

SNO-SCIDOT Joint Conference on Therapeutic Delivery to the CNS

November 20 – 21, 2019

Phoenix Arizona

SCIDOT Chair: Michael Vogelbaum, MD, PhD

SNO Chair: Nathalie Agar, PhD

PRELIMINARY PROGRAM

WEDNESDAY, NOVEMBER 20		
6:00 - 8:00	Registration	
7:00 - 8:00	Light breakfast	
8:00 - 8:15	Welcome and Introduction	Michael Vogelbaum, Nathalie Agar
SESSION 1: BBB PHYSIOLOGY		
8:15 - 8:35	BBB overview	Lester Drewes
8:35 - 8:55	BBB transporters	William Elmquist
8:55 - 9:15	CNS Pharmacokinetics of chemotherapy	Kathy Warren
9:15 - 9:35	Evaluating drug delivery in Phase 0 Trials	Nader Sanai
9:35 - 9:45	Abstract 41: Nanotherapeutic targeting of tumor endothelium for enhancing drug delivery past the blood-brain barrier	G. Praveen Raju
9:45 - 9:55	Abstract 42: FT-2102 – A potent and selective brain penetrant inhibitor of mutant isocitrate dehydrogenase	Maria Ribadeneira
9:55 - 10:10	BREAK	
SESSION 2: NEW DRUGS - PRECLINICAL		
10:10 - 10:30	Multivalent agents for GBM therapy	Waldemar Debinski
10:30 - 10:50	Local immunomodulation in malignant glioma using motile mesenchymal stem cells	Nils-Ole Schmidt
10:50 - 11:10	Preclinical development of OS2966 for CED	Anne-Marie Carbonell
11:10-11:30	Novel CAR T cells Therapy for GBM	Gianpietro Dotti
11:30 - 11:40	Abstract 46: MicroRNA nanocell therapy for glioblastoma	Muhammad Babar Khan
11:40 - 11:50	Abstract 48: Evaluating the therapeutic efficacy and convection enhanced delivery (CED) toxicity analysis of CDK4/6 inhibitor palbociclib for diffuse intrinsic pontine glioma (DIPG)	Dennis Lee
11:50 - 12:00	Abstract 21: Improving drug delivery to glioblastoma by targeting canonical WNT/ β -catenin signaling in the blood-brain barrier	Amelie Vezina
12:00 - 13:00	LUNCH	
SESSION 3: CLINICAL TRIALS, PART 1		
13:00 - 13:20	Update on the Medicenna CED trials	Krystof Bankiewicz

13:20 - 13:40	Multi-cycle CED for glioma	David Walker
13:40 - 14:00	CED for DIPG	Mark Souweidane
14:00 - 14:20	Convection-enhanced delivery of IL13-pseudomonas exotoxin for pediatric diffuse intrinsic pontine glioma	John Heiss
14:20 - 14:30	Abstract 2: A phase I study of convection-enhanced delivery of liposomal-irinotecan (Onivyde) using real-time imaging with gadolinium in patients with recurrent high grade gliomas: results thus far	Karishma Kumar
14:30 - 14:40	Abstract 30: GLITIPNI: A phase 1b clinical trial combining surgical resection with direct intracerebral injection of immune checkpoint inhibitors in patients with recurrent glioblastoma	Johnny Duerinck
14:40 - 14:50	Abstract 51: Overpowering multiple inhibitory immune checkpoints with a single peptide inhibitor enhanced survival in a spontaneous high-grade glioma canine pilot-trial	Michael Olin
14:50 - 15:10	BREAK	
SESSION 4: CLINICAL TRIALS, PART 2		
15:10 - 15:30	Oncolytic viral therapy	Frederick Lang
15:30 - 15:50	Update on the Tocagen immunogene therapy trials	Michael Vogelbaum
15:50 - 16:10	Chronic CED of topotecan	Jeffrey Bruce
16:10 - 16:30	CED of BMP4 in recurrent GBM, results of a phase I trial	Clemens Dirven
16:30 - 16:40	Abstract 7: Ultrasound delivered albumin bound paclitaxel extends survival in malignant glioma models and outperforms ultrasound delivered cremophor paclitaxel in bio-distribution and safety	Adam Sonabend
16:40 - 16:50	Abstract 33: Ultrasound-facilitated drug delivery device for local drug infusion against brain tumors	Ryuta Saito
16:50 - 17:00	Abstract 43: Final data analysis of a pilot study testing the efficacy of using laser interstitial thermal therapy (LITT) to induce temporary disruption of the peritumoral blood brain barrier (BBB) to improve effectiveness of BBB-impermeant chemotherapy in recurrent glioblastoma	David Tran
17:15 - 19:30	POSTER AND NETWORKING RECEPTION	
THURSDAY, NOVEMBER 21		
6:00 – 8:00	Registration	
7:00 – 8:00	Light Continental Breakfast	
SESSION 5: NEW TECHNOLOGIES		
8:00 - 8:20	BBB disruption by pulsed electric fields	Yael Mardor
8:20 - 8:40	Ultrasound enabled drug delivery	Alexandre Carpentier
8:40 - 9:00	BBB disruption for CNS delivery	Kullervo Hynynen
9:00 - 9:10	Abstract 23: Low intensity pulsed ultrasound enhances blood-brain barrier opening and improves response to immunotherapy for glioblastoma	Aria Sabbagh
9:10 - 9:20	Abstract 35: A novel model for the optimization of drug-device combinations for the treatment of brain tumors	Clare Killick-Cole
9:20 - 9:30	Abstract 34: Brain injury signals systemic immunosuppression through thymic involution	Katayoun Ayasoufi

9:30 - 9:40	Abstract 6: Towards exclusively local therapy of glioblastoma - engineering IL-12Fc with superior tissue retention and minimal systemic exposure after CNS administration	Johannes vom Berg
9:40 - 10:00	BREAK	
SESSION 6: MODELING, PATHWAYS, AND IMAGING		
10:00 - 10:20	New methods to alter convection rates in CED	Justin Williams
10:20 - 10:40	MR imaging and modeling of connected perivascular spaces	Malisa Sarntinoranont
10:40 - 11:00	Biophysical effects of ultrasound as aids to therapeutic delivery	William Tyler
11:00 - 11:20	Lessons from simulations and monitoring of intracerebral infusions	Raghu Raghavan
11:20 - 11:40	Role of interstitial fluid flow in drug delivery	Jennifer Munson
11:40 - 11:50	Abstract 38: Development of an image-informed mathematical model of convection-enhanced delivery of nanoliposomes for individual patients	Ryan Woodall
11:50 - 12:00	Abstract 44: Creating causal capabilities in functional brain mapping using a CED approach	Walter Block
12:00 - 13:00	LUNCH	
SESSION 7: NON-TUMOR APPLICATIONS		
13:00 - 13:20	Unconventional ways to alter interstitial flow rates	Kip Ludwig
13:20 - 13:40	CNS therapeutics and intrathecal delivery	Manuel Sanchez-Felix
13:40 - 14:00	CED for intracerebral hemorrhage and the MISTIE trials	Azam Ahmed
14:00 - 14:20	Intraventricular therapy for epilepsy	Eric Distad
14:20 - 14:30	Abstract 17: Understanding the effects of molecular size on volume of distribution in convection-enhanced delivery	Julian S. Rechberger
14:30 - 14:40	Abstract 39: K16ApoE enhances A β -associated 11C-PiB deposition and PET signal in APP/PS1 transgenic mice	Desmond Brown
14:40 - 15:00	BREAK	
SESSION 8: NEW APPROACHES		
15:00 - 15:20	A new temozolomide formulation for intracavitary chemotherapy	Manfred Westphal
15:20 - 15:40	IPA to IT drug distribution of siRNA	Greg Gerhardt
15:40 - 16:00	Novel delivery methods	Jeffry Colella
16:00 - 16:20	Intrathecal delivery in childhood CNS diseases	Stephen Maricich
16:20 - 16:40	Exosome-enabled CNS delivery	Steven Stice
16:40 - 16:50	Abstract 37: Assessing cerebrospinal fluid flow dynamics in pediatric patients with central nervous system tumors	Kim Kramer
16:50 - 17:00	Abstract 52: In situ delivery of Tumor Treating Fields therapy in glioblastoma patients	Kristen Carlson
17:00 - 17:05	Closing remarks and adjourn	Michael Vogelbaum, Nathalie Agar