A 73-year-old male presented to a long-term acute care (LTAC) facility with a large left posterior basal cell carcinoma lesion (Figure A) and subsequent radical surgical resection. At the time of LTAC admission, the deficit measured 26cm x 27cm x 1.2cm.

A primary wound contact layer of non-adhering silicone dressing (ADAPTIC TOUCH™ Non-Adhering Silicone Dressing, Systagenix UK, Inc., Gatwick, West Sussex, or Mepitel®, Mölnlycke Health Care, Gothenburg, Sweden) was first applied to protect exposed structures (Figure B). V.A.C. VeraFlo™ Therapy (KCI USA, Inc., San Antonio, TX) was initiated using the V.A.C. VeraFlo™ Dressing (KCI USA, Inc., San Antonio, TX); 25-35 mL of normal saline was instilled with a 20-minute dwell time, followed by 2 hours of continuous negative pressure at –125mmHg. V.A.C. VeraFlo™ Dressing changes were performed three times a week. After Week 1 (Figure C) and Week 2 (Figure D) of V.A.C. VeraFlo™ Therapy, the wound improved with increased granulation tissue, contracting wound edges, and new epithelial tissue formation.

After 3 weeks of treatment, V.A.C. VeraFlo™ Therapy was discontinued. The patient was discharged from the LTAC facility, and a sterile, freeze dried matrix of 44% oxidized regenerated cellulose (ORC), 55% collagen and 1% silver-ORC (PROMOGRAN PRISMA™ Matrix; Systagenix UK, Inc., Gatwick, West Sussex) was applied to the shoulder (Figure E) until ActiV.A.C.® Therapy (KCI USA, Inc., San Antonio, TX) could be initiated at the patient’s home. One week after facility discharge, V.A.C. Therapy was re-applied with continuous negative pressure at -150 mmHg (Figure F). Five weeks after starting negative pressure wound therapy, the wound measured 18cm x 21cm x 0.1cm, and the patient was prepared for skin graft closure. Split-tissue skin grafts taken from the anterolateral thigh were placed over the wound and bolstered with continuous negative pressure at -125 mmHg (Figure G). PROMOGRAN PRISMA™ Matrix was used on the donor site (Figure H) that healed without incident by postoperative day 6. By postoperative week 1, the wound displayed full take of the skin graft (Figure I) and by postoperative week 4 the wound continued to heal without complication (Figure J).

Figures. Surgical intervention for large basal cell carcinoma

A. Posterior shoulder view at initial presentation
B. Application of non-adhering silicone dressing to protect exposed structures followed by V.A.C. VeraFlo™ Therapy
C. Week 1 V.A.C. VeraFlo™ Therapy; granulation tissue formation
D. Week 2 V.A.C. VeraFlo™ Therapy; increased granulation tissue and new epithelial tissue formation; switch to Mepitel dressing
E. Week 3, V.A.C. VeraFlo™ Therapy discontinued; application of PROMOGRAN PRISMA™ Matrix
F. Week 4, wound appearance after ActiV.A.C. Therapy
G. Week 5, Split-tissue skin graft
H. PROMOGRAN PRISMA™ Matrix used on donor site
I. Wound appearance, post-STSG, Week 1
J. Wound appearance, post-STSG, Week 4

Patient data and photos courtesy of Brian Bradow, MD, Peoria, IL

NOTE: As with any case study, the results and outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary depending on the patient’s circumstances and condition.