

## Appendix 3B Characteristics of excluded studies

### Abbruzzese 2009<sup>1</sup>

**Reason for exclusion** Both groups received debridement.

### Abdelatif 2008<sup>2</sup>

**Reason for exclusion** Nonrandomized study

### Acechurovai 2003<sup>3</sup>

**Reason for exclusion** Nonrandomized study

### Aftab 2010<sup>4</sup>

**Reason for exclusion** Soft tissue laser intervention in this study was not used as a form of debridement.

### Ahroni 1993<sup>5</sup>

**Reason for exclusion** Surgical debridement was reported as being carried out routinely throughout study on both treatment arms.

### Apelqvist 1994<sup>6</sup>

**Reason for exclusion** Varidase is used as a debriding agent but no separate data were available for this group of patients. If such data had been available, the size of the study (n=17) is unlikely to be sufficiently powered.

### Apelqvist 1996<sup>7</sup>

**Reason for exclusion** Authors report that both treatment groups received surgical debridement performed during the course of the study indicating that debridement was not the primary focus of this study.

**Armstrong 2000<sup>8</sup>**

**Reason for exclusion** Although all wounds were debrided the primary intervention measured was a foot compression system, there was no comparison or conclusions drawn regarding the debridement methods used.

**Ashry 1998<sup>9</sup>**

**Reason for exclusion** Not an RCT on debridement but a cost related archival analysis on amputations among in diabetic minority groups.

**Bahrami 2008<sup>10</sup>**

**Reason for exclusion** Intervention was not a form of debridement but an oral herbal preparation.

**Berry 1996<sup>11</sup>**

**Reason for exclusion** Randomized study on the debridement of cavity wounds not diabetic foot ulcers.

**Biliaieva 2009<sup>12</sup>**

**Reason for exclusion** This was a non-randomized study investigating absorptive dressings.

**Bowling 2007<sup>13</sup>**

**Reason for exclusion** This was a non-randomized study - case series investigating larval therapy.

**Brenes 2011<sup>14</sup>**

**Reason for exclusion** This was a non-randomized study - case series on hyaluronate iodine.

**Caputo 2008<sup>15</sup>**

**Reason for exclusion** The study does not report outcomes separately for diabetic and other wound types.

**Cardinal 2009<sup>16</sup>**

**Reason for exclusion** Non-randomized retrospective study of healing rates as predictors of complete wound closure.

**Chan 2007<sup>17</sup>**

**Reason for exclusion** Systematic review of Maggot debridement therapy not RCT.

**Chiglashvili 2004<sup>18</sup>**

**Reason for exclusion** Non-randomized study - case series not on debridement but IV infusion of complex medical regimen.

**Clavel 2008<sup>19</sup>**

**Reason for exclusion** Narrative review article on preventing amputations in diabetics.

**Davydov 2011<sup>20</sup>**

**Reason for exclusion** Narrative review article on Larval therapy.

**Dekhtiar 1995<sup>21</sup>**

**Reason for exclusion** Non-randomized case series.

**Dereure 2012<sup>22</sup>**

**Reason for exclusion** RCT on Venous leg ulcers and Mixed etiology ulcers using Hyaluronic acid.

**Ennis 2005<sup>23</sup>**

**Reason for exclusion** Study utilized another form of debridement in both treatment arms.

**Freeman 2010<sup>24</sup>**

**Reason for exclusion** Non-randomized study of bee honey.

**Gelunenko 2000<sup>25</sup>**

**Reason for exclusion** The intervention under study is an oral immune modulating agent not a form of debridement.

**Gottrup 2001<sup>26</sup>**

**Reason for exclusion** This is a cost evaluation paper. Not an RCT.

**Gough 1997<sup>27</sup>**

**Reason for exclusion** RCT which compares granulocyte stimulating factor, with a placebo. There is no debriding agent included in the trial.

**Graham 2014<sup>28</sup>**

**Reason for exclusion** The study involved wounds of varying etiologies and was a non-randomized case series study on Oakin dressing.

**Grayson 1994<sup>29</sup>**

**Reason for exclusion** RCT assessing the effectiveness of Imipenem / Cilastatin against ampicillin / Sulbactam in the treatment of pedal infections in diabetic. No debriding agent was considered.

**Holzer 1998<sup>30</sup>**

**Reason for exclusion** This study was not an RCT but an archival data analysis.

**Jan 2012<sup>31</sup>**

**Reason for exclusion** This study was not an RCT but was reported as a quasi-experimental study.

**Jude 2007<sup>32</sup>**

**Reason for exclusion** Standardized surgical debridement was used regularly in both treatment arms concurrently as part of standard care.

**Jude 2004<sup>33</sup>**

<b>Reason for exclusion</b>	RCT of 120 people that compares silver based fiber dressing with an alginate, alternate form of debridement confounded both arms.
<b>Kaviani 2011<sup>34</sup></b>	
<b>Reason for exclusion</b>	The laser therapy was not used here for debridement but to stimulate growth. Debridement was carried out separately.
<b>Khramilin 2011<sup>35</sup></b>	
<b>Reason for exclusion</b>	Narrative review article not an RCT.
<b>Krupski 1991<sup>36</sup></b>	
<b>Reason for exclusion</b>	RCT which compared platelet derived wound healing with a placebo. Although all wounds were extensively debrided initially, there were no debriding agents included in the trial. The trial sample was 'mixed ulcers' - with leg ulcers mainly identified.
<b>Krymets 2013<sup>37</sup></b>	
<b>Reason for exclusion</b>	Non-randomized study not an RCT.
<b>Kuo 2012<sup>38</sup></b>	
<b>Reason for exclusion</b>	Randomized study on the use of herbal botanical anti-inflammatory creams. These herbal botanicals were not used as a form of debridement.
<b>Xi-qiang 2006<sup>39</sup></b>	
<b>Reason for exclusion</b>	Growth factors as focus of RCT. (Debridement to aid growth factor only).
<b>Logachev 2001<sup>40</sup></b>	
<b>Reason for exclusion</b>	Nonrandomized study - Case series.
<b>Macleod 1991<sup>41</sup></b>	

<b>Reason for exclusion</b>	Not an RCT.
<b>Martinez-de-Jesus 1997<sup>42</sup></b>	
<b>Reason for exclusion</b>	RCT where all foot ulcers underwent surgical debridement and were then treated with either topical Ketanserin or normal saline (placebo). Excluded as the topical treatment, although gel based was compounded by the fact that it contained Ketanserin gel.
<b>Mehta 1999<sup>43</sup></b>	
<b>Reason for exclusion</b>	Review article on cost using claims data.
<b>Mohajeri 2014<sup>44</sup></b>	
<b>Reason for exclusion</b>	Though topical Kiwifruit possesses debridement properties both treatment arms of the study were subjected regularly to surgical debridement concurrently throughout the study.
<b>Moore 2013<sup>45</sup></b>	
<b>Reason for exclusion</b>	Systematic review on Silver dressings but in mixed etiology wounds, not restricted to diabetic foot ulcers.
<b>Moretti 2009<sup>46</sup></b>	
<b>Reason for exclusion</b>	Study on shock wave therapy which was not used for debridement but for angiogenesis. Debridement was conducted similarly in both groups.
<b>Motley 2014<sup>47</sup></b>	
<b>Reason for exclusion</b>	Serial sharp debridement was carried out on both treatment arms with and without enzymatic debridement.
<b>Mulder 1994a<sup>48</sup></b>	

**Reason for exclusion** RCT comparing lamin gel with standard care and vehicle gel. The lamin gel contains a peptide copper complex, which has been shown to be a chemoattractant for capillary endothelial cells and stimulates angiogenesis. It is therefore not a debriding agent.

### **Mulder 2005<sup>49</sup>**

**Reason for exclusion** RCT comparing lamin gel with standard care and vehicle gel. The lamin gel contains a peptide copper complex, which has been shown to be a chemoattractant for capillary endothelial cells and stimulates angiogenesis. It is therefore not a debriding agent.

### **Naidu 2005**

**Reason for exclusion** Study did not pertain to debridement but on off-loading of callus.

### **Nielsen 2012<sup>50</sup>**

**Reason for exclusion** Nonrandomized study on surgical wounds and not specific to diabetic patients.

### **Oluwatosin 2000<sup>51</sup>**

**Reason for exclusion** Intervention was not a comparison between forms of debridement but included a comparison Phenytoin.

### **Pettican 2012<sup>52</sup>**

**Reason for exclusion** This study was not an RCT but a Non-randomized study on larval therapy, specifically a case series.

### **Pollak 1997<sup>53</sup>**

<b>Reason for exclusion</b>	RCT which assesses the effectiveness of human dermis replacement against conventional treatment. There is initially sharp debridement, but there is no debriding agent assessed in the trial.
<b>Ramsey 1999<sup>54</sup></b>	
<b>Reason for exclusion</b>	Nonrandomized study on healthcare costs of foot ulcers in diabetes.
<b>Razzak 1997<sup>55</sup></b>	
<b>Reason for exclusion</b>	RCT including 24 patients, dividing patients into treatment with either antibiotics or local insulin application. No debriding agent was assessed in this trial.
<b>Ricci 2010<sup>56</sup></b>	
<b>Reason for exclusion</b>	Nonrandomized study on unspecified leg wounds.
<b>Richard 2012<sup>57</sup></b>	
<b>Reason for exclusion</b>	Nonrandomized study on Immunomodulating NOSF dressing.
<b>Saap 2002<sup>58</sup></b>	
<b>Reason for exclusion</b>	Fulfills the inclusion criteria for RCT and diabetic foot ulcers. The paper, however, is concerned with measuring the standard of debridement and the effectiveness of a debridement scale rather than the effectiveness of debridement as a treatment.
<b>Saied 2011<sup>59</sup></b>	
<b>Reason for exclusion</b>	RCT of low intensity laser therapy as biostimulation not as a form of debridement.
<b>Sanchez 2006<sup>60</sup></b>	
<b>Reason for exclusion</b>	This was a retrospective non-randomized study on



collagen matrix.

**Santra 2012<sup>61</sup>**

**Reason for exclusion** The comparison in the study was not form of debridement.

**Schindl 1998<sup>62</sup>**

**Reason for exclusion** RCT of Low intensity laser therapy for use as biostimulation not a form of debridement.

**Schindl 2002<sup>63</sup>**

**Reason for exclusion** An RCT of Low intensity laser therapy for use as biostimulation not a form of debridement.

**Sedlarik 1969<sup>64</sup>**

**Reason for exclusion** This is a Non-randomized study - case series.

**Seidel 1994<sup>65</sup>**

**Reason for exclusion** RCT which assess the use of short term retrograde transvenous leg perfusion. The trial is concerned with infection of foot ulcers; wound healing was not an outcome.

**Siavash 2015<sup>66</sup>**

**Reason for exclusion** Though Royal Jelly could be considered a form of autolytic debridement both treatment arms received a regular form of debridement that was unspecified.

**Singh 2004<sup>67</sup>**

**Reason for exclusion** Systematic review on using hydrocolloids in chronic wounds not strictly diabetic foot ulcers.

**Solway 2011<sup>68</sup>**

**Reason for exclusion** Non-randomized study. Sharp debridement was done on

both groups.

### **Soos 2003<sup>69</sup>**

**Reason for exclusion** Narrative review article on diabetic foot ulcer management.

### **Steed 1996<sup>70</sup>**

**Reason for exclusion** RCT of 118 patients which compares treatment of human-derived growth factor against a placebo. The influence of debridement was evaluated by reviewing the records of the trial. This paper was used in the discussion section of this review.

### **Steenvoorde 2007<sup>71</sup>**

**Reason for exclusion** Non-randomized study - prospective case series on larval therapy.

### **Tennvall 2000<sup>72</sup>**

**Reason for exclusion** Non-randomized study on cost of care in diabetics with deep foot infections.

### **Van Acker 2000<sup>73</sup>**

**Reason for exclusion** Costs for prevention and treatment of foot lesions in diabetics in Belgium not on debridement.

### **Van Houtum 1995<sup>74</sup>**

**Reason for exclusion** The study investigates cost of amputations in the Netherlands not cost of debridement.

### **Varma 2006<sup>75</sup>**

**Reason for exclusion** RCT undertaken on people whose wounds had already been debrided, and the effectiveness of the post debridement dressing was the focus of the trial.

### **Wieman 1998<sup>76</sup>**

<b>Reason for exclusion</b>	RCT of 382 patients which assessed the efficacy and safety of topically applied recombinant human platelet derived growth factor at two strengths, either Becaplermin 30 mg or Becaplermin 100 mg.
<b>Wolff 2003<sup>77</sup></b>	
<b>Reason for exclusion</b>	Nonrandomized study - case series of larval therapy.
<b>Zgonis 2014<sup>78</sup></b>	
<b>Reason for exclusion</b>	Expert opinion narrative review not RCT.
<b>Zimny 2008<sup>79</sup></b>	
<b>Reason for exclusion</b>	RCT of competing methods of off-loading including felted foam dressing versus pressure relief half-shoe. The debridement method was the same in both groups.

## Characteristics of studies awaiting classification

**Callaghan 1993<sup>80</sup>**

Callaghan DP. Assessment of the effectiveness of Debrisan in healing ulceration on pressure areas of diabetic patients' feet. In: 2nd European Conference on Advances in Wound Management; 1992, 20-23 October; Harrogate, UK. 1993:82.

**Dolynchuk 2001<sup>81</sup>**

Dolynchuk K. The use of collagenase in the debridement of diabetic foot ulcers: a double-blind prospective randomized study. In: 7th Annual Conference of the Canadian Association of Wound Care 1-3 November 2001 London, Ontario, Canada. 2001:56.

**Mulder 1994b<sup>82</sup>**

Mulder GD, Jensen JL, Seeley JE, Peak Andrews K. A controlled randomized study of an amorphous hydrogel to expedite closure of diabetic ulcers. In: 4th European Tissue Repair Society Meeting; 1994, 25-28 August; Oxford, England. 1994:130 (Abstract 90).

**Characteristics of ongoing studies****Michaeldis 2014<sup>83</sup>**

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12. Biliaieva OO, Neshta VV, Kurylyshyn VP. [Effect of new generation application sorbents on the results of complex treatment in patients with diabetic foot syndrome]. *Klinichna khirurhiia / Ministerstvo okhorony zdorov'ia Ukrainy, Naukove tovarystvo khirurhiv Ukrainy* 2009(5):35-7. [published Online First: 2009/12/05]
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