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International Seminar on Open Access

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Effect of Open Access on a Scientific Journal Published in a Developing Country

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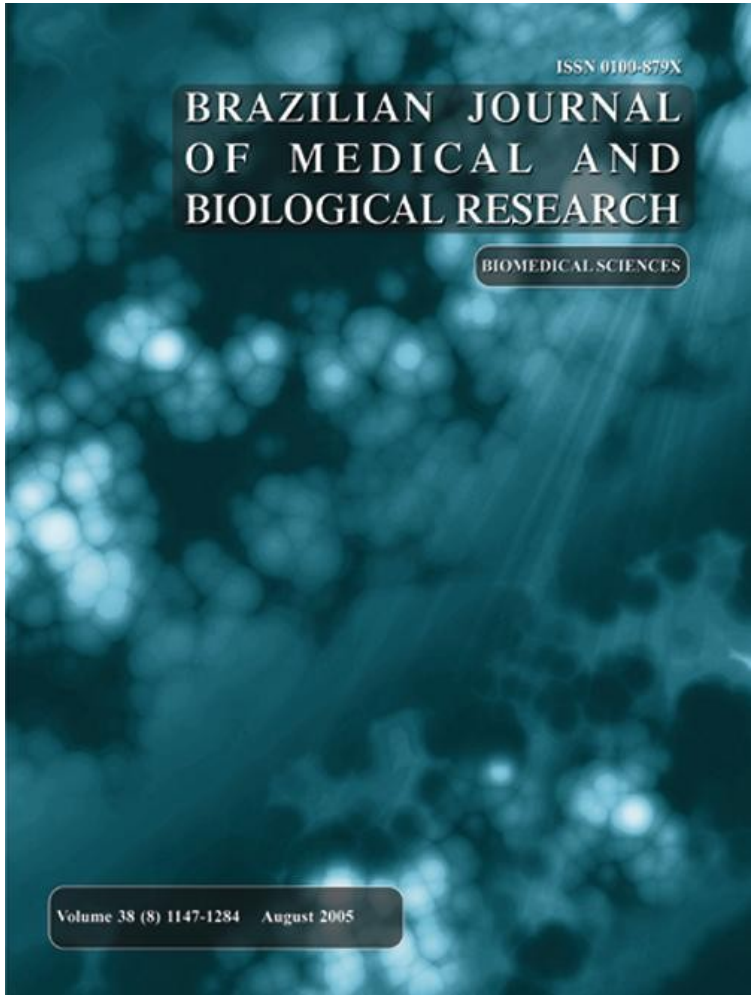
Characteristics of the Brazilian Journal of Medical and Biological Research

- Mission: to provide a vehicle for the export of Brazilian biomedical research.
- Published monthly in English.
- ~200 paper/year.
- Editorial responsibility was assumed in 1980 by 5 biomedical societies.
- ISI, NLC, BIOSIS, PsycInfo, LILACS and others.

Brazilian Journal of Medical and Biological Research



TRENDS IN SCIENTIFIC COMMUNICATION

Lost Science in the Third World

Many researchers in the developing world feel trapped in a vicious circle of neglect and—some say—prejudice by publishing barriers they claim doom good science to oblivion

by W. Wayt Gibbs, *staff writer*

Scientific American, August 1995, p 76-83

→Emphasis on ISI (JCR) indexing and citations.

→Diagnosis was correct.

→Remedy was not correct.

Journal Gospel According to Abel

Visibility →

- References
- Abstracts
- Indexing
- Citation sources
- **SCIELO INDEX**

Availability →

- The paper
- Reprint requests
- Library
- **SCIELO PAPERS**

Brazilian Journal of Medical and Biological Research Pre-Scielo

	1992	1997
Impact	0.389	0.468
Impact rank	63%	64%
Cites	500	895
Cites rank	49%	44%
Submissions	225	300
Published papers	160	206

Open Acess Publishing
SCIELO

- BJMBR - went on-line in Scielo in January 1997 with 9 other Brazilian journals.

- The problem: how do you inform the scientific community that Scielo exists and where to find it?

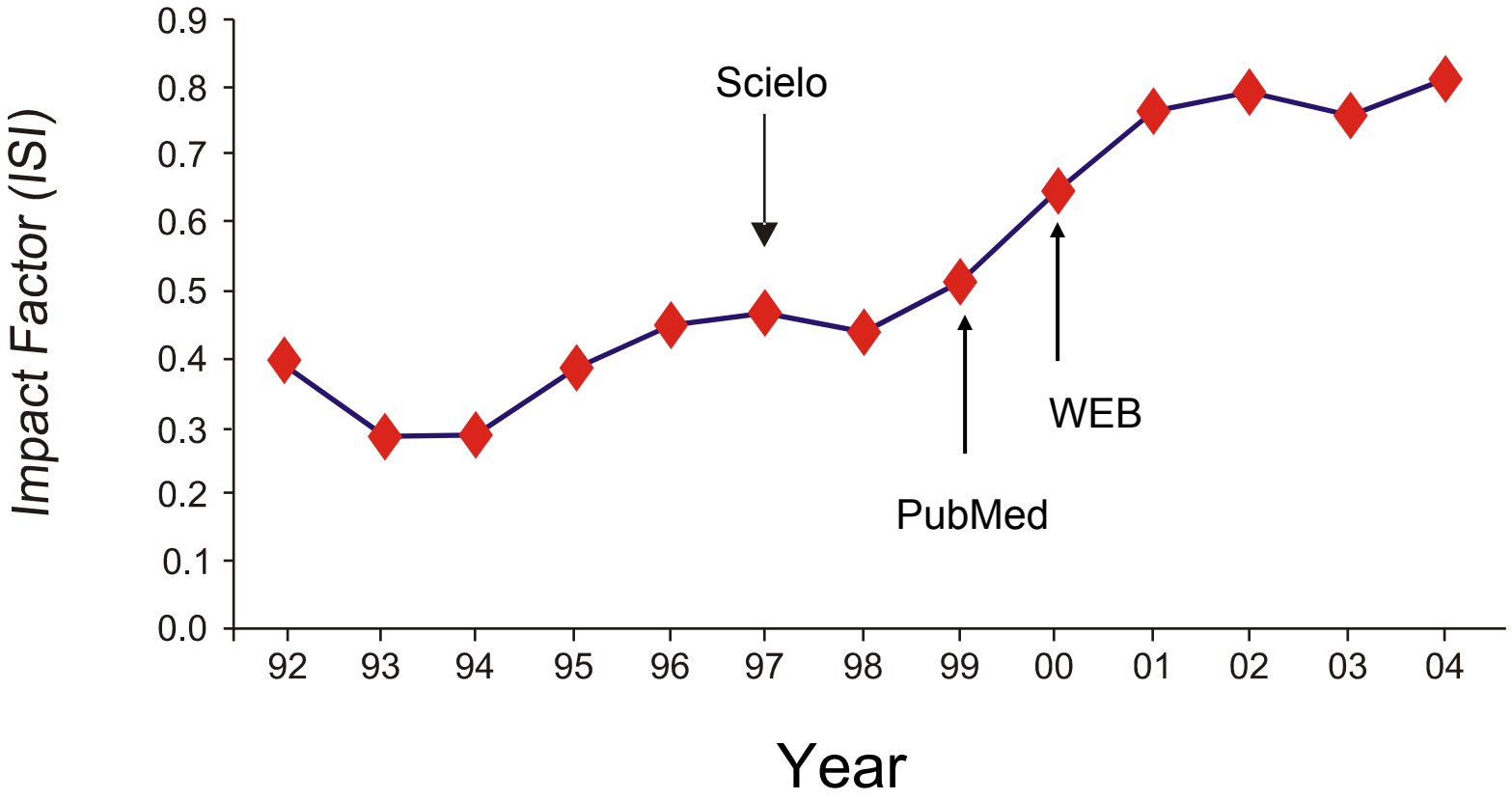
- Run adds in Nature and Science?

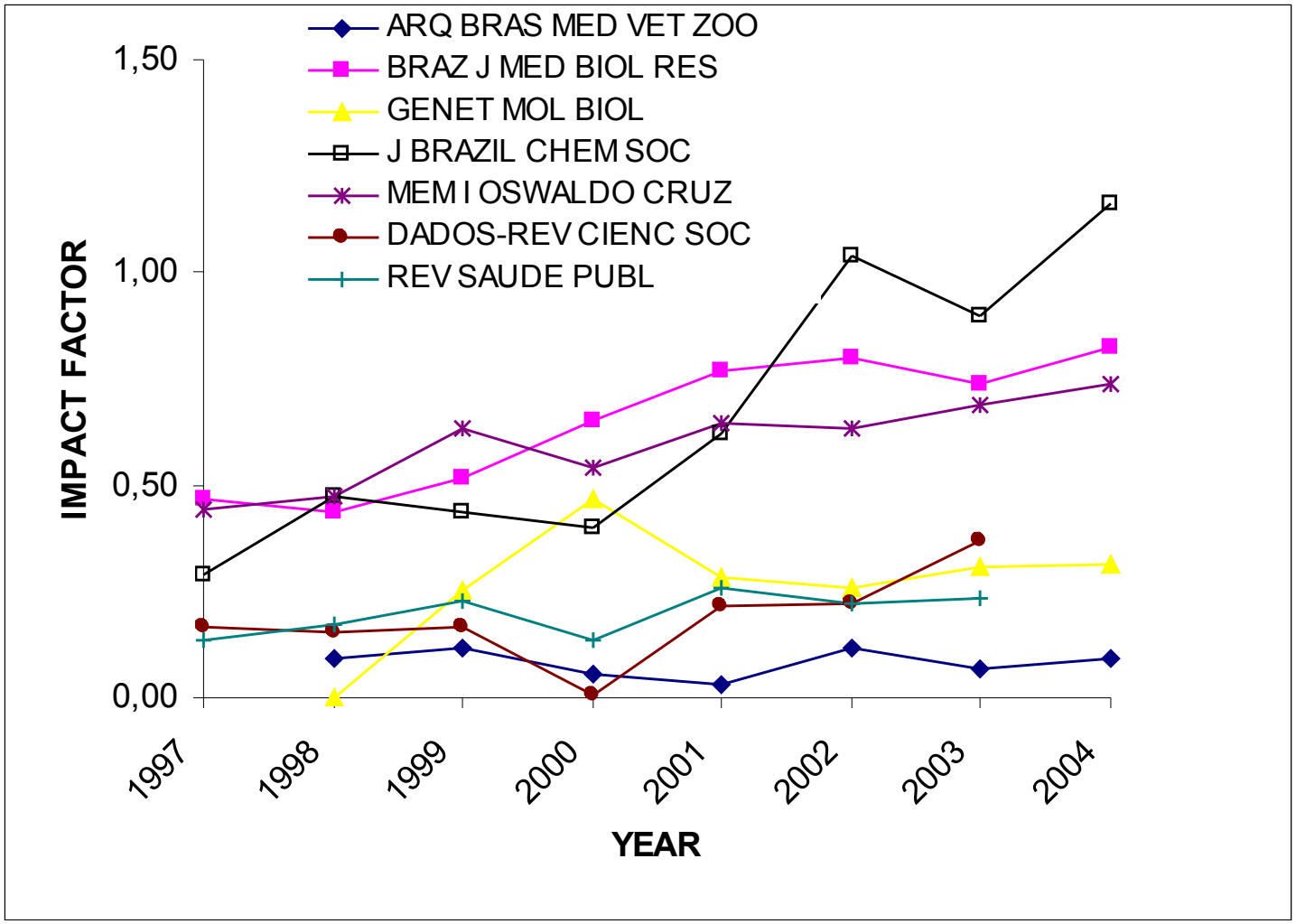
Potentiation of SCIELO

- Links from PubMed (1999) and the WEB (2000) connect directly to the title page of the paper in Scielo.

- Scielo became truly international.

Impact Factor Before and After SCIELO

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IMPACT FACTOR
1997
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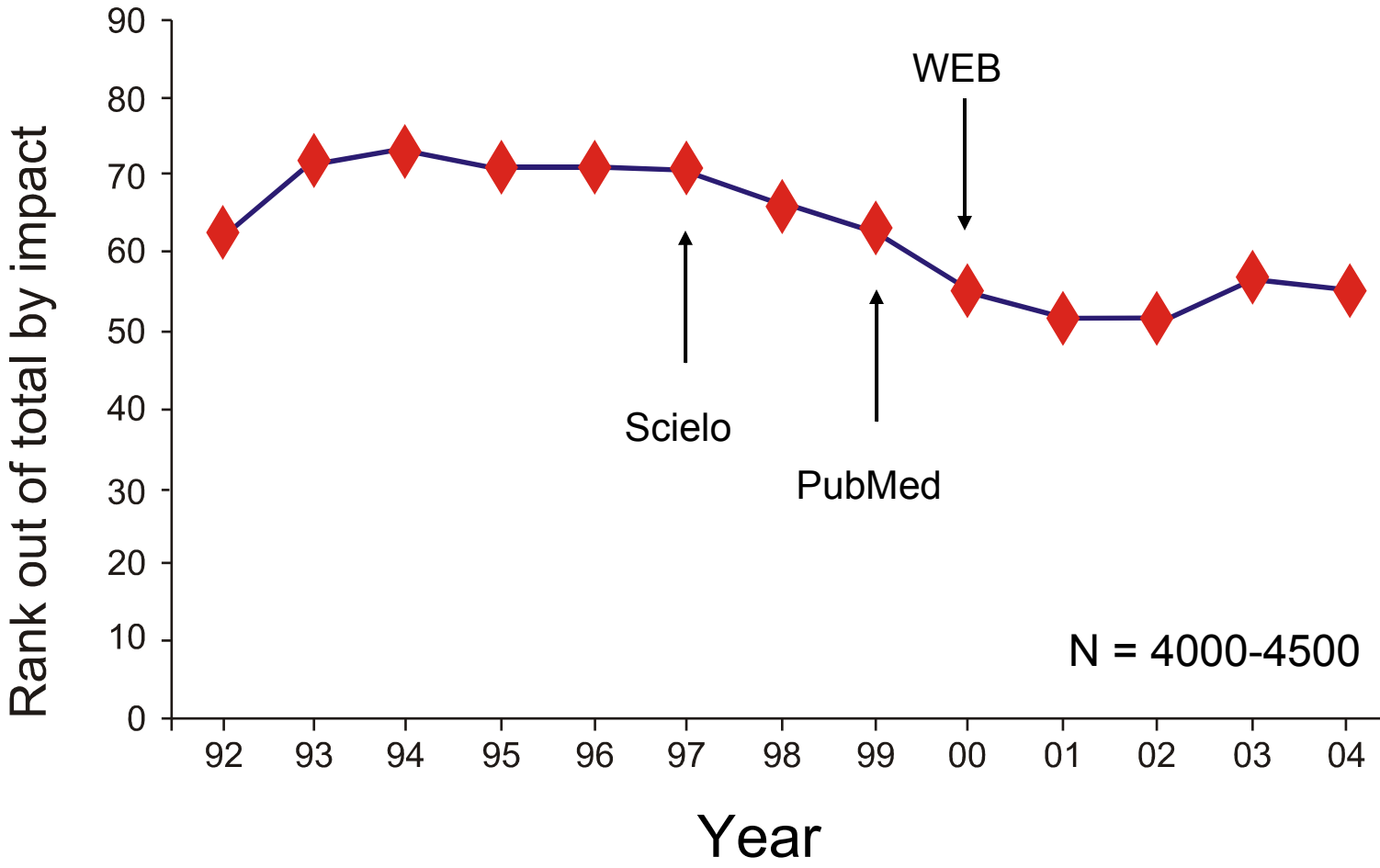
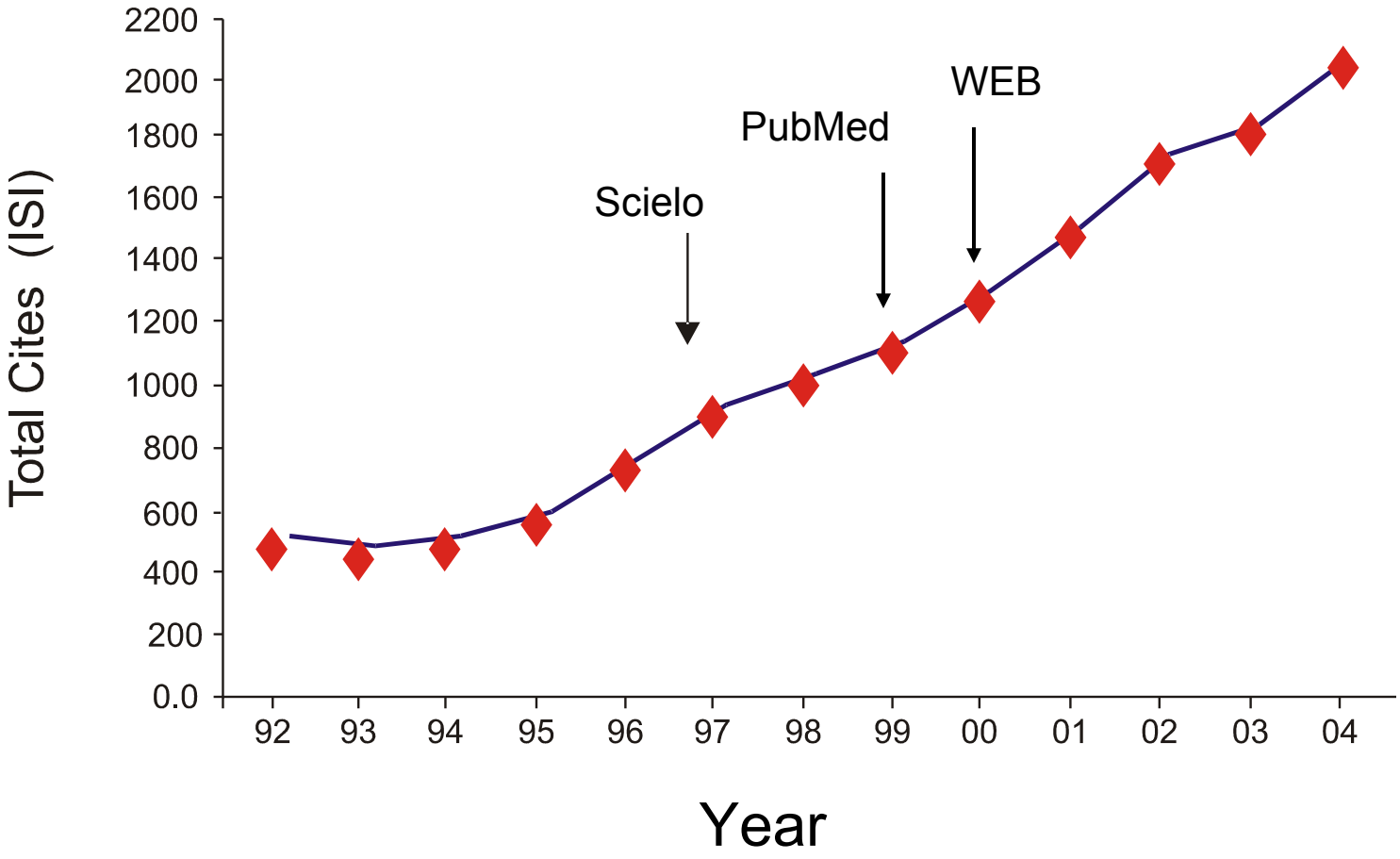
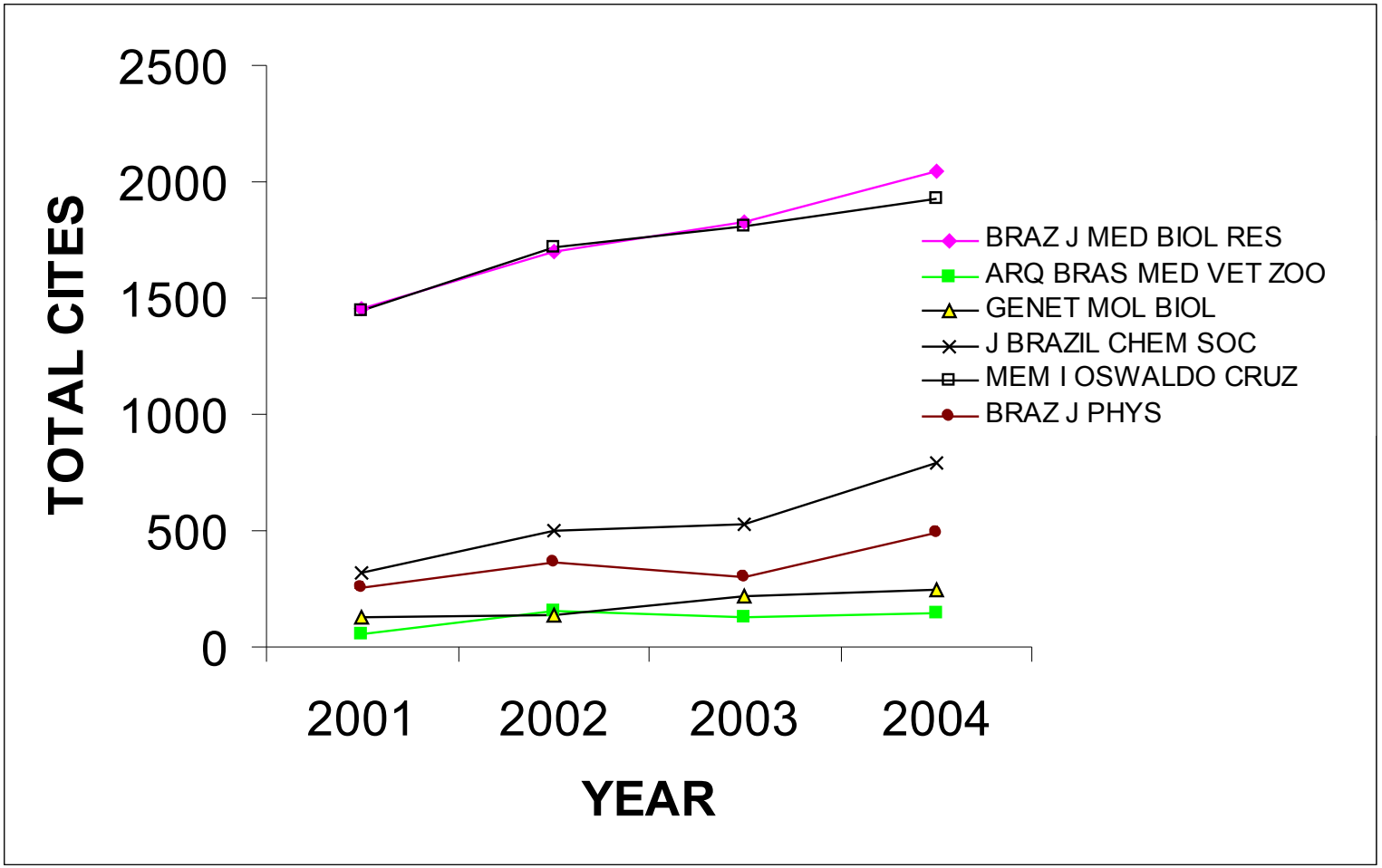
2003
2004
YEAR

Impact Factor Rank in JCR Before and After SCIELO



Total Cites Before and After SCIELO




TOTAL CITES
2500
2000
1500
1000
500
0
2001
2002
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2004
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BRAZ J MED BIOL RES
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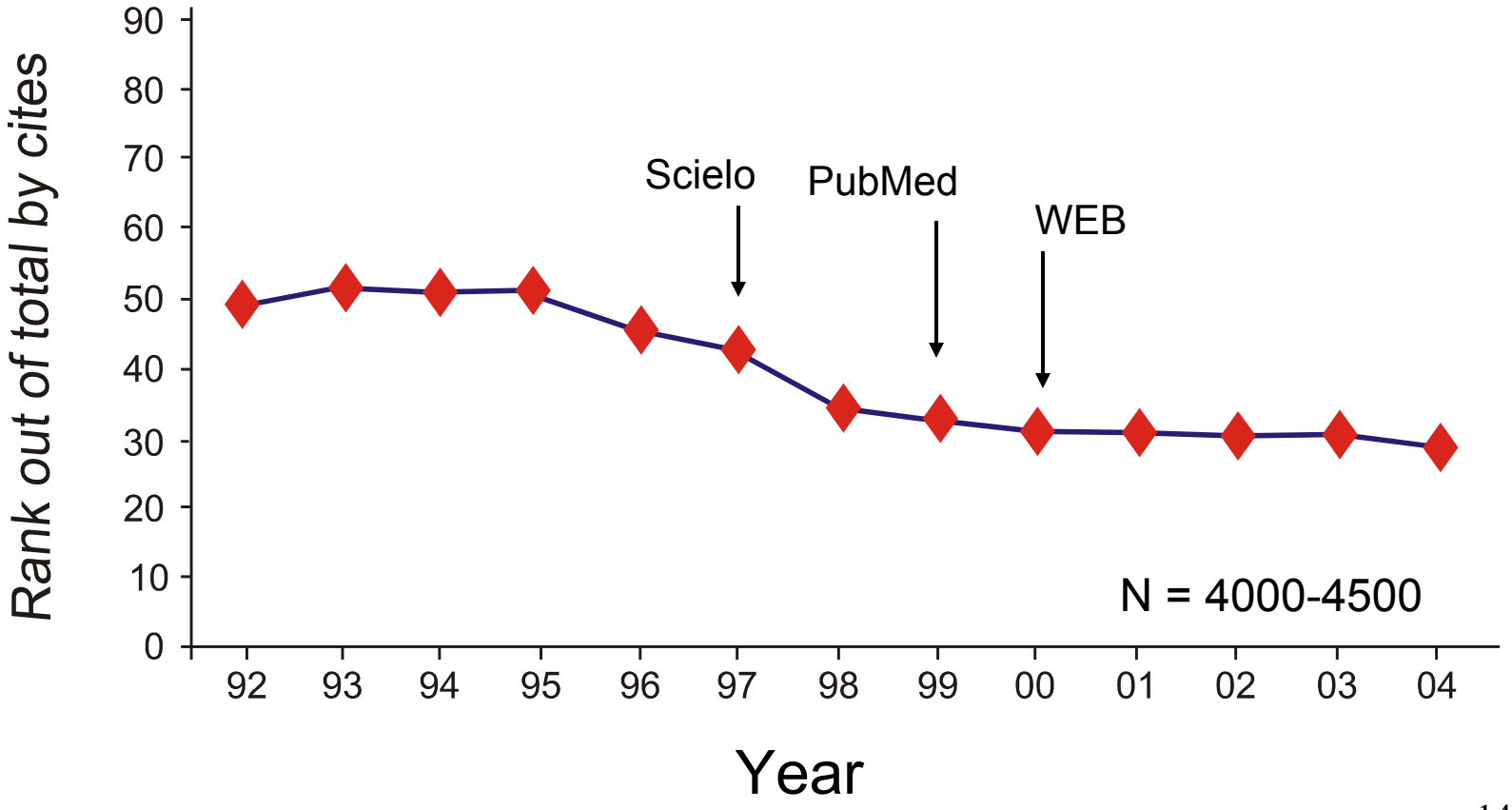
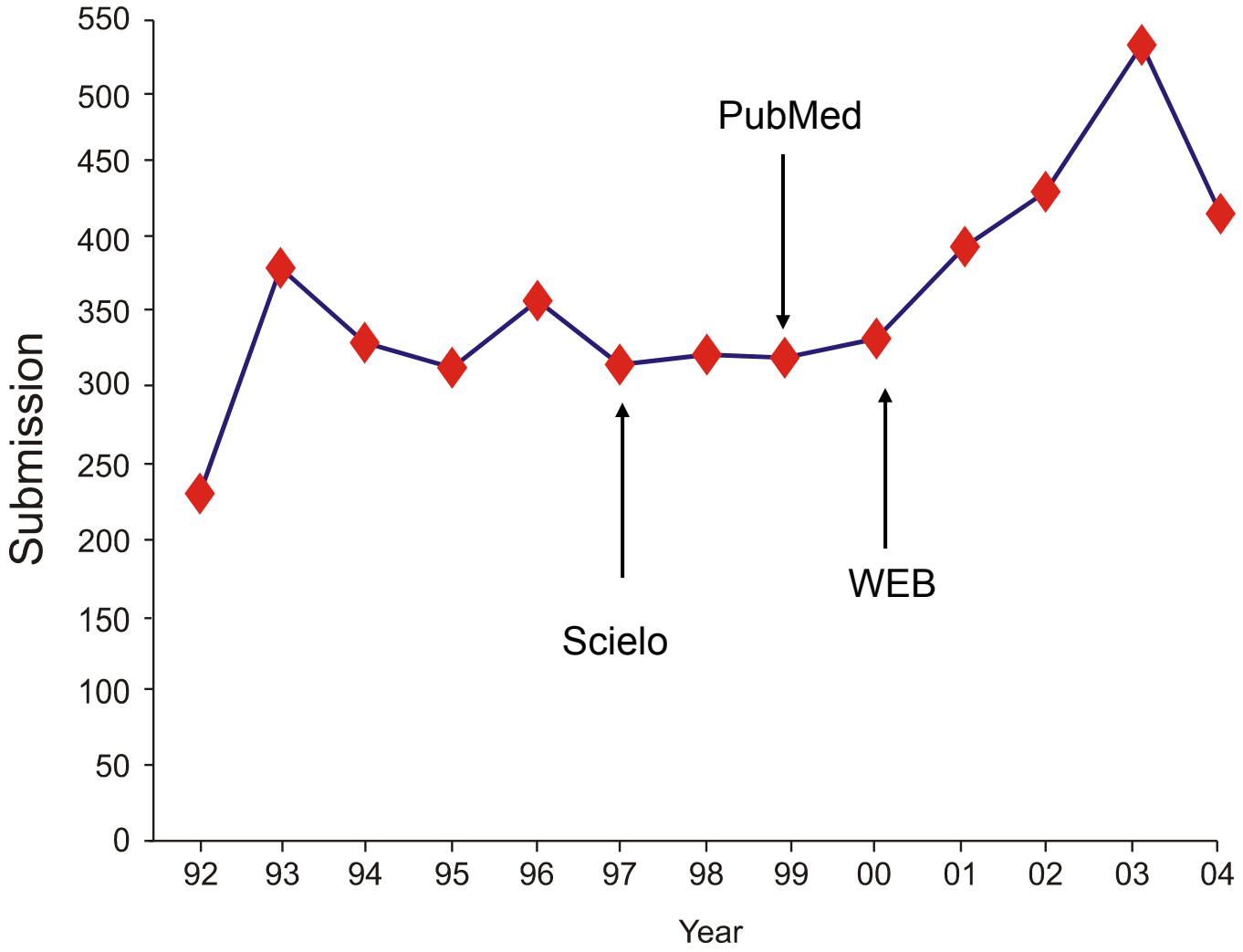
MEM I OSWALDO CRUZ
BRAZ J PHYS

Total Cites Rank in JCR Before and After SCIELO



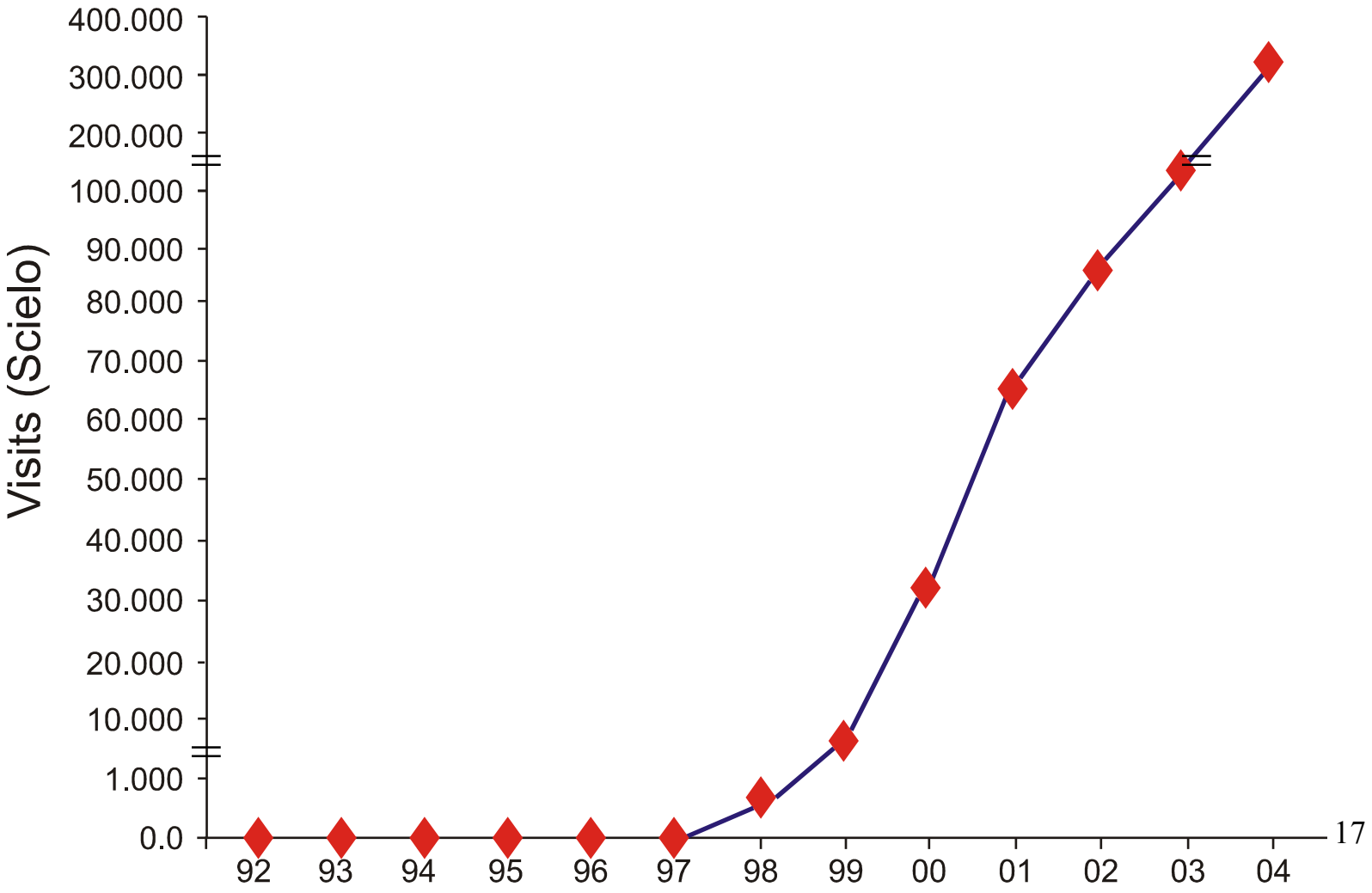
Papers Submitted to BJMBR Before and After SCIELO



Brazilian Journal of Medical and Biological Research After Scielo

	1992	1997	2005
Impact	0.389	0.468	0.824
Impact rank	63%	64%	56%
Cites	500	895	2043
Cites rank	49%	44%	28%
Submissions	225	300	404
Published papers	160	206	234

Visits to BJMBR Articles in SCIELO



SCIELO
Summary of Visits to the BJMBR Articles
(Source: statistical data of Scielo, accessed on 23/06/05)

Year of visit	Visits/year	Visits/day
1998	819	2
1999	8,187	22
2000	33,322	91
2001	67,587	185
2002	87,154	238
2003	147,128	403
2004	305,754	837

What part of the Cost of Producing a Journal is Associated with Paper

- 12 number or 1440 pages/year, 90g paper, 21x28cm.
- Reduction from 2000 copies to 0 = -23.1% of total cost.
- Reduction from 2000 copies to 400 = -9.8% of total cost.
- Money saved can be used to support the server.

Financing Scientific Journals in Brazil

- Direct grant from agency whose mission is to stimulate research.
- Subscriptions – small, because Brazilian libraries are bankrupt.
- Advertising – smaller, except for professional journals.
- Page charges – for the first time in Brazil, BJMBR started collecting page charges in 2003.
  - 40% of cost of production of 7 pages
  - USD$ 320.00 = $ 46.00/page
  - Cost for matrix is USD$ 114.00/page
  - Cooperation from the granting agencies.
  - Accepted by the scientific community.

Conclusions

- Open access can have a significant positive effect on journals published in developing countries by making them available to the world.
- However not all journals will benefit. This will depend on the quality and content of the journal.
- Since governments support the publication of journals, directly or indirectly, it is necessary for them to support the infrastructure of open access.