1999 U.S. MSPPSA SERIES

MONOCLONAL ANTIBODIES

AN ANALYSIS OF MARKET SIZE & GROWTH, MARKET SHARE, PURCHASE PLANS & SUPPLIER ASSESSMENT FOR THE U.S. LIFE SCIENCE RESEARCH MARKET

A Multi-Client Report

by
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San Carlos, California

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I. Background

A. SURVEY OBJECTIVES

The purpose of this survey was to provide the management of our client companies with an analysis of the current market for monoclonal antibodies in the United States and of the attitudes of researchers who utilize these biologicals in their work.

A random selection of 1,854 BioTechniques subscribers who had indicated an interest in monoclonal antibodies were used for this survey. The group was separated into two mailings consisting of 945 names for the first and 909 for the second. The surveying was blind, with no reference made to any clients for the survey. To encourage respondents to express themselves freely and without bias, the survey made frequent use of open-ended questions.

The demographic screens used to characterize respondents included type of organization and area of expertise. Early on in the survey, respondents were asked whether or not they currently used monoclonal antibodies in their work. Those respondents who answered positively were directed to complete the remainder of the survey, first describing where the monoclonals were obtained (made themselves, received from colleagues or purchased commercially) and what percentage of total consumption each of these comprised. Respondents were then asked to choose which types of monoclonal antibodies they currently use in their work.

This was followed by the first audit question regarding the consumption of monoclonal antibodies in terms of the number of vials consumed and dollars spent on an annual basis. Respondents were then asked to list each supplier from whom they purchased, along with the type of monoclonal antibody and the percentage of their total budget this purchase represented. In addition, anticipated change in monoclonal antibody use over the next 12 months was also identified.

Next, respondents were questioned regarding their reasoning behind choosing the suppliers listed, and whether there were any suppliers with whom they were not satisfied. They were then asked to select the highest-rated supplier in four key areas. In particular, respondents were asked to choose the top-ranked supplier among seven leading monoclonal antibody suppliers (or an eighth write-in choice) in the following areas: best value for money, most reliable quality, best customer support, and widest product range.

The next two questions concerned the circumstances which would cause a primary supplier to be switched, and if this had actually occurred in the past 6 months. The inquiry into the single most important factor considered when choosing a supplier for monoclonal antibodies was followed by the opportunity to provide suggested improvements, both open-ended questions so htat

so that all researcher's thoughts could be recorded.

Major objectives of the survey were to estimate the present size of this market and to determine the present market share for leading companies, to calculate a future growth rate, and to identify the leading suppliers in terms of vials sold and estimated dollar sales volume. Finally, profiles of respondents currently using monoclonal antibodies would be carefully examined to determine if certain issues were associated with specific suppliers.

The audit should permit the evaluation of our clients' present market positions, identify marketing strengths and weaknesses, and suggest strategies to develop or improve sustainable competitive advantage.

This report is the first 1999 study in a growing series of market research analyses that began in 1993. We plan to continue the series, adding titles and alternating between U.S. and international markets, depending upon our clients' suggestions and support.

The following titles have already been released in the U.S. series for 1997/8:

Cell & Tissue Culture
Cytokines & Growth Factors
DNA Sequencing
HPLC in the Life Sciences
Molecular Biology Reagent Systems, Vol. 1
Molecular Biology Reagent Systems, Vol. 2
Molecular Diagnostics.

In addition, we also published a special report covering the U.S. market for:

Recombinant Protein Expression Systems.

The reports previously released covering the European markets are:

DNA Amplification
DNA Sequencing
Electrophoretic Gel Media

In the 1999 series, two additional European reports are underway, including:

Densitometry & Image Analysis
Microplate Equipment.

These titles were also available covering the U.S. market in 1995/6.

We also introduced two reports in 1997/8 covering the Far East market for:

DNA Amplification
Molecular Biology Reagent Systems, Vol. 2.

Further reports in the series to be published in 1999 include:

DNA Sequencing
Molecular Biology Reagent Systems, Vol. 1.

Clients are reminded that additional copies of any of these reports that have been purchased in the past are available at a modest cost. Please contact us for further details.

Clients wishing to know publication dates for any of these reports, or wanting to read summaries of the 30+ earlier reports in this series are invited to visit our Web site at: www.phortech.com

B. SURVEY METHODOLOGY

The names utilized for this survey were acquired from a single source, BioTechniques magazine (obtained from Eaton Publishing). This consisted of a random selection of 1,854 subscriber names of life science researchers who had specified an interest in monoclonal antibodies. These were mailed in two batches, the first one sent by first class mail on October 30th, 1998, and the second batch on November 2nd. The survey was held open until December 8th to allow ample time for responses from both mailings to be collected.

Each participant received an introductory letter, a double-sided legal-sized survey, and a business reply envelope addressed to PhorTech International. No reference was made to any of our clients as sponsors of the survey.

To improve the response rate, the cover letter mentioned a choice of two prizes - a $10 gift certificate to Amazon.com or a 140 g box of Jelly Belly jelly beans. Apart from these, no inducements were employed and no follow-up mailings were used. The questionnaires were anonymous, using a combination of tabular entry, check-offs, and open-ended probes. However, the majority of respondents did identify themselves by filling in the prize request form. This made it possible for us to double-check the responses to some questions by telephoning respondents, improving the overall confidence in the data.

Undeliverables were measured at 3.2%, or 59 returns. By the close of the survey, 610 responses had been received for an overall response rate of 34.6%, which exceeded expectations. Twelve additional unsolicited responses came through our web-site, resulting in a total of 622 responses for this survey.

We felt that respondents spent considerable time explaining their positions on the open-ended questions. We have no reason not to believe that the survey is representative of the entire U.S. population of monoclonal antibody users. We have found that, within the limits of experimental error for sample size we have obtained, no demonstrable bias could be detected that could affect our results.

Based upon 622 responses, the overall statistical results presented in this report are accurate to within ± 3.9 percentage points at the 95% confidence level. In cases where we only calculate the percentages of respondents that use monoclonal antibodies, the results are accurate to ± 4.4%. In our experience, 95% confidence levels are appropriate primarily for scientific experiments. Most business people making decisions are content to be right more often than they are wrong. In this case, a 65% confidence level, (in which you would be right twice as often as you would be wrong) is more appropriate.

Conveniently, 65% confidence levels are nearly exactly one half the size of the 95 % level, thus our 65% levels would be ± 2.0% for all respondents and ± 2.2% for all users.

According to the binomial distribution theory, these values are valid when the measured event has about a 50% probability. When the measured event is considerably more rare than this, the corresponding confidence intervals get smaller. On the other hand, these confidence intervals are valid for answers based upon the complete pool of respondents. When analyzing data for a group that includes only a small segment of respondents, the answers are less certain and confidence intervals are correspondingly larger.

In the report, we will calculate more exact individual confidence intervals when appropriate. In our comments, we will note whether given differences are significant at either the 95% or 65% level.