DIA
Combination Products Conference

Primer: October 14 | Conference: October 15-16 | Virtual Event

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Global Regulatory Head, PTR Devices and Combination Products
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Overview

Combination products, comprised of a drug, generic, or biologic and device, are a rapidly growing segment of the biopharmaceutical and device industry. The convergence of innovative medicines such as advanced cell and molecular biological products (Advanced Therapeutic Medicinal Products or ATMPs), materials science advances, and the development of digital therapies and applications, is driving a rapid expansion of novel applications to better meet patient needs.

The use of combination products in these novel therapies has a growing impact on regulatory and the development of science. Many regulatory challenges arise as new product types intersect with previously distinct development and approval pathways. The good news is that recent and ongoing improvements in the regulatory framework and process are leading to better access to new combination products for patients. But development challenges and regulatory questions continue to emerge as combination product sciences advance.

DIA's *Combination Products Conference* is a premier forum where industry and regulators dialog on today's best answers to key questions:

- How can new and emerging regulatory tools be used to best advance combination product development and approval?
- How can the regulatory framework for combination products be continuously improved?
- How can new technologies and novel approaches be used to realize opportunities in the developmental of new therapies to meet patient needs?

Who Should Attend

Senior level professionals and decision-makers involved in:

- Biopharmaceutical, Generics, Biosimilars, Device, and Combination Product R&D and Development
- Business Development
- Clinical Research
- Consulting
- CMC
- eClinical
- Legal, Government Affairs
- Policy
- Quality Assurance and Control
- Regulatory Affairs, Regulatory Operations
- Research and Development
- Submissions

Schedule At-A-Glance

PRIMER | WEDNESDAY, OCTOBER 14

1:00-3:00PM	APPs/Digital Health in Combination Products - QMS and Risk Management Opportunities and Challenges

DAY ONE | THURSDAY, OCTOBER 15

10:00-10:15AM	**Welcome and Opening Remarks**
10:15-10:55AM	**Keynote Address** – Future of Medicine: Combination Products
10:55-11:00AM	Break
11:00AM-12:00PM	**Session 1:** Updates and Insights from the Office of Combination Products (OCP)
12:00-12:30PM	Break
12:30-1:30PM	**Session 2:** Trends and Updates from a Global Perspective: International Regulation of Combination Products and Opportunities for Collaboration
1:30-2:30PM	Break
2:30-3:30PM	**Session 3:** Industry Best Practices and FDA Feedback on Optimal Combination Product Submissions
3:30-4:00PM	Break
4:00-5:00PM	**Session 4:** Device Post-Market Safety Management in a Drug Product World

DAY TWO | FRIDAY, OCTOBER 16

10:00-10:05AM	**Welcome to Day Two**
10:05-11:05AM	**Session 5:** EU Medical Device Regulation (MDR): Implication to Integral and Non-Integral (Co-Packaged Products)
11:05-11:35AM	Break
11:35AM-12:35PM	**Session 6:** Technical and Regulatory Considerations for an On-Body Injector
12:35-1:35PM	Break
1:35-2:35PM	**Session 7:** Digital Combination Products: Real World Experiences, Lessons Learned, and Opportunities
2:35-3:05PM	Break
3:05-4:05PM	**Session 8:** Panel Discussion on Human Factors for Combination Product Development
4:05-4:20PM	Closing Remarks

Learning Objectives

At the conclusion of this activity, participants should be able to:

- Define combination product and identify steps taken for uncertainty of approval
- Describe the current state of the global regulation of combination products
- Discuss the chemistry, manufacturing, and control (CMC) challenges, pitfalls, and best practices that sponsors should consider when submitting a combination product for FDA review
- Explain the post-market safety management process for a combination product
- Analyze regulatory expectations and industry challenges in complying with Article 117
- Identify expectations of the evolving regulatory landscape and challenges of on-body injectors
- Describe current FDA regulatory thinking and related guidance associated with digital combination products and concepts related
- Identify the role human factor engineering plays in combination product development and the design controls process

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CE Allocation

October 14 Primer: APPs/Digital Health in Combination Products - QMS and Risk Management Opportunities and Challenges: 2 contact hours or .2 CEUs Type of Activity: Knowledge, 0286-0000-20-133-L04-P

October 15 Day 1: Combination Products Conference: 4.5 contact hours or .45 CEUs Type of Activity: Knowledge, 0286-0000-20-134-L04-P

October 16 Day 2: Combination Products Conference: 4.25 contact hours or .425 CEUs Type of Activity: Knowledge, 0286-0000-20-135-L04-P

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PRIMER | WEDNESDAY, OCTOBER 14

1:00-3:00PM

APPs/Digital Health in Combination Products - QMS and Risk Management Opportunities and Challenges

Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

Instructor
Kim Trautman, MS, Executive Vice President Medical Device International Services, NSF International

This primer will explore updates and priorities in the application of incorporating digital health software requirements into the quality management system to support the development of connected combination products. ISO 14971:2019 and its impact to the current quality management system requirements under EU MDR Article 10 and 21 CFR Part 4 will be presented and discussed during the session. A discussion on the recent ISO/TR 24971:2020 guidance and the application to ISO 14971:2019 will be emphasized including the overall impact to digital health and combination products.

At the conclusion of this primer, participants should be able to:

- Identify key software application and digital health requirements to incorporate into the quality management system for combination products
- Analyze the impact of ISO 14971:2019 and ISO TR 24971:2020 to the combination product quality management system
- Define the key requirements of EU MDR Article 10 and the impact to Article 117 products

DAY ONE | THURSDAY, OCTOBER 15

10:00-10:15AM

Welcome and Opening Remarks

Session Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

Speaker
Robin Weinick, PhD, Senior Vice President and Managing Director, Americas and Global Program Officer, DIA Global

10:15-10:55AM

Keynote Address – Future of Medicine: Combination Products

Session Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

Combination products are emerging as innovative medical products due to their contribution to advancing medical care and are thus expected to have major impact in the coming years. Future technologies are most appealing to patients with ongoing medical conditions that require consistent treatment with daily injections or weekly procedures and unmet medical needs. Overall, the successful development of combination products will require great collaboration within the industry to overcome regulatory, clinical, and technical challenges.

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Future of Medicine: Combination Products
Thinh Nguyen, Director, Office of Combination Products, OCPP, FDA

10:55-11:00AM **Break**

11:00AM-12:00PM **Session 1:** Updates and Insights from the Office of Combination Products (OCP)

James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

This session will explore updates and priorities in FDA policy regarding regulation of combination products. There has been substantial clarification in recent years and its associated processes and practices have seen significant updates in enhancing efficiency and consistency. Both PDUFA VI and 21st Century Cures called on FDA to take actions to assess combination products programmatic activities and publish additional guidance. More broadly, FDA has been addressing regulation of products intended for combined use. The Office of Combination Products will give an update on all these aspects including, current inspection trends, warning letters, and forecast some future issues we might see addressed in the coming year.

Updates and Insights from the Office of Combination Products (OCP)
John Barlow Weiner, JD, Associate Director, Policy and Product Classification Officer, OC/OCPP, FDA

Panelists
John Barlow Weiner, JD, Associate Director, Policy and Product Classification Officer, OC/OCPP, FDA

Thinh Nguyen, Director, Office of Combination Products, OCPP, FDA

12:00-12:30PM **Break**

12:30-1:30PM **Session 2:** Trends and Updates from a Global Perspective: International Regulation of Combination Products and Opportunities for Collaboration

Session Chair
Jonathan Amaya-Hodges, Associate Director, Regulatory Affairs, Biogen

Regulations specific to combination products have now expanded well beyond the United States and European Economic Area (EU), as other key global regions market their own frameworks for such products. While some regulatory schemes closely follow those established by the US or EU, some take new approaches and warrant additional attention. Ultimately, sponsors must navigate a variety of requirements to place their combination products on the market globally, while regulatory authorities will face the growing need for harmonization in this area.

Introduction to International Regulation of Combination Products
Jonathan Amaya-Hodges, Associate Director, Regulatory Affairs, Biogen

Industry Perspectives on Challenges and Opportunities in Global Regulation of Combination Products
Stephanie Sabatino Kelly, MS, JD, Associate Director, North America Regulatory Intelligence & Policy, CSL Behring

Industry Perspectives on Challenges and Opportunities in Global Regulation of Combination Products
Tim Chesworth, Senior Director Regulatory Affairs, AstraZeneca, United Kingdom

Progress of the ASTM Global Standard for Combination Products
Manfred Maeder, PhD, Head of Device Development & Commercialization, Novartis, Switzerland

1:30-2:30PM **Break**

2:30-3:30PM **Session 3:** Industry Best Practices and FDA Feedback on Optimal Combination Product Submissions

Session Chair
Demetra Macheras, MBA, Director, Regulatory Policy & Intelligence - Regulatory Affairs, AbbVie, Inc

Have you ever struggled with how and where to address certain information within your combination product submission? This session will provide an overview of pitfalls and lessons learned from both industry and FDA regarding where information is best located to provide a clearly structured and efficient combination product submission to FDA. Topics to be covered will include key FDA guidance and resources that support the location of key combination product information, real world experience from industry, and pitfalls and best practices in the structure and format of combination product submissions experienced by both CDER and CBER.

Evolution of the NDA/BLA Content for a Combination Product
Susan Holmes, MSc, Director, GlaxoSmithKline, Netherlands

Best Practices and Recommendation for Combination Product Submissions to CDER
Kristina Lauritsen, PhD, Combination Products Regulatory Policy Advisor, OEP, CDER, FDA

Considerations for Submission of Device Information
Sarah Mollo, PhD, RAC, Combination Product Policy Analyst, OPEQ, CDRH, FDA

3:30-4:00PM **Break**

4:00-5:00PM **Session 4:** Device Post-Market Safety Management in a Drug Product World

Session Chair
Khaudeja Bano, MD, DrMed, MS, Executive Medical Director, Combination Product Safety Head, Amgen

This session will explore end-to-end considerations for implementing post-market safety reporting (PMSR) requirements related to the inclusion of a device constituent part in a drug/biologic combination product. Speakers will discuss industry best practices to overcome key challenges (TPM, outsourcing of case processing, multiple presentations etc.) using a case study for a hypothetical device malfunction scenario in a single entity simple drug delivery system. Next, they will outline a risk-based approach to handling device malfunctions, followed by a discussion on the challenges with lifecycle management. Next generation device development will be explored as we ask ourselves how we are doing in the development phase of combination products as an industry. The session will then conclude with Q&A including speakers from the FDA and EMA (EU) for audiences to gain insights on their objectives and plans for additional malfunction data collected in this process.

Speakers
Khaudeja Bano, MD, DrMed, MS, Executive Medical Director, Combination Product Safety Head, Amgen

Melissa Burns MS, Senior Program Manager, Office of Combination Products, OCPP, OC, FDA (Invited)

Keith Morel, PhD, Vice President Regulatory Compliance, Principal Consultant, Qserve Group US, Inc.

Panelist
John Barlow Weiner, JD, Associate Director, Policy and Product Classification Officer, OC/OCPP, FDA

DAY TWO | FRIDAY, OCTOBER 16

10:00-10:05AM **Welcome to Day Two**

Session Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

10:05-11:05AM **Session 5:** EU Medical Device Regulation (MDR): Implication to Integral and Non-Integral (Co-Packaged Products)

Session Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie

Article 117 of the Medical Device Regulation 2017/745 amended Annex I to Directive 2001/83/EC, point 12 of section 3.2), and introduces a new requirement for notified body involvement in a medicinal product with an integral medical device. The marketing authorization dossier for a medicinal product with an integral medical device is expected to include the results of the assessment of conformity for the medical device component to the General Safety and Performance Requirements (GSPRs) laid down in Annex I of the Regulation (i.e. the declaration of conformity or the relevant certificate issued by a notified body). The session will provide an overview of current challenges and opportunities including a panel discussion: EMA representative, Notified Body Representatives, and Industry:

- Overall Impact to Drug Delivery Devices including Combined Advanced Therapy Medicinal Products (cATMP)
- Application of Article 117 as Article 2(1)(d) of Regulation (EC) No 1394/2007 drives the combined advanced therapy medicinal products regulatory pathway process
- Notified Submission process to obtain an opinion on the conformity of the device constituent part (e.g. Integral and Non-Integral)
- Lifecycle Management and variation process for drug delivery devices

Industry Perspective: Overall Impact to Drug Delivery Devices Including Combined Advanced Therapy Medicinal Products and Impact of Article 117 and No. 1394/2007
Kim Trautman, MS, Executive Vice President Medical Device International Services, NSF International

EMA Perspective: Overall Impact to Drug Delivery Devices Including Combined Advanced Therapy Medicinal Products and Impact of Article 117 and No. 1394/2007
Armin Ritzhaupt, PhD, MPH, Scientific Administrator, European Medicines Agency, Netherlands

Notified Body Submission Process to Obtain an Opinion on the Conformity of the Device Constituent Part
Susanne Fornero, PharmD, PhD, Medicinal Expert, BSI

Lifecycle Management for Drug Delivery Devices
Julia Frese, MBA, Director MHS Japan, Global Focus Business Developer Article 117, TÜV SÜD Japan Ltd., Japan

11:05-11:35AM **Break**

11:35AM-12:35PM **Session 6:** Technical and Regulatory Considerations for an On-Body Injector

Session Chair
Darin Oppenheimer, DrSc, Executive Director, Device & Digital Health Solutions, Merck & Co., Inc.

How will healthcare wearable technology advance opportunity for the pharmaceutical industry regarding drug delivery? Advancements in delivery technology can be perceived as a significant advancement in medication delivery, but any advancement can be met with challenges along the way. This novel technology is not free of some of the basic hurdles that have challenged delivery systems in the past such as pain, technological complexity, physical dexterity or cognitive challenges, and needle phobia, all of which can have a significant impact into your wearable technology strategy.

This session will discuss the evolving landscape surrounding wearable drug delivery technology from a bench to bed side approach, and the opportunities and challenges of developing these products from a technical, regulatory, and clinical application.

Opportunities and Challenges with the Evolving Regulatory Landscape for On-body Injectors and Wearable Devices
Suraj Ramachandran, MS, Director, Regulatory Affairs, Merck & Co., Inc

Opportunities and Challenges with the Evolving Regulatory Landscape for On-body Injectors and Wearable Devices
Karen Kazak, MS, Principal Regulatory Scientist, Eli Lilly and Company

12:35PM-1:35PM **Break**

1:35-2:35PM

Session 7: Digital Combination Products: Real World Experiences, Lessons Learned, and Opportunities

Session Chair
Chin-Wei Soo, DRSc, Global Regulatory Head, PTR Devices and Combination Products, Genentech, A Member of the Roche Group

Digital health technologies are becoming a significant element of combination product manufacturer's product pipeline and portfolio. Navigating the FDA CDER-lead combination product regulatory landscape is challenging. This interactive session will provide (a) real world experiences from industry leading regulatory experts in securing regulatory clearances/approvals of digital combination products, and (b) interactive panel discussions involving industry and FDA representatives on topics such as regulatory pathway, prescription drug use related software framework, and lifecycle management.

Speakers
Michael Fahmy, MS, Senior Director, Global Regulatory Affairs, Otsuka Pharmaceutical Development & Commercialization, Inc.

Michael Benecky, PhD, Senior Director, Global Regulatory Affairs, UCB

Michael Koenig, MS, Group Head – Regulatory Affairs Established Products, Bayer

Panelist
Robert Berlin, JD, MPH, Division Director, Division of Clinical Policy, Office of New Drug Policy, CDER-OND, FDA

2:35-3:05PM

Break

3:05-4:05PM

Session 8: Panel Discussion on Human Factors for Combination Product Development

Session Chair
Karthik Balasubramanian, PhD, MS, Director, Combination Products and Semisolids, Generic CPD, Teva Pharmaceuticals

Session Co-Chair
Karl Saldanha, PhD, Associate Regulatory Program Director, Genentech, A Member of the Roche Group

This session offers the opportunity for industry and FDA Human Factors (HF) leaders to offer their viewpoints and experiences regarding the role of HF in the development of drug-device combination products. Topics discussed will focus on the HF engineering process and its integration within the overall design controls process. In particular, the session will focus on use of formative studies to inform combination product design, as well as key considerations in HF validation study design, execution, and analysis of results. In addition, panelists will discuss the use of comparative/threshold analysis and associated studies. The session will offer the audience an opportunity to interact directly with the panelists and ask questions.

Panelists
Christina Mendat, PhD, Managing Director, Human Factors MD

Shannon Hoste, MS, Senior Director, Development Quality and Human Factors Engineering, Enable Injections Inc.

Paul Blowers, MA, Director, Human Factors - Drug Delivery Solutions, AbbVie Inc.

Irene Chan, PharmD, Deputy Director, Division of Medication Error Prevention & Analysis, CDER FDA

4:05-4:20PM

Closing Remarks

Session Chair
James Wabby, MHS, Executive Director, Regulatory Affairs, Emerging Technologies and CMC – Device, AbbVie