

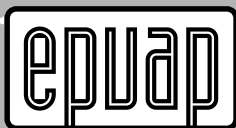


Mission Statement The European Pressure Ulcer Advisory Panel's objective is to provide the relief of persons suffering from, or at risk of pressure ulcers, in particular through research and the education of the public.

Executive Committee Members: Tom Defloor: *President* (Belgium)
Denis Colin: *Past President* (France)
Michael Clark: *Recorder* (UK)
Jacqui Fletcher: *Deputy Recorder* (UK)
Marco Romanelli: *Past President* (Italy)
George Cherry: *Secretary/Treasurer* (UK)
Carol Dealey (UK)
Christina Lindholm (Sweden)

Trustees: Andrea Bellingeri (Italy)
Manuel Gago-Fornells (Spain)
Lena Gunningberg (Sweden)
Ruud Halfens (Netherlands)
Hilde Heyman (Belgium)
Helvi Hietanen (Finland)
Cristina Miguens (Portugal)
Zena Moore (Eire)
Cees Oomens (Netherlands)
Anna Polak (Poland)
Joseph Schols (Netherlands)
Lisette Schoonhoven (Netherlands)
José Verdu Soriano (Spain)
Jan Weststrate (Netherlands)
Anne Witherow (Northern Ireland)

EPUAP Business Office: *Administrator:* Christine Cherry (UK)
68 Church Way
Iffley, Oxford, OX4 4EF, UK
Tel: +44 (0)1865 714358
Fax: +44 (0)1865 714373
E-mail: oxfordwound@aol.com



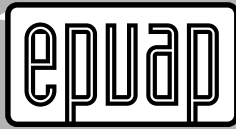
Dr Michael Clark

THE excitement of the 9th Open Meeting of the European Pressure Ulcer Advisory Panel is now fading and the EPUAP begins to look forward to its 10th Open Meeting to be held next year in Oxford, UK, from 30 August to 1 September 2007. Berlin was a great success – as all delegates agreed – and the format of the meeting, with plenary sessions on the first day then focused scientific and practical sessions over the remaining day-and-a-half, worked well and is likely to be used as the foundation for the programme of the Oxford meeting next year.

What were the highlights of the Berlin meeting? For me the shear force session on the second day was a major landmark where three organizations had come together to tackle a single important issue in pressure ulcer aetiology. The EPUAP, the National Pressure Ulcer Advisory Panel from the United States and the Japanese Pressure Ulcer Society will continue to work together to elucidate the definition, description and measurement of shear, and a significant plenary session is scheduled for the Oxford meeting to share new science and clinical research related to shear and its influence on pressure ulcers. Socially the formal dinner held in the hotel adjacent to the Berlin Conference Centre was really enjoyable. It was amazing to see so many dancers within the confines of the narrow dance floor, which was really just the aisle between dinner tables! Next year in Oxford the social event will be afloat cruising down the local waterways around Oxford and no doubt we will find space to dance even within the confines of the river boats!

The work of the EPUAP working groups deserves mention. This year the EPUAP groups have produced two publications based upon the lived experience of having a pressure ulcer and the pilot prevalence study we performed across five European countries. A further manuscript is in development looking at barriers to implementation of the EPUAP nutrition guideline. This productivity of the working groups helps contribute to the wider pressure ulcer field and demonstrates that the EPUAP is academically active. At this time there are working groups on pressure ulcer classification, nutrition, repositioning, and the lived experience of coping with pressure ulcers. There is also a group dedicated to the management of the process of developing new guidelines on pressure ulcer prevention and treatment. Future issues of the *EPUAP Review* will focus in depth on the activities of these groups so providing members with information regarding where they could contribute to the development of our Society.

Michael Clark
Editor



Letter from the President



Dr Tom Defloor

THE Ninth EPUAP meeting in Berlin was a real success. The quality of the oral presentations and the posters was high. Even more important were the mutual exchanges of experiences and the networking. The main objective of these meetings is to return to clinical practice with new ideas and new energy. The responses and the comments we received showed that the meeting in Berlin achieved that objective. *Cum laude.*

The planning of the next meeting has already begun and EPUAP will return to her roots: Oxford. It will be an important key moment in the history of the EPUAP. The main focus of the EPUAP has always been to improve current practice concerning pressure ulcers, while realising that this is not a simple task. We are very well aware of that.

A ready-made, simple answer does not exist, rather multiple approaches are needed. In addition to the meetings several guidelines, statements and educational tools have been developed over the years. However, new insights and research require the development of new, more extensive evidence-based guidelines. This is a major project, without doubt.

The EPUAP has decided to start up this project and is taking the lead in formulating prevention guidelines, whilst the NPUAP is developing treatment guidelines, with both societies working collaboratively. It is hoped to finalise the guidelines in 2008. This is a tough target but we are going for it anyway. However, achieving this is only possible through the efforts of many people.

A steering committee consisting of Carol Dealey, Michael Clark, Lisette Schoonhoven, Anne Witherow and myself will direct this project. It will be managed by the trustees who have agreed to actively participate in this undertaking.

However, it is very important that members of the EPUAP also take part and this, therefore, is an appeal to all those who are interested in participating. Depending on their interests, people can join one of the working groups as active participating members or as stakeholders, reviewing the draft version of texts. Candidates may register an interest with the EPUAP Business Office or via the website.

Support is also needed from Industry. Without additional financial support the completion of the project is not possible. For this purpose the grants of the EPUAP are too limited. Collection of the literature, organisational support, meetings of the different working groups, distribution of texts, translation, etc., will all require considerable financial support.

Thus, 2007 will be an important year for the EPUAP. It is a big challenge, but a feasible one if we all actively support it.

Tom Defloor
President



Letter from the President Elect



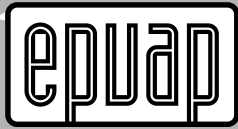
Carol Dealey

I approach writing this letter with some trepidation, but also a feeling of pride. I feel very honoured to have been elected President Elect of EPUAP, not least because I follow a number of distinguished people. I also feel proud to be part of such a successful and active organisation. In the nearly ten years since EPUAP was founded it has been recognised for the range of activities which it has instigated as well as the very successful annual conferences. For many societies the annual conference is their main activity and little else happens the rest of the year, not so for EPUAP!

Over the years we have produced Pressure Ulcer Prevention and Treatment and Nutrition Guidelines in a number of different languages. The EPUAP Pressure Ulcer Classification has been widely adopted and the linked teaching aid PUCLAS developed by a group led by our current President Tom Defloor has been incredibly successful. EPUAP has supported two major pieces of research: the PEPUS Study, looking at pressure ulcers in patients with hip fractures across Europe; and a phenomenological study exploring the impact of pressure ulceration on patients. We have recently produced position statements on monitoring pressure ulcer prevalence and incidence and also on differentiating between pressure ulcers and moisture lesions. Both of these statements are exceedingly useful for clinicians.

Perhaps our most ambitious projects to date are our considerable involvement in the International Collaboration to Define and Measure Shear and our joint project with the NPUAP to develop international pressure ulcer prevention and treatment guidelines. These two projects seem to be moving forward in a rather measured manner, but with each meeting of the joint groups there is improved understanding for what is required and each other. These are definitely exciting times to be a part of EPUAP!

Carol Dealey
President Elect



Dr George Cherry

OUR Ninth Annual Meeting, which took place at the end of August this year, in Berlin, was a great success exemplified by the quality of the presentations and the attendance of more than 500 delegates from 30 countries. At this meeting we met with our Corporate Sponsors in a special session (photograph on page 66) to discuss the progress that EPUAP has made and to receive their feedback as to how they would like to see the rôle of the EPUAP develop in the future. A report of the meeting by Tracy Cowan, Deputy Editor of the *Journal of Wound Care* (which was first published in the *Journal of Wound Care*, in October) is reproduced in this issue. A sad event, which occurred at the same time as the Berlin meeting, was the sudden death of Graham Philip Nicolson who was to have participated in the meeting. An obituary published in the National Pressure Ulcer Advisory Panel newsletter is reproduced in this issue.

One of our new major projects to start in the near future is the updating of our Pressure Ulcer Prevention Guidelines. These were originally written in 1998, at the beginning of the EPUAP, and have been translated into a number of European languages, and distributed to thousands of individuals who are involved with pressure ulcers. We are encouraging stakeholders from a number of organisations including members from Industry who are inter-

Below: Traditional German musicians and dancers at the Berlin Reception, in August.





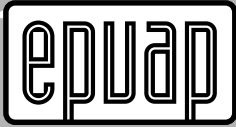
Berlin: Special Session with Sponsors.

ested in being part of this initiative. We anticipate that the new prevention guidelines will be accepted by the National Pressure Ulcer Advisory Panel in USA. Formal collaboration between the two Societies was discussed in Berlin and has already been agreed. Given the volume of new evidence and the requirement to review each study in depth, a postgraduate coordinator for this project will be needed. Thus the EPUAP is in the process of a major fundraising effort to support this important initiative and we anticipate that the new guidelines will be completed and presented in 2008. If you are interested in becoming a stakeholder or supporting this project financially please contact myself at the Business Office, or Carol Dealey, our new president-elect. An application to become a stakeholder is included in this issue.

Plans are well underway for our Tenth Anniversary meeting, which will be held in Oxford, England, 30 August – 1 September 2007. The theme is **‘Ten years of progress, the present and future in Pressure Ulcer prevention and management.’** In addition to an excellent scientific programme a number of unique social events will be incorporated as part of the programme. An announcement and registration form is in this issue and we would encourage early registration (as well as prompt abstract submission) as we anticipate a large number of attendees at this Anniversary meeting. Part of the programme will be a joint session with our Japanese colleagues from the Japanese Society of Pressure Ulcers who have attended and supported our EPUAP meetings throughout the years.

I would personally like to wish all of our members and supporters a Happy New Year and look forward to seeing you in Oxford in August.

George Cherry
Business Office

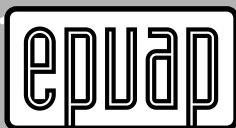


Reproduced from the NPUAP Newsletter, Fall 2006, Volume 20



Dr Graham Nicolson

GRAHAM NICOLSON, Ph.D, Research Fellow at the ASPIRE Centre for Disability Sciences, University College London, Stanmore, passed away following a motorcycle accident, 30 August 2006. Graham published one of the definitive studies on heat and water vapor measurement in support surfaces, and was instrumental in the development of the test method being proposed as an ISO standard on the same. Graham's highly personable interaction, his powerful grasp of life science and engineering and his ability to apply astute math and reasoning skills demonstrate the significance of his contribution to the Science. His ability to offer encouragement and fill the room with contagious laughter created a lab environment where students and co-workers thrived. Often working long hours out of 'love of the work', Graham lived his life as a 'curious fellow', always seeking to understand the full depth of the problem before him. A devoted husband and an avid motorcycle enthusiast, Graham is sorely missed by his widow Sarah and all who had the privilege of working with or around him. Persons wishing to honor Graham, in lieu of flowers, are requested to contribute to the Graham Nicolson Memorial Fund.

**A STIMULATING AND SUCCESSFUL CONFERENCE FOR THE EPUAP IN BERLIN**

Reproduced from the Journal of Wound Care, Vol. 15, No. 9, October 2006, p. 411

With over 500 delegates and more than 35 speakers, this conference provided ample opportunity for networking and to hear about developments in pressure ulcer care.

Delegates from Europe, the US (boosted by a delegation from the National Pressure Ulcer Advisory Board Panel, [NPUAP]), Australia, Japan, Korea and China met together last month in Berlin at the ninth European Pressure Ulcer Advisory Panel (EPUAP) open meeting.

The conference theme was 'pressure ulcers: putting knowledge into practice', and included a host of stimulating presentations with topics such as technological advances in pressure ulcer prevention, microbiology, the patient's experience of living with a leg ulcer, tissue reflectance spectroscopy and the development of test methods for support surfaces.

Given the large number of presentations it would be impossible to describe them all here, but I would like to focus on a few that caught my eye.

Papers

Dan Bader highlighted the need for objective monitoring to identify at-risk individuals and the conditions, such as the patient-support interface, that can lead to tissue breakdown. New technologies being developed can image the entire soft-tissue composition down to the underlying bony prominences, evaluate damage at the cellular level and predict the local mechanical environment within the tissue. Such techniques may have the potential to provide new monitoring systems for practitioners. Dr Bader reminded us that a better understanding of the physiology of pressure ulceration is the key to prevention and management. Jane Nixon reported on the PRESSURE trial: a randomised controlled trial (RCT) that compared alternating pressure mattresses and overlays in 11 hospitals (including six NHS trusts). Its objective was to determine whether there are any differences between the two, with a primary end point of the development of a grade II or above pressure ulcer.

The sample consisted of 1972 patients aged 55 or over admitted in the previous 24 hours to vascular, orthopaedic, medical or elderly acute care wards, either as acute or elective admissions. Of the sample, 990 were randomised to overlays and 982 to mattresses. Intention-to-treat analysis found no difference in the proportion of patients who developed new pressure ulcers in either group. However, the mattresses were associated with lower overall costs.

Jeannie Donnelly announced the results of a RCT comparing leg elevation with therapy mattresses in the prevention of pressure ulcers on the heels of people with fractured hips. She set out to further investigate the theory that offloading is an effective measure in preventing heel pressure ulcers.

All patients with a hip fracture admitted to the Royal Hospitals Trust, Belfast, were recruited if they had a fractured hip, were aged 65 or over, and gave informed consent. Patients whose fractures had occurred 48 hours previously or had existing heel damage were excluded. Patients were randomised to receive one of two treatment options: heels elevated or heels down. The primary outcome was development of a grade I or above pressure ulcer. Assessments were verified by an experienced tissue viability nurse blinded to the intervention. Patients in the control group developed more pressure damage than those in the intervention group. The results were so pronounced that the study was stopped half way through on ethical grounds.

Other events

The EPUAP also announced the formation of the Shear Force Initiative Group, comprising the EPUAP, the NPUAP and the Japanese Pressure Ulcer Society. The group has two goals: to identify the clinical significance of shear force (and agree on a definition), and explore how best to monitor shear. The group first met in Aberdeen at last year's EPUAP open meeting, and held a follow-up meeting in Berlin.

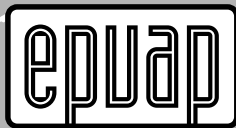
Industry were represented both in the exhibition, and by sponsored symposia, with KCI supporting a session on a holistic approach to pressure ulcer management, Nutricia a symposium on nutrition and healing, Smith & Nephew a session on adapting to the complexity in wound management, Gaymar one on deep tissue injury and Gerromed one on electrical stimulation in healing.

Next year will see the EPUAP celebrate its tenth anniversary open meeting in Oxford from 30 August to 1 September 2007.

Tracy Cowan

Deputy Editor/Production Editor, Journal of Wound Care



**KEYNOTE PRESENTATION RECIPIENT OF EPUAP AWARD***Nicky Cullum, UK*

THE term 'evidence-based medicine' (EBM) was first coined in 1992 by a Canadian epidemiologist to describe a philosophy of medical practice based on a knowledge and understanding of the medical literature supporting each clinical decision. At that time EBM was seen by many as a fundamentally different style of medical practice and promoted the use of epidemiological principles to ensure that research evidence was given appropriate weight in clinical decision making; the weight being proportional to the amount and validity of the research.¹ Since the early 1990s there has been a policy imperative to embrace the tenets of EBM across health care as these principles apply irrespective of specialty, discipline or profession. Nowhere is an evidence-based approach needed more than in wound management. In the UK, analysis of prescribing data has put the spend on wound management products in the top twenty when spending is analysed by sections of the British National Formulary; the spend on wound dressings during the financial year 2005–2006 was £107 Million. However, this huge area of resource use, which itself represents a burden of disease and a need for good wound care, is not matched by the availability of high quality research evidence. In 1998, the Royal College of Nursing published early clinical practice guidelines on the management of leg ulcers; these guidelines contained twenty-eight guideline statements, only four of which were supported by Grade I evidence (that is based on evidence from several studies of acceptable quality), and eighteen recommendations were based on expert opinion.² Similarly the first systematic review of pressure-relieving interventions published in 1995 contained only thirty randomised trials which were deemed to be 'generally of poor quality'.³ But there is now real evidence that things are changing for the better! Positive signs include the rapid increase in the number of systematic reviews in wound care (the Cochrane Wounds Group has published forty-two systematic reviews since it began in 1995),⁴ an increase in the numbers of high quality randomised trials in wound care, and publication in the *BMJ* of several large wound care studies in recent years.^{5,6} In her presentation, Nicky will discuss her involvement in some of these developments and her impression of the future challenges in developing high quality research evidence in pressure ulcer care.

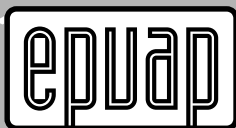
References

1. Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. *JAMA* 1992;268(17):2420-5.



Keynote speaker Nicky Cullum

2. RCN, Centre for Evidence Based Nursing, University of York, Department of Nursing Midwifery and Health Visiting, University of Manchester, *Clinical practice guidelines: the management of patients with venous leg ulcers. Recommendations for assessment, compression therapy, cleansing, debridement, dressing, contact sensitivity, training/education and quality assurance.* 1998.
3. Effective Health Care. The prevention and treatment of pressure sores, *Effective Health Care*, 2 (1), 1995, 1–16.
4. <http://www.mrw.interscience.wiley.com/cochrane/clabout/articles/WOUNDS/frame.html>
5. Nixon J, Cranny G, Iglesias CP, Nelson EA, Hawkins K, Phillips A, Torgerson DJ, Mason S, Cullum N, and on behalf of the Pressure Trial Group. The PRESSURE Trial: A randomised, controlled trial comparing alternating mattresses and alternating pressure overlays for the prevention of pressure ulcers. *BMJ* 2006; 332(7555): 1413.
6. Schoonhoven L, Haalboom JR, Bousema MT, Algra A, Grobbee DE, Grypdonck MH, Buskens E; prePURSE study group. The prevention and pressure ulcer risk score evaluation study. Prospective cohort study of routine use of risk assessment scales for prediction of pressure ulcers. *BMJ* 2002 Oct 12; 325(7368): 797.



POSTER WINNERS ABSTRACTS

Poster Presentations, Berlin: First Prize awarded to Alexander Heyneman, Gent, Belgium (centre), Second Prize awarded to Anne Ballard-Wilson, Dunfermline, Scotland (left), Third Prize awarded to Anna-Karin Westerlund, Uppsala, Sweden (right).

Pressure ulcer treatment with dressings: a systematic review of published randomized controlled trials

A. Heyneman, RN, MA; H. Beele, MD, PhD; T. Defloor, RN, PhD

Nursing Science, Department of Public Health, Ghent University, UZ 2 Blok A, De Pintelaan 185, B 9000 Gent, Belgium (Contact: alexander.heyneman@ugent.be)

Introduction:

Pressure ulcers are a common problem in nursing practice and entail great expenses for the patients as well as for the Health Care Services. Financial resources are limited, an optimal use is thus recommended. The aim of the study is to identify and review the published literature on the use of dressings as treatment of pressure ulcers.

Methods:

A Cochrane based search strategy was used in three databases (PubMed, Embase and CENTRAL), manuals, reference lists and conference proceedings. Used keywords were 'randomized controlled trial', 'random allocation', 'decubitus ulcer', 'therapeutics' and 'therapy'. Studies in which pressure ulcers were treated with dressings, as defined by The British National Formulary, were systematically included and analysed. An additional search was performed to identify validated instruments for assessment of the quality and cost-effectiveness analysis. No sufficiently validated instrument could be identified.

Results:

54 publications, dealing with 52 different studies, met the inclusion criteria. Grouping, based on The British National Formulary, resulted in 31 different categories. Based on the available evidence, none of the dressing categories was proven to be more effective than others. There was marginal evidence that dressings which needed to be changed less frequently were better rated by patients and caregivers. The same was true for pain during wearing and changing. Summary: A clear recommendation about the most effective dressing category could not be made. Identification and



analysis of additional studies is recommended. Additionally, the development of an instrument to validate the quality and the cost-effectiveness is needed.

Pressure Ulcer Prevalence in a District General Division: What are the benefits of doing it?

Anne Ballard Wilson, Tissue Viability Nurse Specialist
Fife Acute Operational Division, Queen Margaret Hospital, Whitefield Road, Dunfermline, KY12 0SU

Introduction:

Pressure ulcers continue to pose serious clinical and economic challenges within the National Health Service. Point Prevalence Studies assist our decision-making by giving valu-

able information, which can help with identification of the type of care and equipment required within an organisation.

Methodology:

A Point Prevalence Survey was carried out in February 2006 in a 600-bedded Hospital. The Tissue Viability (TV) Service in conjunction with Pegasus Ltd, who compiled the data, conducted it. The audit itself was carried out by the TVN with a team of tissue viability link nurses, working to a pre-determined protocol. The survey included age, sex, number of established pressure ulcers, the likelihood of developing a pressure ulcer, and current provision of pressure distributing surfaces. In addition, the ability of patients' to turn unassisted in bed, and care planning provision.

Results:

Data was collected for 591 patients, 15% having established pressure ulcers. The age, sex and severity of pressure ulcers will be discussed, with particular emphasis on the type of surface patients were nursed on. A comparison will also be made with two studies carried out two and five years ago.

Summary:

This study showed that although the age of patients is steadily increasing, there is no significant change in the overall number or severity of pressure damage. Within this Trust there has been a shift away from nursing patients on the more 'high tech' dynamic surfaces, with no apparent detriment to the patient.

Do nutritional supplements for patients with hip fracture reduce postoperative complications?

Anna-Karin Westerlund, RN^{1,2}, Katarina Lönn, MD², Lena Gunningberg, RN, PhD^{3,4}

1. Department of Public Health and Caring Sciences, Section of Caring Science, Uppsala University, Uppsala, Sweden.

2. Department of Orthopaedics, University Hospital, Uppsala, Sweden. 3. Department of Surgical Sciences, Uppsala University, Uppsala Sweden. 4. Department of Surgery, University Hospital, Uppsala, Sweden.

Introduction:

Malnutrition is common in Swedish hospitals; the incidence of malnutrition in 25 Swedish studies (n = 5120) was 28%. Patients with hip fracture constitute a group at particular risk for malnutrition. British research has shown that these patients do not receive all the energy and calories they need after surgery, which can lead to postoperative complications. Previous research at the University Hospital in Uppsala has showed that 29% of patients with hip fracture developed pressure ulcers during their hospital stay. Pressure ulcers increase the overall cost of care to society and can cause both physical and psychological suffering for patients. Nutritional supplements can delay both the onset and progression of pressure ulcers. However, as 57% of patients develop pressure ulcers within two days after surgery and 76% within four days after, it is important that the supplements be given as early as possible postoperatively.

Aim:

The aim of the present study is to investigate whether nu-

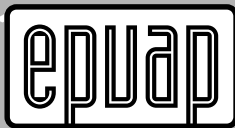
tritional supplements reduce postoperative complications – specifically, pressure ulcers – in patients with hip fracture.

Methods:

The design was quasi-experimental, with both intervention and control groups; 100 patients with hip fracture admitted to the University Hospital in Uppsala are included consecutively (50 patients in each group). Data collection started in September 2005 and will continue until June 2006. The intervention group received a glucose infusion starting the night before surgery and ending the morning the day after surgery, complemented with a carbohydrate-supplement drink. For five days postoperatively, patients also receive nutritional supplements, three times a day. The need of energy was calculated for each patient, nutritional and liquid intake was assessed daily, and interventions according to clinical guidelines were implemented if needed. Outcome measures used were the Modified Norton Scale, pressure ulcer classification according to EPUAP recommendations, weight, Insulin-like Growth Factor-1, Short Portable Mental Square Questionnaire and the Katz index. All of the assessments were collected preoperatively and five days postoperatively. Every patient's nutrient and liquid intake was assessed daily for five days.

Results:

Data will be analysed in July 2006.



SELECTED ABSTRACTS

Technological Advances in Pressure Ulcer Prevention – how close are we to producing an objective clinical monitoring system?

Dan Bader DSc

*Department of Engineering, Queen Mary University of London, Mile End Road, London E1 4NS, UK, and Department of Biomedical Engineering, Eindhoven University of Technology, The Netherlands.
D.L.Bader@qmul.ac.uk*

Despite considerable efforts to prevent pressure ulcers, prevalence figures still remain an unacceptably high burden to the individual and modern society as a whole. In addition to the traditional view involving pressure-induced ischaemia, other theories associated with the pathophysiological response to mechanical loading have been proposed (Bouten *et al.*, 2003). These include impaired interstitial fluid flow (Reddy *et al.*, 1981) and lymphatic drainage (Miller and Seale 1981), sustained deformation of cells (Wang *et al.*, 2005) and reperfusion injury (Peirce *et al.*, 2000). In addition, recent interest has identified the susceptibility of underlying muscle tissue to breakdown, with particular focus on deep tissue injury.

In order to minimise the clinical problem, objective monitoring needs to be available to identify both conditions at the patient-support interface which can lead to tissue breakdown and susceptible individuals. Techniques have largely focused on measurements of interface pressures and/or soft tissue viability or status (Knight *et al.*, 2001). They largely reflect the conditions within the skin tissues and their applications will be critically evaluated. Other technologies, however, are now available, which can image the entire soft tissue composite down to underlying bony prominences (Stekelenburg *et al.*, 2006), evaluate damage at the cellular level and predict the local mechanical environment within the tissues. These techniques will be discussed, with emphasis on their potential in providing monitoring systems for the clinician.

Relevant References

- Bouten CVC, Oomens CWJ, Baaijens FPT and Bader DL (2003) *Arch. Phys. Med. Rehabil.* 84: 616–9.
Knight SL, Taylor RP, Polliack AA and Bader DL (2001) *J. Applied Physiology* 90: 2231–37.
Miller GE and Seale J (1981) *Lymphology* 14: 161–6.
Peirce SM *et al.* (2000) *Wound Rep. and Regen.* 8: 68–76.
Reddy NP *et al.* (1981) *J. Biomechanics* 14: 879–81.
Stekelenburg A, Oomens CWJ, Strijkers GJ, de Graaf LAHJ, Nicolay K. and Bader, DL (2006)

J. Applied Phys., 28, 331–8

Wang Y-N, Bouten CVC, Lee DA and Bader DL (2005) *Proc. Inst. Mech. Eng. Part H Engineering in Medicine*, 219, 1–12.

Patient stories of living with pressure ulcers: the impact on practice and implications for further European research.

Hopkins A, Dealey C, Bale S, Defloor T and Worboys F.
The EPUAP Phenomenology Group

This paper discusses the findings of the EPUAP funded phenomenological study that investigated the lived experience of older people with pressure ulcers. It provides a synopsis of the key themes to emerge and focuses on the impact of the findings on patient care and equipment provision; the three core themes were pressure ulcers produce endless pain; pressure ulcers produce a restricted life; coping with a pressure ulcer.

Background:

Pressure ulcers are known to be a significant health burden, but little is known of the impact on the quality of life of the sufferer. They mainly affect older people, and this is a neglected group in previous studies of this topic.

Methods:

A Heideggerian phenomenological approach was used and patients were recruited if they were over 65 years of age and had a grade 3 or 4 pressure ulcer that had been present for more than a month. Patients were recruited from multiple centres but the data were analysed centrally. The study took place in 2003–2004.

Findings:

Analysis of the transcripts revealed three main themes, all with associated sub themes: pressure ulcers produce endless pain; pressure ulcers produce a restricted life; coping with a pressure ulcer. The endless pain theme had four subthemes: constant presence, keeping still, equipment pain and treatment pain. Some patients found that keeping still reduced their pain. Several patients also reported that pain was exacerbated by their pressure relieving equipment and at dressing change. There were three sub themes for the restricted life theme: impact on self, impact on others and consequences. Patients found that the pressure ulcer restricted their activities and had an impact on their families. In addition, for some, the restrictions delayed their rehabilitation. To cope with their pressure ulcers, patients de-

veloped ways of accepting their situation or comparing themselves with others.

Conclusions:

Although a pilot, this study has produced a wealth of data that demonstrates the impact of pressure ulcers on people. While a larger study is required to obtain a European perspective, it is still reasonable to conclude that the issues of pain and restrictions should be considered in the development of pressure ulcer treatment and prevention guidelines.

Reference (complete article):

Hopkins A, Dealey C, Bale S, Defloor T and Worboys F (2006). Patient stories of living with a pressure ulcer, *Journal of Advanced Nursing*, 56 (4), 1–9.

**Evolution or Revolution?
Adapting to Complexity in Wound Management**

Smith & Nephew Symposium (two papers)

Congress Centre, Berlin

Thursday 31 August 2006, 4.15 – 6.00 pm

Why we need more than one approach in pressure ulcer management

Professor Keith Harding

Cardiff Medicentre, Wales

It is very tempting to look for a single approach that we can rely on to provide us with all the answers that we need in the management of all wounds, including pressure ulcers. Wound Bed Preparation comes close as an educational tool, because it is in itself multifactorial, but those of us who have looked for a single system or method of treatment for wounds have invariably been disappointed. On the technical side, there has recently been a focus on single interventions, and the possibilities that they provide for healing a variety of wounds. Although some of these are very promising, we must be careful of reductive solutions that don't sufficiently take into account all the other factors in wound management.

To select appropriate treatment protocols, including appropriate dressings, a whole host of factors must be considered; the wound itself needs to be monitored and assessed, and the location, size, severity, cause, stage of progress and type of chronic wound will all have an impact on the decisions made regarding the type of care and treatments used.

The wound is only one part of a many tiered treatment regime. The general health, nutrition, age and co-morbidities of the patient naturally need to be taken into account, as well as the appropriate treatment goals for that person.

Our patients' immediate environments and the ranges of health services available to them will also affect their wound care regimes, and as clinicians we must all be aware of the facilities (and budgets) that we have available to provide the best outcomes for our patients.

During my presentation I will suggest some approaches that are worth considering in conjunction with others. I will also suggest that this need for multiple approaches highlights the need for tools and technologies that are themselves highly adaptive and multifactorial.

Considerations in appropriate dressing design

Professor Keith Harding

Cardiff Medicentre, Wales

Over the past four decades the importance of moisture control through effective exudate management has become more apparent. The moist wound healing paradigm has had a huge influence in dressing design, but as a greater understanding of the other underlying factors in the wound environment has emerged, we need to expect a dressing to demonstrate a level of adaptability that will suit a variety of wound factors.

Protection of the wound, good wear time and ease of fixation are naturally important technical features, along with the ability to adapt to wound size, position, shape and depth.

On the biochemical side, research has shown that exudate from chronic and acute wounds are quantitatively and qualitatively different, with very different cellular and biochemical events underlying them. Where excess exudate can harbour infection, the increased levels of white blood cells can also keep infection under control. Dressing design should include a moist wound interface, while allowing transpiration of excess fluid to achieve good moisture balance. This can reduce pain levels, address infection and restore a good wound healing environment. Dressings should also prevent exudate from seeping on to healthy areas of skin and should provide an effective barrier against infection from external sources.

As a result I will discuss the importance of total exudate management in terms of the combination of fluid absorption and moisture vapour transpiration. I will also suggest that adaptability in this area is becoming increasingly important, along with mechanical flexibility and antimicrobial barrier protection, and that dressings may be more inclined to fail where these features have been overlooked.

Antibacterial activity of positive and negative polarity high voltage pulsed current (HVPC) on six typical gram positive and gram negative bacterial pathogens of chronic wounds.

Gerronmed Symposium, Paper One

Georg Daeschlein¹, Ojan Assadian², Christina Meinel², F Ney¹ and Axel Kramer¹

¹ *Institute of Hygiene and Environmental Medicine, Ernst-Moritz-Arndt University, Greifswald, Germany*

² *Department of Hygiene and Medical Microbiology, Medical University of Vienna, Vienna, Austria*

Introduction:

Based on increased blood flow, protein denaturation and stimulation of cellular defence, an antibacterial effect of electrical stimulation ES is to be expected. Although the antibacterial effect of ES already has been demonstrated *in vitro*, little attention has been paid to the direct antibacterial effect of changing polarity of the applied current.

Method:

Using the *WoundEL*[®]-System, the gram negatives *E. coli*, *P. aeruginosa*, *K. pneumoniae* and the gram positives *S. aureus*, *S. epidermidis*, *E. faecium* were tested against posi-

tive and negative polarity HVPV (42 mA, pulse rate of 128 Hz). The electrodes were cut into pieces of 2.5 cm x 2.5 cm. To simulate a wound, sterile 100% cotton patches 2.5 cm x 2.5 cm (6.25 cm²) were used. 300 µl of each bacterial suspension (1.2 x 10⁴ colony forming units/ml) were pipetted onto a cotton patch and placed onto a 58 cm x 40 cm x 4 mm sized sterile stainless steel (V4A) panels. The cotton patches were covered with the electrodes and a sterile glass slide to improve contact between the electrode and the cotton patches (exposure 30 min).

Results:

All bacteria were significantly ($P < 0.01$) reduced by ES. The reduction differed significantly ($P = 0.02$) between positive and negative polarity, with the highest log₁₀ reduction factor (RF) achieved with positive polarity. Using positive polarity, the maximum RF was measured for *Escherichia coli* (median log₁₀ RF 0.83; 25th percentile 0.59, 75th percentile 0.98), the lowest for *Staphylococcus epidermidis* (median log₁₀ RF 0.20; 25th percentile 0.17, 75th percentile 0.24). Yet, there was no significant difference with positive ES against gram positive ($P = 0.35$) or gram negative ($P = 0.71$) organisms.

Summary:

It can be assumed that the microbicidal efficacy will additionally directly support the *in vivo* induced indirect antibacterial effects.

Clinical experience with a new topical device WoundEL- used in geriatric patients with chronic wounds

Geromed Symposium, Paper Two

R.-J. Schulz, M. Azzarro and E. Steinhagen-Thiessen
Charité, Dept for Geriatric Medicine, Humboldt-University
Berlin, Germany

Introduction:

Geriatric patients usually present multimorbid clinical status. In this context the treatment of chronic wounds is very costly, demanding lengthy hospital stays or specialized home care. In general, therapies of chronic wounds cannot be completed in hospital but have to be continued in the ambulatory care system.

The aim of this clinical study is to prove the applicability of a new method of wound treatment by electrical stimulation. This might be of special interest because several factors like malnutrition, chronic circulatory disorder and immobility hinder regular wound healing.

Methods:

So far fifteen patients with different types of chronic wounds (decubital ulcer, gangrene, diabetic foot syndrome) are treated over a time period of seven days to eight weeks. Utilized was a *WoundEL*-device from GerroMed company which works on a low-frequency pulsed direct-current (PDC). According to the protocol, patients were treated twice a day by a 30 to 42 mA PDC over thirty minutes with a frequency of 128 Hz. The range of age was 65–98 years, mean age was 79 years. On average, seven diagnoses were documented beside the chronic wound healing problem. All wounds were documented by digital imaging. Microbiological tests were performed on day one and once a week in the follow-up.

Results:

Up to now, all therapies were well tolerated. Fifty percent of the patients uttered local misperception in currents over 30 mA. Microbiological control did not indicate any infected wounds. With negative polarity all necrosis were debrided and wound bed preparation was performed without problems. Even large wound areas (7 x 12 cm) were treated without difficulty.

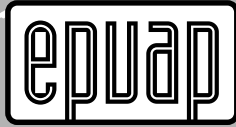
Time correlation between wound therapy and different wound types could not be calculated because of the small number of patients so far. Quite impressive was the wound healing in one case with a history of skin transplantation, vascularity deficits and large necrotic tissue fraction. Occlusive wound dressing and wound care was easy to perform without traumatic handling or pain induction.

Summary:

In our opinion this new approach indicates a simple and fast way of wound therapy by electrical stimulation. This might be of interest in treatment of multimorbid patients with several reasons for complications. So far this method is a safe and atraumatic way of therapy and was well tolerated even by patients with dementia. Possible misconception was eliminated by accurate adjustment of the mA dosage. Because of this new therapy, hospital stay could be dramatically reduced and therapy easily continued in ambulatory care. From the viewpoint of cost reduction this might be a quite convincing concept for the future. Above all, improvement of life quality could be demonstrated by earlier release from hospital and retain from painful treatment.

Figures 1 to 3 (below) demonstrate the time course of wound healing indicating the change from necrotic tissue (Figure 1) at day 0, to accelerated tissue recovery with vasoformation at day 10 (Figure 2) to well reconstituted epithelial areas at day 20 (Figure 3).





FEBRUARY 2007

6 – 8 **2nd International Course on Diabetic Foot (ICDF) 2007**
Padova Fiere, Italy

JUNE 2007

20 – 23 **12th Annual Oxford-European Wound Healing Summer School**
St Anne's College,
University of Oxford, England
Theme: Different aspects of patient wound management based on therapy, innovation and clinical research

AUGUST / SEPTEMBER 2007

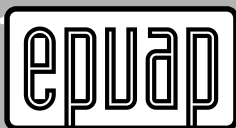
30 – 1 **10th European Pressure Ulcer Advisory Panel Open Meeting**
**Pressure Ulcers:
putting knowledge into practice**
Academic Centre
John Radcliffe Hospital, Oxford, UK
Contact: EPUAP Business Office
68 Church Way, Iffley
Oxford, OX4 4EF, UK
Tel: +44 (0)1865 714358
Fax: +44 (0)1865 714373
E-mail: oxfordwound@aol.com
Website: www.epuap.org
Deadline for submission of abstracts: 31 March

SEPTEMBER 2007

26 – 28 **17th ETRS Annual Meeting**
Measurements in Wound Healing – the conduit between the laboratory and the clinic
Southampton, UK
Deadline for submission of abstracts: 26 March
www.etr2007soton.com or
www.conventus.com/etr2007/soton
For further information contact:
The ETRS Business Office
68 Church Way, Iffley, Oxford, OX4 4EF, UK
Tel: +44 (0)1865 714358
Fax: +44 (0)1865 714373
E-mail: oxfordwound@aol.com
ETRS Website: www.etr.org
E-mail for Raj Mani: rm1@soton.ac.uk

JUNE 2008 – Advance announcement

4 – 8 **Third Congress of World Union of Wound Healing Societies**
Toronto, Canada
Contact: www.wuhs2008.ca

**Executive Committee Members**

Prof Tom Defloor, UZ Blok A, De Pintelaam 185, Gent, 9000, Belgium, Tel: +32 9 240 3694, Fax: +32 9 240 5002, tom.defloor@ugent.be

Dr Denis Colin, Centre de l'Arche, Saint Saturnin, Le Mans, 72650, France, Tel: +33 243 517 267, Fax: +33 243 517 257, denis.colin@ch-arche.fr

Dr Marco Romanelli, Department of Dermatology, University of Pisa, Via Roma 67, Pisa, 56126, Italy, Tel: +39 050 992 436 or Mobile +39 368 229, Fax: +39 050 551 124, m.romanelli@med.unipi.it

Dr Michael Clark, Wound Healing Research Unit, Cardiff University, The Medi Centre, Heath Park, Cardiff, Wales, CF14 4UJ, UK, Tel: +44 (0)2920 682 188, Fax: +44 (0)2920 754 217, clarkm@whru.co.uk

Mrs Jacqui Fletcher, University of Hertfordshire, Hatfield Campus, College Lane, Hatfield, Herts, AL10 9AB, UK, Tel: +44 (0)1707 285 266, Fax: +44 (0)1707 284 954, j.fletcher@herts.ac.uk

Dr George Cherry, 68 Church Way, Iffley, Oxford, OX4 4EF, UK, Tel: +44 (0)1865 714 358, Fax: +44 (0)1865 714 373, OxfordWound@aol.com

Dr Carol Dealey, Research Development Team, University of B'ham Hospital NHS Found Trust, 4th Floor, Nuffield House, QEMC, Birmingham, B15 2TH, UK, Tel: +44 (0)121 697 8377, Fax: +44 (0)121 627 2213, carol.dealey@uhb.nhs.uk

Prof Christina Lindholm, Nattarovagen 42, Saltsjo-Boo, 13234, Sweden, Tel: +46 8 517 798 82, Fax: +46 8 517 799 68, christina.lindholm@ks.se

Trustees

Dr Andrea Bellingeri, Via Marangoni, 15, Pavia, 27100, Italy, Tel: +39-38-422-133, Fax: +39-38-523-203, abellingeri@venus.it

Mrs Christine Cherry, EPUAP Business Office, 68 Church Way, Iffley, Oxford, OX4 4EF, UK, Tel: +44 (0)1865 714 358, Fax: +44 (0)1865 714 373, OxfordWound@aol.com

Manuel Gago-Fornells, Urb/Los Castillos, C/Catedral No. 9, Puerto de Santa Maria (Cadiz) 11500, Spain, Tel: +34 956 873 457 nana_gaztelu@yahoo.es

Dr Lena Gunningberg, Kirurgisht Centrum, Ing 70, Akademiska Sjukhuset, Uppsala, 75185, Sweden, Tel: +46 18 611 3194, lena.gunningberg@akademiska.se

Dr Ruud Halfens, PO Box 616, Maastricht, 6200-MD, The Netherlands, Tel: +31 43 388 1572 Fax: +31 43 388 4162, r.halfens@zw.unimaas.nl

Ms Hilde Heyman, Karel van de Woestynelaan 40, Aartselaar, B-2630, Belgium, Tel: +32 32 89 40 87, Fax: +32 32 89 40 87, hilde.heyman@telenet.be

Ms Helvi Hietanen, Tonttumuorinkuja 1, Espoo, 02200, Finland, Tel: + 358 50 427 2214, Fax: + 358 9 471 87260, helvi.hietanen@hus.fi

Mrs Cristina Miguens, Apartado 1, Pampilhosa da Serra, 3320-999, Portugal, Tel: +351 235 594 728, Fax: +351 235 590 208, miguens.gouveia@clix.pt

Mrs Zena Moore, Faculty of Nursing and Midwifery, RCSI, 123 St Stephens Green, Dublin, Dublin-2, Ireland, Tel: +353 1 402 2113, zmoore@rcsi.ie

Dr Cees Oomens, Eindhoven University of Technology, Biomedical Engineering Dept, PO Box 513, 5600-MB Eindhoven, The Netherlands

Dr Anna Polak, Physiotherapy Dept, APE Mikolowska 72B, Katowice, 40-065, Poland, Tel: +48 608 519 262, Fax: +48 322 511 097, polanna@op.pl

Dr J.M.G.A. Schols, De Riethust, Venestraat 28, Geerhuidenberg, 4931-BP, The Netherlands, j.schols@dericthorst.nl

Dr Lisette Schoonhoven, Centre for Quality of Care Research, Radboud University Nijmegen Medical Centre, PO Box 9101, Wok 229, Nijmegen, 6500-HB, The Netherlands, Tel: +31 24 361 0458, Fax: +31 24 361 9604, L.Schoonhoven@wok.umcn.nl

Prof Jose' Verdu Soriano, Victoria, 102, Santa Pola, (Aucante), 03130, Spain, Tel: +34 965 90 39 17, Fax: +34 965 90 3664, pepe.verdu@va.es

Dr Jan Weststrate, LEVV, PO Box 3135, Utrecht 3502 9C, The Netherlands, Tel: +31 3029 19000, Fax: +313029 19049, j.weststrate@levv.nl

Ann Witherow, 36 Cappagh Grove, Portstewart, Derry, Northern Ireland, BT55 7SU, UK, Tel: +44 (0)2871 345 171 ext 3602, awitherow@alt.n-i.nhs.uk

Paying Members

Mr William Allen, Smith and Nephew, 101 Hessle Road, Hull, E. Yorkshire, HU3 2BN, UK, Tel: +44-1482-763-436, Fax: +44-1482-763-106, bill.allen@smith-nephew.com

Mrs Annelie Anderson, Molnlycke Health Care AB, Box 13080, Goteborg, 402 52, Sweden, Tel: +46-31-722-3105, Fax: +46-31-722-3409, annelie.anderson@molnlycke.net

Mrs Irene Anderson, Univ of Hertfordshire, Dept of Nursing & Midwifery, College Lane, Hatfield, Hertfordshire, AL10 9AB, UK, Tel: +44-1707-285233, Fax: +44-1707-285299, i.l.anderson@herts.ac.uk

Dr Anneke Andriessen, Zwenkgras 25, Malden, 6581-RK, The Netherlands, Tel: +31-24-358-7086, Fax: +31-24-388-0155, anneke.a@tiscali.nl

Prof. Denis Anthony, Faculty of Health and Life Sciences, Hawthorn Building, De Montfort University, The Gateway, Leicester, LE1 9BH, UK danthony@dmu.ac.uk

Dr BFG Apotheker, James Stewartstraat 125, Almere, 1325-JC, The Netherlands, Tel: +31-36-537-5219, b.f.apotheker@amc.uva.nl or bfg-apotheker@hetnet.nl

Mr Peter Appelt, Parktoren, 6th Floor, Van Heuven Goedhartlaan 11, PO Box 129, Amstelveen, 1180-AC, The Netherlands, Tel: +31-20-426-0060, Fax: +31-20-426-0097, pappelt@kci-medical.com

Ms Rachel Apsey, Clinitron House, Ashby Park, Leics, Ashby de la Zouch, LE65 1JG, UK, Tel: 01530 411 000 or 01530-562-003, Fax: 01530-562-051

Mrs Shirley Aspin, Tissue Viability Nurse, Withnell Health Centre, Railway Road, Withnell, Chorley, Lancashire, PR6 8UA, UK

Dr Elizabeth A. Ayello, 209-14 82nd Avenue, Hollis Hills, New York, 11427, USA, Tel: +1-718-465-6261, elizabeth@ayello.com

Ms Carina Baath, Karlstad University, Division for Health and Caring Sciences, Department of Nursing, Karlstad, SE-65188, Sweden, Tel: +46-54-700-2089, Fax: +46-54-836-996, carina.baath@kau.se

Dr Mona Baharestani, Division of Plastic & Reconstructive Surgery, North Shore Long Island Jewish health System, New Hyde Park, New York, 11040, USA
Tel: 001 718 470 7813 Fax: 001 718 347 6730

Prof Sue Bale, Trust Headquarters, Grange House, Llanfrechta Grange, Cwmbran, South Wales, NP64 8YN, UK, Tel: +44-1633-623-802, sue.bale@gwent.wales.nhs.uk

Mr Graham Ball, Jacksons, 8 Mill Field, Barnston, Great Dunmow, Essex, CM6 1LH, UK, Tel: +44 1371 872 097, Fax: +44 1371 872 097, graham@roberlimited.com

Ms Katrin Balzer, Zikadenweg 22, Stuttgart, D-70439, Germany, Tel: +49 711 882 1159, katrin_balzer@web.de

Dr Maria Barbierato, Via Ca' Brazzo, 44, Arre Padova, 35020, Italy, Tel: +39 54 538 4329, Fax: +39 54 821 2423, mbarbieratom@libero.it

Dr Brigitte Barrois, Service de N.R.R., PO 71 CH Gomme, Gomme, 95503, France, Tel: +33 134 53 20 85, Fax: +33 134 53 24 81, brigitte.barrois@ch-gomme.fr

Martin Becker, 11 Highlands Road, Drayton, Portsmouth, PO6 1HL, Hants, UK, Tel. and Fax: +44 (0)23 9237 9080, martin-becker@embimed.co.uk

Mrs Joy Bell, 10 Dumgoyne Drive, Bearsden, Glasgow, Scotland, G61 3AP, UK, Tel: +44 141 942 2523, joy.bell@dial.pipex.com

Dr Andrea Bellingeri, Via Marangoni, 15, Pavia, 27100, Italy, Tel: +39-38-422-133, Fax: +39-38-523-203, abellingeri@venus.it

Dr Giuseppe Benati, Via Sara Levi Nathan II, Forci, 47100, Italy, Tel: +39-340-838-9532, Fax: +39-543-731-865, gibenati@tiscali.it

Mrs Maureen Benbow, University College Chester, School of Health & Social Care, Leighton Hospital, Middlewich Road, Crewe, CW1 4QJ, UK, Tel: +44-1270-612-331 ext. 2430, Fax: +44-1270-250-976, m.benbow@chester.ac.uk

Ms Sheila Benton-Jones, Tissue Viability Department, Abingdon Hospital, Ward 1, Marcham Road, Abingdon, Oxon, OX14 1AG, UK, Tel: +44 (0)1235 205 786, Fax: +44 (0)1235 205 788, sheila.benton-jones@swoxon-pct.nhs.uk

Mr Laurent Bernier, c/o Asymptote, 2 allée de la Combe, 69380 Lissieu, France, Tel: +33 472 54 86 18, laurent@escarre.fr

Mrs Elaine Bethell, c/o Nursing Admin, City Hospital, Dudley Road, Birmingham, B18 7QH, UK, Tel: +44-121-554-3801, Fax: +44-121-507-5610, elaine.bethell@swbh.nhs.uk

Mrs Victoria Betteridge, Oxfordshire Community Tissue Viability Service, Ward One, Abingdon Community Hospital, Marcham Road, Abingdon, Oxfordshire, OX14 1AG, UK, Tel: +44-1235-205-786, Fax: +44-1235-205-788

Mr Bert Billen, Peter Valentijnusland 4, Hasselt, B-3500, Belgium, Tel: +32-11-284-359, Fax: +32-11-281-517, bertb@therohogroup.com

Ms Jo Billingham, Harrington House, Milton Road, Ickenham, Uxbridge, Middx, TW3 3JA, UK, Tel: +44-1895 628 400

Dr Mary Bliss, Oaklea, Badgers Mount, Sevenoaks, Kent, TN14 7AY, UK, Tel: +44-1959-534-278, mary.bliss@dsl.pipex.com

Mrs Th.C.M. Bots, Silversteyn 64, Breurelren, 3621-PD, The Netherlands, Tel: +31-34-626-4208, th.bots@hemet.nl

Dr Gerrie Bours, Universiteit Maastricht, Sectie Verplegingswetenschap, PO Box 616, Maastricht, 6200-MD, The Netherlands, Tel: +31-43-388-1279, Fax: +31-43-388-4162, g.bours@zw.unimaas.nl

Ms Dianne Brett, Tissue Viability, Q20B, Queen Elizabeth II Hospital, Howlands, Welwyn Garden City, AL7 4HQ, UK, Tel: +44 (0)1707 369 012, dianne.brett@nhs.net

Mrs Shiu-Ling Briggs, 'Minffordd', Fearn Close, East Horsley, Leatherhead, Surrey, KT24 6AD, UK

Mr David Burroughes, KCI Europe Holding BV, Parktoren 6th Floor, Van Heuven Goedhartlaan 11, PO Box 129, 1180 AC Amstelveen, The Netherlands, Tel: +31 61350 9055

Mrs Rosie Callaghan, Evesham Community Hospital, Waterside, Evesham, Worcs, WR11 1JT, UK, Tel: +44 (0)1386 502 338,

Ms Helen Campbell, Smith & Nephew, 101 Hessle Road, Hull, HU3 2BN, UK, Tel: +44 (0)1482 673 243, Fax: +44 (0)1482 673 106, helen.campbell@smith-nephew.com

Ms Lucy Carroll, 30 Larkfield Grove, Harolds Cross, Dublin-6W, Ireland, Tel: +353 14 923 194, lkcarroll@eircom.net

Ms Heidi Castren, Siltakylantie 2 F 27, Helsinki 00740, Finland, Tel: +35 850 591 4776, heidi.castren@kolumbus.fi

Mr Andrea Cavicchioli, Via Siligardi No 14, Modena, 41100, Italy, Tel: +39 59 436 581, Fax: +39 59 436 580, a.cavicchioli@ause.mo.it

Mrs Tina Chambers, Royal Hampshire County Hospital, Romsey Road, Winchester, Hants, SO22 5DG, UK, Tel: +44-1962-825-595, Fax: +44-1962-824-826, tina@hightown.demon.co.uk

Ms Sinead Clark O'Neill, Dept of Medicine 3rd Floor, Clerkenwell Building Archway Campus, Highgate Hill, London, N19 5LW, England. Tel: 020 7 288 5150, Fax: 020 7 288 3019

Ayesha Clarkson, 365 Beacon Road, Wibsey, Bradford, BD6 3DF, UK, Tel: +44 (0)1274 577 290, Fax: +44 (0)1274 322 198, a Clarkson@bradford.nhs.uk

Mrs Ann Cobb, Harrogate District Hospital, Lancaster Park Road, Harrogate, HG2 7PT, UK, Tel: +44 (0)1423 553 624, Fax: +44 (0)1423 553 624, ann.cobb@uhc-tr.northy.nhs.uk

Dr Denis Colin, Centre de l'Arche, Saint Saturnin, Le Mans, 72650, France, Tel: +33 243 517 267, Fax: +33 243 517 257, dcolin@ch-arche.fr

Mr Mark Collier, The Old Dairy, Byards Leap Farm, Cranwell, Sleaford, Lincs, NG34 8EY, UK, Tel: +44 (0)1400 263 020, Fax: +44 (0)1400 263 021, collier.mark@btopenworld.com

Ms Catherine Considine, 22 The Drive, Melrose Park, Swords, Co. Dublin, Ireland, Tel: +353 1 856 6404, Fax: +353 1 836 3813

Mrs Joanne Conway, 32 Birchwood, Firwood Park, Chadderton, Oldham, OL9 9KM, UK, Tel: +44 (0)161 633 6569

Ms Pamela Cooper, Dept of Tissue Viability, Aberdeen Royal Infirmary, Aberdeen, AB25 2ZN, UK, Tel: +44 (0)1224 554 621, Fax: +44 (0)1224 559 288, pam.cooper@arh.grapian.scot.nhs.uk

Ms Deirdre Cornally, The Newtown, Moate, Co. Westmeath, Ireland, Tel: +353 86 811 89 39

Miss Fiona Coull, c/o Nursing Directorate, Royal Free Hospital, Pond Street, London, NW3 2QG, UK, Tel: +44 (0)207 472 6439, Fax: +44 (0)207 830 2961, fiona.coull@royalfree.nhs.uk

Mr Andrew Cox Martin, Department of Medical Engineering, Salisbury District Hospital, Salisbury, SP2 8BJ, UK, Tel: +44 (0)1722 425 138, Fax: +44 (0)1722 416 227, bill.cox-martin@salisbury.nhs.uk

Mrs Barbara Craven, Disability Services, Walton Hospital, Whitecotes Lane, Chesterfield, Derbyshire, S40 3HW, UK, Tel: +44 (0)1246 517 07, barbara.craven@nederbypct.nhs.uk

Dr Sarah Daniels, ConvaTec, Harrington House, Milton Road, Ickenham, Uxbridge, Middlesex, UB10 8PU, UK, Tel: +44 (0)1895 628 395, Fax: +44 (0)1895 628 332, sarah.daniels@bms.com

Prof Theo Dassen, Albrechtstrasse 15, Berlin, 10117, Germany, theo.dassen@charite.de

Mrs Claire Davies, Middlesex University, Archway Campus, Furnival Building, Highgate Hill, London, N19 5LW, UK, Tel: +44 (0)208 411 6708, c.davies@mdx.ac.uk

Mr Jonathan Davies, MSS Ltd, MSS House, Taffs Fall Road, Treforest Industrial Estate, Cardiff CF37 5TT, UK, Tel: +44 (0)1443 849 200, Fax: +44 (0)1443 843 377, sales@medsys.co.uk

Mrs Patricia Davies, School of Primary Health Care, University of Central England, Westbourne Road, Birmingham, B15 3TN, UK, Tel: +44 (0)121 331 7104, Fax: +44 (0)121 331 7041, patricia.davies@uce.ac.uk

Mr Nick Davis, Newbridge Road Industrial Estate, Blackwood, South Wales, NP12 2YN, UK, Tel: +44 (0)1495 235 800, ndavis@frontier-group.co.uk

Dr Carol Dealey, Research Development Team, University of B'ham Hospital NHS Found Trust, 4th Floor, Nuffield House, QEMC, Birmingham, B15 2TH, UK, Tel: +44 (0)121 697 8377, Fax: +44 (0)121 627 2213, carol.dealey@uhb.nhs.uk

Prof Tom Defloor, UZ Blok A, De Pintelaan 185, Gent, 9000, Belgium, Tel: +32 9 240 3694, Fax: +32 9 240 5002, tom.defloor@ugent.be

Dr Maaïke de Jager, Postbus 1, Zoetermeer, 2700 MA, The Netherlands, Tel: +31 (0)793539310, Fax: +31 (0)79 3539061

Mr Erik de Laat, 111 StafZorg, University Medical Centre, St Radboud, PO Box 9101, Nijmegen, The Netherlands.

Miss Mieke De Win, Academisch Ziekenhuis, Vrije Universiteit, Laarbeeklaan 101, Brussels, 1090, Belgium, Tel: +32 2 477 55 77, diendurmm@az.vub.ac.be

Mr Dirk De Wolf, Prinsenmeers 9, Dendermonde, 9200, Belgium, Tel: +32 474 250 286, de.wolf.dirk.wondzorg@telenet.be

Mr Peter Diesing, Buchbinderweg 55, Berlin, 12355, Germany, Tel: +49 30 66 461 709, Fax: +49 30 66 461 708, peter.diesing@gmx.de

Mrs Jeannie Donnelly, 6 Mount Royal, Bangor, Co. Down, BT12 6BA, UK, Tel: +44 (0)28 91 468 875, jeannie.donnelly@royalhospitals.ni.nhs.uk

Dr Inge Duimel-Peeters, PO Box 616, Universiteit Maastricht, Maastricht, 6200-MD, The Netherlands, Tel: +31-43-388-15-57, Fax: +31-43-388-41-62, i.duimel@zw.unimaas.nl

Dr Sonia Dumit-Minkel, 1231 East Donges Court, Bayside, WI, 53217, USA, Tel: +1-414-228-0101, Fax: +1-414-228-6398, duminkel@yahoo.com

Mrs Jane Edwards, Tissue Viability, Nuffield Orthopaedic Centre NHS Trust, Windmill Road, Headington, Oxford, OX3 7LD, UK, Tel: +44 (0)1865 227 312, jane.l.edwards@noc.anglox.nhs.uk

Mrs Opri Eronen, Leppakatu 16 As 2, Lahti, 15520, Finland, Tel: +358 40 552 2715, opri.eronen@phnet.fi

Ms Marilyn-Agnes Etoke Ngoh, 11 Maxwell Court, Dulwich Common, London, SE22 8NT, UK, Tel: +44 (0)208 299 6690

Mrs Wendy Eve, Saiyang, 30 Torton Hill Road, Arundel, West Sussex, BN18 9HL, UK, Tel: +44 (0)1243 623007, Fax: +44 (0)1243 623008, Wendy.Eve@wsx-pct.nhs.uk

Ms Leone Ewings, Tissue Viability CNS, Nurse Practice Development Unit, Beaumont Hospital, Beaumont, Dublin 9, Ireland, Tel: +353 1 809 2533, leoneewings@beaumont.ie

Dr Mandy Fader, 75 Calton Avenue, London, SE21 7DF, UK, Tel: +44 (0)20 72 883 128, Fax: +44 (0)20 72 883 019, m.fader@ucl.ac.uk

Dr Rosy Fittipaldi, Via Ticinello No 34, Pavia, 27100, Italy, Tel: +39 333 945 2041, rosy.fittipaldi@libero.it

Mrs Jacqui Fletcher, University of Hertfordshire, Hatfield Campus, College Lane, Hatfield, Herts, AL10 9AB, UK, Tel: +44 (0)1707 285 266, Fax: +44 (0)1707 284 954, j.fletcher@herts.ac.uk

Mr Hans-Jürgen Flohr, Hauptstrasse 17, Friedland 37133, Germany, Tel: +49 5509 999142, Fax: +49 5508 9209 054, E-mail: kontakt@hjflohr.de

Mr John Furnes, Myravegen 2, Hareid, 6060, Norway, Tel: +47 70 095 959, Fax: +47 70 095 951, john@vitalbase.no

Ms Katia Furtado, Rua Vitorino Nemesio, No 2, 7 Esquerdo, Lisboa, 1750-307, Portugal, Tel: +351-933-297-496, Kaxfurtado@clix.pt

Mr Manuel Gago-Fornells, Urb/Los Castillos, C/Catedral No. 9,
Puerto de Santa Maria (Cadiz) 11500, Spain.
Tel: +34 956 873 457 nana_gaztelu@yahoo.es

Mr Lucas Garabet, GerroMed GmbH, Fangdieckstrasse 75B,
Hamburg, 22547, Germany, Tel: +49-40-547-3030,
Fax: +49-40-547-30331, GarabetL@Gerromed.de

Mrs Pauline Gatto, 28 Spencer Avenue, Palmers Green, London,
N13 4TR, UK. Tel: +44 (0)208 340 545,
pauline.gatto@haringey.nhs.uk

Kjetil Gausel, Dreierhagen 21, Sanones, 4321, Norway.
Tel: +47-51-68-1890, Fax: +47-51-68-1889, kg@alurehab.com

Dr Krzysztof Gebhardt, 2 Manchuria Villas, Wix's Lane,
London, SW4 0AG, UK. Tel: +44 (0)208 725 2230,
Fax: +44 (0)208 725 1071, chris.gebhardt@stgeorges.nhs.uk

Prof Finn Gottrup, University Center of Wound Healing,
Dept of Plastic and Reconstructive Surgery, Odense University
Hospital, Odense, 5000 Odense C, Denmark, Tel: +45 6541 3903,
Fax: +45 6541 3906 finn.gottrup@ouh.fyns-amt.dk

Joao Gouveia, Apartado 1, Pampilhosa da Serra, 3320-999,
Portugal, Tel: +351-235-594-728, Fax: +351-235-590-208,
gouveia.miguens@sapo.pt

Dr Allison Graham, 75 Mellstock Road, Aylesbury, Bucks,
HP21 7NX, England Tel: +44 (0)1296 436 463,
Fax: +44 (0)1296 315 867, alison.graham@smn.nhs.uk

Mr Mark Green, 1 Greenwood Avenue, Horwich, Bolton,
BL6 6FA, England Tel: +44 (0)1204 669 353,
Mark.Green@Pegasus-uk.com

Ms Tracey Green, 41 Admiral Biggs Drive, Treelar, Rotheram
S60 5TS, England Tel: 07789 935 831

Dr Lena Gunningberg, Kirurgisht Centrum, Ing 70, Akademiska
Sjukhuset, Uppsala, 75185, Sweden, Tel: +46 18 611 3194,
lena.gunningberg@akademiska.se

Ms Heidi Guy, Tissue Viability Nurse, L20G Pirton Ward, Lister
Hospital, Stevenage, SG1 4AB, England
Tel: +44 (0)1438 314 333 (ext 4685), heidi.guy@nhs.net

Prof Jeen Haalboom, Department of Internal Medicine,
PO Box 85500, Utrecht, 3508-GA, The Netherlands,
Tel: +31 30 250 9111, j.haalboom@digd.azu.nl

Miss Satsue Hagiwara, Nagoya City University, School of Nursing,
Kawasumi-1, Mizuho-cho, Mizuho-ku, Nagoya, 467-8601, Japan,
Tel: +81-52-853-8074, Fax: +81-52-853-8074,
hagiwara@med.nagoya-cu.ac.jp

Dr Ruud Halfens, PO Box 616, Maastricht, 6200-MD,
The Netherlands, Tel: +31 43 388 1572 Fax: +31 43 388 4162,
r.halfens@zw.unimaas.nl

Miss Jane Hampton, 25 Trentham Street, Southfields, London,
SW18 5AS, UK, Tel: +44 (0)208 846 6544 janekh@fsmail.net

Mrs Sylvia Hampton, TVCS Ltd., DPB, Compton Place Road
Eastbourne, East Sussex, BN20 8AD, England
Tel: 01323 735588 Fax: 01323 737132
sylviahampton@v2net.co.uk

Dr Carita Hansson, Department of Dermatology, Sahlgrenska
University Hospital, Goteborg, 41345, Sweden,
Tel: +46 31 342 1000 Fax: +46 31 821 871,
carita.hansson@vgregion.se

Prof Keith Harding, Wound Healing Research Unit, Cardiff
Medicentre, Heath Park, Cardiff, CF14 4UJ, UK,
Tel: +44 (0)29 20 682 177, Fax: +44 (0)29 20 754 217,
hardingkg@whru.co.uk

Mr Jan Hermkens, Weymarstraat 8, Maasbree, 5993-CT,
The Netherlands, Tel: +31-77-465-2676, Fax: +31-77-465-1599,
jan@vistamedical.nl

Ms Hilde Heyman, Karel van de Woestynelaan 40, Aartselaar,
B-2630, Belgium, Tel: +32 32 89 40 87, Fax: +32 32 89 40 87,
hilde.heyman@telenet.be

Ms Helvi Hietanen, Tonttumuorinkuja 1, Espoo, 02200, Finland,
Tel: + 358 50 427 2214, Fax: + 358 9 471 87260,
helvi.hietanen@hus.fi

Mrs Anna Hjerppe, Vanhatie 20, 33960 Pirkkala, Finland.
Tel: +358 50 304 2120, anna.hjerppe@pshp.fi

Dr Maria Hok, Maria Str. 5. 8, Budapest, 1085, Hungary,
Tel: +36 1 3380 864

Ms Ami Hommel, Department of Orthopedics, Lund University
Hospital, Lund, 22185, Sweden, Tel: +46 46 177 106,
Fax: +46 46 172 165, ami.hommel@ort.lu.se

Prof Raymund Horch, Friedrich-Alexander Universitat, Erlangen-
Nurnberg, Krankenhausstr. 12, D-91054 Erlangen,
Germany Raymund.Horch@chir.imed.uni-erlangen.de

Mr Ronald Houwing, Driekieftenweg 9, 7214-PJ Epse, The
Netherlands. Tel: +31 570 646 755, houwingr@dz.nl

Mrs Lynne Hudgell, 2 Old Farm Close, Horton, Leighton Buzzard,
Beds, LU7 0UF, UK, Tel: +44 (0)1296 660 286,
lhudgell@hhnt.nhs.uk

Mrs Susanna Jackson, 180 Eccleshall Road, Stafford, Staffs, ST16
1JA, UK, Tel: +44 (0)1785 253 000, Fax: +44 (0)1785 250 627

Dr Maaïke Janssen, 'Sectie Verpegingswetenschap' uns 40,
Postbus 616, Maastricht, The Netherlands
Tel: +31 43 3881223 Fax: +31 43 3884162

Mrs Menna Lloyd Jones, Moarron Cae Deintur, Dolgellau,
Gwynedd, Wales, LL40 2YS, UK, Tel: +44 (0)1341 42,
menna.jones@nww-tr.wales.nhs.uk

Ms Julie Jordan-O' Brien, 16 Elton Court, Millgarm, Dunboyne,
Co. Meath, Ireland, Tel: +353 825 2136,
julie.jordanobrien@beaumont.ie

Dr Will Jung, Smith & Nephew Medical, Ltd., 101 Hessle Road,
Hull, HU3 2BN, UK, Tel: +44 (0)1482 673 030,
Fax: +44 (0)1482 673 307

Dr Vesa Juutilainen, Helsinki University Hospital, Dept of Plastic
Surgery, PO Box 266, HUS, 00029, Finland,
Tel: +358 50 427 1826, vesa.juutilainen@hus.fi

Mr TH Kaldijk, Academisch Ziekenhuis Maastricht, Postbus 5800,
Maastricht, 6202-AZ, The Netherlands Tel: +31 43 387 5912,
Fax: +31 43 387 5142, tka@frev.azm.nl

Feroz Kassam, Smith & Nephew, 101 Hessle Road, Hull,
HU3 2BN, UK, Tel: +44 (0)1482 673 812,
Fax: +44 (0)1482 673 106,
feroz.kassam@smith-nephew.com

Dr Daniel Katz, 44 Bar Yelauda Street, Neshet, 20300, Israel,
Tel: +972 4 820 7917, Fax: +972 4 820 7919.

Mr Jochen Kaulitzky, KCI Europe Holding BV, Parktoeren 6th
Floor, Van Heuven Goedhartlaan 11, PO Box 129, 1180 AC
Amstelveen, The Netherlands Tel: +31 (0)20426 0000

Mrs Taina Kelakorpi, Rintamasotilaantie 2C2, Helsinki, 00730,
Finland, Tel: +358 50 530 4985, taina.kelakorpi@hel.fi

Ms Bernadette Kerry, Lahinch, Durrow, Tullamore, Co. Offaly,
Ireland, bernie.kerry@mhb.ie

Dr Morris Kerstein, 1214 Valley Road, Villanova, Pennsylvania, 19085-2124, USA, Tel: +1 610 527 4316, Fax: +1 610 520 9293, lk1122@comcast.net

Mrs Brenda King, Tissue Viability, Manor Clinic, 18 Ridgeway Road, Sheffield, South Yorkshire, S12 2ST, UK.
Tel: +44 (0)114 271 6416; Fax: +44 (0)114 271 6417;
E-mail: Brenda.King@sheffieldsw-pct.nhs.uk

Prof Luther Kloth, 2205 North 71st Street, Wauwatosa, Wisconsin, 53213-1803, USA, Tel: +1 414 288 3381, Fax: +1 414 288 5987, Luther.Kloth@marquette.edu

Ms Susan Knight, Chalfont & Gerrards Cross Hospital, Hampden Road, Chalfont St Peter, Bucks, SL9 9DR, England
Tel: +44 (0)1753 883 821, Fax: +44 (0)1753 890 314, susan.knight@buckshosp.nhs.uk

Mr Eddy Koopman, Deventer Ziekenhuis, Postbus 5001, Deventer, 7400-GC, The Netherlands, Tel: +31 6 535 22224, Fax: +31 570 630 763, e.koopman@dz.nl

Ms Anne Laursen, Munkarp PI 2297, Hoor 24391, Sweden
Tel: +46 0413 551101. E-mail: anne.laursen@swipnet.se

Mrs Marion Lazenby, 73 Parkeston Road, Dovercourt, CO12 4AG, UK. Tel: 01255 206201 or 07784 741 092.
E-mail: marion.lazenby@tendrings-pct.nhs.uk

Miss Sylvia Leonard, 7 Brackendale Grove, Luton, LU3 2LT, UK,
Tel: +44 (0)1582 718 253. sylvia.leonard@ldh-tr@anglox.nhs.uk

Mr Jon Lewis, MSS Ltd, MSS House, Taffs Fall Road, Treforest Industrial Estate, Cardiff CF37 5TT, UK Tel: +44 (0)1443 849 200, Fax: +44 (0)1443 843 377, sales@medsys.co.uk

Ms Sarah Lewis, 14 Lancaster Road, Walthamstow, London, E17 6AJ, England. Tel: 0845 1555 000 (ext 4551);
Fax: 020 7380 9110. sarah.lewis@uelh.nhs.uk

Ms Doris Liddy, Danganelly, Cooraclare, Kilrush, Co. Clare, Ireland. Tel: +353 65 905 9203, doris.liddy@bsi.ie

Prof Christina Lindholm, Nattarovagen 42, Saltsjo-Boo, 13234, Sweden, Tel: +46 8 517 798 82, Fax: +46 8 517 799 68, christina.lindholm@hv.hkr.se

Dr Maarten Lubbers, Surgeon AMC, Meiberegde 9, Amsterdam, 1105-AZ, The Netherlands.
Tel: +31-20-566-9111, Fax: +31-20-697-2988.
E-mail: m.a.simons@amc.uva.nl

Mrs Eija Luotola, Hakalantanhua 15, Luvia, 29100, Finland,
Tel: +358 2 5583 300

Mr David Maddocks, Harrington House, Milton Road, Ickenham, Uxbridge, Middx, TW3 3JA, UK,
Tel: +44 (0)1895 628 400

Ms Lynda Mapplebeck, Northeast Lincolnshire NHS PCT, Cleethorpes Clinic, St Hughs Avenue, Cleethorpes, DN35 8EB, UK, Tel: +44 (0)1472 232 237, Fax: +44 (0)1472 232 251, lynda.mapplebeck@nelpct.nhs.uk

Mr Paddy Markey, Global Marketing Manager, ConvaTec Wound, Global Development Centre, First Avenue, Deeside Industrial Park, Deeside, CH5 2NU, UK
Tel: +44 (0)1244 584374 or 07819 223190,
Fax: +44 (0)1244 584311 paddy.markey@bms.com

Mrs Mathilde Martin, Marketing Global, Laboratoire URGO, 42, rue du Longvic, Chenove, 21300, France.
Tel: +33 380 44 70 00, Fax: +33 380 44 72 15, m.martin@urgo.fr

Mrs Ruth Martin, Wound Care Team, Wandsworth PCT, St John's Therapy Centre, 162 St John's Hill, Battersea, London, SW11 1SP,

UK, Tel: +44-20-8700-0232, Fax: +44-20-8700-0203, ruth.martin@swlondon.nhs.uk

Mr John Masso, 412 Hancock Place, Fairview, New Jersey, 07022-1810, USA, Tel: +1 201 941 8493, Fax: +1 201 943 1726, jmasso@palisadesmedical.org

Dr Miles Maylor, Consultant Nurse in Tissue Viability, John Radcliffe Hospital, Headley Way, Oxford, OX3, UK
E-mail: miles.maylor@orh.nhs.uk

Mr Dave McCausland, 100 N Florida Avenue, Belleville, Illinois, 62221-5429, USA, Tel: +1 618 277 9173, Fax: +1 618 277 9561, davem@therohogroup.com

Mr Russell McCraith, Molnlycke Health Care, Box 13080, Goteborg 402-52, Sweden.
Tel: +46-31-722-3000; Fax: +46-31-722-3408

Mr Alastair McLeod, 310-312 Dallow Road, Luton, Beds, LU1 1TD, UK. Tel: +44 (0)1582 413 104, Fax: +44 (0)1582 459 100, E-mail: alastairmcleod@huntleigh-technology.com

Ms Mary McMahan, Day Ward, Cappagh National Orthopaedic Hospital, Cappagh, Finglas, Dublin, Dublin-11, Ireland,
Tel: +353 1 814 0451

Ms Geraldine McNulty, Templeatha, Athea, Co Limerick, Ireland
Tel: +353 068 42370

Mr Kevin Mearns, Talley Group Ltd., Premier Way, Abbey Park Industrial Estate, Romsey, Hants, SO51 9AQ, UK,
Tel: +44 (0)1794 503 557, Fax: +44 (0)1794 503 555, kmearns@talleymedical.co.uk

Meditec Medical Ltd, Unit 7, Whitestown Business Park, Whitestown Drive, Tallaght, Dublin 24, Ireland.

Mr Jorg Menton, Parktoren, 6th Floor, Van Heuven Goedhartlaan 11, PO Box 129, Amstelveen, 1180-AC, The Netherlands, Tel: +31 20 426 0060, Fax: +31 20 426 0097

Mrs Elke Mertens, Wielandstrasse 24, Berlin, 12159, Germany, Tel: +49 30 859 1136, Fax: +49 30 450 529 900, elke.mertens@charite.de

Mr Frans Meuleneire, AZ St. Elizabeth, Wound Care Center, Godveerdegemstraat 62, 9620 Zottegem, Belgium.
Tel: +32 (0)936 48322, E-mail: frans.meuleneire@skynet.be

Dr Judith Meijers, Sect Verplegingwetenschap, Postbus 616, Maastricht 6200 nd, The Netherlands. Tel: +31 62 226 08312
Email: j.meijers@zw.unimaas.nl

Mrs Cristina Miguens, Apartado 1, Pampilhosa da Serra, 3320-999, Portugal, Tel: +351 235 594 728, Fax: +351 235 590 208, gouveia.miguens@sapo.pt

Ms Irina Mokina, Marketing Global, Laboratoire URGO, 42, rue du Longvic, Chenove, 21300, France, Tel: +33 380 44 70 00, Fax: +33 380 44 72 15, i.mokina@urgo.fr

Mrs Ann Moore, 14 Baker Rd, Shotley Centre, Ipswich, IP9 1RT, UK. E-mail: ann.moore@smhp.nhs.uk

Mrs Zena Moore, Faculty of Nursing and Midwifery, RCSI, 123 St Stephens Green, Dublin, Dublin-2, Ireland,
Tel: +353 1 402 2113

Ms Louise Morris, Overdale, Mamble Road, Clows Top, Bewdley, Worcestershire, DY14 9HX, UK.
Tel: +44 (0)1902 307 999 (ext. 4972), Fax: +44 (0)1902 643 010, E-mail: louise.tvn@btinternet.com

Mr Olavi Murros, PO Box 141, Valuraundantie 13, Helsinki, Finland 00701 Tel: +358 9 346 2574, Fax: +358 9 346 2576, olavi.murros@icfgroup.fi

Mrs Elaine Musgrove, Clinical Nurse Specialist – Tissue Viability, Northampton PCT, c/o St James Clinic, 116 St James Road, Northampton, NN5 5LQ, UK. Tel: +44 (0)1604 758484
Email: elaine.musgrove@northamptonpct.nhs.uk

Ms Anne Myer, 22951 Femes, Mission Viejo, California, 92692-1424, USA, Tel: +1-949-586-8222, Fax: +1-949-767-5998, woundcare@cox.net

Ms Tine Nexø, Huntleigh Healthcare A/S, Vassingerodvej 52, 3540 Lynge, Denmark Tel: +45 49 13 8486 or +45 2294 8480, Fax: +45 49 13 8487 E-mail: tin@huntleigh-healthcare.dk

Prof Wolfgang Niebel, Klinik für Allgemein u. Transplantationschirurgie, Hufelandstrasse 55, Essen, 45122, Germany, Tel: +49 201 723 1114, Fax: +49 201 723 1113, wolfgang.niebel@uni-essen.de

Mrs Marja Niskasaari, Korvatie 12 A1, 90650 Oulu, Finland. E-mail: marjaliisa.niskasaari@pp.inet.fi

Dr Jane Nixon, Clinical Trials Research Unit, University of Leeds 17 Springfield Mount, Leeds, LS2 9NG, England Tel: 0113 343 1477 Fax: 0113 343 1471 E-mail: j.e.nixon@leeds.ac.uk

Herr Professor Diedrich Nord, Abteilung Gesundheitsökonomie Universität Konstanz, Schweitzertalstrasse 10, 69118 Heidelberg Germany

Mrs Birgit Nordlund, Sala-Ampujankatu 18 F41, Vaasa, 65370, Finland, Tel: +358-6-3231-522, Fax: +358-6-3231-528, birgit.nordlund@vshp.fi

Mrs Pia Obank, District Nurses Office, Carrington House Surgery, 19 Priory Road, High Wycombe, HP13 6SL, England Tel: +44 (0)1494 445582. E-mail: pia.obank@nhs.net

Dr Takehiko Ohura, Pressure Ulcer & Wound Healing Research Center (Kojinkai), 6F, H&B Plaza Blvd., 1-1, West 2, South 3, Chuo-ku, Sapporo, 060-0063, Japan. Tel: +81 11 232 2208, Fax: +81 11 232 5181 t.ohura@mb.snowman.ne.jp

Dr Jr Cees Oomens, Eindhoven University of Technology, Biomedical Engineering Department, PO Box 513, Eindhoven, 5600-MB, The Netherlands, Tel: +31 40 247 2818, Fax: +31 40 244 7355, c.w.j.oomens@tue.nl

Dr Manlio Ottonello, via Nizza 12411, Savona, 17100, Italy Tel: +39 348 515 6157 or +39 019 623 4803; Fax: +39 019 623 4847, E-mail: manlioot@tin.it

Mr Roy Overgard, Nasse Noffsvei 5b, Holter, 2034 Norway. Tel: +47 930 86 013; E-mail: rco@alurehab.com

Mrs Claudia Parnell, 83 St Margarets Street, Rochester, Kent, ME1 3BJ, UK, Tel: +44 (0)1634 294 654, Fax: +44 (0)1634 294 830

Mrs Elaine Penn, Fox and Pheasant Cottage, Silver Street, Brixworth, Northampton, NN6 9BY, England Tel: 01604 595 215 Fax: 01604 595 106

Ms Jeanne Perla, 10 Centre Drive, Orchard Park, NY, 14127-2280, USA, Tel: +1-716 662-2551, Fax: +1-716 662-0748

Mrs Anne Marie Perrin, Admin Block, Brookfields Hospital, 351 Mill Road, Cambridge, CB1 3DF, England Tel: +44 (0)1223 723 019, Fax: +44 1223 723 002, anne-marie.perrin@cambcity-pct.nhs.uk

Ms Lyn Phillips, 310-312 Dallow Road, Luton, Bedfordshire, LU1 1TD, UK, Tel: +44 (0)1582 413 104, Fax: +44 1582 459 100,

Ms Birgit Planitz, Solmsstrasse 8, Wiesbaden, 65189 Germany. Tel: 0049-611-174 8674, Birgit.planitz@web.de

Prof Chrysanthi Plati, Fragokklisias 12, Marousi Atica, Athens, 15125 Greece, Tel: 6198617; Fax: 6198619

Prof Patricia Price, Wound Healing Research Unit, University of Wales College of Medicine, Heath Park, Cardiff, CF14 4UJ, UK, Tel: +44 (0)29 206 82175, Fax: +44 (0)29 207 54217, pricepe@whru.co.uk

Linda Primmer, 104 Bonnyrig Road, Eskbank, EH22 3HZ, UK

Ms Tiina Pukki, Aapelinkatu 5 H 83, Espoo 02230, Finland Tel: +358 405 496 506, tiina.pukki@hus.fi

Ms Nina Pulkkinen, Leppäpaantie 5, Haapajarvi 85800, Finland Tel: +358 40 775 5580

Dr Steven Reger, Dept of Physical Medicine and Rehabilitation, Cleveland Clinic Foundation C-21, 9500 Euclid Avenue, Cleveland, Ohio, 44195, USA, Tel: +1 216 444 1801, Fax: +1 216 445 7000

Dr Burkhard Reis, Smith & Nephew GmbH, Wound Management, Max-Planck Strasse 1-3, Lohfelden, Germany, D 34253 Tel: +49 561 9514 135, Fax: +49 561 9514 19 135 burkhard.reis@smith-nephew.com

Mr Paul Rigby, Beech Avenue 54-80, PW Schiphol-Rijk, NL-1119, The Netherlands, Tel: +31 20 658 6145, Fax: +31 20 658 6810

Dr Shyam Rithalia, Brian Blatchford Building, School of Healthcare Professions, University of Salford, Salford, M5 4WT, UK Tel: +44 161 295 2286, Fax: +44 161 295 2668, s.rithalia@salford.ac.uk

Ms Birgit Rodgaard-Jessen Lund, Coloplast A/S, Wound Care Division, Holtedam 3, Humlebaek, DK-3050 Denmark. Tel: +45 49 11 17 48; Fax: +45 49 11 17 00. DKBRJ@coloplast.com

Dr Marco Romanelli, Department of Dermatology, University of Pisa, Via Roma 67, Pisa, 56126, Italy, Tel: +39 050 992 436 or Mobile +39 368 229, Fax: +39 050 551 124, m.romanelli@med.unipi.it

Ms Marianne Rosager, Bronzevej 2-8, Esbjerg, DK-3060, Denmark, Tel: +45 49 11 2314, dkmro@coloplast.com

Ms Julie Rosier. E-mail: J.Rosier@ZW.unimaas.nl

Johanna Sahlstedt, c/o Bjorn Lovgren, Simnshamnsvagen 3, Johannestrov 12153, Sweden Tel: +46 8 462 1830, Fax: +46 8 462 1890 johanna.sahlstedt@shltech.com

Prof Hiromi Sanada, Gerontological Nursing, Health Science & Nursing, University of Tokyo, Graduate School of Medicine, 7-3-1 Hongo, Bunkyo-ku, Tokyo, 113-0033, Japan. Tel: +81 3 5841 3419, Fax: +81 3 5841 3419, hsanada-ky@umin.ac.jp

Miss Sue Sayer, 3 Westerbroom Place, Edinburgh, EH12 7RU, Scotland, UK. Tel: +44 (0)131 467 9425, suesayer33@hotmail.com

Prof J.M.G.A. Schols, Vivre, Polvertorenstraat 4, 6211 LX Maastricht, The Netherlands Tel: 043 631 4129, Fax: 043 631 4125 E-mail: j.schols@vivre-groep.nl

Dr Lisette Schoonhoven, Centre for Quality of Care Research, Radboud University Nijmegen Medical Centre, PO Box 9101, Wok 229, Nijmegen, 6500-HB, The Netherlands, Tel: +31 24 361 0458, Fax: +31 24 361 9604, L.Schoonhoven@kwazo.umcn.nl

Dr Wayne Schroeder, KCI, 8023 Vantage Drive, San Antonio, Texas, 78230, USA, Tel: +1 210 255 6968, Fax: +1 210 255 6988, schroedw@kci1.com

Ms Astrid Schulz, Birkenhaldenstr. 45, Uctliburg ISA, 8738 Switzerland, Tel: +41-551-280-4145. E-mail: astrid.schulz@srft.ch

Ms Pamela Scott, Park View, Bothel, Wigton, Cumbria, CA7 2JD, UK, Tel: +44 (0)7939 821 567

Dr J.B. Selkon, 4 Ethelred Court, Oxford, OX3 9DA, UK, Tel: +44 (0)1865 764 098

Mrs Salla Seppanen, Kaarikatu 32, Oulainen, 86300, Finland, Tel: +358 50 320 6831, Fax: +358 8 473 414
salla.seppanen@pp.inet.fi

Ms Sharon, Shaw, 5 Chestnut Way, Brightlingsea CO7 0UA, UK, Tel: +44 (0)1206 742 452, sharon-shaw@essexrivers.nhs.uk

Ms Catherine Sharp, 20/765 Princes Highway, Blakehurst, Sydney, 2221, Australia, Tel: +61 2 95 465 456, Fax: +61 2 95 850 393, katesharp410@optusnet.com.au

Ms Sue Simmonds, Smith & Nephew, PO Box 81, 101 Hessle Road, Hull, East Yorkshire HU3 2BN, UK, Tel: +44-1482 225181; Fax: +44-1482 328326
sue.simmonds@smith-nephew.com

Mr Peter Sims, Newbridge Road Industrial Estate, Blackwood, South Wales, NP12 2YN, UK, Tel: +44 (0)1495 235 800, psims@frontier-group.co.uk

Mrs Maggie Slater, North Hampshire Hospital NHS Trust, Aldermaston Road, Basingstoke, Hampshire, RG24 9NA, UK, Tel: +44 (0)1256 473202, E-mail: Maggie-slater@nhht.nhs.uk

Mrs Christine Smith, Department of Nursing and Midwifery, John Dewar Building, Highlander Way, Inverness, IV2 7GE, UK, Tel: +44 (0)1463 706 837, Fax: +44 (0)1463 713 844, christine.smith@hpct.scot.nhs.uk

Mrs Rachael Smithdale, 35 Vanneck Square, Putney, London, SE15 5DZ, UK, Tel: +44 (0)2086 533 597, rachael.smithdale@swlondon.nhs.uk

Ms Helen Smyth, Anglia Ruskin University, Institute of Health and Social Care, Bishop Hall Lane, Chelmsford, Essex, CM1 1SQ, UK, Tel: +44 (0)1245 493 131, h.smyth@anglia.ac.uk

Prof J Javier Soldevilla Agreda, Av. Navarra 8-10 – 4*B, Logrono, La Rioja, 26001, Spain, Tel: +34 941 239240, Fax: +34 941 23934, E-mail: gneaupp@arrakis.es

Ms Jackie Stephen-Haynes, Malvern View Barn, Shrawley, Worcs, WR6 6TS, UK, Tel: +44 (0)7775 792 775, jackies-h@btopenworld.com

Dr Lesley Stockton, 1 Hatherway Court, Leigh, Lancashire, WN7 1HL, UK, Tel: +44 151 794 5722, Fax: +44 151 794 5719, E-mail: lesley2@liv.ac.uk

Ms Cindy Sylvia, 10 Centre Drive, Orchard Park, New York, 14127, USA, Tel: +1 716 662 2551, Fax: +1 716 662 0748

Prof Makoto Takahashi, Kita 14, Nishi 9, Kita-ku, Sapporo Graduate School of Information Science & Technology, Hokkaido University, Hokkaido, Japan 060-0814, Tel: +81 11 (706) 7100, Fax: +81 11 (706) 7100, E-mail: takahashi@bme.ist.hokudai.ac.jp

Mr Chris Tas, Clinical Nurse Practitioner, Wound Care, Zulzekestraat 27, 9690 Zulzeke, Belgium, Tel: +32 49 722 9301, E-mail: chris.tas@pandora.be

Ms Niina Tasaranta, Tiistilantie 6 a 7, 02230 Espoo, Finland, Tel: +358 40 735 2471, Fax: +358 9 471 87260, E-mail: niina.tasaranta@hus.fi

Mr Bruno Teixeira, Canada des Gentes, No. 21, Porto Formoso, Sao Miguel - Acores, Porto Formoso, 9625-410, Portugal, Tel: +351 296 442 597, Fax: +351 296 302 285, bmtaixeira@esepd.pt

Dr Barend ter Haar, M2 East Way, Dales Manor Business Park, Sawston Cambridge CB2 4TJ, UK, Tel: +44 (0)845 130 0237, Fax: +44 (0)845 1300238, E-mail: barend@besbiz.eu.com

Mr Geoffrey Thompson, 38 Robin Road, Erdington, Birmingham, West Midlands, B23 6PG, UK, Tel: +44 (0)121 680 1296; E-mail: geoffreylthompson@gmail.com

Ms Minna Tikkanen, Nousiaistentie 7A7, Helsinki, 00280, Finland, Tel: +358 40 582 3091

Mr Bart Van Der Heyden, Houtstrat 74, Destelbergen, 9070, Belgium, Tel: +32 9356 7222, Fax: +32 9356 6915, bvanderheyden@attglobal.net

Mr Han van der Mij, Farmaceutisch Bureau Amsterdam, Postbus 2200, Amsterdam, 1000-CE, The Netherlands, Tel: +31 20 624 3079, Fax: +31 20 638 7960, hbjvdmijn@fbadam.nl

Dr Katrien Vanderwee, UZ Gent - Blok A 2de V, De Pintelaan 185, Gent, 9000, Belgium, Tel: +32 9 240 36 29, Fax: +32 9 240 50 02, katrien.vanderwee@ugent.be

Dr Franco Vercesi, Via Vincenzo Monti 2, Milan 20123, Italy, Tel: 0039 335 465 494, Fax: 0039 028 691 9014, E-mail: franco.vercesi@ao-legnano.it (or: fvercesi@tiscali.it)

Prof Jose' Verdu Soriano, Victoria, 102, Santa Pola, (Alicante), 03130, Spain, Tel: +34 965 90 39 17, Fax: +34 965 90 36 64, pepe.verdu@va.es

Ms Wilma Vermeulen, Verpleegkundig specialist/2Orginnovator, Duinschooten 12-B19, Noordwijkerhout 2211 2C, The Netherlands, Tel: +31 (0)252 376 701, wvermeulen@spaarneziekenhuis.nl

Mrs Tracy Vernon, Doncaster Royal Infirmary, Armthorpe Road, Doncaster, Yorks, DN2 5LT, UK, Tel: +44 (0)1302 366 666 (ext. 3359), Fax: +44 (0)1302 320 098

Dr Argentina Vidrascu, Plastic Surgeon, 28 Ion Ghich Street, 400306 Cluj-Napoca, Romania, Tel: +4064 580 793, Fax: +4064 353 566, E-mail: argentinadr@yahoo.com

Ms Pia Volmanen, Puulinranta 2, Rovaniemi 96200, Finland, ppatsi@msn.com

Mrs Kathryn Vowden, Bradford Royal Infirmary, Duckworth Lane, Bradford, BD9 6RJ, UK, Tel: +44 (0)1274 364 466, Fax: +44 (0)1274 364 807, E-mail: Kath.Vowden@bradfordhospitals.nhs.uk

Dr Jan Weststrate, LEVV, PO Box 3135, Utrecht 3502 9C, The Netherlands, Tel: +31 3029 19000, Fax: +313029 19049, j.weststrate@levv.nl

Ms Kerry Wiles, Smith & Nephew Medical Ltd, PO Box 81, Hessle Road, Hull HU3 2BN, UK, E-mail: kerry.wiles@smith-nephew.com

Mr Flemming Wilhelmsen, Coloplast A/S, Wound Care Division, Høltedam 3, Humlebaek, DK-3050 Denmark, Fax: +45 49 11 17 00; E-mail: dkfw@coloplast.com

Ann Witherow, 36 Cappagh Grove, Portstewart, Derry, Northern Ireland, BT55 7SU, UK, Tel: +44 (0)2871 345 171 (ext. 3602), awitherow@alt.n-i.nhs.uk

Mr Gareth Wood, Clinitron House, Ashby Park, Ashby de la Zouch, Leicestershire, LE65 1JG, England, Tel: +44 (0)1530 411 000, or +44 (0)1530 562 003, Fax: +44 (0)1530 562 051

Ms Trudie Young, School of Nursing, Glan Clwyd Hospital, Bodelwyddan, Denbighshire, Wales, LL18 5UJ, UK, Tel: +44 (0)1745 58 43 80, Fax: +44 (0)1745 53 49 60, t.young@bangor.ac.uk