

## Supplementary File. Characteristics of included studies.

Author	Experimental design	Number of subjects	Mean age (SD)	Sex (% female)	Indication for SCS placement	Current smokers	Former smokers	Bias risk summary
Amann <sup>7</sup> 2003	Prospective cohort study	Total=112; SCS match=41; SCS no match=32; no SCS=39	68.0 (13.0), demographics only reported for SCS-match (n=41)	34.1%; demographics only reported for SCS-match (n=41)	Critical limb ischemia	63.4% smokers; demographics only reported for SCS-match (n=41)	--	High
Biurrun <sup>8</sup> 2015	Prospective cohort study	17	55.6 (8.8)	47.0%	CLBP due to back surgery (88%) or trauma (12%)	41.0%	--	Moderate
Collison <sup>9</sup> 2017	Prospective cohort study	24	49.5	62.5%	Not detailed, 4 cervical placement; 20 thoracic or thoracolumbar placement	33.3%	--	Moderate
De La Cruz <sup>10</sup> 2015	Retrospective cohort study	57	47.8 in "failure" group; 51.2 in "success" group	59.6%	60% FBSS; 20% CRPS; 20% "neuritis"	35.0%	--	Moderate
Deer <sup>11</sup> 2014	Prospective cohort study	571 total; 407 with 3 month outcomes	54.0 (13.6)	57.2%	47% FBSS; 20% radiculopathy; 9% CRPS; 5% degenerative disc disease; 6% chronic pain syndrome	27.5%	--	Moderate
Donas <sup>12</sup> 2005	Retrospective cohort study	29	33.7 (4.8)	24.1%	Buerger's disease	89.7%	--	Moderate
Eddicks <sup>13</sup> 2007	Randomized controlled trial	12	65.0 (8.0)	33.3%	Refractory angina	66.7%	--	High
Falowski <sup>14</sup> 2018	Retrospective cohort study	6615	51.0 (13.6) infected initial group; 53.9 (12.7) non-infected initial group; 49.8	59.9% infected initial group; 60.4% non-infected initial group; 58.8%	75% CLBP	14.1%	--	Low

			(9.9) infected replacement group; 54.3 (13.0) non-infected replacement group	infected replacement group; 60.9% non-infected replacement group				
Fricke <sup>15</sup> 2009	Prospective cohort study	44	65.2 (8.2)	13.6%	Refractory angina	39.0%	--	High
Gersbach <sup>16</sup> 1997	Prospective cohort study	20	70	20.0%	Critical limb ischemia	46.0%	--	High
Hoelzer <sup>17</sup> 2017	Retrospective cohort study	2737	55.7 (14.5)	59.8%	46% FBSS; 27% CRPS; 1% PHN; 27% other	30.2%	--	Low
Horsch <sup>18</sup> 2004	Retrospective cohort study	258	67.0 (9.8)	30.6%	Critical limb ischemia	58.1%	--	Moderate
Khan <sup>19</sup> 2018	Retrospective cohort study	86	53.0	64.0%	37% FBSS; 18% CRPS; 49% neuropathic	43.7%	--	Moderate
Kin <sup>20</sup> 2018	Retrospective cohort study	90	63.5	51.1%	48% CLBP; 10% FBSS; 21% post-stroke pain; 21% other	16.7%	--	Moderate
Klomp <sup>21</sup> 1999	Randomized controlled trial	Total=120; 60 with SCS	72.6	41.7%	Critical limb ischemia	30.0%	36.7%	Low
Lalkhen <sup>22</sup> 2017	Cross-sectional study	25	50.0	NA	FBSS	20.0%	--	High
Madineni <sup>23</sup> 2018	Retrospective cohort study	47	51.7	61.7%	98% FBSS	27.7%	--	High
Mekhail <sup>2</sup> 2018	Retrospective cohort study	213	53.9	37.5%	Spine-related pain	29%	34.7%	Moderate
Ubbink <sup>24</sup> 1999	Randomized controlled trial	Total=111; 56 with SCS	73.0	41.4%	Critical limb ischemia	44%	--	Moderate

Abbreviations: SCS, spinal cord stimulation; FBSS, failed back surgery syndrome; CRPS, complex regional pain syndrome; PHN, postherpetic neuralgia; CLBP, chronic low back pain; SD, standard deviation.