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// METHODOLOGY

In the first quarter of 2020, Mergermarket surveyed 100 senior-level US-based executives at life sciences companies on their most recent M&A experience in the sector. Job titles of those surveyed included CEO, CFO and Head of M&A, and 70% of respondents recently acquired or were acquired by a US company, while 30% acquired or were acquired by a non-US company. In the survey, 37% of respondents identified that they had transacted, in their most recent deal, with a pharmaceuticals company, 32% with a medical devices or diagnostics company, and 31% with a biotech company. The survey included a combination of qualitative and quantitative questions and all interviews were conducted over the telephone by appointment. Results were analyzed and collated by Mergermarket. All responses are anonymized and presented in the aggregate.

// FOREWORD

We live in extraordinary times. Markets are increasingly volatile as countries battle the COVID-19 pandemic. It is a health crisis of unprecedented proportions with as yet incalculable human and economic costs.

The COVID-19 emergency is a reminder of the vital role the life sciences industry plays in our lives. Businesses in this field develop drugs that improve the quality of and save lives. They also create devices that sustain life and provide physicians with new diagnostic insights. This innovation depends on the dedication of skilled people who devote years to pursuing therapies and technology that benefit us all.

The searches for a COVID-19 vaccine and a COVID-19 treatment are also reminders of how complex it is and how much time it takes to develop medicines of any sort. There are no shortcuts in the life sciences industry. The investment required to develop any new therapy is enormous, both in time and in capital.

M&A plays an important role in enabling the life sciences ecosystem. It is one of the main routes by which promising treatments are acquired, nurtured and brought to market. And it is one of the routes by which life sciences companies refresh their portfolios so they can remain relevant to investors.

Much has changed in the world as a result of COVID-19, but our survey shows that some things have not changed in the world of life sciences M&A. One thing that has not changed is one of the primary motivations for mergers and acquisitions in the life sciences industry—patent expiration. History shows that this has remained a deal driver through good times and bad. This survey confirms that patent expiration and factors that are likely proxies for it (such as portfolio diversification and maintaining or increasing market share) are key deal drivers.

Although this survey gathered information regarding

reasons why life sciences companies acquire other businesses, the focus of this survey is post-deal integration. Josh Fox, a Member at Mintz, notes: "Our primary goal in organizing and conducting this survey was to provide new information to both buyers and sellers in the life sciences industry. We have seen a lot of information published in the past regarding the terms of M&A deals and statistics related to those deals. However, we wanted to gather and share information regarding what happens after those deals get done. How can we measure the success of mergers and acquisitions that are completed, from both the perspective of the buyer and the seller? Do executives of the seller remain with the buyer after the closing? How frequently do disputes arise in the future? We wanted to be able to answer these and other key questions related to post-closing events."

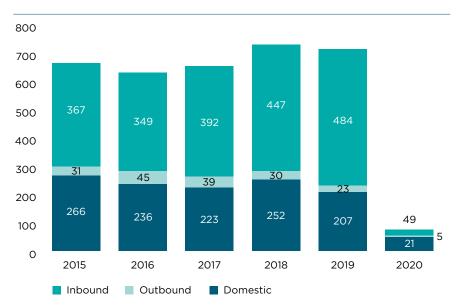
Integration is uniquely challenging in life sciences businesses: executives must advance products through clinical trials from a scientific perspective while simultaneously addressing regulatory concerns and charting a course for the combined enterprise after the acquisition. Faced with a task this large, it would be unsurprising to find out that some areas associated with post-deal integration are overshadowed by these topics. Executives understandably devote much of their attention to the product and might not focus as much on the culture of the merged organization. Areas such as employee and executive retention might also be lower on the list of priorities. Our survey confirmed that cultural aspects of M&A transactions, including employee and executive retention, are not prioritized as highly as scientific and non-cultural operational goals.

However, there are risks in neglecting the cultural aspects of integration, particularly in a sector that depends on its human capital. Our survey shows that executives are increasingly aware of the need to better take cultural factors into account and to adapt their integration plans accordingly.

US PHARMACEUTICALS, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH M&A BY THE NUMBERS

By examining the recent dealmaking activity of US pharma, medical device/diagnostics and biotech companies—including domestic (where a US company purchases or merges with another US company), outbound (a US company acquiring or merging with one in a foreign country) and inbound (a foreign company acquiring or merging with a US firm) deals—we can shine some light on the future of the sector.

PHARMA, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH INBOUND, OUTBOUND AND DOMESTIC VALUE 2015-TO DATE



10 LARGEST US PHARMA, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH DEALS 2020 TO DATE THROUGH 7 APRIL

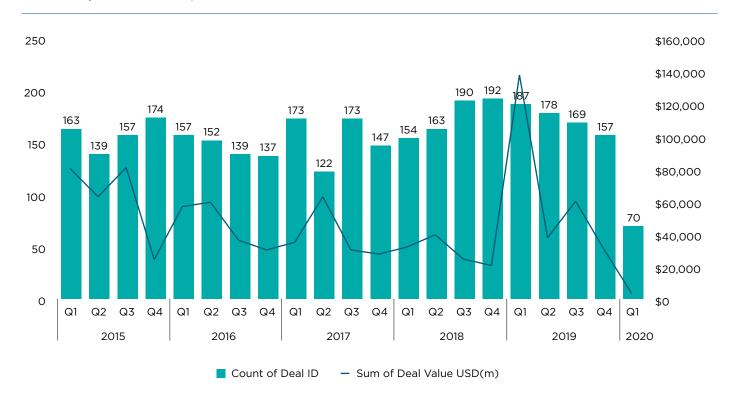
Announced	Target Company	Target	Bidder Company	Bidder	Seller	Seller	Deal
Date	ranger company	Dominant	Blader company	Dominant	Company	Dominant	Value USD(m)
01/10/2020	Dermira, Inc.	USA	Eli Lilly and Company	USA	Bay City Capital LLC; New Enterprise Associates	USA	1,304
01/13/2020	RTI Surgical Holdings, Inc. (OEM, Sports and Reconstructive Surgery Implants divisions)	USA	Montagu Private Equity LLP	United Kingdom	RTI Surgical Holdings, Inc.	USA	490
02/26/2020	PvP Biologics, Inc.	USA	Takeda Pharmaceutical Company Limited	Japan	0	0	330
01/22/2020	Memphis Meats, Inc.	USA	SoftBank Group Corp.; Cargill, Incorporated; Temasek Holdings Pte. Ltd.; Tyson Foods, Inc.; Mr. Richard Branson (Private Investor); Bill Gates (Private Investor); Threshold Ventures; Norwest Venture Partners; Finistere Ventures, LLC; Fifty Years; Future Ventures; CPT Capital	Japan	0	0	161
02/10/2020	Iora Health, LLC	USA	Temasek Holdings Pte. Ltd.; Polaris Partners; Cox Enterprises Inc; Khosla Ventures; Foundation Medical Partners; F-Prime Capital Partners; Premjilnvest; .406 Ventures, LLC; Devonshire Investors	India	0	0	126
01/10/2020	Aligos Therapeutics, Inc.	USA	Wellington Management Company LLP; Novo A/S; Versant Venture Management, LLC; Vivo Capital, LLC; Roche Venture Fund; Boxer Capital, LLC; Cormorant Asset Management, LLC; Pivotal bioVenture Partners LLC; Janus Henderson Investors; Logos Capital	USA	0	0	125
01/14/2020	Covetrus Inc (scil animal care business)	USA	Heska Corporation	USA	Covetrus Inc	USA	125
02/04/2020	Outset Medical, Inc.	USA	T. Rowe Price Associates, Inc.; Fidelity Management & Research Company; Partner Fund Management, L.P.; Perceptive Advisors, LLC; D1 Capital Partners	USA	0	0	125
01/27/2020	NovaBone Products, LLC	USA	Halma Plc	United Kingdom	0	0	122
02/12/2020	ALX Oncology	USA	HBM BioVentures AG; Vivo Capital, LLC; Foresite Capital Management, LLC; venBio LLC; BVF Partners LP; Lightstone Ventures; Cormorant Asset Management, LLC; Janus Henderson Investors; Logos Global Management LLC	USA	0	0	105

10 LARGEST US PHARMA, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH DEALS 2019

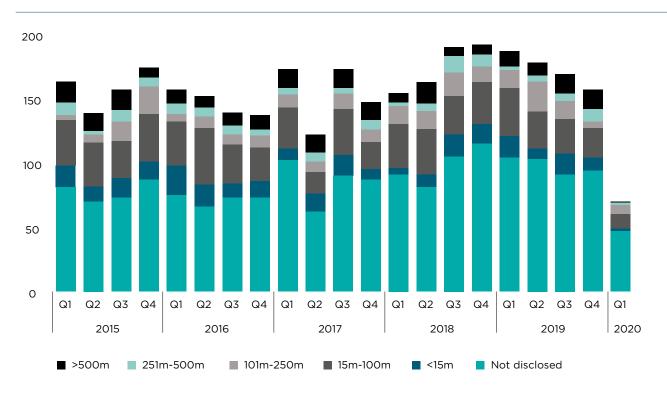
Announced Date	Target Company	Target Dominant Country	Bidder Company	Bidder Dominant Country	Seller Company	Seller Dominant Country	Deal Value USD(m)
03/13/2019	Celgene Corporation	USA	Bristol-Myers Squibb Company	USA	0	0	87,761
07/29/2019	Pfizer Inc. (Upjohn Business)	USA	Mylan N.V.	USA	Pfizer Inc.	USA	24,623
02/25/2019	GE Healthcare Life Sciences (Biopharma business)	USA	Danaher Corporation	USA	GE Healthcare Life Sciences	USA	21,400
08/26/2019	Celgene Corporation (Otezla global rights)	USA	Amgen, Inc.	USA	Celgene Corporation	USA	13,400
06/17/2019	Array BioPharma, Inc.	USA	Pfizer Inc.	USA	0	0	10,746
11/24/2019	The Medicines Company	USA	Novartis AG	Switzerland	0	0	7319
01/07/2019	Loxo Oncology, Inc.	USA	Eli Lilly and Company	USA	0	0	7,091
02/05/2019	Acelity	USA	3M Company	USA	Apax Partners LLP; Canada Pension Plan Investment Board; Public Sector Pension Investment Board	United Kingdom	6,725
02/25/2019	Spark Therapeutics, Inc.	USA	Roche Holding AG	Switzerland	0	0	4,250
06/17/2019	National Veterinary Associates, Inc.	USA	JAB Holdings B.V.	Luxembourg	Ares Management LLC; OMERS Private Equity Inc	Canada	3,703



US PHARMA, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH 2015-2020 YTD



US PHARMA, MEDICAL DEVICE/DIAGNOSTICS AND BIOTECH M&A 2015-2020 YTD BY DEAL SIZE



DEAL DRIVERS

Patent expiration stands out as the principal motivation for life sciences M&A

Life sciences companies are under constant pressure to keep their pipelines and portfolios fresh. M&A plays a critical role in achieving these objectives. Acquiring IP in the form of new products and capabilities allows businesses to counteract the decrease in revenue that would otherwise occur when existing proprietary products go off patent.

With many life sciences businesses working against the ticking clock of 20-year drug patents (often much less by the time the product reaches the marketplace), it is unsurprising that executives in our survey highlighted the expiration of patents as their principal motivation for pursuing M&A. When asked about the rationale for their most recent deal on a 1-5 scale, the top mean answer is 4.30 for patent expirations (Chart 1).

The second most-cited deal driver—diversifying/improving product portfolios (mean score 4.25)—may, in certain cases, serve as a proxy for patent expiration: a key dimension of portfolio improvement is the acquisition of assets with a longer life expectancy. Similarly, respondents point to offsetting losses in market share (mean score

4.24) as a key element in their dealmaking rationale. Again, this could indicate that looming patent cliffs are a key reason for completing an M&A transaction.

The survey shows that accessing new geographies is not a core rationale for deals: with a mean score of 3.05, it is the lowest-ranked factor. However, among those respondents completing a transaction with a non-US company, opening up new markets was, unsurprisingly, the top rationale identified (4.93).

Other Transformational Drivers

The factors described above suggest that M&A motives often can be viewed as being defensive in nature. Yet the survey also underlines respondents' willingness to embrace innovation and risk, which can be seen as more offensive in nature. Adding to or improving the R&D pipeline, which includes the preclinical stage of development and drug candidates that are in the early stages of clinical development, scores 4.24.

Similarly, respondents point to digital health solutions as a deal driver, although this realizes a slightly lower score than adding to or improving the R&D pipeline (a mean of 4.16 for digital health solutions). This could suggest that buyers are not prioritizing investments in data and data-driven technologies (such as analytics and artificial intelligence), which can be valuable to delivering additional value, at least not through mergers and acquisitions. With the COVID-19 pandemic forcing several countries to enforce social distancing measures, digital health solutions are in some places replacing non-urgent medical consultations. This trend could continue post-crisis.

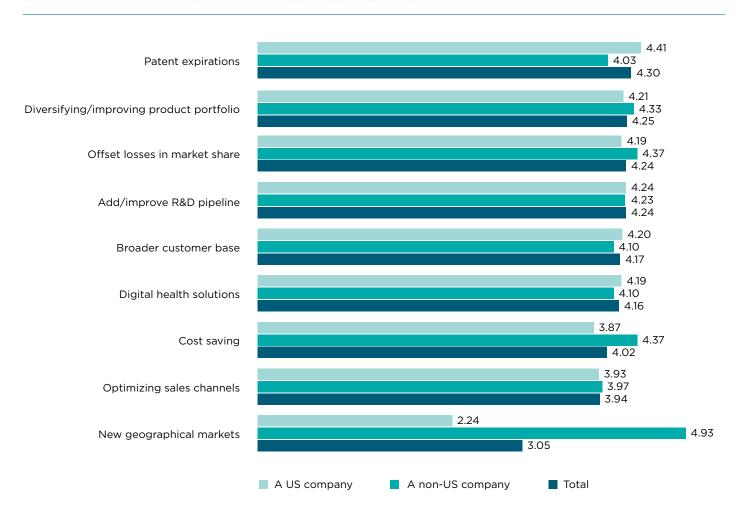
The idea that dealmakers might not be focusing as much on digital products or services is also supported indirectly by respondents' views on optimizing sales channels, given that sales channels are now typically digital channels. With a mean score of 3.94, this factor comes second from bottom by rank, ahead only of accessing new geographies.



We are seeing consolidations and PE investment in novel treatments, delivery systems and digital health platforms. We also observe that innovative drugs and drugs competing with those coming off patent are critical pieces of the drug supply chain.

Susan Berson, Member at Mintz and Chair of its Regulatory Practice Groups.

CHART 1. WHAT WAS THE RATIONALE BEHIND YOUR MOST RECENT M&A DEAL?



TARGETS AND PRICING

Targets

The US-based life sciences buyers in our survey primarily acquired entire businesses rather than parts of them. Nearly three-quarters (72%) say they acquired an entire entity, while 28% acquired a portion of a larger business (Chart 2). Delving into more detail on these figures, buyers that acquired a US company were considerably more likely to acquire an entire entity (81%) than to acquire a portion of a larger business (19%). For buyers that acquired a non-US company, however, the statistics are markedly different: only 56% acquired an entire entity, compared to 44% acquiring a portion of a larger business.

Pricing

In a sector where strategic buyers dominate and where competition for assets is fierce, it is unsurprising that sellers achieve higher prices than they aim for. What is surprising is the extent to which this is the case: our survey of sellers shows that a high proportion of sellers obtained an acquisition price well in excess of their goal. When asked about the price paid, 28% say the price was 10-20% above target, with 16% reporting that that it was up to 10% more. Just over a quarter (26%) achieved their target price. Only 24% say the price was less than the target (Chart 3).

CHART 2. [FOR BUYERS] WAS THE TARGET/SELLER A...?

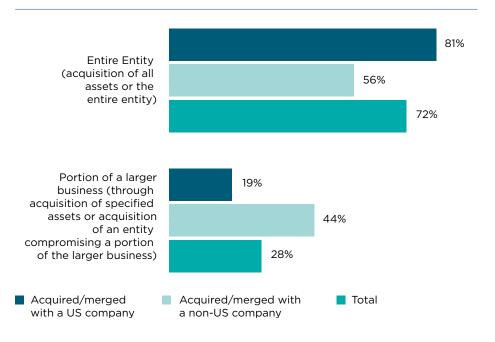
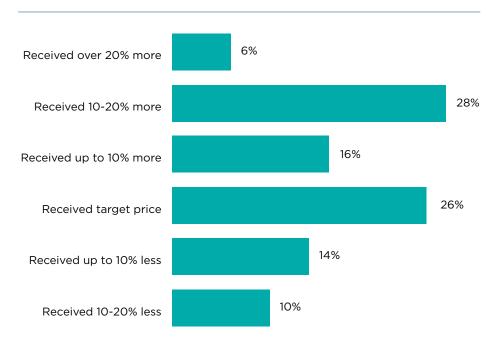


CHART 3. [FOR SELLERS] DID THE TARGET/SELLER SECURE THE BUYOUT (ACQUISITION PRICE) THAT THE TARGET/SELLER WAS AIMING FOR?



IPOs and Fallen Angels

Our survey indicates that life sciences companies are open minded when it comes to the possibility of buying another company or selling to another company: respondents say they considered alternative strategic transactions when evaluating a possible M&A deal. Nearly one-third of executives (32%) say they considered an IPO when deciding whether to buy or sell (Chart 4). Unsurprisingly, most of the respondents that indicated that they had considered an IPO were sellers.

Meanwhile, 22% say they considered a "reverse merger", by which a private company goes public by acquiring a controlling interest in a public company. This can be an attractive option for private companies that wish to raise capital, as it can eliminate or reduce some of the complexities

associated with a conventional underwritten public offering. Here again, the majority of those respondents who indicated that they considered a reverse merger were sellers.

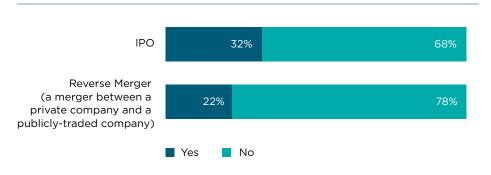
In recent years, "fallen angel" reverse mergers have gained a degree of prominence. In this scenario, a fallen angel (a publicly-listed company that has failed to live up to its promise) merges with an up-and-coming private company—typically one with successful, or at least promising, clinical programs. Both stand to benefit: the private company gains access to capital and becomes a public company, while the stockholders of the fallen angel get a new opportunity to realize value.



Ten or 15 years ago there was more of a 'stigma' associated with a life sciences company going public by way of a reverse merger. That has shifted—we have been working with several very strong private companies to explore this alternative to the traditional IPO route. Structural considerations include how to monetize the legacy company's clinical assets, and whether and how to complete a concurrent financing to ensure adequate financial resources at the outset of life as a public company.

Megan Gates, Member at Mintz and Co-Chair of its Securities & Capital Markets Practice

CHART 4. WHEN CONSIDERING WHETHER TO BUY/SELL, DID YOU ALSO CONSIDER EITHER OF THE FOLLOWING?



POST-MERGER INTEGRATION

Successful integration hinges on balancing tactical and strategic objectives

Post-merger integration in the life sciences industry is challenging in ways that often are not seen in other industries. In addition to dealing with a raft of regulatory requirements that are applicable only to companies in this industry, executives must address the complexity of consolidating the newly merged enterprise, while ensuring work on new drugs or devices is not disrupted. This must all be achieved without losing sight of long-term objectives.

INTEGRATION ISSUES

Post-Deal Operational Structure

Maximizing the value of a newly merged enterprise is as much art as science. Every acquisition or merger is different and the success of integration hinges on multifaceted clinical, operational and cultural factors.

In terms of how the post-deal business is operated, the approach reported by most executives in our survey is to operate the seller as a standalone entity (44%). In nearly one-third (31%) of cases, integration is partial—an example of this is where the acquirer takes over development and commercialization

of a new product without further integrating the target entity into the acquirer. Interestingly, only a quarter of cases involve complete integration into the buyer's business (Chart 5).

Preparing the Ground: Planning for Post-Deal Integration

Most respondents say they map out their integration plans at an early stage. However, our survey shows that a significant minority are leaving this important matter until relatively late in the transaction lifecycle.

When asked at what point their integration strategy was developed, 40% of respondents (buyers and sellers) say it was developed after the execution of a letter of intent, but before signing the definitive agreement (Chart 6). 24% say it was done after signing the definitive agreement but prior to closing the transaction. 10% say the integration strategy was developed after closing. Only 26% developed their integration strategy before the execution of a letter of intent.

Looking more closely at the data, respondents clearly are mindful of the additional risks that come with acquiring or merging with a non-US company. In these deals, 40% report

that the integration strategy was developed prior to a letter of intent being executed. Meanwhile, 30% say the strategy was put together after the execution of a letter of intent, but before signing the definitive agreement.

Executives are much less likely to prioritize an early-stage integration strategy when the transaction involves a company closer to home. The survey shows that just 20% of respondents developed an integration strategy before a letter of intent was executed in M&A deals with US-based companies.

CHART 5. WHAT WAS THE INTEGRATION MODEL FOR THE TARGET/SELLER?

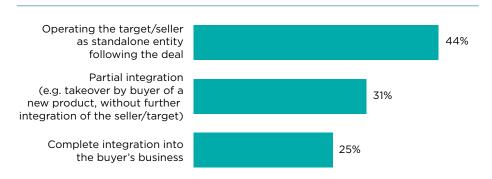
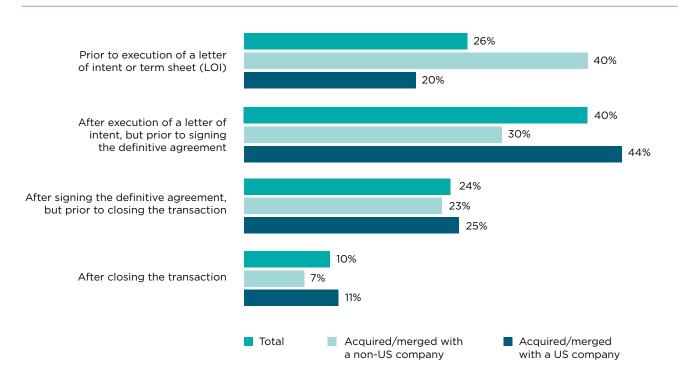


CHART 6. AT WHAT STAGE DURING THE DEAL DID YOU DEVELOP A MERGER/ACQUISITION INTEGRATION STRATEGY?



A Matter of Time: Post-Closing Integration Timeframes and Resources

The survey reveals major variations in the length of time it takes to achieve post-closing integration. For most respondents (56%), it took six months or less, while 29% report that the process took between seven and 12 months (Chart 7). For others, the process proved to be even longer: 15% say integration took 13-24 months.

Effective time management is key, says the Head of M&A at a seller who describes the company's integration as somewhat successful: "Rather than completely focusing on cost effectiveness, time constraints should be given equal importance as these will strain other resources eventually."

Most respondents recognize the need to resource the integration process properly. "We've learned that it helps to have dedicated teams for each stage of the integration process," says another Head of M&A.

The survey shows that 81% of respondents established a dedicated integration team to keep the process on track (Chart 8). More than half of those respondents with a dedicated team (54%) report that it consisted of between six and 15 people (Chart 9). 26% state that their integration team was between 16 and 25.

CHART 7. HOW LONG DID THE POST-CLOSING INTEGRATION TAKE?

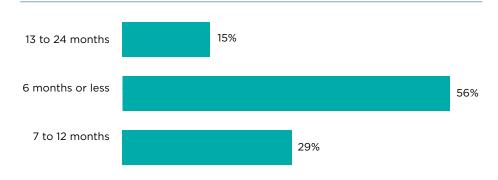


CHART 8. DID YOU HAVE A DEDICATED INTEGRATION TEAM?

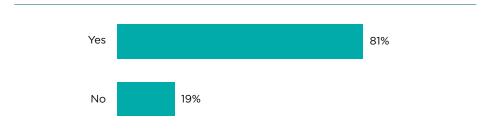
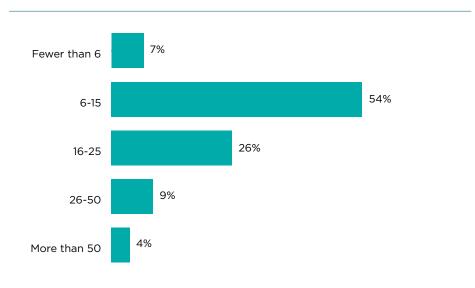


CHART 9. IF YES, HOW MANY PEOPLE WERE IN THE INTEGRATION TEAM?



EVALUATING SUCCESS AND OVERCOMING CHALLENGES

A slight majority of respondents (54%) say the integration process applied in their most recent deal has to date been either somewhat or very successful (Chart 10). On the other hand, 31% say the integration has been unsuccessful.

The pressure can be intense for executives wrestling with the complexity of integration following an acquisition. In addition to ensuring that product development is not impeded, they must also develop and protect the culture of the combined enterprise. Overlying this is the need to ensure strategic goals are being addressed in critical areas such as growth, talent retention and customer satisfaction.

The criteria against which the success of an integration process is judged that respondents selected suggest that both tactical and strategic measures are in play. However, some important strategic areas may not be getting as much attention as one might expect.

Looking at the data, respondents say the most important metric to use in evaluating the success of an acquisition or merger in the life sciences industry is overcoming regulatory hurdles. This scores a mean answer of 4.38 on a 1-5 scale (Chart 11). The ability to advance products through late-stage clinical trials, regulatory approval or sales is seen as

CHART 10. HOW SUCCESSFUL DO YOU FEEL THE INTEGRATION WAS OR HAS BEEN TO DATE?

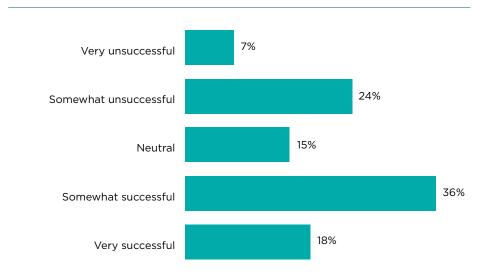


CHART 11. WHAT MEASUREMENTS DID YOU OR WILL YOU USE TO DETERMINE INTEGRATION SUCCESS? (PLEASE RATE ON A SCALE OF 1 TO 5, WHERE 5 = VERY IMPORTANT, AND 1 = NOT AT ALL IMPORTANT) (MEAN SHOWN)



the second most important metric (4.24). An increase in market share is the third most important (4.15).

However, two metrics stand out as being of less interest to respondents, despite their strategic importance. Employee and key talent retention—the lifeblood of sustainable integration—ranks fourth with a score of 4.08. Customer satisfaction and retention comes last, achieving a score of just 3.84.

"It is essential that employee retention be considered as an important part of the strategic process of integration," says one CFO. "Most companies do consider it, but their priorities lie with maximization of profits and lowering overall operational costs. This is where most cultural issues develop and build up to become real concerns for achieving productivity."

Making a Success of Integration

Survey respondents were then asked what factors they believe are most important in achieving the goals identified in the previous section (Chart 11). Executive leadership support is the top mean answer (4.28), followed closely by having a dedicated integration team (4.27) and having a detailed integration plan (4.23) (Chart 12).

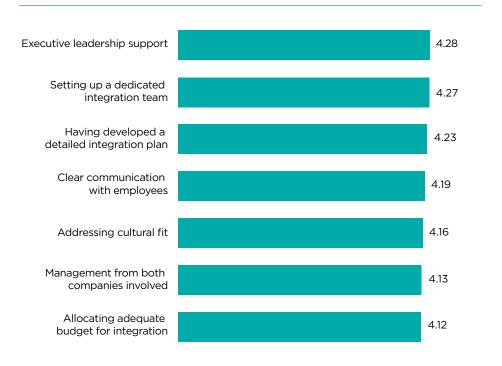
A CFO whose company acquired a pharmaceuticals business says: "Coordination and planning are important. Careful analysis and research will point out areas that are most effective and that can be capitalized for maximizing revenue after integration. Had we thought of this earlier, the integration would have been handled differently."

Respondents deem factors linked to people and culture to be less important. But neglecting these can be risky. The CFO of a company whose integration is described as somewhat unsuccessful says: "Management is not always aware of what goes on after the integration has been completed—they are more concerned with the revenue and getting the project phases completed. This causes problems: ignoring cultural



Two metrics stand out as being of less interest to respondents: employee and key talent retention, and customer satisfaction.

CHART 12. IN YOUR EXPERIENCE, WHICH FACTORS ARE MOST CRITICAL TO ACHIEVE A SUCCESSFUL INTEGRATION? (PLEASE RATE ON A SCALE OF 1 TO 5, WHERE 5 = VERY IMPORTANT, AND 1 = NOT AT ALL IMPORTANT) (MEAN SHOWN)



concerns gives rise to clashes between employees in the same team, affecting functionality."

Clear communication with employees, which includes communication with people in the buyer's organization and those within the seller's organization, ranks fourth with a score of 4.19. Addressing cultural fit is another area considered less important (4.16). Involving the management of both companies comes second from last with 4.13.

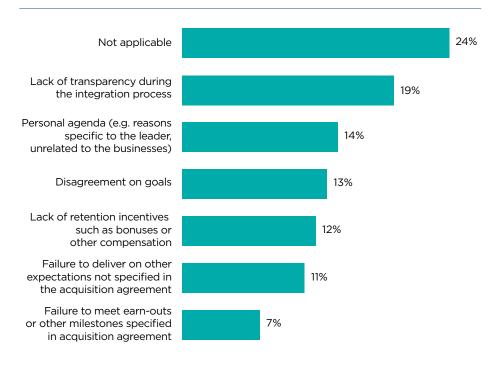
This suggests that while respondents are focused on overcoming technical hurdles associated with the integration, by seeking support from executive leadership, developing an integration plan and establishing a team to implement that plan, each of which can be viewed as short-term in nature, teams may be deprioritizing the long-term health of the merged enterprise, to the extent that they are not as focused on employees and culture.

Lost Leaders

More than three-quarters (76%) of respondents say that a member of the leadership of the seller left following the closure of the deal (Chart 13). The explanations respondents give for executive departure fall into three categories.

The first and biggest driver is dissatisfaction on the part of the person who chose to leave. Factors at work here include lack of transparency during integration,

CHART 13. IF ANY MEMBER OF THE LEADERSHIP OF THE SELLER/TARGET LEFT FOLLOWING THE CLOSING OF THE DEAL, WHAT WAS THE MAIN REASON? (PLEASE SELECT ONE)



disagreement on goals and lack of retention incentives. Among those who say that a member of the seller's leadership left, factors linked to dissatisfaction on the part of the departing executive account for 44% of the loss.

The second driver is performance. The factors in play here include failure to deliver on expectations and failure to meet earn-outs or other milestones specified in the acquisition agreement. Together, these performance factors account for 18% of the loss among respondents who reported that a member of the seller's leadership had left.

Personal factors are the third and final driver. These are factors specific to the leader and are unrelated to the business, and account for 14% of executive attrition among respondents reporting the loss of a leader.

While there are clearly cases where a leader's departure is desirable—particularly where poor performance is involved—it is also true that there are many cases where executive departure is unintended and undesirable. Therefore, buyers may look to focus on this survey question and answers when developing their integration plans.

Integration Obstacles

Unsurprisingly, challenges associated with product development and commercialization top the list of obstacles to successful integrations. Respondents say the most challenging aspect of integration in their most recent deal was advancing a product to a later stage of clinical development, receiving regulatory approval or initiating sales. This is identified by 27% as the number-one challenge (Chart 14).

Several other challenges are noted, however. Cultural differences are the primary obstacle for 18% of respondents. "Merging with a company in another region and with differences in social and cultural perceptions is not an easy task," warns the CFO of a company whose integration is described as very unsuccessful.

Additional challenges highlighted by respondents include speed of transition (the top concern for 17%) and intellectual property rights (also 17%). Achieving cost reductions is mentioned by only 12% of respondents as their main concern, which could reflect the fact that a primary goal of many life sciences deals is to acquire IP rather than to realize cost synergies. This correlates closely with the principal rationales for dealmaking identified by respondents earlier in our survey, where patent expiration and diversifying/improving product portfolios achieved the highest mean scores.

Interestingly, only 3% of respondents cite talent retention as the most challenging aspect of integration. This ties in closely with respondents' earlier answers about the criteria against which they judge the success of an integration process and the factors that contribute to that success. In those cases, too, less focus was placed on issues around people, and more on product advancement.

Another area of risk in life sciences deals is that products are often abandoned, or their development is terminated after the closing of the transaction (Chart 15). More than half (51%) of respondents say that a product was abandoned or

terminated after a deal closed. The main reason (and by far the most common) cited was regulatory constraints, reported by 44% of respondents who noted that they experienced product abandonment/termination. By contrast, only 20% of respondents say that financial feasibility was the main reason for abandoning or terminating a product, followed by clinical trial failure (19%) and strategic decisions or related issues (12%).

Our survey also demonstrated that disputes are fairly common post-closing, as more than one-third of respondents (35%) say the parties ended up in litigation or a formal dispute resolution process related to

CHART 14. WHAT WAS THE MOST CHALLENGING ASPECT OF INTEGRATION OF YOUR MOST RECENT M&A DEAL? (PLEASE SELECT ONE)

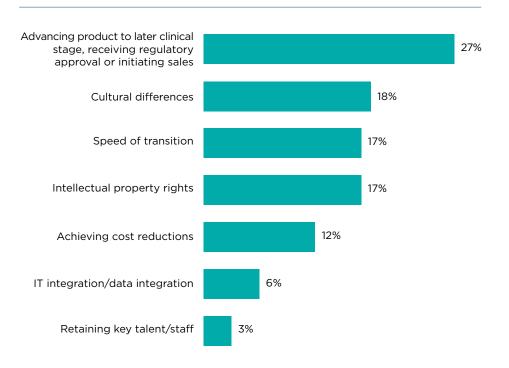


CHART 15. ONCE THE DEAL WAS CLOSED, IF ANY PRODUCT(S) WAS/WERE ABANDONED/TERMINATED, WHAT WERE THE MAIN REASONS (SELECT ALL THAT APPLY)?

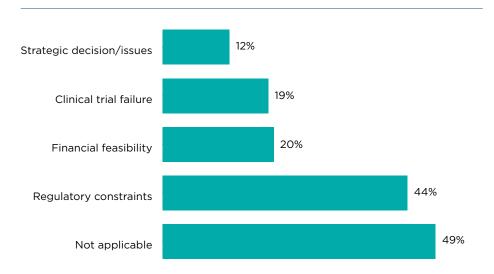


CHART 16. DID THE PARTIES END UP IN LITIGATION OR A FORMAL DISPUTE RESOLUTION PROCESS RELATED TO THE DEAL AFTER ITS CLOSING?

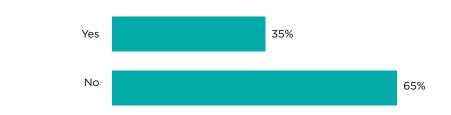
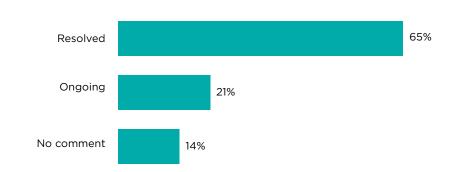


CHART 17. IF YES, PLEASE COMMENT ON THE STATUS OF ANY SUCH LITIGATION OR DISPUTE:



the transaction after the deal had closed (Chart 16). Among the reasons cited are disagreements about valuation and disputes about the disclosure of material information.

"There was a short-term dispute after the closing of the deal in relation to the valuation that was discussed," says a Head of M&A. "Furthermore, it was claimed that important information regarding financials was not revealed at the time of discussions. The dispute is completely resolved now."

Another cause of deal-related disputes is alleged regulatory violations. Respondents describe this source of dispute as especially onerous given that regulatory proceedings can be so protracted. "After the transaction was completed, we were held liable for EPA violations in relation to the target," says a CFO, who adds that resolution is going to "take some more time".

A potential violation of environmental regulations is mentioned by another CFO, who says that problems with the authorities have prevented the company from getting the desired results from their acquisition. "Many a time we've hit a dead end, resulting in financial losses and loss of time as well."

Lessons Learned

Respondents were asked what they had learned from the integration experience, provoking many different responses. However, a few common themes emerged, including integration planning and communications.

The area where respondents see the greatest need for improvement is integration planning. "A betterdefined strategy for integration would have helped us in suppressing the effects of challenges: cultural, employee and regulatory," says a Head of M&A. "The purpose of the acquisition could have been better defined, so that involved parties could derive benefits from their perspective."

Another executive emphasizes the importance of early preparation: "It is important to think of planning for integration way before the deal has been initiated. With growing uncertainties in the market and pressure from competition, it is always better to stay a step ahead of the rest."

Clearly establishing metrics to determine success offer an effective way to keep integration plans on track, says a Head of M&A:
"Measuring success at each stage of the integration is essential now that we've experienced the inconsistencies of non-adherence to planning."

Problems can arise when management does not focus on the

"

Several respondents highlight the need for clear communications at every stage—and between all stakeholders... Building a collaborative relationship can help participants overcome any disagreements that arise.

merged entity. Simply leaving the acquired entity to move its business forward post-closing under the buyer's general ownership is not the right approach, says a Chief Strategy Officer: "From the time of integration, there should be set goals and timelines for each project. Well-defined strategies and expectations, clearly mapped out, provide direction and cultural differences lessen over a period of time. Concentration on achieving targets is better than focusing on differences."

Several buyers underline the need to be clear about how the seller operates. "Understanding the way the target company functions is important," a CFO says. "Their strategy for sale and intentions for the future of the company are naturally discussed, but discussion about supply chain complications in case of an integration is also a necessity."

Several respondents highlight the need for clear communications at every stage—and between all stakeholders. "Proper levels of communication must be maintained to avoid misunderstandings among seller and buyer teams," a CEO comments. Another executive highlights the importance of constant communication in maintaining trust and retaining employees: "Acknowledging even minor concerns will shape the integration in a better manner."

Building a collaborative relationship can help participants overcome any disagreements that arise in an acquisition: "An important lesson we have learned is that developing a mutual understanding through the integration is important," says a CFO, who went on to say: "Unless particular effort is taken, conflicts cannot be avoided. Personnel within the organization need to be aware of the procedures underway and of the eventual outcome of the decision to sell."

CULTURE

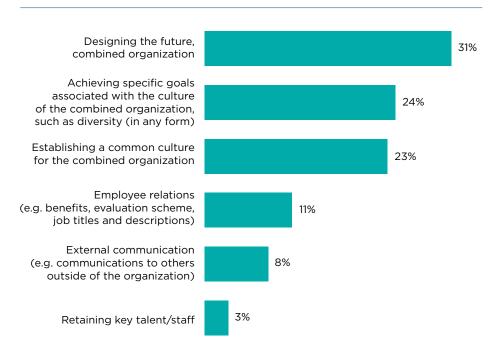
Asked about the most challenging cultural aspect of integration, a plurality of respondents (31%) cite designing the future, combined organization (Chart 18). Achieving specific goals associated with the culture of the new organization is the second most popular answer, cited by 24%. These topics ("design" and "achievement of goals"), which can be viewed as being more general in nature and focused on planning at a high level, receive more attention in our survey than specific culture issues such as employee relations (11%) and retaining key staff (3%).

As we have seen in this survey, cultural integration is often not given as much attention as other aspects of integration. However, there is a strong case for evaluating the cultural compatibility of a buyer and a seller before embarking on an acquisition or merger. Indeed, there is an increasing trend toward cultural due diligence—a process that takes into account traditionally neglected factors, such as the values and behavioral norms of both buyer and seller.

Merger companies' principle approaches to doing business—if not necessarily the products and services they provide—can prove unalike in ways that few people expect, especially if they hail from dissimilar parts of the world.

A large pharmaceuticals company, for instance, might be driven more

CHART 18. WHAT WAS THE MOST CHALLENGING CULTURAL ASPECT OF THE INTEGRATION? (PLEASE SELECT ONE)



by marketing and revenue considerations, or in the case of listed firms be mindful of shareholder sentiment, while a smaller, target company might be more interested in R&D considerations.

"Since an organization's culture is an integral part of its operations, it is difficult for the teams to cope with changes after integration—especially when you are looking at regional differences as well. It is best to identify targets that are more suited to your way of conducting business," says a board member who describes the integration of a recent acquisition as somewhat successful.

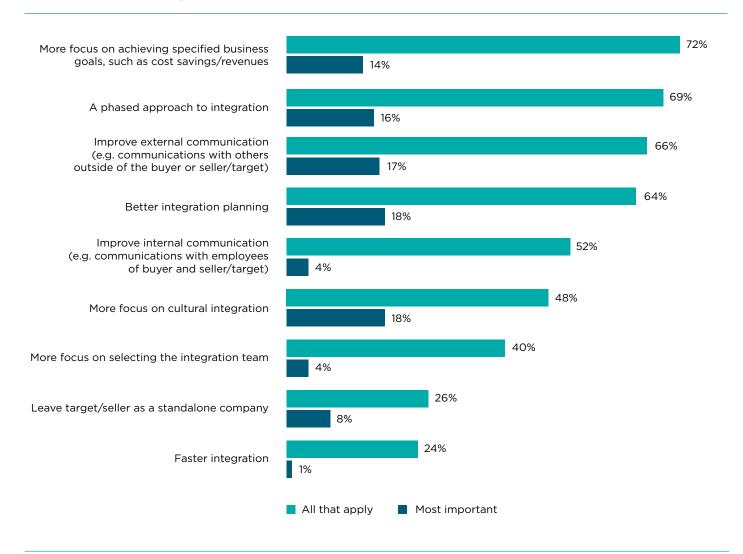
Room for Improvement: How to Enhance Integrations

Most respondents (72%) say that having more focus on achieving specified business goals, such as cost savings and revenues, would help improve integrations (Chart 19). 69% say a phased approach to integration would improve future processes. 66% highlight external communications (those outside of the buyer and seller) as an area to

focus on in order to achieve better results in future integrations. 64% list better integration planning in general as the area to focus on.

Asked to highlight the most important factor to improve future integrations, respondents point to better integration planning (18%), more focus on cultural integration (also 18%) and improving external communications (17%).

CHART 19. WHICH FACTORS WOULD IMPROVE FUTURE INTEGRATIONS (PLEASE SELECT ALL THAT APPLY AND THE MOST IMPORTANT)?



// CONCLUSION

The world is confronting unprecedented uncertainty as it faces the COVID-19 pandemic and the global economic impact it is having. Against this background, business valuations may be changing in response to supply-side and demand-side shocks.

Business models and operational approaches are also being re-evaluated in the context of the crisis. We can see a key result being that life sciences companies will be more likely to focus on digital solutions in order to more effectively reach customers, employees, suppliers and partners. Life sciences businesses must be ready for what comes next.

Deal drivers—patent expiration is the primary transaction driver for most respondents. This is unlikely to change. However, life sciences executives may, in the future, see opportunities to consummate deals to improve their digital solutions as the COVID-19 pandemic causes consumers and practitioners to shift more into the digital arena: for example, social distancing has forced many patients and healthcare providers to adopt telemedicine platforms.

Integration planning—poor planning is the cause of many of the post-closing difficulties encountered by respondents. Survey responses show that planning often starts later than it could and, while most businesses have a clear integration strategy for product advancement, deal participants are less clear about how they will make the combined organization operate as one business. Indeed, key facets of integration receive less attention than one would expect. Among these are employee retention (including retaining executive talent) and customer retention. To remedy this, businesses would be well advised to expand their strategic focus, crafting plans to address aspects of the integration unrelated to product development and commercialization, and back up that

expanded strategy with clear goals, timelines and metrics to evaluate whether those goals have been achieved.

Cultural due diligence—cultural factors are often not considered until late in the integration process and in some cases significantly deprioritized. Yet overlooking cultural differences—such as values, purpose and behavioral norms—can be harmful, particularly because of the importance of human capital to life sciences companies. By focusing on cultural factors at the due diligence stage of a transaction, deal participants can increase the chances of success for the post-closing integration, including in retaining talent and realizing synergies that might otherwise be more difficult to achieve.

Bill Whelan, Member at Mintz and Co-Chair of its Life Sciences Practice, in reviewing these conclusions, noted: "Our survey has resulted in a lot of interesting quantitative and qualitative data being gathered related to what happens after buyers and sellers close an M&A transaction in the life sciences industry. Our team of over 150 practitioners has experienced virtually every M&A scenario and we know how to get deals done even in the most challenging economic times. We hope this report is a helpful tool to management teams, boards and investors as they consider their current M&A strategy."

// ABOUT MINTZ

Mintz is a leading life sciences law firm with more than 150 professionals representing therapeutics, vaccine, medical device and systems, research tools and diagnostics companies, as well as investment banks, venture capital firms and other investors. Our work for these clients encompasses transactional, health care regulatory, intellectual property, litigation, employment, real estate and other matters. We are embedded in the global life sciences ecosystem and provide industry leaders with practical solutions to business-critical challenges, helping them achieve their strategic and business goals.

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 public offerings, joint ventures, licensing and collaborations, mergers and acquisitions,
 divestitures, distribution arrangements, royalty monetization transactions
 and private financings
- Advise on the complete spectrum of FDA regulations, from clinical trials through product launch and beyond, including product approvals, labeling, and supply and distribution agreements
- Prosecute patents to issuance (nearly 40 patent team members have biology or chemistry PhDs), navigate trademarks through the USPTO and health regulatory bodies, and defend intellectual property rights in trial courts and at the USPTO
- Successful track record of helping life sciences clients avoid and when necessary resolve — litigation with collaboration and licensing partners or third parties that threatens research, development and commercialization rights in products and product candidates

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