

TRANSFORMING POWDER DRESSING WITH EXTENDED WEAR TIME RETROSPECTIVE EVALUATION IN TRAUMA INJURIES

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COMPANY MISSION | ACHIEVEMENTS TO DATE

OVERVIEW: Based in Addison, TX, we are committed to developing and commercializing innovative wound care and drug delivery systems based on our patented technologies.

MISSION: To improve the lives of patients the world over by delivering comprehensive solutions that optimize outcomes for all key stakeholders: patients, providers and payers.

ALTRAZEAL STATUS: Patent granted, FDA registered, and market launch initiated. Used in prominent hospital systems: AdventHealth, Northwestern, Northwell Health, NYU, Plaza Medical (HCA), Providence Health (LifePoint), St. Vincent's (Ascension), UPMC.

DOD / VA EFFORTS: DAPA listed. SAM registered. Introduced to MRMC, CCCRP, USAISR, USUHS, WRAIR, NMRC, 59th Wing. Approved for use in several VAMCs including Boston, Chicago, Charleston, Dallas, Sacramento and Tampa.

DOD FUNDED R&D PROJECTS: Received grant funding from the Department of Defense related to three post-marketing clinical studies as well as a number of pre-clinical studies for product development:

1. MTEC-NAMD: Clinical studies in diabetic foot ulcers and acute partial thickness burns
2. CDMRP-DHA: Clinical study in pressure injuries
3. SBIR-WRAIR-DHA and MIDRP-BDRD: Development of Altrazeal combinations for drug delivery

UNIQUE EXPERTISE: Clinical partnerships with global wound care experts and centers of excellence.

ABOUT ALTRAZEAL® TRANSFORMING POWDER DRESSING

Altrazeal powder is comprised primarily of two biocompatible polymers (same as those used in contact lenses). Upon hydration, Altrazeal granules aggregate to form a moist, oxygen-permeable barrier that protects the wound from contamination while helping to manage excess exudate through vapor transportation. Once applied, Altrazeal may be left in place for up to 30 days. Additional powder may be added ("topped off") as needed without requiring primary dressing changes. Simple secondary dressings may be used in areas of high friction or exudation. If clinically necessary, the dressing may be removed atraumatically by lifting off with a pair of forceps. As the wound heals, Altrazeal dries and flakes off.

EASY TO USE | ENHANCED PATIENT COMFORT



Debride or clean wound as required. Moisten with saline or antiseptic. Pour powder to cover wound surface.



Gently drop or spray saline to complete transformation if needed. Avoid submerging the powder.



Regularly inspect the wound. Visible exudate enables inspection without requiring primary dressing changes.



Cover with non-adhesive contact layer and secure with, especially in areas of high friction.



Dressing flakes off as wound heals. More exudative wounds may require regular secondary dressing changes and powder top-up.



If dressing change is required prior to wound healing, submerge in saline and gently lift off with forceps.

International wound journal

ORIGINAL ARTICLE

A prospective, randomised study of a novel transforming methacrylate dressing compared with a silver-containing sodium carboxymethylcellulose dressing on partial-thickness skin graft donor sites in burn patients

Altrazeal® Pain Scores Significantly Lower at All Time Points in the Randomized Study

Randomized Study: Comparing Altrazeal® with Aquaseal AG

Pain scores were averaged for each patient and each center over a three-point, three-day period. Between day 2 and day 3 the average pain score for Aquaseal AG was 1.88 versus 0.47 for Altrazeal (p<0.001). Similarly on days 4 to 5 the average Aquaseal AG pain score was 2.02 versus 0.47 for Altrazeal® (p<0.001).

CASE SERIES OVERVIEW: FULL THICKNESS TRAUMATIC INJURIES (N=10)

A retrospective analysis of data from 10 patients with complex, full thickness traumatic wounds with elements of exposed bones, tendons and muscle was performed. All wounds were treated with Altrazeal until complete wound closure was achieved or the wounds were ready for grafting. Time to healing as well as frequency and number of dressing changes were tracked.

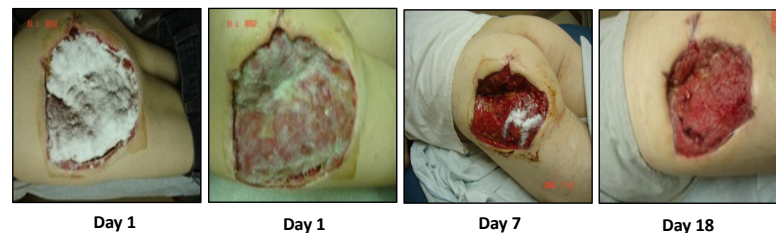
CASE 1: TRAUMA INJURY FROM MOTORCYCLE ACCIDENT

- **Patient:** 31-year-old female
- **Wound Size:** 35cm x 17cm x 17cm
- **Challenge:** Extensive wound with dressing changes required multiple times a week
- **Dressing Changes:**
 - Total: Six changes
 - Average: Once every eight days
- **Outcomes:**
 - Wound healed in 45 days
 - Avoided grafting



CASE 2: IMPROVISED EXPLOSIVE DEVICE WOUND DUE TO M-80 ACCIDENT

- **Patient:** 40-year-old male
- **Wound Size:** 25cm x 25cm x 5cm
- **Challenge:** NPWT discontinued due to pain. Porcine matrix failed to stimulate granulation
- **Dressing Changes:**
 - Total: Two changes
 - Average: Once every nine days
- **Outcomes:**
 - Depth reduced from 5cm to 2cm by Day 7 with single application
 - Wound ready for grafting by Day 18



CASE 3: GUN SHOT WOUND

- **Patient:** 24-year-old male
- **Challenge:** Deep wound in combat situation with few medical and material resources
- **Dressing Changes:**
 - Total: Two changes
 - Average: Once every five days
- **Outcomes:**
 - Wound healed in 10 days with two applications
 - Avoided grafting



CONCLUSION

A marked acceleration in healing was observed in all ten cases with reduced frequency of dressing changes relative to standard of care (once every 6.5 days on average versus daily or three times a week for standard of care). Six patients achieved complete healing without requiring grafting. Mean healing time was 23 days with three applications on average, or once every seven days. Four patients received successful grafting treatments once sufficient granulation had been achieved with Altrazeal. Average treatment time was 33 days with dressing changes every six days on average. **Clinical observations and outcomes indicate that Altrazeal presents a safe, effective and resource-efficient modality for the treatment of patients with traumatic wounds.**