

Patient perspectives of the social, emotional and functional impact of alopecia areata: a systematic literature review

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Table S1 Embase® search strategy

Embase <1974 to 2018 Week 49>

Run: December 03, 2018

Step	Search string	Hits
1	exp ALOPECIA AREATA/	5375
2	alopecia areata.mp.	5838
3	(alopecia adj2 (totalis or universalis)).tw.	759
4	or/1-3	6118
5	outcome assessment/	453,254
6	"Quality of Life"/	406,955
7	(quality of life or QoL or QL or HRQoL or HRQL or life quality or health status or health state or well-being).mp.	698,359
8	or/5-7	1,105,251
9	exp Questionnaires/	617,541
10	(questionnaire* or interview* or self-report* or measure* or instrument* or scale* or tool* or construct* or report* or survey* or focus group* or daily or diary or diaries).mp.	12,335,990
11	9 or 10	12,335,990
12	8 and 11	675,664
13	((patient* or parent* or proxy or proxies or caregiver*) adj3 (report* or relate* or perspective* or experience* or satisfaction)).mp.	704,176
14	(psycho* or psychiatric* or suicid* or anxi* or depress* or bully* or bulli* or social function* or emotion* or productivity or absent* or absence* or missed school or missed work).tw.	2,452,786
15	(Beck Depression Inventory or BDI or Beck Anxiety Inventory or BAI or Short Form Health Survey 36 or SF-36 or SF-6D or Dermatology Life Quality Index or DLQI or Child Depression Inventory or CDI or Hamilton Anxiety Rating Scale or HAM-A or Hamilton Depression Rating Scale or HAM-D or Minnesota Multiphasic Personality Inventory or MMPI or Hospital Anxiety Depression Scale or HADS or General Health Questionnaire 28 or GHQ-28 or Child Health Utility 9D or CHU 9D or Health Utilities Index or HUI2).tw.	89,510
16	(function* adj2 (stat* or capacit*)).tw.	94,746
17	(Mental adj2 (ill* or health or disease* or condition*)).tw.	179,665
18	or/12-17	3,584,001
19	exp economics/ or exp health-economics/ or exp economic-evaluation/ or exp health-care-cost/ or exp	916,018

Step	Search string	Hits
	pharmacoeconomics/	
20	exp Economics/ or exp Health Services Research/ or exp Models, Economic/ or exp Cost-Benefit Analysis/ or exp Health Care Costs/ or exp Economics, Medical/ or exp Economics, Pharmaceutical/	938,640
21	(finance\$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic\$).ti,ab.	701,386
22	(financ* adj2 (impact or burden)).ti,ab.	9291
23	((impact or burden) adj2 (work or school or career)).tw.	3019
24	(Health resource utili\$ation or healthcare resource utili\$ation or HCRU or HRU).tw.	1098
25	(Work adj2 (productivity or loss)).tw.	5720
26	(disability adjusted life year* or DALY* or quality adjusted life year* or QALY*s).tw. (21672)	22,094
27	(expenditure\$ not energy).ti,ab.	35,452
28	(value adj2 money).ti,ab.	2167
29	budget\$.ti,ab.	34,017
30	pay\$r.ti,ab.	36
31	or/19-30	1,367,949
32	(metabolic adj2 cost).ti,ab.	1477
33	((energy or oxygen) adj2 cost).ti,ab.	4616
34	((energy or oxygen) adj2 expenditure).ti,ab.	29,131
35	or/32-34	34,102
36	31 not 35	1,360,736
37	18 or 36	4,719,705
38	4 and 37	1162
39	(animal\$ not human\$).sh,hw.	1,360,626
40	38 not 39	1177
41	limit 40 to english language	1036
42	limit 41 to yr="2008 -Current"	766
43	conference abstract.pt.	3,217,669
44	42 not 43	532
45	remove duplicates from 44	513

Table S2 Medline® search strategy

MEDLINE and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily
<1946 to November 30, 2018>

Run: December 03, 2018

Step	Search string	Hits
1	exp ALOPECIA AREATA/	2962
2	alopecia areata.mp.	4038
3	(alopecia adj2 (totalis or universalis)).tw.	576
4	or/1-3	4271
5	outcome assessment/	0
6	"Quality of Life"/	169,057
7	(quality of life or QoL or QL or HRQoL or HRQL or life quality or health status or health state or well-being).mp.	459,092
8	or/5-7	459,092
9	exp Questionnaires/	927,078
10	(questionnaire* or interview* or self-report* or measure* or instrument* or scale* or tool* or construct* or report* or survey* or focus group* or daily or diary or diaries).mp.	9,790,112
11	9 or 10	9,987,590
12	8 and 11	320,449
13	((patient* or parent* or proxy or proxies or caregiver*) adj3 (report* or relate* or perspective* or experience* or satisfaction)).mp.	460,891
14	(psycho* or psychiatric* or suicid* or anxi* or depress* or bully* or bulli* or social function* or emotion* or productivity or absent* or absence* or missed school or missed work).tw.	1,929,898
15	(Beck Depression Inventory or BDI or Beck Anxiety Inventory or BAI or Short Form Health Survey 36 or SF-36 or SF-6D or Dermatology Life Quality Index or DLQI or Child Depression Inventory or CDI or Hamilton Anxiety Rating Scale or HAM-A or Hamilton Depression Rating Scale or HAM-D or Minnesota Multiphasic Personality Inventory or MMPI or Hospital Anxiety Depression Scale or HADS or General Health Questionnaire 28 or GHQ-28 or Child Health Utility 9D or CHU 9D or Health Utilities Index or HUI2).tw.	56,083
16	(function* adj2 (stat* or capacit*)).tw.	69,237
17	(Mental adj2 (ill* or health or disease* or condition*)).tw.	143,589
18	or/12-17	2,603,306

19	exp economics/ or exp health-economics/ or exp economic-evaluation/ or exp health-care-cost/ or exp pharmacoeconomics/	568,782
20	exp Economics/ or exp Health Services Research/ or exp Models, Economic/ or exp Cost-Benefit Analysis/ or exp Health Care Costs/ or exp Economics, Medical/ or exp Economics, Pharmaceutical/	693,793
21	(finance\$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic\$).ti,ab.	529,590
22	(financ* adj2 (impact or burden)).ti,ab.	5851
23	((impact or burden) adj2 (work or school or career)).tw.	2090
24	(Health resource utili\$ation or healthcare resource utili\$ation or HCRU or HRU).tw.	355
25	(Work adj2 (productivity or loss)).tw.	3122
26	(disability adjusted life year* or DALY* or quality adjusted life year* or QALY*s).tw. (21672)	14,290
27	(expenditure\$ not energy).ti,ab.	26,557
28	(value adj2 money).ti,ab.	1529
29	budget\$.ti,ab.	26,453
30	pay\$r.ti,ab.	31
31	or/19-30	1,088,934
32	(metabolic adj2 cost).ti,ab.	1387
33	((energy or oxygen) adj2 cost).ti,ab.	4475
34	((energy or oxygen) adj2 expenditure).ti,ab.	23,114
35	or/32-34	27,961
36	31 not 35	1,082,086
37	18 or 36	3,517,883
38	4 and 37	586
39	(animals not (humans and animals)).sh.	1,192,722
39	38 not 39	582
40	limit 39 to english language	416
41	limit 40 to yr="2008 -Current"	244

Table S3 Cochrane Central Register of Controlled Trials search strategy

EBM Reviews – Cochrane Central Register of Controlled Trials <October 2018>, EBM Reviews – Cochrane Database of Systematic Reviews <2005 to November 30, 2018>, EBM Reviews – Health Technology Assessment <4th Quarter 2016>, EBMReviews – NHS Economic Evaluation Database <1st Quarter 2016>

Run: December 3, 2018

Step	Search string	Hits
1	exp ALOPECIA AREATA/	202
2	alopecia areata.mp.	366
3	(alopecia adj2 (totalis or universalis)).tw.	39
4	or/1-3	373
5	outcome assessment/	12
6	"Quality of Life"/	21,624
7	(quality of life or QoL or QL or HRQoL or HRQL or life quality or health status or health state or well-being).mp.	227,263
8	or/5-7	227,274
9	exp Questionnaires/	1923
10	(questionnaire* or interview* or self-report* or measure* or instrument* or scale* or tool* or construct* or report* or survey* or focus group* or daily or diary or diaries).mp.	616,837
11	9 or 10	616,845
12	8 and 11	156,415
13	((patient* or parent* or proxy or proxies or caregiver*) adj3 (report* or relate* or perspective* or experience* or satisfaction)).mp.	89,244
14	(psycho* or psychiatric* or suicid* or anxi* or depress* or bully* or bulli* or social function* or emotion* or productivity or absent* or absence* or missed school or missed work).tw.	155,012
15	(Beck Depression Inventory or BDI or Beck Anxiety Inventory or BAI or Short Form Health Survey 36 or SF-36 or SF-6D or Dermatology Life Quality Index or DLQI or Child Depression Inventory or CDI or Hamilton Anxiety Rating Scale or HAM-A or Hamilton Depression Rating Scale or HAM-D or Minnesota Multiphasic Personality Inventory or MMPI or Hospital Anxiety Depression Scale or HADS or General Health Questionnaire 28 or GHQ-28 or Child Health Utility 9D or CHU 9D or Health Utilities Index or HUI2).tw.	17,755
16	(function* adj2 (stat* or capacit*)).tw.	11,408
17	(Mental adj2 (ill* or health or disease* or condition*)).tw.	14,070

Step	Search string	Hits
18	or/12-17	329,904
19	exp economics/ or exp health-economics/ or exp economic-evaluation/ or exp health-care-cost/ or exp pharmacoeconomics/	27,606
20	exp Economics/ or exp Health Services Research/ or exp Models, Economic/ or exp Cost-Benefit Analysis/ or exp Health Care Costs/ or exp Economics, Medical/ or exp Economics, Pharmaceutical/	29,415
21	(finance\$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic\$).ti,ab.	59,401
22	(financ* adj2 (impact or burden)).ti,ab.	461
23	((impact or burden) adj2 (work or school or career)).tw.	607
24	(Health resource utili\$ation or healthcare resource utili\$ation or HCRU or HRU).tw.	73
25	(Work adj2 (productivity or loss)).tw.	1034
26	(disability adjusted life year* or DALY* or quality adjusted life year* or QALY*s).tw. (21672)	8358
27	(expenditure\$ not energy).ti,ab.	1362
28	(value adj2 money).ti,ab.	186
29	budget\$.ti,ab.	770
30	pay\$r.ti,ab.	0
31	or/19-30	72,113
32	(metabolic adj2 cost).ti,ab.	111
33	((energy or oxygen) adj2 cost).ti,ab.	403
34	((energy or oxygen) adj2 expenditure).ti,ab.	3120
35	or/32-34	3510
36	31 not 35	71,525
37	18 or 36	370,250
38	4 and 37	73
39	limit 38 to humans	73
40	limit 39 to english language	46
41	limit 40 to yr="2008-Current"	31

Table S4 PubMed advanced search

January 1, 2016–November 22, 2018

Step	Search string	Hits
1	alopecia areata[MeSH Terms]	2949
2	alopecia areata[Title/Abstract]	3461
3	(#1 or #2)	4009
4	(quality of life[Text Word] OR QoL[Text Word] OR HRQoL[Text Word])	285,944
5	((((quality of life[Text Word] OR QoL[Text Word] OR HRQoL[Text Word]))) AND #3	96
6	(economic[Title/Abstract] OR cost[Title/Abstract] OR burden[Title/Abstract])	659,763
7	(#6 and #3)	41
8	(#5 or #7)	132
9	#5 or #7 Filters: Publication date from 2016/01/01 to 2018/11/22	56
10	#5 or #7 Filters: Publication date from 2016/01/01 to 2018/11/22; English	55
11	#5 or #7 Filters: Publication date from 2016/01/01 to 2018/11/22; Humans; English	29

Table S5 Dermatology congress abstracts searched

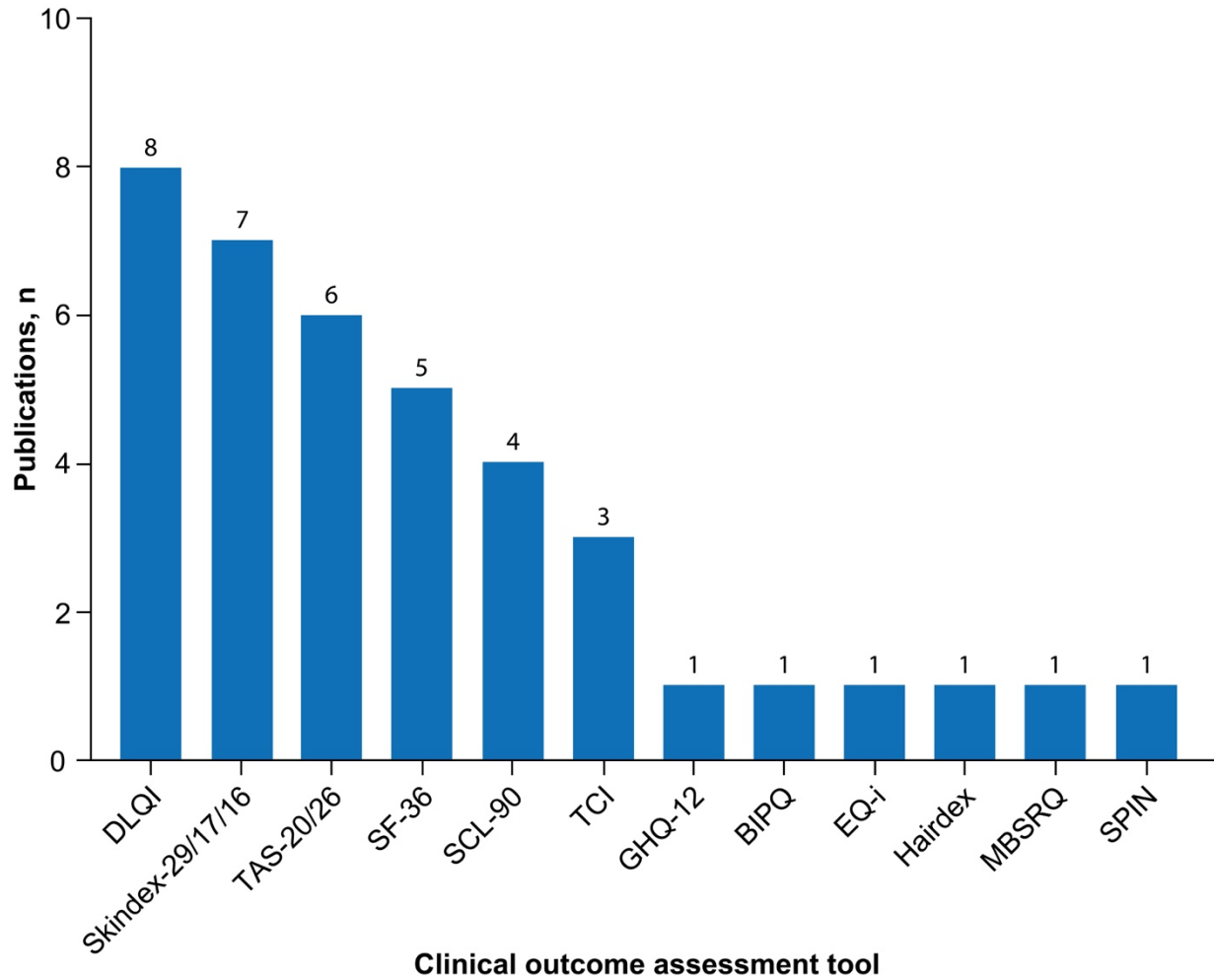
January 1, 2017 to December 3, 2018

American Academy of Dermatology
European Academy of Dermatology and Venereology
European Dermatology Congress

Table S6 Key study characteristics

Characteristics	Category	Studies, <i>n</i> (%)
Total		37 (100)
Publication type, <i>n</i> (%)	Manuscript Congress abstract	37 (100) 0
Study design, <i>n</i> (%)	Observational	37 (100)
Continent/Region, <i>n</i> (%)	Middle East and North Africa Europe Asia North America South America	14 (38) 13 (35) 5 (14) 3 (8) 2 (5)
Risk of bias, <i>n</i> (%)	Low Medium High	23 (62) 14 (38) 0

Fig. S1 Clinical outcome assessment tools across the publications



BIPQ, Brief Illness Perception Questionnaire; DLQI, Dermatology Life Quality Index; EQ-i, Emotional Quotient Inventory; GHQ-12, General Health Questionnaire, 12-item; MBSRQ, Multidimensional Body-Self Relations Questionnaire; SCL-90, Symptom Checklist 90; SF-36, Short Form 36; SPIN, Social Phobia Inventory; TAS-20/26, Toronto Alexithymia Scale, 20-item or 26-item; TCI, Temperament and Character Inventory.