DRUG DELIVERY, FORMULATION & AEROSOL MEDICINE

UK Pre-Event Newsletter

Adare White Paper

Formulation customization: Applying Diffucaps® Customized Release Technology to reduce dosing frequency and encourage patient adherence

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3D Printed Microneedle Patches For Drug Delivery

Exploring applications and advantages of 3D printing on the field of Transdermal Drug Delivery (TDD)

ETC.VENUES VICTORIA
8 - 9 MAY 2018 | LONDON, UK

OXFORD GLOBAL CONFERENCES

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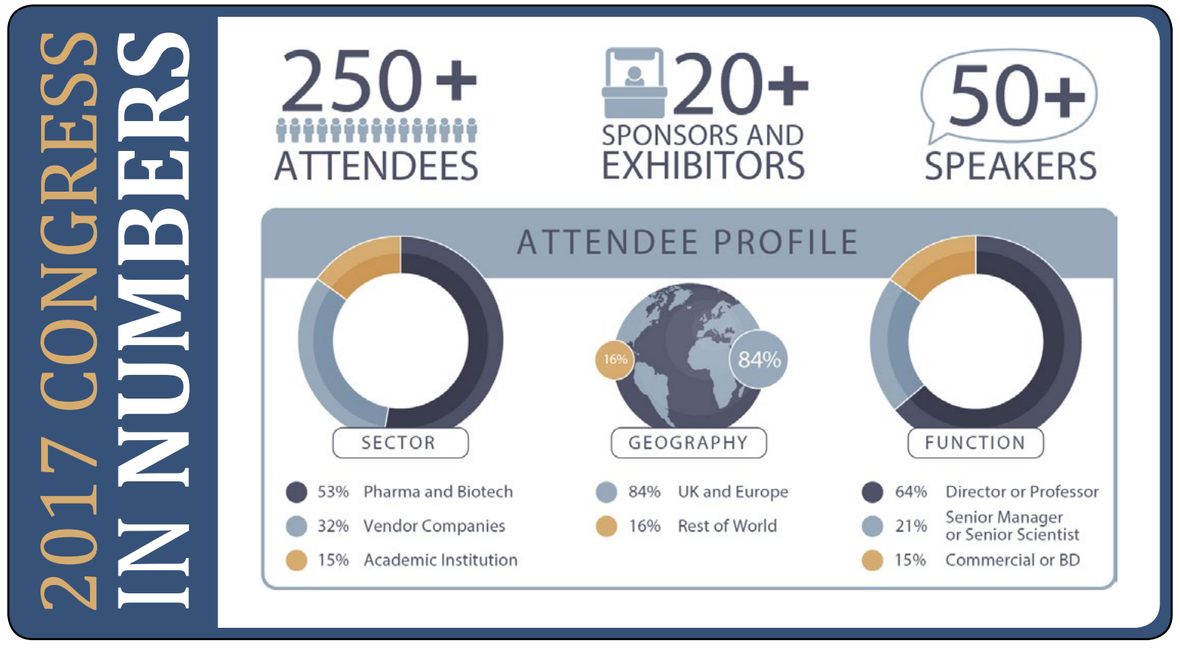

WELCOME TO THE INAUGURAL EDITION OF OXFORD GLOBAL'S DRUG DELIVERY, FORMULATION AND AEROSOL MEDICINE UK NEWSLETTER!

With the 4th Formulation & Drug Delivery Congress and co-located 3rd Inhalation & Respiratory Drug Delivery Congress taking place in May 2018 in London, I am delighted take to look back at the 2017 event and provide some exciting details on a few of the key features & new additions for the 2018 congress.

The 2017 congress brought together over 200 attendees to discuss & discover solutions to large & small molecule formulation development and learn about the latest advances in large & small molecule drug delivery, collaborative solutions to the challenges of developing inhaled therapies and the latest innovations in inhalation devices. The 2018 event will once again discuss these hot topics, featuring over 60+ presentations on areas such as novel protein & peptide formulation strategies, formulation development for vaccines & biosimilars, vaccines delivery, advanced microneedle delivery systems, updates in ocular drug delivery, aerosol response, generic product design AND case studies including innovative development of inhalation devices, connective health and analytical tools. New for 2018, there will be an increased focus on drug delivery devices and Bioanalysis & Stabilisation with two dedicated streams.

After a full day of learning, knowledge sharing and meeting new people, what better way to unwind after the first day of the congress than with a glass of wine (or two) at Oxford Global's networking drinks. Read on for a range of interesting interviews and insights with some of this year's industry-leading speakers and participating sponsors, and we look forward to welcoming you to the 2018 Congress in May!

- Hayley Watson, Portfolio Director

ETC.VENUES VICTORIA
08 - 09 MAY 2018 | LONDON, UK

4TH ANNUAL FORMULATION & DRUG DELIVERY CONGRESS

co-located with

3RD ANNUAL INHALATION & RESPIRATORY DRUG DELIVERY CONGRESS

WHO IS ATTENDING?

For the full attendee list please contact
marketing@oxfordglobal.co.uk

- **350+ senior level attendees** from leading pharmaceutical, biopharmaceutical, biotechnology, diagnostics, CRO and solution provider companies.
- **Professors, Directors and Heads** of formulation development and drug delivery, biologics developments, inhalation drug delivery, respiratory pharmacology, inhalation process development, inhaled dosage forms, pulmonary disease, respiratory therapeutics.
- **Highly esteemed members** of academic and government institutions.

These companies and many more:

GlaxoSmithKline · NOVARTIS · AstraZeneca · Genentech A Member of the Roche Group · janssen · SAVARA · Boehringer Ingelheim · BAYER · ucb · King's College London · abbvie · Takeda · Alnylam Pharmaceuticals

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It's not too late to join them!

REGISTER ONLINE

Formulation customization: Applying Diffucaps® Customized Release Technology to reduce dosing frequency and encourage patient adherence

The pharmaceutical industry is driven to develop oral drug formulations that deliver significant patient benefits. Drug delivery technology can be leveraged to reduce dosing frequency, and therefore, help encourage patient adherence to prescribed therapeutic regimens.

Benefits of successfully reducing dosing frequency

Studies have shown a direct link between reduced dosing frequency and improved patient adherence.[1] When patients are taking their medication more consistently, this can lead to a more successful course of treatment with positive outcomes. Several studies across various therapeutic categories have shown that once-daily (QD) dosing regimens can achieve equivalent efficacy, or even surpass the efficacy of their twice-daily (BID) or three-times-daily (TID) counterparts.[1]

Not only can reducing dosing frequency lead to better outcomes for patients, but research also indicates a decrease in overall healthcare costs. One study comparing a QD formulation of a treatment for prostate cancer with a TID formulation reported that there was a 30% cost savings associated with the QD formulation.[1]

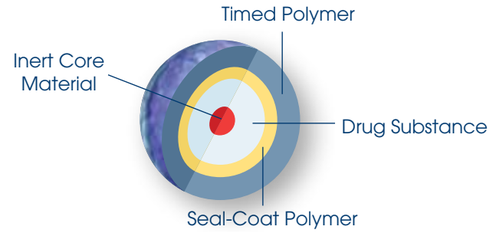
Adare Pharmaceuticals recognizes the inherent challenges associated with simplifying dosing regimens. With a broad range of proprietary technologies, Adare has the expertise to overcome these challenges—delivering formulations with the benefit of improved convenience for patients.

A transformative partnership

Adare collaborated with a private partner to satisfy an unmet need for a QD formulation of a muscle relaxant. Prior to co-development, the US patents for the immediate release (IR) formulation of this product, dosed TID, had expired. Several companies were previously unsuccessful in developing a QD formulation of this product. The key formulation objective was developing a QD, modified-release dosage form.[2]

An innovative solution

By using Diffucaps® Customized Release Technology, Adare developed a muscle relaxant in an extended-release capsule formulation. Diffucaps® technology has the flexibility to incorporate functional, release-controlling polymers or protective coatings onto drug-layered cores, granules, or crystals. This multiparticulate system provides sophisticated control of drug delivery and optimizes release profiles for single drugs and drug combinations.



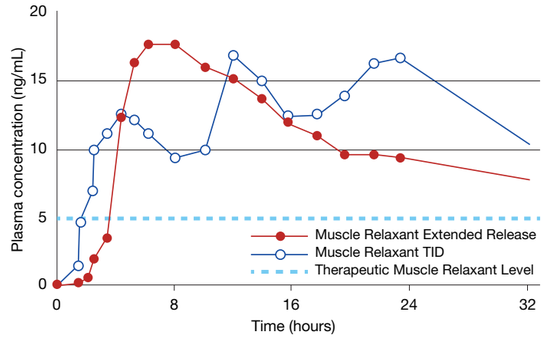
With Diffucaps® technology, extended-release (ER) beads were developed, allowing medication delivery over a period of 24 hours after dose administration.[2]

Transformative results

The formulation featuring Diffucaps® Customized Release Technology transformed the IR product—extending release over 24 hours.[2]

In a pharmacokinetic study, this QD muscle relaxant product had a single peak plasma level that gradually declined over 24 hours versus three peaks for the IR product.[2]

One-Day Crossover Pharmacokinetic Study: Mean Muscle Relaxant Concentration Over Time (N=36)[2]



From valuable IP to global commercialization

To add further value to this new formulation, Adare generated new IP, with patent exclusivity until 2025. Challenges to the patents covering the product for generic alternatives were defeated in 2012 and 2013, and these patents were determined to be valid by the US Court of Appeals.

Adare also leveraged its international capabilities to help bring this enhanced dosage form to the global market. This product is actively marketed in the United States, Latin America, South Africa, and South Korea.

About Adare Pharmaceuticals

Adare is a global specialty pharmaceutical company focused on understanding patient treatment needs that are not met by current medications and developing innovative products that deliver better therapeutic outcomes and improve lives. By applying its capabilities and expertise, Adare delivers innovative solutions that help solve a broad range of challenges.

With extensive experience across a wide range of therapeutic areas, Adare is actively pursuing growth in its proprietary pipeline, including development and acquisitions. Over 40 products incorporating the proprietary technologies of Adare have been commercialized around the world. Adare also has an extensive patent portfolio, which includes more than 360 granted patents and 225 pending patent applications.

To learn more about Diffucaps® Customized Release Technology or to explore partnership opportunities, please email BusDev@adarepharma.com or visit www.AdarePharma.com.

References: 1. Richter A, Anton SF, Koch P, Dennett SL. The impact of reducing dose frequency on health outcomes. *Clin Ther*. 2003;25(8):2307-2335. **2.** Data on file. Adare Pharmaceuticals, Inc.

ADARE Pharmaceuticals™

WEBINAR EXCERPT: Q&A SESSION WITH **MARIANNE ASHFORD** AND **CONSTANTIN-C. COUSSIOUS**

Do you think that more nanomedicines will be used in other therapeutic areas?

MA: Yes, I think that they will be. I think that currently many people are focused on oncology because of the obvious challenges that the therapeutic index presents and that has driven many of the examples currently in use. I do think that as more modalities are coming through, and we're seeing a lot more nucleic acids and peptides, this will open up the drug target space in other areas as well as the need for a more targeted delivery. I think that we will see this a lot more in different therapeutic areas.

Most of the nanomedicines that you have mentioned are intravenously delivered, what about other routes of administration?

MA: Again, I think that we will see this more in other routes of administration, but I think that this will be particularly in terms of Cell CarT, intra muscular, and also some of the long acting preantrals. I really think that this is an under exploited area for nanomedicines and I think that by understanding the bio-distribution which is unlikely to be into the systemic circulation, it will be important. I think that we will see it used a lot more in combination with therapy, surgery, and interventional medicine when nanoparticles are used. In oncology I think that we will see a lot more local delivery which will allow us, as we diagnose diseases earlier, to deliver to many different sites in the body It will also impact respiratory, inflammation, and auto-immune areas and these are the areas that we will perhaps see more local delivery of nanoparticles to the lung which will change the distribution within the lung.

Are there limitations to the indications and anatomical locations which such device and drug approaches can be deployed?

CC: Each of the modalities has different limitations. Ultrasound only really feels air and bone which means that it would be able to treat pretty much any soft tissue indication or any prostate, head, or neck, skin indication but treating the gut or inside the skull is a lot more challenging. However, what ultrasound and shockwaves cannot do, magnetic fields can do. So, for example, magnetic fields can delivery some of these benefits in the lung where ultrasound cannot be used. It can also be used within the brain cavity more generally.

What do you know about the regulatory pathway for these device and drug approaches in Europe and in the US?

CC: There are essentially two approaches here, one where the drug is combined or re-formulated in a liquid or nanomedicine form and one where the drug is co-administered with a nanoparticle that responds mechanically. The second situation is very interesting because in Europe these known drug carrying drug particles and micro particles tend to be classified as medical devices. This means that it may be possible to access a broad range of indications through a C marking route than a more conventional pharmaceutical route. In the US, of course, they will always be seen as a combination product by the FDA, but which side of the FDA might actually lead these studies will depend on whether the additional component is purely a device or is actually a novel drug or a novel drug formulation. I think that is the important distinction between the re-formulated drugs and the co-administered drugs with some of these stimulus responses in nanomedicines ■

Marianne Ashford, Senior Principal Scientist, Pharmaceutical Sciences, Innoative Medicines Biotech Unit, AstraZeneca

Marianne is Senior Principal Scientist in Advanced Drug Delivery, Pharmaceutical Sciences within Innovative Medicines Biotech Unit at AstraZeneca. In this role, Marianne in responsible for applying drug delivery approaches to improve therapeutic index of medicines and is working to enable novel targets via successful intracellular delivery of new modalities such as nucleic acid and peptide drugs. This is achieved both via internal research programs and through external collaborations. Marianne has initiated a number of collaborations, which has resulted in the introduction of nanomedicines into our Oncology development portfolio. She is a member of the global Pharmaceutical Sciences and Oncology Science Leadership teams.

Constantin-C. Coussious, Director, Oxford Institute of Biomedical Engineering, & Director, Oxford Centre for Drug Delivery Devices

Professor Constantin Coussios is the the Director of the Oxford Institute of Biomedical Engineering. He received his BA, MEng and PhD in Engineering from the University of Cambridge and was elected to the first statutory chair in Biomedical Engineering at the University of Oxford in 2011, with special responsibility for drug delivery and non-invasive therapies. He founded and heads the Biomedical Ultrasonics, Biotherapy and Biopharmaceuticals Laboratory (BUBBL) and recently launched the £10m Oxford Centre for Drug Delivery Devices (OxCD3) under a 5-year programme grant by the UK's Engineering and Physical Sciences Research Council. The author of over 100 peer-reviewed publications and 16 patents, Prof. Coussios received the UK's Institute of Acoustics' Young Person's Award for Innovation in Acoustical Engineering in 2007, was elected as Secretary-General of the International Society for Therapeutic Ultrasound between 2006-2010 and was honoured with the Society's Fred Lizzi award in 2012.

This is an excerpt from the free webinar, 'Nano-based Oncological Drug Delivery'.

The full recording is available on our website at:
www.formulation-congress.com/webinar-recordings/

Q&A SESSION WITH **DR. BERNARDO PEREZ-RAMIREZ**

Senior Scientific Director, Global Pharmaceutical Development Biologics, SANOFI;

Adjunct Professor, Department of Biomedical Engineering, Tufts University, Boston, Massachusetts

Dr. Bernardo Perez-Ramirez, Senior Scientific Director, Global Pharmaceutical Development Biologics, SANOFI

Adjunct Professor, Department of Biomedical Engineering, Tufts University, Boston, Massachusetts

Bernardo is a Senior Scientific Director in the Global Pharmaceutical Development Biologics Department at Sanofi. He is responsible for development of drug products for therapeutic proteins, due diligences, life cycle management strategies, and platform technology evaluation. He also serve as the US-based Drug Device Integrator for Sanofi's North American portfolio. Prior to joining Genzyme/Sanofi, he was Laboratory Head of Formulation and Process Development at Genetics Institute/Wyeth Biopharma (now Pfizer).

Dr Perez-Ramirez holds a BS degree in Biology a M.S. degree in Biochemistry from the Medical College of Virginia and a Ph.D. in Chemistry/Biochemistry from the University of Missouri. He did postdoctoral research in physical biochemistry of proteins at Brandeis University, MA. He is a member of several scientific societies including the New York Academy of Sciences; The American Society for Biochemistry and Molecular Biology, Sociedad Espanola de Bioquimica y Biologia Molecular. He is a fellow of the Royal Society for the Arts (RSA) of England and he also serves as adjunct professor in the Department of Biomedical Engineering at Tufts University in Boston.

What will your presentation be covering?

BP-R: In the meeting I will be presenting on the challenges and opportunities in developing drug products for therapeutic proteins. In particular, I will integrate the concepts of developing convenience to patients while creating stable dosage forms for different type of monoclonal constructs. This necessitates strong integration with discovery research as well as with the groups working on the upstream process and the ones designing the final container closure. The need to have an early device ability criterion for biologicals to predict the behavior of the final drug product is an imperative.

What are the emerging trends that you are seeing in formulation and drug delivery?

BP-R: There is a continuous evolution of different type of protein scaffolds that has prompted an in depth evaluation and optimization of platform approaches. The promises of brain delivery and the challenges of gene therapy applications for brain delivery continue to be important. Taking in consideration the patient experience to develop dosage forms is a critical point that is becoming to be integrated in the target product profile early on.

What are the main challenges that you are facing in formulation and drug delivery?

BP-R: In order to develop protein therapeutics we need a very diverse expertise including pharmaceutical scientists with experience in drug substance and drug product development, engineers, protein chemists, pharmacologists, compliance specialists, etc. Talent is in great demand and training and retaining talent is a high priority and a challenge in a very competitive environment. This is one of the reason that I decided to teach a graduate course at Tufts University on formulation and drug product development so we can expose students to real work examples to better prepare them for a career in the biopharmaceutical industry .

Why are conferences like this important to you?

BP-R: In the industry we have common technical challenges so these type of forums are important to learn from our respective experiences and see how others have approached or come out with solutions for similar situations. There is also lot of opportunities to chat with colleagues and networking with others ■

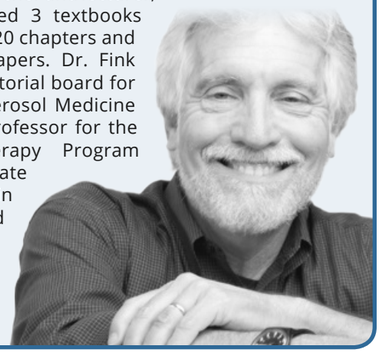
Dr. Bernardo Perez-Ramirez will be expanding on this topic at our 4th Annual Formulation & Drug Delivery Congress.

Hear his presentation '*Improving Patient Convenience: Challenges And Opportunities In Drug Product Development*' on Day One in the stream 'Drug Delivery Devices'.

WEBINAR EXCERPT: Q&A SESSION WITH **DR. JIM FINK**

Senior Fellow Clinical Aerosol Product Development, Dance Biopharm

A highly trained clinician and researcher, Dr. Jim Fink has spent the past 25 years of his career focused on understanding the design of aerosol devices and how patients interface with them. In his capacity as Fellow of Aerosol Science at Aerogen (later Nektar), Fink developed efficient liquid aerosol delivery systems for adults, children, and infants, in critical care and ambulatory contexts, with multiple patents both in the US and abroad. Dr. Fink is a Registered Respiratory Therapist with a Ph.D. in Pharmaceutical Innovation from Bradford University, UK and a Fellow of both the American Association of Respiratory Care (FAARC) and the College of Chest Physicians (FCCP). An internationally recognized researcher and lecturer, Fink has authored 3 textbooks and more than 120 chapters and peer-reviewed papers. Dr. Fink serves on the editorial board for the Journal of Aerosol Medicine and is adjunct Professor for the Respiratory Therapy Program at Georgia State University in Atlanta GA, and faculty at Rush Medical School in Chicago.



Why did you choose vibrating mesh technology for the delivery device?

One of the reasons that we used the mesh technology is that it has been shown to be very efficient with small doses. When you use the vibrating mesh and an individual drop reaches the aerosol generator mesh, that single drop is nebulised, and it produces the same efficiency and same particle size characteristics as you would have in a larger volume of ½ ml or even 3-4 ml. This means that drop by drop nebulisation is a key feature. The Aerogen technology has also been around for over a decade worldwide and is used in critical care devices. They have produces more than a million devices a year, so it has really become a stable process which means that we didn't have to go through a steep learning curve in that aspect of the device.

Why should marketing of inhaled insulin extend to primary care providers?

This is simply because primary care providers are the people who see the patients. Generally, the majority are the Type 2 patients who are seen while they are pre-diabetic. They are counselled to get some exercise and make lifestyle changes and then they are started on some orals. When they have failed their first oral they go on to the next oral and there's such an extended period before they reach the endocrinologist. The primary care providers have a much closer feel for how these patients respond to their early diagnosis of diabetes and of their concerns and problems in adhering to the prescription and their reluctance to go on to injections. They are a much broader group of people who have contact with the inhaled diabetic. Endocrinologists do an excellent job but for years they have been using injections and they have patients who are reluctant at first to have accepted injections but don't really have much alternative. They are probably, as a group, less excited about giving people and inhaled alternative.

What are the risks of contamination of the device?

Many devices have reservoirs that contain all the liquid and that liquid is generally below the mouth piece. This allows any bacteria or saliva that enters the mouthpiece to drain into reservoir. The vibrating mesh is unique because it provides a barrier of sorts in the reservoir and this is above the mouth piece, so we believe that there is less risk of contamination from the patient. To test this, we took five different biologicals and sprayed them individually into a mouth piece (100 mcL sprays). We then continued to spray the aerosol and collected it to see if it had become contaminated. Sure enough we had zero contamination. This meant that coughing into the mouthpiece, which we were trying to simulate didn't in fact contaminate the device. So, our recommendation is that you do not need to wash the device after every dose, you could rinse and airdry it at the end of the day ready for the next one.

What do you think the future holds for inhaled insulin and its research, what is left for the future?

It's safe to say that there is no drug research war more intense than inhaled insulin. There are over 12 different people doing extensive studies and phase 2 & 3 trials, but I think that the biggest barrier that we have now to inhaled insulin is the failed marketing in the past two cases. This means that it's very difficult to get investors and the financial community to see past that. Should we be able to get past that, I'm sure that some day we will have a range of effective devices for long term inhalation of insulin. I'm sure that injections are probably appropriate for most people with insulin, but for people who have put off taken the injections when the others have failed, that is where all the damage happens, and it can go on for 10 years. So, I think that inhaled insulin is not a technological barrier anymore and there are several ways to give it ■

This is an excerpt from the free webinar, 'Inhaled Insulin: Highway To Heaven Or Road To Ruin?'.

The full recording is available on our website at:
www.drugdelivery-congress.com/free-webinar-recordings

3D PRINTED MICRONEEDLE PATCHES FOR DRUG DELIVERY

DENNIS DOUROUMIS AND SOPHIA ECONOMIDOU

UNIVERSITY of GREENWICH

Dennis: Professor in Pharmaceutical Technology and Process Engineering, University of Greenwich
Sophia: PhD student working on the design and 3D printing of microneedles for drug delivery purposes

3D printing comprises of a family of distinct technologies that use a layer-by-layer process to create a physical object based on a virtual Computer Aided Design (CAD) model. Since its launching in the 1980s, it has changed the outlooks of manufacturing in numerous industrial and scientific fields, enabling the fast and accurate production of structures and components with levels of complexity that are unreachable through conventional techniques. Medical scientists envisioned the unique prospects of 3D printing to fundamentally alter how patients are treated, aiming in taking modern therapeutics from the massively produced to the customised. Implants and prosthetics have been 3D printed with tailored, patient-specific characteristics. In pharmaceutics, the investigation on this cutting-edge technology's potential to manufacture drug delivery systems has already been fruitful, with the first 3D printed oral administration tablet, Spritam, to gain FDA approval and the term 'pharmacoprinting' to be introduced.

Lately, applications of 3D printing on the field of Transdermal Drug Delivery (TDD) have started to be explored. Modern TDD systems are vastly based on the concept of microneedles, which are miniature puncturing devices that can painlessly pierce the skin and convey drugs directly into the dermal microcirculation. Microneedle systems are an appealing alternative to traditional oral and injection-based drug administration routes that tackle common drawbacks such as needle phobia, pain and degradation in gastric acids, yielding high degrees of bioavailability. 3D printing aims to revolutionize microneedle fabrication strategies since typical methods such as micromoulding and micromachining are commonly multistep and difficult to scale-up.

Key highlights of 3D printed microneedles:

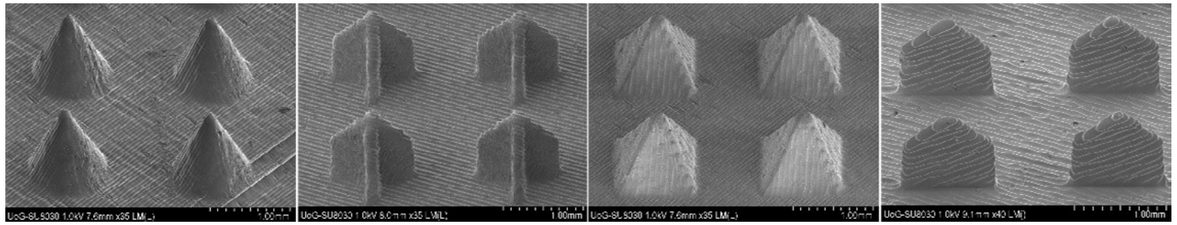
- Rapid fabrication of complex designs with high resolution
- Delivery of various therapeutic agents at high drug load
- Use of a biocompatible printable resin

Among the various 3D printing technologies, Stereolithography (SLA) is a user-friendly, straightforward, cost-effective technology that uses a UV laser beam to selectively polymerize photosensitive polymers. Due to its high-resolution capability, SLA permits the creation of complex structures with great accuracy and reproducibility. It also endows the design and prototype stage with versatility since multiple designs can be built simultaneously with no material losses associated with the fabrication of moulds.

In this study, the SLA technology was employed to fabricate four prototypes of solid microneedle arrays with different needle shapes. The arrays were designed using the SolidWorks® 3D CAD engineering software and featured cone, cross, pyramid and spear shaped microneedles (Fig. 1).

The four designs were printed via a photopolymerization process using a Class I FDA approved resin leading hardened plastic patches with strong mechanical properties. The complete fabrication process including post-printing washing and curing under UV radiation lasted less than two hours.

The 3D printed microneedle arrays demonstrated excellent piercing capacity. Piercing tests through full thickness porcine skin were conducted, measuring the force required for each design to fully penetrate. All the designs successfully pierced the skin and no needle failure was observed. Very low forces of penetration (<5 N) were needed for all the designs, with the cone-shaped needles to require the minimum force value. A major advantage of the microneedles patches is the rapid release rates of therapeutic agents even at high drug loading. The study demonstrated that 3D printing when combined with coating or 'poke and patch' strategies is a promising technique for the fabrication of solid microneedles for transdermal drug delivery. Future developments will focus on the co – printing of drug/polymer blends with the drug substance embedded in the polymeric structure ■



FORTHCOMING EVENTS

OXFORD GLOBAL

Biologics Series

APR 2019	12th Annual Proteins & Antibodies Congress	London, UK
	6th Annual Peptides Congress	London, UK
	6th Biennial Biosimilars & Biobetters Congress	London, UK

Co-located Events

Genomics Series

MAY	2nd Annual Genome Editing USA Congress	Boston, USA
	2nd Annual Advances in Transgenic Technology USA Congress	Boston, USA
	Synthetic Biology USA Congress	Boston, USA
OCT	4th Annual Next Generation Sequencing & Clinical Diagnostics USA Congress	Boston, USA
	4th Annual Single Cell Analysis USA Congress	Boston, USA
	Industrial Synthetic Biology Congress	Munich, Germany
NOV	10th Annual Next Generation Sequencing & Clinical Diagnostics Congress	London, UK
	6th Annual Single Cell Analysis Congress	London, UK
	4th Annual Genome Editing Congress	London, UK
	Synthetic Biology Congress	London, UK

Co-located Events

Cell Series

OCT	4th Annual Cell & Gene Therapy Congress	London, UK
	7th Annual Cell Culture & Bioprocessing Congress	London, UK
	5th Annual Stem Cell & Regenerative Medicine Congress	London, UK
	Biobanking Congress	London, UK

Co-located Events

R & D Series

FEB 2019	14th Annual Biomarkers Congress	Manchester, UK
MAR 2019	2nd Annual Formulation & Drug Delivery USA Congress	San Diego, USA
	2nd Annual Inhalation & Respiratory Drug Delivery USA Congress	San Diego, USA
MAY	4th Annual Formulation & Drug Delivery Congress	London, UK
	3rd Annual Inhalation & Respiratory Drug Delivery Congress	London, UK
	3rd Annual Advances in Immuno-Oncology Congress	London, UK
JUN	19th Annual Drug Discovery Summit	Berlin, Germany
	6th Annual Discovery Chemistry & Drug Design Congress	Berlin, Germany
	2nd Annual Microbiome Discovery & Development Congress	Berlin, Germany
	2nd Annual Precision Medicine Congress	Munich, Germany
OCT	5th Annual Drug Discovery USA Congress	San Diego, USA
	3rd Annual Biomarkers & Precision Medicine USA Congress	San Diego, USA
	Advances in Immuno-Oncology USA Congress	San Diego, USA

Co-located Events

PharmaTec Series

SEP	16th Annual Pharmaceutical IT Congress	London, UK
	2nd Annual Artificial Intelligence in Drug Development Congress	London, UK
	Digital Health and Digital Technologies Congress	London, UK

Co-located Events

Biotech Investment Series

MAY	Biotech Investment Showcase & Start Up Slam	London, UK

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