Case Report 6
Using the Spincare™ System for Partial Thickness Burn
Rambam Health Care Campus

Introduction
Over 30,000 people suffer new burns worldwide every day that are severe enough to warrant medical attention. Most burns are considered to be partial thickness skin wounds, requiring a well-orchestrated, complex healing process. Various skin substitutes and dressings offer potential advantages over traditional treatments. Spincare uses Electrospun Healing Fibers (EHFTM) technology to create an on-the-spot, fully tailored nanofibrous personalized matrix for any wound shape and contour using electrospinning technology, which structurally mimics the extracellular matrix, serving as an excellent medium for tissue repair and healing.

Patient’s History & Treatment
SA, 42 Y-old male, was admitted due to burn (scald) injuries to his left shoulder, proximal arm, and part of his lower back after a radiator exploded. The burn was evaluated as superficial partial thickness (2nd degree), 9% TBSA. The patient was treated with a hypochlorite solution for the burns on his hands and shoulders, and on the day of the admission the treatment was changed to the Spincare matrix on the shoulder. The health care professionals reported that the process was extremely fast and Spincare’s matrix was easy to apply on an overly complicated area to dress, allowing for an immediate start to physiotherapy and showers. By day 14, the burn had completely epithelialized.

Case Results
The Spincare matrix stayed on for the full healing period, with no need of reapplication and showed excellent adherence to the wound throughout the healing period. Its transparency constantly permitted wound evaluation and its adherence and flexibility granted the preservation of range of motion. The Spincare matrix tolerated unrestricted use of hands whereas traditional bandages would have restricted it.

Conclusions
Shoulder burns are notoriously difficult to dress due to the anatomy and movement of the joint. Traditional dressings tend to be bulky and need to be wrapped around the torso to be kept in place, and showers are usually impossible. The properties of the Spincare matrix are maintaining range of motion, the avoidance of painful dressing changes and permitted showering freely during the healing process.