

12<sup>th</sup> World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology

## **VIRTUAL** MEETING LIVE event from 11 - 14 May 2021

# **ABSTRACT** OVERVIEW



in combination with



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#### POSTER SESSION ON WEDNESDAY, 12 MAY 2021

#### Cellular drug transport

Establishing an in vitro cornea model of Dry Eye Disease – wound healing and anti-inflammatory effects of serum on HCE-T cells

Isolation and characterization of porcine nasal epithelial cells for generation of novel immortalized cell lines with organotypic properties

#### Dermal preparations

Alkanediols as alternative preservatives for dermal formulations

Arabinoxylan and carboxymethyl cellulose composite blend films for antibiotic delivery to infected wounds

Assessment of antimicrobial and cytotoxic activity of Eucalyptus globulus

Bioactivity of Echinacea purpurea extracts, a putative cosmetic ingredient

Biosensors with and without carbon nanotube functionalization for monitoring skin pH and hydration in non-clinical settings: preliminary study

Characterization of topical formulations and skin penetration via confocal Raman microscopy

Cyclic siloxanes interact with human skin - evidence from spectroscopic, thermal and microscopic studies

Development and validation of HPLC method for determination of spironolactone in lamellar liquid crystal-based topical emulsions

Development of lipid nanoformulations for improved treatment of scalp psoriasis: a fluocionolone acetonide case study

Dissolving Microarray patches containing Artemether-Lumefantrine: Development, bioavailability and antimalarial studies in Plasmodium yoleii

Dressings as a protective barrier to prevent skin lesions in Healthcare Professionals during the COVID-19 pandemic: Tribological lubricant characterization

Encapsulation of Hesperetin Particles in an O/W Emulsion

Evaluation of the comparability of skin penetration analysis by confocal Raman microspectroscopy

Foamability and Foam Stability of Mono- and Diacylphosphatidylcholine Mixtures

Formulation and characterization of chitosan-based films as topical dressings

Influence of microemulsion and glycerol on minoxidil release from carrageen gel

Investigation of physiological skin parameters influenced by penetration enhancer methods

Methods to assess protein binding of drugs in the interstitial fluid

Monitoring of cytokines and eicosanoids in acute wounds

Multifunctional membranes based on β-glucans and chitosan useful in wounds treatment

Optimization of an 8% ciclopirox base and olamine-soluble polypseudorotaxanes nail lacquer for onychomycosis treatment.

Poly(lactic acid) electrospun fibers loaded with triterpene extract for wound dressing

Silk sericin: from textile waste material to dermatological and cosmetic applications

Study of acne patient adherence to topical and oral medication

The Biopolymer Bacterial Nanocellulose as a Platform for Nail Applications

The development of a hand-sanitizer preparation containing plant-based APIs

The influence of the preparation method to the moisturizing properties of a new hyaluronic gel

The spreadability and consistency of semisolid dermal formulation – correlation between extensometry and penetromety

Topical acidification of the skin: contribution of alpha and beta hydroxy acids

Transformation/metamorphosis of topical film-forming systems upon application: contribution of tribological studies

#### Gene delivery

Glycogen-based cationic nanovectors for siRNA delivery to cancer cells

GMP-compliant sponge-like dressing containing MSC lyo-secretome: proteomic network of healing in a murine wound model

Lipid nanoparticles encapsulating miR199/204 to revert drug resistance in metastatic melanoma

Lipid-based nanocarriers for co-delivery of oligonucleotides and chemotherapeutics to glioblastoma

Modified β-cyclodextrin-based nanoparticles mediated delivery of siRNA for Huntingtin gene silencing

Polymeric Nanoparticles Based on Tyrosine-Modified, Low Molecular Weight Polyethylenimines for siRNA Delivery

Translating thin film rehydration method for cationic liposome manufacture to a microfluidics system for a liposomal pDNA vaccine against SARS-COV2

#### Green and sustainable pharma

Hydrolyzed keratin: a versatile excipient for pharmaceutical applications?

#### Nanoparticles and vesicles

A quality by design approach for liposomes production by innovative method using supercritical fluids: which parameters use to obtain good physicochemical characteristics?"

A mixture of non-ionic and cationic surfactants for the formulation of nanostructured lipid carriers (NLCs)

API-loaded ApoA1-reconstituted high-density lipoprotein nanoparticles formulated by novel preparation technique

Biodynamers, pH-responsively degradable and fluorescent protein-like polymers for drug delivery

C. elegans as a model of type 2 diabetes to evaluate free and encapsulated quercetin

Characterisation of anionic and cationic amphiphilic cyclodextrins as novel materials for siRNA delivery

Characterization and evaluation of antibacterial activity of artemisinin and quinacrine loaded phospholipid vesicles

Cytotoxicity and cellular uptake of Cannabis sativa extract loaded nanostructured lipid carriers on hCMEC/D3 cells

Design of Dye and SPION loaded Lipid Nanocapsules for dual detectability

#### POSTER SESSION ON WEDNESDAY, 12 MAY 2021

Design of solid pwder particles for a needle-free injection Design of STING ligand nanoparticles for improved cancer immunotherapy Development and optimization of hydrogels loading PLGA-nanoparticle for wound healing Development of a dissolution test method for nanoscale drug suspensions Development of cargo-free nanostructured lipid carriers in alginate microspheres for colon cancer targeting and treatment Development of molecularly imprinted nanoparticles for targeted delivery of betamethasone Development of optimized protocols for the manufacturing of non-functionalized and functionalized poly(lactic-coglycolic) acid nanoparticles Development of PEGylated Solid Lipid Nanoparticles as Vectors for Gene Therapy Development of Pravastatin Nanoparticles for Atherosclerosis Therapy Differences in Cytokine Release of Human Leukocytes by Stimulation with different Toll-like Receptor Agonist loaded **PLGA** nanoparticles Different serum, different corona! How reliable are in-vitro nanoparticle uptake experiments conducted in the presence of bovine serum? Effects of penetration modifiers on in vitro skin permeation of idebenone from lipid nanoparticles Effects of solid lipid and liquid lipid ratios on physical properties of stearylamine-containing nanostructured lipid carriers Enhancing mitochondrial function using NO releasing nanoparticles; a potential approach for therapy of Alzheimer's disease Evaluation of co-encapsulated fisetin and cisplatin into liposomes in vascularized tumor models Evaluation of the biodistribution of PS- and PG-enriched liposomes and the impact of PEGylation by fluorescence imaging (FI) Evaluation of the employment of INVITE nanomicelles in the prevention and maintenance therapy of diabetic retinopathy Fusogenic liposomes for the delivery of ion channels into cell membranes; A potential platform for the treatment of channelopathies How suitable is folic acid as targeting ligand in active targeting of breast cancer by nanocarriers? Improvement of therapeutic efficacy of bicalutamide by incorporation into novel drug delivery systems In vitro appraisal of polymeric nanoparticles designed for oral delivery of GLP-1 analog- Liraglutide In vitro biocompatibility of transferosomes, ethosomes and transethosomes In vivo efficacy of bevacizumab-loaded albumin nanoparticles in the treatment of colorectal cancer Indocyanine Green based polymeric nanoparticles, an encouraging strategy for simultaneous cancer imaging and therapy Influence of poly(vinyl alcohol) as emulsifier on the polymorphic behavior of tripalmitin nanoparticles Loperamide loaded into poloxamer-coated nanocarriers: impact over solubility and intestinal cellular transport LPS decoration on nanoparticles improves the outcome of cancer immunotherapy therewith Modified polymeric nanocarriers for targeted drug delivery Nanocarriers as a strategy to improve the anti-inflammatory activity of Sambucus nigra L. extract Nanocrystal Manufacturing Using Controlled Expansion of Supercritical Solutions (CESS) Nanoencapsulation of Buddleja globosa bioactive compounds in polymers derived from methacrylic acid

Nanoparticle in liposomes for the delivery of antimicrobials in multiple drug resistant bacteria Natural polyglycerol ester-based low energy nanoemulsions prepared with specialty seed oils for dermal application Oligomer-Stabilized Calcium Phosphate Nanoparticles for siRNA Delivery to Brain Tissue Optimization of lipid nanoparticles formulation for nose-to-brain delivery using the guality by design (QbD) approach Particle size distribution of cilostazol obtained by liquid antisolvent precipitation (LASP) and its combination with ultrasound Pharmacokinetic and biodistribution studies of novel patent protected pyrazologuinolinones formulated as nanosuspension Polymeric nanoparticles as carriers for the delivery of pomegranate peels extract Preparation and Characterization of Gemcitabine-ester loaded PLGA-nanoparticles Preparation of superparamagnetic nanoemulsions by premix membrane emulsification QbD development of long-circulating liposomes co-encapsulating Doxorubicin and Simvastatin for enhanced antitumor activity Quality by Design-based development process for preparation of liposomal formulations Quantitative AFM measurements reveal hidden changes in gelatin nanoparticles induced by preparation, and drug load Reversal of liver fibrosis using collagenase loaded collagen binding nanoparticles; elucidation of the underlying toxicity Role of Green Honokiol-loaded Transferosomes on a Key Player of The Tumor Microenvironment Selective dissolution approach as analytical tool for individual particle size analysis of a drug combination nanosuspension Self assemblies of azacitidine prodrugs : an innovative therapy against myelodysplastic syndromes Self-assembled folate-targeted nanoparticles for dual-responsive release of Doxorubicin in cancer cells Self-assembling nanoparticles: application of a thermo-responsive hyaluronic acid conjugate for osteoarthritis Silk Fibroin Nanoparticle Functionalized with Arg-Gly-Asp cyclopentapeptide: Tumor-specific Active Targeting Silk Fibroin Nanoparticles to Redirect Immunity Against Cancer Solid lipid nanoparticles made of glycine and fatty alcohols for the minocycline nasal administration Spray drying of API nanosuspensions: Important aspects for successful formulation and process development Squalene-Near IR dye nanoassemblies targeting mitochondria with theranostic properties Stacking as a Key Property for Creating Nanoparticles with Tunable Shape: the Case of Squalenoyl-Doxorubicin Study of liposomes' uptake by the placental barrier using complementary in vitro and ex vivo models Supercritical Fluid-Processed Liposomal Amphotericin B: Characterization and Pharmacokinetic study Surface modification of nanostructured lipid carriers by maintaining particle size and hydrophobicity Surface-modified curcumin nanocrystals Sustainable Preparation Methods for the Encapsulation of Anti-inflammatory Small Molecules in Nanoparticles The impact of serum source on the reliability of in-vitro nanoparticle-cell uptake experiments

TPGS polymeric micelles for poorly soluble drug delivery

Transfer of lipophilic drugs from nanoemulsions into lipid-containing alginate microspheres

Tumor penetrating gangliosilated liposomes to improve anticancer efficacy in cancer hypoxic area via M2 TAMs surface association 5 Ultrasound parameters for the determination of phospholipid transitions in liposomal dispersions

Visible-Light-Induced Click Chemistry for Nanoparticle Modification

#### Parenteral delivery

Dose adaption of TGF  $\beta$  3 on implant for the reconstruction of tendon-to-bone junctions

Impact of oil phase selection on long-term stability and in vitro release of curcumin from PEGylated nanoemulsions

Manufacturing of Injectable Implants for Drug Delivery

PLGA-based in situ forming implants for controlled release of rilpivirine

#### Protein formulation and aggregation

Application of Stability Screening Tools for Protein Formulation Development Can Polysorbate 20 Influence the Effect of Trehalose or Urea on a Monoclonal Antibody? Development of the bacteriocin, lacticin 3147 from Lactococcus lactis, into an antibiotic Excipient Combinations to reduce protein viscosity Low-in-nanoparticulate-impurities sucrose for biopharmaceutical formulations Mitochondrial calcium rise in thapsigargin-treated THP-1 monocytes is independent of NLRP3 inflammasome activation Novel design of bioresponsive tri-functional peptide Novel Developmental Surfactant for Improved Protein Stabilization Optimization of IgG dry powder formulation stability based on polyol-sugar mixtures using a rational DoE Photocrosslinked hydrogels: promosing carriers for maintaining protein stability Spray drying of monoclonal antibodies Temperature-ramped molecular dynamics simulations to select aggregation-resistant antibodies Towards a mechanistic understanding of bevacizumab stabilization with Hydroxylpropyl ß-Cyclodextrins

#### Quality assurance

Perception of Risk Among Pharmaceutical Stakeholders Risk Assessment in Pharmaceutical Processes Software Validation in the Pharmaceutical Industry Understanding Risks in Pharmaceutical Processes

#### Quality controll and PAT

A novel approach to determine the granule density of milled ribbons using multi-stage air classification combined with dynamic image analysis

Automated online process control and regulation in fluid bed granulation Development and validation of uv-vis spectroscopic method of assay of carbamazepine orally disintegration tablets (ODT) Development of a discriminating dissolution method for an ASD-based formulation using an AQbD approach Does Magnesium Stearate influence the electrical charge of lactose powder? Dynamic study of loss on drying in a continuous wet granulation process HME process optimisation with in-line UV-Vis spectroscopy and machine learning algorithm PAT monitoring of coating pan by nir: pls method calibration approach Prediction of in vitro dissolution by Artificial Neural Networks and integrated modeling of continuous manufacturing Quantification of Tablets Containing Multiple APIs Using Transmission Raman Quantitative NMR for the determination of residual solvents in silica-based drug delivery systems The Value of Pharmacopeial Reference Standards: Uncertainties, associated guard bands and secondary reference standards

#### Transdermal delivery

Advanced corneotherapy with lipid nanoparticles

Characterization, permeation, recovery, and histological study of a topical Keterolac-formulation across vaginal mucosa

Combination of Fentanyl with Antidote inTDS as an Anti-Abuse-Strategy - Misuse Simulation Methods for Fentanyl-TDS

Comparison Study of Skin Penetration Testing Methods

Curcumin encapsulation in protein-stabilized nanoemulsions for a topical application

Development and evaluation of azithromycin-loaded niosomes for transdermal delivery

Development of soft vesicular systems for dermal and transdermal delivery of non-psychoactive cannabinoids

Enhanced skin permeation of some drugs using ionic liquid based on the pharmaceutical additives

Ex Vivo Evaluation of Modulated Flavanones for the Intended Use in Topical Formulation

Hair follicle targeting with nanocrystals: influence of the vehicle on the penetration efficacy

Investigation of Nanostructured Lipid Carriers (NLC)-Based Gel for the Transdermal Delivery of Ibuprofen: Preparation, Characterization, Textural Properties and Ex Vivo Skin Permeation Studies

Monitoring drug penetration with PEGylated emulsifiers as penetration enhancers by confocal Raman spectroscopy

Silicone and polyacrylates as a matrix for transdermal delivery: influence of polymer type on drug diffusion

SmartFilms ® as a novel transdermal drug delivery system

Structure and adhesiveness of various PSA-based DIA type transdermal delivery systems with indomethacin

Testing the efficacy of different penetration enhancers for dermal delivery of poorly soluble drugs – a case with sertaconazole nitrate

The influence of innovative versatile polymers in skin delivery: formulation of diclofenac sodium and permeation study

#### POSTER SESSION ON THURSDAY, 13 MAY 2021

#### Advanced drug delivery systems

3D Bioprinted Scaffolds for controlled release of Mesenchymal Stem/Stromal Lyo-secretome in Bone Regeneration 3D-Printing of paracetamol tablets by fused deposition modelling A comparative study of PLGA microparticles loaded with micro-sized and nano-sized dexamethasone A novel composite nanosystem as a potential tool for the local treatment of glioblastoma Aerosolized Nanoparticles for Nose to Brain Drug Delivery NTBDD Bioinspired contact lenses functionalized with cytosine for affinity-driven loading and release of transferulic acid Carbon Quantum Dots encapsulation in liposomes for lung delivery in Coronavirus infections Characterization of advanced Proticles – a new generation of drug delivery systems Characterization of printlets obtained from photoreactive dispersions by digital light processing (DLP) 3D technology Characterization of sonochemically prepared bovine serum albumin microcapsules using different plant oils as core component Chitosan and Chitosan-Lipid Hybrid Nanoparticles as Promising Carriers Relieve the Immune Suppressive Tumor Microenvironment in Triple Negative Breast Cancer Coating of Alginate Aerogel Particles in a Wurster Fluidized Bed for Drug Delivery Colon delivery of hydrophobic drugs by colloidal inulin cyclodextrin bioconjugates Comparison of PEGylated and non-PEGylated Proticles An in vitro and in vivo study Developing predictive models for optimising the properties of chitosan nanogels Development and Characterization of Mucoadhesive Films Containing Metronidazole for Vaginal Drug Delivery Development of a mucoadhesive, anhydrous and self-emulsifying vaginal base for compounded medications Development of liposomal formulations to increase the stability of cysteamine, a natural bioactive compound Erlotinib solubility measurements on aqueous and organic solutions: preliminary step towards new supersaturating delivery systems Eudragit® RL/RS-coated drug delivery systems based on shape memory poly(vinyl alcohol) for gastric or vesical retention Evaluation of methods to determine the encapsulation efficiency of curcumin in suspoemulsions Hot melt extrusion paired fused deposition modeling 3D printing techniques for fabrication of ketoprofen films for topical delivery Hyaluronic Acid Nanogel for Protein Delivery System Importance of combining particle size analysis techniques to characterize self-assemblies Improved In Vivo Photoprotective Activity of Ferulic Acid-loaded w/o/w multiple emulsions In vitro drug release of anthelmintic moxidectin-loaded lipid microparticles Lipid coated silica nanoclusters: nanocarriers for poorly soluble drugs Lipid nanocapsules loaded in alginate microcapsules for a pH-responsive controlled release system

Lipid nanoparticles for vaginal delivery of progesterone Lipid nanoparticles with modified nanostructures Local delivery of plant extracts by electrospun fibers for pharmacomicrobiomic treatment of periodontitis Membrane interactions and uptake of an amphipathic cell- penetrating peptide, as a delivery system for miRNA Microfluidic preparation of iRGD peptide functionalized solid lipid nanoparticles for targeted brain delivery New dextran/polyethylenglycol-based cryogels for biomedical applications New nanoparticle systems for co-delivery of paclitaxel and etoposide prodrug obtained using the nab-based technology Nanofibrous proteolytic mats for wounds and burns sensitive debridement Novel 3D Design Concept for the Development of Individualized Dosage Forms Novel cellulose-based particles as an innovative, adsorptive carrier material for Solid-SNEDDS development Ocular administration of Loteprednol Etabonate: Self-Assembling Nanomicelles to Improve Drug Ocular Efficacy Physicochemical and biological characterization of electrospun fiber mats for the use as innovative substrates for 3D in vitro tissue models Physicochemical characterization of oxidized cellulose sulfate based hydrogels Polymer blends for hot melt extruded and injection molded controlled drug delivery systems Polymorphic transitions in lipid microparticles loaded with the anthelmintic drug moxidectin Preparation and Characterization of Vaginal Delivery of Voriconazole Loaded Mucoadhesive Organogels Preparation by microfluidic technique of solid lipid nanoparticles as promising proteins brain deliver systems. Rose-Bengal loaded transfersomes for melanoma treatment: in-vitro and ex-vivo evaluation Satureja montana L. essential oils: chemical profiles/phytochemical screening and O/W NanoEmulsion antimicrobial activity Selected aspects of orodispersible minitablets (ODMTs) preformulation Self-assembling nanoparticles: a thermo-responsive hyaluronic acid conjugate as a drug delivery system for osteoarthritis Square shaped microcontainers improve in situ colonic mucoadhesion and absorption of amoxicillin in rats Systematic investigation of the influence of filament drug loading and tablet infill percentage on in vitro drug release from 3D printed dosage forms Targeted nanobubbles as a theranostic tool to handle complement-mediated vascular thrombosis Two-component perivascular drug delivery system for the prevention of vein graft failure

#### Advanced therapy medical products

Anticancer properties of novel phosphonate betulin derivatives for drug delivery system in breast cancer treatment Cytotoxic activity of 3-O-diethoxyphosphoryl-28-O'-propynoylbetulin on human ovarian cancer cell line Design and evaluation of short cationic amphiphilic peptides with selective anticancer activity Emerging Treatments for Retinitis Pigmentosa GMP validation of production process for freeze dried secretome from bone marrow mesenchymal stem/stromal cells

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Induction of breast cancer cell death by an acetylenic derivative of betulin phosphate

Microparticulate poly(vinyl alcohol) hydrogel formulations for embedding and controlled release of polyethyleimine (PEI)-based nanoparticles

Silk fibroin/hyaluronic acid sponges that regulate the release of SDF-1a for tissue engineering

Technological Development of Freeze-dried Mesenchymal Stem Cell Secretome Formulations

#### Controlled drug delivery

3D printed PLGA implants loaded with ibuprofen – Proof of concept

A new biodegradable copolyester, poly(-caprolactone-co-butylene succinate), as matrix former for controlled release of drugs

An evaluation study of pharmacokinetics and anti-adhesion barrier efficacy of oxaliplatin-PLGA microparticle-loaded hydrogels for colorectal cancer treatment in Rats

An innovative combination of technological platforms screening for extended-release of a highly soluble drug

Clotrimazole-loaded sodium caseinate-poloxamer microparticles for oral candidiasis treatment

Co-processed starch/mannitol as a promising excipient for direct compression of controlled release tablets

Could antioxidant-liposomal gels improve the cochlear implant surgery?

Cross-linked potato starch matrix tablets for controlled drug delievry

Development and characterization of pharmaceutical filaments for 3D print of solid dosage forms

Development and optimization of hydrogels loading PLGA-nanoparticle for wound healing

Development of SR matrix tablet containing a new GPR40 agonist for first-in-human clinical trial

Dissolution Studies with 3D-printed Intravesical Inserts in Novel Biopharmaceutical Bladder Model

Doese Independent Drug release from 3D Printed Oral Dosage Forms

Drug loaded filament development for 3D printing dosage forms. Application of percolation theory

Drug micro carriers with a hyaluronic acid corona toward a diffusion limited aggregation within the vitreous body

Dry granulation vs direct compression: Formulation of PVA based sustained release tablets

Dynamic changes of the pH inside and outside PLGA implants prepared by HME

Effect of drug load in 3D printed systems with HPMC and metformine

Fabrication and Characterization of Budesonide Loaded pH and Time Dependent Nanofiber Drug Delivery Systems

Formulation and characterization of double-layered ranitidine-diclofenac sodium tablets for improved NSAID therapy

Formulation of core-shell microspheres for the delayed pulsed release of protein

Formulation of sustained release lipid-based matrix system for vaginal delivery using the tween-screw hot-melt extrusion method

How drug milling affects the key properties of cochlear implants loaded with dexamethasone and dexamethasone sodium phosphate

Impact of the HME manufacturing process on the burst release of ibuprofen from PLGA implants

Importance of the diameter of PLGA implants for system swelling and drug release

Importance of the sampling procedure and drug loading for ibuprofen release from PLGA implants Improved Fluidised Bed Coating Scalability of Sustained Release Microparticles using the MicroCoatTM Technology Improved mechanical strength of floating tablets via in situ alginate crosslinking In situ forming oleogels as a long-acting depot formulation In Vitro Evaluation of Telmisartan Loaded PCL/Collagen Small Diameter Vascular Grafts In vitro modified-release of the cytotoxic agent, 4-[4,4-Diphenyl-4-(1-tricyclo[3.3.1.13,7]decyl)butyl)-1-methylpiperazine, from matrix tablets In vitro modified-release studies of 1-methyl-4- $\{3-[4-[\alpha-(1-adamantyl)phenylmethyl]phenyl]propyl\}piperazine matrix tablets$ In vitro modified-release studies on bupropion hydrochloride tablets using various Eudragit polymers In vitro modified-release studies on naltrexone hydrochloride from matrix tablets containing Eudragit® L100-55 Iontophoresis vs. chemical penetration enhancers towards improved dermal drug delivery: A case study with curcumin Is PLGA 503H a potentially suitable matrix former for 3D printing of controlled release implants? Long-acting implantable dosage forms containing paliperidone palmitate obtained by 3D Printing Manufacturing of defined porous silica aggregates for the production of tailored dosage forms Mesoporous silica as a universal platform for continuous manufacturing of multi-API formulations Metformin chontroitin sulfate salt preparation and cytotoxicity evaluation Monitoring the distribution and release of dexamethasone and dexamethasone sodium phosphate within silicone matrices using Raman imaging PLGA implants for controlled dexamethasone delivery: Further insight into the drug release mechanisms Polymerized Ionic Liquids (PILs)-based Hydrogels as Innovative Drug Carriers in Controllable and Individualized Dosage Forms Printability of personalized 3D printed tablets: Influence of formulation and process parameters Programmable Drug Release from Prodrug Suspension Pulsatile release from high dose lipid press-coated tablet Release from PLGA matrices prepared by hot melt extrusion with different dexamethasone particle sizes Release Profiles of Coated Matrix Tablets Developed Under Quality by Design (QbD) Methodology Rheological and mucoadhesive properties of vegetable extract with potential use in pharmaceutics as controlled release and bio-adhesive excipient in inflammatory bowel disease. Rheology of ibuprofen - PLGA blends Robustness of drug release from cross-linked potato starch-based controlled release tablets Screening of pharmaceutical polymers for FDM 3D printing of patient-tailored tablets Silicone matrices for controlled drug delivery to the inner ear: Combining dexamethasone and dexamethasone sodium phosphate Study of novel chitosan-based hydrogel as drug carrier for antifungal drug caspofungin acetate. Sustained release matrix tablets based on starches: Impact of the starch nature and chemical modifications Synthesis of a Redox-Responsive Blend of Polymers and Application to the Nanoencapsulation of Retinol

The effects of polymethacrylate polymers as carriers on the release of simvastatin from SMEDDS-based drug delivery systems Thiamine-poly(anhydride) coated zein nanoparticles for in vivo delivery of oral insulin Ultrasound-induced release of Rhodamin B from polylactic acid nanoparticles Xanthan-mannitol, a new directly compressible co-processed excipient for controlled release of melatonin

#### Oral delivery

3D powder bed printing of lactose tablets

3D printed capsules for colon targeted drug delivery

3D Printed Microdevices for Oral Drug Delivery

3D printing of abuse-deterrent and alcohol resistant formulations with modified release properties

A customized screening tool approach for the development of a self-nanoemulsifying drug delivery system (SNEDDS)

A novel carrier for the formulation of amorphous solid dispersion and solubility enhancement of poor water soluble drugs

A systematic approach for assessing the applicability of different types of nasogastric and PEG tubes for the administration of coated pellet formulations

Advantages of Using a Directly Compressible Starch in the Formulation and Scale-up of Ibuprofen Tablets

Application of Artificial Intelligence to Drug Product Development: a Quality-by-Design case study

Application of NUTRIOSE® FB06D, a soluble dextrin, as dry binder in tablets prepared by direct compression

Cellulose nanocrystals: A potential hydrogel drug carrier and nanocomposite for reinforcement of hot melt extrudates

Cochleate nanoparticles for the oral administration of Amphotericin B for leishmaniasis treatment

Compaction Analysis Simplified with the Gamlen Dashboard Software

Compaction behavior of freeze-dried trehalose

Comparison of In Vitro Lipolysis of Bosentan-Loaded Lipid Based Formulations in Fasted State Biorelevant Media Comparison of the compaction properties of granulated and spray-dried lactose with and without a disintegrant Compression Profiles of a Directly Compressible Starch using Compaction Simulation and High-Speed Tablet Press Conversion of Liquid Pharmaceutical Formulations to Powders by using Syloid® XDP Mesoporous Silica Gel Development and Evaluation of Ready-to-Use Hot Melt Coating / Formulations for Taste Masking Development and In Vitro Characterization of Bosentan-Loaded Self-Nanoemulsifying Drug Delivery System Development of structured orodispersible film templates for the improved drug loading in inkjet printing Direct compression of probiotics: A screening study

Direct cyclodextrin based powder extrusion 3D printing for one-step production of BCS Class II drug loaded tablets Effect of lipid composition of SLN on oral permeability of a new BCS class IV drug: Witepsol® versus Gelurcire® Effect of Simulated Intestinal Media Composition on Solubility and Permeability of Cinnarizin, Dipyridamole and Fenofibrate Emulsification speed of amphiphilic starches Encapsulation method for oral delivery of a complex mixture of microorganisms

Enhanced Loading Efficiency and Mucoadhesion Properties of Gellan Gum Thin Films by Complexation with Hydroxypropyl-β-Cyclodextrin

EVA as a matrix excipient for personalized 3D printed tablets using HME and FDM

Evaluation of Partially Pregelatinized Starch in a Continuous High Shear Wet Granulation Process

Exploratory study of Aripiprazole-Adipic acid Cocrystals produced by Hot Melt Extrusion Techniques for improved Solubility and Dissolution rate

Fabrication of ondansetron 3D printed orally disintegrating printlets (ODP) via selective laser sintering

Flow Properties, Morphology and Compression Characteristics of a Directly Compressible Starch Before and After Feeding through Loss in Weight Continuous Feeder

Formulation and characterization of tablets with dry birch leaves extract

Formulation of essential oil tablets through microencapsulation and subsequent compression

Formulation of orodispersible carbamazepine/hydroxypropyl-β-cyclodextrin tablets with five-in-one high functionality excipients for direct compression

Formulation of tablets containing mesoporous silica nanoparticles loaded with pramipexole

Furosemide: In vitro modified-release studies from ulvan tablets

How do Orodispersible Tablets Behave in an In Vitro Oral Cavity Model

Impact of glycerol on the coil/helix transition of gelatin and the viscoelastic behavior of soft capsule shell formulations

Impact of phospholipids on Prediction of Solubility Limited Fraction Absorbed in Physiologically Based Biopharmaceutics Modelling

Impact of Surface Properties of Core Material on the Stability of Hot Melt Coated Multiparticulate Systems

Improving treatment in maple syrup urine disease patients with personalized isoleucine printlets (3D printed tablets)

In vitro models of the intestinal mucosa for testing anti-inflammatory nanomedicine

In vitro Permeability Comparison of HPC-based Itraconazole Nanosuspensions

Influence of anaesthesia and capsule size in the gastric emptying of non-disintegrating capsules in rats

Influence of binder critical material attributes of hydroxypropyl cellulose in high-shear mixing

Influence of the cooling regime on the gel elasticity of soft gelatin capsule shell formulations

In-use Stability Improvement of the Moisture Sensitive Drug Ranitidine HCl Through Excipient SelectionIn-use Stability Improvement of the Moisture Sensitive Drug Ranitidine HCl Through Excipient Selection

Investigation of the Impact of Formulation and Processing Conditions on Drug Release from An Aqueous Ethylcellulose Dispersion

MicroCoatTM for the development of Sustained Release Fixed Dose Combination Products in Microparticle-Filled Straw for Patients with Dysphagia

Microcontainers protect the prodrug valaciclovir from degradation in the intestinal environment

Mitigation of Sensitive API Degradation through Lipid-based Formulation and Soft Gelatin Capsule

Mucus-permeating nanocarriers for oral delivery of insulin. From in vitro to in vivo

Novel approach to treat genotype-specific hypertension using a riboflavin/amlodipine polypill

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#### POSTER SESSION ON THURSDAY, 13 MAY 2021

Novel authentication technology using molecular tags as a PCID in solid oral dosage forms

Oral administration of Dalargin: Improvement of peptide stability by cyclodextrin grafted ammonium chitosan

Pharmaceutical development of an orally disintegrating tablets of carbamazepine using the SeDeM diagram tool

Physico-chemical alterations of saliva caused by radiation therapy in head and neck area

Polymeric-based nanocarriers: a study of their mucus permeating properties

Preparation of multiple-unit tablets containing enteric-coated pellets with diclofenac sodium using novel calciumphosphate-based starter pellets

Production of Different Nanoemulsions with High Energy Method for Oral Drug Delivery

Scaled-up production and tableting of grindable electrospun fibers containing an oral antisense oligonucleotide

Scaled-up solid formulation of living anaerobic bacteria for oral delivery using electrospinning

Stereolithography (SLA) 3D printing of an antihypertensive polyprintlet: Case study of an unexpected photopolymerdrug reaction

Study of Formulation and Manufacturing of Fixed dose Combination ER and Glipizide IR Bilayer Tablets

Tablet formulation studies with co-processed excipients for direct compression

The influence of filament composition on the properties of 3D printed tablets with bicalutamide

Understanding the Physical Chemistry of the Buffering Action by Bicarbonate: Prospects in Enteric-Coated Dosage Form Development

Use of pea starch maltodextrins in nutraceutical formulations

#### Pediatric and geriatric drug delivery

3D printed orodispersible films loaded with a thermosensitive and bitter drug substance

Acceptability of a sublingual drug formulation for respiratory tract infections in children aged 3 to 5 years

Adherence and acceptability of an oral antibiotic used for the prevention of pediatric urinary tract infection in Japan

Characterization of micro-extrusion 3D printing for the production of dose homogeneous paediatrics orodispersibles PrintletsTM

Development of Compartmental Films for Simplified Administration

Development of orodispersible films as dosage forms for pediatric patients

Extrudate materials via hot melt extrusion mask the bitter taste of drugs used for neglected tropical diseases

Fixed-Dose Combination coated mini-tablets designed for the management of GERD in paediatric patients

Hydroxypropyl-beta-cyclodextrin as a multifunctional excipient in orodispersible films

Rapid Dissolving Capsules for the Administration of Enteric Coated Prednisolone Microparticles

Review of methods for TPMT biomarker genotyping in the personalisation of thiopurine therapy

Safety and Efficacy characteristics of pharmacists recommended medications for paediatric patients

Technological approaches for extemporaneous preparation of oral pediatric formulations with sildenafil citrate

#### **Regulatory affairs**

A National System for Medical Device Incident Reporting

Defining a strategy for successful compliance to the new Medical Device Regulation

Drug utilization research on medication adherence: a case of fixed versus free combination of antihypertensive drugs

Facilitating patient access to quality medicines: Associations between USP Monograph Standards, ANDA Approval and Prescription Drug Costs

Medical Devices Directive in the European Union adapting to the EU Regulations

Medicinal substances meet medical devices: Drug-Device Combinations and their neighbours

Perception of Rare Diseases and Orphan Medicines

Perspectives in quality control of cannabis for medicinal purposes

Regulatory Science Research in Pharmacovigilance - The Experience of the Malta Medicines Authority

The impact of the pharmaceutical legislation on market penetration of biosimilar drugs: a drug utilization study

#### **Technical Innovations**

A new method to produce high-dose loaded dissolving microarray patches

Gentle Drying for Probiotic Products

Inhibition of bacterial biofilm formation in biomedical device after poly(methylmethacrylate)-co-dimethylacrylamide plus silver nanoparticles coating

Simultaneous estimation of naltrexone and bupropion hydrochloride in a binary mixture using UV spectrophotometry

The ISOLPHARM project: proof of concept of no-carrier added radioisotopes production and development of innovative radioconjugate for cancer therapy

Track-and-Trace: Novel Anti-Counterfeit Measures using Combined 2D-3D Printing Technologies

#### Veterinary

In-vitro evaluation of organogel based systems for veterinary use

Production, characterization, and in vitro efficacy of canine and equine lyo-secretome injectable formulation in regenerative medicine

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#### POSTER SESSION ON FRIDAY, 14 MAY 2021

#### Bioavailability and absorption enhancement

#### Absorption profile of oleocanthal in rats

Amorphous solid dispersions of cannabidiol with an increase of the aqueous solubility: influence of the carrier, the hot melt extrusion parameters and the use of a crystallization inhibitor

Correlation of experimentally determined lipophilicity with in silico blood-brain permeation of new succinimide derivatives

Development of prednisolone containing in situ gelling ophthalmic formulations

Effect of 2-hydroxypropyl-β-cyclodextrin on the solubility and permeability of psoralen and 5-methoxypsoralen

Effect of carrier type and surfactant concentration on the silymarin release

Evaluation of potential of amino acids for amorphization and dissolution improvement of carvedilol

Exploring NSAIDs bioavailability through THEDES-like liquid formulations

Fraction of Drug Absorbed Predicted from In Vitro Flux Measurements

Impact of mucoadhesive polymeric nanoparticles containing thermosensitive hydrogels on transcorneal administration of 5-fluorouracil

Improvement of fenofibrate aqueous solubility by using mesoporous silica impregnation under pressurized carbon dioxide

Improving the bioavailability of anti-tuberculosis drugs through deep eutectic systems

Influence of pharmaceutical polymers on the recrystallization and dissolution of nimodipine

Influence of the luminal perfusion rate in the determination of the effective intestinal permeability coefficient of levofloxacin

Marinosolv: A novel solubilization technology

Mesoporous silica: a solution for amorphous stabilization of poor glass formers

Microenvironmental pH-modified solid dispersions for improving dissolution rate of valsartan

Microwave-induced in situ amorphization: mechanistic studies and application in indomethacin solid dispersion

Novel biphasic lipolysis testing of nilotinib lipid based suspensions to predict in vivo performance

Permeability and biocompatibility evaluation of olopatadine hydrochloride viscous ophthalmic solutions using in vitro 3D corneal model

Predicting the performance of amorphous solid dispersions

Semi-volatile solvent mixtures: a novel approach to liquisolid systems preparation

Solid lipid nanocarriers to increase oral bioavailability of the peptide Leuprolide

Spray drying of amorphous solid dispersions (ASD): small scale screening of batches containing less than 50 mg API

Structural Dynamics and Diffusion in Solid Dispersions

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Synthesis of Novel Esters of Ciprofloxacin as Prodrugs for Improved Activity

Synthesis, physicochemical, biopharmaceutical and antimicrobial characterisation of Gatifloxacin n-butanoate, Gatifloxacin iso-butanoate and their ionic liquid salts as prodrugs for ocular drug delivery

#### Buccal and nasal delivery

Application of a Thermosensitive In Situ Gel of Chitosan-Based Nasal Spray Loaded with Tranexamic Acid for Localised Treatment of Nasal Wounds

Cytokine mediated inflammation in the oral cavity: Consequences on drug delivery

Design of Dextran Sulfate/Poly-L-lysine Nanogel for Ovalbumin delivery

Development of matrix for freeze-dried buccal vaccines

Development of mucoadhesive carrier systems for flavoring agents

Drug delivery strategies of Geraniol via nose-to-brain for the treatment of neuronal disorders

Formulation of Cardiospermum halicacabum extract loaded vesicles for nasal delivery.

In vitro release methodologies for nasal powder testing

Orodispersible films: A delivery platform for solid lipid nanoparticles?

Self-assembly multilayer films for buccal drug delivery: the impact of polymer cross-linking

Soluble Idebenone/Hydroxypropyl-B-Cyclodextrin Inclusion Complex for nasal administration

#### In vivo - in vitro correlations

A microfluidic human cornea model with dynamic dilution profile for in vitro drug absorption studies Cryopreservation using Natural Deep Eutectic Systems: A new tool for pharmaceutical applications Development of in vitro methods to evaluate the bitter taste using extra-oral bitter receptors Direct visualizing of immediate release tablet disintegration; in vivo and in vitro studies Formulation development of Telmisartan driven by flux measurements In quest of a suitable tool to assess drug and nanomedicine penetration into tumor spheroids Towards enabling IVIVC for orally inhaled products: PBPK modelling in dry powder inhaler development Usefulness of small scale biphasic dissolution experiments in estimating precipitation rates for input in PBPK modelling

#### Pharmaceutical manufacturing and engineering

3D nanofibrous scaffolds for tendon reconstruction

3D printing of personalized bioresorbable airway stents

3D Printing of tablets via fused deposition modeling - Focus on filament production

3D-printing of suppositories based on hard fat

A mixture design approach to optimizing spray-dried sericin-based formulations

An existing polymer reinvented: A new particle designed polyvinyl alcohol for coating applications

Analysis and optimization of a pharmaceutical production process by computer simulation

Applying optical coherence tomography during film coating development

Cellulosic dry binders in direct compression and roll compaction: effect of particle size and mechanical properties on tablet performance

Characterization and modeling of the viscoelasticity of pharmaceutical tablets

Characterizing powders flowability and triboelectric behavior for continuous manufacturing applications

Comparison of artificial neural networks and response surface methodology for efficient extraction of rosmarinic acid from Satureja kitaibelii

Comparison of the robustness of pellet film coating with and without in-process coating thickness evaluation

Continuous small batch OSD production @ 90 level

Correlation study between SeDeM diagram expert system tool and the rotary press simulator Styl'ONE applied to a Zidovudine's direct compression industrial tablets formulation.

Developing a framework to acquire the Rp-distribution of a spin-freeze dried product

Development of a spray dried enteric release form of essential oil prepared by co-spray drying polysaccharides and methacrylate.

Development of flow cell for in-situ visualization of dissolution processes in solid dosage forms

Direct compression of QESD crystallized metformin hydrochloride into high-drug-loaded tablets

Directly compressible spray dried powders obtained by dry coating using pharmaceutical mills

DoE Combined with Process Automation: a New Approach to Quality by Design

Does Tabletability Really Improve With Decreased Diameters of Tablet Punches?

Downstream processing of co-amorphous olanzapine

Effect of binder type and lubrication method on the binder efficacy for direct compression

Effect of dry ball milling process on curcumin crystals and its impact on physico-chemical and biopharmaceutical properties

Effect of exposure time on dimensional accuracy and dissolution rate of printlets fabricated with DLP 3D printer

Elastic properties of various Lactose grades during compaction, evaluated by ultrasonic-measurement system KIM

Enhancement of nifedipine solubility in supercritical carbon dioxide: role of co-solvents

Estimation of material hold-up in twin-screw granulation

Evaluation of dry granulation and tableting for a formulation with a high amount of herbal drug using Design of Experiment

Evaluation of hydroxypropyl cellulose (HPC) for aqueous-based film coating system

Fluidized and Spouted Bed for the preparation of directly processable amorphous solid dispersions

Formation of delta-mannitol by co-spray drying to enhance tabletability of paracetamol-mannitol formulations

Formulation and Characterization of Dissolvable PLGA-Loaded Microneedles for Ocular Drug Delivery

Formulation by design (FbD) applied for the identification of Critical Quality Attributes (CQAs) in process manufacturing of chitosan/glycosaminoglycan electrospun scaffolds

Formulation of Microorganisms to Tablets: How Different Process Steps Influence the Microbial Viability

How to improve dies loading when using poor flowable powders

Impact of incorporated APIs on material properties of hot-melt extruded amorphous solid dispersions

Impact of magnesium stearate and sodium starch glycolate on work of compaction, detachment and ejection stress of microcrystalline cellulose

Induced Jet Decay from Flow-Channel Streams

Influence of binder attributes on binder effectiveness in a continuous twin screw wet granulation process via wet and dry binder addition

Influence of degree of disorder on the inter-particulate bonding of lactose particles Influence of Mesoporous Silica (MPS) on Flow and Tribo-electrostatic Charging during Manufacturing Influence of Residence Time in Manufacturing Amorphous Solid Dispersions via Hot Melt Extrusion Inline Characterization of Dispersive Mixing Properties in Twin Screw Extrusion Investigation of a Model for Mixing Capacity in a Rotary Tablet Press Investigation of different mannitol grades and their performance on a dosing-disc capsule filling machine Investigation of the Dissolution Behavior of APIs for the Description of Inherent Solubility Properties Investigation on the dustiness of a binary powder mixture with a newly developed two-chamber setup Linking raw material characteristics and process settings to granule CQAs in continuous twin screw granulation Liquid Carbon Dioxide for the Production of Small Droplets Liquisolid systems with mesoporous silica based carriers: An investigation of flow and compaction properties Manufacture of amorphous solid dispersions by spray drying using a coaxial three-fluid nozzle Medications with novel 3D printed tactile patterns for patients with visual impairment Microfluidics and pharmaceutical devices by 3D printing Mind the Gap – Importance of Particle Distance During Drying of API-Nanosuspensions in a Fluidized Bed Process Next Generation Lipid-Based Excipients: Development of dry powders for inhalation via spray drying NIR spectroscopy as real time control tool for tablets manufacturing Optimization of processing times and temperature for 3D-printing of tablets Particle agglomeration analysis using PATVIS APA and deep learning Hard and Performance of anhydrous lactose in roller compaction PLGA nanoparticles manufacturing : comparison of ultrasound based production method Powder vs. granules - material characterization of binary powder blends and roller compacted granules for oral solid dosage forms Prediction of tablet weight variability based on process parameters and blend properties Preparation and characterization of electrospun polycaprolactone (PCL) tubular scaffolds for bioengineering of small-

Preparation of Submicron Particles via Spray Drying using Ultrasonic Nebulization and Electrostatic Precipitation

Printability of paracetamol-PCL filaments in FDM 3D process

diameter blood vessels

Processability of poly(vinyl alcohol) filaments prepared by hot melt extrusion for fused deposition modelling 3D printing

Production and characterization of Polydioxanone (PDO) fibers by centrifugal spinning for biomedical application

Production of Drug Nanocrystals Engineered using a High Throughput Microfluidic Reactor

Raman Microscopy of Low-dose Filaments For 3D Printing

Rational design of solvent-based ASD production processes

Spray Drying versus Freeze Drying of cytokines exemplified by the model protein CXCL8

Spray Flash Evaporation and its extension for the submicronization of Active Pharmaceutical Ingredients

Synthesis physicochemical and biopharmaceutical characterization of trimethoxybenzenesulfonamide (TMBS)- a new derivative of gallic acid

Tabletability of Oil-loaded Powders

Tackling ASD Flowability: Optimization in Downstream Processing

Tacrolimus suppositories prepared by semisolid-extrusion 3D printing for the treatment of Inflammatory Bowel Disease

The effect of lactose particle size on the tablet strength - compaction pressure relationship

The impact of suction pressure on die filling on rotary presses

The influence of lower punch vibration on the compactability and bondability of different types of microcrystalline cellulose

The role of online content uniformity measurement in the rapid automated process development of a continuous production system used for direct-filling hard gelatin capsules

Twin-screw granulation: An attempt for a quantitative description of screw configuration impact

Using microfluidics for the development of chitosan nanogels for gene therapy

#### Physical pharmacy

3D printed capsules for modulating the sustained release rate from a nanocellulose hydrogel

Dissolution in Intestinal Bicarbonate Buffer: Mass Transport-Dependent Effective pKa and its Implications

Enantiomeric amino acids as co-amorphous systems

Evaluation of Phase Transition of Bicalutamide in Tablets Under Different Storage Conditions

FDM 3D printing of flexible materials for pharmaceutical dosage forms

How Does the Content of Kollidon®VA64 Inhibit the Recrystallization and Improve Dissolution of Ezetimibe from Amorphous Solid Dispersions?

Polymorphism and drug release modification of tristearin-based formulation: the effect of liquid additives

Relationship between particle size and adhesion forces in Neusilin® US2 particles

Solid state amorphization of riboflavin upon milling

Solid state conversion of olanzapine during tableting

Thermal treatment to stabilize/destabilize pharmaceutical glasses

Toward biopredictive dissolution conditions for ionizable BCS class II compounds

Viscosity of ASDs at humid conditions

#### Preformulation

Assessment of side effects of SMEDDS in the rat

Combination of itraconazole cocrystal and nanocrystal techniques to improve the saturation solubility and dissolution rate

Effect of Maillard reaction on electrospun scaffolds for skin tissue engineering

Electrospun scaffolds in periodontal wound healing

Evaluation of Compressibility Index by SeDeM system method to predict the behavior of some tablets excipients

Evaluation of nephelometric high-throughput method in drug formulation development

Griseofulvin (BCS Class II Drug) Solubilization by Beta Cyclodextrin Derivatives Complexation

Hydrates as a water source for microwave induced in situ amorphization of celecoxib

Hydroxypropyl β Cyclodextrin as a High Efficiency Cholecalciferol Solubilizer

Insights from the preclinical development of Corallopyronin A: Establishing analytical assays for the determination of Corallopyronin A, Corallopyronin isomers and degradation products of stability and bioanalytical samples.

Insights from the preclinical development of Corallopyronin A: Formulation evaluations by physiology-based pharmacokinetics and in vivo predictive in vitro tools

Liquid marbles for bioavailability enhancement of poorly soluble drugs - a case study

Multivariate analysis of powder flow parameters to improve the development of blends for direct compression

Next Generation Lipid-Based Excipients: Solid State - Stability Relationship

Optimization of Bicalutamide-loaded 3D-printing Filament Composition

Oral liquid formulations of carvedilol in medium-chain triglycerides for use in paediatrics

Predicting powder flowability utilizing material characteristics and multivariate approach

Preparation, thermal analysis and phase solubility study of Quercetin inclusion complexes with β-cyclodextrin derivatives

Smart UV: An evolving strategy in sunscreen protection

Studies on modifications of established silk fibroin production methods to enhance protein content

Towards biocompatible formulations of steroids: Preparation of zuranolone nanoformulations

#### Pulmonary delivery

Activity evaluation of supramolecular compound based on N-acetylcysteine for the treatment of P. aeruginosa biofilm Comparing the mechanical properties of Quali-V®-I and Quali-V®-I Extra Dry capsules for use in dry powder inhalers Effect of lumen enlargement on functionality of halloysite-chitosan sustained-release nanocontainers Evaluation of pulmonary and renal tolerance of a cisplatin-based dry powder for inhalation to treat lung cancer How important is internal lubricant in capsules for inhalation? Hybrid lipid/polymer nanoparticles for pulmonary delivery of siRNA in cystic fibrosis lung inflammation In vitro / in vivo Correlation of Two Commercial pMDI Formulations using NGI Analysis with 3D Printed Modified Induction Ports In vitro Aerodynamic Assessment and Dissolution Profile of Spray-dried Itraconazole Powders for Inhalation from Aqueous Nanosuspensions

In vitro-in silico approach in the assessment of drug deposition and absorption following intratracheal insufflation of an ordered mixture in rats

Novel inhalable redox responsive nanoparticles for the combined treatment of lung cancer

**Optimal Carrier Properties For Vaporizing Cannabinoids** 

Physicochemical factors affecting development of Vancomycin delivery in high dose DPI formulations

Synthesis of rifampicin and pyrazinoic acid biodegradable nanoconjugates for pulmonary delivery

The impact of interaction between inhaled drugs and lung surfactant on in-vitro solubility and predicted in-vivo performance

#### Stability testing

Cocoa butter and its stability in extemporaneous semisolid formulations

Determination of antioxidant effect of polyols in a cell free enviroment

DMTA test as an effective rheological alternative for accelerated freeze-thaw stability testing of O/W emulsions

Exploring the Performance and Stability-Controlling Tablet Disintegration Mechanisms

Influence of drug load on the stability of phospholipid-stabilized lipid nanoemulsions

Overcoming The Color Stability Issue Exhibited By Indigo Carmine In Film Coating Formulations

#### Starting materlias

Enzymatically synthesized nanocellulose for drug delivery

GRANFILLER-D® As a New Co-processed Excipient For Orally Disintegrating Tablets Produced by Direct Compression

Pharmaceutical powder tribo-charging: the impact of relative humidity and twin-screw feeding

When CDs Meet DCs: Amphiphilic Cyclodextrin Particles Induce Potent Immune Responses

#### **Chairs and committees**

Chair of the conference Eva Roblegg, University of Vienna/University of Graz, Austria

#### Co-chairs of the conference

Jörg Breitkreutz, University of Düsseldorf, Germany Anna Maria Fadda, University of Cagliari, Italy Jürgen Siepmann, University of Lille, France

Chair of the programme committee Duncan Craig, University College London, UK

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