

# The Top 100 Most-Cited Articles on Nail Psoriasis: A Bibliometric Analysis

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To the Editor:

Nail psoriasis is highly prevalent in patients with cutaneous psoriasis and also may present as an isolated finding. There is a strong association between nail psoriasis and development of psoriatic arthritis (PsA). However, publications on nail psoriasis are sparse compared with articles describing cutaneous psoriasis.<sup>1</sup> Our objectives were to analyze the nail psoriasis literature for content, citations, and media attention.

The Web of Science database was searched for the term *nail psoriasis* on April 27, 2020, and publications by year, subject, and article type were compiled. Total and average yearly citations were calculated to create a list of the top 100 most-cited articles. First and last authors, sex, and Altmetric Attention Scores were then recorded. The Wilcoxon rank sum test was calculated to compare the relationship of Altmetric scores between nail psoriasis-specific references and others on the list.

In our data set, the average total number of citations was 134.09 (range, 42–1617), with average yearly citations ranging from 2 to 108. Altmetric scores—measures of media attention of scholarly work—were available for 58 of 100 papers (58%), with an average score of 33.2 (range, 1–509).

Of the top 100 most-cited articles using the search term *nail psoriasis*, only 20% focused on nail psoriasis, with the remainder concentrating on psoriasis/PsA. Only 32% and 24% of first and last authors, respectively, were female. Fifty-two percent and 31% of the articles were published in dermatology and arthritis/rheumatology journals, respectively. There was no statistically significant difference in Altmetric scores between nail psoriasis-specific and other articles in our data set ( $P=.7551$ ).

For the nail psoriasis-specific articles, all 20 highlighted a lack of nail clinical trials, a positive association with PsA, and a correlation of increased cutaneous psoriasis body surface area with increased onychodystrophy likelihood.<sup>2</sup> Three of 20 (15%) articles stated that nail psoriasis often is overlooked, despite the negative impact on quality of life,<sup>1</sup> and emphasized the importance of patient compliance owing to the chronic nature of the disease. Only 1 of 20 (5%) articles

focused on nail psoriasis treatments.<sup>3</sup> There was no overlap between the 100 most-cited psoriasis articles from 1970 to 2012 and our top 100 articles on nail psoriasis.<sup>4</sup>

Treatment recommendations for nail psoriasis by consensus were published by a nail expert group in 2019.<sup>5</sup> For 3 or fewer nails involved, suggested first-line treatment is intralesional matrix injections with triamcinolone acetonide. For more than 3 affected nails, systemic treatment with oral or biologic therapy is recommended.<sup>5</sup> Although this article is likely to change clinical practice, it did not qualify for our list because it did not garner sufficient citations in the brief period between its publication date and our search (July 2019–April 2020).

This study is subject to several limitations. Only the Web of Science database was utilized, and only the term *nail psoriasis* was searched, potentially excluding relevant articles. Using total citations biases toward older articles.

Our bibliometric analysis highlights a lack of publications on nail psoriasis, with most articles focusing on psoriasis and PsA. This deficiency in highly cited nail psoriasis references is likely to be a barrier to physicians in managing patients with nail disease. There is a need for controlled clinical trials and better mechanisms to disseminate information on management of nail psoriasis to practicing physicians.

## REFERENCES

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The eTable is available in the Appendix online at [www.mdedge.com/dermatology](http://www.mdedge.com/dermatology).

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## APPENDIX

**eTABLE. Top 100 Most-Cited Articles on Nail Psoriasis From the Web of Science Database**

Reference	Total citations	Average no. of citations per year	Altmetric Attention Score
1. <i>Arthritis Rheum.</i> 2006;54:2665-2673.	1617	108	9
2. <i>Nat Genet.</i> 2009;41:199-204.	841	70	30
3. <i>Lancet.</i> 2005;366:1367-1374.	756	47	6
4. <i>Lancet.</i> 2015;386:983-994.	569	95	25
5. <i>Arthritis Rheum.</i> 2009;60:976-986.	391	33	13
6. <i>Arch Dermatol Res.</i> 2011;303:1-10.	389	39	33
7. <i>Ann Rheum Dis.</i> 2009;68:1387-1394.	345	29	1
8. <i>Rheumatology.</i> 2003;42:1460-1468.	329	18	13
9. <i>Arthritis Rheum.</i> 2018;70:345-355.	302	60	27
10. <i>J Am Acad Dermatol.</i> 2017;76:405-417.	251	63	509
11. <i>Arthritis Rheum.</i> 2009;61:233-239.	249	21	1
12. <i>Ann Rheum Dis.</i> 2014;73:48-55.	234	33	27
13. <i>Lancet.</i> 2007;370:272-284.	223	16	10
14. <i>Arthritis Rheum.</i> 2005;52:2513-2518.	n/a	14	n/a
15. <i>Br J Rheumatol.</i> 1994;33:834-839.	217	8	3
16. <i>Am J Clin Dermatol.</i> 2008;9:1-14.	214	16	1
17. <i>J Am Acad Dermatol.</i> 2007;57:1-27.	207	14	10
18. <i>Rheumatology.</i> 2003;42:778-783.	195	11	n/a
19. <i>J Invest Dermatol.</i> 2010;13:1213-1226.	195	17	n/a
20. <i>Dermatology.</i> 1996;193:300-303.	183	7	n/a
21. <i>J Invest Dermatol.</i> 2006;126:740-745.	182	9	n/a
22. <i>Arthritis Care Res (Hoboken).</i> 2011;63(suppl 11):S64-S85.	139	14	15
23. <i>J Invest Dermatol.</i> 2002;118:362-365.	136	7	1
24. <i>J Am Acad Dermatol.</i> 2002;46:867-873.	131	7	n/a
25. <i>J Dermatol.</i> 2012;39:242-252.	124	13	3
26. <i>Br J Dermatol.</i> 2015;173:949-961.	121	20	23
27. <i>J Rheumatol.</i> 2006;33:1417-1421.	120	8	1
28. <i>Rheumatology.</i> 2004;43:790-794.	113	7	n/a
29. <i>J Am Acad Dermatol.</i> 1995;32:78-88.	113	4	n/a
30. <i>Ann Rheum Dis.</i> 2011;70(suppl 1):i77-i84.	113	11	n/a

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Reference	Total citations	Average no. of citations per year	Altmetric Attention Score
31. <i>Ann Rheum Dis.</i> 2009;68:497-501.	105	9	3
32. <i>J Am Acad Dermatol.</i> 2008;58:224-231.	105	8	n/a
33. <i>Drugs.</i> 2014;74:423-441.	105	15	481
34. <i>J Eur Acad Dermatol Venereol.</i> 2009;23(suppl 1):9-13.	103	8	1
35. <i>J Rheumatol.</i> 2007;34:123-129.	100	7	4
36. <i>Br J Dermatol.</i> 2010;163:580-585.	99	9	3
37. <i>Arch Dermatol.</i> 1969;99:567-579.	97	2	n/a
38. <i>Dermatology.</i> 2009;218:97-102.	95	8	2
39. <i>Ann Rheum Dis.</i> 2010;69:394-399.	94	8	3
40. <i>Arch Dermatol.</i> 2010;146:721-726.	86	8	n/a
41. <i>Int J Dermatol.</i> 2004;43:654-658.	84	5	n/a
42. <i>Ann Rheum Dis.</i> 2012;71:553-556.	82	9	4
43. <i>J Cutan Med Surg.</i> 2003;7:317-321.	78	4	n/a
44. <i>Pediatr Int.</i> 2006;48:525-530.	78	5	3
45. <i>J Rheumatol.</i> 1999;26:1752-1756.	76	3	6
46. <i>Br J Dermatol.</i> 1998;139:655-659.	70	3	3
47. <i>J Ultrasound Med.</i> 2009;28:1569-1574.	70	6	n/a
48. <i>Br J Dermatol.</i> 2014;170:59-65.	69	10	1
49. <i>Dermatology.</i> 2012;225:231-235.	67	7	4
50. <i>Cutis.</i> 2001;68:355-358.	67	3	1
51. <i>Arch Dermatol.</i> 2009;145:269-271.	67	6	1
52. <i>Dermatol Ther.</i> 2007;20:60-67.	66	5	3
53. <i>Br J Dermatol.</i> 2003;148:233-235.	66	4	n/a
54. <i>J Eur Acad Dermatol Venereol.</i> 2009;23(suppl 1):15-21.	66	5	23
55. <i>J Eur Acad Dermatol Venereol.</i> 2009;23:896-904.	65	5	n/a
56. <i>Acta Dermatol Venereol.</i> 2007;87:335-340.	65	5	n/a
57. <i>Arthritis Rheum.</i> 2009;61:1235-1242.	65	5	n/a
58. <i>Arthritis Res Ther.</i> 2010;12:R117.	64	6	n/a
59. <i>Dermatology.</i> 2010;22(suppl 1):1-5.	63	6	7
60. <i>J Rheumatol.</i> 2006;33:1315-1319.	61	4	n/a

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eTABLE. (CONTINUED)

Reference	Total citations	Average no. of citations per year	Altmetric Attention Score
61. <i>Clin Rheumatol.</i> 2000;19:301-305.	61	3	n/a
62. <i>J Am Acad Dermatol.</i> 1991;24:598-602.	60	2	n/a
63. <i>J Eur Acad Dermatol Venereol.</i> 2011;25(suppl 2):19-27.	58	6	1
64. <i>J Dermatol.</i> 2017;44:355-362.	57	14	n/a
65. <i>Clin Dermatol.</i> 2008;26:448-459.	55	4	n/a
66. <i>Arch Dermatol.</i> 2011;147:429-436.	55	5	1
67. <i>Br J Dermatol.</i> 2014;171:1123-1128.	54	8	3
68. <i>Br J Dermatol.</i> 2008;159:453-456.	53	4	3
69. <i>Int J Dermatol.</i> 2002;41:220-224.	53	3	n/a
70. <i>Semin Cutan Med Surg.</i> 2009;28:39-43.	52	2	n/a
71. <i>Cutis.</i> 1999;64:309-314.	52	2	n/a
72. <i>Arthritis Rheum.</i> 2016;68:915-923.	52	10	74
73. <i>J Am Acad Dermatol.</i> 2016;74:134-142.	51	10	10
74. <i>J Dtsch Dermatol Ges.</i> 2014;12:48-57.	51	7	n/a
75. <i>Cutis.</i> 1992;50:174-178.	51	2	n/a
76. <i>Arthritis Rheum.</i> 2012;64:3150-3155.	51	6	12
77. <i>J Rheumatol.</i> 2006;33:1452-1456.	50	3	n/a
78. <i>Lancet.</i> 2018;391:2273-2284.	50	16	149
79. <i>J Eur Acad Dermatol Venereol.</i> 2011;25:1409-1414.	49	5	n/a
80. <i>Br J Dermatol.</i> 2000;142:1171-1176.	49	2	n/a
81. <i>Rheum Dis Clin North Am.</i> 2015;41:569-579.	49	8	1
82. <i>Pediatr Dermatol.</i> 2013;30:424-428.	48	6	1
83. <i>Am Fam Physician.</i> 2013;87:626-633.	48	6	3
84. <i>Best Pract Res Clin Rheumatol.</i> 2012;26:805-822.	48	5	n/a
85. <i>J Eur Acad Dermatol Venereol.</i> 2011;25:1080-1084.	48	5	1
86. <i>Ann Rheum Dis.</i> 2011;70(suppl 1):i71-i76.	48	5	1
87. <i>Postgrad Med.</i> 2009;121:154-161.	48	4	n/a
88. <i>Dermatology.</i> 2003;206:153-156.	48	3	6
89. <i>J Eur Acad Dermatol Venereol.</i> 2011;25:579-586.	48	5	n/a
90. <i>Curr Opin Rheumatol.</i> 2009;21:340-347.	47	4	n/a

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eTABLE. (continued)

Reference	Total citations	Average no. of citations per year	Altmetric Attention Score
91. <i>Med Res Rev.</i> 2014;34:438-454.	46	7	2
92. <i>Rheumatol Ther.</i> 2016;3:91-102.	45	9	13
93. <i>J Dermatol.</i> 2012;39:253-259.	45	5	n/a
94. <i>J Eur Acad Dermatol Venereol.</i> 2010;24:530-534.	45	4	n/a
95. <i>Nat Rev Rheumatol.</i> 2014;10:531-542.	44	6	2
96. <i>Br J Dermatol.</i> 2005;153:1153-1158.	44	3	n/a
97. <i>Br J Dermatol.</i> 2003;149:207-209.	44	2	n/a
98. <i>J Am Acad Dermatol.</i> 2005;52:736-737.	43	3	n/a
99. <i>Dermatology.</i> 1999;199:313-318.	43	2	3
100. <i>Br J Dermatol.</i> 2014;170:398-407.	42	6	4

Abbreviation: n/a, not available.