Abstract:
The importance of maintaining peristomal skin health in ostomy care cannot be overstated. However, maintaining healthy peristomal skin can be a challenge for the patient and the STN. Because skin barriers used to support pouching systems occlude peristomal skin for extended periods, any person with a stoma is at risk of peristomal skin challenges. Despite advances in skin barrier formulations, their ongoing use may inflict certain histological changes including: thickening of the skin, inflammatory cell infiltration, and epidermal thickness (when the epidermis easily detaches from the dermis and forms blisters)^4^.

Leakage and mechanical trauma can also directly impact healthy peristomal skin. Leakage leads to contact with stool or urine under the skin barrier leading to PMASD (Peristomal Moisture Associated Skin Damage)^2^, This may include irritant contact dermatitis, maceration, and fungal infection. Mechanical trauma from repeated skin barrier removal can result in skin stripping – MARS (Medical Adhesive Related Skin Injury)^2^. Although there may be no visible damage with skin barrier removal, there is constant "exfoliation" of the outer skin layer during repeated removal. This may result in an elevated TEWL (Trans- Epidermal Water Loss) due to layer loss of the stratum corneum.^2^

This poster illustrates findings from nurses involved in an Australian evaluation of a new ceramic infused skin barrier (CeraPlus, Picture 1) and its impact on peristomal skin condition.

Methodology:
The product evaluation was conducted in Australia using CeraPlus two-piece skin barriers in conjunction with the Ostomy Skin Assessment Tool (DET Score – Dissociation, Erosion & Tissue Overgrowth) for qualitative skin peristomal skin assessment.

The evaluation program CPEP (CeraPlus Evaluation Program) was part of a larger scale evaluation involving other countries. The data represented here is the Australian data only.

Stomal Therapy Nurses (STNs) were provided with CeraPlus skin barriers and asked to select patients for evaluation as matter of standard care. Patient selection was not randomised and it was an assessment of the clinicians per patient experience using the CeraPlus skin barrier.

Issues of concern for the assessment were: peristomal skin condition as assessed using DET score and qualitative rating (pre and post use), reasons for removal, average change frequency, likelihood of continued use, satisfaction with the barrier, and any changes in accessory usage.

Results:

**Conclusions:**
DET Scores overall showed statistically significant improvements in peristomal skin condition after using CeraPlus skin barriers infused with ceramide. (See Table Picture 4)

Ceramide is a natural component of human skin that plays a critical role in skin health. Ceramides and other lipids link the cells of the epidermis to form a waterproof protective barrier that can minimise the impact of the external environment and assist in preventing TEWL. 2, 3 Studies show ceramide levels are abundant in healthy skin, but lower in damaged or diseased skin.5

Clinicians in Australia involved in this evaluation experienced good results during this study. However, maintaining healthy peristomal skin can be a challenge for the patient and the STN.