



Automatic Noninvasive Express Screening Analyzer (ANESA)



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Automatic Noninvasive Express Screening Analyzer (ANESA)

Device is designed for screening analysis of human body.

Results of the analysis include more than 100 parameters of blood formula, electrolyte metabolism, the system of blood fibrillation, the enzyme system, oxygen assimilation and transportation, CO₂ assimilation and transportation, internal blood flow, cardiomechanics, etc.

- Noninvasive examination
- No blood extraction, no pain
- Comfortable, no stress
- Measure indices of blood in its natural environment
- Results are available in 3-6 minutes
- Monitoring of trends in repeating examinations
- Compact, mobile device
- No restrictions in repeating examinations
- More than 100 parameters give better overview of the state of organism
- Preliminary results from patient database can serve as a help for medical staff in stating of diagnosis

ANESA doesn't replace biochemical laboratory analysis and gives the information about the state of health. The quantity of certified parameters varies in different countries. Other parameters are used as recommended ones.

Principle of function of Automatic Noninvasive Express Screening Analyzer (ANESA) is based on measurement of temperature in certain biologically active points of a human body, taking into account other initial data about the patient and parameters of environment. All the information is processed by the software USPIH and is the base for the report/survey with the parameters of health state.

Device has five sensors, which are to be placed onto so-called biologically active points of patients' body.

The following bioactive points are used during an examination:

- on bifurcation of left and right carotid arteries (two points, on neck)
- in left and right axillary regions (two points, in armpits)
- in abdominal region (one point, umbilicus).

Intended fields of the application of the device: family doctors, clinics, hospitals, medical research centers, sanatoriums and other medical institutions.



Models of ANESA

ANESA analyzer is manufactured in different enclosures to meet customer needs and requirements. Depending on used enclosure, there are different complete sets of cables with microprocessors. Enclosures are shown on picture.

Model, where one cable with 5 microprocessors is included into a complete set of the ANESA Analyzer.



ANESA-L/2007, ANESA-L/2007w

Models, where 5 separate cable (each with one microprocessor) are included into a complete set of the ANESA Analyzer.



ANESA -L/2012,
ANESA-L/2012w



The methodology of noninvasive diagnostic has got several patents.

The device was certified in different countries including European Union, Ukraine, Russian Federation, Belarus, Kazakhstan and China, etc.



ANESA-T/2011



The process of an examination on the ANESA Analyzer.

The system can be used by doctors only! Training courses for users are obligatory!
Attention! Before use of the system you have to read carefully the USER'S MANUAL to understand function of the system!



Example patient examination

00001 Patient Name

01.01.2013 11:07:35 00010101

Gender: male Age: 67 Weight: 85 Pulse: 80 Resp.rate: 18 Atm.pres: 737,87
 LCA: 34,12 RCA: 34,68 LAC: 36,02 RAC: 36,56 ABD: 33,78 175,16

No.:	Parameter:	Norm:	Value:
Hemogram:			
1	1 Hemoglobin HGB. g/l	120 - 175	118,72
2	2 Erythrocytes RBC. mm ³	4 - 5,6	3,63
3	4 Leukocytes WBC. x10E9/l	4,3 - 11,3	4,88
4	120 MCH. pg	26 - 32	33
5	121 MCV. fl	81 - 94	91
6	122 MCHC. g/l	310 - 350	356
7	123 CPB (Color index of blood).	0,85 - 1,15	0,98
8	3 Lymphocytes. %	19 - 37	27,79
9	5 Segmented neutrofiles. %	47 - 72	57,01
10	7 Eosinophils. %	0,5 - 5,8	1,45
11	8 Monocytes. %	3 - 11	8,85
12	9 Stab neutrofiles. %	1 - 6	4,89
13	6 Erythrocyte sedimentation rate ESR. mm/h	1 - 14	41,67
Blood coagulation:			
14	10 Beginning of coagulation. min	0,5 - 2	02`08``
15	11 End of coagulation. min	3 - 5	03`38``
16	12 Thrombocytes. x10E ³	180 - 320	289,36
17	86 Fibrinogen. g/l	2 - 4	3,23
18	87 Prothrombin index. %	75 - 104	78,18
19	88 Hematocrit. %	35 - 49	33,38
Electrolyte metabolism:			
20	13 Calcium (Ca) in plasma. mmol/l	2,25 - 3	2,65
21	14 Magnesium (Mg) in plasma. mmol/l	0,7 - 0,99	0,86
22	15 Potassium (K) in plasma. mmol/l	3,48 - 5,3	4,46
23	16 Sodium (Na) in plasma. mmol/l	130,5 - 156,6	140,44
Functional parameters of the stomach:			
24	17 pH of gastric juice.	1,2 - 1,7	1,27
Cardiac work:			
112	108 Cardiac work. Joule	4,1 - 10,39	4,05
113	109 Cardiac ejection. ml	60 - 80	70,07
114	110 Interval PQ. sec	0,125 - 0,165	0,147
115	111 Interval QT. sec	0,355 - 0,4	0,442
116	112 Interval QRS. sec	0,065 - 0,1	0,109
117	113 The myocardial contraction of the left heart ventricle. %	52 - 60	65,79
118	114 Systolic arterial pressure. mm Hg	-----	134,26
119	115 Diastolic arterial pressure. mm Hg	-----	94,91
120	58 Plasma density. g/l	1048 - 1055	1 050,10
121	117 Cardiac work. Joule	0,692 - 0,788	0,78
Hepatic metabolism			
122	118 eGFR [MDRD]. ml/min/1.73m ²	95 - 145	102,2
123	119 Estimated creatinine clearance rate(eCCr)[Cockroft and Gault]. ml/min	95 - 145	107,4
124	124 CysC (Cystatin C). mg/l	0,6 - 0,96	0,79
125	125 BUN. mg/dl	6 - 23	15
126	126 Transferrin.(test!) mg/dl	204 - 380	169,60
127	127 Urine specific gravity g/cm ³	1005 - 1035	1 012
128	128 Chloride mmol/l	98 - 107	111,2
129	129 Ceruloplasmin (CP) g/l	0,2 - 0,6	0,265
130	130 Alkaline phosphatase (ALP) U/L	38 - 119	117,0

Preliminary computer conclusion about diagnosis:

It is necessary to get a consultation of a gastroenterologist (gastroduodenitis?). It is necessary to eliminate a pathology of small intestine.

There is the hypoacid gastritis.

There is the spinal osteochondrosis. There is the derangement of water-electrolytic metabolism. The Ca of plasma is changed (Ca of bone tissue).

There is the hypertension of pulmonary circulation.

Width of the third ventricle of cerebrum.=6,74

The index Tiffeneau is reduced till: 69,6 (Test Tiffeneau.)