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Director’s Message

It gives me a great pleasure to present to you the 11th issue of the Lerner Center's Newsletter. This covers the activities of the center during the past year and the highlights of the presentations at the 13th annual Healthcare Symposium held on April 22, 2019. The theme of the symposium was “State of the Bio Pharmaceutical Industry in 15-20 years from Now”. The Keynote speaker Giovanni Caforio, M.D, Chairman and CEO, Bristol-Myers Squibb, began by building a bridge from the past to the present, illuminating the important changes that have occurred within the past 20 years from “one size fits all” approach to become highly targeted and personalized medicine through advances in genomics and biomarkers. The guest speaker Ed Adamcik, Chief Pharma Trade Relations Officer at Express Scripts discussed the current trends of market access and affordability.

The industry focus continues to shift towards wanting affordable drugs and providing access to patients in need. Current challenges payers face includes 1% of members driving 36% of costs and 4% of current medications are specialty drugs but they make up 28% of costs. The symposium concluded with an enlightening panel discussion, moderated by Rohit Sood Executive Managing Director Syneos Health, as industry experts Lawrence Ganti CEO of Innoplexus, Mark Vineis Vice President of Access Strategy & Commercialization at Novartis, and Dr. Richard Moscicki Executive Vice President at The Pharmaceutical Research and Manufacturers of America (PhRMA) provided their perspective on the industry's future innovative drugs. Please visit http://www.business.rutgers.edu/lerner, click on photo album to watch the highlights of the symposium in pictures.

The Center serves as an educational conduit between the pharmaceutical industry, the University and various other organizations. By providing industry data, organizational support and hosting research colloquia and seminars the Center facilitates pharmaceutical management research within Rutgers Business School. The Center offers the following resources to the University and various organizations:

- Short-term executive training programs on issues facing the pharmaceutical industry.
- On-site customized executive training programs for bio-pharmaceutical companies.
- Facilitate faculty and Ph. D students' pharmaceutical management research by providing relevant data and organizational support. The center maintains IMS data bases – NSP, NPA, IPS and NDTI – covering the monthly data for 2000 onwards.

We would like to thank the following for sponsoring the symposium: Bristol-Myers Squibb, Blanche and Irwin Lerner and Robert Campbell for their generous support. We welcome your comments and feedback on the Center's activities and programs.

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I. Keynote Speaker: Giovanni Caforio, CEO Bristol-Myers Squibb
A Glimpse into Tomorrow: The State of the Pharmaceutical Industry

What will the pharmaceutical industry look like in 20 years is the prophetic question we all seek to understand but also, we are unlikely to know fully. While it is impossible to predict which new technological breakthrough(s) will shape the future, there are clear trends that indicate a likely direction. Industry leader and CEO of Bristol-Myers Squibb Giovanni Caforio provided an enlightening and thoughtful talk of the future of the biopharmaceutical industry as the keynote speaker at the 2019 Lerner Center Annual Healthcare Symposium.

He began by building a bridge from the past to the present, illuminating the important changes that have occurred within the past 20 years. We have seen how medicine has evolved from a “one size fits all” approach to become highly targeted and personalized through advances in genomics and biomarkers. Thus, biopharma companies are exceedingly narrowing their focus on key therapeutic areas. Additionally, as more research and development are conducted externally, the industry is becoming more collaborative and banking on partnerships with academia and biotech firms to yield fruit.

As for the future, Dr. Caforio believes three main trends will dominate: first, innovation will be the foundation of all progress. Cultivating “ecosystems of innovation” (through internal and external partnerships) will lead to great scientific breakthroughs of tomorrow. Second, medicine will continue to be more personalized. We have seen how immunotherapies that harness the body’s immune system to fight cancer have revolutionized the oncology landscape. Moving forward, different platforms like gene therapy, biologics, and cell therapies will continue to dominate this space. Finally, access and reimbursement will remain as important as ever. Innovation means little if patients do not have access to the products, so the industry must continue to work with stakeholders to increase access and affordability.
II. Industry Trends: Ed Adamcik, Vice President Express Scripts

Access and Affordability in the Pharmaceutical Industry

Following the keynote speech, Vice President of Express Scripts Ed Adamcik discussed the current trends of market access and affordability. The industry focus continues to shift towards wanting affordable drugs and providing access to patients in need. Current challenges payers face includes 1% of members driving 36% of costs and 4% of current medications are specialty drugs but they make up 28% of the costs. Science today is incredible as FDA approvals for novel drugs continue to increase, but this also means that the cost of drugs at the time of introduction increases too. Although it may seem the costs are increasing at an unimaginable rate, there’s currently a record low drug trend for commercial plans; in 2018, US drug spending only increased 0.4% for commercial plans, the lowest in 25 years. Additionally, there is only a 2% projected increase over the next 3 years, lower than the US inflation rate. All of this indicates that the industry is creating space for new therapies to enter the market and give patients access to said therapies.

Our biggest challenge is managing the costs of specialty drugs but with biosimilars entering the market, we’ve seen the cost decrease by 20%. Shifting over to value-based contracting is an additional tool 30 million patients are utilizing under the SafeGuardRx programs. The bottom line is to keep medication affordable and accessible; in 2018, patients only paid 6 more cents per prescription than in 2017, with patients paying about 15% of prescription bills and insurance covering the remaining 85%. Commercial plans are also enrolling patients in chronic disease management programs as seen with diabetes solutions. Such programs saw a 4.3% decrease in spending for diabetes medications in 2018 because of better disease management. As commercial plans continue to follow similar models for other disease states, overall cost of treatment will come down.
Leadership Panel Discussion

The symposium concluded with an enlightening panel discussion (moderated by Rohit Sood Executive Managing Director Synopsys Health) as industry experts Lawrence Ganti President of Innoplexus, Mark Vineis Vice President of Access Strategy & Commercialization at Novartis, and Dr. Richard Moscicki Executive Vice President at PhRMA provided their perspective on the industry’s most important future trends.

**Rohit Sood:**

Rohit Sood opened the discussion by noting the current shifts occurring in healthcare. First, physicians are losing some of their prescribing power as the policy makers and payers are exerting more influence and control in access decisions. Second, innovation and the emergence of new technologies (e.g., CRISPR, immune therapies) is allowing us to shift our focus from treating symptoms to potential cures. Finally, the consumerization of technology – Dr. Google, wearables – is enabling a patient/caregiver to become an active voice in their treatment.

**Dr. Moscicki:**

The discussion began by Dr. Moscicki explaining how scientific innovations currently in development will play a large role in future disease treatments. As the full impact of genomics
and gene editing (through technologies like CRISPR/CAS-9) come to fruition, pricing and reimbursement will become even greater hot-button issue. However, Dr. Moscicki is confident that these pricing pressures will spur innovations through abbreviated clinical trials. Technology like in-silico testing could greatly reduce length of clinical trials. Other technologies that are ripe to transform the industry include: more precise biomarkers, human organoids that will replace mouse models, and computational biology to design new molecules.

**Mark Vineis:**

Mark Vineis echoed a similar sentiment regarding pricing challenges. As new medical innovations change the healthcare landscape, stakeholders are concerned about the astronomical cost of treatments and the effects on global (reference) pricing. Biosimilars represent an opportunity to bring down costs as do outcomes-based contracts, yet both also bring significant challenges because they are difficult to implement. However, the current pharmaceutical infrastructure is unprepared for the intense pricing pressures and will require bold choices from leadership.

**Lawrence Ganti:**

The final topic of the panel discussion was focused on the best way for the industry to leverage data outcomes to make better, more informed decisions. Lawrence Ganti discussed the role artificial intelligence will play in the future of pharma and voiced the challenges the industry currently faces in adopting AI. As life science data doubles every 73 days, how can the pharmaceutical industry harness the power of this information? The current size of drug manufacturers makes significant infrastructure changes difficult. The biggest prediction for the future will be the marriage of the tech industry and pharma as technology platforms improve the way healthcare will be delivered.

*Symposium articles written by: Puja Kapoor and Setu Shah*

**View photo gallery:** [https://photos.app.goo.gl/LsxjwHHPGqBNGV2r8](https://photos.app.goo.gl/LsxjwHHPGqBNGV2r8)
Two-Day Pharmaceutical Management Executive Certificate Program

The Lerner Center is committed to providing executive education, access to industry experts and networking opportunities to professionals at every level. Three times a year, the Lerner Center conducts a Two-Day Pharmaceutical Management Executive Certificate Program at Rutgers Business School’s Newark Campus.

Upcoming Dates: July 11-12, October 17-18, 2019

Broader your skillset. Expand your network. Advance your career.

Register Today!  www.business.rutgers.edu/lerner | lernercenter@business.rutgers.edu
2018 WINNERS:
1st Place: Yale University
2nd Place: Indiana University
3rd Place: Texas Christian University

Save the Date
8th Annual Rutgers Business School Biopharmaceutical Case Competition:
Friday, November 22, 2019