**Case study 1**

**Elderly female patient with chronic venous leg ulceration.**

87 year old lady admitted to hospital with an extensive CVA. She had previous history of chronic venous ulceration of right lower leg which has been treated by her district nurses using different dressing regimes and three layer compression bandaging with little effect.

Upon initial assessment by tissue viability, the patient presented with a 3cm x 2cm full thickness skin ulcer to right medial gaiter area and two smaller ulcers, proximal to the first ulcer. All ulcers were superficially sloughy but not infected, exuding high levels of serous fluid causing white maceration and irritation of surrounding skin. As patient suffered with psoriasis, there were multiple psoriatic lesions and hyperkeratosis to both feet and gaiters.

Following a three week treatment with Actilite® dressing to ulcerated areas and three layer compression bandaging (changed weekly) all ulcers were fully healed, skin texture improved considerably and some of the psoriatic plaques have disappeared.

Patient was discharged to a nursing home with weekly maintenance compression therapy and skin care. Due to general deterioration and development of chest infection, patient was readmitted to hospital two weeks after initial discharge. Her right leg had also deteriorated, she had new, small but red inflamed ulcerations to her shin, and what appeared to be pustules to plantar aspect of her foot. Again Actilite® was applied to all new skin damage/limitations and three layer compression bandaging was reapplied to aid venous return. One week later all signs of skin infection had disappeared and ulceration had healed. No further primary dressings were required but weekly skin care and maintenance compression were continued.

8 days later left foot ulcer has fully epithelialised and erythema has subsided.

**Case study 2**

**Elderly female patient with long term right leg ulceration.**

85 year old lady admitted to the stroke unit following right frontal CVA, past medical history of Peripheral Vascular Disease, left below knee amputation and long term right leg ulceration.

Initial presentation: 8cm x 2cm full thickness skin ulcer, just above right medial malleolus, 100% sloughy, surrounding skin imitated, inflamed, high exudate levels with offensive odour: chronic varicous eczema, hyperkeratosis and ulceration between 3rd and 4th toes due to fungal eczema. ABPI was within the acceptable range therefore compression bandaging therapy continued whilst Actilite® was used as primary dressing to all ulcers and between toes. The aim of the dressing was to encourage desloughing, reduce bacterial load, reduce inflammation and provide antifungal properties. Two and three weeks later, skin between the toes has healed and the fungal eczema cleared up, 60 - 70% of the ulcer bed was clean and reducing in size and depth, exudate levels were reduced considerably and there was no odour. At this point patient was transferred to a community hospital for rehabilitation.

Due to ill fitted shoes and diabetic neuropathy patient has developed grade 2 pressure ulcer to left foot, medial aspect of 1st MTH, size 2cm x 2cm. On initial assessment the ulcer appeared inflamed, erythematous, with moderate serous exudate, increased local pain and surrounding maceration. Both legs were grossly oedematous with deepened skin folds, hyperkeratosis, papilomatosis and red inflamed skin to dorsal aspects of both feet.

Actilite® was applied to left foot ulcer and both feet - dorsal aspect, to provide antibacterial properties, reduce inflammation and encourage ulcer healing. The dressings were secured with padding and toe to knee retention/crepe bandages. Dressings were changed every three days, while this was incorporated into regular skin care routine i.e. washing of both legs in warm tap water to remove skin debris and moisturising dry, scaly skin with emollient.

8 days later left foot ulcer has fully epithelialised and erythema has subsided.

Following ABPIs which showed good vascular supply, lymphoedema treatment continued with 3 - 4 layer compression bandaging and skin care. In this case the use of Actilite® resulted in reduced inflammation, allowed ulcer to heal, improved skin texture and prevented development of cellulitis.
Case study 4
Male diabetic patient with leg ulceration.

A 74 year old male with a thirteen year history of type 2 diabetes mellitus visited out-patients diabetic foot clinic. He also has a seven year history of Charcot joint to his right foot. His diabetes is controlled with insulin.

On examination he had two areas of ulceration to plantar and dorsal aspect of right foot. He was admitted as an inpatient for debridement of wounds by orthopaedic surgeons. Following debridement the ulcers appeared infected with surrounding cellulitis. Patient continued to attend foot clinic on a weekly basis where the wounds were reviewed by tissue viability and the use of Actilite® was recommended. He was also treated with Doxycycline. The ward followed the same regime, resulting in a dressing change every three days.

On discharge, the wound remained clean, granulation tissue had started to form around wound margins and the cellulitis had subsided. Two months later the gentleman returned to foot clinic, having visited his local trauma clinic for dressing changes in the interim. On examination the wound to the plantar aspect appeared to be larger in size, surrounding skin was macerated and some slough was noted to the wound bed. The patient reporting that a hydrofibre dressing had been used but this was not suiting him. The wound was sharp debrided by podiatrist back to healthy tissue. Due to the increased risk of recurrent infections in patients with diabetic foot ulcers and the resulting implications on healing, Actilite® was reapplied for its antimicrobial properties. It was also the preference of the patient as he felt that no other dressing had been as effective. He was sent home with Actilite® dressings and a letter for the district nurses to continue to change dressing every three days. Two weeks later at follow up in foot clinic, the wound remained clean and granulating with evidence of healing and no evidence of infection or inflammation.

Case study 5
Obese female patient with bilateral lower leg lymphoedema and leg ulcers.

A 58 year old lady transferred from another hospital with acute chronic renal failure and respiratory failure. The patient was morbidly obese with a history of type 2 diabetes mellitus, hypertension, bilateral lower leg lymphoedema, leg ulcers, poor mobility and diabetic neuropathy.

One week treatment of Actilite®, secondary padding and bandage, changed every three days resulted in a rapid improvement of the condition of the skin. All blistered areas were fully epithelialised and cellulitis had subsided. She was then transferred to another hospital.

Due to chronic skin changes and hyperkeratosis, papillomatosis, elephant skin, warty appearance, patients with gross lymphoedema are prone to recurrent inflammatory episodes and cellulitis. On first assessment, patient presented with blistering to dorsal aspect of left foot, due to cellulitis.

One week later the proximal wound was approximately 90% clean and granulating, no evidence of infection (no systemic antibiotics were administered throughout the treatment), reduced local pain and no malodour. On next planned review, the proximal wound continued to show signs of improvement and was almost 100% clean and granulating.

Case study 6
Female patient with an infected and dehisced abdominal laparotomy wound.

A 71 year old lady referred to the tissue viability team for assessment and advice on management of infected and dehisced abdominal laparotomy wound. She had a history of rheumatoid arthritis (which was treated with steroids), right total knee replacement, hypothyroidism and anaemia.

Upon initial assessment the patient presented with 2 areas of dehiscence. Proximal area approximately 5cm x 2cm x 0.5cm, covered with thick patches of devitalised, necrotic tissue which had an offensive odour. Distal area approximately 12cm x 7cm x 7cm, again 100% of the base of the wound covered with thick, soft, necrotic tissue. The distal end of the wound was treated with topical negative pressure therapy, whilst the proximal end, with low exudate levels, was treated with Actilite® to provide antibacterial properties, encourage debridement and reduce inflammation. The Actilite® dressing was secured with a film dressing and changed every 3 days. 1 week later the proximal wound was approximately 90% clean and granulating, no evidence of infection (no systemic antibiotics were administered throughout the treatment), reduced local pain and no malodour. On next planned review, the proximal wound continued to show signs of improvement and was almost 100% clean and granulating.