Supplementary Table 3. Summary of peer-reviewed clinical evidence for DACC-coated dressing

Study	Study design	Aetiology	Patients	Outcome measures/ clinical challenge	Main findings
Diabetic foot ulcers (n=10)					
Nielsen and Andriessen (2012)	Comparative, RCT: DACC-coated dressing vs. PHMB-containing biocellulose	Amputation related to DFU	n=30 (DACC) vs. n=30 (PHMB)	Pain levels, dressing adherence	Pain levels and adherence greater in DACC-coated dressing group
Sebayang and Burhan (2024)	Single-blind, fold-over, RCT: cadexomer iodine 0.9% vs. Cutimed Sorbact	DFU	n=162	Wound assessment	Significant reduction in wound size scores for Sorbact at 60 and 90 days
Armi et al (2023)	Comparative, quasi-experimental study: DACC-coated dressing vs. PHMB-containing dressing	DFUs	n=129	Wound healing	Wounds treated with DACC-coated dressing healed faster
Mañas et al (2025)	Prospective, observational study: DACC	DFUs	n=61	Bacterial load, presence of biofilm	Number of patients requiring antibiotics reduced, level of biofilm reduced
Malone et al (2023)	Non-comparative, proof-of-concept study: DACC or DACC gel	DFUs	n=20	Reduced bacterial load with removal of DACC-coated dressing	Mean total microbial load of DFUs did not change after 2 weeks of therapy. Biofilms adhere to DACC-coated dressings
Haycocks and Chadwick (2011)	Case series: DACC	DFUs	n=29	Signs of infection	All ulcers showed reduced signs of infection when treated with DACC-coated dressing, some wounds healed
Skinner and Hampton (2010)	Case series: DACC	DFUs	n=4	Wound assessment	All cases showed improvements and some healed completely
Malone et al (2024)	Case series: DACC	DFUs	n=3	Assessment of dressing fouling after use	Microorganisms bound to fouling material and not directly to dressing material
Haycocks et al (2011)	Case reports: DACC	Hard to heal DFUs	n=2	Reduction in infection and prevention of reinfection	Reinfection did not occur, and complete healing took place
Cardillicchia and Todaro (2024)	Case report: DACC	DFUs	n=1	Wound assessment, pain, infection	DACC dressing reduced all parameters and wound healed in 10 days
Venous leg ulcers (n=3)					
Magdi et al (2017)	Quasi-experimental: DACC (Cutimed Sorbact)	Pressure ulcers	n=76	Wound assessment (PUSH)	Improvement in wound healing
Mussi and Salvioli (2004)	Comparative study: DACC-coated dressing vs. control treatment	Pressure ulcers	n=33	Wound assessment	DACC-coated dressing use improved wound bed appearance, increased debridement, reduced number of days treatment
Ciliberti et al (2016)	Observational study: DACC used as contact layer in NPWT	Pressure ulcers	n=50	Changes in bacterial load	When used as a contact layer as part of NPWT, use of DACC-coated dressing associated with a reduction in wound infection
Surgical wounds (n=15)					
Bua et al (2017)	Prospective, comparative, RCT: standard dressing vs. DACC	Non-implant surgery	n=100	SSI	Significantly less patients had SSIs at days 5–7 in DACC group
Magro (2023)	Retrospective and prospective audit: Leukomed Sorbact	Post-caesarean section wounds	n=2436 (retrospective), n=2368 (prospective)	SSI rate, SSI readmission rate, antibiotic use, costs	SSI rate reduced by 38% (6.1% to 3.8%) with introduction of Leukomed Sorbact, SSI readmission rate reduced by 31% (1.27% to 0.88%), cost reductions
Stanirowski et al (2016a)	Comparative RCT (pilot study): standard dressing vs. DACC-coated dressing	Caesarean section wound	n=81 (standard), n=81 (DACC)	SSI	SSI significantly lower in DACC-coated group
Stanirowski et al (2016b)	Comparative RCT: standard dressing vs. DACC-coated dressing	Caesarean section wound	n=271 (standard), n=272 (DACC)	SSI	SSI significantly lower in DACC-coated group
Totty et al (2019)	Comparative RCT: standard dressing vs. DACC-coated dressing	Caesarean section wound	n=70 (standard), n=74 (DACC)	SSI	SSIs lower in DACC-coated group but not statistically significant
Stanirowski et al (2019)	RCT: bacterial-binding dressing (DACC) vs. standard surgical dressing	Post-caesarean section wounds	n=543	SSI rate, resource use	Patients with DACC-coated dressing had fewer outpatient visits and fewer hospital bed-days. Cost savings were recorded
Romain et al (2020)	Comparative, randomised consecutive study: DACC-coated dressing vs. alginate dressing	Pilonidal sinus surgery	n=246	Wound healing	Number of wounds healed at 75 days significantly higher in DACC-coated dressing group
Mulpur et al (2024)	Prospective observational study: DACC dressing	Various surgical wounds	n=106	SSI, pain, dressing adhesion (remaining in situ), patient satisfaction	SSI rate of 1.91%, good dressing retention, pain experienced at dressing changes improved compared with other dressings, excellent satisfaction
Mahyudin et al (2020)	Comparative, observational study: DACC-coated dressing vs. gauze/tulle dressing	Orthopaedic and traumatology surgery wounds	n=25	Wound healing (BWAT score; Patient comfort (frequency of wound care, pain VAS); cost-effectiveness (indirect and direct costs)	Slight improvement in wound healing (reduced BWAT score) and better patient comfort in favour of DACC-coated dressing. No difference in cost-effectiveness
Taylor et al (2020)	Audit study: DACC dressings	Caesarean section wounds	N/A*	SSI rate	Use of evidence-based evidence and guidelines, education, and introduction of DACC-coated dressings reduced SSI rates
Bullough et al (2012)	Case series: DACC dressings	Abdominal wounds	n=4	SSI, wound size	Infections resolved within 2 weeks, reduction in wound size
Nicolosi and Parente (2023)	Case series: DACC dressings	Infected post-surgical wounds	n=3	Wound assessment	Resolution of infection, optimal healing, resolution of dehiscence
Corazza et al (2018)	Case report: DACC	Foot surgical wound	n=1	Wound and skin assessment	Diagnosis of contact dermatitis due to dialkylcarbamoyl compounds of DACC
Navarro-Triviño et al (2022)	Case report(s): DACC		n=??	Skin assessment	Diagnosis of contact dermatitis with treatment using Intrasite and Sorbact
Pickles et al (2022)	Comparative study: DACC and Aquacel Ag Surgical, Leukomed Control, Mepilex Border, Mepore, Opsite Post-Op, Tegaderm+Pad	Orthopaedic surgical	n=307	Ease of application; exudate management; SSI	90% of healthcare professionals were satisfied, very or extremely satisfied with ease of application; highest amount of wet exudate of dressings assessed
Traumatic wounds (n=1)					
Avkan-Oğuz et al (2020)	Case series: DACC	Traumatic leg wound	n=1	Wound infected with *Aspergillus flavus*; leg wound with exposed bone; tissue necrosis	Systemic antifungal initiated DACC-coated dressing applied daily. No fungal growth observed in third week of systemic antifungal therapy and dressing application. Wound improvement led to skin grafting.
Multiple wound types (n=16)					
Ciprandi et al (2022)	Non-comparative, retrospective assessment: DACC dressings	Varied acute and chronic paediatric wounds	n=1232	Signs of infection; wound healing; SSI prevention	Use of DACC-coated dressing prevented SSIs, reduced signs of infection, and promoted wound progression
Masti et al (2015)	Comparative RCT: Aquacel vs. DACC-coated dressing	Infected leg ulcers	n=20 (Aquacel), n=20 (DACC)	Bacterial load	73% reduction of bioburden seen in DACC-coated dressings (vs. 41%)
Dissemond et al (2023)	Chart audit review, comparative: Aquacel Ag+ vs. DACC-coated dressing	Varied acute and chronic wounds	n=159	Outcomes included: wound parameters, healing, need for surgery	Findings in Germany were comparable between Aquacel Ag+ and Sorbact with regards to wound description, management and treatment outcomes, including percent area reduction and wound closure
Seckam et al (2021)	Observational study: DACC dressing (Cutimed Sitrec Sorbact)	VLUs and DFUs	n=62	Infection management, QoL, fluid retention, ease of use	Good fluid management, reduction in skin maceration. A 9% reduction in number of infected wounds
Von Hallern et al (2004)	Pilot study: DACC	Varied infected or secondary healing wounds	n=36	Signs of infection	Signs of infection reduced, marked improvement of wound condition, wound progression
Von Hallern and Lang (2005)	Observational study: DACC	Varied infected wounds	n=418	Microbial count	Microbial elimination supporting reduction in clinical signs of infection
Stephen-Haynes et al (2010)	Case series: DACC dressing	Leg ulcers, pressure ulcers, other wounds	n=14	Wound assessment, debridement	Assisted in debridement in 5 cases
Sibbald et al (2012)	Case series: DACC dressing	Leg ulcers, DFUs	n=14	Infection, wound area	Treatment with DACC-coated dressing reduced wound area, no change infection rate
Bruce (2012)	Prospective case series: DACC dressing	Acute or chronic wounds, all infected	n=13	Clinical signs of infection, wound size	Signs of infection eliminated in all but 2 patients, size reduction seen in 79% of cases
Bateman (2015)	Case series: DACC dressing	Various (surgical, DFU, burn, VLU, trauma) heavily exuding, infected wounds treated with NPWT	n=10	Exudate reduction, wound depth, reduction in infection	Positive outcomes on adherence, atraumatic application and removal, reduced bacterial load and exudate levels
Powell (2009)	Case series: DACC dressing	Ulcers and post-operative wounds	n=6	Wound assessment	All cases showed improvement with some healing completely
Jeffery (2014)	Case series using DACC with NPWT	Surgical wounds, sinus wound, burn wounds	n=7	Wound assessment	No clinical signs of infection, mechanical performance good, healing outcomes good
Hardy (2010)	Case series: DACC dressing	Chronic oedema with leg ulcer, oedema with varicose eczema, chronic wound lymphoedema	n=3	Patient assessment, wound assessment (where appropriate), pain, QoL	All cases showed clinical improvement, improved quality of life
Boyar (2016)	Case series: DACC dressing	Delayed healing occipital pressure injury, pressure injury, dehisced surgical wound	n=3	Wound assessment, wound infection, wound closure	Complete closure achieved within 2-4 weeks
Pirie et al (2009)	Case series: DACC dressing	Varied infected wounds	n=3	Wound healing, signs of infection	All cases showed clinical improvement
Iwao et al (2023)	Pilot study: DACC dressing	Varied infected or critically colonised wounds	n=15	Odour assessment	Use of DACC-coated dressings reduced wound odour, no difference in bacterial load
Burn wounds (n=8)					
Holm et al (2024)	Prospective observational study: DACC dressing	Minor burn wounds	n=52	Graft take	Median days to grafting 35 days. Sorbact use prior to grafting aids successful outcomes
Kleintjes et al (2018)	Prospective study: DACC dressing	Burn wounds	n=27	Wound assessment	A majority of wounds treated with DACC-coated dressing appeared clean, 27% appeared healed
Allorto (2024)	Prospective audit: DACC dressing	Partial thickness burn wounds; donor sites	n=27	Wound assessment; tissue trauma; wear time	Mean wear time to healing of 14 days (max. 22 days)
Kleintjes et al (2017)	Prospective pilot study: DACC dressing	Burn wounds	n=13	Bacterial load, wound assessment	Wounds with DACC-coated dressing assessed as cleaner and had less bacterial growth compared with control dressings
Kusu-Orkar et al (2019)	Case series: DACC dressing	Burn wounds	n=10	Re-epithelialisation, adverse healing events	Healing seen in wounds treated with DACC-coated dressing
Derbyshire (2010a)	Case studies: DACC dressing	Non-healing wounds	n=3	Wound bed assessment, QoL, cost	Use of Sorbact improved all parameters
Derbyshire (2010b)	Case studies (follow-up to previous study): DACC dressing	Non-healing wounds	n=3	Wound bed assessment, QoL, cost	Use of Sorbact improved all parameters
Kleintjes and Prinsloo (2024)	Case report: DACC dressing	Various (deep, partial, full-thickness) burn wounds	n=1	Graft take using Sorbact-CEA method	Good graft take (short term), near-normal tissue appearance (long term)
Miscellaneous wounds (n=11)					
Meberg and Schøyen (1990)	RCT: cleansing with CHX vs. DACC-coated dressing	Umbilical cord cleansing	n=1,228 (CHX), n=1,213 (DACC)	Incidence of infection at 6 weeks	No difference in incidence of infection (16.3% [DACC] vs. 14.6% [CHX])
McBride et al (2018)	Parallel, three-arm prospective RCT: Algisite™ M, Cuticerin™, and Sorbact®	Split-thickness skin grafts	n=101	Time to re-epithelialisation, pain, itching, scarring, cost	No difference between dressings
Lee et al (2018)	Retrospective, comparative study: conventional foam vs. DACC-coated dressing combined with CHX	Skin grafts	n=60	Healing times, infection rate	Time to wound healing significantly shorter in DACC-coated dressing group. Infection rates significantly shorter in thin skin grafts
Kammerlander et al (2008)	Prospective study: DACC dressing	Non-healing wounds	n=116	Wound assessment, infection	72% of wounds improved, 21% healed, improvement in pain levels
Lamberti et al (2023)	Prospective study: DACC dressing	Central venous catheter exit site wounds	n=88	Bacterial load, skin tolerance, risk of infection	No cases of infection. DACC-coated dressing may play a role in infection prevention
Hampton (2007)	Prospective study: DACC dressing	Non-healing wounds	n=21	Wound assessment	At 4 weeks, 6 wounds healed, and 14 wounds improved. Reduction in malodour in all wounds
Johansson et al (2009)	Case series: DACC dressing	Diabetic patients with inter-digital fungal infections	n=20	Lesion size, resolution of infection	Positive healing in majority of cases, variety of changes in microbiology
Choi et al (2015)	Prospective, non-comparative study: DACC dressing	Skin grafts	n=7	Assessment of infection	No wound infection detected
Dwiyana et al (2019)	Comparative study: DACC-coated dressing vs. saline dressing + mupirocin	Infected epidermolysis bullosa wounds	n=5	Wound area, clinical improvement	DACC-coated dressing as effective as saline dressings + mupirocin at eliminating bacterial infection, promoted faster healing
Johansson et al (2009)	Case series: DACC dressing	Diabetic patients with inter-digital fungal infections	n=20	Lesion size, resolution of infection	Positive healing in majority of cases, variety of changes in microbiology
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