

Objective Skin Burn Assessment Kit (Mor)

Avraham Amir, Department of Plastic Surgery, Rabin Medical Center, Belinson Campus

Background

Currently, there is no evidence-based method to determine burn depth degree. Burns of the skin are assessed in terms of total body surface area (TBSA), representing is the percentage affected by partial thickness or full thickness burns (excluding superficial thickness burns). The "[Rule of Nines](#)" is used as a clinical method to estimate the affected TBSA. Thus, according to this method, an adult's head and neck account for 9% of the body; anterior/posterior torso for 18%; each leg for 18%, and each arm for 9%. There is an unmet medical need for accurate, evidence-based evaluation of skin burns' depth. Precise setting of burn degree is essential for determining the optimal mode of treatment as early as possible.

Our Innovation

Simplicity. Only a small serum sample is needed for diagnosis. Immediate and accurate. Use of the proposed kit will allow for immediate and accurate evaluation of the burn depth and scope, leading to appropriate burn treatment, including evacuation to the right hospital, infusing the right amount of fluids during the admission to the hospital or determining whether the patient should be referred to surgery. Treatment follow-up. Using the kit for follow-up examinations within the Hospital's burn care unit will be done following burn treatments and skin transplantation surgery. The kit will enable physicians to determine the percent of the remained injured skin. Such on going evaluation of the burn healing process will allow optimal treatment, up to the patient's discharge from the Hospital. The main target users of the kit include hospital burn care units and Emergency Medical Service (EMS) teams.

Thus, the proposed kit will be used as follows:

Early evaluation test conducted by the Emergency Medical Service (EMS) personnel, prior to evacuation to the Hospital

As evaluation test during hospital admission in the ER.

Evaluation and follow-up tests at the burn unit to be administered before treatment, and once a week (for 2 - 3 weeks) post surgery (an estimated 40% of the burn unit patients undergo surgery).


The Opportunity

According to American Burn Association (that capture data on visits to hospital emergency departments and outpatient clinics, free-standing urgent care centers, and private physician offices)

Patent status

Provisional patent has been filed

Contact for more information:

Sari Prutchi-Sagiv PhD , Director of Technology transfer Phamaceuticals, 052-8594444

38 Habarzel st.
Ramat Hahyal, Tel Aviv, 69710
Tel: 972-3-9233227
Fax: 972-3-6233228