



BION, INŠTITUT ZA BIOELEKTROMAGNETIKO IN NOVO BIOLOGIJO, d.o.o.
BION, INSTITUTE FOR BIOELECTROMAGNETICS AND NEW BIOLOGY, Ltd.

Stegne 21, SI-1000 Ljubljana, Slovenia
t: +386 (0)1 513 11 46 m: +386 (0)51 377 388
e: info@bion.si i: www.bion.si

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TEST REPORT FOR THE DIAGNOSTIC CAPABILITIES OF THE DEVICE MARS III

Subscriber:

Bruce Copen Laboratories e.K.
Hainbuchenring 4
82061 Neuried
Germany

Contractor:

BION, Institute for Bioelectromagnetics and New Biology, Ltd.
Stegne 21
SI-1000 Ljubljana
Slovenia

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1. INTRODUCTION

We tested the diagnostic capabilities of the device Mars III. Testing process of used device is based on a resonance test. We tested organ systems in the body through establishing correlation between the known/diagnosed diseases or trouble and the diagnostic results of the device. Its diagnostic capabilities are presumably based on resonance between the patient (or test subject in our case volunteers) and some vibration form within the Mars III (or a computer connected to it) that is later digitalized. The manual states that the higher the value of resonance (given in percents for a specific indication), the more urgently the patient needs treatment. For our evaluation we used averages of the given resonance value (also named percentage of indication in this text as the value is given in percents) for previously determined organ systems on one hand and self-evaluations of our volunteers on the other. For the start we used all percents for the given health endangering indication.

The device gives an option of using 12 levels of a human being. Because it is difficult to make clear diagnosis on higher levels (called emotional, mental and causal body in the manual) and in agreement with the producer, to be as simple as possible and at the same time as close to medical diagnosis as possible, we concentrated our testing only on the physical level (level 1), since it corresponds to real health issues the most, higher levels represent more and more remote potentials.



Figure 1: Mars III diagnostic device

2. TESTING PROCEDURE

After the mutual agreement about the testing procedure, we performed testing at the Bion Institute. We tested 30 subjects with different medical problems. There were 19 female and 11 male test subjects from age 23 to 74. We analyzed 14 different organ systems and teeth (01 Organs and 02 Teeth). Test subjects filled out a questionnaire for all organ systems and evaluated their health status with scores from 0 to 3 (0 – no problem, 1 –there is a small

problem, 2 – there is a problem, 3 – there is a serious problem with severe consequences). They also described the issue so we were not checking an organ system only but also a specific organ (e.g. if test subject had diabetes, we were looking for pancreas and also for some related organs / problems).

2.1. TESTED ORGAN SYSTEMS / ORGANS

01 Organs

- Brain (encephalon)
- Digestive organs
- Epigastric organs
- Glandular system
- Hair, Skin, Nails
- Heart and Circulatory system
- Lymphatic system
- Macrophage system (RES)
- Muscular system
- Nervous system
- Respiratory organs
- Skeletal system
- Sensory system
- Urinary and reproductive organs

02 Teeth

We got the results from Scope 2004 program and used them for evaluation of diagnostic capabilities. The results were in form of percentage on the level 1. We compared results from personal questionnaire and Scope 2004 to evaluate correlation. Germ layers were excluded out because it is hard to make positive diagnosis using that parameter.

2.2. DEVICE SETTINGS

- Trigger: 0
- Level of testing: Level 1
- Range type: %
- Tests:

Main test - 00 Intake clearance test

Main test - 04 Organ status I (all) - 01 Organs - 02 Teeth

Besides the basic agreed test we performed also further tests and analyses to find as much capabilities of the device as possible within the framework of this testing.

3. RESULTS AND DISCUSSION

3.1. BASIC TEST

First, we went through questionnaires and examined which organ system most often appeared as problematic among our test subjects. We found four such systems: a) digestive organs, b) epigastric organs, c) glandular system and d) sensory system (Figure 2). Since the glandular system represents a great part of digestive and epigastric organs, the highest scores with these three (see Figure 2) were expected and also found.

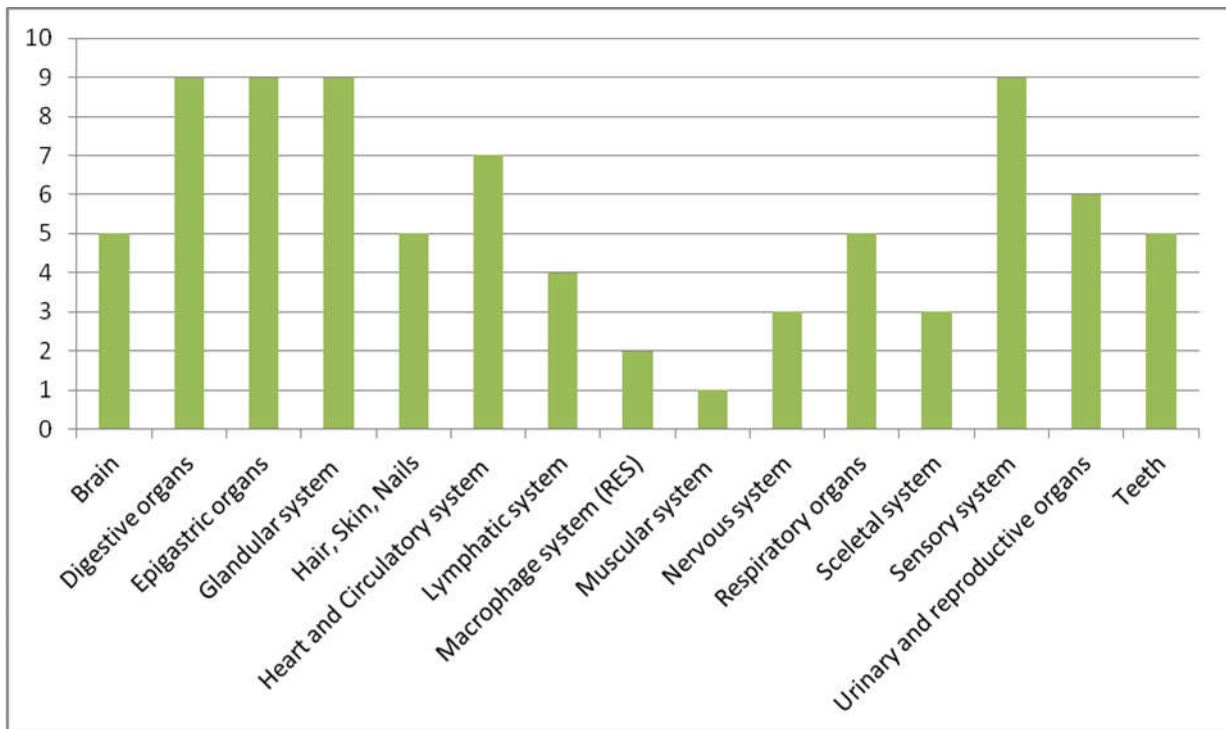


Figure 2: Number of volunteers with organ systems that caused problems and were self-evaluated with scores 2 (there is a problem) and 3 (there is a serious problem with severe consequences) points.

As a pertinent diagnostic result from Mars III we defined *points* for all determined organ systems. The points were evaluated as average percentage for any indication, which means the average percents for the indication (its average resonance value) multiplied by how many times this indication appears and divided by 100. Thus we combined two important diagnostic reports: the number of appearances of some supposedly troubled organ on one hand and the percentage of resonance on the other into one that according to our estimation reflects the health status of the organ under inspection the most reliably. The here defined points therefore correspond to Mars III diagnosis for the given organ or organ system.

First we compared the scores from the volunteers for the same organ systems and their Mars III points, seeking any correlation that would correspond to the diagnostic power: the percentage of correlation would correspond to diagnostic reliability. We found no significant correlations between personal assessment and Mars III diagnostic results (correlation coefficient = 0.27; see Figure 3 for a better idea).

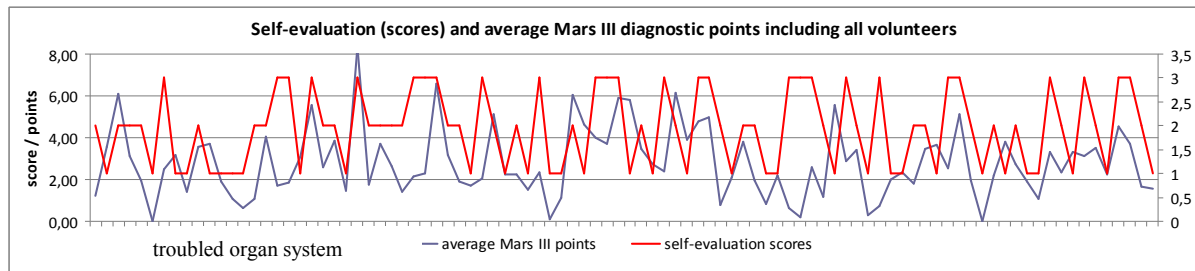


Figure 3: Curves of self-evaluation (scores) of medical problems or troubles and Mars III results in average points for a given indication including all volunteers. A relatively small correlation (parallel raise and fall of both curves) is indicated.

3.2. *ADDITIONAL TESTS*

Since our primary correlation test demonstrated only a very low correlation, too small to demonstrate any true diagnostic power, we performed extensive additional analyses (tests). We were interested in

- a) comparison between groups of volunteers with different health status (2 tests),
- b) agreement between clinical diagnoses and Mars III diagnostic reports,
- c) repeatability of Mars III diagnostic report for a patient with a chronic illness
- d) UF / OF (under function / over function) rate
- e) correlations
- f) t-tests between differently self-assessed groups

3.2.1 *Comparison between groups of volunteers with different health status*

5 volunteers with a lot of medical problems against 5 relatively healthy ones

In the first such test we compared Mars III diagnoses with personal assessments or even medical diagnoses of 5 test subjects with a clear chronic illness. However even this test did not give any statistically significant result. The correlation was in fact even lower than the one of the basic assessment (correlation coefficient = 0.02).

We also tested any significant difference in Mars III average points between volunteers (patients) who have been positively diagnosed with a disease and others who don't have that condition. There was no significant difference, the device identified problems at a similar level concerning the same organ system also for healthy individuals.

Research involving troubles with digestive system

We continued this type of additional analyses with a comparison between two groups of test subjects for the troubles with digestion, like constipation, slow digestion, hemorrhoids and similar disorders as these are among most common health issues. The difference was sought between the group of 13 individuals reported to have troubles and the group of 11 individuals

that reported no such troubles. We found almost statistically significant difference ($p = 0.07$) between the groups, however unfortunately *not in favor* of individuals with digestive troubles. The result shows almost significantly more problems among the second group of test subjects than in the first one (see Table 1 and Figure 4).

Table 1: Average points between individuals with reported problems with digestive tract and healthy individuals.

Average points - problem with digestive system	Average points - healthy
4,42	6,1
Student T test	
0,07	

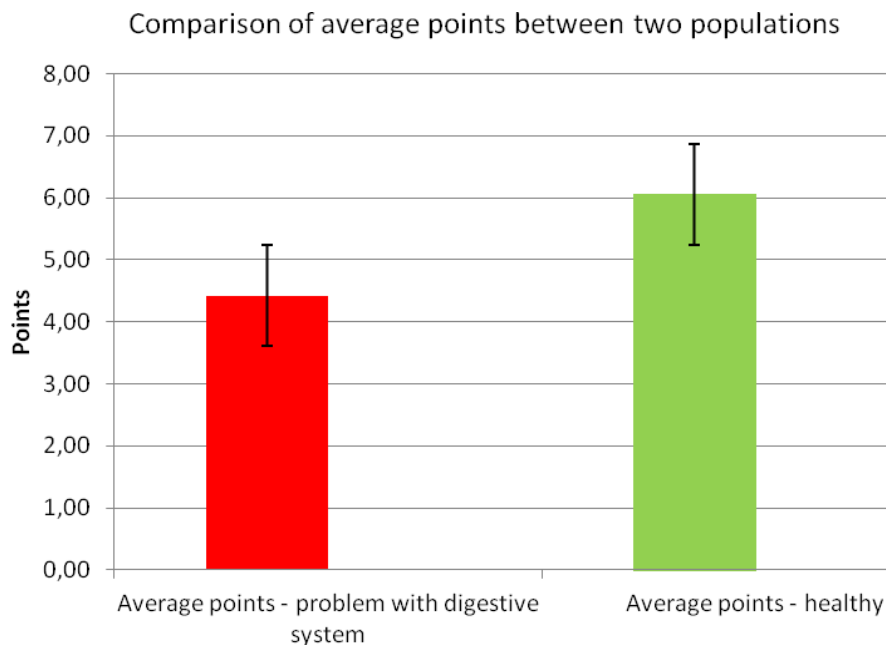


Figure 4: Comparison between average resonance points among two groups of test subjects (red bar shows the group with reported problems and the green one with no such reports).

3.2.2 Agreement between clinical diagnosis and Mars III reports: diabetes, thyroid gland

We further analyzed results from three test subjects (19, 21 and 30) diagnosed with diabetes and searched for any possible pancreas disorders. Other volunteers (1, 2, 5, 8, 10, 12, 20, 24, 28 and 29) that do not have this illness were used as a control group. We compared both groups using our already described point system (percentage multiplied by how many times organ system appears and divided by 100). Using point system allows us to consider average percentage of problem and number of times specific organ appears as problematic. We found no significant differences between the two groups of test subjects.

Table 2: Average points between medically diagnosed subjects with diabetes and healthy individuals – we evaluated any reference to pancreas in both cases. Healthy individuals demonstrated even higher Mars III score (points).

Average points - diabetics	Average points - healthy
0,82	1,1
Student T test	
0,54	

We further examined the volunteer (no. 14) with under functioning thyroid gland (clinical diagnosis) (Table 3). Mars III gave 3 indications among 192 that were related to thyroid gland which is a rather small number. At the same time Mars III evaluated as a 100% resonance some indications that the volunteer has no problem with. **It is possible that Mars III would find some troubles that the volunteer is not conscious of, but at least on the level 1 (most physical) one would not expect such huge discrepancy** (see Table 3: 1.94 points thyroid gland : 4 (organs not identified as problematic by the volunteer)).

Table 3: Data comparison of the volunteer with thyroid problem and the results that were rated by the Mars III with 100%, but not evaluated as problematic by volunteer.

Patient No. 14 - thyroid problem (underfunction)	Lv	%	Hits	Aver. %	Points	Personal assesment
Thyroid results from Mars III			3	64,7	1,94	3
01 Organs -> Lymphatic system -> Lymphatic drainage -> Neck, lower (tongue, thyroid gland drainage)	1	82				
01 Organs -> Glandular system -> Endocrinal glands -> Thyroid gland -> Thyroid gland, left lobe	1	70				
01 Organs -> Glandular system -> Endocrinal glands -> Thyroid gland -> Vesicle	1	42				
Other results from Mars III			4	100	4	0
01 Organs -> Muscular system -> Muscles -> Levator scapulae muscle	1	100				
01 Organs -> Hairs, Skin and Nails -> Skin -> Basal cellular layer (Stratum basale)	1	100				
01 Organs -> Nervous system -> Nerve plexuses -> Coccygeal network (Plexus coccygeus)	1	100				
01 Organs -> Digestive organs -> Large intestine (Intestinum crassum) -> Lymphatic follicles, individual	1	100				

3.2.3 Repeatability

In the additional research we also performed a test of repeatability and reliability of Mars III diagnostics with two volunteers with a chronic disease through a repeated measurement two months after the first one. The expectation was that since the state of illness did not change the results pertaining to it (diabetes) would be very similar. The results are presented on Tables 4 and 5.

Table 4: Testing for repeatability of diagnosis with Mars III (test subject No. 21)

Test subject No. 21 - Type 2 diabetes	Mars III - results	Lv	%	How many hits	Average percent %	Points	Personal assesment
First measurement (23.2.2016)	01 Organs -> Digestive organs -> Pancreas -> Pancreatic tissue, 'b'-cells	1	35	3	21,3	0,64	3
	01 Organs -> Digestive organs -> Pancreas -> Head of pancreas (Caput pancreatis)	1	18				
	01 Organs -> Digestive organs -> Pancreas -> Pancreas, intercalated ducts	1	11				
Second measurement (23.4.2016)	01 Organs -> Digestive organs -> Pancreas -> Tail of pancreas, superior edge	1	52	2	26	0,52	3
	01 Organs -> Digestive organs -> Pancreas -> Pancreatic tissue, centriacinar cells	1	0				

The same comparison was performed for test subject No. 19 with diabetes type 1. It should be emphasized that this is a test subject who has type 1 diabetes for thirty years, and is fully dependent on insulin. The expected result should amount to 100% resonance involving at least the majority of pancreas indications. However, the average resonance demonstrated only around 30%, which is similar to the one in many healthy subjects. Also, this specific resonance occurs only three times during a total of 192 hits for that individual – much higher number was expected.

Table 5: Search results for repetability of diagnosis with Mars III (volunteer No. 19)

Test subject No. 19 - Type 1 diabetes	Mars III - results	Lv	%	How many hits	Average percent %	Points	Personal assesment
First measurement (25.2.2016)	01 Organs -> Glandular system -> Endocrinal secretion (hormones, incretory) -> Insulin (pancreas)	1	37	3	34,7	1,04	3
	01 Organs -> Digestive organs -> Pancreas -> Artery from the splenic artery	1	38				

	01 Organs -> Digestive organs -> Pancreas -> Tail of pancreas, superior edge	1	29				
Second measurement (23.4.2016)	01 Organs -> Digestive organs -> Pancreas -> Pancreas, lymphatic vessels	1	73	4	38,5	1,54	3
	01 Organs -> Glandular system -> Endocrinal secretion (hormones, incretory) -> Anterior pituitary (AP), pancreatropic	1	61				
	01 Organs -> Digestive organs -> Pancreas -> Nerves from autonomic nerve	1	20				
	01 Organs -> Digestive organs -> Pancreas -> Tail of pancreas, inferior surface	1	0				

Both tests for repeatability demonstrated similar number of points, therefore this expectation was fulfilled. However, the number of points in all 4 cases was much too low from expectations for such chronic illness – at least in comparison with other indications. The interesting point here was also that it showed higher number of points for the volunteer with type 1 diabetes in comparison to the one with type 2.

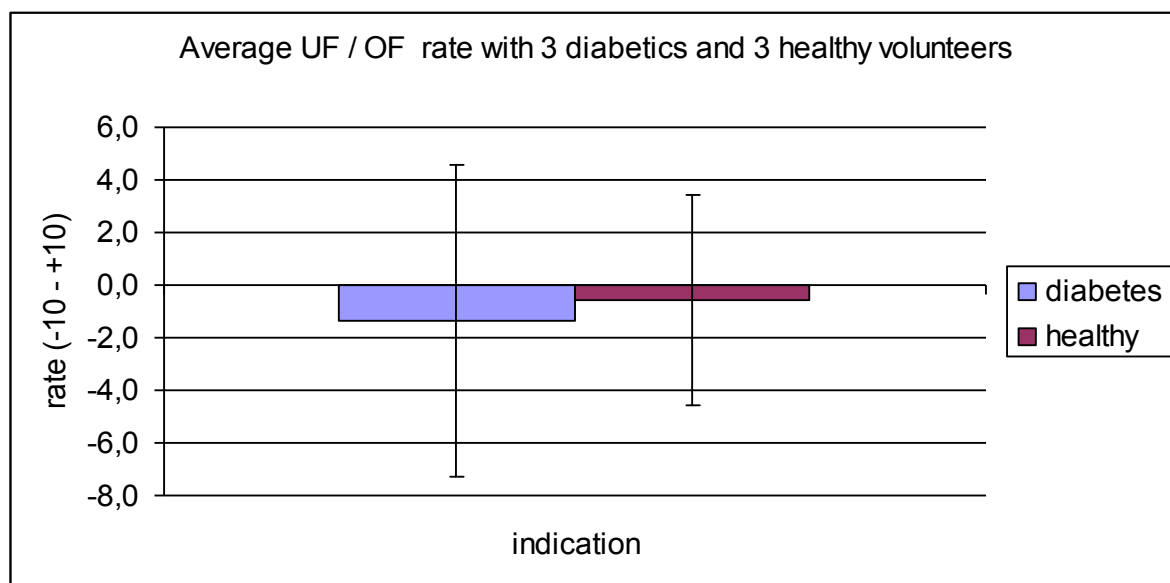
3.2.4 UF / OF (under function / over function) rate

Because of the problems that emerged using evaluation by means of percent, we decided to review the second approach: analyzing the UF / OF (under function / over function) rate giving the rate value. In this analysis we used a group of 3 volunteers with diabetes and compared it to 3 healthy individuals (with no such diagnosis or problems). Our expectation was that with the subject diagnosed for diabetes type 1 (for 30 years) we would have the average score for pancreas involved indications close to -10 as his pancreas is not functioning for so long. With the two subjects diagnosed for diabetes type 2 we also mainly expected under function. We made also a qualitative evaluation of the difference between the average score for the individual and expectation (-1: disagreement, 0: mild agreement or disagreement, +1: agreement), see Table 6 and Figure 5 for more detail. In only 2 volunteers Mars III demonstrated full accord with expectations and in 2 there was a high disagreement. Therefore on the average the device does not give reliable results even in this case. However, this result highly differs from the expected one if the UF/OF values were got randomly. We calculated the H_i^2 value and it demonstrated as highly significant ($p < 0.0001$), from which we conclude the device is not based on a random generator or some other random process that would not have any reference to the test subject (what would be the ordinary expectation from academic science).

Table 6: Average UF/OF scores for 3 medically diagnosed volunteers with different types of diabetes and 3 healthy individuals.

Indication	UF/OF score	Evaluation	Expected if random
diab.type 1	4,2	-1	0
diab.type 2	-7,6	1	0
diab.type 2	-0,6	0	0
healthy 1	-4,8	-1	1
healthy 1	3,1	0	1
healthy 1	0,0	1	1

Figure 5: Comparison of average UF/OF rates in volunteers with diabetes and the healthy ones



On Figure 5 it is seen that the average rates for healthy volunteers approximates expectations, however it is not so with the diabetics, where we would expect much higher average UF (negative values) rate.

3.2.5 Correlations

Up to that point we used rough correlations between points and self-estimates of volunteers in the basic test, as well as many other comparisons in further tests. However, in all these analyses we did not find any true correspondence that would speak in favor of Mars III being a diagnostic device. Consequently we tried to find more sophisticated correlations between questionnaire scores (self-evaluated) and number of device's indications above certain threshold of resonance value (50%, 65% or 80%). Compared were only indications of organ systems that were defined as problematic by volunteers (e.g. respiratory system).

The highest correlations were observed with indications threshold above 65% in groups of 10 and 15 most unhealthy (self-evaluation) volunteers (groups overlap in the sense that the 10 most unhealthy were all included in the group of 15). The correlation coefficient values were

0.72 and 0.56, respectively. Correlations in the group of healthy volunteers were smaller, the highest correlation coefficient was observed with 50% threshold (0.26).

Threshold above 80% seems to be too restrictive.

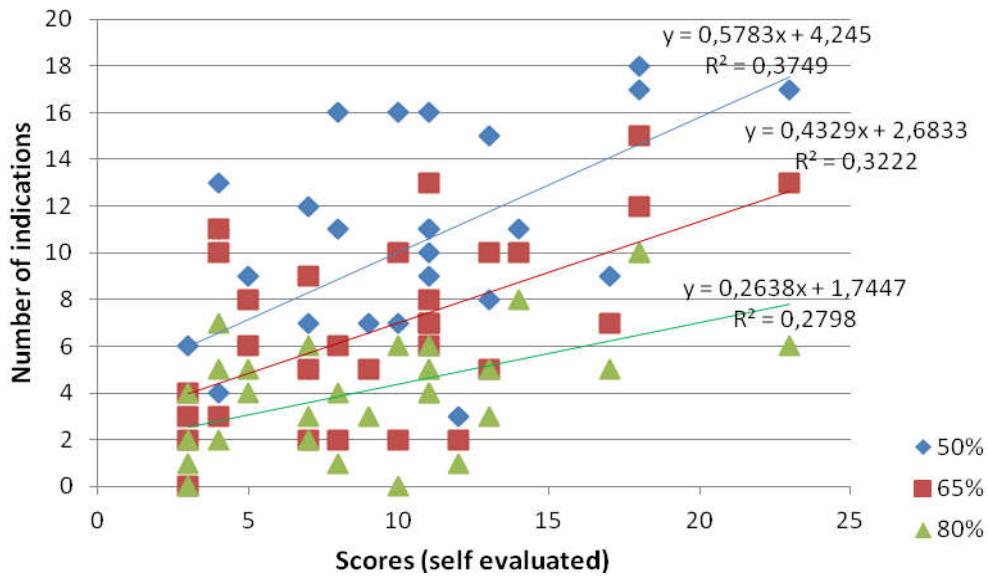


Figure 6: Comparisons between self-evaluated scores and number of indications identified by Mars III device at different thresholds (50%, 65% and 80%).

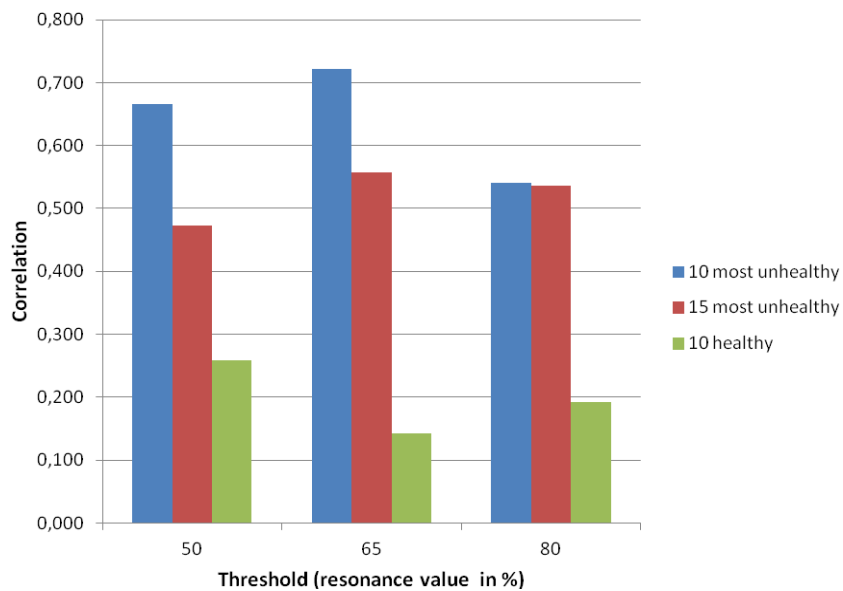


Figure 7: Correlation coefficient between self-evaluated scores and number of indications identified by Mars III device (above certain threshold).

3.2.6 T-test

Using the same type of data and the same sequence of volunteers as with correlations (see 3.2.5), we compared groups with different numbers of unhealthy or healthy individuals according to self-evaluated scores (see Table 7 – columns “scores”) and according to Mars III indications (see Table 7 – columns “Mars III = indications that were determined by Mars but were not identified as problematic by volunteers). In this analysis we did the t-test with different groups according to their self-evaluation scores. Differences were statistically significant in all cases where self-evaluating scores were the basis of group classification. There were no significant differences between different groups of volunteers according to Mars defined indications that did not match the self-evaluated ones (which is OK).

Table 7: p-values of t-test between groups of volunteers above defined threshold of indications (50%, 65% and 80%, respectively; individuals in unhealthy or healthy groups overlap!). Compared are p-values of self-assessed scores (all significant) and other Mars III defined problems (no significance).

	50%		65%		80%	
	Scores	Mars III	Scores	Mars III	Scores	Mars III
7 unhealthy against 7 healthy	0,0063	0,2174532	0,0182	0,24417	0,0193	0,39482951
10 most unhealthy against 10 most healthy	0,0092	0,5150379	0,0406	0,464624	0,0423	0,58253372
15 most unhealthy against 15 most healthy ¹	0,0119	0,8535368	0,0149	0,928212	0,0368	0,4989635

We examined also the reverse situation, namely, Mars III capability to sort the volunteers according to their health status and correlate this evaluation to the self-one (see Table 8). We found a weak *negative* correlation (-0.2), meaning that Mars III by itself is incapable to classify patients according to their self-evaluating health state.

¹ This comparison comprises all 30 volunteers.

Table 8: Comparison of sum of self-evaluated scores from questionnaire and points from Mars III device (see text above). Values with asterisks denote the highest value in each column.

SUM of scores from questionnaire (self-evaluations)	Points from Mars III for the same persons
23*	84,4
18	88,0
18	86,8
17	88,1
14	86,4
13	82,8
13	82,9
12	91,9
11	93,5
11	88,2
11	81,2
11	97,6*
11	84,6
10	89,7
10	83,9
9	96,4
8	97,0
8	88,1
7	86,7
7	89,3
7	91,3
5	80,6
5	87,7
4	90,7
4	84,9
4	96,3
3	85,3
3	88,6
3	86,1
3	96,1

The overall result from the last two paragraphs means that Mars III is able to discern between different self-evaluated groups, but only if the self-evaluated indications are taken into primary consideration (it doesn't work vice versa!). These positive results definitely qualify Mars III as an instrument that is capable of detecting health problems at least on a very rough level.

4. CONCLUSIONS

The basic test did not show any significant correlation between self-evaluation of volunteers and the number of points – although the point evaluation system (as defined at the beginning of Results) was somewhat crude, as it abstracts one number from many different indications. According to our preliminary analyses the situation would be even worse if we were more precise.

Even in our further analyses the diagnostic capabilities of Mars III did not demonstrate themselves. However, certain results indicated that the device is not an equivalent to a random generator and that therefore it has some connection with the volunteer.

The last series of analyses (correlations, t-test) demonstrated that the device is capable to catch some health issues of volunteers. The level of this correlation is too low and crude for a true and self-sufficient diagnostic power, however there is a proof that the device can be connected to the health status of a patient and that it is not a random generator (which could be concluded taking into account only our first analyses or if we inspect the diagnostic power into too narrow detail).

Our overall conclusions, based on all analyses are as follows:

- a) Mars III is not a random generator based device. Therefore it is at least to some measure connected to the health status of the examined person.
- b) It can show only quantitative (overall) health status or imbalance in the body since individual indications in general fail to correlate with medically diagnosed health problems or diseases.
- c) It does not function as a true diagnostic tool for specific illnesses, at least not self-sufficiently.
- d) It could give some clues and hints to a trained therapist and perhaps could be used as a supplementary diagnostic device in this connection. In this case he/she should know the physiology and pathology of the organs into very detail.
- e) The therapist should know the anamnesis from the patient and should seek agreements between Mars III indications as well as the indications following the anamnesis.

Our advices:

It badly needs a hierarchical arrangement of diagnostic data. In the present form it does not allow a gradual crossing from organic system through organs to their finer parts, but immediately casts large amount of specific data which showed as most unreliable.

Since the device shows some rough connection to the examined person, but is on the other hand unreliable, the mechanisms or processes (we do not know how the device is built-up) that stand behind the non-random determination of diagnostic scores should be further developed and the random mechanisms gradually eliminated.

5. REFERENCES

- Rauer H. User's manual for Mars III Multiple Analytical Resonance System Version 5.x. 2012. Bruce Copen Laboratories.