Young & Partners and Pharmaceutical Executive Magazine

Executive Summit: Emerging Strategic and Financial Issues in the Pharmaceutical Industry

November 16, 2010
Yale Club in New York City
12:00 Noon to 5:00 P.M.

Co-Sponsored by
Pharmaceutical Executive Magazine and Young & Partners

Agenda

12:00 P.M. **Luncheon and Speakers**

The Future of Biopharma: Where Business Meets Policy
William Looney, Editor-in-Chief, *Pharmaceutical Executive*

The Current and Future State of the Pharmaceutical Industry
Peter Young, President, *Young & Partners*

1:15 P.M. **The Pharmaceutical Market: Trends and Forecasts**
Doug Long, Vice President, *IMS Health Inc*.

2:15 P.M. **Pharma Venture Investing: Lessons and Observations**
Barbara Dalton, Vice President Venture Capital, *Pfizer Inc.*

2:45 P.M. **Pharma M&A: Driving Factors in the Market**
Peter Young, President, *Young & Partners*

3:15 P.M. **Biotech Deal Making – M&A, Licensing and Partnering Trends**
Randolph Guggenheimer III, Managing Director, *Young & Partners* (Speaker and Moderator)
Stephen Simes, President and CEO, *BioSante Pharmaceuticals*
Adam Golden, Partner, *Kayee Scholer LLP*
Dr. Gregory Wiederrecht, Vice President & Head, External Scientific Affairs, Worldwide Licensing, *Merck*

4:30 P.M. **Speaker Roundtable**
Moderator: Peter Young, President, *Young & Partners*
Participants: Executive Summit Speakers

5:00 P.M. **Concluding Comments**

The Future of Biopharma: Where Business Meets Policy

WILLIAM LOONEY
EDITOR-IN-CHIEF, PHARMACEUTICAL EXECUTIVE MAGAZINE

The concept of "where business meets policy", simply means anything that affects your license to operate. As a highly regulated industry, the pharmaceutical space is continuously under operational duress. Given this characteristic, and the recent changes to the pharmaceutical industry, particularly in the United States, it is becoming increasingly more important that we, as industry participants, operate in a manner that allows for the most freedom of "license to operate" moving forward. Issues which are important to the future of the operational viability of pharmaceutical industry include a) reputation and trust, b) c-suite dynamics, and c) trade association politics.

With regard to reputation and trust, the rise of globalization and the sophistication of new information technology platforms have forced the industry to operate with a higher sense of accountability and in a manner that is both more responsible and more inclusive.

And with respect to "C-Suite Dynamics," the community and customer base that the industry had traditionally served is changing. Now more so than ever, the industry must effectively track and monitor the needs and culture of its direct/indirect community in addition to deciding whether it should as a whole address customers from a commodity producer (where price is a key value point) or full service solution provider standpoint. CEOs will continue to have an important role in this matter via the power of "focused and targeted messaging."

Lastly, with regards to trade association politics, we are observing "a shrinking water hole" phenomenon where increased competition between companies has blurred the distinction between national and global issues affecting the industry. This discord has prevented the industry from moving forward in addressing macro issues relating to global license to operate. In order for the industry to maintain or improve its license to operate, companies will need to look at more collaborative, as opposed to competitive, approaches in dealing with one another.

In addition to the issues I have already covered, key elements that the industry needs to focus on in order to turn things around positively are 1) replenishing the drug pipeline 2) maintaining value through the product life cycle 3) securing market access 4) achieving global operational efficiencies, and 5) improving industry's societal reputation

The Current and Future State of the Pharmaceutical Industry

PETER YOUNG
PRESIDENT, YOUNG & PARTNERS LLC

The pharmaceutical industry for many decades had a stable, profitable business model. Pharma companies were able to invent drugs in at a reasonable cost and in a reasonable time frame, they enjoyed long periods of patent protection, and product pricing was fairly steady. Under that business model, you did not have to hit homeruns necessarily to be successful. For some time now that business model has broken down, with rising development costs in spite of new technologies, tighter restrictions on advertising, shorter effective patent lives, pricing threats from various countries – all disruptions that changed the nature of the industry.

Both big and small pharmaceutical companies are evolving strategies to survive in this new business environment, but no clear picture has emerged with regard to who the winners and losers will be. Strategies range from diversification, large scale mergers, exiting the pharma industry, geographic expansion, regional consolidation, pursuit of biologics, etc. Virtually all pharma companies are pursuing biotech acquisitions and partnering/alliances. Potentially weak strategies include the narrow pursuit of the old Big Pharma business model, some of the mega mergers, and the creation of larger, but still weak regional players through regional mergers. Potential winning strategies include heavy use of biotech methods, alliances with and acquisitions of biotech companies, restructuring of research to be more nimble and collaborative, willingness to stop research projects earlier, and focusing on singles and doubles rather than just home runs.

On the positive front the high proportion of the elderly in developed countries has favored growth in healthcare and pharmaceutical demand. Asia's economic strength and population size is yet another source for pharmaceutical demand. Medicare Part D has had a positive impact on drug sales in the U.S. The drug industry appears to be a net winner under the 2010 U.S. Health Care Reform bill that was passed. By coming to an early agreement with the Obama Administration where drug makers agreed to contribute billions of cost savings in government health programs, the industry got higher prescription volumes and avoided many very onerous provisions that were being proposed.

On the negative front the business model of the large ethical drug companies has been under attack. Competitive pressures from generic drugs, lackluster R&D productivity and pricing pressures are all culprits. A wide variety of threats to ethical drug pricing are raging globally. Drug safety issues plagued many already established drugs such as the Cox-2 inhibitors and are still remembered by investors even though many have been resolved. The negative publicity has resulted in lengthy and more costly FDA Phase II and III trials, as well as costly Phase IV/REMS programs. The FDA is taking a more cautious approach. Specifically, the FDA is paying closer attention to safety data in clinical trials, shying away from approval of same-in-class products with marginal incremental benefits, and is heavily monitoring

post-marketing monitoring (Phase IV). The R&D costs required to launch new drugs are now extremely high (about $1.1 billion per drug) and continue to escalate, even as the industry adopts new techniques to increase the productivity of R&D. It is now taking an average of 12 years to bring a new drug to market. There have been a number of high profile development failures at advanced stages as well as product withdrawals. Drug development productivity has been on a downward spiral. Patents continue to expire in large numbers. Drugs representing more than $64 billion in sales face patent expiration from 2010 to 2012. New competitors are emerging from India and China as well as both countries aspire to evolve from

The stock market will continue to penalize the ethical pharma industry as long as the structural changes are working their way through the industry and solutions are being implemented. Generics will continue to do well as long as they achieve growth, but with high volatility. Pharma industry multiples are below market multiples now and will continue to suffer until the industry outlook improves and regulatory uncertainty is resolved.

Young & Partners expects M&A activity will continue to be high as pharma companies merge or acquire to achieve scale and to enhance their product pipelines. The need to fill the shrinking drug pipeline will continue to fuel mergers and acquisitions, in-licensing arrangements, and the formation of partnerships and joint ventures.

Debt issuance surged in 2009 as the market has opened up for investment grade debt and companies refinanced old debt and financed large acquisitions. The major refinancings are now over and new debt issuance will depend on the level of M&A that will have to be financed. Non-investment grade debt will be issued more sporadically. Equity issuance will continue to be modest as the IPO and general equity issuance markets continue to be difficult.

The Pharmaceutical Market: Trends and Forecasts

DOUG LONG
VICE PRESIDENT, IMS HEALTH INC.

Although 2010 has been a challenging year for the pharmaceutical industry as a whole, the industry has continued to be resilient. The market growth rate to date is tracking nicely to our current 2010 forecast range of 3-4% value increase. In comparison, in 2009 the pharmaceutical market grew by 5.2%, a significant improvement over the 2008 growth rate of 1.8% and higher than the expected growth for 2010. The growth during 2009 was attributable to a surge in demand for cold, cough and flu products & services. 2010 saw little in the way of demand for cold, cough and flu products & services which explains the decrease in market growth from 2009 to 2010. Key factors supporting growth in 2010 include protected brand price growth, increased generic volume and decreased price deflation, continued approvals of innovative therapies, and a few notable demographic factors. Countering these factors are protected brands volume decline, patent expiries, slow uptake of recently launched products, and greater substitution of generics. Generics now hold more than 74% of scripts. Additionally, there has been fewer hospital visits, suggesting that patients have either deferred treatment altogether or have become more price sensitive. Costs continue to rise and health care providers are very much interested in generic and therapeutic substitution. Brand volume growth has declined in 2010 as manufacturers have cut back on advertising. Key products are expected to be exposed to generic competition, particularly in late 2011. Pipeline products and recent launches which deliver only incremental benefits failed to gain wide usage or to offset losses from patent expiries. Generic price pressures soften prior to large expiries.

Outlook

For the US, 2011 sales are expected to grow by 3-5%. Sales growth measures, however, remain at historically low levels. The U.S. is forecasted to grow below 5% in 2011 as patent expiries and lack of innovation hamper growth. On the other hand, the global pharma market is expected to exceed $880 billion in 2011 with growth of 5-7%. The majority of this global growth will be driven by the rise of the Pharmerging markets. To date, the US market is roughly $320-$330 billion. “Pharmerging markets” currently maintain a size of $170-180 billion and are projected to grow at 15-17%. Japan expects 5-7% growth at a size of 100 billion and Europe 1-3% at $135-145 billion. The rest of the world is estimated to grow by 3-5% from its current size of $145-155 billion. As the weak performing brands expire, brand volume is projected to improve but remain below historic levels. Brand price is projected to remain a high contributor to market growth. Expected major 2010-11 NCE launches include 11 products with blockbuster potential. Currently there are 6119 active products in the pipeline. If you breakdown the mix by stage, 44.5% are pre clinical products, 20.5% are phase I products, 24.8% are phase II products, 7.3% are phase III products, and pre-registered products comprise the remaining 3%.

Issues and Implications

Loss of exclusivity of products with $29+ billion in sales will have some significant impact on remaining branded products. As mentioned earlier, new product launches now face tougher prospects for immediate and rapid uptake compared to in the past. As such companies will need to model realistic assessments for new proposed products and what impact these products will have on existing therapies. Dependence on price increases for growth of branded products will require a new approach. Additionally, the uncertain economic and employment recovery will continue to have its toll on industry growth. Pharmaceutical companies must budget for realistic growth expectations in addition to making further adjustments to their cost base in order to remain viable. Lastly, changes to our US healthcare system, which was broadly centered on issues of access, affordability and quality, will most certainly have a negative impact in the short term, but a more positive or uncertain impact in the long term.

Pharma Venture Investing: Lessons and Observations

BARBARA J. DALTON, Ph.D.
VICE PRESIDENT VENTURE CAPITAL, PFIZER INC.

The venture capital group at Pfizer invests for return in areas that will have a current or future interest to Pfizer. Investments are therefore assessed on both a financial and a strategic basis and are largely weighted towards technologies that can assist with Pfizer's existing commercial pipeline. The majority of Pfizer's investments are U.S. based, stemming largely from the vast sums of money spent annually on R&D by US companies. Pfizer's VC group makes direct investments ~ 90% of the time and indirect investments ~10% of the time. Similar to the military's use of the "force multiplier", Pfizer's VC group makes indirect investments into companies via fund of funds as yet another way "to provide eyes and ears around the world where we don't have feet on the street."

VC funds are structured in a multitude of ways (e.g. upfront, evergreen). Pfizer's VC group is funded on an annual basis with about $50 million of capital, which is the equivalent to a $250 million private fund.

Typically, we invest via a syndicate as it is preferable to share the risks/rewards with other parties, in addition to developing the potential for future business relationships. Although we are closely involved with our portfolio company's business development operations, a majority if not all of our investments are in the form of minority equity stakes.

Johnson & Johnson was the first pharmaceutical company to house an internal VC arm. Other Pharma VC groups include: SR One – SB / GSK, Novartis Ventures , Lilly Ventures , Medimmune Ventures, Roche Venture Fund , Biogen Idec New Ventures, Amgen Ventures, Boehringer Ingelheim Ventures, Abbott Ventures, Shire Ventures, Astellas Venture Mgmt, Takada Ventures, Merck Capital, Bayer Innovation, Aventis – PharmaVent, and Novo Ventures.

VC investments in Pharma biotech remain strong, as does investment in clean tech, while investments in software and hard disks have started to see declines. Of the investments in Pharma biotech, biotech companies comprise the majority of funds received followed by Biotech Medical Devices and lastly by Biotech Healthcare Services.

In sum, VC is a people business. Characteristics needed to be successful in this business include: patience, trust, technological insight and an acute sense of managerial skill. Great technology in the wrong hands will fail as will bad technology in great hands. A successful venture capitalist should have a strong view of management, and its capabilities, a thorough sense of valuation and a complete understanding of the company's products and customers before making an investment decision. Collaboration not competition

should drive future investments in the Bio Pharmaceutical space. The more Big Pharma collaborates with one another, the greater opportunities we will have in R&D.

Pharma M&A: Driving Factors in the Market

PETER YOUNG
PRESIDENT, YOUNG & PARTNERS LLC

In the first three quarters of 2010, pharma M&A volume was 30 deals over $25 million in value completed worth $27.7 billion versus 29 deals worth $126.5 billion in 2009. On an annualized basis, the number of deals completed increased significantly, driven by European activity, while the dollar volume declined dramatically. More deals are getting done, but the average size has plunged with the lack of any mega deals. Although there have been no mega deals, there were six deals over $1 billion in equity value, the largest of which was Abbott Laboratories' acquisition of Solvay Pharmaceutical. As of September 30, 2010, the value of the deals announced but not closed was $3.6 billion (11 deals), a sign of an active market, but where the deals are moderate.

Young & Partners expects M&A activity will continue to be high as pharma companies merge or acquire to achieve scale and to enhance their product pipelines. However, there have been no announced mega mergers thus far this year, so the dollar volume will fall in 2010. We will also continue to see companies selling products to others as they restructure their product portfolios. The need to fill the shrinking drug pipeline will continue to fuel mergers and acquisitions, in-licensing arrangements, and the formation of partnerships and joint ventures.

Biotech Deal Making

RANDY GUGGENHEIMER
MANAGING DIRECTOR, YOUNG & PARTNERS LLC

In the first three quarters of 2010, biotech M&A volume continued the moderate pace of the last two years with 16 deals worth $4.5 billion in equity value completed. This compares to 20 deals worth $6.1 billion completed in 2009 and 19 deals worth $4.8 billion of deals completed in 2008.

Acquisitions of biotech companies by big pharma and big biotech companies are continuing as these companies look to build their pipelines to grow and to offset patent expirations. A number of these deals take the form of "structured acquisitions" involving earn outs or other contingent payments.

As of September 30, only 1 M&A deal worth $29 million had been announced but not closed. This is an indication of a relatively low level of M&A activity. M&A volume was chronically low for years until 1999. Since then, activity has generally been high and volatile, fueled by pharma acquisitions of biotech companies and biotech consolidation. The number of transactions was low for years until 2002. The pace has been steady at around 20 per year recently. U.S. biotech M&A activity has been very strong for more than six years, continuing through 2009 and the third quarter of 2010.

European activity in 2006 and 2007 surged as European biotech companies became acquisition targets. Deal volume has fallen back considerably since then. Earn out deals or "structured acquisitions" involving contingent payments have become common in biotechnology M&A deals. The payouts on these deals look more like partnering/licensing transactions with milestones for approval or the achievement of specific sales levels. These structures allow acquirers to mitigate their risk and allow sellers to potentially realize significantly higher valuations upon success. Historically, venture capitalists have been reluctant to sell in earn out deals because of IRR concerns. In the current biotech financing environment, they have become more flexible. Earn out deals have grown to be a larger share of biotechnology M&A activity in the past two years.

Although the number of licensing deals has fallen somewhat over the last couple of years, the average value of deals has risen. This reflects intense competition among large pharma and large biotech for products addressing the most attractive targets and indications. The number of new alliances, according to Windhover data, fell from 154 in 2007 to 142 in 2008 and 131 in 2009. The average upfront payment for products in Phase 1 through Filed rose from $39mm in 2007 to $50mm in 2008 to $55mm in 2009. The average total deal value for all licensing transactions ("BioWorld dollars") rose from $266mm in 2007 to $274mm in 2008 to $331mm in 2009. The number of licensing deals has declined modestly in the past few years, but the total value of licensing deals has increased.

The development capabilities of biotech companies are positive overall. Although there will be successes and failures by individual companies, biotech companies are demonstrating their ability to develop new drugs at a faster pace than the large pharma companies. The primary biotech M&A and licensing theme will continue to be pharma and big biotech acquisitions of biotech companies and licensing of products for pipeline enhancement and to offset patent expirations.

In the current difficult financing market environment, pharma companies have the upper hand overall, but the most promising biotech companies and products are attracting high interest and high prices. In many cases, pharma companies are mitigating risk through structured acquisitions and licensing transactions, forcing biotech investors to wait for significant upsides.

Biotech Deal Making – M&A, Licensing and Partnering Trends

STEPHEN SIMES
PRESIDENT AND CEO, BIOSANTE PHARMACEUTICALS

BioSante is a specialty pharmaceutical company focused on female health and oncology. Our main product is LibiGel, which treats female sexual dysfunction, it currently is in Phase III development and we plan on submitting a NDA to the FDA in 2011 for potential approval in 2012.

Late last year we acquired Cell Genesys, a biotechnology company focused on cancer therapeutics, which brought our clinical development pipeline to 15 phase II products.

From 2002 to 2008 $80 billion worth of patents have expired. And it is estimated that from 2009-2012 an additional $74 billion of patents will expire. These trends will result in peak generic competition as six of the ten largest blockbuster products will now face generic competition. With more than $150 billion in expiring patents over this past decade 2002-2012, the need for M&A/licensing has never been higher.

The pharmaceutical industry is witnessing historically high FDA safety hurdles, rising product development costs, thinning near term pipelines, and unpredictable product reimbursements. M&A/licensing may be the light at the end of the tunnel, as such activities can provide companies with new products, cash, and can also accelerate the commercialization of new marketed products.

Current Structures in Biotech Deal Making

ADAM GOLDEN
PARTNER, KAYEE SCHOLER LLP

Compared to other industries, the life sciences arena is home to a multitude of transactional deal structures. These structures include traditional M&A, licensing and collaborations, option deals, and finally debt & equity financing.

Current transactional alternatives to the ones mentioned above, include structured considerations, contingent value rights, asset deals and options. These structures can be considered as additional tools in the toolbox.

Structured considerations are most common in private M&A. An example of a recent structured consideration is Eli Lilly's acquisition of Avid Radiopharmaceuticals. Avid's key product is Florbetapir F 18 a molecular imaging agent which detects the presence of amyloid plaque in the brain. Lilly effectively acquired 100% of Avid stock for $300 million in cash with a promise to pay of up to $500 million to Avid if certain regulatory and commercial milestones are met by Avid's Florbetapir product.

An example of a contingent value right, common in public M&A, includes Celgene's acquisition of Abraxis wherein Celgene offered $58 per share in cash and .2617 shares of Celgene common for 100% of the stock of Abraxis. Abraxis' lead product is an oncology product called Abraxane. Tied to the transaction is a tradable CVR per share entitling the holders to receive a pro rata share of up to a $650 million payment should Abraxane meet future regulatory and commercial milestones.

The sale of Columbia's progesterone franchise to Watson Pharmaceutical is an example of an asset purchase. The structure of the deal includes Prochieve and Crinone as well as the rights to Prochieve if it is approved for the prevention of pre-term birth. Upon closing, Watson paid $62 million in cash ($47 mm up-front plus $15 mm note forgiveness) and offered up to $45.5 million in regulatory and royalty milestones tied to Prochieve's use in pre-term birth indications.

Lastly, examples of option deals, wherein a buyer is granted the right to acquire a target on specified terms, during a window after a key valuation point (e.g. results of Ph. II study). The option fee is paid in cash at option grant, and upon option exercise, the deal is usually structured as a private M&A deal with corresponding contingency and closing terms. Cephalon and Novartis entered into an option to buy Ception and Proteon respectively.

The above mentioned structures allow acquirers to mitigate their risk and allow sellers to potentially realize significantly higher valuations upon success. Earn out deals have grown to be a larger share of biotechnology M&A activity in the past two years.

Biotech Deal Making – M&A, Licensing and Partnering Trends

GREGORY WIEDERRECHT PH.D.
VICE PRESIDENT & HEAD, EXTERNAL SCIENTIFIC AFFAIRS, WORLDWIDE LICENSING, MERCK

"It is not the strongest of the species that survives, or the most intelligent that survives. It is the one that is the most adaptable to change." The current global Pharma market will change from small molecules to biologics, from developed to emerging market, and from mega blockbusters to broader based portfolios.

Growth slowed globally and especially in the US market in 2008, as the reshaping of the global market continues. And since 2008 growth has been in the low to mid single digits. Currently, the growth rate of biological market is 2.5X times greater than that of traditional small molecules.

The management at leading healthcare companies is tightly focused on executing against a program of change, diversification and finding new drivers for growth.

In looking at the history of novel molecular entities by Merck, Lilly, & Roche since 1950 one can see how productivity has been constant for 60 years, and for each company, productivity is constant and stochastic. Costs associated with NME have been rising at a CAGR of 13% since the 1950s with only 1 in 5 NME becoming a blockbuster.

This phenomenon begs the questions of whether in-licensing of compounds delivers more bang for the buck than traditional in-house research. Morgan Stanley has noted that "$1 invested in in-licensed compounds will on average deliver 3 times as much value as $1 invested in in-house research." Search & Development is starting to replace Research & Development at major pharmaceutical companies.

The above figures demonstrate the need for large drug makers to merge in order to fund expensive, complex areas of research, such as Alzheimer's disease, Former Schering-Plough Chief Executive Officer Fred Hassan said in a recent interview on Bloomberg TV. Smaller companies also will be forced to sell themselves as they run out of cash in the tight credit markets, he said. "One reason deals are necessary is because the innovation investments are becoming larger and larger and it makes it easier when people can combine their resources to make the big, deep bets that you need to make for difficult diseases," Hassan said. "That is why you are going to see more of these deals."

Consolidation has been a continuing process. In 1980 there were 34 pharmaceutical companies, today only, Merck, Roche, Sanofi Aventis, BMS, Novartis, GSK and Pfizer remain. In 7 years, it is predicted that there will be even fewer pharmaceutical and large cap biotech companies.

In total approximately 66% of the blockbuster drugs this past decade had originated in a company other than the commercializing company.

From 2005-2009 there have been 1824 biotech/big pharma deals announced. Of the 1824, about 832 or 46% have been in the field of discovery, while only 76 or 4% has been in lead molecule. Early stage deals accounted for 50% of the total while mid (preclinical ~10% and Phase I ~6%) and late stage (Phase II ~8%, Phase III ~ 11%, and Approved ~15%) deals accounted for 16% and 34% respectively. There will be a reduction of mid to early stage licensing as large pharma needs pipeline due to patent expiries.

Merck's pipeline makes the case for collaboration and the company's licensing strategy has resulted in high value alliances. Approximately 63% of Merck's 2009 revenues can be attributable to alliance products and patents. Merck leads the field in biotech partnering followed by Pfizer, Roche, GSK, Novartis, Astra Zeneca, Johnson & Johnson, Bayer and Sanofi Aventis.

Speaker Roundtable

MODERATOR:
PETER YOUNG
PRESIDENT, YOUNG & PARTNERS LLC

Question:
Is there a typical option price, as a % of the total consideration, when dealing with option based transactions?

Answer:
Golden, Partner, Kaye Scholer: The percentage is less than 10%. The amount varies from transaction to transaction and is usually dependent on cash on hand, how much financing the transaction will require, and on the particular company's capital structure.

Question:
Is there a CVR time limit? Are there put options typically.

Answer:
Golden, Partner, Kaye Scholer: Some CVRs have finite lives, although they are typically flexible and tied to regulatory and commercial milestones. Put options are not that common. The Genentech/Roche deal was an example of a transaction that used a put provision in its negotiations.

Question:
Given the increased regulatory risk in approval will we see more companies buy out their partners?

Answer:
Golden, Partner, Kaye Scholer: If it makes financial sense, a pharma company will make a move to buy out their partner. It all depends on how the royalty streams will affect the business moving forward.

Question:
What will the new pharma business model look like in the future?

Answers:
Wiederrecht, Vice President, Merck: Merck believes that successful pharmaceutical business models will touch heavily on the biologics space. More specifically, using a 3 tier approach Merck looks to emphasize biologic similars/generics, biologic betters and novel biologics. Additionally, Merck is looking for ways to expand its operations in China. Alternative routes towards a successful future business model include seeking near term adjacencies in healthcare – this may come in the form of Information Technology.

Guggenheimer, Managing Director, Young & Partners: Pharmaceutical companies may find themselves having to break apart into different business segments. "slimming down" of the industry as a whole, if you will.

Dalton, Vice President, Pfizer: Rather than forecast what the model will look like, I would like to see more collaboration between players in the space. "Think of your competitor as your collaborator."

Young, President and Managing Director, Young & Partners: The dilemma of hitting homeruns vs. singles or doubles is a very relevant issue in the pharmaceutical industry. In order to succeed, companies

should stop worrying about size and the emphasis on blockbuster products, but rather, focus more on consistent growth via singles and doubles.

Question:
Personalized medicine – will it be a real opportunity and in what dimension?

Answers:
Guggenheimer, Managing Director, Young & Partners: I do believe that it will have an important role, but it will take time.

Wiederrecht, Vice President, Merck: Partnering arrangements between pharma and diagnostic companies will increase as such arrangements afford large discovery company's access to a more targeted clinical trial pool.

Question:
What will be the next disruptive technology or game changer if you will in the pharmaceutical space?

Answers:
Dalton, Vice President, Pfizer: Merus, a Netherlands based biotechnology company, has the technology to produce in a controlled fashion anywhere from two to four antibodies in one cell. This technology will revolutionize the industry by saving companies both time and money in the discovery and approval process. Companies could theoretically receive regulatory approval on a product with multiple indications based entirely on review of a single product containing various epitopes.

Wiederrecht, Vice President, Merck: The future will lie in companies going back to the pre competitive/collaborative era in which the industry addressed the biology behind important disease areas. This exercise will further propel the industry towards the discovery of new cures.