

PHARMA
MATTERS

WHO'S MAKING THE BIGGEST SPLASH?

Thomson Scientific's expert review of the organizations that are helping to shape professional opinions on drugs and therapies, using the unique insights of the *Thomson Message Mapping System*SM.



Section I: Introduction

The international pharmaceutical industry is among the most important sponsors of scientific research, so it is understandable that some of the most widely published well-written scientific articles are affiliated with, or sponsored by, pharmaceutical companies.

In this quarterly review of the scientific literature on drugs and therapies, Thomson Scientific has assessed the quantity and quality of the materials published by pharmaceutical companies, research institutions and other non-commercial bodies in the last three months to identify which organization has made the biggest splash.

Section II: Our findings

For the second quarter in a row Novartis maintained the top position in our analysis. Researchers affiliated with the firm issued 96 articles, abstracts or scientific posters between July and September 2007 that met the criteria for analysis by the TMMS, more than the 82 identified in the previous quarter. The company maintained its solid Thomson Source Score of 75. In addition, all of the other organizations at the top of our list (Eli Lilly, AstraZeneca, GlaxoSmithKline and Bristol-Myers Squibb) were also in the top five last quarter.

The Organizations that have made the biggest impact in the leading sources of information on medical research (July—September 2007)

| Rank | Sponsor | Number of Sources ¹ | Thomson Source Score (%) ² | Thomson Institutional Recognition Score ² | Ranking During Previous Quarter |
|------|--------------------------------------|--------------------------------|---------------------------------------|--|---------------------------------|
| 1 | Novartis | 96 | 75 | 7200 | 1 |
| 2 | Eli Lilly | 77 | 76 | 5852 | 3 |
| 3 | AstraZeneca | 68 | 77 | 5236 | 2 |
| 4 | GlaxoSmithKline | 65 | 78 | 5070 | 4 |
| 5 | Bristol-Myers Squibb | 60 | 78 | 4680 | 5 |
| 6 | Pfizer | 58 | 73 | 4234 | 6 |
| 7 | Sanofi-Aventis | 53 | 70 | 3710 | 10 |
| 8 | Merck | 43 | 75 | 3225 | 8 |
| 9 | National Institutes of Health (US) | 46 | 63 | 2898 | 7 |
| 10 | Novo Nordisk | 36 | 77 | 2772 | 11 |
| 11 | Takeda | 22 | 76 | 1672 | 12 |
| 12 | Janssen-Cilag | 15 | 85 | 1275 | 9 |
| 13 | Amylin Pharmaceuticals | 17 | 69 | 1173 | NR |
| 14 | Boehringer Ingelheim Pharmaceuticals | 16 | 73 | 1168 | 15 |
| 15 | Daiichi Sankyo | 13 | 72 | 936 | NR |

Notes:

1 These analyses span the more than 30 therapeutic areas currently covered by the *Thomson Message Mapping System*SM

2 For the meanings of these terms, see methodology on page 3

NR Not ranked in the top-tier last quarter

Section III: Commentary

As in previous quarters, Big Pharma features prominently again this quarter representing all our entries except for the US National Institutes of Health and the growing biotechnology company, Amylin Pharmaceuticals. The first eight entries in the list are among the world's leading pharmaceutical companies, which is consistent with our findings for the previous quarter.

As a general assessment parameter, *Thomson Source Scores* of 80% or greater represent well-written articles based on solid science. While several companies approach this value (GSK and BMS with average values of 78%), Janssen-Cilag was the only organization among the top-15 that exceeded the 80% mark this quarter.

The US National Institutes of Health sponsored 46 items that met our criteria for assessment, consistent with the 43 articles and abstracts during the previous quarter. The organization's average *Thomson Source Score* (63%) was surprisingly weak, especially in light of the 82% average score observed for the Institute during the fourth quarter of 2006.

As in the past, we have taken our analysis a stage further by comparing the *Thomson Source Score* for all the articles, abstracts and scientific posters sponsored by the pharmaceutical industry with the scores for those sponsored by individuals, research institutes or other non-commercial organizations. Between July 2007 and September 2007, the *Thomson Source Score* for the literature sponsored by non-commercial bodies was 72%, compared with 75% for that sponsored by the industry. Although this difference narrowed slightly compared with the previous quarter, because of the large numbers of articles analyzed during this quarter (1045), this difference in average quality score was highly statistically significant, in favor of articles supported by the pharmaceutical industry.

We continue to observe the generally robust nature of the scientific materials published in the leading information resources that healthcare professionals read. Our analyses continue to find that many pharmaceutical companies and research institutions convey their scientific results in a comprehensive and thoughtful manner.

Section IV: Our methodology

Clearly, no healthcare professional has enough time to review all the information that comes his or her way – in the form of medical journals containing thousands of articles, and abstracts or conferences at which researchers present their findings – but some publications and scientific posters carry more weight than others.

Thomson Scientific has developed a systematic means of identifying this key subset of resources with the *Thomson Message Mapping System (TMMS)*. First we identify the number of articles, abstracts and posters sponsored by individual companies or research institutions in key journals and at key conferences which meet the *TMMS* assessment criteria. We then calculate the average *Thomson Source Score* for all these materials sponsored by a particular group.

However, the impact a particular organization makes on the healthcare community is likely to be a product of both the quantity and the quality of the publications it issues. Thomson Scientific has therefore multiplied the number of each organization's published articles, abstracts and posters in our system by the average *Thomson Source Score* for those materials. The resulting *Thomson Institutional Recognition Score* provides an objective, quantitative measure of the impact the organization has made, and is used as the basis for the rankings in this document.

How the *Thomson Message Mapping System* works

The *TMMS* applies inclusion criteria to identify the articles, abstracts and posters most likely to shape professional opinions about particular drugs and therapies. In addition, Thomson Scientific uses the methodologies of the *TMMS* to evaluate the quality of the material included in its analyses:

- 1 Thomson Scientific assesses each article, abstract and poster in terms of its scientific content, the appropriateness of the methods used by the investigators and how well the information has been presented.
- 2 Thomson Scientific assigns each study a score (called the *Thomson Source Score*) ranging from 0% to 100%. 80% or more generally indicates a well written, thoughtfully designed, scientifically-valid study.

This unique, patented model has been independently tested on clinicians to ensure that it reflects the ways in which they think and assess the value of the information they receive.

About Thomson Message Mapping SystemSM

The *Thomson Message Mapping System* provides focused analyses of influential scientific information to assist brand managers, publication planners, and competitive intelligence department to make informed decisions based on independent assessments of these sources.

About Thomson Pharma[®]

Thomson Pharma was developed to help pharmaceutical companies make better decisions faster. It integrates information from Thomson Scientific, including the *Thomson Message Mapping System*, with information from other Thomson sources, including the Financial, Healthcare and Legal and Regulatory groups. *Thomson Pharma's* core content areas include drug information, intellectual property data, literature and news, company data, chemical information, sequence data and drug target information, enhanced with value-added content resources and powerful search tools.

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WHO IS MAKING THE BIGGEST SPLASH

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