URCH PUBLISHING

Global Pricing Strategies for Pharmaceutical Product Launches

Peter J. Rankin, Associate Principal
Gregory K. Bell, Group Vice President
Tim Wilsdon, Principal

Chapter 2 of The Pharmaceutical Pricing Compendium

A Practical Guide to the Pricing and Reimbursement of Medicines

www.pharmaceuticalpricing.com

CRA

Article Summary

This article provides a brief strategic overview of the types of constraints that manufacturers must overcome in order to implement a successful global product launch and determine the optimum price.

KEYWORDS

Demand Analysis, Global Launch, Health Outcomes, Market Research, Optimal Price, Parallel Trade, Prescribing Patterns, Reference Pricing

ESCALATING HEALTHCARE COSTS, increasing sophistication of insurers and regulators, and heightened investor expectations continue to compel pharmaceutical manufacturers to become more effective at pursuing all available sources of revenue. These pressures are emerging globally, with countries seeking a variety of concessions from pharmaceutical manufacturers. Effective global launch of a new pharmaceutical therapy must account for reduced pricing freedom and a tangle of country-specific regulations. Efforts to rationalise regulatory regimes and promote international trade further contribute to an environment in which pharmaceutical manufacturers must manage product launches globally in order to meet revenue and profit expectations.

There are many rewards to reap from effective global launches, but today's approach requires strategic considerations that might differ fundamentally from past experiences. Successful global strategies must negotiate profitable prices in a fragmented and idiosyncratic environment, predict proper launch timing, mitigate parallel import losses, minimise the effects of reference-based pricing, and establish consistency in pricing and reimbursement levels across markets and time. An acknowledged effective approach to global launches allows the development of potentially valuable global brands, generates in-licensing opportunities and maximises global profits.

Pharmaceutical companies pursuing global product launches have identified a troubling tension between minimising the time to market and maximising prices that determine global profits. Limited intellectual property protection and stockholder expectations (among other factors) often suggest that the best product launch strategy is one that provides the fastest commercialisation. This mindset is appropriate in countries where manufacturers are free to set price; however, in countries that require price negotiations before launch, such haste to enter the market risks sacrificing significant revenues over the product life cycle.

Of course, this tension is merely the first of many hurdles faced by manufacturers pursuing global product launches. Others include price maintenance, unilateral regulatory price changes, managing price negotiations, and sequential launch timing. Underlying all of these constraints is the spectre of parallel imports, which can magnify the scope of price concessions by eroding sales in profitable markets.

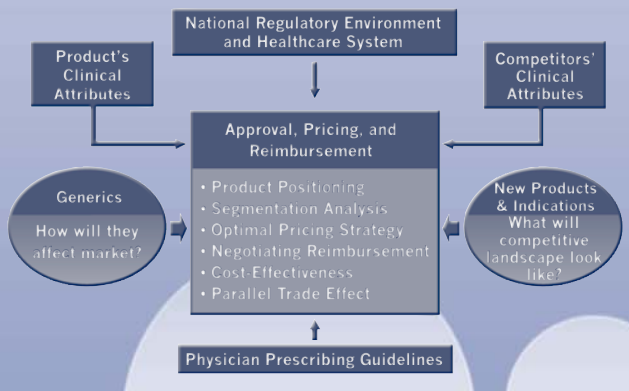
DETERMINING THE GLOBAL LAUNCH STRATEGY

A successful global launch strategy includes far more than determining price. As shown in Figure 2.1, the typical launch issues, including product positioning, price determination and reimbursement negotiations, must include an evaluation of the factors that affect the launch and life cycle of the new therapy. For example, a profitable global launch strategy must:

- Demonstrate the clinical attributes of the therapy against products
- Protect against the possibility of a generic or new competitive entry
- Incorporate each country's healthcare system and physician prescribing patterns
- Cater to country-specific regulatory environments while successfully negotiating profitable prices.

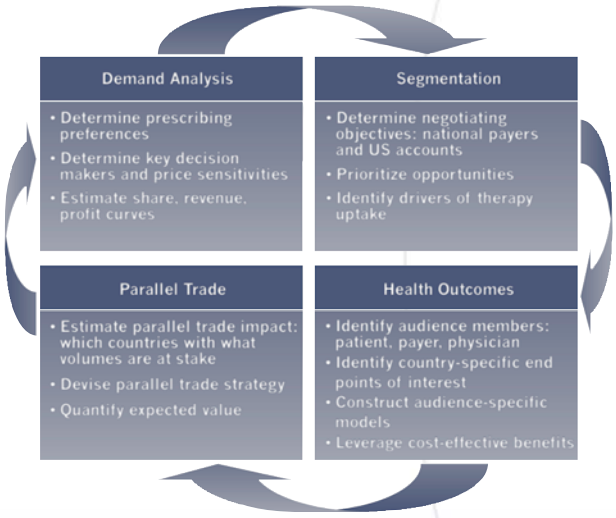
Price determination should be the culmination of demand analysis based on market research, account segmentation, health outcomes analysis and evaluation of regulatory constraints. The significance of different determinants of launch prices varies by geography; emphasis on health outcomes analysis and the risks of parallel trade is pronounced in Western Europe whereas the importance of managed care and account segmentation analysis is dominant in the US. Figure 2.2 provides a summary of these pricing factors, each of which is described in detail below.

Figure 2.1 - Strategic considerations for global product launch



Source: CRA

Figure 2.2 - Determining optimal global price



Source: CRA

Demand analysis

Understanding the dynamics of prescription use is of critical importance to developing an optimal pricing strategy. Across different countries and physician types, the propensity to use a particular therapy and, as a result, the willingness to pay for a therapy, vary greatly. Demand analysis focuses on three critical questions:

- Who are the key decision makers for the use of this therapy?
- How do the price sensitivities of key decision makers affect use?
- How do prescribing preferences vary across markets of interest?

Key decision makers

A fundamental truth underlies all prescriptions and provides constancy when considering global product launch: physicians know which therapeutic options are best for their patient. Provided a new pharmaceutical offers clinical advantages relative to current treatment methods, physicians, especially key opinion leaders, will motivate prescriptions, both through their own prescriptions for the product as well as their recognition of clinical advantages in public forums. Manufacturers emphasise the importance of a new therapy by recruiting key opinion leaders for clinical trials and health outcome analyses to boost the credibility and distribution of information related to their new therapy.

Payers affect therapeutic choice in a less direct but often more substantial manner: by limiting the class of options from which a physician can select a therapy. Some payers may not reimburse certain products, or might reimburse only under certain circumstances (such as when a course of therapy begins in the hospital). Further, the reimbursement decision allows differential support across therapies; not only can a payer exclude some drugs from consideration, but that payer can also demonstrate preferences among covered drugs by altering the degree or ease of reimbursement, as is the case with multi-tiered formularies in the US.

Patients can play a significant role in the prescribing decision, especially for certain types of therapies under certain healthcare systems. Granted, patients often defer to their physicians when considering therapeutic options, but with the increase in 'lifestyle' products, the broader availability of health information and direct-to-patient marketing initiatives, patients increasingly express a preference for a particular therapy. In certain markets (e.g., the US), patients also have a direct financial incentive to guide their drug decisions, as cost-sharing requirements can result in higher costs for certain therapeutic options.

Price sensitivities

As noted above, key decision makers might be price insensitive, depending on the regulatory structure of the market. Some countries, such as Japan, have regulatory systems that provide economic incentives for physicians to use certain therapies. Some European markets discourage physicians from higher priced therapies by establishing physician budgets for prescriptions. Similarly, countries vary greatly in the degree to which patient price sensitivity is encouraged or structured in local regulations. Payer price sensitivity, of course, is a redundant phrase as payers are universally interested in methods to reduce prices. Pharmaceutical managers should have a firm understanding of the local dynamics among these three parties when establishing a launch strategy. Integrating the results of these analyses would reinforce a tailored approach to maximise returns.

Prescribing patterns across markets

Prescription patterns vary widely across markets, reflecting local epidemiology, physician preferences, clinical practices and regulation. Clinical guidelines, guided largely by these local matters, play a large role in influencing prescribing patterns. Countries often have clinical groups that establish treatment guidelines for certain maladies or for certain classes of pharmaceuticals. These guidelines typically encompass more than a single product, which results in a new product being classified relative to existing comparable therapies. These guidelines can differ significantly across markets. German physicians, for example, are much more willing to use beta-blockers for congestive heart failure than physicians in other European markets. In nearly all markets, including Germany, usage of beta-blockers lags behind the targeted rate established

in clinical guidelines. Which guidelines are followed, the extent to which guidelines encourage the use of particular products and the speed with which guidelines are adopted provide significantly different prescription patterns across countries.

Market research: identifying the demand for pharmaceuticals

The goal of demand analysis is to craft a research agenda that speaks to all three research questions, while also providing insight into segmentation and health outcome strategies. Market research provides the raw information to address these concerns, but only if designed well and fielded correctly. Effective market research must provide information on all key decision makers. In general, market research should evaluate the share response to changes in the status of competing products; the share response to clinical attributes, indications, efficacy and patient profiles; price responsiveness; physician response to financial incentives and disincentives for prescribing; and patient awareness and willingness to pay.

The particular market research design used to provide competitive information for a new product launch depends greatly on the therapy, existing and expected competitors, key decision makers and clinical factors. However, there are a number of practical suggestions that apply to market research in general. First, key decision makers must be placed in realistic trade-off situations. Not only does this provide the most accurate forecast of market demand, but it also keeps the respondent engaged in the survey process. Physicians asked to consider an unfeasible collection of product attributes, or patients asked about their willingness to pay an exceptionally high cost, are likely not only to provide poor responses, but their frustration regarding poor scenario construction will most likely limit or reduce the quality of information collected.

Second, market research should consider multiple factors of demand for a new therapeutic agent. When key decision makers - whether physician, patient or payer - are confronted with a shortlist of demand determinants, market research is easily manipulated to fulfill the preferences of the respondent. For example, if market research on pricing a new therapy considers only the effect of price, respondents to market research have an incentive to overstate their price sensitivities in order to encourage low prices. Instead, pricing scenarios should be coupled with other demand factors, including reimbursement issues, treatment regimens, patient severity and characteristics of available alternatives. The particular type of market research employed (e.g. monadic, discrete choice) can also affect the extent to which respondents can manipulate market research to bias the results.

Finally, the third characteristic of effective market research is short, focused survey instruments. The instrument needs to focus on the 'need-to-know' issues (identified earlier in the analysis of strategic options for the launch) and not be hijacked to satisfy a myriad of 'nice-to-know' questions. There is an implicit trade-off when considering the length of a survey instrument: collecting more data from each individual respondent risks respondent fatigue against the higher cost of a larger sample size (the 'no data versus bad data' scenario).

Armed with effective market research data, manufacturers can understand the dynamics of prescription patterns for a new product and its competitors. Market research allows construction of share, revenue, profit-maximisation and competitor-reaction curves for each global market and market segment. The results of market research analysis can be evaluated at the subgroup level to inform segmentation analyses and health outcome trial designs, and aggregated across groups to the national or pan-European level.

Account segmentation

A fundamental first step in determining an optimal price is to prioritise the opportunities available from those who might purchase or use the therapy, including patients, physicians and payers. Not all purchasers will have the same sensitivity to price, and not all will purchase similar volumes. The goal of an optimal pricing strategy is to accurately predict the price sensitivity, willingness to pay and expected purchase volumes of customer groups. Effective segmentation analysis will answer four questions across the global customer population:

- Which segments of the market are price sensitive?
- How price sensitive are these segments?
- What percentage of the total market do price-sensitive segments represent?
- How will competitor responses vary by segment?

Segments can be defined using a number of criteria, such as cost-sharing liability, disease status, physician type, acute/chronic disease type, payer size and predisposition to generic use, among others. There is no single correct method to segment the market, as the appropriate tactic will depend on market and product characteristics. To be successful, though, a segmentation method must produce segments that are homogeneous within and heterogeneous among. Once these categories of purchasers have been defined, pre-launch efforts and strategic focus should obviously be directed to those segments of the highest priority, typically those segments that exhibit the greatest profit potential.

Health outcomes and pharmacoeconomics

The value of health outcomes and pharmacoeconomic analysis depends largely on the structure of the local healthcare system. In countries where governments negotiate reimbursement levels (e.g. France, Spain and Australia), health outcomes research is essential to demonstrate the cost effectiveness of a new therapy. In countries where reimbursement is traditionally negotiated with non-government payers (e.g. the US), health outcomes analysis has traditionally played a less important role (though health insurers in the US increasingly recognise the value of health outcomes research).

An effective global launch strategy must incorporate health outcomes research. Not only can an effective health outcomes strategy help to demonstrate the efficacy of a new therapy, compelling health outcomes research can speed time to market by anticipating the clinical or cost-effectiveness concerns of regulators. To achieve this end, manufacturers must conduct a basic evaluation of health outcomes needs in the principal countries for commercialisation well in advance of regulatory filing. In fact, clinical trials data used in health outcomes research should be structured to include endpoints of interest to countries of interest. Such anticipatory planning requires that manufacturers identify issues and endpoints of interest sufficiently far in advance to structure the clinical trials to include these endpoints.

Such foresight is often elusive, but the pay-off is often worthwhile. Anticipatory data collection can obviate the need for costly follow-up trials. Addressing country-specific concerns in advance can avoid costly delays in the time to market for new product launch or restrictive product labeling. Finally, compelling cost-effectiveness data can constitute a powerful tool in price and reimbursement negotiations with regulators and private payers.

Parallel trade

The risk of parallel trade, not to mention the court of public opinion, requires that a profitable global launch strategy explicitly consider price differentials across markets. Parallel trade describes the process in which large price differences among country markets makes it profitable for an arbitrageur to purchase pharmaceuticals in one country market and sell them in another. Parallel imports are particularly prominent in the EU, where trade liberalisation efforts have minimised the costs associated with trade while disparate regulatory policies have encouraged price differentials across markets. Expected enlargement of the EU will only exacerbate the range of price variability.

Parallel trade diverts additional product revenues from the manufacturer to those who move the pharmaceuticals from one market to another. Spain is a standard example. Low prices have led arbitrageurs to purchase pharmaceuticals in Spain and export them to countries with higher prices, such as Germany or the UK. In such a transaction, the manufacturer loses the value of the sale in the importing country, realising only the lower priced sale in Spain.

In addition, parallel trade imposes other costs on manufacturers, including market forecasting, liability assessment and mitigation, and volatile manufacturing requirements. The liability assumed by the manufacturer when a product packaged in one country and distributed in another (which might have a different national language) is often unclear, leaving manufacturers to assess and address potential claims. Manufacturers must also forecast the sales for both exporting and importing countries in order to minimise the risk of product shortages or unexpected production runs. Manufacturers can work with local governments to address some of these concerns. For example, some countries are experimenting with 'clawback' policies intended to recoup some of these profits accruing to parallel traders, but these benefits accrue to payers (or patients) rather than pharmaceutical manufacturers.

Understanding the potential effects of parallel trade is complicated by several emerging trends. First, the increasingly extensive price negotiation required in some country markets generates uncertainty regarding the eventual price band for the new product. More troubling is that many countries use reference pricing policies, which potentially increases the number of markets from which parallel trade exports could ensue by basing reimbursement on countries with the lowest prices/reimbursement levels. Each of these issues is now explored in detail.

Price negotiations

A stark and immediate consideration for pharmaceutical manufacturers used to launching pharmaceuticals in the US, UK or Germany is that few other global markets allow free pricing. Instead, there is often a period of time between regulatory or technical approval and commercialisation, during which manufacturers negotiate with regulators to establish the price at which the new product will be marketed, or at least reimbursed.

Price negotiations are often protracted. In France, price negotiations have an average duration more than twice that for the rest of Europe. In addition to price, these negotiations might also require other concessions by manufacturers. In the UK, for example, manufacturers are constrained by a specified level of profitability. Other countries, such as Spain, require manufacturers to commit to predetermined sales targets. Manufacturers are held accountable for recouping the cost of sales that exceed

volume commitments, either by reducing prices or by directly paying back profits.

There are well-documented cases of manufacturers rushing negotiations in order to launch as quickly as possible, only to realise that the gains from a quick commercialisation did not outweigh the cost of reduced reimbursement levels resulting from abbreviated negotiations. Clearly, manufacturers must approach these negotiations with care and careful preparation. Quick commercialisation is not always ruled out, however. In some countries, such as the UK and France, effective strategies often hasten negotiations not by acceding to price reductions, but instead by agreeing to labeling and use limitations on their products. Once a quick launch is achieved, at a favourable reimbursement rate, subsequent clinical trials can expand product labeling. Manufacturers anticipating this strategy can even prepare the subsequent clinical trial framework before negotiations begin.

Reference pricing

The concentration of purchasing power to payers (often government agencies) in global markets is of little consequence to optimal pricing without other regulatory constraints. As has become well publicised, though, many regulatory agencies have pursued a host of methods intended to limit the prices that a pharmaceutical manufacturer can charge. One example of these policies is reference pricing. Under a reference pricing framework the price of a pharmaceutical therapy is affected by the price of a reference drug. The reference product might be another drug in the same therapeutic class; it might be a drug with the same clinical indications; and it may or may not be available in the country of interest. Canada, for example, sets drug prices by comparing with prices charged for that drug in the US and several European countries. Australia exercises firm reference pricing with reimbursements capped at the reference price.

Reference pricing has two immediate effects on pricing for product launch. First, some countries are considering a form of retroactive reference pricing, which would constrain a manufacturer's ability to use launch timing and life-cycle pricing changes to maximise profits. Second, the existence of reference pricing policies 'ups the ante', or increases the pressure on pharmaceutical manufacturers to avoid selling at a low price, as that low price could be used to affect pricing in other countries that use reference pricing. The strategic implications of both effects are explored below.

Reference pricing effects on timing decisions

Retroactive reference pricing may place further restrictions on pricing strategy, limiting some of the rationale that used to support a sequential entry strategy for a global launch. Unless a sequential strategy is mandated by regulatory requirements, intellectual property concerns, or production or distribution capacity constraints, retroactive reference pricing can limit the cost of an immediate rollout in every market of interest. For a country that practises retroactive reference pricing, a subsequent launch in another country at a lower price may force the manufacturer to reduce the price in the first country and refund the difference between the price charged initially and the new, lower price.

Reference pricing effects on pricing strategy

In completing regulatory dossiers to seek clinical or technical approval in global markets, manufacturers often have the opportunity (and perhaps obligation) to report the anticipated prices, sales volumes, reference products and clinical indications of their therapy. There are obvious strategic issues inherent in the approach taken in these dossiers, where manufacturers have the chance to affect regulatory consideration of their therapy. While these dossiers are usually country specific, they often share a core of information (such as clinical trials data) that is common across countries. The extent to which clinical trials and health outcomes analysis anticipates global launches and incorporates this information into the structure of the studies (e.g. trial location and demographic populations, or health outcome endpoints of particular interest) will affect the latitude enjoyed by the manufacturer in addressing idiosyncratic concerns of individual regulators.

Pharmaceutical manufacturers have two strategic choices affected by reference pricing, assuming that the necessary clinical and regulatory information is available. First, manufacturers can choose a limited number of countries in which they would like to commercialise their product. Because of reference pricing, it might be a (global) profit-maximising strategy to avoid launching a product in certain countries. For example, several manufacturers have avoided commercialising a product in France, both in recognition of the protracted length of negotiations and the possibility of a low reimbursement price triggering lower prices in other markets that use reference pricing. The second strategic option available to manufacturers is to craft a globally consistent price negotiation strategy. The most commonly cited example of such a strategy involves the use of price bands.

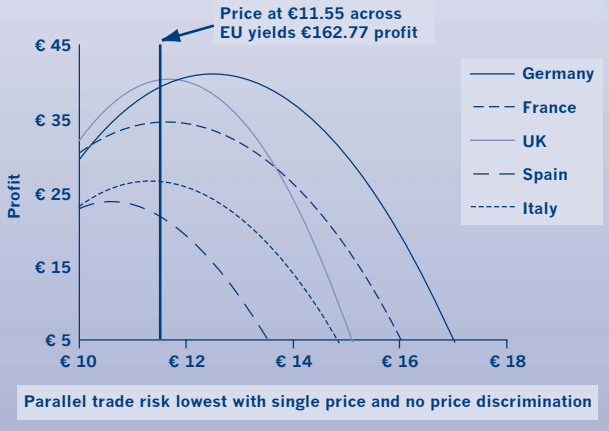
Price bands

Price bands define the allowable difference in prices across global markets. As depicted by the hypothetical situation in Figure 2.3, the narrowest price band is a single price charged in all markets. Such a price eliminates the concern of reference pricing, but also restricts a

manufacturer from realising the highest global profit levels. For instance, in Figure 2.3, the single price is too high to maximise profits in Spain and too low to maximise profits in Germany (the profit-maximising price corresponds to the highest point on the profit curves of Figure 2.3 for each country). Alternatively, wide price bands allow some differences in prices across countries. Such price differences might allow for some negative effects due to parallel trade or reference pricing, but they also provide additional latitude to reach the profit-maximising price in more markets. Figure 2.4 demonstrates that a 15% price band would allow a manufacturer in these circumstances to charge a different profit-maximising price specific to each of the five country markets.

While they provide a useful heuristic tool for the evaluation of pricing strategy, price bands face limitations. The degree of success attainable from a price band strategy depends on the willingness of a manufacturer to walk away from reimbursement discussions that do not comply with the global strategy. In a manufacturer's favour, a demonstrable price band strategy might provide support for requested prices in reimbursement discussions. Just as likely, however, a price band strategy increases the relevance of each negotiation, effectively increasing the bargaining power of regulators, many of whom already enjoy significant advantages as near-monopoly purchasers.

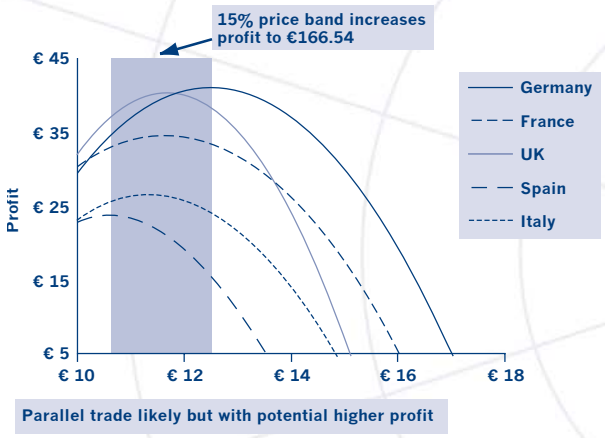
Figure 2.3 - Price bands: no variation



Source: CRA

Certainly, parallel trade is not only an issue under a price band strategy; after all, parallel trade will develop whenever there is a sufficient price differential among markets, whether the result of a price band strategy or not. In fact, it is the price differential between markets encouraging parallel trade that places an upper bound on the potential success of a price band strategy. Of course, reference pricing will magnify the consequences of any sub-optimal result of pricing negotiations by increasing the number of markets from which parallel trade exports could ensue.

Figure 2.4 - Price bands: increasing price discrimination



Source: CRA

Conclusion

Manufacturers that have grown accustomed to the pricing freedom afforded by certain markets such as the US are likely to encounter severe strategic challenges when attempting a global product launch. Price restrictions, including reference pricing, profit limits, price reductions and other measures combine to create a global market with price constraints growing increasingly numerous. Launching in any country may have immediate ramifications in other countries, and unfortunate pricing decisions can spread to several markets despite the best efforts of the manufacturer. In this increasingly complex global marketplace, manufacturers must use segmentation analysis, health outcomes research, parallel trade evaluation and demand analysis to craft a coherent global pricing strategy that anticipates regulatory entanglements. While difficult, the profits of an effective comprehensive global launch strategy more than justify a concerted strategic effort.

About the authors

Peter J. Rankin, PhD, is an Associate Principal in the Pharmaceuticals Practice (Washington, DC).
Tel: +1 202 662 3935; email: prankin@crai.com

Gregory K. Bell, PhD, MBA, is a Group Vice President and the Pharmaceuticals Practice Leader (Boston).
Tel: +1 617 425 3357; email: gbell@crai.com

Tim Wilsdon, MSc, is a Principal who directs pharmaceutical projects in Europe (London). Tel: +44 20 7664 3707; email: twilsdon@crai.co.uk.

This article originally appeared in *The Pharmaceutical Pricing Compendium—A Practical Guide to the Pricing and Reimbursement of Medicines*. Reprinted with the express permission of Urch Publishing who owns the copyright.

About Charles River Associates (www.crai.com)

Founded in 1965, Charles River Associates is an economics, finance, and business consulting firm that works with businesses, law firms, accounting firms, and governments to provide a wide range of services. CRA combines economic and financial analysis with expertise in litigation and regulatory support, business strategy and planning, market and demand forecasting, policy analysis, and engineering and technology management. In thousands of engagements, CRA has distinguished itself by its corporate philosophy of providing responsive, top-quality consulting; an interdisciplinary team approach; unsurpassed economic, financial, and other analytic skills; and pragmatic business insights.

Our business consulting practice provides services directly to companies seeking assistance with strategic issues that require sophisticated economic or financial analysis, and which typically require "mission-critical" decisions for the client, such as positioning and pricing a new product or developing new technological processes. We apply a highly analytical, quantitative approach, helping companies analyse and respond to market forces and competitive pressures that affect their businesses. Our engagements often result in client-specific decision support tools. Our consultants possess in-depth industry knowledge and are able to provide insightful, value-added advice by challenging conventional approaches and avoiding predetermined solutions for methodologies. CRA has always been a leader in developing and translating advanced analytic techniques into practical solutions for clients.

The global Pharmaceuticals practice at Charles River Associates provides consulting services to leading firms in the pharmaceutical, biotechnology, and medical device industries around the world. Our emphasis is new product launch strategy, product pricing and contracting, and strategic responses to new market entrants. We specialize in the economics of business strategy, and our recommendations are based on quantitative analyses using game theory, marketing science, finance, and econometrics.

Dr. Gregory K. Bell leads CRA's Pharmaceuticals practice. For further information on how CRA can assist your company, please contact Dr. Bell in the Boston office at (617) 425-3357 or by e-mail at gbell@crai.com. Mr. Tim Wilsdon directs pharmaceutical engagements from CRA's London office. Mr. Wilsdon can be reached at +44 20 7664 3707 or by e-mail at twilsdon@crai.co.uk.

Charles River Associates Incorporated

BOSTON
Corporate Headquarters

John Hancock Tower
200 Clarendon Street, T-33
Boston, MA 02116-5092

(617) 425-3000
fax (617) 425-3132

LONDON

1 Undershaft
London EC3A 8EE

+44-20-7664-3700
fax +44-20-7664-3998

www.crai.com