MARKETING PLAN

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**EpiWrist**

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SUMMARY

EpiWrist is the company planning to put his project EpiWrist to the market up. Our product is an epilepsy seizure detecting system, which detects seizures of a patient when he/she is asleep. It basically detects the seizure, monitor the details (such as the date, duration etc.), ring the alarm in the next room to warn people living in the house and call the hospital if necessary. It is a complete system composed of a wireless wristlet shaped sensor, a monitor and an alarm. The sensor will be on the wrist of the patient. When the seizures occur, the vibration that is generated on the sensor will be processed by the monitoring system. The monitor has a microprocessor that processes the signals and keeps the data of the seizures inside. It has a screen that displays the data, which user can interact with it.

**TARGET MARKET**

The nature of epilepsy and the broad structure it difficult to apart the patients into segments. Differences in incidence rates by age, gender, etiology, and other demographic variables complicate the task of determining the market search. The illness is highest in the first decade of life and in the elderly. “70% of patients with new-onset epilepsy will achieve remission relatively quickly and at relatively low cost. The picture is far less rosy for patients with intractable seizures; for them, the outcome is fair to poor, and the lifetime costs are high.” (1)

**People with epilepsy:**

Approximately one percent (1 in 100) of the population of all ages, all races, and from all walks of life. (2) Epilepsy occurs at any time of life. However, the greatest numbers of new cases develop in early childhood and old age. (3) Epilepsy affects all age groups. (4) It tends to affect men more than women. “In children, the cause is generally unknown or genetic, and the risk is highest in the first year of life, declining until the age of ten. People aged 10-55 will most likely develop epileptic seizures from brain injuries or infections (trauma, tumors, encephalitis/meningitis.) As people approach 55+ years, the risk for epilepsy again increases because of strokes, brain tumors, or Alzheimer's disease (all sources of injury to the brain.) At every stage in life, 50% of epileptic seizures are of unknown origin.” (5)

**Life conditions of the people with epilepsy**

They live in places, which the normal people live in. Additionally they may live in halfway or group houses if their seizures are too severe to live alone. (6)

Epilepsy people may or may not have the regular life style according to the frequency and intensity of the seizures. Irregular use or inability to buy seizure medications may lead to additional seizures. (7) Epilepsy patients should be under safe life conditions in order to keep their life standards close to the regular.

**Buying decisions of our product**

EpiWrist provides a secure and peaceful environment for the families of the epileptic patients. A parent with a child with epilepsy or relatives of the patient would purchase the product. As well charity organizations, hospitals, caring and nursing services should purchase the item since it is not just an alarm, it is also a seizure monitoring and record keeping which is an important fact to deal with the illness. Also if the patient is living by him/herself, the item is useful since it has also a calling-alarm feature.

Our product will be available in the biomedical stores and throughout e-commerce. Patients wants to buy such caring products with the advice of doctors or their personal research steers them. So the patients or family of the patients can buy the product from biomedical stores or via e-commerce. The caring services, hospitals and charity organizations can also purchase the product from our warehouses. Since it is a health related product the item will be sold outright, one percent of the population can use the item. Although it is a life-long product, every single new-born might have the disease so the product can be sold up to 500000 per year in the domestic market if the necessary health insurances agree to use it and up to 10000000 per year world-wide. These expected numbers can change with the backup of health insurances and government policies. If the payment can be under insurance there will be an increase in the expected selling numbers. In case even if no insurance supports the patient, the product will be sold about the expected numbers with the patient’s own payment, with the purchasing of the hospitals and charity organizations.

**PRODUCT DESIGN**

The prototype is a 7x5x3 cm3 polymer block to which a rubber wristlet is attached. It is expected to weigh around 150g. The prototype is physically coarse and lacking comfort of use and agronomy. The reason of the roughness in design is the requirement of four alkaline battery for powering the device and primitive circuit boards that are used for hardware, all of which are mandatory choices due to limited resources.

**Operations and functions of the product**

**Functions of the product**

Epi-Wrist contains 2 main functions that are detection of the seizure and warning the patient’s relative during the night.

**Detection of the seizure**

Epi-Wrist detects the tonic-clonic seizure of the patient during day and night by the vibration of patient’s wrist and records the details of seizure

**Warning the patient’s relatives**

Epi-Wrist warns the family when patient had tonic-clonic seizure during the night by the wireless system. We are also trying to enable the communication through cell-phones in order to maket he product call the hospital by itself.

**User Interface**

The user interface of Epi-Wrist consists of the LCD screen and the hard buttons that are on the sides of the LCD screen. The buttons are “Up”, “Down”, “OK”, “BACK” and “HISTORY”. If the user presses “HISTORY”, the history of the seizures is listed on the screen according to their dates. The most recent will be on the top. Basically “Up” and “Down” buttons helps the user to move around the listed data. “OK” button is used to move to the next step. “BACK” button is used to go to the previous step. Normally, there will be nothing on the screen when Epi-Wrist is idle. The screen is on when a new seizure is detected or if the user presses to “History”. When a new seizure is detected, the screen will turn on automatically and the date, hour will be shown. More information like the duration of the seizures will be shown when user presses ‘OK’ on that screen. The same rule will apply on the history screen. The user interface is based on minimalism and easiness to use.



Figure 1: The figure is a rough illustration of the wristlet unit.

Our program is to make a more ergonomic and attractive design. We may need a participation of a designer in order to make our product look trustable, resistant and have a smooth and easy usage. The product and packaging should be white \_a health-based color which gives a trustable view\_. The packaging should also be though and kind of cushioned in order to save the product from impacts. The transportation would be safe by the packaging. Since our product is a small-sized one, there can be transported hundreds of it in a truck. There will be a user guide whom should be clear, detailed and easy to understand since people from every section of the population can use our product. The user guide will be schema and picture based explained. The package will also have the guarantee booklet. Over the package the name, the picture, and the necessary certificates which compliance to production quality assurance, quality assurance procedures, marking of product being subject to the achievement and maintenance of certification, Electrical Safety for Medical Devices, Electrical Safety for Medical Systems, EMC for Medical Devices, Electromagnetic Radio Spectrum Matters

, Electromagnetic Radio Spectrum Matters Short Range Devices.

**PRICE**

EpiWrist has unique, innovative features. Health caring products are always needed and EpiWrist has the features to detect, monitor, keep record and give alarm for the seizures. An immediate and constant attention to EpiWrist is something expected for us since there is no such a similar product with all features it has. Since the basic sector of the product is health services, it is something needed and people would try to buy the product with its exceptional quality. The fact that the epilepsy is not a clear issue with all its symptoms yet, will be deterministic about the ceiling of the prices, since there might be new developments in the medicine and technology and the developments will surely push us to develop the existing product or new products should be produced in the market. Our aim in the market, size of the market, cost of production and supply chain, demand, elasticities and competitors’ stance are the facts we have to care about determining prices. Price of EpiWrist should be reasonable for all the financial segments since anybody might be in need of our product. Approximately 20 percent profit margins can advance EpiWrist. Price for wholesale buyers and for buyers should be different. For a lot or a hundred or more pieces order a deduction of 10 percent can be applied. As the expenditure is calculated approximately 510 TL with all the costs included transportation and outsourced holding inventory approximately 619 TL can be our first price. Furthermore in order to match with the inflation rate approximately 10 percent increase in price per year can be applied. With the new investments more equipped production and marketing techniques can be applied so the profit margins are expected to increase by the time. The pricing is also fair concluding our main competitors:

## Medpage ST-2 Epileptic Nocturnal Seizure Alarm: $699.95 (medpage-ltd),

## Emfit Nocturnal Epileptic Tonic-Clonic Seizure Monitor (Package): €647.00 (emfit),

# Sensorium Sensalert EP200 – R: $800 (sensorium)

# with the fact that we have unique features above which will be mentioned in the COMPETITION part of the report.

**DISTRIBUTION CHANNELS**

We are planning to sell our products directly from our own warehouses as the retailer in the future projection. This will decrease our costs but needs a greater amount of investment. For the start-up period, due to the fact that we do not have enough investment to keep our own warehouses the company chooses the indirect distribution channels. We will use the existing biomedical warehouses as the retailer. Retailers are the way to reach to the already existing customers with the drugstores. Our product can be sold in the supermarkets or electronics markets such as sphygmomanometers (blood pressure measuring devices). It is our advantage. The Internet allows us to reach large areas quickly. We will sell the product through our own website. A customer cannot see the product before buying via e-commerce but since our product is a health caring needed product the comments of existing user on our website is enough. The customers of e-commerce will be charged with the price of the product and shipping costs.

**PROMOTION**

Biomedicals have the main selling numbers through doctor advices. So instead of using mass media, which costs high but inefficient for our product, we should inform the doctors about our product. Organizing seminars with the doctors and retailers is the best way to promote our product. We can also implement a promotional strategy through direct mailing. There are worldwide epilepsy organizations and they have connections with the patients and their relatives. We can explain the features of our product via e-mailing. It can be a good promotion for us, since it costs low and efficient with the fact that we are commencing through Internet. An additional promotion strategy will be via mass media, aiming to raise the conscious of the target customers. A campaign about how important to detect and keep the data of the seizures for epilepsy patients will be done furthermore.

**COMPETITION**

The product has some competitors worldwide, but not in the Turkish market. These competitors basically detect the seizures as our product does but our monitoring system is more enhanced in the sense of keeping track of the seizures and the details. The details are very important in defining and controlling the degree of the disease. This is the major difference of our product from the competitors.

Our main product competitors are:

## Medpage ST-2 Epileptic Nocturnal Seizure Alarm: $699.95 (medpage-ltd)

It has an under bed movement sensor, a monitor and an alarm transmitter.

Sensor gives notification to transmitter in three cases;

- Breathing or movement stops for 18 seconds approximately

- Consistent movement for 15-20 seconds

- Patient leaves the bed more than 20 seconds.

In addition to its sound alarm, transmitter has a call button and a socket that allows connection of standard hospital type nurse call switch and some specialist easy operation switches for the physically disabled

## Emfit Nocturnal Epileptic Tonic-Clonic Seizure Monitor (Package): €647.00 (emfit)

# It has two main components; a thin flexible (like a layer) bed sensor placed under the mattress and a monitor. Sensors send warning to monitor in two situations;

# - When the person leaves the bed (falling from bed)

# - Movements of the person continues over a predetermined time (time can be adjustable to 10,13,16 or 20 seconds)

# After detecting the seizure monitor’s audible alarm steps in, also monitor has a dry-contact output (NO and NC) for connection to wireless transmitter, nurse call system or carephone.5

## Sensorium Sensalert EP200 – R: $800 (sensorium)

# It has two bed sensors, a bed-side monitor and a wireless alarm receiver. Unlike the products above its sensors are smaller but thicker. When the tonic-clonic seizure detected, a radio signal is transmitted to the alarm receiver, then alarm receiver emits a continuous sound until the reset button is pressed.

## Our Features and Differences

## Our system has some similarities with the products mentioned above. For example we will detect and monitor the epileptic seizures just in time like other products. We will also have an emergency button as in Medpage ST-2 Epileptic Nocturnal Seizure Alarm to call the hospital. Another similarity is an alarm receiver in order to communicate with someone living next room.

# Our main difference is a user interface that shows seizures as notifications on the main screen. It keeps the times, dates and how long each seizure lasts. This feature guides the doctors in order to monitor the situation of the patient and inform them about the seizures even nobody hears the alarm at night.

Our product can be compared with a full-time caring person and even is there is someone near the patient there may be seizures that cannot be detected by human eye. It makes a great advantage that we serve unique features with our product.

**SALES STRATEGY**

There will be sales staff to inform the doctors about our product. They will work with the bonus payment they get from the sales made by the mediation of them. They will be trained as soon as they get into the company about marketing, epilepsy and the product.

Since it is an electronic device we will provide the necessary guarantee and the technical support. We will have at most two technical staff to solve the problem in case the device breaks down. They will be in the headquarters since the product is mobile, the defective product will be sent to the headquarters by cargo.

**REVENUE MODEL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Profit from sales (TL)** | **2011** | **2012** | **2013** | **2014** | **2015** |
| **Number of sales** | 10000 | 25000 | 50000 | 120000 | 130000 |
| **Cost / unit** | 510 | 559 | 603 | 645 | 698 |
| **Total cost** | 5100000 | 13975000 | 30150000 | 77400000 | 90740000 |
| **Sales price** | 619 | 680.9 | 748.99 | 823.99 | 906.99 |
| **Revenue** | 6190000 | 17022500 | 37449500 | 98878800 | 117908700 |
| **Gross profit** | 1090000 | 3074500 | 7299500 | 21478800 | 27168700 |

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