

# CRO Differentiation



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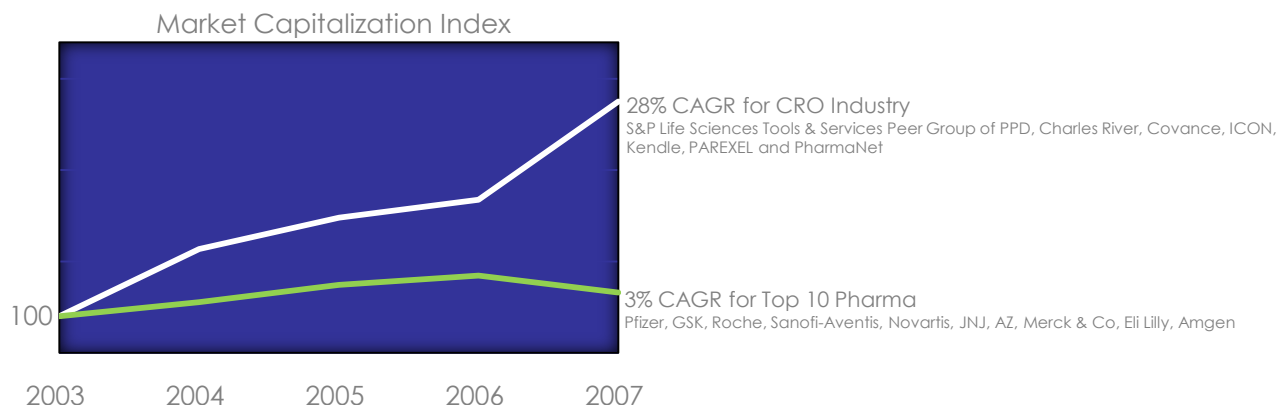
## Inside you will find:

- ☐ Cause & Effect of CRO Market Positioning
- ☐ The Increasing Risk Profile
- ☐ Pharma's Development Dilemma
- ☐ Lack of Industry Performance Information
- ☐ CRO: Challenges - Opportunity - Strategic Choices

The biopharmaceutical industry is becoming increasingly dependent on contract research organizations (CROs) for their clinical development. However, the selection of a service provider partner is still a “risky” proposition given the lack of clearly differentiated CRO service offerings.

# Executive Summary

Buying services from Contract Research Organizations (CROs) is not like buying a car. There is no JD Power, Kelley Blue Book or Consumer Reports that biopharmaceutical decision-makers can reference to get an independent analysis of CRO “best buys”. Yet, the decision to outsource, the decision to partner, the decision to place a potentially multi-billion dollar asset in the hands of strangers is becoming more the norm. In the pharmaceutical industry, the balance of power is shifting from internal pharmaceutical development organizations to outsourced service providers. The reason for this shift is well known: pharmaceutical companies, struggling to fill their depleting pipelines with enough revenue producing products to meet Wall Street expectations are taking dramatic steps to variablize and reduce their clinical development expense while attempting to quickly get more products into the market. Pharma is removing fixed assets/staff from its balance sheet and increasing its partnering with service providers. A look at the market capitalization of publically traded CROs compared to the top 10 pharmaceutical companies (in terms of R&D spending) over the past few years reveals evidence of this shift.



But what does this shift mean for the clinical development industry and its players? It means that more and more clinical development will be provided by companies who did not create the compound nor have a vested/economic interest in the compound’s commercial success. Given where pharmaceutical companies and CROs are in their respective industry lifecycles...

...Pharmaceutical companies must be sure they are making the right partnering decisions.  
...CROs must take this opportunity to differentiate themselves from each other.

Lack of CRO differentiation increases the cost of clinical development, slows the time to market entry and forces pharmaceutical companies to layer in management oversight .

## A Focus on CRO Differentiation

There are many environmental factors that have contributed to where we are today; some positive, some negative, some easily reversed and some that are woven into the fabric of the Pharma-CRO relationship. The simple truth is that pharmaceutical companies of all sizes need service providers more today than ever. They need their resources, their global reach and, dare we say it, they need their clinical development experience and expertise. This industry primer will focus on the lack of differentiation among CROs today and the impact that has on pharmaceutical companies and the CROs themselves.

### Pharma - Difficulty Choosing CROs with Confidence

#### Cause

- No differentiation among the mid-size and large CROs**
  - all of them say they are full-service, global in reach and have therapeutic expertise
- Too many attributes with no independent assessment**
  - therapeutic expertise, global capabilities, breadth of services (e.g. full-service), experienced staff, low staff turnover, quality data, the project manager, cost, value, patient recruitment and overall time to complete the study
- Too many CROs**
  - there are more than 100 choices and nearly half a dozen for large, global studies
- Cost is a main driver of choice**
  - at many pharmaceutical companies, the CRO decision is heavily influenced by outsourcing managers, who are incentivized to lower costs
- Insufficient time to make decisions**
  - most pharmaceutical companies give CROs 10 working days and limited information to craft a proposal

#### Effect

- Feeds ambiguity and uncertain decision-making
- Forces choice based on personality, not performance
- Lose market exclusivity time due to overly administrative CRO selection process
- Incentivizes "bait and switch" mentality  
Perpetuates change orders
- Don't get strategic thinking from CROs

### CROs - Differentiate Yourselves

#### Cause

- No differentiation among the mid-size and large CROs**
  - all of them say they are full-service, global in reach and have therapeutic expertise
- No strategic imperative**
  - given the recent strengthening of demand for CRO services, CROs have not had to fight hard to win business
- Long live the change order**
  - CROs know that should things go wrong on either side of the fence that a change order is just the ticket
- High switching costs**
  - once a sponsor company has selected a CRO and the study has been initiated, it is very difficult to change providers
- Insufficient time to state your case**
  - most pharmaceutical companies give CROs 10 working days and limited information to craft a proposal

#### Effect

- Price pressure, commoditization and opens the door to more competition
- Building unsustainable infrastructures
- Lack of trust, does not lay the groundwork for partnership, perpetuates per-study outsourcing
- Minimizes focus on customer satisfaction
- Boilerplate RFP responses  
Lack of innovative pricing options

Today, more than ever, CROs have an impact on the clinical development for a significant portion of the industry's pipeline. This increased responsibility comes with increased risks. How CROs and Pharma manage this risk will be a key to their individual success.

## Pharma & CROs: The Game is Changing

### Why now?

What makes it so important to understand what differentiates CROs from one another? The pharmaceutical and pharmaceutical service industries have both plugged along for decades and been very successful, thank you very much. It's important because today, pharmaceutical companies no longer have the time, cash or public relations credit to go it alone. Like it or not, CROs have become and will continue to grow in importance as organizations that bring life-saving and life-enhancing products to market.

### How did we get here?

Let's start by saying it's nobody's fault that CROs have not differentiated themselves. Pharmaceutical companies have spent the last 20 years treating CROs like vendors: driving costs down, telling them how to do their job (e.g. "use my SOPs"), telling them what sites to use, giving them only ten working days to do proposals, giving them limited information upon which to make decisions or recommendations, micro-managing them to the Nth degree – all this has made CROs gun-shy. CROs, for their part, have historically done little to defend themselves because it has not been worth the risk. They have had a pretty good thing going, so why rock the boat?

### Why change?

Because the stakes are going up. Way up. Pharma needs CROs, and not just for a \$300k slice of a phase II study, but for \$100M global Phase III studies and entire clinical development programs. CROs are no longer under the radar; they are billion dollar operations and Wall Street is taking notice. Neither pharmaceutical companies nor CROs can afford missteps these days. Both need to be educated, informed and armed with as much information as possible in order to act with confidence and maximize their organizational value. Risk management planning will be a key to future success.

Both CROs and Pharma need to take the time to understand that the game is changing.



## Pharma's Development Paradox

Moving from being an autocratic society to a democracy is not a road traveled easily. Both Pharma companies and CROs must recognize the new world in which they are operating and embrace it. For the pharmaceutical industry to thrive, both Pharma and CROs have to succeed.

## The Biopharmaceutical Clinical Development Paradox

For those of you who have worked in a clinical development or outsourcing department at a biopharmaceutical company, we have a request. Raise your hand if you have ever had the same project manager on two different outsourced clinical development studies. Our research shows that there are probably very few of you out there with your hand raised high in the air. The point we are making is that even though you may have used the same CRO for years, because they are on your preferred provider list, you have basically entrusted your company's most valuable assets to strangers. Think back to when you made the decision regarding which CRO to select. What did you base your decision on? If your biopharmaceutical company is like most, you gave several CROs a brief synopsis of the compound in development (note we said nothing about the actual protocol, that has yet to be finalized), some inclusion/exclusion criteria, gave them a list of sites to use and told them to come back in ten working days with a budget, feasibility analysis, a strategy for patient recruitment and a timeline. Next came the bid defense, where half a dozen people from the CRO got together in a hotel room the night before the defense and produced some slides that are then presented to your company. In the end, the CRO gets a call from the outsourcing department and the conversation goes something like: "We really want to work with your organization, but your prices are too high. If you can come down 5% we will award your company the study." 5%? No wonder CROs have not differentiated themselves. They haven't had to. But that is changing.

Today the biopharmaceutical industry is putting more of its eggs in the CRO basket and with that comes added risk. Pharma is recognizing this and doing something about it. They are asking for longer term, more strategic partnerships, similar to the recent Eli Lilly announcement with Covance, i3 and Quintiles. But these partnerships are for functional services. What about for the traditional per-study outsourcing model? Biopharmaceutical companies need to spend time and resources developing better strategies for the selection of clinical development partners. The good news is that the market forces that have been acting to strengthen the CRO industry have increased the number and caliber of potential partners. Just a few years ago, if you wanted to conduct a large, global Phase III study, you had very few choices (e.g. Quintiles, PAREXEL). Today the choices are more plentiful. We recommend Pharma force the CROs to make choices and decide where and how they want to excel. However, for this strategy to be successful, biopharmaceutical companies will need two things: information and time.

## Information

As we touched on in the Executive Summary, there is not a single, comprehensive source to objectively compare CROs: there is no Consumer Reports. Nowhere can you find CROs ranked in terms of value, speed or responsiveness.



You can find some research, but that is usually a simple summary of a dozen or so interviews with individuals at a handful of pharmaceutical companies. What pharmaceutical companies need are common, clearly defined metrics on which to judge CROs. While that might seem pie-in-the-sky because every study is different, what should be achievable is a peer-based scoring of how well CROs have met expectations and a willingness to use that CRO again. Because let's face it, CROs are different. Some of them excel at relationship management, some use technology better, some have a global reach that is unmatched and some are more cost efficient. Right now, pharmaceutical companies use the only information they have access to: their individual experiences. And that limited scope is insufficient given what is at stake. Imagine if you based your next car buying decision based solely on your experience with your last car. What if there is something better out there that you just didn't know about... wouldn't you want to know? Today, CROs are not making it easy on pharmaceutical companies to separate themselves from the pack, and that too needs to change.



Imagine your family is deciding on what type of new car to purchase and you finally decide that fuel efficiency is more important than cargo space, horsepower or all-wheel drive. You go to the car dealership to make your purchase only to find out that the auto manufacturers do not provide an estimate of miles per gallon for any of their cars. How would you make your decision?

## Time

It's in a pharmaceutical company's best interest to take two steps back and look at their clinical development strategy. Some companies have functionally outsourced one or more services (e.g. data management, clinical monitoring), some outsource along therapeutic lines, some are choosing to bring partners in to co-fund development efforts, some are using virtual development models, while others are sticking to the tried-and-true method of single study outsourcing. It is not a stretch to assume that each and every biopharmaceutical company has recently changed or contemplated changing their clinical development model. The fundamental question a biopharmaceutical company has to ask itself is: "What do I need from my clinical development partner?" While this question seems easy enough to answer, our guess is that your first answer went something like this: "We need a CRO that can get us the patients we need, on time, at a reasonable price, and provide quality data and analysis." If a biopharmaceutical company is to truly drive value from a CRO, the expectations have to be clearly stated and communicated in a manner that the CRO is left with no doubt about what is expected of them. And it takes time to develop this strategy. It takes time to get consensus from the relevant parties within a biopharmaceutical company (e.g. R&D; Outsourcing; Legal; Marketing/Commercial; Safety; Therapeutic Heads) when deciding what is more important: therapeutic expertise or global access to patients; global access to patients or overall price; overall price or speed to market; speed to market or extremely high quality data; high quality data or highly integrated data; and so on. While difficult, making those choices will help guide an organization in selecting the right CRO partner.

## Information and Time

Pharma companies have to do their part and CROs have to do theirs.

Pharma has to decide what is important to them, what they are willing to pay for, and what they are not willing to pay for. Then, clearly articulate those needs and expectations to their CRO partners. Pharma, call your CROs on the phone prior to an RFP and talk with them. Only so much can be learned or communicated through an RFI.

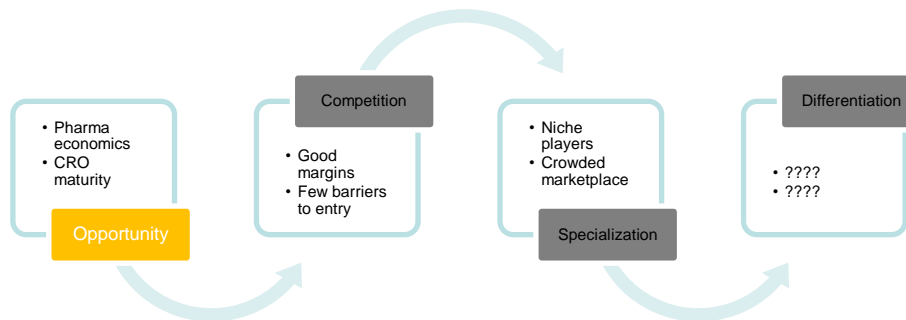
CROs have to help Pharma by clearly stating what their strengths are and clearly articulating how they are better than the competition. However, if you are a CRO, you are probably saying: "Why should I go through the time, effort and expense to prove to Pharma why I am better than the guy down the street? Pharma companies need my services, I have a record backlog, I'm not changing a thing." That's one way to play it, but why gamble that the good times will last? Perhaps the question is "How do you want to be positioned in times of increasing competition?"



Times are good for CROs. Really good. But the times are changing. The opportunity will still be there, but business models are changing and competitors are getting stronger. CROs are assuming more risk and must develop strategic positions to manage this risk while demonstrating they are different from the crowd.

## The Land of CRO Opportunity

CROs are entering a new era; a golden era. To ensure survival and maximize prosperity, CROs need new business and service delivery models. For the first two decades of the CRO industry, CROs were treated like – and acted as – “order takers”. Even two or three years ago, for a CRO to have a discussion with a biopharmaceutical company about establishing a genuine partnership would have been met with laughter. Today, biopharmaceutical companies are counting on, trusting and partnering with service providers for a wide range of services. The shift from vendor to partner is evidenced by the announcements from Eli Lilly (central labs, clinical monitoring, data management), AstraZeneca (IT, data management) and Wyeth (data management) and dozens of similar unnamed partnerships. Today, there are two major opportunities for CROs: (1) there are more clinical studies and programs being outsourced in the traditional fee-for-service project/study mode and (2) there exists an opportunity for alternative outsourcing models similar to the Wyeth-Accenture data management partnership and the Lilly-Covance/Quintiles/i3 partnerships. Either way you slice it, the size of the clinical development pie that CROs can address is expanding. An expanding market brings with it three things... opportunities, challenges and choices.



## Opportunities

There exists opportunity in the marketplace today because of two factors. The first factor is that the simple economics of today's pharmaceutical company is driving them to outsource more. The second factor is that over the past 20 years the CRO industry has matured and now represents a viable large-scale option for their customers. Opportunity fosters competition (e.g. large consulting companies like Accenture, IBM, and Cognizant have entered the CRO or pharmaceutical services space because they smell opportunity). Think about it, why would an already \$20 billion company like Accenture enter into a relatively small market? Three reasons: First, they believe their skill sets are a good fit for pharmaceutical outsourcing. Second, they believe they have a better way of doing clinical development. Third, they believe that one day the market will be large enough to make it worth the investment.

It is not hard to see why traditional CROs and new entrants currently view their prospects through rose colored glasses. Their customers, the pharmaceutical and biotech companies, still have large cash positions and need to get products to market fast in order to fill their dwindling pipeline and that is a good recipe for success. However, some of the low-hanging fruit has already been picked. Most of the large pharmaceutical companies, and a growing number of mid-size companies, have already outsourced some “non-core” functions like data management, lab services and statistical programming. If you are a CRO, pharmaceutical companies today need you and the window of opportunity is open, but how do you take advantage? If you are a pharmaceutical company, how do you ensure that you select a CRO that will enable you to succeed?

## Market Size and Growth

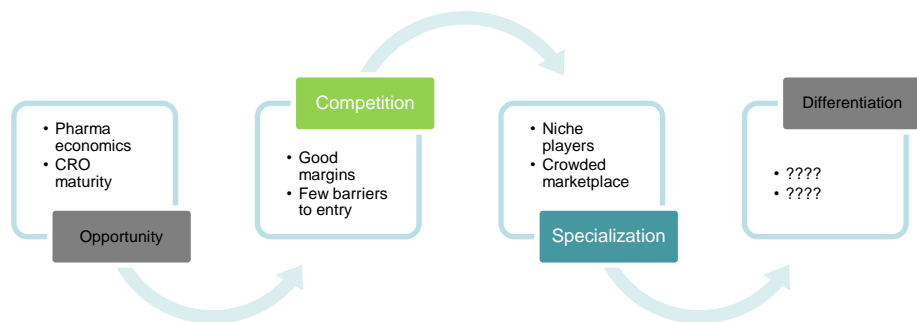
In December 2007, Goldman Sachs estimated that the Phase II-III outsourcing market will increase roughly 16% annually from 2006 to 2011 and estimates the total CRO market to be worth over \$29B annually in 2011.

## New Entrants

Accenture (market cap = \$20B)  
 Cognizant (market cap = \$5B)  
 IBM (market cap = \$105B)  
 Tata (market cap = \$24B)  
 For reference, PPD's market cap = \$3B

## Customer Uptake

Eli Lilly example – August 6<sup>th</sup>, 2008  
 “Over the past several years, Lilly has been transitioning to a new, more networked business model by increasing collaboration with organizations outside the company's walls to generate ideas and build capabilities, sell products, reduce costs, manage risk, and accelerate productivity.”



The CRO industry is maturing. The industry is at a stage where the strong competitors will start to distance themselves from the competition and the weak will be acquired or enter into a slow decline. As an industry, CROs need to fight commoditization and at the same time differentiate themselves from their competition.

## Challenges

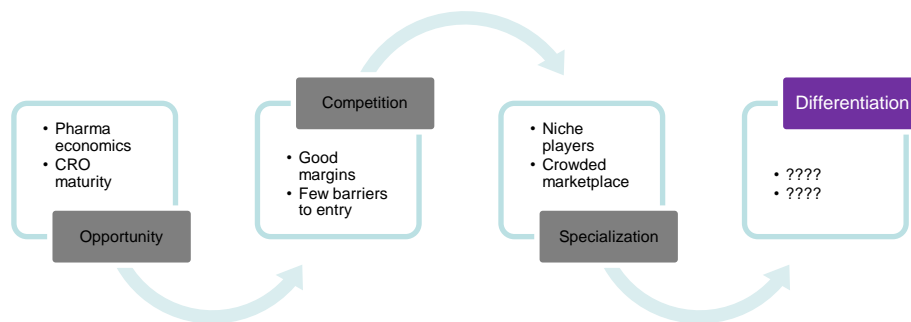
The business driver for CROs today should be: “How do I position myself to take full advantage of the opportunity placed at my feet and ensure my company is successful in the future?” There are two distinct challenges CROs face today, one is immediate and the second is strategic. The immediate challenge: Operational Delivery. According to a Moody’s Global Corporate Finance report from August 2008, the backlog of Quintiles, Covance, PAREXEL, ICON, Kendle, PRA, PharmaNet and LSR increased from \$4.3B in 2002 to \$12.7B in 2007 (an astounding CAGR of 24%). While that is generally good news for their financial situation, CROs are still only as good as their last study. CRO finances are not unlike a large bolder that has been rolled up and sits atop a hill, full of potential energy waiting to be turned into kinetic energy. Until the CRO’s “potential” revenue is converted into “kinetic” profit, it is still at risk and can be pulled at any time. A tangible example of how fragile CRO economics can be occurred on October 28<sup>th</sup>, 2008 when the Dow Jones Industrial Average was up 10.8%, but PAREXEL announced that their 2009 revenue would be below expectations and their stock dropped 38% on that day alone, resulting in a loss of \$287M in market capitalization. Therefore, finding enough patients, sites and staff to operationally deliver on their growing backlog is a major challenge. The strategic challenge: Service Differentiation. In a growing, crowded, and competitive market, companies have to differentiate themselves or face commoditization. CROs are close to painting themselves into the commodity corner. A read of the major CROs’ websites and marketing material tells the story. One would be hard-pressed to find any evidence of why they are better than the competition or even why *they think* they are better than the competition.

	Covance	ICON	Kendle	PAREXEL	PPD	Quintiles
Vision Statement	<i>“Our vision is to be recognized by clients as the undisputed leader in providing drug development services and a trusted partner whose hallmarks are great people, high quality data, and a proven track record of integrating and streamlining development processes.”</i>	<i>“To provide flexible, superior quality, global pharmaceutical development services, that enable clients to expedite development, reduce costs, and establish the benefits of treatments that enhance people’s lives.”</i>	<i>“To be the best-in-class provider of clinical development services to the biopharmaceutical industry through broad therapeutic and geographic expertise.”</i>	<i>“PAREXEL’s mission is to combine the strength of our expertise, experience and innovation to advance the worldwide success of the biopharmaceutical and medical device industries in preventing and curing disease.”</i>	<i>“Our vision is to be the global leader in our industry based on consistent quality and execution, exceptional customer-aligned service and constant innovation.”</i>	<i>“The Quintiles family of companies is a global leader in pharmaceutical services, improving healthcare worldwide by providing innovative, quality professional expertise, market intelligence and partnering solutions to meet the dynamic needs of the pharmaceutical, biotechnology and healthcare industries.”</i>
Overall Message	<i>Global Nonclinical Testing Central Laboratory Testing</i>	<i>Full-service Flexibility</i>	<i>Relationships People</i>	<i>Full-service Emphasis on First in Man and Proof of Concept studies</i>	<i>Full-service Global</i>	<i>Global Full-service Future-looking Partnering</i>
Editorial Notes	<i>There are no case studies, value statements or performance metrics.</i>	<i>Actually have an Oncology Solution, put it does not seem to be strategic as it is difficult to find on their website.</i>	<i>Messages are better than average, but still just focuses on being a global, full-service clinical provider.</i>	<i>Will do anything for anybody: “No matter what your product goal, we have the key to your success”</i>	<i>Does say they try to maximize clients R&amp;D investments, but no hard evidence.</i>	<i>Had the best customer-named case study. Actually provided market research data that showed they were better than the competition.</i>

According to several published reports (Goldman Sachs, Moody’s), the top 10 CROs account for roughly 50% of the total clinical development outsourcing market. This means there are 100s of other niche players that account for the other half of the development pie. This highly fragmented market gives credence to the argument that the large CROs have yet to differentiate their service offerings and are vulnerable to existing competitors and new market entrants. As a start, CROs need to clearly define and communicate their strategy to the market. For example, it seems challenging for a company to differentiate itself when, per the above, you operate with the mentality that “no matter what your product goal, we have the key to your success.” If you are a CRO, saying your company is “full-service” has “therapeutic expertise” and is “global” simply earns you a ticket to today’s game. It does not guarantee a win. Differentiation is not impossible and it can be based on a myriad of attributes: service delivery, technology, price, speed or relationship building. The key for CROs is to focus on certain attributes and the key for pharmaceutical companies is to have confidence that you can find a CRO that best meets your current need because, despite what the CRO marketing messages tell you, not all are created equal.



It is not easy to develop a strategy that is differentiated, actionable, leads to financial success and is sustainable. It is, however, a necessity given the state of the CRO industry. Without the current CROs differentiating their service offerings, Pharma will have a new crop of service providers to choose from in the near future.



## Choices

The choices CROs have to make all focus on strategy development. CROs have to take a stronger stance with biopharmaceutical companies and come to the table as equals. That is easier said than done, but both CROs and biopharmaceutical companies will benefit in the long run. It takes a fundamental change in personality to move from being an “order taker” to a “provider of value”, but a necessary one. Why make this change now? A combination of two factors: (1) CROs have been around for two decades and have more experience than many of their customers. They see a wide variety of studies from a variety of customers using a variety of SOPs and therefore, should be able to determine, based on their core competencies, which studies will meet the sponsor’s expectations and which will not and (2) many CROs have more business than they can effectively handle and are now in a position to make choices as to which studies to bid on and which to pass on. CROs must create a formal strategic statement that differentiates themselves from their competition and enables their organization to choose the studies and customers to which they want to apply their limited resources. Not every CRO is best suited for every study. CROs need to choose the studies they think they can effectively deliver and this will benefit the CRO and its biopharmaceutical partner. For CROs in today’s market, it is all about making smart choices. Without differentiation comes commoditization. The challenge for CROs in this market is to differentiate at a speed faster than commoditization is gaining on them. However, this strategic plan, this differentiation, takes information. CROs first have to know how they are viewed in the market and at the same time determine what they think their points of differentiation are, then see if there is a match. If there is, great, then focus-focus-focus their organization and marketing messages around those points. If there is not a match, then the CRO has to determine what to focus on: either the market’s perception of them or their operational strengths. Either way, CROs need that baseline information.

## Summary

Pharma’s increased need for partners to assist with their clinical development pipeline is putting more and more pressure on their outsourcing and R&D departments. They are looking for service providers that can help them get as many promising drugs to market in the shortest amount of time, at reasonable costs while adhering to increased safety concerns. In many cases this means expanding beyond their current service providers or asking their current service providers to take on responsibilities they have little or no experience with. The result: a higher risk profile for both Pharma and CROs. Pharma needs information; an objective evaluation of CRO performance that is independent of their own experiences. For only with this information can Pharma act with confidence when selecting a service provider to handle their clinical assets.

CROs are at a crossroads. Their recent success has brought them out from the shadows of the backstage squarely into the spotlight. They now have a higher industry and Wall Street profile and their business models need to catch up to the maturity of their clinical development skills. CROs need to know – reliably and independently – how they are perceived by their customers, for this perception is the bedrock of strategic planning. They need to know if they are perceived as low cost, known for data quality or rated the highest in therapeutic expertise. The implications are too great to be ignored. For example, if a CRO is perceived by the market to be low cost and high value, then that CRO is giving away margin.

In the end, CROs need an independent evaluation of their performance and Pharma needs this information to confidently select their development partners.