

The Netherlands Journal of Medicine's hit list: best cited articles in 2003

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The scientific world we live in is changing. We no longer rely on the hardcopy of a Journal for scholarly information, instead we just log on to the web and try to find the article that fits our needs. We introduced open access to the *Netherlands Journal of Medicine* (NJM) at the beginning of August, 2005.¹ We did so because we believe that open access serves readers and scientists best. The content of the NJM is now readily available via PubMed (www.pubmed.gov) as well as via the Publisher's website (www.njm-online.nl). We believe that this will attract a wider audience and enable us to disseminate relevant clinical knowledge on a global platform.

The benefits for the Journal are clear: open access enhances the visibility of the Journal and we hope that this translates into an increase in the quantity and quality of submitted manuscripts. On the other hand, open access benefits the authors and readers as well. Evidence shows that usage increases when access is more simple, and maximising the usage of the scientific information benefits society. Papers that are freely accessible online are more easily available and enjoy a higher visibility, which leads to higher citation rates.² A by now classic study analysed possible factors that were responsible for higher citation rates for *British Medical Journal* (BMJ) articles. In 1999, the BMJ enjoyed free open access and for a cohort of papers that were published in that year, Perneger calculated the 'hit count' and number of citations these articles received in the following years.³ Indeed the hit count in the first week after publication correlated significantly with the number of subsequent citations. This phenomenon might be new for biomedical scientists, but it has been known for years among physicists and mathematicians. The correlation between hit counts and subsequent citations appears to be so consistent that an online usage/citation

correlator has been created that allows the prediction of citation counts two years later on the basis of the downloads of today (<http://citebase.eprints.org/analysis/correlation.php>). Consequently, the number of early hits is a potentially useful measure of the scientific value of published medical research papers.

Facilitated by the former publisher, the *Netherlands Journal of Medicine* was available on the web from September 1999 until December 2001. The online content of the Journal was only available via institutional subscription, which limited its access. Despite these obstacles, the electronic usage of the Journal grew quickly, illustrated by the hit counts which increased from only 200 a month at the beginning of 2000 to 1600 a month by the end of 2002.⁴ In recent years, we have witnessed an enormous explosion of Internet technology and the data provided here are a mere reflection of this. The electronic traffic to our Journal (for a large part facilitated by its open access) has exceeded our expectations. The vast majority of articles are accessed and downloaded directly via PubMed, and in the first three months the hit count easily exceeded 3000 every month. This illustrates the popularity of PubMed as a search interface but also that the Journal is a viable and interesting source for valuable clinical information. In the near future, we hope to provide you with more detailed information down to the level of individual articles.

Now let us focus our attention on the most popular articles from 2003. In 2003 the Journal published 20 reviews, 22 original articles, 28 case reports and 15 other reports. A count on Web of Science interface (ISI Web of Knowledge), on 15 October 2005, revealed that a total of 45 articles (53%) yield citations and the majority of papers received less than two citations. The level of non-citations is

on a par with that seen for surgical publications but higher than that for immunological journals.⁵ The ten most cited articles received on average 4.9 citations within two years after publication (*table 1*). The table contains six reviews, three original articles and one case report. This finding is in line with the notion as reiterated elsewhere that reviews attract the most citations. The authors on this list have to be applauded because they have succeeded in picking up many citations in a time when the Journal was only limited (*table 1*).

As Editors, we continuously strive for improvement in the content as well as design of the Journal.⁶ We aim for publication of important new scientific developments that affect the clinical practice of internists. The Journal attracts a large range of clinical manuscripts and the list shown here reflects the variety of subject matter published by the Journal that has succeeded in attracting attention. The most frequently cited article from 2003, written by Dr Ingrid M. Jazet and colleagues from Leiden University Medical Centre, describes the role of adipocyte secretory products in relation to insulin resistance and obesity. It is well written and equally well illustrated and highly topical, all important reasons why it is best cited.⁷ The Editorial Board congratulates these authors on their achievement.

We feel that by publication of both citation rates and hit counts for articles we single out those articles that made the cut. We plan to keep track of both types of impact in the future and will inform the reader accordingly.

REFERENCES

1. Drenth JP. A watershed for the Netherlands Journal Medicine: open internet access. *Neth J Med* 2005;63(7):239-40.
2. Lawrence S. Free online availability substantially increases a paper's impact. *Nature* 2001;411(6837):521.
3. Perneger TV. Relation between online "hit counts" and subsequent citations: prospective study of research papers in the BMJ. *BMJ* 2004;329(7465):546-7.
4. Hoepelman AI. The Netherlands Journal of Medicine: end of a fruitful period and a new start. *Neth J Med* 2001;59:267-9.
5. Weale AR, Bailey M, Lear PA. The level of non-citation of articles within a journal as a measure of quality: a comparison to the impact factor. *BMC Med Res Methodol* 2004;4:14.
6. Thien T, van der Meer JW, Stalenhoef AF, Smits P. Why publish in the Netherlands Journal of Medicine? *Neth J Med* 2003;61:99.
7. Jazet IM, Pijl H, Meinders AE. Adipose tissue as an endocrine organ: impact on insulin resistance. *Neth J Med* 2003;61(6):194-212.

Table 1 Highly cited articles from the Netherlands Journal of Medicine published in 2003

Author [reference]	Title	Pages	# Citations
Jazet IM, Pijl H, Meinders AE ⁷	Adipose tissue as an endocrine organ: impact on insulin resistance	194-212	10
Van Vonderen MG, Bos JC, Prins JM, Wertheim-van DP, Speelman P ⁸	Ribavirin in the treatment of severe acute respiratory syndrome (SARS)	238-41	6
Arend SM, Breedveld FC, van Dissel JT ⁹	TNF-alpha blockade and tuberculosis: better look before you leap	111-9	5
Bleeker-Rovers CP, Bredie SJ, van der Meer JW, Corstens FH, Oyen WJ ¹⁰	F-18-fluorodeoxyglucosepositron emission tomography in diagnosis and follow-up of patients with different types of vasculitis	323-9	5
Riksen NP, Keuning JJ, Vreugdenhil G ¹¹	Rituximab in the treatment of relapsing idiopathic thrombocytopenic purpura	262-5	5
Baas SJ, Endert E, Fliers E, Prummel MF, Wiersinga WM ¹²	Establishment of reference values for endocrine tests. III: Primary aldosteronism	37-43	4
Becker A, van der Does FE, van Hinsbergh VW, Heine RJ, Bouter LM, Stehouwer CD ¹³	Improvement of glycaemic control in type 2 diabetes: favourable changes in blood pressure, total cholesterol and triglycerides, but not in HDL cholesterol, fibrinogen, Von Willebrand factor and (pro)insulin	129-36	4
Van Bommel EF ¹⁴	Renal replacement therapy for acute renal failure on the intensive care unit: coming of age?	239-48	4
De Fost M, Aerts JM, Hollak CE ¹⁵	Gaucher disease: from fundamental research to effective therapeutic interventions	3-8	3
Loffeld RJ, van der Putten AB ¹⁶	The yield of UGIE: a study of a ten-year period in the 'Zaanstreek'	14-8	3

8. Van Vonderen MG, Bos JC, Prins JM, Wertheim-van DP, Speelman P. Ribavirin in the treatment of severe acute respiratory syndrome (SARS). *Neth J Med* 2003;61(7):238-41.
9. Arend SM, Breedveld FC, van Dissel JT. TNF-alpha blockade and tuberculosis: better look before you leap. *Neth J Med* 2003;61(4):111-9.
10. Bleeker-Rovers CP, Bredie SJ, van der Meer JW, Corstens FH, Oyen WJ. F-18-fluorodeoxyglucose positron emission tomography in diagnosis and follow-up of patients with different types of vasculitis. *Neth J Med* 2003;61(10):323-9.
11. Riksen NP, Keuning JJ, Vreugdenhil G. Rituximab in the treatment of relapsing idiopathic thrombocytopenic purpura. *Neth J Med* 2003;61(7):262-5.
12. Baas SJ, Endert E, Fliers E, Prummel MF, Wiersinga WM. Establishment of reference values for endocrine tests. III: Primary aldosteronism. *Neth J Med* 2003;61(2):37-43.
13. Becker A, van der Does FE, van Hinsbergh VW, Heine RJ, Bouter LM, Stehouwer CD. Improvement of glycaemic control in type 2 diabetes: favourable changes in blood pressure, total cholesterol and triglycerides, but not in HDL cholesterol, fibrinogen, Von Willebrand factor and (pro)insulin. *Neth J Med* 2003;61(4):129-36.
14. Van Bommel EF. Renal replacement therapy for acute renal failure on the intensive care unit: coming of age? *Neth J Med* 2003;61(8):239-48.
15. De Fost M, Aerts JM, Hollak CE. Gaucher disease: from fundamental research to effective therapeutic interventions. *Neth J Med* 2003;61(1):3-8.
16. Loffeld RJ, van der Putten AB. The yield of UGIE: a study of a ten-year period in the 'Zaanstreek'. *Neth J Med* 2003;61(1):14-8.

That was quite a job ;
to put all the words
of my paper
on lines!!

