



IATDMCT 2021

**19th INTERNATIONAL CONGRESS OF THERAPEUTIC
DRUG MONITORING & CLINICAL TOXICOLOGY**

“Nobody is average”

19-22 SEPTEMBER 2021

Angelicum Congress Centre | Largo Angelicum, 1

ROME, ITALY



Chair:

Mario Regazzi

Italian Society of Biopharmaceutics
and Pharmacokinetics
Pavia, Italy

Co-Chair:

Franco Locatelli

U.O. di Onco-Ematologia
IRCCS - Ospedale
Pediatrico
Bambin Gesù
Rome, Italy

CONFERENCE PROGRAM

www.iatdmct2021.org

Under the Auspices of



Sistema Socio Sanitario



Sunday 19th September 2021

Program

10.30-11.30 Pre-congresses registration

Pre-congress symposium (CME):

Pharmacometrics-enhanced TDM

ROOM A

- 11.00 **SESSION 1 - Precision Dosing**
- 11.00 Talk 1: Population approach basics
- 11.30 Talk 2: Covariate modelling
- 12.00 Talk 3: Hands-on 1: Developing a basic PK model
- 13.00 **Lunch**
- 13.45 **SESSION 2 - Precision dosing and Clinical Trial Design**
- 13.45 Talk 4: Model-informed precision dosing
- 14.15 Talk 5: Clinical trial design
- 14.45 Elective hands-on:
 - Hands-on 2: Treatment individualisation using InsightRX and TDMx
 - or
 - Hands-on 3: Clinical Trial Design
- 15.45 **Pre-congress seminar closing**

Pre-congress symposium (CME):

TDM in pediatric patients as well as in neonates

ROOM B

- 11.00 **Welcome**
- 11.10 **SESSION 1**
- 11.10 TDM in children supported with ECMO
- 11.40 Adverse drug reactions and pediatric intensive care. What impact?
- 12.10 Informed use biologics in rheumatology
- 12.40 **Discussion/Questions**
- 13.00 **Lunch**
- 14.00 **SESSION 2**
- 14.00 Drug monitoring in human milk from women after labor analgesia
- 14.30 TDM in paediatric haematology
- 15.00 Neonatal pharmacology: how to improve the dosing regimens for TDM compounds based on PK modeling
- 15.30 **Discussion/Questions and closing considerations**

12.00-19.00 Congress Registration

16.00-18.00 CONGRESS OPENING SESSION | AULA MAGNA

16.00-16.45 Welcome address

Presidential Welcome

16.45-17.30 Plenary Lecture 1 | Precision Dosing: An Industry Perspective

17.30-18.00 Award 1: Irving Sunshine Award Pippenger Award

18.00-20.00 Welcome cocktail

Evening Dinner at Leisure

Monday 20th September 2021

Program

07.30-08.30	MORNING ROUNDTABLE SESSION (Hotel The Hive) - preliminary program				
	Antibiotic stability in elastomeric pumps used for outpatient parenteral antimicrobial therapy	Alternative sampling devices to collect dried blood microsamples: state-of-the-Art	TDM in an immune-oncology word		
	Aula Magna	Room A	Room B	Room C	Room D
08.45-10.15	PLENARY SESSION				
08.45-09.00	Presidential address				
09.00-09.45	Plenary lecture 2 (CME) The New Psychoactive Substances: availability, effects and new diagnostic needs.				
09.45-10.15	Award 2: Pippenger Award				
10.30-11.00	Morning coffee & tea, exhibition and poster viewing				
11.00-12.30	CONCURRENT SESSION 1				
	Symposium 1 New issues in Immunosuppression	Symposium 2 The "NPS (New Psychoactive Substances) phenomenon"	Contributed papers 1 Pharmacogenetics	Contributed papers 2 TDM in real world	Intersociety Seminar (CME) Pharmacometrics: Practical approaches to dose optimization
	11.00 Talk 1: Biomarkers in solid organ transplantation 11.30 Talk 2: TDM of immunosuppressive, beyond transplantation-the JAK inhibitors 12.00 Talk 3: Immunosup PK and physical activity	11.00 Talk 4: Pharmacotoxicological aspects of NPS 11.25 Talk 5: The European Early warning system on new psychoactive substances 11.50 Talk 6: NPS testing in emergency departments: screenings and quantification 12.15 Talk 7: Biological samples for the determination of recreational substances	Talk 1 Talk 2 Talk 3 Talk 4 Talk 5 Talk 6 Talk 7	Talk 8 Talk 9 Talk 10 Talk 11 Talk 12 Talk 13 Talk 14	11.00 Opening remarks 11.05 Pharmacometrics and machine learning: a new opportunity for model-informed precision dosing? 11.25 Personalized medicine in children 11.45 Dose optimization of biologics 12.05 Discussion 12.25 Closing considerations
12.30-13.50	Lunch with Exhibitors				
12.30-14.00	Industry workshop 1	Industry workshop 2	Business meeting	Business meeting	Business meeting

Monday 20th September 2021

Program

	Aula Magna	Room A	Room B	Room C	Room D
14.00-15.30	CONCURRENT SESSION 2				
	Symposium 3 Update in oncology	Symposium 4 Clinical toxicology laboratory: broad-spectrum drug screening	Contributed papers 3 Miscellaneous 1	Contributed papers 4 Clinical Toxicology - 1	
14.00-14.30	Talk 8: TDM: small molecules vs biologics	Talk 11: Point of Care urine drug screen in supporting ambulatory substance use clinic	Talk 15 Talk 16 Talk 17	Talk 1 Talk 2 Talk 3	
14.30-15.00	Talk 9: Next generation therapeutic antibodies	Talk 12: High Resolution Mass Spectrometry drug screening in plasma and urine	Talk 18 Talk 19 Talk 20	Talk 4 Talk 5 Talk 6	
15.00-15.30	Talk 10: Biosensor-enabled on-site TDM.	Talk 13: The LC-Orbitrap HR/MS in the clinical toxicology laboratory: a quality management perspective to broad-spectrum drug screening	Talk 21	Talk 7	
15.30-16.20	Afternoon tea&Coffee, exhibition and poster viewing				
16.30-18.00	CONCURRENT SESSION 3				
	Symposium 5: TDM of biologics in inflammatory bowel diseases	Symposium 6: Role of metabolite measurement in risk assessment of xenobiotic compounds: analytical and toxicokinetic aspects	Contributed papers 5 Anti-infectives: antibiotics	Contributed papers 6 Immunosuppressants	
16.30-17.00	Talk 14: Role of proactive versus reactive TDM of anti-TNF drugs or standard of care in inflammatory bowel diseases	Talk 17: The complexity of human metabolism and how it can be explored through in vitro and in vivo approach	16.30-18.30 Talk 22 Talk 23	16.30-18.30 Talk 31 Talk 32	
17.00-17.30	Talk 15: Value of TDM of ustekinumab and vedolizumab in inflammatory bowel diseases	Talk 18: Bisphenol: weakness of deconjugation methods and its impact on biomonitoring	Talk 24 Talk 25 Talk 26 Talk 27	Talk 33 Talk 34 Talk 35 Talk 36	
17.30-18.00	Talk 16: How do we implement TDM to maximise treatment success? What target concentrations should we aim for?"	Talk 19: The role of metabolite determination in risk assessment	Talk 28 Talk 29 Talk 30	Talk 37 Talk 38 Talk 39	
18.00-19.30	Cocktail reception and poster viewing				
20.30-23.00	Young scientists dinner				

Tuesday 21st September 2021

Program

07.30-08.30	MORNING ROUNDTABLE SESSION (Hotel The Hive) - <i>preliminary program</i>				
	New drug-drug interactions in organ transplant recipients	TDM of tyrosine kinase inhibitors and taxanes	TDM of long-acting formulations of antipsychotics		
	Aula Magna	Room A	Room B	Room C	Room D
08.45-10.15	PLENARY SESSION				
08.45-09.30	Plenary lecture 3 (CME) Precision medicine and information technology in ICUs				
09.30-10.00	Award 3: Victor Armstrong Young Investigator Award				
10.00-10.15	Award 4: Patsalos Prize				
10.15-10.50	Morning coffee & tea, exhibition and poster viewing				
11.00-12.30	CONCURRENT SESSION 4				
	Symposium 7 The issues in pediatric patients	Symposium 8 Microsampling devices: assay developments and applications	Symposium 9 Diagnosing drug-induced liver injury (DILI)	Contributed papers 7 Pharmacometrics	Seminario intersocietario (ECM) Il paziente fragile
11.00-11.30	Talk 20: TDM of drugs used for analgesia/sedation	Talk 23: DBS and the difficulties one encounters when implementing such a strategy in practice	Talk 26: Adverse drug reactions caused by genetic variation of drug transporters	Talk 40 Talk 41 Talk 42	11.00 Saluti ed apertura dei lavori
11.30-12.00	Talk 21: Management of IFI in immunocompromised children	Talk 24: Dried blood microsampling: new devices, automation, and toxicological and clinical implementation	Talk 27: Predicting hypersensitivity drug reactions mitochondrial toxicity and cytokine storm	Talk 43 Talk 44 Talk 45 Talk 46	11.05 Terapie croniche e comorbidità nel paziente anziano
12.00-12.30	Talk 22: Antipsychotics monitoring in pediatric patients	Talk 25: Direct mass spectrometric analysis from VAMS	Talk 28: Liver injury produced by amatoxins and phallotoxins		11.25 Terapie concomitanti nel paziente trapiantato
					11.45 TDM nel paziente fragile
					12.05 <i>Discussione</i>
					12.25 Considerazioni conclusive
12.30-13.50	Lunch with Exhibitors				
12.30-14.00	Industry workshop 3	Industry workshop 4	Business meeting	Young Scientists' Lunch	Business meeting
				<i>Meet the expert session</i>	

Tuesday 21st September 2021

Program

	Aula Magna	Room A	Room B	Room C	Room D
14.00-15.30	CONCURRENT SESSION 5				
	Symposium 10 Therapeutic drug monitoring of biologics in immune-mediated inflammatory diseases other than IBD	Symposium 11 Laboratory monitoring of COVID-19 patients	Contributed papers 8 Anti-infectives: antiviral drugs	Contributed papers 9 Clinical Toxicology - 2	
14.00-14.30	Talk 29: Personalized dosing of natalizumab in multiple sclerosis	Talk 32: Variants, epidemiology: the impact on vaccinations	Talk 47 Talk 48 Talk 49	Talk 8 Talk 9 Talk 10	
14.30-15.00	Talk 30: Clinical utility of therapeutic drug monitoring for biologics in patients with psoriasis	Talk 33: Performance of the different serological tests for anti-SARS-CoV-2 antibodies	Talk 50 Talk 51 Talk 52	Talk 11 Talk 12 Talk 13	
15.00-15.30	Talk 31: Exposure-Response Relationship of biologics in Patients With Rheumatoid Arthritis: individualised dose reduction based on drug concentration	Talk 34: Considerations for diagnostic COVID-19 tests	Talk 53	Talk 14	
15.30-16.20	Afternoon tea&Coffee, exhibition and poster viewing				
16.30-18.00	CONCURRENT SESSION 6				
	Symposium 12 Optimal sampling strategies for TDM exemplified by vancomycin	Symposium 13 New frontiers of clinical toxicology labs	Symposium 14 Clinical implementation of Pharmacogenomics	Contributed papers 10 TDM in oncology	
16.30-17.00	Talk 35: Common PK/PD targets for TDM and model-informed precision dosing and what the trough sample does (not) tell	Talk 38: Methadone, oxycodone and buprenorphine: are polymorphisms and metabolic evaluation of clinical relevance?	16.30 Talk 41: Development of pharmacogenetics guidelines: from reactive to pre-emptive 16.55 Talk 42: Educating health care professionals on Pharmacogenomics	16.30-18.30 Talk 54 Talk 55 Talk 56 Talk 57 Talk 58 Talk 59 Talk 60 Talk 61 Talk 62	
17.00-17.30	Talk 36: Optimal sampling is not just for trial design: application to individual patients	Talk 39: Amanitins testing in mushrooms poisoning	17.20 Talk 43: Implementing PGx in Italy. Proposed		
17.30-18.00	Talk 37: An interactive introduction to AUC-based dosing of vancomycin	Talk 40: Nano-drug delivery; dream or reality	17.45 Talk 44: Integrating Drug-Drug-Gene interactions: a Physiologically Based Pharmacokinetic approach 18.30 End of the Symposium		
18.00-19.30	Cocktail reception and poster viewing				
20.30-23.00	IATDMCT CONGRESS DINNER				

Wednesday 22nd September 2021

Program

07.30-08.30	MORNING ROUNDTABLE SESSION (Hotel The Hive) - <i>preliminary program</i>				
	Interpretation of metal concentrations in blood and urine	Pharmacogenetics in psychiatry: is the glass half empty or half full?	The use of machine learning approaches in clinical pharmacology		
	Aula Magna	Room A	Room B	Room C	Room D
08.30-10.00	CONCURRENT SESSION 7				
	Symposium 15 Infection site measurement of anti-microbial agents: unnecessary, a luxury or essential?	Symposium 16 Herbal remedies and dietary supplements	Contributed papers 11 Alternative sampling strategies	Contributed papers 12 Miscellaneous 2	Seminario intersocietario (ECM) Anticorpi monoclonali
08.30-10.00	Talk 45: The role of microdialysis Talk 46: Bone and joint infections Talk 47: Central nervous system Talk 48: Lungs and pleural space	Talk 49: Amanita Phalloides intoxications: clinical outcomes and efficacy of antidotes – Review of 40 years of case reports Talk 50: Herbal remedies: toxicity and effect on therapeutic drug monitoring Talk 51: <i>Case study of curcumin food supplements: an example of public health issue</i>	Talk 63 Talk 64 Talk 65 Talk 66 Talk 67 Talk 68 Talk 69	Talk 70 Talk 71 Talk 72 Talk 73 Talk 74 Talk 75 Talk 76	08.30 Saluti ed apertura dei lavori 08.35 Talk A: Impiego dei monoclonali in gastroenterologia pediatrica 08.50 Talk B: Impiego dei monoclonali in reumatologia pediatrica 09.05 Talk C: Impiego dei monoclonali nelle malattie infiammatorie intestinali dell'adulto 09.20 Talk D: Impiego dei monoclonali nel paziente adulto reumatologico 09.35 Talk E: TDM nei monoclonali: prospettive attuali e future 09.50 Discussione 09.55 Considerazioni conclusive
10.10-10.30	Morning coffee & tea, exhibition and poster viewing				

Wednesday 22nd September 2021

Program

	Aula Magna	Room A	Room B	Room C	Room D
10.30-12.00	CONCURRENT SESSION 8				
	Symposium 17 Young Scientist Committee Symposium 2021	Symposium 18 Special Analytical evaluations in child/sexual abuse and in hospitalized patients	Contributed papers 13 TDM of biologic drugs	Contributed papers 14 Clinical Toxicology - 3	
10.30-11.00	Talk 52: Drug-Gut microbiota interaction: Importance of microbiomics in Pharmacokinetics	Talk 55: Delirium in hospital- admitted patients: is pharmaco- toxicological testing appropriate?	Talk 77 Talk 78 Talk 79	Talk 15 Talk 16 Talk 17	
11.00-11.30	Talk 53: Bioassays in toxicology testing and toxicokinetics of new drugs [cannabinoids, Benzodiazepine]	Talk 56: Child abuse: relevance of the tox lab	Talk 80 Talk 81 Talk 82 Talk 83	Talk 18 Talk 19 Talk 20 Talk 21	
11.30-12.00	Talk 54: SimPharm: a state-of-the- art pharmacy simulation software to empower students	Talk 57: DFSA-Sexual abuse			
12.00-13.30	Lunch with Exhibitors				
	Industry workshop 5	Industry workshop 6	Business meeting	Business meeting	Business meeting
14.45-16.45	IATDMCT GENERAL ASSEMBLY - PLENARY PRESENTATION AND CONGRESS CLOSE				
14.45-15.30	Plenary lecture 4 Clinical importance and pharmacological utility of using biomarkers in diagnosis of dementia				
15.30-16.30	IATDMCT GENERAL ASSEMBLY				
16.30-16.45	Closing remarks				

