Introduction to capital raising - preambulum

Name of Product: EMOST™ Own Signal Therapy

1. **What is the profile of the company?**
   - developing and manufacturing the EMOST™ Redox 1.1 medical device
   - service of this medical device only, and sales of this device only

2. **How long has the firm been in operation?**
   For 7 years, experience of service are 7 years, scientific researches since 11 years, certification (EU) of Medical Device in 2011

3. **What are the advantages of the current method?**
   - alternative procedure to neurological based diseases
   - chemical agent-free, convenient
   - may be provided as a course (*4-5 treatments, repeated 2-3 years*)
   - effects on hormones and regulators

4. **How does this resolve a particular sector’s problem?**
   - safe method of sensitive intervention in the case of nervous system based diseases
   - does not cause personality disorder
   - no side effects* (*extremely low risks only*)
   - may be a simpler and a more effective therapy than the use of chemical agents and psychotherapy

5. **How would it reflect the volume of sector?**
   The affected population in Europe is 164 million persons, 79 million in the USA (see Annex): panic attacks (rate of populations is 2.5%), anxiety (8.5%), depression (2.6%), sleeping disorders (6.7%), stroke-risk (6.9%), cardiological risk (11.7%), arrhythmia (4.1%), digestive diseases (8.9%), allergy (4.2%), burn-out (11%), alcohol dem. (8%), PTSD (6.7%). *See attached files below*
6. **What is the main benefit and other benefits?**
   - the main benefit: easy-to-use
   - cost-effective way
   - relatively long-term results *(course is enough in 2-3 years)*
   - low number of treatments needed *(one specific course is about 4-5 treatments, treatment is weekly)*
   - no addiction, no defensive reactions in healing

7. **How much capital is needed for the investment?**
   The device: 29,900 EUR + VAT

8. **What is the order of capital requirements?**
   50% at the time of the order, 50% at delivery

9. **What is the payback period?**
   The device: 83 patients (360 EUR/course/patient), 6-8 months
   Marketing: 60% 50 patients
   Wage cost: 60% 50 patients

10. **What is the period for completion?**
    Delivery: 60 days, teaching, training: 60 hours

11. **What financing options are added?**
    50% upon ordering, 50% at delivery, ability to leasing, promotion of job-creation in the EU, option of state-supported financial assistance in medical sector.

12. **Name of a reference, and a photo:**
    Dr. Veronika Hajda (+36 30 999 99 47)
13. The investment capital will support the distribution of the Product in Western-Europe (and in the USA):

   a) the Product is availing of several years of service references and has a recognized market position (*no negative criticism on internet forums during the past 7 years, the central 0-24 call center phone number and the managerial mobile number have not changed and are public also for 7 years*)

   b) in order to meet the growing demand we plan to increase the production capacity, since it the production process is time-consuming and requires high quality hand work.

14. Market position: the Product is a medical device which was registered in the history book of medical science in 2010 after 11 years of research work and 7 years of normal operational application in franchise system. The former version of the device, not certified yet as medical device contributed to the recovery of 45,000 persons in 57 cities of Hungary using 107 pcs of devices (in health-care category). The Product from its better position as a new, certified medical device intends to achieve the same degree of prevalence typically in Western-Europe and in the USA as it has reached in Hungary.

   The new procedure covers nearly 27% of illnesses, its special field of application is neurology, the affected population in Europe is 164 million persons, 79 million in the USA (see Annex), in order to meet the 2,3% market share potential, the 8 million EUR (*worst-case 5,8 million EUR*) corrected revenue of the 3-year business plan 44,000 persons will be sufficient in 2013, 110,000 persons in 2014 and 200,000 persons in 2015, which means that the real potential is hardly exploited. (see below: business/rate of return (ROI) calculations, target countries and volumes)
15. Target groups: based on the Hungarian experiences the medical procedure and the device (EMOST Redox 1.1) built on the new medical principals are aiming at the following groups:
   a) 45-55 age group belonging to ABCD income category, mainly intellectual, medium level managers, primarily women (65%)
   b) medium level and senior managers, sales managers of companies
   c) units, corps of law enforcement organizations (police, military forces, sentence enforcement organs, special operational units /SWAT etc.)
   d) leading sportmen, professional sportmen, key sport clubs
   e) recreational SPA hotels/sanatoria, rehabilitation clinics and private practice
   f) clinics for children.

16. Publications, professional recognitions

   Nineteen Ph.D. scientific researchers are taking part in the research work of our Company. Dr. Attila Erdőfi-Szabó Ph.D., D.Sc., biophysicist, Research and Methodology Director, Executive. Today Doctor of Medical and Health Sciences, University Professor, Invited Researcher of the Medical Radiobiological Research Institute of Russian Federation, Invited Researcher of the American High Technology Center (Washington), Member of Research and Methodological Committee of the Hungarian Association of Sports Sciences, Member of the Sports Innovation Special Committee of the Hungarian Association of Sports Sciences, Member of TIT TS Scientific Information Disseminating Society, Dr. István Bókkon Ph.D., D.Sc. Research and Scientific expert, Director, Pre-doctorial, brains specialist, biochemist, editor of several international scientific journals, Member of the American Society of Biophysicists.
Our company, BioLabor Biophysical and Laboratory Service Ltd. has got several years’ professional experience and also a kind of conservative approach to life. We have gathered skilled colleagues to organize a team in which people can not only look after the patients but are sufficiently open to cutting-edge technologies as well. Our staff and company proprietors work in different areas of healthcare and are outstanding representatives of general practitioners, internists, surgeons, military doctors, natural therapeutics, pharmacists, haematologists, university teachers, scientists, and every colleague has been using our own-produced technology with success in their daily routine for years.


17. Our publications:

18. Outstanding professional acknowledgements

a) In 2010, at the 8th International Congress of Biophysicists 20 of the 720 scientific research teams were nominated, among them 2 Hungarians, the brain research results of our colleague, István Bókkon, and the achievements of Attila Erdőfi-Szabó (Executive, Developer) in the mitigation of phantom pains after amputation.

b) Based on the results achieved in the reduction of phantom pains after amputation the EMOST method was registered in extremely short period of time in 2010 by Nature Precedings.

c) After the scientific presentation held in the Ukrainian State Medical Postgraduate Institute an agreement for joint research works, investments was signed with the Ukrainian State „Zakarpatyia” Regional Development Agency (Office).

d) Almost immediately after our professional, scientific presentation in the Medical Radiobiological Research Institute of Russian Federation an agreement was concluded for joint research work, developments, for the preparation of the introduction of the method/device on state level in the Russian Federation.
19. Outstanding scientific achievement

According to preliminary, professionally competent opinions the EMOST method/device may be suitable for the continuous protection of the health and mental condition of the astronauts during the 32 months First Human Space Travel to Mars envisaged for 2028-2032. The Russian-Hungarian (-American) analysis began in December 2012. [http://biolabor.hu/emost-a-vilagurben/](http://biolabor.hu/emost-a-vilagurben/)

20. Envisaged/prospective order stock:

a) Our Company has state level research and development contracts with Russia, Ukraine which envisage a requirement of 180 devices in Russia and of 60 devices in Ukraine in 2013, the state licensing and registration of the method and the device is finished in Mongolia (Ulan Bator) we plan to use 30-50 devices in 2013.

b) The investment capital will contribute to the safe introduction of the Product in Western-Europe (and in the USA). We have determined 10 target countries for ourselves by opening 3 Model Health Centers in every country financed from investment capital. These Centers (under the names Dr. Ps Center Ψ, or Dr. Happy Care Center Ψ) will serve as first models, will provide normal service, organize media and target group contracts and will cooperate in the selling of devices. Below please find the details of the 10 target countries and volumes.
Demands towards the Investor, or Incubator Project Company in connection with the Partnership

a) using of international relations for the support of the project on governmental, authority and target group level
b) using of international relations for the support of the planned initial public offering (IPO)
c) retaining the value of privileges
d) investor participation in the development of the device to the possible First Human Space Travel to Mars

Any questions are welcome,
Thank you for your attention,
Sincerely,

05.01.2013, Balatonalmádi, Hungary, EU

Dr. Attila Erdőfi-Szabó Ph.D. D.Sc.
www.biolabor-med.com
Professional information

Hormonal, chemical, immune and perception processes are ongoing, regeneration is reducing, and the health potential of the organism is deteriorating under stress in emergency mode. The EMOST Electro Magnetic Own Signal Treatment works as shock wave therapy (EMOST know-how) and assists to overcome the dead point.

Sensor/regulating stimuli of different signal density are received (EMOST know-how) from the free nerve endings of the skin surface of the subject and they are connected (EMOST know-how), variations (EMOST know-how) and slightly changed modifications are made (EMOST know-how) and then are returned through another free nerve ending zone.

The thus returned stimulus directly reaches the neurovegetative and central nervous system where ad-hoc self test is made enforcing by this the regulating system for immediate review and ad-hoc coordination of the processes. Since the received and returned signals remain natural own signals in their content and dynamics and electro-chemical interference also occurs, the retransmitted own energy has enough redundancy to overcome the dead point and to regain balance.

The coordination of the body processes improves the efficiency of the information system of the organism (spreading of neuro-transmitters, operation of synapse), the evoked potential changes contribute to keeping the electro-chemical processes of the body in balance (redox state) and the method as a whole facilitates the replacement of regenerations failed due to the stress and also contributes to spontaneous restoration and keeping of the balance state and even to the improvement of abilities.
Indication: neurology
**EMOST™ method and neurological (brain) and neurological associated disorders**

*LFI-EMF treatments and developments should get more possibility and attention in the application of biophysical treatment of diseases in the future*

1. **Biophysical low-frequency and intensity electromagnetic fields /treatments**

Although pharmacology has made considerable progress in the treatments of various diseases, we should also recognize that in numerous cases pharmacology treatments are ineffective. In these cases, the application of biophysical low-frequency and intensity electromagnetic fields /treatments (LFI-EMFs) can offer new opportunity, because during diverse diseases, living cells not only display altered biochemical processes but also produce altered non-linear bioelectric and bioelectromagnetic complex patterns. It is very possible that the major efficiency of low-frequency and intensity electromagnetic fields (LFI-EMF) treatments is due to the redox processes and the bidirectional communication between skin cells and the nervous system.

2. **Costs for brain disorders**

In 2005, Patrik Andlin-Sobocki et al. presented for the first time overall estimates of annual costs for brain disorders (mental and neurologic disorders) in Europe (Table 1).

In 2007, WHO showed that neurological disorders, (epilepsy, headache, stroke, brain injuries, neuroinfections, multiple sclerosis, Parkinson disease, Alzheimer disease, stress, depression, burn-out, panic etc.) affect up to one billion people worldwide. For example, 50 million people suffer from epilepsy and 24 million from Alzheimer and other dementias worldwide. Neurological disorders affect people in all countries, irrespective of age, sex, education or income. According to World Health Organization (WHO) data, brain disorders were estimated to represent 35% of the total burden of all diseases in Europe. This suggests that the cost of brain disorders in Europe is very high. It was estimated that 6.8 million people die as a result of neurological disorders every year. In Europe, the economic cost of neurological diseases was estimated at about 139 billion euros in 2004.* WHO advocated for the integration of neurological care into primary health care. For many people, primary health care is the only access to medical care they have. In these settings, doctors can use low-technology interventions. Community-based rehabilitation is also an option.


In 2010, *(Olesen J, Gustavsson A, Svensson M, Wittchen HU, Jönsson B; CDBE2010 study group; European Brain Council. Collaborators (70))* presented an updated, more accurate, and comprehensive estimates for 30 European countries (Table 2). This study showed (that the previous study grossly underestimated the cost of brain disorders ) that the total cost of brain disorders (mental and neurologic disorders) in Europe in 2010 was € 798 billion. Direct health care cost was 295 billion, non-medical cost (nursing homes etc.) 186 billion, and the indirect cost (absenteeism from work, pensions etc.) 315 billion. This high cost of brain disorders may be surprising, but WHO data suggest that brain disorders cause one-third of the burden of all diseases and are thus in agreement with the present study [3]. The total cost of brain disorders in Europe in 2010, € 798 billion, is comparable to the cost of cardiovascular diseases, cancer, and diabetes put together. Furthermore, the prevalence and
cost of brain disorders are going to increase because of increasing life expectancy. In particular, the number of patients with neurodegenerative disorders, stroke, depression, and anxiety will increase. Increased focus on research strategies, prevention, and care is necessary to reduce the future cost of brain disorders. Brain disorders are the biggest health challenge of the century posing a serious threat to our social and health care systems as well as to the future of European economy.

Table 1

<table>
<thead>
<tr>
<th>Groups</th>
<th>Global</th>
<th>EU25</th>
<th>EU15</th>
<th>EU10</th>
</tr>
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<tbody>
<tr>
<td>Total</td>
<td>191 609 642</td>
<td>14 857 720</td>
<td>12 379 282</td>
<td>2 478 431</td>
</tr>
<tr>
<td>Per 1000</td>
<td>30.8</td>
<td>32.8</td>
<td>32.7</td>
<td>32.7</td>
</tr>
<tr>
<td>%</td>
<td>12.9%</td>
<td>25.3%</td>
<td>26.3%</td>
<td>21.10%</td>
</tr>
</tbody>
</table>

Table 2. (Continued)

<table>
<thead>
<tr>
<th>Disorders</th>
<th>Estimated number of subjects affected (millions)</th>
<th>Cost per patient (CPPP 2010)</th>
<th>Total costs (million CPPP 2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct health care costs</td>
<td>Direct non-medical costs</td>
<td>Indirect costs</td>
</tr>
<tr>
<td>Traumatic brain injury</td>
<td>3.7</td>
<td>2697</td>
<td>893</td>
</tr>
<tr>
<td>Trauma (incident)</td>
<td>1.2</td>
<td>4158</td>
<td>52</td>
</tr>
<tr>
<td>Trauma (prevalent mod/sev)</td>
<td>2.5</td>
<td>2002</td>
<td>1294</td>
</tr>
<tr>
<td>Total</td>
<td>380.1</td>
<td></td>
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</tr>
</tbody>
</table>

GAD, generalized anxiety disorder; OCD, obsessive-compulsive disorder; PTSD, post-traumatic stress disorder; ADHD, attention deficit hyperactivity disorder; ALS, amyotrophic lateral sclerosis; CIDP, chronic inflammatory demyelinating polyradiculoneuropathy; GBS, Guillain-Barré syndrome; MMN, multifocal motor neuropathy; PDN, paraproteinemic polyneuropathies; PD, personality disorder.

3. EMOST method and natural-based electromagnetic signal forms

EMOST™ medical device (Figure 1) can detect non-linear bioelectric and bioelectromagnetic signals (as ECG or EEG signals) from subjects’ skin by unique flat input/output electrodes (Figure 3). The collected signals are processed by computer of EMOST™ apparatus. The subjects are treated by processed signals originated from apparatus...
(signal density between 1 Hz - 1 MHz; intensity range is in natural pA mV). A particular feature of EMOST™ method - compared to most of electromagnetic equipments - is that the subjects’ own bioelectro- bioelectromagnetic signals that are detected from skin can be processed in natural analogue mode (non-digitalized). Next, analogue signals are radiated back, using a flat electrode radiator through various signal density/signal combinations, with some signal amplification (-20dB - +60dB), to the skin’s surface on the opposite side and extended by the higher range sounds of the signal. The special analogous process makes it possible that the biophysical information content of detected and back-transmitted electro-electromagnetic signal is much larger than in digitized methods (Figure 2).

**Figure 1.** EMOST Redox 1.1. Medical Device (Certificate: HU11/6192) controlled by a personal computer.
4. **EMOST method exerts its effect through the skin associated autonomous nervous system**

EMOST™ device can detect non-linear bioelectric and bioelectromagnetic signals from subjects’ skin. The innervated skin is a tremendous complex system and the largest organ of the body with numerous very important functions that is linked to the peripheral sensory nervous system (PNS), the autonomous nervous system (ANS), and the central nervous system (CNS) (Roosterman et al., 2006). There is growing evidence that the cutaneous peripheral nervous system has essential roles in skin homeostasis as well as in diseases. Cutaneous nerves can react to stimuli from the circulation and to emotions. Moreover, the central nervous system is directly (through efferent nerves or CNS-derived mediators) or indirectly (through the adrenal glands or immune cells) linked to skin functions (Figure 4) (Roosterman et al., 2006).
The skin has densest and most complex innervation of all mammalian organs. There is rising evidence that the cutaneous peripheral nervous system has essential roles in skin homeostasis as well as in diseases. Cutaneous nerves can react to stimuli from the circulation and to emotions. Moreover, the central nervous system is directly (through efferent nerves or CNS-derived mediators) or indirectly (through the adrenal glands or immune cells) linked to skin functions (Figure 4) (Roosterman et al., 2006). Recent studies support that basic emotions have emotion-specific ANS activity/signature (Kreibig, 2010; Stephens et al., 2010). In Collet et al. (1997) experiments, basic emotion (happiness, surprise, anger, fear, sadness and disgust) induced specificity autonomic patterns in the skin regarding recorded parameters such as skin conductance, skin potential, skin resistance, skin blood flow, skin temperature and instantaneous respiratory frequency. It suggests that skin can represent stress related conscious and unconscious emotions directly by efferent nerves and mediators from CNS or indirectly by the adrenal glands or immune cells. The represented stress related conscious and unconscious emotions can affect on biochemical, bioelectrical and bioelectromagnetic patterns. There is bidirectional communication between skin cells and the nervous system that has essential roles in homeostatic regulation during physiological and pathophysiological states (Roosterman et al., 2006).

Under LFI-EMF (or EMOST™) expositions, first the skin meets electromagnetic fields that can exert a complex effect on skin mechanisms. These complex effects can spread by special mechanisms by modulation of specific neuropeptides released from cutaneous nerves that act on target cells by paracrine or endocrine pathway. It is well appreciated that complex interactions exist linking sensory and autonomic nerves to the immune and endocrine systems. In addition, the skin itself produces neuromediators and neurotrophic factors that target nerve fibers, thereby modulating inflammation, immune responses during host defense, pain, and pruritus. Recently, Arck et al. (2010) proposed a unifying model about the gut-brain-skin communication axis.

According to Vianale (2008) experiments, ELF-EMF can modulate chemokine production and keratinocyte growth by inhibition of the NF-kappaB signalling pathway and thus may inhibit inflammatory processes. In addition, Patruno et al. (2010) reported that ELF-EMF modulate expression of inducible nitric oxide synthase, endothelial nitric oxide synthase as well as cyclooxygenase-2 in the human keratinocyte cells. Recent experiments support that pulsed electromagnetic or low energy and frequency magnetic fields influence the autonomic nervous system (Grote et al., 2007; Kraiukhina et al., 2010).

Nordlind et al. (2008) in their recent paper, titled, The skin as a mirror of the soul: exploring the possible roles of serotonin, state that, “... alterations in the levels of 5-HT in extracellular fluids can alter the maturation, metabolism, migration and mitosis of its target cells, including those in both the brain and the skin. Serotonin (5-HT) is a significant bidirectional mediator between the neuroendocrine system and the skin. Recently, Irmak (2010) proposed that excitable Merkel cells in the skin (Merkel cells’ function is still unclear), which are in close contact with sensory nerve endings, may take part in mammalian magnetoreception. The movement of melanosome with the changing electromagnetic field may open ion channels producing a receptor potential that can be transmitted to brain by sensory neurons.

The above mentioned support that the LFI-EMF (or EMOST) exposition can modulate biochemical, bioelectrical, and bioelectromagnetic processes in the skin, and the modulated skin signals can affect the neuroendocrine system and modulate brain activity through ANS.

All together, it is very probable that EMOST™ method exerts its effect through the skin associated autonomous nervous system, which offers a unique therapy for the treatment of neurological disorders.
5. Particular high-efficiency of EMOST treatments

The particular effectiveness of EMOST™ method is possible due to the analogous process of own non-linear signals detected from skin that makes it possible that the biophysical information content of detected and back-transmitted electromagnetic signal is much larger than in digitized methods. In addition, the application of patient’s own signals also makes it possible that all treatment can be individualized.

6. EMOST™ method: can reduce the progression and frequency of the diseases, cost-effective, non invasive, no side effects, easy to use, portable method, not polluting the environment

7. Particular high-efficiency areas of EMOST treatments, according to our several year’s experiences

Bone fractures, skin wounds, sleep disturbances, pain, depression, panic, chronic fatigue, gastrointestinal and liver diseases, multiple sclerosis, inflammatory diseases, post traumatic syndrome, in diverse children diseases, cardiovascular parameters, sport injuries, general rehabilitation

8. EMOST™, prevention and children

Treatment of children with (chronic) diseases is very important because it serves the prevention and reduces cost. However, the effectiveness of EMOST treatments for children is much stronger than in adult subjects. According to our several year’s experiences by EMOST, in children, much less treatment is needed for recovery treatments as opposed to adult subjects, as well as the duration of treatment is shorter. It is possible that this special effectiveness of EMOST treatments is due to the large plasticity of the central and the autonomic nervous system in young patients. Thus, our research pays special attention to study EMOST effectiveness in the field of (chronic) childhood diseases.

9. Many neurological and psychiatric disorders are associated with various additional non neurological diseases, in which EMOST treatments can reduce the progression and frequency of these diseases

EMOST treatments also offer a unique therapy for the treatment of non neurological diseases that are associated with neurological disorders. For example, chronic fatigue is a typical symptom of neurological diseases. Many neurogenic and primary muscle disorders are associated with abnormalities of gut motility. Constipation is a frequent complaint among patients with different neurological diseases. Psychological stress is widely believed to play a major role in functional gastrointestinal disorders, especially irritable bowel syndrome. Sleep behaviour disorder symptoms may be the first manifestations of neurodegenerative and psychiatric diseases.
10. **Conclusion**: EMOST method offers an unique, individualized therapy for the treatment of neurological (brain) and neurological associated disorders, can reduce cost, and can take important roles in the prevention of various diseases.

*Dr. István BÖKKON (Ph.D.), and Dr. Attila ERDŐFI-SZABÓ (Ph.D.)*

**Some references**