Freeze dried preparation of cells such as keratinocytes offers a more versatile option for wound management.

**Background:**
Clinical and animal experiments have demonstrated healing of acute wounds, such as burns with cultured keratinocyte grafts suppresses hypertrophic scar formation and keloid formation. This technology describes a novel preparation and method for freeze drying various types of skin cells.

**Technology Description:**
Dr. Marcia Simon, a professor in the Oral Biology department of Stony Brook University has developed method of freeze-dried cell preparations that are made from skin cells and can be used to treat a wide variety of wounded tissues. The preparation methods render cells stable for long period of time and they can be carried out with any type of cell normally found within the skin. Upon freeze drying and further processing, the cells and cell-based supernatant can be formulated to the applications to the skin or other open wounds.

**Human skin equivalent. (a) Normal histology. (b) Human skin equivalent the epidermis shows marked psoriasiform hyperplasia and focal hypogranulosis.**

**Patents / Publications:**
- Patent Pending

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**Advantages**
- Stable preparations can be stored for months
- Ease of use in conditions where refrigeration is lacking

**Applications**
- Wound repair

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