**RENASYS® NPWT system and V.A.C.™ Therapy offer similar levels of efficacy in the management of challenging wounds**

A study of over 1000 patients with challenging wounds in the community setting. Effective co-use of ACTICOAT® Flex in conjunction with NPWT.

**Evidence**
- Level 3 evidence
- Retrospective comparative clinical audit

**Patients**
- Over 1107 community patients treated with either RENASYS (n=808) or V.A.C. (n=299)
- Post-surgical wounds being managed either as part of the acute care discharge plan or managed entirely in the community
- NPWT use was dictated by a strict clinical protocol. This protocol included the use of ACTICOAT Flex 3 in wounds with suspected localised bacteria burden or localised signs of infection. In all, over 300 patients were treated with ACTICOAT Flex 3 and NPWT.

**No differences in clinical efficacy were seen between RENASYS and V.A.C.**

- **RENASYS vs V.A.C.**
  - Similar percentage of patients reaching their predetermined treatment goal (90.0% RENASYS and 93.6% V.A.C.)
  - No difference in time taken to achieve the treatment goal (median 8 weeks in both groups)
  - No significant difference in the percentage reduction in wound area after 8 weeks (64.2% V.A.C. and 65.3% RENASYS; p=0.6360) during therapy
  - No significant difference in the weekly rate of reduction in wound area (9.7% V.A.C. and 9.4% RENASYS; p=0.156)
- **Nanocrystalline silver (ACTICOAT Flex)** was used successfully as an adjunct to either NPWT system in 34% of patients
  - % reduction in wound area after 8 weeks was 64% (ACTICOAT + RENASYS) vs 68% (ACTICOAT + V.A.C.)
  - Treatment goals were met in 95% and 92% respectively of patients treated with ACTICOAT Flex 3 and RENASYS or V.A.C.

**COMMENTS**: Believed to be the largest cohort of patients treated with NPWT published to date.

There have been relatively few attempts to compare the relative performance of NPWT systems. The two most widely used systems globally are vacuum-assisted closure (V.A.C.) therapy (KCI, Inc.) and the RENASYS NPWT systems (Smith & Nephew, Hull, United Kingdom).

The results of this study demonstrate that there are no clinically significant differences in outcomes that can be observed between the two different commercial NPWT systems. The choice of which system to use is then no longer dependent on clinical efficacy or the size of the body of evidence but can become dependent on other factors such as cost, availability, and personal choice.

Co-use of ACTICOAT and NPWT in 34% of the patients (over 300 patients) is reported. Clinical outcomes in these challenging subset of wounds was equivalent to the results observed in patients without signs of infection. This suggests that ACTICOAT Flex 3 is a useful adjunct to NPWT to help prevent deterioration from signs of infection to clinical infection.

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**Title**: A Retrospective Comparison of the Performance of Two Negative Pressure Wound Therapy Systems in the Management of Wounds of Mixed Aetiology

**Aim of the study**: To compare efficacy of RENASYS and V.A.C. NPWT devices in the community setting

**Study Type**: Retrospective Comparative Cohort Study

**Wound Type**: Mixed indications but majority were complicated post-surgical wounds

**Setting**: Community

**Products**: RENASYS and V.A.C. and ACTICOAT Flex 3

**Number of patients**: 1107 (808 RENASYS, 299 V.A.C.)

**Reference**: Advances in Wound Care TBC

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