test** and **Spectrum** near to the diagrams of the organ and its center of alterations. By clicking the **Test** button, the form **Etalons** (Standards) opens with the appropriate diagram. The **Spectrum** button zooms the diagram.

That allows the operator to comment the virtual image of selected organ and its alterations.

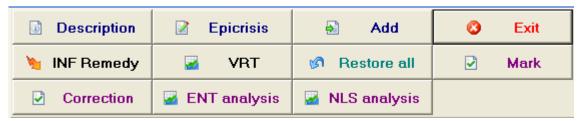
Click the **Test** button (under the word "organ") for the selected organ to get into the **Etalons** form for the given patient.

### **Control elements of the Etalons form**

In the left lower part of the form **Etalons**, there is a field that displays a diagram plot of the object observed. There are following control elements near the plot:

**Spectrum** - displays the diagram plot obtained during the investigation of observed object

**Test** - displays the diagram plot of selected standard process

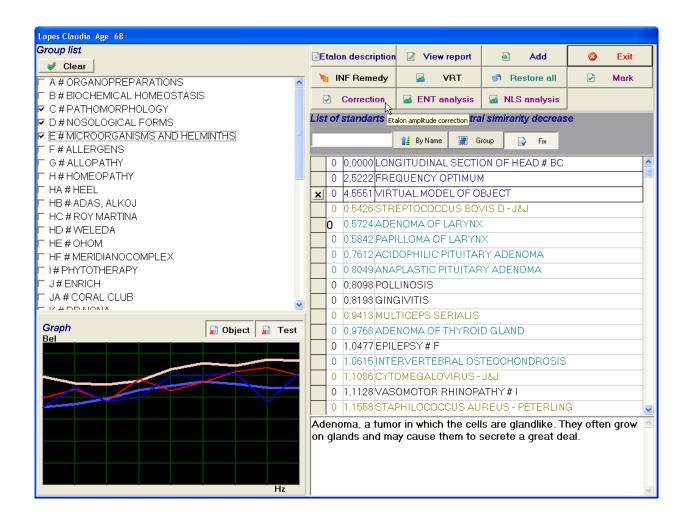


In the right lower part is located the area for displaying the standards **Etalons**. When clicking the button **Description**, the displaying area of the selected etalon enlarges. The button **Correction** enables a virtual activation of the pathological process. The process can have its remission stage but we are interested in an active process. When clicking this button, the selected etalon process can be adjusted to the spectral characteristics of the object being studied.

The button **INF Remedy** enables the recording of every preparation on a matrix.

The button **Epicrisis** - (open the epicrisis to edit it)- on the screen is displayed the list of selected etalons to be printed.

The button **VRT** - the vegeto-resonance test mode can be used.



A great number of various pathological processes are stored in the computer memory, including their variations in degree of evidence, age, sex etc. By registering frequency characteristics of an organ, the diagnostic equipment can compare them to the sample by their spectral similarity to standards (healthy organ, pathologically altered tissues, infection agents) and thus reveal the closest pathological process or tendency to its occurrence.

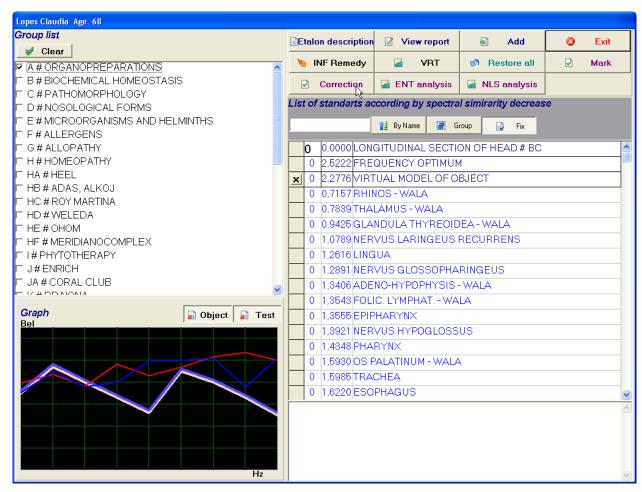
With the help of the analysis, you can *follow up* see the condition of combined spincharacteristics of electromagnetic response signals coming from the tested patient; they are displayed as rose colored (S) and blue colored (N) diagrams on the screen. When looking at the diagrams, we can define to which of etalon processes it is closer and look for the value of the correlation between the etalon process and the diagram, recorded from the tested patient.

#### **ORGANOPREPARATIONS Group**

It contains standards of spectral characteristics of healthy tissues of organism.

In the **Spectronosodes groups** below, the standards are listed by decrease of spectral similarity with investigated object. The healthy tissues practically have no dissociation between N (North) and S (South) signals (corresponding red and dark blue diagram plots). The less the correlation between organopreparation and the object, the more intact is the given tissue in investigated organism, and vice versa.

This group is intended to compare the examination results with standard norms within the program. This group can also be used to recommend an organotherapy.

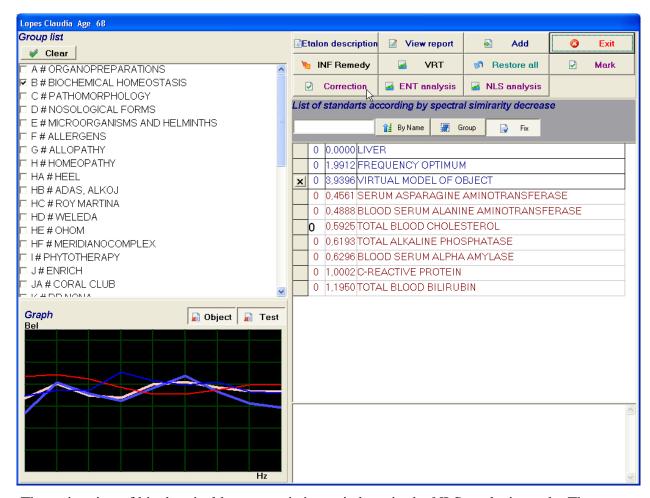


"Organopreparations" are spectronosodes of normal organs. If their names are highlighted by light blue color in the "Standards List" window, that means deviation from norm, if highlighted by red - no deviations from norm.

# **BIOCHEMICAL HOMEOSTASIS group**

Allows carrying out a qualitative estimation of basic biochemical parameters using the wave functions of tissues of organism.

The group contains the list of all laboratory blood and urine indexes; the frequency characteristics of them are written down in graphical form. This group is used to fix the quantitative contents of blood- and urine-cells.



The estimation of biochemical homeostasis is carried out in the NLS-analysis mode. The utmost value of the evaluated exponent on the horizontal scale corresponding to the figure 7 means that the level of this exponent is at the upper limit of the norm or exceeds it. The value of the evaluated exponent corresponding to the figure 1 means that the level of this exponent is at the lower limit of the norm or lays under it. The intermediate values (2, 3, 4, 5, 6) mean that the level of the investigated component is normal or, depending on the figure, trends to increasing or to decreasing.

In the similar way the skew ascending scale in the lower left corner of the screen can be used. In the top of the screen the information about the upper and lower limit of the norm of the exponent to be studied is placed; it is shown as digits and are measured in standard units.

The result of the biochemical analysis with the help of computer are approximate ones and it is recommended to confirm them in clinic by traditional methods.

The "Biochemical homeostasis" is better analyzed by virtual blood test using the "NLS-analysis" button for its conduction.

# Working with PATOMORPHOLOGY and NOSOLOGICAL FORMS groups PATOMORPHOLOGY group.

The group contains a list of the standards of pathological processes. In this section main pathomorphological conditions of various tissues of organism are stored. Every pathological process has its own specific type of diagram.

For example, acute inflammation processes have high-amplitude saw-shaped plots with significant dissociation of signals. The painted line of the diagram is located within the limits of 2-3 points.

In sub-acute processes, the voltage of diagrams decrease, diagrams became more flat and their painted line rises to the level of 3-4 points.

In chronic processes voltage decreases even more, the diagrams look smoothed, and their painted line rises to the level of 4-5 points.

The non-malignant tumors are characterized by diagrams painted line height of the 4-5 points and by tendency of exceeding of S-signal amplitude above the N-signal.

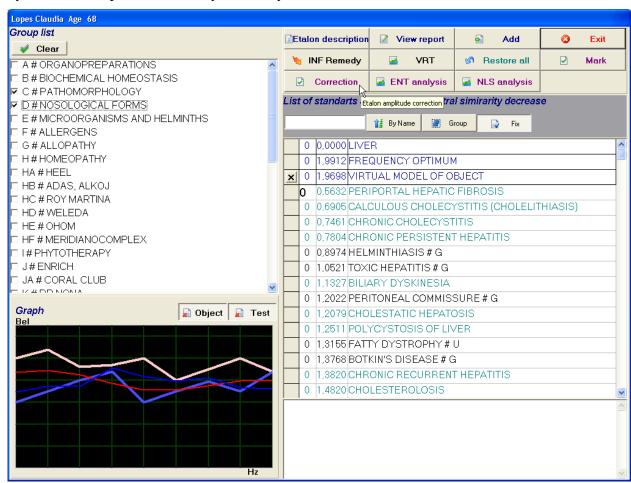
The maliginisation processes are characterized by nearly flat diagrams with insignificant peaks in the area of own frequency of the organ and low value of amplitude (1-1,5 points) of N-signal at the high W-signal amplitude (5-6 points).

# NOSOLOGICAL FORMS group.

In this section, main nosological processes are stored, including wave characteristics of pathological tissue alterations, infection agents, and antigens that can present in the center of a disease.

Select both groups simultaneously by setting ticks with the left mouse button.

As result, the list of standards appears. The operator selects etalons from the list of etalons sorted by decrease of spectral similarity and analyzes them.



Note that the most probable processes are highlighted with red color (that is so if the coefficient value is below 0,4250). When forming the epicrisis, the diagnosis' with the coefficients of 0,6 and less can be taken in consideration as they represent the most probable processes, too.

But it is necessary to analyze all possible processes that can, in opinion of the operator, occur in the given organ of the given patient.

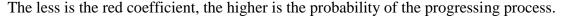
# **Analysis techniques:**

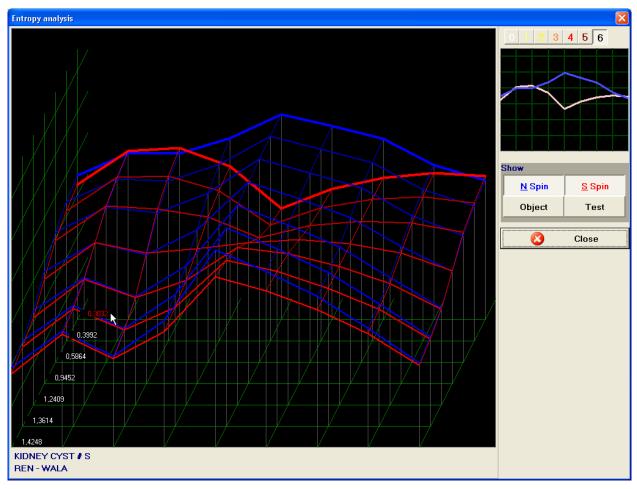
- the most significant are those processes that are located near in the beginnings of the list,
- and that demonstrate decrease of the coefficient after the **Correction** button was clicked (the coefficient values are located to the left of the standard name). Thus the name of the etalon can shift up or down from its initial position.

# a) Test using the option ENT- analysis

The **ENT-** analysis shows risks, probabilities and opportunities of progressing of the pathological process. Click the button, and the window **Entropy analysis** appears, in which the operator can see diagram plots and coefficients.

The higher is the red figure of the coefficient in the diagram (to look for in the right upper corner), the more probably is the disease.





The two-way entropy analysis allows constructing a mathematical model of pathological process. The healthy tissue (organopreparation) is considered as initial (zero) stage, and clinically apparent form of any pathological process is considered as final stage in the model that calculates plots of intermediate stages. Analysis of these plots reveals maximum similarity of any intermediate or utmost stages of the process to the sample of standards that allows to determine the maturity of the process and to reveal pre-clinical pathology.

Note that values of entropy index (the height of the position of the red figure in the plot) equal to 1, 2 suggest the absence of progressing of investigated process, values of 3, 4 are evidence of pre-clinical stage of the process development, and values of 5, 6 testify to the maturity of the process.

The low spectral similarity to the standard (correlation more than 1) under condition of high entropy index (5, 6) testifies to condition of remission of the pathological process on the background of low adaptive reaction of tissue.

Small difference in spectral similarity (correlation) in all the range of entropy indices from 1 up to 6 testifies to the acute process.

The most similar spectral plot is highlighted by thick line, and its numerical value is highlighted by red color (0,665 in this case). If the entropy coefficient is higher than the absolute coefficient

of the discovered pathological process, the disease course is good, if this coefficient is lower, the prognosis is not good.

To view the plots separately or together, use two blue colored **N** spin buttons and a red **S** spin button. Clicking them will show the corresponding plot.

The **Object** button displays optimal values for the given process.

The **Test** button displays the plot of the initial curve which is analyzed.

To follow the dynamics and prognoses of the process, click the buttons in the red upper part under the numbers 0 to 6.

The button **Close** allows to leave the entropy analysis for the form **Etalons**.

b) Test using the NLS analysis button

The "Nonlinear analysis" is applied in two following cases:

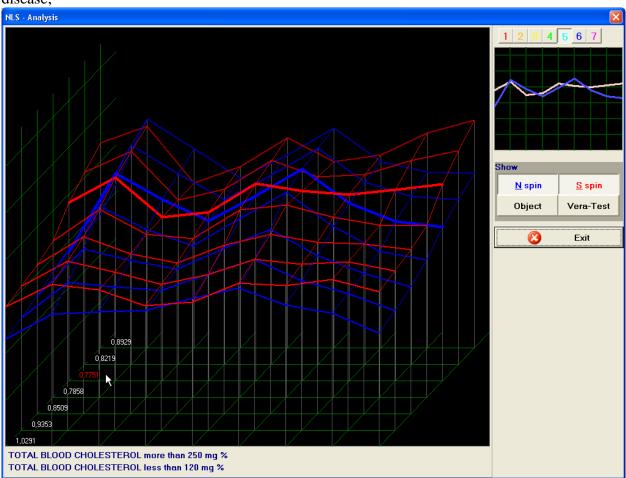
1) For the biochemical homeostasis analysis. In this case, the intermediate position of red coefficient figure in the plot is normal.

The raised position of red figure suggests a tendency to increase of the homeostasis, the lowered position — a tendency to its decrease.

2) For the analysis of oncological processes, carcinomas etc.

In this case the normal position of the red coefficient figure is in the bottom of the plot;

The raised position of red figure means a tendency or risk of progressing of the given disease;



The multi-dimensional NLS-analysis is identical to the Entropy analysis with one exception. In the NLS-analysis, the standards of all the intermediate stages of pathological processed are recorded from real patients at various stages of their disease that allows to construct more precise model of development of pathological process. This is very complicated laborious way of

process recording, so the NLS-analysis is used only for estimation of malignant processes and estimation of biochemical characteristics.

The analysis of oncological processes using the NLS-analysis diagrams allows revealing possibility of development of irreversible character of the pathological process. The increase of N- signal amplitude (blue line in the plot) testifies to strengthening of compensatory mechanisms. After reaching its maximal values, the curve of S-signal can abruptly decrease at its high amplitude values (red line) that testifies, that the adaptation mechanisms are broken but irreversible conditions are developing.

# Further work with the "Etalons" form

Now let's consider the meanings of other groups of standards (etalons) and of the control buttons on the form "Etalons"

MICROORGANISMS and HELMINTHES groups. This group contains the list of microorganisms and helminthes, which are most pathognomonic for humans, and the list of viruses with frequency characteristics written down in graphical form. This group is intended to reveal various pathogenic biological agents the organism contains. In this section, the main characteristics of the infectious agents of bacteria, viruses, rickettsias, mycoplasma, fungi, and helminthes are stored. As a rule, their plots have high dissociation peaks within the areas of own frequencies of tissues that are objects of tropicity of these agents.

# NOSODE OF VIRUSES

the group contains the list of all kinds of hepatitis virus, of HERPES SIMPLEX and HERPES ZOSTER viruses in various potencies with frequency characteristics written down in a graphical form. This group is intended to reveal the above-stated activators.

**ALLERGENS** group. This group contains a big list of food, household, vegetative and chemical allergens with frequency characteristics written down in graphical form. This group is intended to reveal every possible allergens, which are pathognomic for humans.

#### **CONTAMINANTS**

-the name of the group has its origin from the word "contamination" that means the getting of any toxic admixtures into the certain environment (from the Latin word "mixture"). The group contains the list of harmful impurities in the food with their frequency characteristics written down in graphical form. This group is intended to reveal the harmful substances in organism causing various diseases which can have their origin in nutritional products.

# FOOD ADDITIVES

- the group contains the list of additives used in the food-processing industry to improve the organoleptical and technological properties of food with their frequency characteristics written down in graphical form. This group is intended to reveal the harmful impurities acting in organism together with food stuffs.

#### ENERGY and INFORMATION BURDENING

This group contains the list of various adverse factors of environment with frequency characteristics written down in graphical form. This group is intended to reveal the harmful influences of environment and of nature factors on the organism.

#### **MEDICAL REMEDIES**

This group contains the list of pharmacological remedies with their frequency characteristics written down in graphical form. This group is a reference database for doctors and serves for fast searching the list of medical preparations in correspondence with concrete diseases.

#### HOMEOPATHIC MEANS

The group contains the list of preparations of classical homeopathy with their frequency characteristics written down in graphical form. This group is intended to be used by doctor-

homeopath in his work and allows to do an individual selection and to prescribe classical homeopathic remedies.

THE GROUPS HA\*HEEL, HB \* EDAS, ALKOY, HC\*ROY MARTINA, HD\*WELEDA, HE\*OHOM, HF\*MERIDIANOKOMPLEKSY contain the list of homeopathic complexones with their frequency characteristics written down in graphical form. These groups can be used by common practice doctors to do an individual selection and to prescribe homeopathic complexones as accompanying therapy.

#### **PHYTOTHERAPY**

The group contains the list of medicinal herbs with their frequency characteristics written down in graphical form. This group is intended to be used by doctors-phytotherapists or by common practice doctors and allows to do an individual selection and to prescribe medicinal herbs.

Beginning with the group J # ENRICH, in the program are represented biological active supplements **NUTRYCEUTICS AND PARAPHARMACEUTICS** made by domestic and foreign manufacturers; the frequency characteristics of dietary supplements are written down in graphical form. These groups are intended to be used to do an individual selection and to prescribe biological active supplements (dietary supplements).

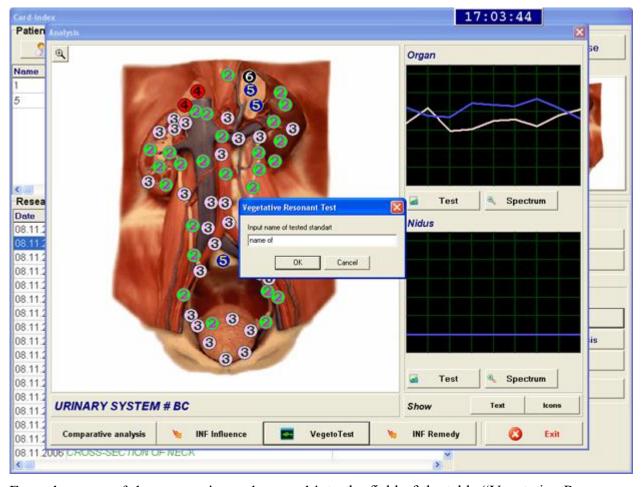
# The own tissue frequencies lay in the following standard frequencies spectra.

- **1.8** skeletal system.
- **2.6** connective tissue.
- **2.6-3.4** skeletal muscles and areole tissue.
- **3.4** smooth muscles, unilayered flat epithelium of the top departments of the gastro-intestinal system.
- **4.2** one-layer flat epithelium of the gastro-intestinal system.
- **4.9** multilayered flat and squamous epithelium, parenchyma tissue of the liver, and tissue of the bile excreting channels.
- **4.9-5.8** epithelium of the kidneys' tissue and reproductive organs.
- **5.8** lymphatic ring of the gullet, top department of respiratory paths, lymphatic system, spleen, ovaries, prostate.
- **6.6** peripheral nervous system, epithelium of bronchi, adrenals, thyroid gland.
- **7.4** central departments of sensor analyzers (except visual ones), sub-cortex structure of the brain, pones, cerebellum, limbic system and parenchyma of lungs.
- **8.2** retina of the eye, visual nerve, hemisphere cortex.

# The Vegeto-Resonance Test mode (button "VRT")

Several windows are used for working:

<u>The 1<sup>st</sup> mode</u>: in the window "**Analysis**" when clicking the button "VRT" appears the table "Vegetative Resonance Test"



Enter the name of the preparation to be tested into the field of the table "Vegetative Resonance Test" which is appeared. Click the button "OK". When doing this an Information transfer unit must be used (bio-resonance chamber: reprinted can (a little glass)).

<u>The 2<sup>nd</sup> mode:</u> the work can be done in any window ("Etalons", "Analysis") with an electronic standard – spectronosode.

The result can be estimated by external attributes — changing of symbol colors in cartogram plots determining the resonant modulation frequency of the tested preparation and by the "Comparative analysis", too.

In both modes, the patient should be connected to the device, as usual.

The "ENT analysis" button allows carrying out two-way entropy analysis of the pathological process.

The "Add" button (add the current standard to the epicrisis) allows to send the selected standards (etalons) to be printed.

The "Cancel" (Cancel all) allows calling off the adjustments of all the standard processes placed in the etalons catalog.

The "NLS-analysis" button allows carrying out multi-way nonlinear analysis of the pathological process (biochemical homeostasis of the system).

The "Select" button allows carrying out a dispersion analysis of an arbitrary chosen standard, by assigning object's properties to it.

When clicking the "Select" button, the program brings the coefficient value of the selected standard to zero and arranges the related processes by their similarity or probability.

It also can search the diseases, related by their matter. It is especially important for the analysis of oncological processes probabilities.

The "Exit" button switches back to "Analysis" form window.

# "Comparative analysis" function

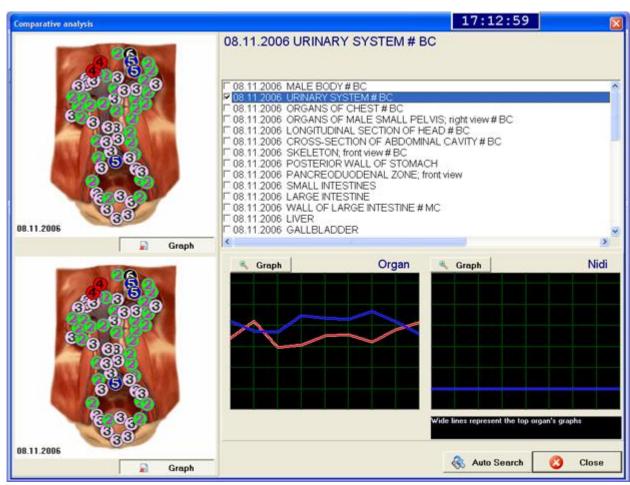
When the above listed actions done, let's begin a <u>comparative analysis</u> of results of initial investigation of the organ comparing them with the results of the **Vegetative Resonance Test** of selected preparations for the given organ. This action is implemented by clicking the **"Comparative analysis"** button, which, if you remember, is located in the "Analysis" and "Card Index of investigations" forms.

Clicking the "Comparative analysis" button opens the "Comparative analysis" window.

The "Comparative analysis" allows determining the virtual condition of the organ in its dynamics by the results of the carried out therapy using this preparation or after the Vegetative testing of preparations, i.e. the influence of each tested preparation on the organ can be estimated enabling to choose the most effective one.

The top snapshot characterizes the initial condition, the bottom one — its time dynamics or change after the influence. The "**Auto Search**" button allows an automatic search of the compared organs in the main Card Index. The lines "*Improvement*" and "*Deterioration*" focus the attention to those tissue structure departments where any changes took place.

In the left part of the form, two identical images of the investigated organ appear. Select in the list the initial investigation of the organ that was afterwards tested by "VRT" or influenced with the energy-correcting procedure INF, by ticking its name with the left mouse button, and click on the "Auto Search" button.



In result, the bottom image of the organ is replaced by its image after being tested with "VRT", and a line with the digital comparative data appears in the bottom part of the form. Compare the characteristics – the data in the line are specified as percentages. Then, if necessary, click the "Auto Search" button again to conduct further comparisons. It is recommended to show to he tested patients the positive results the selected preparations have contributed to – this is a powerful means to motivate the patient to be treated with these preparations.

# 3.11. Selection of health improving remedies

This program has a unique opportunity to carry out comparisons of spectral similarity of any preparations stored in the memory with spectral characteristics of the center of pathological process. In the highlighted area, correlation values of the standards are displayed. If the correlation between standard and center of pathological process is lower than 0.4250 that means spectral similarity to investigated object more than 95% and the standard is highlighted with red color. The clinical significance, i.e. presentation of processes, exists, if the correlation value is less than 0,75.

With the help of mathematical addition of spectrum characteristics of informational preparations, it is possible to obtain an optimal combination of preparations by their similarity to the spectral characteristics of pathological process and, therefore, to select the most effective health improving remedy. The ability to combine frequencies of pathological processes enables experimental creation of virtual models of various pathological processes. The creation of virtual models is needed, for example, for selection of combinations of medicinal preparations that give the best results when being taken in a complex.

The creation of virtual model is implemented by selecting standards in the standards list. To select a standard in the list, click with the left mouse button on the first column near its name. Use right mouse button to exclude standards from the virtual standards model.

If the correlation value of any of the preparations is greater than the correlation value of their composition in the virtual model that means synergism of the preparations. If the value is less, the antagonism of preparation is observed.

The selection of preparations consists in conducting of VRT similarly to the testing of organs considered above.

The sequence of actions is similar to former: click the "Analysis" button in the "Card Index of investigations" form, then click the "Test" button in the appeared "Analysis" form window to get into the "Etalons" form.

(The selection of preparations is carried out in the same way as analysis, by comparison of spectronosodes of preparations with standards of organs and investigation data).

The name of the top preparation in the "Standards List sorted by similarity decrease" has least coefficient value and thus is most suitable.

It is also possible also to use the red point function – on click with the left mouse button it displays compatibility of preparations: at positive interaction of preparations, the coefficient of the "Virtual model" decreases.

#### 3.12. Carrying out the INF influencing

The information influencing is a bioresonance correction of energy of the organism using the method developed by the famous German doctor Fr. Morell. By influence of electromagnetic frequencies produced by "Dianel" equipment, the normalization of energetic condition spectrums of the organ is achieved.

The sensors are placed on the patient, as usual.

The mode of **Information influencing** can be started from the **Card Index of investigations** window. Select an organ to be treated (take into account principles of connections between organs and systems) by clicking on the **Analysis** button, and then click the button **INF influence** in the **Analysis** form window. The following form will appear:



Now point the center of influence (green sight-shaped sign) and click on the **Evaluation** button.

The comparison of results is carried out using the **Comparative Analysis** button. Do as usual.

Changes in pathological processed can be viewed with the help of **Analysis**, **Correction** and **ENT analysis** buttons.

It is possible to conduct 3-5 various influences on the same or different organs during 1 session but not less than every 1-2 days and not more than 10 sessions for a course. The courses of Informational influence are to be repeated not oftener than 1 time every 6 months.

# 3.13. Preparation of "spectronosodes"

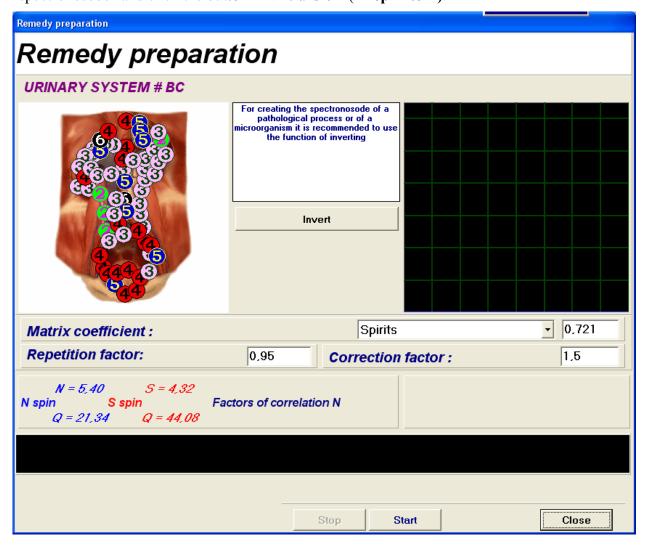
The device uses an original technique of automated production of energy and information preparations "spectronosodes" (spectronosode is a spectral frequency, characterizing any process or preparation). "Spectronosodes" are used for getting the special energy and information preparations, similar to homeopathic ones having a precise aimed action.

The effect of spectronosodes comes to awaking of hidden reserves of the organism. That explains the wide range of influence of the preparations and absence of side effects and contraindications when application of traditional medicinal means takes place at the same time.

The energy and information preparations – "spectronosodes" are produced with the help of the option **INF transfer** using the bioresonance chamber (a bioresonance can, a little glass) circuited with the hardware-software complex "Biolaz-Oberon".

Thus the information and wave influence of the equipment (combined influence of light, coherent laser beam and of acoustic electrical signal) is directed to a medium placed in the resonance chamber (put into a resonance can); as media can be used: water solution, water-alcohol solution, sugar or paraffin globules. In our case are used: distillation water, 50%-spirits, homeopathic sugar globules. The bioresonance preparation made in this way will be given to the tested patient to be taken according to the principles of taking the homeopathic preparations and the bioresonance therapy -preparations.

In the form "Card Index of investigations", click the "Analysis" button and click the button "Test" in the appeared "Analysis" form window to open the form "Etalons". Select the needed "spectronosode" and click the button "INF transfer" ("Reprinter").



The standards for "spectronosode" preparations can be:

- A) Pathological processes, viruses (in the inverted form);
- B) Normal processes and standards of any preparations (in their usual form).

The procedure is based on the principles of homeopathy and Foll's method.

The kind of carrier that is used for recording of information can be set up in the window "Production of Preparation".

The button "Start" begins the production of a preparation; the button "Stop" interrupts it.

The own frequencies of the center of pathology are read by the device, converted into frequencies with inverted polarity and identical shape, and recorded to the matrix (water, alcohol, ethyl alcohol, sugar, paraffin etc.) as an intensified information. Water is recommended as a carrier in case of acute processes therapy. The efficiency of preparations recorded to water matrix does not exceed 2-3 weeks; then preparation loses its efficiency.

The alcohol serves for therapy of sub-acute and chronic processes. For treatment of chronic processes, herbal spirit-based tinctures (motherwort, hawthorn, chaga mushroom, Siberian ginseng, Russian leuzea etc.) are also recommended that prolongs effect of medicinal preparations. The efficiency of alcohol-and alcohol tincture-based preparations lasts 2-3 weeks. For treatment of chronic processes it is possible to record preparations on dairy sugar; in this case the preparation can be effective during 2 months.

Note that the sugar should be slightly moistened with alcohol or water when manufacturing the preparation.

When treating acute processes, preparations are taken 3 times a day by 4-8 drops (grains). Children under 14 years old take by 2-3 drop less.

At treatment of sub-acute and chronic diseases the preparations are administered 1-3 times a day by 2-4 drops (grains). Children under 14 take 1-2 drops less.

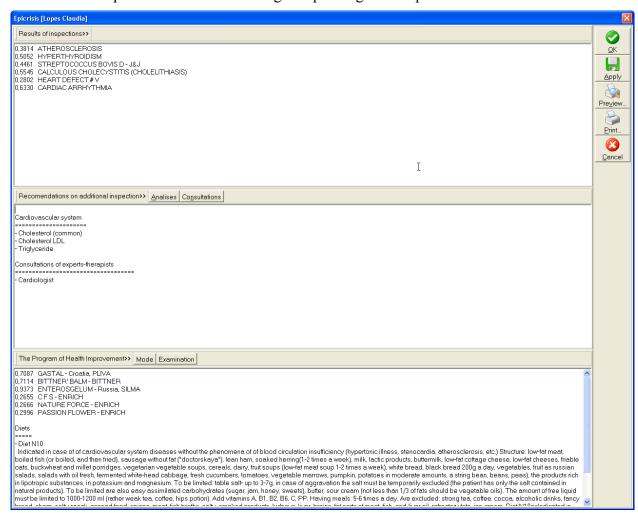
Paraffin's are used for treatment of skin pathology and in case of peripheral nervous system disorders (radiculitis, neuralgia, lumbago) by application onto the skin surface. It is advisable to write on one matrix not more than 1 preparation. The bioresonance preparations are recommended to be taken with successive courses: 1 preparation for a course.

# 3.14. Sending of cartograms to be printed and preparing of the conclusion (Epicrisis).

During carrying out of the analysis and working with the tested patient, the operator sends necessary data, standardized conclusions and names of most suitable preparations or their descriptions to the Epicrisis (using the Copy function) by clicking the button "Add" from the window Etalons.

The etalons added to the epicrisis can be looked through with the help of the function "Epicrisis". This function opens the epicrisis to be edited (changed or added).

The function "Epicrisis" serves for editing and printing of the epicrisis:



The window consists of three editors enabling to select three categories of data: results of the examination, recommendation for additional examinations and a Health improving Program and has the following buttons:



The button "OK" stores on the disk the alterations in the epicrisis and closes the window showing the epicrisis.



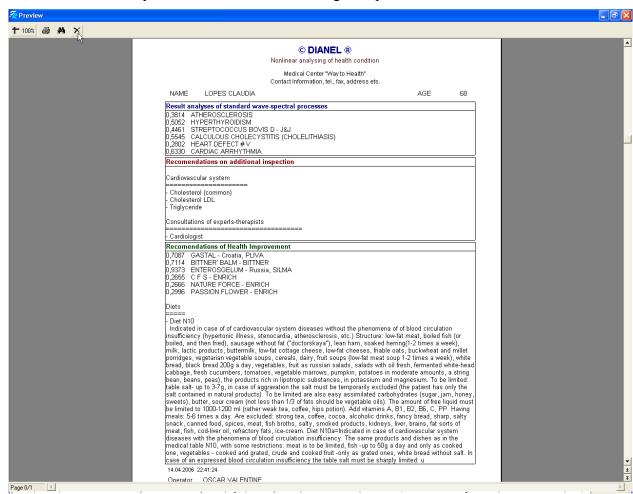
The button "Store" is similar to the button "OK"; it stores alterations but doesn't close the window showing the epicrisis.



The button "Cancel" closes the window for looking through without storing the alterations.



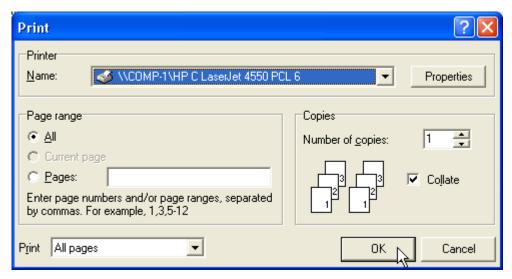
The button "View" opens the window "Pre-viewing the epicrisis":



The pre-view window enables to look through the form of the epicrisis on different scales before printing and also to print the epicrisis.

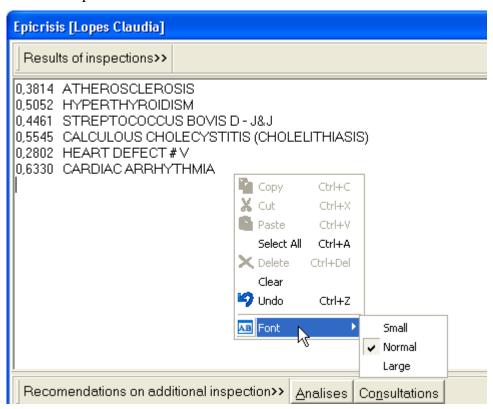


The button "Print" displays the dialog window for sending the epicrisis to be printed.



Comment: The appearance of this window can be different; it depends on the version of the operation system.

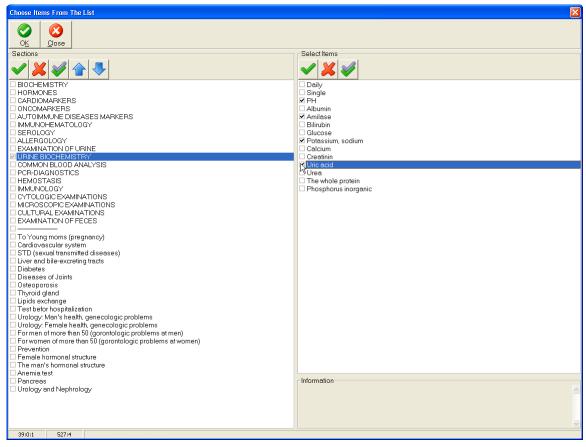
The text editors are standard text editors combined with additional features which can be used with the help of the context menu.

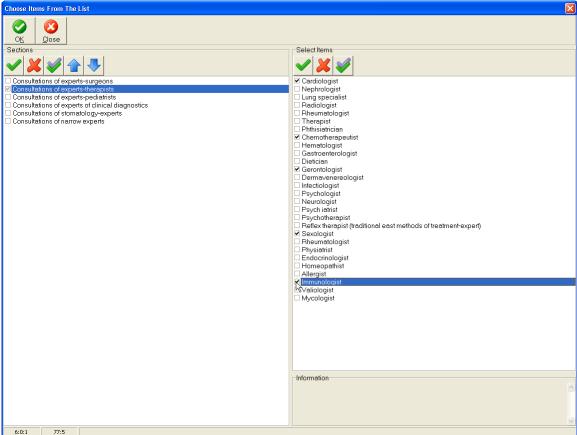


The functions "Copy", "Cut", "Insert" "Select all", "Delete", "Clear", "Cancel" are fully similar to the system functions of the same names, that' why they are not considered in details.

The function "Type" alters the type dimension used in the current editor. The type altering influences only the looking through mode but not the printing mode.

In the form "Epicrisis" in the window "Recommendations for additional examination" the functions "Analysis" and "Consultations" are accessible; these functions are text pattern to be inserted into the text of editor:





The needed lines can be selected with the help of corresponding flags or with the buttons



The button "Select all" marks all the lines in the list to be inserted.



The button "Cancel mark" removes the marks from all the elements of the list.

The button "Inversion" makes an inverted marking of the elements. This means that the mark will be removed from the element selected before the inversion and vice versa.

When clicking the button "**OK**", the selected elements will be inserted into the window of the editor and the window for selecting analysis from the list will be closed.

When doing analysis of the cuts and organs of the tested patients, lots of information are gathered. The names of the spectral similar etalon processes must be creative remade, ordered in groups and in logical sequence. In medicine institutions the classification orders can be applied, for example MKB-10.

It is desirable, to insert the coefficients of conformSity and similarity of processes.

After that it is necessary to give to the tested patient recommendation about his regimen, diet, additional examination (if necessary) and about improving his health; the information to this recommendation is stored in the part "Health improving program" in the window "Epicrisis"

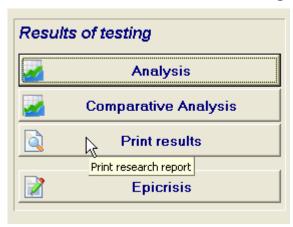
To the tested patient must be given the main recommendations regarding his health problems.

The printing can be done direct from the window "Epicrisis" of the program by clicking the button "Print" or one can make copy on a special "Firm" form.

When being printed from the program, all the spectral processes inserted into the epicrisis are alphabetical ordered.

Click the button "Close" in the window "Gathering data" ("Polling"). The window of the form "Card index of investigations" will appear.

Now we have to click the button "Printing the results" in the right lower corner of this form:



This action prepares the obtained results to be printed. You can begin the analysis and send the cartograms to be printed.

# **3.15.** Control testing (Monitoring)

If the tested patient comes again, the doctor and the data base of the tested patient must be called up to find the results of examination the patient has had before.

Find the patient in the database of the patients, tested by a concrete operator, and select the according line with the cursor calling the previous investigation in this way.

If there is no patient's data in the database, they must be entered from the archive or from diskette. If there is no information on patient at all, conduct the investigation as the first one. However, the fact of former treatment (if it was carried out) must be taken into account as subjective or objective estimation of its efficiency.

After that, in the "Card Index of investigations" in the field of "Testing the patient" click the "Control" button under the button "New".



In result, the "Data collection" form window opens.

Further all the necessary investigation steps must be done.

The investigation can be stopped at any moment (with help of buttons "Stop" and "Card Index") and then continued again with the help of the button "Control" enabling the correction of the complaints and anamnesis when working with the tested patient.

# 3.16. Exit from the program complex

After all the works are finished, the program must be exited correctly.



To do that, close all active forms and get into the initial form "Card Index of investigations". Find the button "Exit" in the right top corner and click it.

In result, you get into the "Main menu" front page window where you should click the key "Exit" that is located in the left bottom corner of the screen.

Now out work of the "Dianel ®" software-hardware system is finished.

Do not forget to switch off a power of the computer and "Dianel ®" device and disconnect the equipment if necessary.

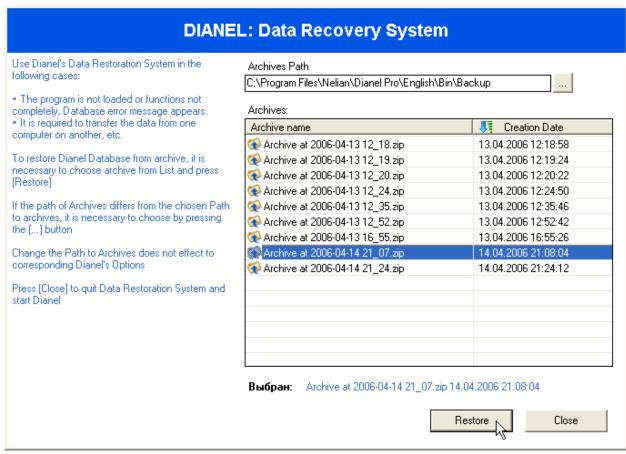
# 3.17. Saving of the investigation - creation of archive

If the messages about mistakes in the database or in the program appear, the function of restoring the database must be used. To do this, the wrong working Dianel-Pro program must be closed and the utility Database restoring must be started.

Click Start→Main menu→Programs→Nelian→Dianel Pro→Russian→Dianel Pro Rusrestoring the data.



To restore the database from the backup copy, select the needed copy from the "List of backup archives" and click the button "Execute".



If the archives are located in the catalogue, other as the set one (for example, if the configuration is to be transferred), click the button and select the required catalogue.

- The archives in the list are sorted by increasing date of creation, i.e. the last archive finds its place in the bottom of the list.
- After finishing the database restoring click the button "Close" and the program DIANEL-PRO will be started automatically.

# We wish you successful working!