EAPCCT CONGRESS 2019

39th Congress of the European Association of Poisons Centres and Clinical Toxicologists

21-24 May
Naples

#eapcct2019  @eapcct

Detailed scientific programme
The 39th International Congress of the EAPCCT has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.
EAPCCT
CONGRESS
2019

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European Association of
Poisons Centres and
Clinical Toxicologists

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Congress Supporters & Sponsors 89
The 39th Congress of the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT) has been organised by the following Committees:

### EAPCCT SCIENTIFIC AND MEETINGS COMMITTEE

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### CONGRESS SECRETARIAT

**GRUPO PACIFICO**
The power of meeting

Maria Cubí, 4 Pral  
08006 Barcelona – Spain  
eapcct2019@pacifico-meetings.com

### LOCATION

Terminal Napoli SpA  
Centro Congressi  
Stazione Marittima  
80133 Napoli Porto, Italy  
www.terminalnapoli.it
**General Information**

> Social programme

**WEDNESDAY 22 MAY 2019**

19:30 hrs: Welcome Reception  
*Included in Congress registration fee*

The Welcome Reception will be held at the [Maschio Angioino-Castel Nuovo](http://www.comune.napoli.it/flex/cm/pages/ServeBLOB.php/L/EN/IDPagina/1372) on Wednesday 22nd May 2019.

Castle Nuovo is located close to the Congress venue. It can be reached on foot within 6 minutes from the Terminal Napoli SpA, Centro Congressi, Stazione Marittima.

**FRIDAY 24 MAY 2019**

20:00 hrs: Conference Dinner

The Conference Dinner will be held at [The Santa Chiara Monastery](http://www.santachiara.info) on Friday 24th May 2019.

The Santa Chiara Monastery is located in the old town. It can be reached on foot within 15 minutes from the Terminal Napoli SpA, Centro Congressi, Stazione Marittima. Welcome drinks will be served at 20:00 hrs and dinner at 20:30 hrs.

A limited number of tickets are still available and can be purchased at the registration desk.
General Information

> Accreditation

The 39th International Congress of the EAPCCT, Naples, Italy from 21/05/2019-24/05/2019 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME® credit to AMA credit can be found at: www.ama-assn.org/education/earn-credit-participation-international-activities

Please note that attendance at sessions will be logged and delegates will have the barcode on their badge scanned on entering and exiting each session. A summary of your attendance will be sent to you after the congress and will have to be provided to the European Accreditation Council for Continuing Medical Education (EACCME®) to claim your credits.

To be eligible for credits, participants must:
1. Attend the entire session
2. Participants must scan their badge on entering AND leaving the room

> Name badge

Each delegate will receive a name badge when they register. This must be worn during the Congress to gain entry to the lecture theatres, the dining hall (lunches) and at the Welcome Reception.

Registered accompanying persons will also receive a name badge, which they must wear at the Welcome Reception and during lunch if this has been booked.
Pre-Congress
Tuesday 21 May 2019

Continuing Education in Clinical Toxicology
CONTINUING EDUCATION IN CLINICAL TOXICOLOGY
Natural Toxin Poisoning in Europe: A Global Interaction

Session chair: Bruno Mégarbane, Julian White

09:00 - 09:30
From abroad to home: PC experience of “exotic poisoning”
Andreas Schaper, GIZ-Nord Poisons Centre, University Medical Centre, Göttingen, Germany

09:30 - 10:00
The Red Sea and Mediterranean Sea connection: the toxicological risks associated with the Suez Canal
Régis Bédry, University Hospital Bordeaux, France

10:00 - 10:30
Tetrodotoxin vs ciguatera
Mark Little, Cairns Hospital, Cairns, Australia

At the end of this session the audience should be able to:
> Explain toxicovigilance aspects of envenomations with exotic pets in Western Europe
> Know the conditions in which the Red Sea’s venomous marine animals can become a danger for people living around the Mediterranean Sea
> Describe the differences between tetrodotoxin and ciguatera syndromes, including mechanism of toxicity, sources of toxin, symptoms and signs and possible treatments

10:30 - 11:00  Coffee

Session chair: Régis Bédry, Miran Brvar

11:00 - 11:30
Dangerous jellyfish in Europe - an overview for the toxicologist
Julian White, Women’s & Children’s Hospital, Adelaide, Australia

11:30 - 12:00
Analytical strategies for determination of palytoxins in the environment and in seafood. Past present and future challenges
Carmela Dell’Aversano, University of Napoli Federico II, Naples, Italy

12:00 - 12:30
Palytoxin and related compounds: new toxic guests in Europe
Luc de Haro, Hopital Sainte Marguerite, Marseille, France

12:30 - 13:00
Snake venoms: actions and neutralization
Bruno Lomonte, University of Costa Rica, San Jose
At the end of this session the audience should be able to:

> Understand the relationship of jellyfish stings in European-region waters in comparison to stings in other regions and the potential for changes in risk secondary to climate change and how this might impact approaches to medical management
> Discuss the regulated and the emerging marine toxins that may affect humans through ingestion, dermal and aerosol contact and the analytical techniques for their detection
> List the different sources of palytoxin and related compounds and to describe the clinical features of exposure
> Understand the basics of snake venom toxic effects, their targets, and their neutralization by antivenoms

13:00 – 14:00  Lunch

DIONI & ELETTRA, TUESDAY 21 MAY 2019 (AFTERNOON)

CONTINUING EDUCATION IN CLINICAL TOXICOLOGY
Natural Toxin Poisoning in Europe: A Global Interaction

Session chair: Luc de Haro, Andreas Schaper

14:00 – 14:30
Toxicological syndromes linked to key spiders and scorpions from South America and their management
Fabio Bucaretchi, State University of Campinas, Brazil

14:30 – 15:00
Antivenom to treat scorpion stings: is it useful?
Bruno Mégarbane, Paris-Diderot University, France

15:00 – 15:30
European, Africa and Middle Eastern snakes and snake bites
Miran Brvar, University Medical Centre Ljubljana, Slovenia

At the end of this session the audience should be able to:

> Recognize the main local and systemic features observed in patients bitten by spiders of the genera *Phoneutria*, *Latrodectus* and *Loxosceles*, and stung by *Tityus* spp. scorpions
> Understand the advantages versus the inconveniences in administering antivenom to a scorpion-envenomated patient
> Describe the features and management of snake bites in Europe, Northern Africa and the Middle East

15:30 – 16:00  Coffee
Session chair: Régis Bédry, Julian White

16:00 – 16:30
*Envenomation with snakes from the American continent*
Jean-Philippe Chippaux, Institut Pasteur / Center for Translational Science, Paris, France

16:30 – 17:00
*Availability of ‘exotic’ antivenoms in Europe: a recurring problem*
Marieke Dijkman, Dutch Poisons Information Center, Utrecht, Netherlands

17:00 – 17:30
*Conclusion and synthesis of the communications: the world of natural toxin poisoning is moving*
Julian White, Women’s & Children’s Hospital, Adelaide, Australia

At the end of this session the audience should be able to:

- Describe the figure of snakebite incidence and severity in the Americas to improve the management of envenomations
- Explain causes of unreliable availability of ‘exotic’ antivenom
Main Congress
22 to 24 May 2019
### GALATEA, WEDNESDAY 22 MAY 2019 (MORNING)

#### WELCOME & PLENARY LECTURE

**Session chair:** Mark Kostic, Martin Wilks

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| 09:00 – 09:05 | *Welcome and opening*  
Martin Wilks, President EAPCCT                                                                 |
| 09:05 – 09:55 | *Envenoming and related issues in Europe versus the rest of the world - contemplating the future in the context of the present*  
Julian White, Women’s & Children’s Hospital, Adelaide, Australia |

**At the end of this lecture the audience should be able to:**

> Understand more fully the extent of envenoming and other toxin-induced diseases (TIDs) in Europe, both endemic and emerging exotic causes, and ways exposure to these TIDs may increase over time

#### CYANIDE AND SMOKE INHALATION SYMPOSIUM

**Session chair:** Rob Palmer, Horst Thiermann

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| 10:00 – 10:20 | *Challenges in the diagnosis of acute cyanide poisoning*  
Christopher P Holstege, University of Virginia School of Medicine, Charlottesville, United States |
| 10:20 – 10:40 | *The role of the new cyanide antidotes*  
Philippe A Haouzi, Penn State University College of Medicine, Hershey, United States |

**At the end of this session the audience should be able to:**

> Describe the challenges in the diagnosis of cyanide poisoning and the varied presentations encountered  
> Understand how the different families of cyanide antidotes can be used during cyanide intoxication

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<td>10:40 – 11:15</td>
<td><em>Coffee and Authors with Posters</em></td>
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**Wednesday 22**

**GALATEA, WEDNESDAY 22 MAY 2019 (MORNING)**

**WELCOME & PLENARY LECTURE**

**Session chair:** Mark Kostic, Martin Wilks

- **09:00 – 09:05**  
  *Welcome and opening*  
  Martin Wilks, President EAPCCT

- **09:05 – 09:55**  
  *Envenoming and related issues in Europe versus the rest of the world - contemplating the future in the context of the present*  
  Julian White, Women’s & Children’s Hospital, Adelaide, Australia

**At the end of this lecture the audience should be able to:**

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**CYANIDE AND SMOKE INHALATION SYMPOSIUM**

**Session chair:** Rob Palmer, Horst Thiermann

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> Understand how the different families of cyanide antidotes can be used during cyanide intoxication

- **10:40 – 11:15**  
  *Coffee and Authors with Posters*
GALATEA, WEDNESDAY 22 MAY 2019 (MORNING)

CYANIDE AND SMOKE INHALATION SYMPOSIUM (CONTINUED)

Session chair: Rob Palmer, Horst Thiermann

11:15 – 11:20
Analysis of 350 consecutive cases of carbon monoxide (CO) poisoning: the Florentine experience (abstract no. 1)
Anita Ecolini¹, Alessandro Zotto¹, Angelo Rotulo¹, Alessandra Ieri², Emanuela Masini¹, Guido Mannaioni³, Francesco Gambassi².
¹Department of Neurofarba, University of Florence, Florence, Italy; ²Medical Toxicology Unit and Poison Control Center, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy; ³Neuroscience, Psychology, Drug Research and Child Health, Università degli Studi di Firenze, Florence, Italy.

11:20 – 11:25
Correlation between clinical signs and/or symptoms and blood cyanide concentrations in victims of cyanide poisoning (abstract no. 2)
Hanne Herbots, Greet Dieltiens, Kurt Anseeuw.
Emergency Medicine, ZNA Stuivenberg, Antwerp, Belgium.

11:25 – 11:45
Inhalation exposure to toxic chemicals: mechanisms and medical management
Bronwen Jugg, Defence Science and Technology Laboratory, Salisbury, United Kingdom

11:45 – 12:05
Molecular targets in lung toxicology
Dirk Steinritz, Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany

12:05 – 12:25
Volcano eruptions: what are the consequences for acute and chronic lung injury
Alvin Bronstein, Hawaii Department of Health, Honolulu, United States

12:25 – 12:30
Discussion

At the end of this session the audience should be able to:
> Describe the effects of toxic chemical inhalation exposure on the lungs and how this could be mitigated
> Describe emerging mechanistic targets in lung injury induced by inhalation of toxic compounds
> Describe four types of volcanic emissions that can produce human health effects

12:30 – 13:20 Lunch

13:20 – 13:50 Authors with Posters and Poster Round
(postер numbers 013, 015, 051, 055, 063)
CO-MORBIDITIES IN THE POISONED PATIENT SYMPOSIUM

Session chair: Florian Eyer, Sergej Zacharov

10:00 – 10:20
*The consequences and impact of chronic renal impairment on acute poisoning*
Darren Roberts, NSW Poisons Information Centre and St Vincent’s Hospital, Sydney, Australia

10:20 – 10:40
*The consequences and impact of chronic liver impairment on acute poisoning*
Stephan Krähenbühl, University Hospital Basel, Switzerland

At the end of this session the audience should be able to:
> Understand the impact of chronic kidney disease on risk assessment in poisoned patients
> Understand the impact of liver cirrhosis on the kinetics and dynamics of toxicants

10:40 – 11:15 Coffee and Authors with Posters

11:15 – 11:35
*The consequences and impact of co-morbidities in the perspective of a toxic outbreak*
Sergej Zacharov, Charles University, 1st Faculty of Medicine, and General University Hospital, Prague, Czech Republic

11:35 – 11:50
*A consensus statement on the management of patients in outbreaks of methanol poisoning (abstract no. 3)*
Hossein Hassanian-Moghaddam 1, Nasim Zamani 2, Darren Roberts 3, Jeffrey Brent 4, Kenneth McMartin 5, CynthiaAaron 6, Michael Eddleston 7, Kent Olson 8, Paul I Dargan 9, Lewis Nelson 10, Ashish Bhalla 11, Philippe Hantson 12, Dag Jacobsen 13, Bruno Mégarbane 14, Mahdi Balali-Mood 15, Nicholas Buckley 16, Sergey Zakharov 17, Raido Paasma 18, Bhavash Jarwani 19, Amirhossein Mirafzal 20, Tomas Salek 21, Knut Erik Hovda 22.

1 Social Determinants of Health Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran; 2 Clinical Toxicology, Loghman Hakim Hospital, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran; 3 NSW Poisons Information Centre, Sydney, Australia; 4 University of Colorado, School of Medicine, Aurora, United States; 5 Department of Pharmacology, Toxicology and Neuroscience, Louisiana State University Health Sciences Center - Shreveport, Shreveport, United States; 6 Michigan Regional Poison Control Center at Children’s Hospital of Michigan, Detroit, United States; 7 Department of Pharmacology, Toxicology, and Therapeutics, University/BHF Centre for Cardiovascular Science, University of Edinburgh, Edinburgh, United Kingdom; 8 California Poison Control System, San Francisco Division, University of California, San Francisco, United States; 9 Clinical Toxicology, Guy’s and St Thomas’
NHS Foundation Trust and Faculty of Life Sciences and Medicine, King’s College London, London, United Kingdom; 10 Department of Emergency Medicine, Rutgers Medical School, Newark, United States; 11 Postgraduate Institute of Medical Education and Research, Chandigarh, India; 12 Department of Intensive Care, Cliniques Universitaires Saint Luc, Université Catholique de Louvain, Brussels, Belgium; 13 Department of Acute Medicine, Ullevaal University Hospital, Oslo, Norway; 14 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, INSERM UMRS 1144, Paris-Diderot University, Paris, France; 15 Medical Toxicology Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran; 16 Department of Pharmacology, University of Sydney, NSW Poison Information Center, Sydney, Australia; 17 Occupational Medicine, 1st Faculty of Medicine, Charles University and General University Hospital, Toxicological Information Centre, Prague, Czech Republic; 18 Anesthesiology and ICU, Pärnu County Hospital, Pärnu, Estonia; 19 Emergency Medicine, VSGH, Ahmedabad, India; 20 Emergency Medicine, Kerman University of Medical Sciences, Kerman, Iran; 21 Clinical Biochemistry and Pharmacology, Tomas Bata Hospital, Zlín, Czech Republic; 22 Acute Medicine, The Norwegian CBRNE Centre of Medicine, Oslo University Hospital, Oslo, Norway.

11:50 – 12:10  
**The consequences and impact of chronic heart failure on acute poisoning**  
Dag Jacobsen, Oslo University Hospital, Oslo, Norway

12:10 – 12:30  
**The consequences and impact of age-related neuro-degenerative diseases on acute poisoning**  
Dylan de Lange, Dutch Poisons Information Center, University Medical Center, Utrecht, Netherlands

At the end of this session the audience should be able to:

> Define the role of co-morbidities on the outcome of poisoning during a toxic alcohol mass poisoning outbreak and explain the influence of co-morbidities on long-term health sequelae and mortality
> Explain how underlying heart failure may affect the clinical course and prognosis of acute poisonings
> Explain that poisonings in older patients differ from poisonings in younger patients in both epidemiology and severity due to the presence of comorbidities that influence the course and outcome of intoxication

12:30 – 13:20  
**Lunch**

13:20 – 13:50  
**Authors with Posters and Poster Round**  
(poster numbers 013, 015, 051, 055, 063)
PRO-CON DEBATE: CASE REPORTS STILL HAVE A SIGNIFICANT ROLE IN GUIDING PRACTICE OF THE POISONED PATIENT

Session chair: Andis Graudins, Hugo Kupferschmidt

13:50 – 14:10
**PRO – Yes, case reports still have a significant role in guiding practice of the poisoned patient**
Ana Ferrer Dufol, Clinical University Hospital, Zaragoza, Spain

14:10 – 14:30
**CON – No, we need controlled clinical data and high-quality data not case reports**
Sophie Gosselin, Centre antipoison du Québec, Montréal, Canada

At the end of this debate the audience should be able to:

> Explain why individual cases have played, and still do, a fundamental role in the understanding of how poisons act on humans and how the reporting of such cases is essential for the development of the best diagnosis and therapeutic strategies
> Identify information gaps conveyed in case reports

POISONS CENTRES SYMPOSIUM – MODELS OF ACTIVITY

Session chair: Pieter Brekelmans, Maren Hermanns-Clausen

14:30 – 14:50
**Providing poisons information for veterinary cases - benefits, risks and practicalities**
Alexander Campbell, London, UK

14:50 – 15:10
**Disaster management and the role of poisons information centers**
Antoinette van Riel, University Medical Center Utrecht / DPIC, Utrecht, Netherlands

At the end of this debate the audience should be able to:

> Debate aspects that should be considered when including veterinarians and pet owners as potential users of a poisons information service
> Describe ways to professionalize the role of your PIC in disaster management and identify the parties that you can cooperate with to help you do this
DIONI & ELETTRA, WEDNESDAY 22 MAY 2019 (AFTERNOON)

ANTIDOTE DEVELOPMENT SYMPOSIUM

Session chair: Irma de Vries, Michael Holland

13:50 – 14:10
Antidote development from the perspective of the pharmaceutical industry
Jeremie Urbain, SERB, Brussels, Belgium

14:10 – 14:30
Fomepizole: development from the bench to clinical use
Kenneth E McMartin, Louisiana State University Health Sciences Center, Shreveport, United States

At the end of this session the audience should be able to:
> Understand the simplified development pathway for a new antidote with its critical steps
> Describe the difficulties in developing therapeutic products for treatment of acute poisonings

ANTIDOTE AVAILABILITY ROUND TABLE: ARRANGEMENTS, PROBLEMS AND SOLUTIONS

Session chair: Ana Ferrer Dufol, Carlo Locatelli

14:30 – 14:40
The Spanish Perspective
Raquel Aguilar-Salmerón, Hospital Universitari Dr. Josep Trueta, Girona, Spain

14:40 – 14:50
The Italian Perspective
Davide Lonati, Poison Control Centre and National Toxicology Information Centre - Toxicology Unit, ICS Hospital Maugeri and University of Pavia, Italy

14:50 – 15:00
The German Perspective
Andreas Schaper, GIZ-Nord Poisons Centre, University Medical Centre, Göttingen, Germany

15:00 – 15:10
The UK Perspective
Paul Dargan, Guy’s and St Thomas NHS Foundation Trust, London, UK

At the end of this session the audience should be able to:
> Describe the antidote network experience in Spain
> Describe the different models of antidote databases available in Italy
> Explain the specific situation concerning antidotes and their availability in Germany
> Describe arrangements in the UK for antidote stocking

15:10 – 15:50 Coffee and Authors with Posters
GALATEA, WEDNESDAY 22 MAY 2019 (AFTERNOON)

POISONS CENTRES SYMPOSIUM – MODELS OF ACTIVITY (CONTINUED)

Session chair: Pieter Brekelmans, Mark Zammit

15:50 – 15:55
Poisons Centres need to prepare for a new product notification procedure (abstract no. 4)
Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht, Netherlands.

15:55 – 16:00
Avoiding emergency ambulance dispatch for suspected non-intentional poisoning by prior telephone consultation with the UK National Poisons Information Service (abstract no. 5)
David A James¹, Nathan George¹, Sally M Bradberry², Euan A Sandilands³, John P Thompson⁴, Simon HL Thomas¹.¹⁵
¹National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; ²National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; ³National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; ⁴National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; ¹⁵Medical Toxicology Centre, Institute of Cellular Medicine, Newcastle University, Newcastle, United Kingdom.

16:00 – 16:05
Evaluation by telephone-follow-up of mild intoxications managed at home by the Poison Control Centre’s medical doctors (abstract no. 6)
Elena Brambilla, Valeria M Petrolini, Giulia Scaravaggi, Eleonora Buscaglia, Maria Di Primo, Carlo A Locatelli.
Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy.

16:05 – 16:25
Enquiries to poison centres regarding occupational and environmental exposures
Maren Hermanns-Clausen, University Medical Center Freiburg, Albert-Ludwig University Freiburg, Germany

16:25 – 16:45
Beyond ‘hello poisons centre how can I help....’
Nick Edwards, Nick Edwards Consulting Ltd, London, UK

16:45 – 16:50
Discussion
At the end of this session the audience should be able to:
> Describe the pattern of occupational and environmental exposures reported to Poison Centers and specific challenges for PC staff handling these enquiries
> Discuss opportunities to diversify available to poisons centres, use the power of our 24-hour service to provide clinical trial support and medicines information, and recognise ‘new’ requirements of pharmaceutical companies and regulatory authorities

GALATEA, WEDNESDAY 22 MAY 2019 (AFTERNOON)

PLENARY PRO-CON DEBATE
SHOULD POISONS CENTRES PROVIDE ADVICE TO THE GENERAL PUBLIC?

Session chair: Alexander Campbell, Karen Simone

16:50 – 17:10
Yes, poisons centres should provide advice to the general public
Edward Krenzelok, University of Pittsburgh, United States

17:10 – 17:30
No, poisons centres should not provide advice to the general public
Irma de Vries, University Medical Center Utrecht, Netherlands

At the end of this debate the audience should be able to:
> Describe the social, clinical and financial benefits of providing poison information directly to the public
> Explain how a country’s overall health care organization influences poisons centres activities

CLINICAL RECOMMENDATION TOXICOLOGY COLLABORATIVE

Session chair: Alexander Campbell, Karen Simone

17:30 – 18:00
Activated Charcoal: Death of the 60 minutes dogma?
Sophie Gosselin, Centre antipoison du Québec, Montréal, Canada
Lotte Hoegberg, The Danish Poisons Information Centre, Bispebjerg University Hospital, Copenhagen, Denmark

At the end of this session the audience should be able to:
> List situations when activated charcoal beyond 60 minutes is indicated

19:30
Welcome Reception at Maschio Angioino-Castel Nuovo
DIONI & ELETTRA, WEDNESDAY 22 MAY 2019 (AFTERNOON)

ANTIDOTE AVAILABILITY ROUND TABLE: ARRANGEMENTS, PROBLEMS AND SOLUTIONS (CONTINUED)

Session chair: Ana Ferrer Dufoi, Carlo Locatelli

15:50 – 16:00
The Netherlands Perspective
Marieke Dijkman, Dutch Poisons Information Center, Utrecht, Netherlands

16:00 – 16:10
The USA Perspective
Christopher Hoyte, Rocky Mountain Poison and Drug Center, Denver, United States

16:10 – 16:20
The Australian Perspective
Darren Roberts, NSW Poisons Information Centre and St Vincent’s Hospital, Sydney, Australia

16:20 – 16:30
The Developing Country Perspective
Knut Erik Hovda, The Norwegian CBRNE Centre of Medicine, Oslo University Hospital, Norway

16:30 – 16:40
Military and Government Stocking for Terrorism
Horst Thiermann, Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany

16:40 – 16:50
Round table discussion

At the end of this session the audience should be able to:

> Explain why certain antidotes are centrally stocked in the Netherlands
> Identify measures to reduce insufficient stocking of emergency antidotes
> Describe approaches used to facilitate timely access to antidotes in Australia
> Explain the main challenges and potential for solution for the antidote availability in developing countries
> Discuss that stockpiling of antidotes necessary for military purposes is performed according to different national specifications and that most antidotes belong to so-called strategic goods

16:50 – 17:30
Plenary Pro-Con Debate in Galatea

17:30 – 18:00
Updates from your Clinical Recommendation Toxicology Collaborative in Galatea

19:30
Welcome Reception at Maschio Angioino-Castel Nuovo
GALATEA, THURSDAY 23 MAY 2019 (MORNING)

LOUIS ROCHE LECTURE

Session chair: Horst Thiermann, Martin Wilks

09:00 – 09:15
Introduction and presentation of the Louise Roche lecturer
Martin Wilks, President EAPCCT

09:15 – 10:00
Poisons Centres: at the crossroads of curative care and public health
Irma de Vries, University Medical Center Utrecht, Netherlands

At the end of this lecture the audience should be able to:
> List a number of pitfalls in decision making under uncertainty

ORAL PLATFORM AND SHORT ORAL PRESENTATIONS I

Session chair: Betty Chan, Alex Manini

10:05 – 10:20
§ Butanediol conversion to gamma-hydroxybutyrate markedly reduced by the alcohol dehydrogenase blocker fomepizole (abstract no. 109)
Evangelia Liakoni 1,2, Hallam Gugelmann 3, Delia A Dempsey 1, Timothy J Wiegand 4, Christopher Havel 1, Peyton Jacob 1, Neal L Benowitz 1,3,5.
1 Division of Clinical Pharmacology and Experimental Therapeutics, Department of Medicine, University of California, San Francisco, United States; 2 Clinical Pharmacology and Toxicology, Department of General Internal Medicine Inselspital, Bern University Hospital, University of Bern, Bern, Switzerland; 3 California Poison Control Center, University of California, San Francisco, United States; 4 University of Rochester Medical Center, Rochester, United States; 5 Department of Bioengineering and Therapeutic Sciences, University of California, San Francisco, United States.

10:20 – 10:35
Gamma-hydroxybutyrate (GHB) and gamma-butyrolactone (GBL) poisonings admitted to the ICU: features and usefulness of plasma GHB concentration measurement (abstract no. 108)
Charlotte Héliodore 1, Isabelle Malissin 1, Hervé Gourlain 2, Laurence Labat 2, Bruno Mégarbane 1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

§ Shortlisted for Taylor & Francis best scientific presentation award
10:35 – 10:40
*Acute beta-blocker overdose: factors associated with cardiovascular mortality and management in the intensive care unit (abstract no. 110)*

Dabor Resiere¹, Bruno Mégarbane², Bruno Sánchez³, Julian Fabre⁴, Hossein Mehdaoui¹.

¹Critical Care Unit, University Hospital of Martinique, Martinique, France; ²Medical and Toxicological ICU, Lariboisière Hospital, Paris, France; ³Department of Cardiovascular Surgery, University Hospital of Martinique, Martinique, France; ⁴Department of Cardiology, University Hospital of Martinique, Martinique, France.

10:40 – 11:20 Coffee and Authors with Posters

**NOVEL OPIOID AND BENZODIAZEPINES SYMPOSIUM**

Session chair: Knut Erik Hovda, Simon Thomas

11:20 – 11:40
*The pharmacology and toxicology of the new synthetic opioids*

Lewis Nelson, Rutgers New Jersey Medical School Newark, United States

11:40 – 12:00
*The pharmacology and toxicology of the NPS benzodiazepines*

David Wood, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom

12:00 – 12:15
*Access and use of bystander naloxone among emergency department patients with opioid abuse in the era of adulterated heroin with fentanyl (abstract no. 111) and Prevalence of fentanyl exposure among emergency department patients with history of opioid abuse (abstract no. 112)*

Hannah Bach¹, Siamak Moayedi², Brenten R Hurt³, Atizaz Hussain³, Valerie R Jenkins³, Ilya J Lazzeri³, Stephen Schenkel², Hong K Kim².

¹Emergency Medicine, University of Maryland Medical Center, Baltimore, United States; ²Emergency Medicine, University of Maryland School of Medicine, Baltimore, United States; ³University of Maryland School of Medicine, Baltimore, United States.

12:15 – 12:30
*Towards real-time opioid abuse surveillance: machine learning for automatic characterization of opioid-related tweets (abstract no. 113) and Characterizing opioid-related tweets: a comparison between prescription and illicit opioid chatter (abstract no. 114)*

Abed Sarker¹, Graciela Gonzalez-Hernandez², Francis De Roos³, Jeanmarie Perrone³.

¹Biostatistics, Epidemiology and Informatics, University of Pennsylvania, Philadelphia, United States; ²University of Pennsylvania, Philadelphia, United States; ³Emergency Medicine, University of Pennsylvania, Philadelphia, United States.
At the end of this session the audience should be able to:
> Compare the risks associated with use of new synthetic opioids to those of prescription opioids and heroin
> Describe the acute toxicity related to the use of novel benzodiazepines

12:30 – 13:30 Lunch

13:30 – 14:00 Authors with Posters and Poster Round
(post number 123, 145, 147, 156, 233)

DIONI & ELETTRA, THURSDAY 23 MAY 2019 (MORNING)

HYPERTHERMIA SYMPOSIUM

Session chair: Paul Dargan, Darren Roberts

10:05 – 10:25
Psychostimulants and hyperthermia: mechanisms
Matthias Liechti, University Hospital Basel, Switzerland

10:25 – 10:40
Influence of genetic polymorphisms within the serotonin system on the acute effects of 3,4-methylenedioxymethamphetamine (MDMA) (abstract no. 115)
Patrick Vizeli¹, Henriette E Meyer Zu Schwabedissen², Matthias E Liechti¹.
¹Clinical Pharmacology and Toxicology, University Hospital Basel, University of Basel, Basel, Switzerland; ²Pharmaceutical Sciences, University of Basel, Basel, Switzerland.

At the end of this session the audience should be able to:
> Understand the mechanism leading to hyperthermic reactions when using stimulant-type drugs of abuse

10:40 – 11:20 Coffee and Authors with Posters
**HYPERTHERMIA SYMPOSIUM (CONTINUED)**

**Session chair: Paul Dargan, Darren Roberts**

**11:20 – 11:40**
*The neuroleptic malignant syndrome*
Philippe Hantson, Cliniques universitaires St-Luc, Université catholique de Louvain, Brussels, Belgium

**11:40 – 12:00**
*Serotonin syndrome*
Angela Chiew, Prince of Wales Hospital, Sydney, Australia

**12:00 – 12:05**
*The time-course of the serotoninergic syndrome in relation to plasma 3,4-methylenedioxy-methamphetamine (MDMA) concentrations in severely poisoned patients (abstract no. 116)*
Mathieu Bouthemy¹, Isabelle Malissin¹, Marion Soichot², Laurence Labat², Bruno Mégarbane¹. ¹Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ²Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

**12:05 – 12:10**
*Efficacy and safety of dantrolene in toxic hyperthermia: a systematic review (abstract no. 117)*
Alexandre Doucet¹, Hugo Langlois², Eric Villeneuve², Camille Tétreault³, Josh J Wang⁴, Sophie Gosselin⁵. ¹Faculty of Medicine, McGill University, Montréal, Canada; ²Pharmacy Department, McGill University Health Centre, Montréal, Canada; ³Faculty of Medicine, Sherbrooke University, Sherbrooke, Canada; ⁴Department of Emergency Medicine, Division of Medical Toxicology, New York University School of Medicine, New York, United States; ⁵Emergency Medicine, Hôpital Charles Lemoyne, Longueuil, Canada.

**12:10 – 12:30**
*Management of drug-induced hyperthermia in the ER and ICU*
Robert Hoffman, NYU School of Medicine, New York, United States

**At the end of this session the audience should be able to:**

> Describe the pathophysiology of the so-called neuroleptic malignant syndrome, discuss the overlap with other syndromes, and recognize severity criteria
> Understand the pathophysiology, causes and diagnosis of serotonin syndrome and describe clinical features and management
> Compare and contrast methods of cooling to identify the most efficient process

**12:30 – 13:30**  **Lunch**

**13:30 – 14:00**  **Authors with Posters and Poster Round**
(postner numbers 132, 146, 148, 155, 231)
### NOVEL OPIOID AND BENZODIAZEPINES SYMPOSIUM (CONTINUED)

**Session chair:** Andrew Dawson, Bob Hoffman

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>14:00 – 14:20</td>
<td>Detection of the novel opioids and benzodiazepines</td>
<td>Sandra N Staeheli, Zurich Institute of Forensic Medicine, University of Zurich, Switzerland</td>
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<td>14:20 – 14:25</td>
<td>Pollyanna in an age of fentanyls (abstract no. 118)</td>
<td>Erik Lindeman, Jenny Westerbergh, Swedish Poisons Information Center, Stockholm, Sweden</td>
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<td>14:25 – 14:45</td>
<td>Novel opioids and benzodiazepines: detection and prevalence in the UK and Europe</td>
<td>Simon HL Thomas, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom</td>
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<td>14:45 – 14:50</td>
<td>Epidemiology of fentanyl exposures reported to US Poison Centers, 2014- 2017 (abstract no. 119)</td>
<td>Saumitra Rege(^1), Duc Anh Ngo(^2), Asaad I Alsufyani(^1), Christopher P Holstege(^1).</td>
</tr>
<tr>
<td></td>
<td>Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.</td>
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<tr>
<td>14:50 – 15:10</td>
<td>Synthetic opioids and benzodiazepines: Impact on clinical and addiction medicine in the USA</td>
<td>Timothy J Wiegand, University of Rochester Medical Center, Rochester, United States</td>
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</tbody>
</table>

**At the end of this session the audience should be able to:**

> List several novel opioids and benzodiazepines and be aware of analytical challenges of their detection
> Compare the use of novel opioids and benzodiazepines between countries within and outside Europe
> Describe how the substitution of novel opioids and benzodiazepines into recreational drug markets in the USA has impacted drug-user safety, overdose rates and the treatment of opioid use disorder

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<th>Time</th>
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<td>15:10 – 15:45</td>
<td>Coffee and Authors with Posters</td>
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Thursday 23
Main Congress
Thursday 23rd May

DIONI & ELETTRA, THURSDAY 23 MAY 2019 (AFTERNOON)

ORAL PLATFORM AND SHORT ORAL PRESENTATIONS II

Session chair: Sophie Gosselin, Kenneth McMartin

14:00 – 14:15
§ Characterization of Chemical, Biological, Radiological, Nuclear (CBRN) Incidents Worldwide From 1970 to 2016 as reported by the Global Terrorism Database (GTD) (abstract no. 120)
Katie Myers, Cynthia Santos.
Department of Emergency Medicine, Rutgers New Jersey Medical School, Newark, United States.

14:15 – 14:20
Valproic acid poisoning: modeling of the pharmacokinetic/pharmacodynamic relationships and analysis of usefulness of L-carnitine infusion (abstract no. 121)
Philippe Nguyen¹, Lucie Chevillard¹, Hervé Gourlain², Isabelle Malissin¹, Bruno Mégarbane¹.
¹ Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ² Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

14:20 – 14:35
§ In vitro pharmacological profiles as predictors of effects and clinical potency of monoaminergic new psychoactive substances (abstract no. 122)
Dino Luethi, Matthias E Liechti.
Division of Clinical Pharmacology and Toxicology, Department of Biomedicine, University Hospital Basel and University of Basel, Basel, Switzerland.

14:35 – 14:40
Impact of a new legislation in Germany on synthetic cannabinoids analytically identified in intoxication cases (abstract no. 123)
Michaela Sommer¹, Verena Angerer¹, Volker Auwärter¹, Florian Eyer², Maren Hermanns-Clausen³.
¹ Forensic Toxicology, Institute of Forensic Medicine, Medical Center - University of Freiburg, Freiburg, Germany; ² Department of Clinical Toxicology, Klinikum rechts der Isar, Technical University of Munich, Munich, Germany; ³ Poisons Information Center, Department of General Pediatrics, Adolescent Medicine and Neonatology, Center for Pediatrics, Medical Center - University of Freiburg, Freiburg, Germany.

§ Shortlisted for Taylor & Francis best scientific presentation award
Thursday 23rd May

14:40 – 14:45
Reported and analytically detected substances in cases of acute recreational drug toxicity: a multicenter European comparison of immunoassay and additional analytical methods (abstract no. 124)

Evangelia Liakoni¹, Alison M Dines², Yasmin Schmid³, Knut Erik Hovda⁴, Fridtjof Heyerdahl⁴, Christopher Yates⁵, David M Wood⁶, Paul I Dargan⁶, Matthias E Liechti³, on behalf of the Euro-Den Plus Research Group.

¹Clinical Pharmacology and Toxicology, Department of General Internal Medicine, Inselspital, Bern University Hospital; Institute of Pharmacology, University of Bern, Bern, Switzerland; ²Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners, London, United Kingdom; ³Division of Clinical Pharmacology and Toxicology, Basel University Hospital and University of Basel, Basel, Switzerland; ⁴The Norwegian CBRNe Centre of Medicine, Department of Acute Medicine, Oslo University Hospital, Oslo, Norway; ⁵Clinical Toxicology Unit, Emergency Department, Hospital Universitari Son Espases, Research Institute of Health Sciences (IdISBa), Palma de Mallorca, Spain; ⁶Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners; Clinical Toxicology, Faculty of Life Sciences and Medicine, King’s College London, London, United Kingdom.

14:45 – 15:00
Acute poisoning by chemicals in Spain: results of the Spanish Toxic Surveillance System (STSS) 2017 (abstract no. 125)

Ana Ferrer Dufol¹, Santiago Nogue Xarau², Francisco Ruiz Ruiz³, Laura Rejas Morras⁴, Agustin Garcia Urdangarin⁵, on behalf of the Spanish Foundation of Clinical Toxicology (FETOC).

¹Unit of Clinical Toxicology, Clinic University Hospital, Zaragoza, Spain; ²Unit of Clinical Toxicology, Hospital Clinic, Barcelona, Spain; ³ED, Clinic University Hospital, Zaragoza, Spain; ⁴Clinical University Hospital, Zaragoza, Spain; ⁵Zaragoza University, Zaragoza, Spain.

15:00 – 15:05
National poisons centre data collection: pilot study on Pesticide Poisoning Monitoring in Germany (PIMONT-PES) (abstract no. 126)

Andreas Stürer¹, Esther Feistkorn², Kathrin Begemann², Nina Glaser², Daniela Acquarone³, Dagmar Prasa⁴, Martin Ebbecke⁵, Florian Eyer⁶, Maren Hermanns-Clausen⁷, Carola Seidel⁸, Erol Tutdibi⁹, Herbert Desel².

¹Poisons Information Centre Mainz, Universitätsmedizin Mainz, Mainz, Germany; ²Poisoning and Product Documentation Centre, German Federal Institute for Risk Assessment (BfR), Berlin, Germany; ³Poisons Information Centre, Charité Universitätsmedizin Berlin, Berlin, Germany; ⁴Poisons Information Centre Erfurt, Helios-Klinikum, Erfurt, Germany; ⁵GIZ-Nord Poisons Center, University Medical Center Göttingen, Göttingen, Germany; ⁶Poisons Information Centre Munich, Klinikum rechts der Isar, Munich, Germany; ⁷Poisons Information Centre VIZ-Freiburg, Universitätskinderklinik Freiburg, Freiburg, Germany; ⁸Poisons Information Centre Bonn, Universitätskinderklinik Bonn, Bonn, Germany; ⁹Poisons Information Centre Homburg, Universitätskinderklinik des Saarlandes, Homburg, Germany.

15:05 – 15:10
Tak: the computational toxicological machine (abstract no. 127)

Michael Chary¹, Michele Burns¹, Edward Boyer².

¹Harvard Medical Toxicology Fellowship, Boston Children’s Hospital, Boston, United States; ²Harvard Medical Toxicology Fellowship, Brigham and Women’s Hospital, Boston, United States.

15:10 – 15:45 Coffee and Authors with Posters
Session chair: Raido Paasma, David Wood

15:45 – 16:00
*Poppers poisoning cases admitted to the intensive care unit: Is there a methemoglobinemia threshold responsible for tissue dysoxia? (abstract no. 128)*
May Yaker, Eya Hamdi, Karim Jaffal, Bruno Mégarbane.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Biochemistry, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

16:00 – 16:15
*Clinical outcomes from early use of digoxin-specific antibodies versus observation in chronic digoxin poisoning (ATOM-4) (abstract no. 129)*
Betty S Chan, Geoffrey K Isbister, Colin B Page, Katherine Z Isoardi, Angela L Chiew, Katharine A Kirby, Nicholas A Buckley.
1 Emergency Medicine & Clinical Toxicology Unit, Prince of Wales Hospital, Sydney, Australia; 2 Clinical Toxicology Research Group, University of Newcastle, Newcastle, Australia; 3 Clinical Toxicology Unit, Princess Alexandra Hospital, Brisbane, Australia; 4 Discipline of Pharmacology, University of Sydney, Sydney, Australia.

16:15 – 16:20
*Can severe digoxin poisoning be treated without using antibody fragments? (abstract no. 130)*
Csaba Pap
Department of Emergency Medicine and Clinical Toxicology, Péterfy Hospital, Budapest, Hungary

16:20 – 16:25
*Self-harm with Nerium oleander ingestion in Italy (abstract no. 131)*
William Brambilla, Ilaria Melara, Valeria M Petrolini, Francesca Chiara, Marta Crevani, Sarah Vecchio, Carlo A Lociatelli.
1 Emergency Medicine Fellowship Program, University of Pavia, Pavia, Italy; 2 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maurer Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy.

16:25 – 17:00
*Meet the editor. How to get published in Clinical Toxicology* *and anywhere else*
Steven Seifert, Editor-in-Chief, Clinical Toxicology

17:15 – 18:45
EAPCCT General Assembly
APAMT SYMPOSIUM - THE DIRTY DOZEN: MECHANISMS OF TOXICITY IN COMMONLY MARKETED HERBAL REMEDIES

Session chair: Wui Ling Chan, Hossein Hassanian Moghaddam

15:45 – 16:05
Toxicity and safety of herbal products: local issues, global implications
Alan Woolf, Boston Children’s Hospital, Boston, United States

16:05 – 16:25
Highly toxic herbs used in Traditional Chinese Medicine: part I
Chen-Chang Yang, National Yang-Ming University & Taipei Veterans General Hospital, Taipei, Taiwan

16:25 – 16:45
Highly toxic herbs used in Traditional Chinese Medicine: part II
Jou-Fang Deng, Taipei Veterans General Hospital, Taipei, Taiwan

16:45 – 17:05
Potential toxicity of ayurvedic medicine
Ashish Bhalla, Post Graduate Institute of Medical Education and Research, Chandigarh, India

At the end of this session the audience should be able to:
> Describe institutional challenges in addressing safety issues regarding botanicals and other dietary supplements
> Understand the mechanisms and toxic effects of certain highly toxic herbs used in Traditional Chinese Medicine
> Appreciate that any bizarre and/or multiple organ disturbance could be related to the use of traditional medicine or herbs
> Understand the toxic potential of various ayurvedic drugs available over the counter in India and abroad

17:15 – 18:45
EAPCCT General Assembly in Galatea
GALATEA, FRIDAY 24 MAY 2019 (MORNING)

YOUNG INVESTIGATOR AWARD (YIA) (PLENARY SESSION)

Session chair: Paul Dargan, Charles McKay

**09:00 – 09:05**
*Introduction*
Paul Dargan  
Chair, EAPCCT Scientific and Meetings Committee

**09:05 – 09:20**
*Pharmacokinetics of an oral lysergic acid diethylamide (LSD) solution in healthy subjects (abstract no. 235)*
Friederike Holze, Urs Duthaler, Patrick Vizeli, Matthias E Liechti.  
Clinical Pharmacology and Toxicology, University Hospital Basel, University Basel, Basel, Switzerland.

**09:20 – 09:35**
*Derivation of a clinical decision rule allowing earlier discharge of patients with paracetamol poisoning after a shorter 12-hour acetylcysteine (SNAP) protocol (abstract no. 236)*
Amani S Alrossies 1, Ruben HK Thanacoody 1, James Harnett 2, Kerry Layne 2, John RH Archer 2, Simon L Hill 1, David M Wood 2, Paul I Dargan 2, Simon HL Thomas 1.  
1 Newcastle University, Newcastle upon Tyne, United Kingdom; 2 Clinical Toxicology, Guy's and St Thomas' NHS Foundation Trust and Faculty of Life Sciences and Medicine, King's College London, London, United Kingdom.

**09:35 – 09:50**
*Phase I and II metabolites of methylenedioxy-substituted stimulants interact with human monoamine transporters (abstract no. 237)*
Karolina E Kolaczynska 1, Dino Luethi 1, Kenner C Rice 2, Bruce E Blough 3, Michael H Baumann 4, Matthias E Liechti 1.  
1 Division of Clinical Pharmacology and Toxicology, Department of Biomedicine, University Hospital Basel, University of Basel, Basel, Switzerland; 2 Drug Design and Synthesis Section, Intramural Research Program, National Institute on Drug Abuse, National Institutes of Health, Bethesda, United States; 3 Center for Drug Discovery, Research Triangle Institute, Research Triangle Park, United States; 4 Designer Drug Research Unit, Intramural Research Program, National Institute on Drug Abuse, National Institutes of Health, Baltimore, United States.

**09:50 – 10:05**
*Mapping snake envenomation: a pilot meteorological and geospatial model based on retrospective review of case records at a single tertiary care snake bite treatment centre (abstract no. 238)*
Siju V Abraham 1, Ronald Jaison Melit 2.  
1 Emergency Medicine, Jubilee Mission Medical College and Research Institute, Thrissur, India; 2 Jubilee Mission Medical College and Research Institute, Thrissur, India.
10:05
Judging commences

10:05 – 10:25
Biology, Pharmacology and Toxicology of Botulinum Neurotoxin
Cesare Montecucco, Department of Biomedical Sciences, University of Padova, Italy

At the end of this lecture the audience should be able to:
> Understand the pharmacological use of botulinum neurotoxin and its role in causing botulism

10:25 – 10:30
Presentation to the winner of the YIA

10:30 – 11:10 Coffee and Authors with Posters

GALATEA, FRIDAY 24 MAY 2019 (MORNING)

ORAL PLATFORM AND SHORT ORAL PRESENTATIONS IV

Session chair: Peter Hultén, Ian Whyte

11:10 – 11:25
Management of severe calcium channel blocker poisonings using albumin dialysis by MARS™: benefits and limits (abstract no. 239)
Laetitia Sutterlin1, Isabelle Malissin1, Sebastian Voicu1, Nicolas Deye1, Brigitte Delhotal Landes1, Marion Soichot2, Eya Hamdi3, Jean-Louis Laplanche3, Laurence Labat2, Bruno Mégarbanel1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 3 Laboratory of Biochemistry, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

11:25 – 11:40
Using EXTRIP criteria as indications for extracorporeal treatment in lithium poisoning (abstract no. 240)
Betty S Chan1, Sonia Cheng2, Angela L Chiew1, Nicholas A Buckley3.
1 Department of Emergency Medicine & Clinical Toxicology, Prince of Wales Hospital, Sydney, Australia; 2 Faculty of Medicine, University of New South Wales, Sydney, Australia; 3 Department of Clinical Pharmacology, University of Sydney, Sydney, Australia.

§ Shortlisted for Taylor & Francis best scientific presentation award
11:40 – 11:45

Pediatric toxicity of clonidine: can a single pill kill? (abstract no. 241)
Asaad I Alsufyani¹, Daniel P Gorman², Nathan P Charlton¹.
¹Medical Toxicology, University of Virginia, Charlottesville, United States; ²Emergency Medicine, Virginia Tech Carilion, Roanoke, United States.

11:45 – 11:50

Paracetamol metabolites and paracetamol-protein adducts following repeated supratherapeutic ingestion (RSTI) of paracetamol (abstract no. 242)
Angela L Chiew¹, Laura P James², Geoffrey K Isbister³, Paul Stathakis⁴, Kirsty Ress⁴, Betty SH Chan⁵, Nicholas A Buckley¹.
¹Department of Pharmacology, School of Medical Sciences, University of Sydney, Sydney, Australia; ²Arkansas Children’s Hospital and Department of Pediatrics, University of Arkansas for Medical Sciences, Arkansas, United States; ³Department of Clinical Toxicology and Pharmacology, Calvary Mater Newcastle and School of Medical Practice, University of Newcastle, Newcastle, Australia; ⁴NSW Health Pathology, Prince of Wales Hospital, Randwick, Australia; ⁵Department of Clinical Toxicology, Prince of Wales Hospital, Randwick, Australia.

11:50 – 11:55

Efficacy of a two bag acetylcysteine regimen to treat paracetamol overdose (2NAC study) (abstract no. 243)
Anselm Wong¹, Geoffrey K Isbister², Richard McNulty³, Angela L Chiew⁴, Colin B Page⁵, Shaun L Greene⁶, Naren Gunja³, Nicholas A Buckley⁷, Andis Graudins⁸.
¹Clinical Sciences at Monash Health, Monash University and Austin Toxicology Unit and Emergency Department, Victoria, Australia; ²Clinical Toxicology Research Group, University of Newcastle, Newcastle, Australia; ³Department of Clinical Pharmacology & Toxicology, Western Sydney Health, New South Wales, Australia; ⁴Department of Emergency and Toxicology, Prince of Wales Hospital, Sydney, Australia; ⁵Department of Emergency and Toxicology, Princess Alexandria Hospital, Brisbane, Australia; ⁶Austin Toxicology Unit and Emergency Department, Austin Health, Victoria, Australia; ⁷University of Sydney, New South Wales, Australia; ⁸Clinical Sciences at Monash Health, Monash University and Monash Toxicology Unit and Emergency Service, Monash Health, Dandenong, Australia.

11:55 – 12:00

Paracetamol metabolites following acute overdose as a biomarker for acute liver injury (abstract no. 244)
Angela L Chiew¹, Geoffrey K Isbister², Paul Stathakis³, Kirsty Ress³, Betty SH Chan⁴, Nicholas A Buckley⁵.
¹Department of Pharmacology, School of Medical Sciences, University of Sydney, Sydney, Australia; ²Department of Clinical Toxicology and Pharmacology, Calvary Mater Newcastle and School of Medical Practice, University of Newcastle, Newcastle, Australia; ³NSW Health Pathology, Prince of Wales Hospital, Randwick, Australia; ⁴Department of Clinical Toxicology, Prince of Wales Hospital, Randwick, Australia; ⁵Department of Pharmacology, University of Sydney, Sydney, Australia.
12:00 – 12:05
Outcomes associated with large doses of extended and immediate release paracetamol products reported to the US National Poison Data System (NPDS) (abstract no. 245)
Kate M Reynolds, Heather Delva-Clark, Randy I Burnham, Malin Rapp-Olsson, Janetta L Iwanicki, Richard C Dart.
Rocky Mountain Poison & Drug Center - Denver Health & Hospital Authority, Denver, United States.

12:05 – 12:10
Loxoscelism: a case series from the Medical Toxicology Unit and Poison Control Centre of Florence Careggi University Hospital (abstract no. 246)
Angelo Rotulo¹, Alessandro Zotto¹, Marco Cirronis¹, Amedeo Del Vecchio¹, Francesco Gambassi², Emanuela Masini¹, Guido Mannaioni¹, Alessandra Ieri².
¹Department of Neurofarba, Università degli Studi di Firenze, Florence, Italy; ²Medical Toxicology Unit and Poison Control Center, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy.

12:10 – 12:15
Epidemiology and clinical aspects of mushroom-related poisonings in Italy: a 20-year retrospective study (abstract no. 247)
Francesca Assisi¹, Franca Davanzo¹, Maurizio Bissoli¹, Valeria Dimasi¹, Marcello Ferruzzi², Joanne Georgatos¹, Ilaria Rebutti¹, Angelo Travaglia¹, Paolo Severgnini¹, Fabrizio Sesana¹, Giovanni Milanesi¹, Paola Moro¹, Anna Celentano¹.
¹Poison Control Center of Milan, ASST GOM Niguarda, Milan, Italy; ²ASST GOM Niguarda, Milan, Italy.

12:15 – 12:20
A model of big data linkage to monitor student emergency department visits with intoxication and associated risk markers in a US public university (abstract no. 248)
Duc Anh Ngo, Rege Saumitra, Christopher P Holstege.
University of Virginia, Charlottesville, United States.

12:20 – 12:25
Changes in patient demographics and poisoning severity after additional regulation of packaging and labelling for liquid laundry detergent capsules (abstract no. 249)
Patricia Casey, Feargal O’Connor, Edel Duggan.
National Poisons Information Centre, Beaumont Hospital, Dublin, Ireland.

12:25 – 12:30
Documentation in the patient medical record improves adherence to poisons information centre telephone advice (abstract no. 250)
Carol J Wylie¹, Genevieve H Messina¹, Danielle S Dean¹, Keith Harris², Colin B Page², Katherine Z Isoardi².
¹Pharmacy, Queensland Poisons Information Centre, Brisbane, Australia; ²Emergency Department, Princess Alexandra Clinical Toxicology Unit, Brisbane, Australia.

12:30 – 13:30 Lunch

13:30 – 14:00 Authors with Posters and Poster Round
(postner numbers 272, 280, 284, 334, 353)
DIONI & ELETTRA, FRIDAY 24 MAY 2019 (MORNING)

BEST PAPER SESSION

Session chair: Christopher Yates, Mark Zammit

An international panel have each been asked to select a clinical toxicology paper published in 2018 that they consider to be among the best. The aim is to highlight papers that have changed or challenged clinical practice, taught something new or unexpected, improved understanding of toxicological mechanisms, or inspired the panellists. The speakers will defend their choice in a brief 10-minute presentation followed by discussion.

11:10 – 11:30
Self-identification of nonpharmaceutical fentanyl exposure following heroin overdose.
Alex Manini, Icahn School of Medicine at Mount Sinai, New York, USA

11:30 – 11:50
Vulnerability to snakebite envenoming: a global mapping of hotspots.
Dabor Resiere, Critical Care Unit, University Hospital of Martinique, France

11:50 – 12:10
Potential pharmacobezoar formation of large size extended-release tablets and their dissolution - an in vitro study.
Davide Lonati, Poison Control Centre and National Toxicology Information Centre - Toxicology Unit, ICS Hospital Maugeri and University of Pavia, Italy

12:10 – 12:30
Salbutamol in acute organophosphorus insecticide poisoning - a pilot dose-response phase II study.
Kate Balme, Red Cross War Memorial Children’s Hospital and University of Cape Town, South Africa

12:30 – 13:30 Lunch

13:30 – 14:00
Authors with Posters and Poster Round
(posters numbers 272, 280, 284, 334, 353)
GALATEA, FRIDAY 24 MAY 2019 (AFTERNOON)

PSYCHIATRY FOR THE CLINICAL TOXICOLOGIST SYMPOSIUM

Session chair: Sally Bradberry, JJ Rasimas

14:00 – 14:20
Personality disorder - drug abuse and self-harm
Thomas Zilker, Munich, Germany

14:20 – 14:40
Agitation in the psychiatric patient who is intoxicated. (High or Mad?) - the role of sedatives / antipsychotics
Jon Cole, Minnesota Poison Control System, Minnesota, USA

14:40 – 14:55
Psychological disturbances in adolescents with acute voluntary poisoning (abstract no. 251)
Pediatric Poisoning Centre, Emergency Clinical Hospital for Children Grigore Alexandrescu, Bucharest, Romania.

14:55 – 15:00
Death on demand: public debate leads to increasing use of “suicide powders” (abstract no. 252)
Antoinette JHP Van Riel¹, Anja PG Wijnands-Kleukers¹, Douwe Dekker², Irma De Vries¹, Dylan W De Lange³.
¹ Dutch Poisons Information Center, University Medical Center, Utrecht University, Utrecht, Netherlands; ² Dutch Poisons Information Center, Department of Internal Medicine, University Medical Center, Utrecht University, Utrecht, Netherlands; ³ Dutch Poisons Information Center, Intensive Care Unit, University Medical Center, Utrecht University, Utrecht, Netherlands.

At the end of this session the audience should be able to:
> Understand the reason why patients with personality disorder tend to drug abuse and suicidal behaviour
> Develop an approach for choosing the ideal sedative for an acutely agitated or violent patient

15:00 – 15:40  Coffee and Authors with Posters
PSYCHIATRY FOR THE CLINICAL TOXICOLOGIST SYMPOSIUM (CONTINUED)

Session chair: Jon Cole, Timothy Wiegand

15:40 – 16:00
Incipient psychosis and substance misuse
Susana Arboleya Martinez, Hospital Universitari Son Espases, Palma de Mallorca, Spain

16:00 – 16:20
Toxicity and psychiatry in hospital: mental health evaluation and care of the overdose patient
Joseph Rasimas, Hennepin County Medical Center, Minneapolis, United States

16:20 – 16:25
Discussion

At the end of this session the audience should be able to:
> Describe the impact of substance use on the diagnosis and prognosis of first-episode psychosis
> Implement principles for safe, sensitive mental health care of the toxicology patient in the acute setting along with planning for treatment after discharge

16:30 – 17:30
EAPCCT Fellows Meeting

20:00 Conference Dinner at Santa Chiara Monastery
DIONI & ELETTRA, FRIDAY 24 MAY 2019 (AFTERNOON)

ECMO AND THE POISONED PATIENT SYMPOSIUM

Session chair: Davide Lonati, Michael Mullins

14:00 – 14:20
Technical standards for ECMO: an overview
Mirko Belliato, Foundation IRCCS Policlinico San Matteo, Pavia, Italy

14:20 – 14:40
ECMO in chemical-induced lung injury
Juergen Pauluhn, Wuppertal, Germany

14:40 – 15:00
Drug pharmacokinetics during ECMO
Matteo Di Nardo, Children’s Hospital Bambino Gesù, Rome, Italy

At the end of this session the audience should be able to:
> Describe the main indications, contraindications, technical set-up and clinical advantages of ECMO in critical-care severely intoxicated patients
> Differentiate irritants causing early and delayed life-threatening lung oedemas and utilize diagnostic tools to develop treatment plans based on structured mechanism of injury rather than symptomology
> Describe the main mechanism regarding pharmacokinetics of sedative drugs and antibiotics during ECMO, in particular which drugs are absorbed to the ECMO circuit and how to adjust dosaging during ECMO

15:00 – 15:40 Coffee and Authors with Posters
ECMO and the Poisoned Patient Symposium (continued)

Session chair: Davide Lonati, Michael Mullins

15:40 – 15:50
Pardeep S Jagpal¹, Hayley A Williams¹, Muhammad EMO Elamin¹, Euan A Sandilands², Simon HL Thomas³, John P Thompson⁴, Sally M Bradberry¹.
¹ National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; ² National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; ³ National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; ⁴ National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom and Pardeep S Jagpal¹, Muhammad EMO Elamin¹, Euan A Sandilands², Simon HL Thomas³, John P Thompson⁴, Sally M Bradberry¹.

15:50 – 16:05
Clinical utility of extracorporeal membrane oxygenation (ECMO) in poisoned patients with cardiovascular collapse: a retrospective study of Extracorporeal Life Support Organization’s ECMO registry (abstract no. 255)
Lindsay Weiner¹, Michael Mazzeffi², Elizabeth Q Hines³, Katherine Prybys¹, Daniel L Herr⁴, Hong K Kim¹.
¹ Emergency Medicine, University of Maryland Medical Center, Baltimore, United States; ² Anesthesiology, University of Maryland School of Medicine, Baltimore, United States; ³ Pediatrics, University of Maryland School of Medicine, Baltimore, United States; ⁴ Medicine, University of Maryland School of Medicine, Baltimore, United States.

16:05 – 16:25
ECMO for the poisoned patient: indications and results
Bruno Mégarbane, Paris-Diderot University, France

At the end of this session the audience should be able to:
> Understand the indications and management of ECMO in the poisoned patient

16:30 – 17:30
EAPCCT Fellows Meeting in Galatea

20:00 Conference Dinner at Santa Chiara Monastery
Posters
22 to 24 May 2019
7. Cocaine poisoning in the intensive care unit: are there differences between cocaine hydrochloride- and crack-related toxicity?
Lisa Catherine¹, Marion Soichot², Sebastian Voicu¹, Laurence Labat², Bruno Mégarbane¹.
¹ Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ² Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

8. A case of etizolam withdrawal syndrome
Anthony Scoccimarro, Ryan Marino, Joshua Shulman.
University of Pittsburgh School of Medicine, Pittsburgh, United States.

9. Analytical confirmation of benzodiazepine use in 500 patients presenting with acute recreational drug toxicity to a Central London Emergency Department
Joanna C White¹, Paul I Dargan², Simon Hudson³, Rachelle Abouchchedid¹, Alison M Dines¹, John RH Archer², David M Wood².
¹ Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom; ² Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust; Faculty of Life Sciences and Medicine, King’s College London, London, United Kingdom; ³ Laboratory and Managed Services, LGC Ltd, Fordham, United Kingdom.

10. Comparison of the hepatocellular toxicity of para-halogenated amphetamines and methcathinones
Xun Zhou, Melanie Walter, Matthias E Liechti, Stephan Krähenbühl, Dino Luethi.
Division of Clinical Pharmacology and Toxicology, Department of Biomedicine, University Hospital Basel and University of Basel, Basel, Switzerland.

11. A chloromethcathinone-like new psychoactive drug (NPS): epidemiological features and clinical characteristics of intoxication
Emilio Salgado¹, Marina Parra², Oscar Pozo³, Josep Marcos⁴, Jordi To-Figueras², Santiago Nogué¹.
¹ Clinical Toxicology Unit, Emergency Department, Hospital Clinic, Barcelona, Spain; ² Biochemistry and Molecular Genetics Unit, Hospital Clinic, Barcelona, Spain; ³ Integrative Pharmacology and Systems Neuroscience Group, Hospital de Mar, Barcelona, Spain; ⁴ Experimental and Health Sciences Department, Universitat Pompeu Fabra, Barcelona, Spain.

& Shortlisted for Taylor & Francis best case study award
12. Methadone poisonings in France: comparison of suicide attempts versus abuse during a seven-year experience of the French Poison Control Center Network
Romain Torrents ¹, Mathieu Glaizal ², Katharina Von Fabec ², Bastien Domangé ¹, Corinne Schmitt ², Julien Reynoard ², Audrey Boulamery ¹, Luc De Haro ², Nicolas Simon ³.
¹ Aix-Marseille Univ, APHM, INSERM, IRD, SESSTIM, Hôpital Sainte Marguerite, Service de Pharmacologie Clinique, Centre Antipoison et de Toxicovigilance, Marseille, France; ² Service de Pharmacologie Clinique, Centre Antipoison et de Toxicovigilance, Hôpital Sainte Marguerite, APHM, Marseille, France; ³ Marseille Univ, APHM, INSERM, IRD, SESSTIM, Hôpital Sainte Marguerite, Service de Pharmacologie Clinique, Centre Antipoison et de Toxicovigilance, Marseille, France.

13. Trends in synthetic cathinone use in poisoned patients in Italy from the National Alert System observatory
Carlo A Locatelli ¹, Eleonora Buscaglia ¹, Giulia Scaravaggi ¹, Azzurra Schicchi ¹, Pietro Papa ², Davide Lonati ².
¹ Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ² Laboratory of Analytical Toxicology, Fondazione IRCCS Policlinico San Matteo-Pavia, Pavia, Italy.

14. Cytochrome P450 enzymes contribute to the metabolism of LSD to nor-LSD and 2-oxo-3-hydroxy-LSD: implications for clinical LSD use
Dino Luethi, Stephan Krähenbühl, Matthias E Liechti, Urs Duthaler.
Division of Clinical Pharmacology and Toxicology, Department of Biomedicine, University Hospital Basel and University of Basel, Basel, Switzerland.

15. Changes in the new psychoactive substances (NPS) involved in acute drug toxicity Emergency Department presentations reported to Euro-DEN Plus Network between 2014 and 2017
David M Wood ¹, Alison M Dines ¹, Knut Erik Hovda ², Fridtjof Heyerdahl ², Christopher Yates ³, Isabelle Giraudon ⁴, Paul I Dargan ¹, on behalf of the Euro-Den Plus Research Group.
¹ Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom; ² Norwegian National Unit for CBRNe Medicine, Oslo University Hospital, Oslo, Norway; ³ Emergency Department and Clinical Toxicology Unit, Hospital Universitari Son Espases, Mallorca, Spain; ⁴ European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Lisbon, Portugal.

16. Emergency department presentations related to acute toxicity following recreational use of cannabis products in Switzerland
Evangelia Liakoni ¹, Yasmin Schmid ², Irene Scholz ¹, Laura Mueller ³, Aristomenis K Exadaktylos ⁴, Alessandro Ceschi ³, Matthias E Liechti ².
¹ Clinical Pharmacology and Toxicology, Department of General Internal Medicine; Institute of Pharmacology, Inselspital, Bern University Hospital, University of Bern, Bern, Switzerland; ² Division of Clinical Pharmacology and Toxicology, Basel University Hospital and University of Basel, Basel, Switzerland; ³ Division of Clinical Pharmacology and Toxicology, Institute of Pharmacological Sciences of Southern Switzerland, Ente Ospedaliero Cantonale, Lugano, Switzerland; ⁴ Emergency Department, Inselspital, Bern University Hospital, University of Bern, Bern, Switzerland.

* Included in poster round
17. The trend in the use of substances of abuse over the past three and a half years in Greece
Vassiliki Sofidiotou, Myrto Bonataki, Eleni Basanou, Vassiliki Touloupaki, Nikoleta Oikonomou, Angeliki Kalostou, Dimitrios Kolovatsios, Polyxeni Neou.
Greek Poison Information Center, “P & A Kyriakou” Children’s Hospital, Athens, Greece.

18. Unintentional clandestine opioid (U-47700) overdose in an adolescent after counterfeit alprazolam use
Brittany P Chapman1, Jeffrey T Lai1, Alex J Krotulski2, Melissa F Fogarty2, Matthew K Griswold3, Barry K Logan2, Kavita M Babu1.
1 University of Massachusetts Medical School, Worcester, United States; 2 Center for Forensic Science Research and Education at the Fredric Rieders Family Foundation, Willow Grove, United States; 3 Hartford Hospital, Hartford, United States.

19. Analytically confirmed use of 3-methoxy-phencyclidine (3-MeO-PCP) in acute non-fatal polysubstance poisonings in Ibiza
María A Leciñena1, Emilia Moreno2, Laura Sahuquillo2, Jordi Puiguriguier Ferrando3, Christopher Yates3, Isabel Gomila4, Miguel Angel Elorza5, Bernardo Barceló Martin5.
1 Emergency Department, Hospital Can Misses, Ibiza, Spain; 2 Clinical Analysis Department, Hospital Universitari Son Espases, Palma de Mallorca, Spain; 3 Clinical Analysis Department, Hospital Universitari Son Llátzer; Research Institute of Health Sciences (IdISBa), Palma de Mallorca, Spain; 5 Laboratory of Clinical Toxicology, Clinical Analysis Department, Hospital Universitari Son Espases; Research Institute of Health Sciences (IdISBa), Palma de Mallorca, Spain.

20. Substance abuse-related Emergency Room visits in Ramathibodi Hospital, Bangkok, Thailand
Satariya Trakulsrichai1, Wipada Pispan1, Umaporn Udomsubpayakul2.
1 Department of Emergency Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; 2 Section for Clinical Epidemiology and Biostatistics, Research Center, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

21. Recreational food: if legal highs are in the kitchen
Diletta Sabatini, Paolo Boldrini, Viola Mazzucco, Maria Caterina Grassi.
Clinical Toxicology - Poison Control Centre and Drug Dependence Unit, Policlinico Umberto I- “Sapienza”, University of Rome, Rome, Italy.

22. Increasing enquiries to the UK National Poisons Information Service (NPIS) concerning alprazolam
Leonard Hawkins1, David Lupton2, Gillian Jackson2, Sally M Bradberry3, Euan A Sandilands2, Simon HL Thomas1.
1 National Poisons Information Service (Newcastle Unit), Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 2 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 3 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom.
23. Internet availability of modafinil and methylphenidate
Joanna Hockenhull, David M Wood, Paul I Dargan.
Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom.

24. Regional variation in non-medical use of benzodiazepines in the UK
Joanna Hockenhull 1, David M Wood 1, Colleen M Haynes 2, Joshua C Black 2, Karilynn Rockhill 2, Richard C Dart 2, Paul I Dargan 1.
1 Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom; 2 Rocky Mountain Poison & Drug Center, Denver Health, Denver, United States.

25. Differences in the pattern and prevalence of non-medical use of prescription benzodiazepines, gamma-aminobutyric acid (GABA) analogues and stimulants in Europe
Joanna Hockenhull 1, Paul I Dargan 1, Colleen M Haynes 2, Joshua C Black 2, Richard C Dart 2, David M Wood 1.
1 Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust, London, United Kingdom; 2 Rocky Mountain Poison & Drug Center, Denver Health, Denver, United States.

26. Gender differences in benzodiazepine-addicted patients
Gabija Valauskaite 1, Deima Eitmontaite 1, Robertas Badaras 2.
1 Vilnius University, Faculty of Medicine, Vilnius, Lithuania; 2 Vilnius University Emergency Hospital, Centre of Toxicology, Faculty of Medicine, Vilnius University, Vilnius, Lithuania.

27. Fatality associated with therapeutic antidepressant and NBOMe recreational drug use
William J Meggs 1, Susan N Miller 1, Jennifer L Parker-Cote 1, Mohan Punja 2.
1 Emergency Medicine, East Carolina University, Greenville, United States; 2 Emergency Medicine, Augusta University, Marietta, United States.

28. Acute recreational drug toxicity in women: a case series from Oslo, Norway
Victoria L Syse 1, Mette Brekke 2, Marit M Grimsrud 1, Per Sverre Persett 3, Fridtjof Heyerdahl 4, Knut Erik Hovda 5, Odd Martin Vallersnes 6.
1 Faculty of Medicine, University of Oslo, Oslo, Norway; 2 General Practice Research Unit, University of Oslo, Oslo, Norway; 3 Department of Acute Medicine, Oslo University Hospital, Oslo, Norway; 4 Department of Prehospital Medicine, Oslo University Hospital, Oslo, Norway; 5 The Norwegian CBRNe Centre of Medicine, Oslo University Hospital, Oslo, Norway; 6 Department of General Practice, University of Oslo, Oslo, Norway.

29. High-dose propranolol for significant clenbuterol toxicity refractory to esmolol and phenylephrine
Jessica V Rivera 1, Justin Arnold 2, William F Rushton 2.
1 Department of Pharmacy, University of Alabama at Birmingham, Birmingham, United States; 2 Department of Emergency Medicine, Office of Medical Toxicology, University of Alabama at Birmingham, Birmingham, United States.
30. Opioid overdoses admitted to the intensive care unit over a 10-year period: clinical features and opioids involved
Rhianna Willems 1, Ahmed S Gouda 2, Karim Jaffal 1, Anne Buisine 3, Laurence Labat 3, Bruno Mégarbane 1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 National Egyptian Center of Environmental and Toxicological Research (NECTR), Cairo University, Cairo, Egypt; 3 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

31. Acute health problems due to recreational drug use in Slovakia
Blažena Cagáňová, Silvia Plačková.
National Toxicological Information Centre, Department of Occupational Medicine and Toxicology, University Hospital Bratislava, Faculty of Medicine Comenius University, Bratislava, Slovakia.

32. Appearances can be deceiving: a case of an infant with unexpected intoxication
Elena Bellelli 1, Mara Pisani 1, Carla Olita 1, Tatiana Federici 1, Andrea Deidda 1, Francesco P Rossi 1, Davide Lonati 2, Marta Crevani 2, Antonino Reale 1, Marco Marano 3.
1 Emergency Department, Bambino Gesù Children Hospital, Rome, Italy; 2 Poison Control Centre and National Toxicology Information Centre, Toxicology Unit, IRCCS Maugeri Foundation, Pavia, Italy; 3 Emergency Department PICU, Bambino Gesù Children Hospital, Rome, Italy.

33. An ETH-LAD trip with unfavourable consequences: a case report
Michaela Sommer 1, Christina Grumann 1, Volker Auwärter 1, Anne Stürzebecher 2, Maren Hermanns-Clausen 3.
1 Forensic Toxicology, Institute of Forensic Medicine, Medical Center - University of Freiburg, Freiburg, Germany; 2 Poisons Information Center, Helios Klinikum Erfurt GmbH, Erfurt, Germany; 3 Poisons Information Center, Department of General Pediatrics, Adolescent Medicine and Neonatology, Center for Pediatrics, Medical Center - University of Freiburg, Freiburg, Germany.

34. Maculopathy after use of isopropyl nitrate poppers documented with optical coherence tomography (OCT)
Massimo Trombini 1, Vittoria Murro 2, Alessandro Zotto 1, Angelo Rotulo 1, Francesco Gambassi 3, Cecilia Lanzi 3, Guido Mannaioni 4, Alessandra Pistelli 3.
1 Department of Neurofarba, Università degli Studi di Firenze, Florence, Italy; 2 Ophthalmology Unit, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy; 3 Poison Control Centre, Toxicology Unit, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy; 4 Neuroscience, Psychology, Drug Research and Child Health, Università degli Studi di Firenze, Florence, Italy.

35. Fatality from a synthetic cannabinoid adulterated with brodifacoum
Alfred Aleguas 1, Julia M Pearson 2, Tamas Peredy 1, Dina Swanson 2.
1 Florida Poison Information Center Tampa, Tampa General Hospital, Tampa, United States; 2 Medical Examiner Department, Hillsborough County, Tampa, United States.
36. Clinical toxicity from analytically confirmed exposure to the synthetic cathinone methylenedioxypyrroridinohexiophenone (MDPHP) in the UK
Gareth Hardy 1, Emma Stoddard 2, Michael Dunn 3, Simon L Hill 4, Simon HL Thomas 5.
1 Emergency Department, Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, United Kingdom; 2 Clinical Research Centre, Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, United Kingdom; 3 Medical Toxicology Centre, Newcastle University, Newcastle, United Kingdom; 4 Clinical Toxicology, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom.

37. Loperamide-related enquiries to the UK National Poisons Information Service (NPIS)
Rebecca ML Waugh 1, Yasmin H Peacock 1, Leonard Hawkins 1, Sally M Bradberry 2, Euan A Sandilands 3, John P Thompson 4, Simon HL Thomas 5.
1 National Poisons Information Service (Newcastle) Unit, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 2 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 3 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 5 Medical Toxicology Centre, Newcastle University, Newcastle, United Kingdom.

38. Oxycodone abuse during pain-relief prescription: an unusual but important cause
Eleonora Buscaglia 1, Davide Lonati 1, Marta Crevani 1, Giulia Scaravaggi 1, Pietro Papa 2, Carlo A Locatelli 1.
1 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 2 Laboratory of Analytical Toxicology, Fondazione IRCCS Policlinico San Matteo-Pavia, Pavia, Italy.

39. Non-medical use of prescription stimulants in Europe in the Non-Medical Use of Prescription Drug (NMURx) National Surveys
Janetta L Iwanicki 1, Colleen M Haynes 1, Joshua C Black 1, Marc Auriacombe 2, Paul I Dargan 3, Maria Francina Fonseca 4, Marilena Guareschi 5, Norbert Scherbaum 6, David M Wood 3, Richard C Dart 1.
1 Rocky Mountain Poison & Drug Center, Denver, United States; 2 Department of Psychiatry and Addiction, Victor Pachon Medical School, Université Victor Segalen, Bordeaux, France; 3 Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust; Faculty of Life Sciences and Medicine, King’s College London, London, United Kingdom; 4 Institut de Neuropsiquiatria i Addiccions-INAD, Hospital del Mar; Institut Hospital del Mar d’Investigacions Mèdiques (IMIM), Barcelona, Spain; 5 Associazione per l’Utilizzo delle Conoscenze Neuroscientifiche a fini Sociali (AU-CNS), Pietrasanta; Department of Neurosciences, Santa Chiara University Hospital, Pisa, Italy; 6 LVR-Klinikum Essen, Essen, Germany.

40. Recreational ingestion of a compounded topical analgesic presenting with coma and cardiotoxicity
Ryan Marino, Alexander Sidlak, Michael Lynch.
University of Pittsburgh School of Medicine, Pittsburgh, United States.
41. Pyoderma gangrenosum from the cocaine adulterant levamisole
Charlotte Goldfine 1, Jeffrey T Lai 2, Kelli Hickle 2, Kavita M Babu 2.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Massachusetts Medical Center, Worcester, United States; 2 University of Massachusetts Medical Center, Worcester, United States.

42. Self-inflicted severe genital friction burns secondary to hypersexual response from synthetic cathinone and cocaine use
Shirley Shao, Ryan Marino, Joshua Shulman, Michael Abesamis.
University of Pittsburgh School of Medicine, Pittsburgh, United States.

43. Recreational use of cough syrup: report of four cases in adolescents
Jorge G Perez Tuñon, Rocío Martínón Rios, Magaly Figueroa, Daniela Mandujano Meneses, Mireille Arango Mathieu.
Centro Toxicológico, Hospital Angeles Lomas, Huixquilucan, Mexico.

44. Analytical prevalence of novel synthetic opioids including fentanyls in samples from patients presenting with apparent heroin overdose in the UK
Michael Dunn 1, Simon L Hill 2, Gareth Hardy 3, Jamie Cooper 4, Paul I Dargan 5, David M Wood 5, Johann Grundlingh 6, Richard Parris 7, Himanshu Kataria 8, Michael Eddleston 9, Jane Officer 10, Simon HL Thomas 1.
1 Medical Toxicology Centre, Newcastle University, Newcastle, United Kingdom; 2 Clinical Toxicology, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 3 Emergency Department, Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, United Kingdom; 4 Emergency Department, Aberdeen Royal Infirmary, Aberdeen, United Kingdom; 5 Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and Faculty of Life Sciences and Medicine King’s College London, London, United Kingdom; 6 Emergency Department, Barts Health NHS Trust, London, United Kingdom; 7 Emergency Department, Bolton NHS Foundation Trust, Bolton, United Kingdom; 8 Emergency Department, St Helens and Knowsley Teaching Hospitals NHS Foundation Trust, Prescot, United Kingdom; 9 Clinical Toxicology, Royal Infirmary, Edinburgh, United Kingdom; 10 Scottish Police Authority Forensic Services, Edinburgh, United Kingdom.

45. Fatal serotonin syndrome after multi-drug use
Amelia Curtis 1, Jeffrey T Lai 2, Mark Neavyn 2, Brittany P Chapman 2.
1 Department of Emergency Medicine, University of Massachusetts, Worcester, United States; 2 University of Massachusetts, Worcester, United States.

46. Overview of the Italian black market of performance and image enhancing drugs (PIED)
Sara Odoardi, Serena Mestria, Valeria Valentini, Sabina Strano Rossi.
Institute of Public Health, Section of Legal Medicine, Università Cattolica del S. Cuore, Rome, Italy.
CO-MORBIDITIES AND POISONING

47. Seizures resulting from ethanol withdrawal: management and prognosis in the intensive care unit
Camille Tacquin1, Isabelle Malissin1, Nicolas Deye1, Nathalie Kubis2, Bruno Mégarbane1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Neurophysiology, Lariboisière Hospital, Paris-Diderot University, Paris, France.

48. Ethylene glycol poisoning and the development of delayed neurological sequelae
Therese Becker, Betty S Chan, Angela L Chiew.
Toxicology, Prince of Wales Hospital, Randwick, Australia.

49. Hyperlactatemia in the acutely ethanol-poisoned patient: does ethanol play a direct role?
Elmire Chauvière1, Pierre Mora1, Hervé Gourlain2, Bruno Mégarbane1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

50. Pre-existing anemia: a risk factor in children’s acute toxic methemoglobinemia
Viorela Nitescu1, Dora Boghițoiu2, Radu Nicolaescu3, Catalin Alexandru Paslaru2, Coriolan Ulmeanu3.
1 Toxicology and Intensive Care Unit, Pediatric Poisoning Centre, Emergency Clinical Hospital for Children "Grigore Alexandrescu", Bucharest, Romania; 2 University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania; 3 Pediatric Poisoning Centre, Emergency Clinical Hospital for Children "Grigore Alexandrescu", Bucharest, Romania.

POISONS CENTRE ACTIVITIES

* 51. Triage of patients with venlafaxine overdose: setting a dose threshold for hospital referral
Saskia J Rietjens, Laura Hondebrink, Fabian KJ Van Hoof, Irma De Vries.
Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht, Netherlands.

52. Ocular exposures reported to US Poison Control Centers from 2011 to 2015
Craig W Heise1, Sumit Agarwal2.
1 Division of Medical Toxicology and Precision Medicine, University of Arizona College of Medicine – Phoenix, Phoenix, United States; 2 Division of Care Transformation, Banner – University Medical Center Phoenix, Phoenix, United States.

* Included in poster round
53. An analysis of adder bite referrals to the UK National Poisons Information Service (NPIS) requiring antivenom
David Stewart 1, Sally M Bradberry 2, Simon HL Thomas 3, John P Thompson 4, Euan A Sandilands 1, Michael Eddleston 1.
1 National Poisons Information Service, (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 2 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 3 National Poisons Information Service, (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.

54. A review of recommendations for and use of single dose activated charcoal in enquiries to the UK National Poisons Information Service (2017 to mid 2018)
Emma J Moyns 1, Muhammad EMO Elamin 1, Euan A Sandilands 2, John P Thompson 3, Simon HL Thomas 4, Sally M Bradberry 1.
1 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 2 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 3 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 4 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom.

*55. Does the use of extensive monographs influence the duration of telephone calls at a poison center? A pilot study
Iris Venster, Claudine C Hunault, Agnes G Van Velzen, Gerard A Zoelen, Irma De Vries. Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht, Netherlands.

56. Increasing rates of serious and fatal 2,4-dinitrophenol poisoning in the UK
Leonard Hawkins 1, David J Lupton 2, Gillian Jackson 2, Sally M Bradberry 3, Euan A Sandilands 2, John P Thompson 4, Simon HL Thomas 1.
1 National Poisons Information Service (Newcastle Unit), Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 2 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 3 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), Llandough Hospital, Cardiff, United Kingdom.

57. A review of enquiries received by the UK National Poisons Information Service (NPIS) involving colchicine exposure (2008 to 31 July 2018)
Gillian A Cooper 1, John P Thompson 1, Sally M Bradberry 2, Euan A Sandilands 3, Simon HL Thomas 4, James M Coulson 1.
1 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 2 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 3 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 4 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom.

* Included in poster round
58. Handling public health and media concerns over magnetic putty: a case study by the UK National Poisons Information Service
Ho MR Lee 1, Muhammad EMO Elamin 1, Nicola Barlow 2, Euan A Sandilands 3, John P Thompson 4, Simon HL Thomas 5, J Allister Vale 1, Sally M Bradberry 1.
1 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 2 Trace Elements Laboratory, Sandwell and West Birmingham Hospitals NHS Trust, West Bromwich, United Kingdom; 3 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 5 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom.

59. Accidental chemical poisonings in nursing homes
Anna-Mariia Termälä, Terhi Lampinen, Leena Soininen.
Poison Information Center, University of Helsinki and Department of Emergency Medicine and Services, Helsinki University Hospital, Helsinki, Finland.

60. Valpromide overdose: how to interpret the plasma concentration of valproic acid?
Sophie Delhumeau, Gaël Le Roux, Géraldine Meyer, Ali Touré, Marion Legeay, Marie Deguigne.
Centre Antipoison et Toxicovigilance Grand Ouest, CHU d’Angers, Angers, France.

61. Surgical removal of quetiapine bezoars
Hilda MH Phan, Mark Personne.

62. Regional variability in intentional exposures to prescription medications in France and Italy
Samantha J Leroy 1, Zachary R Margolin 1, James J Lagrotteria 1, Geoff Severtson 1, Bruno Mégarbane 2, Antoine Villa 2, Fabrizio Sesana 3, Janetta L Iwanicki 1, Richard C Dart 1.
1 Rocky Mountain Poison & Drug Center, Denver, United States; 2 Centre Antipoison et de Toxicovigilance de Paris, Paris, France; 3 Poison Control Centre of Milan, Milan, Italy.

* 63. Button battery exposures in Australian children: a prospective observational study highlighting the role of poisons information centres
Rose Cairns 1, Jared A Brown 1, Kishen Lachireddy 2, Carol J Wylie 3, Jeff Robinson 4, Andrew H Dawson 1, Nicholas A Buckley 1.
1 New South Wales Poisons Information Centre, The Children’s Hospital at Westmead, Sydney Pharmacy School, The University of Sydney, Sydney, Australia; 2 Environmental Health Branch, Health Protection NSW, Sydney, Australia; 3 Queensland Poisons Information Centre, Lady Cilento Children’s Hospital, Brisbane, Australia; 4 Victorian Poisons Information Centre, Austin Hospital, Melbourne, Australia.

* Included in poster round
64. Review of enquiries to the UK National Poisons Information Service (NPIS) Birmingham Unit originating from NHS 111, NHS 24 and NHS Direct advice services
Pardeep S Jagpal 1, Hayley A Williams 1, Muhammad EMO Elamin 1, Euan A Sandilands 2, Simon HL Thomas 3, John P Thompson 4, Sally M Bradberry 1.
1 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 2 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 3 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.

65. Can poisons centre data inform safer prescribing? A pilot review of propranolol exposures reported to the UK National Poisons Information Service (NPIS)
Hayley A Williams 1, Des Henke 1, Muhammad EMO Elamin 1, Euan A Sandilands 2, Simon HL Thomas 3, John P Thompson 4, Sally M Bradberry 1.
1 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 2 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 3 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.

66. Poison centre data on botulism: results from an EAPCCT survey
Davide Lonati 1, Maria Caterina Grassi 2, Helena Lindal Baldvinsdottir 3, Polyxeni Neou 4, Jonas Moens 5, Piotr M Kabata 6, Luc De Haro 7, Mare Oder 8, Miran Bvar 9, Christine Rauber-Lüthy 10, Sergey Zacharov 11, Helmut Schiel 12, Dieter Genser 12, Fabrizio Anniballi 13, Carlo A Locatelli 1.
1 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 2 Clinical Toxicology, Poison Control Centre and Drug Dependence Unit, Policlinico Umberto I and Department of Physiology and Pharmacology “Ersipamer” - “Sapienza” University of Rome, Rome, Italy; 3 Icelandic National Hospital, Landspítali Háskólasjúkrahús, Reykjavik, Iceland; 4 Greek Poison Centre, “P & A Kyriakou” Children’s Hospital, Athens, Greece; 5 Belgian Poison Control Centre, Brussels, Belgium; 6 Department of Clinical Toxicology, Medical University Gdansk, Gdansk, Poland; 7 Centre Antipoison, Hôpital Sainte Marguerite, Marseille, France; 8 Poisoning Information Center, Estonian Health Board, Tallin, Estonia; 9 University Medical Centre Ljubljana, Ljubljana, Slovenia; 10 National Poisons Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland; 11 Toxicological Information Centre, General University Hospital, Prague, Czech Republic; 12 Poisons Information Centre, Vienna, Austria; 13 National Reference Centre for Botulism (NRCB), Department of Veterinary Public Health and Food Safety, National Institute of Health (ISS), Rome, Italy.

67. Fatal colchicine poisoning in babies due to sound-alike drugs: a call for a common European poisoning database
Mojca Dobaja Borak 1, Damjan Grenc 1, Davide Lonati 2, Carlo A Locatelli 2, Valeria M Petrolini 2, Miran Brvar 1.
1 Centre for Clinical Toxicology and Pharmacology, University Medical Centre Ljubljana, Ljubljana, Slovenia; 2 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy.
68. Ranolazine-related toxicity after intentional overdose as reported to the UK National Poisons Information Service
Dacia Jones 1, Sally M Bradberry 2, Euan A Sandilands 3, John P Thompson 4, Simon HL Thomas 1.
1 National Poisons Information Service (Newcastle Unit), Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 2 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 3 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 4 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.

69. Usability of the EAN-Code on product labels for product identification in poisons centres with a view to the upcoming Unique Formula Identifier (UFI)
Andreas Stürer 1, Verena Kauth 2, Oliver Sauer 2, Daniela Acquarone 3, Andreas Schaper 4, Carola Seidel 5, Angelika Holzer 6, Simone Just 7, Uwe Stedtler 8, Colette Degrandi 9, Erol Tutdibi 10, Florian Eyer 11.
1 Poisons Information Centre, University Medical Centre, Mainz, Germany & Society for Clinical Toxicology (GfKT), Germany, Austria, Switzerland; 2 Poisons Information Centre, University Medical Centre, Mainz, Germany; 3 Poisons Information Center, Charité, Berlin, Germany; 4 GIZ-Nord Poisons Centre, University Medical Centre Göttingen, Göttingen, Germany; 5 Poisons Information Centre, University Hospital, Bonn, Germany; 6 Poisons Information Centre, Gesundheit Österreich GmbH, Wien, Austria; 7 Poisons Information Centre, HELIOS Klinikum, Erfurt, Germany; 8 Poisons Information Center, Center for Pediatrics, Medical Center - University of Freiburg, Freiburg, Germany; 9 National Poisons Information Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland; 10 Poisons Information Centre, University Hospital, Homburg, Germany; 11 Poisons Information Centre, Klinikum rechts der Isar, Technical University of Munich, Munich, Germany.

70. Estonian Poisons Information Centre: slowly but surely - experience of the first 10 years
Mare Oder, Ruth Kastanje.
Poison Information Centre, Estonian Health Board, Tallinn, Estonia.

71. Attempted suicides: the American experience
Saumitra Rege 1, Duc Anh Ngo 2, Heather Borek 1, Christopher P Holstege 1.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; 2 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.

72. Evaluation of the quality of data submitted by industry to the Belgian Poison Centre
Christina Tobback, Martine Mostin.
Poison Centre, Brussels, Belgium.

73. Surveillance of hydrocodone overdoses using a National Real-time Data System
Saumitra Rege 1, Duc Anh Ngo 2, Christopher P Holstege 1.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; 2 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.
74. Retinoid use during pregnancy and lactation in Finland: analysis of Teratology Information Centre data
Emma Sipari, Heli Malm, Michael Stigson, Justus Vasama.
1 University of Helsinki and Department of Emergency Medicine and Services, Helsinki University Hospital, Poison Information Centre, Helsinki, Finland; 2 University of Helsinki and Helsinki University Hospital, Department of Emergency Medicine and Services, Teratology Information Service, Helsinki, Finland; 3 Department of Toxicology, Faculty of Pharmacy, Uppsala University, Uppsala, Sweden.

75. Exposures to stomatological preparations, dental products, and exposures in the context of toothache reported to the Poisons Information Centre Erfurt, 1997-2017
Beate Budenz, Michael Deters, Dagmar Prasa, Helmut Hentschel.
Poisons Information Centre, c/o HELIOS Klinikum Erfurt GmbH, Erfurt, Germany.

76. The Icelandic Poisons Information Centre: evaluation of the range and nature of inquiries
G Svanhvít Michelsen, Helena Lindal Baldvinsdottir, Curtis P Snook, Gudborg A Gudjonsdottir, Freyja Jonsdottir.
1 Faculty of Pharmaceutical Sciences, University of Iceland, Reykjavik, Iceland; 2 Poison Information Centre, Icelandic National Hospital, Reykjavik, Iceland; 3 Emergency Department, National University Hospital, Reykjavik, Iceland; 4 University Hospital of Iceland, Faculty of Pharmaceutical Sciences, University of Iceland, Pharmacy of the National University Hospital of Iceland, Reykjavik, Iceland.

ANTIDOTE AVAILABILITY

77. Antidote logistics in Slovakia
Silvia Plačková, Blažena Cagáňová, Olga Otrubova, Jaroslav Kresanek, Igor Batora.
1 National Toxicological Information Centre, Department of Occupational Medicine and Toxicology, University Hospital Bratislava, Faculty of Medicine Comenius University, Bratislava, Slovakia; 2 Slovak Medical University, Bratislava, Slovakia.

78. Towards optimization of antidote availability in Belgian hospitals
Jonas Moens, Jonas Van Baelen, Martine Mostin, Dominique Vandijck, Anne-Marie K Descamps.
1 Belgian Poison Centre, Brussels, Belgium; 2 Faculty of Medicine and Health Sciences, Ghent University, Ghent, Belgium.

79. Availability of antidotes in the hospitals of the National Health Care System of Greece
Nikoleta Oikonomou, Myrto Bonataki, Vassiliki Papathanassiou, Dimitrios Demenagas, Angeliki Kalostou, Konstantinos Fountas, Spyridoula Zoniou, Polyxeni Neou.
Greek Poison Information Center, Children’s Hospital “P & A Kyriakou”, Athens, Greece.

80. Prehospital antidote administration in patients with acute poisoning in Baku, Azerbaijan
Ismayil Afandiyev, Murad Mirzazade.
1 Toxicology, Clinical Medical Center, Baku, Azerbaijan; 2 Central Ambulance Station, Baku, Azerbaijan.
81. Antidote use in Hungary: use of recommended antidotes
Csaba Pap.
Department of Emergency Medicine and Clinical Toxicology, Péterfy Hospital, Budapest, Hungary.

82. The impact of unavailability of three antidotes on patient management
Giulia Scaravaggi, Giulia Lodrini, Valeria M Petrolini, Eleonora Buscaglia, Olha Maystrova, Carlo A Locatelli, Marta Crevani, Sarah Vecchio, Francesca Chiara.
Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy.

83. A survey of the antidote stocking in Norway
Yvonne Lao¹, Dag Jacobsen², Barbro J Spillum³, Espen R Nakstad⁴, Knut Erik Hovda¹.
¹ Norwegian National Unit for CBRNE Medicine, Oslo University Hospital, Oslo, Norway; ² Department of Acute Medicine, Oslo University Hospital, Oslo, Norway; ³ Norwegian Poisons Information Centre, National Institute of Public Health, Oslo, Norway.

SMOKE AND CYANIDE

84. Efficacy of dimethyl trisulfide in cyanide-poisoned swine
Ophir Lavon¹, Gary Rockwood².
¹ Clinical Pharmacology and Toxicology Unit, Carmel Medical Center, Haifa, Israel; ² US Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, United States.

85. Don’t play with fire! House fire-related smoke injuries in Hungary
Csaba Pap, István Elek.
Department of Emergency Medicine and Clinical Toxicology, Péterfy Hospital, Budapest, Hungary.

86. The predictive impact of plasma neutrophil gelatinase-associated lipocalin (NGAL) in acute carbon monoxide poisoning from charcoal burning
Jeong Mi Moon¹, Byeongjo Chun², SD Lee¹, MH Shin³.
¹ Department of Emergency Medicine, Chonnam National University Medical School, Gwangju, Republic of South Korea; ² Chonnam National University Medical School, Gwangju, Republic of South Korea; ³ Department of Preventive Medicine, Chonnam National University Medical School, Hwasun, Republic of South Korea.

87. The predictive value of scores based on peripheral complete blood cell count for long-term neurological outcome in acute carbon monoxide intoxication
Byeongjo Chun, Jeong Mi Moon, YS Cho.
Chonnam National University Medical School, Gwangju, Republic of South Korea.

88. Murder by cyanide injection
Samuel C Holstege¹, Benjamin J Holstege¹, Christopher P Holstege².
¹ Chemistry, Calvin College, Grand Rapids, United States; ² Emergency Medicine/Medical Toxicology, University of Virginia, Charlottesville, United States.
89. Pitfalls of differential diagnosis: deep vein thrombosis or snake bite?
Anne Stürzebecher¹, Beate Machold², Dagmar Prasa¹.
¹ Poisons Information Centre Erfurt, Erfurt, Germany; ² SRH Zentralklinikum Suhl, Suhl, Germany.

90. Preclinical assessment of the neutralizing ability of a monospecific antivenom in the treatment of Bothrops lanceolatus in Martinique
Dabor Resiere¹, Ana Sylvia Arias², Maureen Villalta², Alexandra Ruvado², Yanick Brouste¹, Andre Cabie¹, Remi Neviere¹, Raymond Cesaire¹, Hatem Kallel³, Hossein Mehdaoui¹, Bruno Mégarbane⁴, José Maria Gutiérrez².
¹ Service des Urgences et de Reanimation Polyvalente, Centre Hospitalier Universitaire, Fort-de-France, Martinique, France; ² Instituto Clodomiro Picado, Facultad de Microbiología, Universidad de Costa Rica, San Jose, Costa Rica; ³ Intensive Care Unit, Cayenne General Hospital, Cayenne, French Guiana; ⁴ Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM 1144, Paris, France.

91. A snake in the house is worth 14 in the bush: estimating the price of antivenin treatment for exotic snake envenomation in Sweden
Peter Hultén, Mikael Julin, Stefan Arvidsson, Erik Lindeman.
Swedish Poisons Information Centre, Stockholm, Sweden.

92. Envenomation by a Western green mamba (Dendroaspis viridis): a report of three episodes in the same patient
Joan Fuchs¹, Stefan Weiler¹, Roger Aeberhard², Jürg Meier³.
¹ National Poisons Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland; ² Snakeparadise.ch, Eschlikon, Switzerland; ³ Department of Environmental Sciences, University of Basel, Basel, Switzerland.

93. Complex regional pain syndrome following a centipede bite: a case report
Satariya Trakulsrichai¹, Suthimon Thumtecho², Charuwan Sriapha³, Winai Wananukul².
¹ Department of Emergency Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; ² Department of Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; ³ Ramathibodi Poison Center, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

94. A confirmed Beautiful Pit Viper (Trimeresurus venustus) bite resulting in local symptoms
Joan Fuchs¹, Karine Bessire², Stefan Weiler¹.
¹ National Poisons Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland; ² Department of Emergency Medicine, Centre Hospitalier Universitaire Vaudois (CHUV), Lausanne, Switzerland.

95. Ten years’ experience of the National Serum Depot in the Netherlands
Marieke A Dijkman, Irma De Vries.
Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht, Netherlands.
96. Impact of the media on the Poison Control Centres: the false outbreak of *Loxosceles rufescens* spider bite in Italy
Diletta Sabatini¹, Paolo Boldrini¹, Michele S Milella¹, Viola Mazzucco¹, Susanna M Signoretti¹, Manuela Graziani¹, Emanuela Lanni¹, Maria Caterina Grassi².
¹ Clinical Toxicology - Poison Control Centre and Drug Dependence Unit, Policlinico Umberto I - “Sapienza” University of Rome, Rome, Italy; ² Department of Physiology and Pharmacology “V. Erspayer” - Clinical Toxicology - Poison Control Centre and Drug Dependence Unit, Policlinico Umberto I - “Sapienza” University of Rome, Rome, Italy.

97. The spotted weever (*Trachinus araneus*): a little-known danger for the diver
Bastien Domangé¹, Valentin Pruvot², Julien Reynoard³, Romain Torrents⁴, Corinne Schmitt³, Luc De Haro³, Nicolas Simon⁴.
¹ Clinical Pharmacology, Poison Control Center, Aix-Marseille Univ, APHM, Marseille, France; ² Department of Pediatrics, Bastia Hospital, Bastia, France; ³ Clinical Pharmacology, Poison Control Center, APHM, Marseille, France; ⁴ Clinical Pharmacology, Poison Control Center, Aix-Marseille Univ, APHM, INSERM, IRD, SESSTIM, Marseille, France.

98. Coagulopathy and the use of rotational thromboelastometry (ROTEM®) after a *Bothrops asper* bite
Johanna Nordmark Grass¹, Erik Gremo², Anna Ågren³.
¹ Swedish Poisons Information Centre, Stockholm, Sweden; ² Department of Anaesthesiology and Intensive Care, Mälarsjukhuset, Esiklstuna, Sweden; ³ Division of Cardiovascular Medicine, Karolinska Institutet, Stockholm, Sweden.

99. Unique clinical effects of dwarf adder (*Bitis* species) envenoming: a case series
Cherylynn A Wium, Catharina E Du Plessis, Carine J Marks, Gert J Muller.
Clinical Pharmacology, Stellenbosch University, Cape Town, South Africa.

100 Will be presented on Thursday 23 May 2019.

101. Coral snake bite: a single snake, two consecutive envenomations
Fabio Bucaretchi¹, Carla F Borrasca-Fernandes¹, Eduardo M De Capitani¹, Stephen Hyslop².
¹ Campinas Poison Control Center and Department of Pediatrics, School of Medical Sciences, State University of Campinas (UNICAMP), Campinas, Brazil; ² Department of Pharmacology and Campinas Poison Control Center, School of Medical Sciences, State University of Campinas (UNICAMP), Campinas, Brazil.

103. Thrombotic microangiopathy and acute renal failure following *Echis coloratus* bite in Israel
Yael Lurie¹, Ilan Rahmani Tzvi-Ran², Taysir Nasasra², Lior Fuchs³, Yaniv Almog³, Ori Galante³, Yedidia Bentur¹.
¹ Israel Poison Information Center, Rambam Health Care Campus, Haifa, Israel; ² Department of Medicine, Soroka University Medical Center, Beer-Sheva, Israel; ³ Medical Intensive Care Unit, Soroka University Medical Center, Beer-Sheva, Israel.
104. Epidemiology of Viperidae snake envenoming in central and south-eastern Europe: CEE Viper Study
Mojca Dobaja Borak 1, Željka Babić 2, Niko Bekjarovski 3, Blažena Cagáňová, 4, Damjan Grenc 1, Laima Gruzdyte 5, Piotr M Kabata 6, Ruth Kastanje 7, Zuzana Kolpach 8, Anna Krakowiak 9, Csaba Pap 10, Julia Radenkova-Saeva 11, Jacek Sein-Anand 12, Slavica Vučinić 13, Sergey Zacharov 8, Michael Eddleston 14, Miran Brvar 1.
1 Centre for Clinical Toxicology and Pharmacology, University Medical Centre Ljubljana, Ljubljana, Slovenia; 2 Poison Control Centre, Institute for Medical Research and Occupational Health, Zagreb, Croatia; 3 University Clinic for Toxicology, Skopje, Macedonia; 4 National Toxicological Information Centre, University Hospital, Bratislava, Slovakia; 5 Poison Information Bureau of the Health Emergency Situations Centre of the Ministry of Health, Vilnius, Lithuania; 6 Pomeranian Centre of Toxicology, Gdansk, Poland; 7 Estonian Poisoning Information Centre, Tallinn, Estonia; 8 Toxicological Information Centre, Department of Occupational Medicine, 1st Faculty of Medicine, Charles University and General University Hospital in Prague, Prague, Czech Republic; 9 Nofer Institute of Occupational Medicine, Łódź, Poland; 10 Department of Toxicology, Péterfy Hospital, Budapest, Hungary; 11 Clinic of Toxicology, University Hospital for Emergency Medicine „N.I.Pirogov”, Sofia, Bulgaria; 12 Pomeranian Centre of Toxicology; Department of Clinical Toxicology, Medical University of Gdańsk, Gdańsk, Poland; 13 National Poison Control Centre, Military Medical Academy, Belgrade, Serbia; 14 Department of Pharmacology, Toxicology, and Therapeutics, University/BHF Centre for Cardiovascular Science, University of Edinburgh, Edinburgh, United Kingdom.

105. Once upon a time there was a frog ... toxicity from the kambô ritual
Simone Lippmann, Christian Lakotta, Daniela Acquarone.
Poisons Information Center, Charité Universitätmedizin Berlin, Berlin, Germany.

106. Severe thrombocytopenia after confirmed Crotalus horridus envenomation refractory to repeat bolus dosing of Crotalidae polyvalent immune fab
Matthew K Griswold 1, Dayne Laskey 2, Patrick Filkins 2, Lynn Farrugia 1.
1 Emergency Medicine, Hartford Hospital, Hartford, United States; 2 Pharmacy Practice, University of Saint Joseph School of Pharmacy, Hartford, United States.
MECHANISMS OF TOXICITY AND BASIC RESEARCH

* 132. Baclofen-attributed withdrawal syndrome: clinical and electroencephalographic features and reversal in the rat
Solène Palmieri¹, Pierre-François Rogliano¹, Marion Soichot², Lucie Chevillard¹, Patricia Risède¹, Laurence Labat², Bruno Mégarbane¹.
¹ Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ² Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

133. Susceptibility to the metamizole metabolite N-methyl-4-aminoantipyrine (MAA) depends on the differentiation state of myeloid progenitor cells
Deborah Rudin¹, Stephan Krähenbühl¹, Manuel Haschke².
¹ Clinical Pharmacology & Toxicology, University Hospital Basel, University Basel, Basel, Switzerland; ² Clinical Pharmacology and Toxicology, University Hospital Bern, University of Bern, Bern, Switzerland.

134. Reactive carbonyl compounds in the mechanisms of neuroinflammation in acute methanol poisoning
Jiří Hlusicka¹, Lucie Lischkova², Marian Regenda², Petr Kacer³, Sergey Zakharov².
¹ Toxicological Information Centre, Charles University in Prague, Prague, Czech Republic; ² Charles University in Prague, Prague, Czech Republic; ³ Institute of Chemical Technology, Prague, Czech Republic.

135. Identification of toxic inhalation hazards using the in vitro CULTEX® Radial Flow System (RFS)
Amelie Tsoutsoulopoulos¹, Katrin Gohlsch², Niklas Möhle², Andreas Breit², Harald Mückter², Thomas Gudermann², Olaf Krischenowski³, Sebastian Hoffmann⁴, Horst Thiermann¹, Michaela Aufderheide³, Dirk Steinritz¹.
¹ Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany; ² Walther-Straub-Institute of Pharmacology and Toxicology, Munich, Germany; ³ Cultex® Laboratories GmbH, Hannover, Germany; ⁴ seh consulting + services, Paderborn, Germany.

136. The molecular imaging contrast agent, cationic ferritin, does not result in toxicity in a murine model of chronic kidney disease
Asaad I Alsufyani¹, Kimberly A Deronde², Nathan P Charlton¹, Helen P Cathro³, Kevin M Bennett⁴, Jennifer R Charlton⁵.
¹ Emergency Medicine, Division of Medical Toxicology, University of Virginia, Charlottesville, United States; ² Department of Pediatrics, University of Virginia, Charlottesville, United States; ³ Department of Pathology, University of Virginia, Charlottesville, United States; ⁴ Mallinckrodt Institute of Radiology, Washington University, St. Louis, United States; ⁵ Department of Pediatrics, Division of Nephrology, University of Virginia, Charlottesville, United States.

* Included in poster round
137. New formulations of endomorphin-2 peptide analogue to reduce opioid-like respiratory toxicity: an experimental investigation
Christophe Camillerapp, Lucie Chevillard, Charlotte Martin, Patricia Risède, Steven Ballet, Bruno Mégarbane.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Research Group of Organic Chemistry, Vrije Universiteit Brussel, Brussels, Belgium.

138. Use of a new model, Ex vivo Eye Irritation Test (EVEIT), to evaluate bromide toxicity
Adeline Navarro, Norbert Schrage, Hervé Coudouel, Laurence Mathieu.
1 Scientific Communication, PREVOR, Angleur, Belgium; 2 University Hospital Aachen, Aachen, Germany; 3 PREVOR, Valmondois, France.

ANALYTICAL AND FORENSIC TOXICOLOGY

& 139. Verification of diazinon poisoning of a 5-year-old boy
Markus Siegert, Johannes Finter, Marianne Koller, Horst Thiermann, Harald John.
1 Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany; 2 University Medical Center Hamburg-Eppendorf, Hamburg, Germany.

Christopher P Holstege, Micaela E Saathoff, Samuel C Holstege, Duc Anh Ngo, Saumitra Rege.
Emergency Medicine/Medical Toxicology, University of Virginia, Charlottesville, United States.

141. Octodrine adulteration in sports supplements: two cases of adverse effects in healthy young men
1 Dutch Poisons Information Center, University Medical Center, Utrecht University, Utrecht, Netherlands; 2 National Institute for Public Health and the Environment (RIVM), Bilthoven, Netherlands.

142. “Roar again”: analysis of a sexual enhancer bought on the Internet
Xavier Duval, Patricia Compagnon, M Palayer, Marie Deguigne, Gaël Le Roux.
1 Centre Antipoison et Toxicovigilance Grand Ouest, CHU d’Angers, Angers, France; 2 Laboratoire de Pharmacologie-Toxicologie, CHU d’Angers, Angers, France.

143. Fatal 2,4-dinitrophenol (2,4-DNP) ingestion and development of a novel laboratory testing methodology for post-mortem quantification
Varun Vohra, Joseph O Jones, Jeanna M Marraffa, Michael G Holland, Christine Giffin, Carolyn Kappen, Jeffrey H Moran.
1 SUNY Upstate Medical University, Upstate New York Poison Center, Syracuse, United States; 2 PinPoint Testing LLC, Little Rock, United States; 3 Erie County Medical Examiner’s Office, Buffalo, United States.

& Shortlisted for Taylor & Francis best case study award
144. Quetiapine overdose causing false positive bedside urine toxicology immunoassay for tricyclic antidepressants
Wail Lam Yip.
Accident and Emergency, Queen Mary Hospital, Hong Kong, China.

EPIDEMIOLOGY AND TOXICOSURVEILLANCE

145. Intoxication events in Ferrara’s Emergency Department in 2017: Emilia-Romagna Antidotes Reference Department
Davide Sighinolfi 1, Roberto Zoppellari 2, Riccardo Fontana 3, Brunella Quarta 3, Paola Scanavacca 3, Antonella Tallarico 1, Angela Ricci Frabattista 3.
*Emergenza-Urgenza, Azienda Ospedaliero-Universitaria Ferrara, Ferrara, Italy; 2 Anestesia e Rianimazione, Azienda Ospedaliero-Universitaria Ferrara, Ferrara, Italy; 3 Biotecnologie, Trasfusionali e di Laboratorio - Farmacia Ospedaliera, Azienda Ospedaliero-Universitaria Ferrara, Ferrara, Italy.

* 146. The effect of minimum unit alcohol pricing on toxicology presentations in Scotland
Karen Osinski 1, Thomas Erlandsen 2, Janice Pettie 1, James W Dear 1, Euan A Sandilands 1.
1 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 2 University of Edinburgh, Edinburgh, United Kingdom.

147. Increased number of consultations on opioid analgesics at the Dutch Poisons Information Center: highlighting oxycodone
Dutch Poisons Information Center, University Medical Center, Utrecht University, Utrecht, Netherlands.

* 148. Two years of experience implementing an Emergency Department protocol for management of chemical submission cases
Jordi Puiguriguer Ferrando 1, Christopher Yates 1, Bernardino Barcelo Martin 2, Miguel Angel Elorza 2, Juan Ortega Perez 2, Isabel Gomila Muñiz 3, Catalina Homar Amengual 2.
1 Emergency Department, Clinical Toxicology Unit, Hospital Universitari Son Espases, Palma de Mallorca, Spain; 2 Hospital Universitari Son Espases, Palma de Mallorca, Spain; 3 Hospital Son Llatzer, Palma de Mallorca, Spain.

149. In-flight opioid overdose and the availability of onboard naloxone: an international survey of commercial airlines
Josh J Wang 1, Vincent Poirier 2, Anna-Maria Carvalho 3, Rana Biary 1, Mark K Su 4.
1 Emergency Medicine, Division of Medical Toxicology, New York University School of Medicine, New York, United States; 2 Emergency Medicine, McGill University Health Centre, Montréal, Canada; 3 Emergency Medicine, University of British Columbia, Vancouver, Canada; 4 New York City Poison Control Center, New York City Department of Health and Mental Hygiene, New York, United States.

* Included in poster round
150. Most intoxications with macrolide antibiotics are the result of a medication error
Agnes G Van Velzen, Irma De Vries, Dylan W De Lange.
Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht, Netherlands.

151. Gender and age-specific increases in suicide attempts by self-poisoning in the US among youths and young adults from 2000 to 2018
Henry A Spiller 1, John P Ackerman 2, Natalie E Spiller 3, Marcel J Casavant 1.
1 Central Ohio Poison Center, NationWide Children’s Hospital, Columbus, United States; 2 Center for Suicide Prevention & Research, Behavioral Health Services, NationWide Children’s Hospital, Columbus, United States; 3 College of Medicine, University of Louisville, Louisville, United States.

153. Suicidal pharmaceutical overdose: evolution over 10 years
Jordi Puiguriguer Ferrando 1, Christopher Yates 2, Sandra García Antich 2, Carolina Roset Ferrer 2, Elena Gervilla Garcia 3, Rafael Jimenez Lopez 3, Juan Ortega Perez 2.
1 Emergency Department, Toxicology Unit, Hospital Universitari Son Espases, Palma de Mallorca, Spain; 2 Hospital Universitari Son Espases, Palma de Mallorca, Spain; 3 Universitat Illes Balears, Palma de Mallorca, Spain.

154. Poisoning in the UK: estimating incidence and circumstance
Gillian Jackson 1, Simon HL Thomas 2, John P Thompson 3, Sally M Bradberry 4, Euan A Sandilands 1.
1 National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 2 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; 3 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 4 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom.

155. Pack size restriction of non-opioid analgesics sold over-the-counter in Danish pharmacies: a national cohort study using nationwide register and biochemical data
Britt Morthorst 1, Annette Erlangsen 2, Manon Chaine 3, Frank Eriksson 4, Keith Hawton 5, Kim P Dalhoff 6, Merete Nordentoft 1.
1 Research Unit Mental Health Center Copenhagen, Danish Research Institute for Suicide Prevention, Hellerup, Denmark; 2 Danish Research Institute for Suicide Prevention, Hellerup, Denmark; 3 Statens Serum Institut, Copenhagen, Denmark; 4 Section of Biostatistics, Department of Public Health, University of Copenhagen, Copenhagen, Denmark; 5 Department of Psychiatry, Centre for Suicide Research, Oxford University, Oxford, United Kingdom; 6 Clinical Toxicology, Department of Clinical Pharmacology, Bispebjerg and Frederiksberg University Hospital, Copenhagen, Denmark.

* 156. Poisoning mortality in Spain: the EXITOX study
Jordi Puiguriguer Ferrando 1, Santiago Nogue 2, Ana Ferrer Dufol 3, Lidia Garcia 4, August Supervia 5, Francisca Cordoba 6.
1 Hospital Universitari Son Espases, Palma de Mallorca, Spain; 2 Hospital Clinic de Barcelona, Barcelona, Spain; 3 Hospital Clinico Universitario Lozano Blesa, Zaragoza, Spain; 4 Hospital Parc Taulí, Sabadell, Spain; 5 Hospital del Mar, Barcelona, Spain; 6 Hospital Moisses Broggi, Sant Just Desvern, Spain.

* Included in poster round
157. Acute poisoning in the elderly: substances involved and predictive factors of death
Anne Fuster 1, Ahmed S Gouda 2, Karim Jaffal 1, Nicolas Péron 1, Pierre Mora 1, Hélène Migueres 1, Isabelle Malissin 1, Sebastian Voicu 1, Nicolas Deye 1, Bruno Mégarbane 1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 National Egyptian Center of Environmental and Toxicological Research (NECTR), Cairo University, Cairo, Egypt.

158. Prescription versus over-the-counter (OTC) in Swedish paracetamol poisoning
Erik Lindeman, Paula Hernandez, Helene Salmonson, Johanna Nordmark Grass.
Swedish Poisons Information Center, Stockholm, Sweden.

159. Adherence of caregivers of children to advice provided by a National Poison Information Center
Gal Neuman 1,2, Adi N Miller-Barmak 2, Lana Khoury 2, Iris Lev dov-Avital 1, Maisar Salama 1, Taleb Moed 1, Yedidia Bentur 1,3.
1 Clinical Pharmacology and Toxicology Section, Israel Poison Information Center, Rambam Health Care Campus, Haifa, Israel; 2 Department of Pediatrics, Rambam Health Care Campus, Haifa, Israel; 3 The Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

160. Teenage oxycodone exposures reported to the US National Poison Data System
Saumitra Rege 1, Duc Anh Ngo 2, Marissa Kopatic 1, Christopher P Holstege 1.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; 2 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.

161. Demographic trends in injury with alcohol intoxication associated with emergency department visits among students in a US public university
Duc Anh Ngo 1, Rege Saumitra 2, Christopher P Holstege 2.
1 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States; 2 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States.

162. Antidote use in Hungary: use of second-line antidotes
Csaba Pap, István Elek.
Department of Emergency Medicine and Clinical Toxicology, Péterfy Hospital, Budapest, Hungary.

163. Poisoned patients admitted to the intensive care unit: experience of treatments in a case series of 184 patients
Roberto Zoppellari 1, Anna L Pinamonti 1, Filippo Tartari 1, Alessandra Mallozzi Menegatti 1, Luca Bagnoli 1, Chiara De Fazio 1, Alessandra Quaranta 1, Angela Ricci Frabattista 2, Anna Talarico 3, Rosa M Gaudio 3.
1 Anaesthesia and Intensive Care, S. Anna Hospital, Ferrara, Italy; 2 Pharmacy, S. Anna Hospital, Ferrara, Italy; 3 Legal Medicine, S. Anna Hospital, Ferrara, Italy.
& 164. A tube with a view – video-assisted orogastric lavage (VAOL)
Arie P Francis¹, Elie Harmouch¹, Emily S Taub¹, Ben Suwing², Matthew McCarty², Rana Biary¹, Robert S Hoffman¹, Silas W Smith¹.
¹Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; ²Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States.

165. Young versus elderly patients in chronic lithium toxicity
Sonia Cheng¹, William Siu², Angela L Chiew³, Elia Vecellio⁴, Nicholas A Buckley⁵, Betty S Chan³.
¹Faculty of Medicine, University of New South Wales, Sydney, Australia; ²Department of Emergency Medicine, Sutherland Hospital, Sydney, Australia; ³Department of Emergency Medicine & Clinical Toxicology, Prince of Wales Hospital, Sydney, Australia; ⁴NSW Health Pathology, Prince of Wales Hospital, Sydney, Australia; ⁵Department of Clinical Pharmacology, University of Sydney, Sydney, Australia.

166. Severe metformin poisoning in the French West Indies: incidence, early clinical and biological features and prognostic factors
Dabor Resiere¹, Annuela Populo¹, Cyrille Charbatier¹, Jonathan Florentin¹, Didier Martin², Julien Fabre³, Francois Roques⁴, Hossein Mehdaoui⁵, Bruno Mégarbane⁴.
¹Critical Care Unit, University Hospital of Martinique, Martinique, France; ²Department of Cardiovascular Surgery, University Hospital of Martinique, Martinique, France; ³Department of Cardiology, University Hospital of Martinique, Martinique, France; ⁴Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

167. Poisoning-associated rhabdomyolysis: Risk factors for acute kidney injury and outcome in the intensive care unit
Pierre-François Rogliano¹, Nicolas Péron¹, Jean-Louis Laplanche², Bruno Mégarbane¹.
¹Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ²Laboratory of Biochemistry, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

168. Massive eucalyptus oil overdose leading to prolonged coma state and associated NT-proBNP concentrations
Joe A Rotella¹, Simon Hume², Anselm Wong³.
¹Austin Toxicology Service, Austin Health and Melbourne Medical School, University of Melbourne, Victoria, Australia; ²Department of Medicine, St Vincent’s Hospital, Victoria, Australia; ³Austin Toxicology Service, Austin Health and Department of Medicine, School of Clinical Sciences, Monash University, Victoria, Australia.

169. Levetiracetam toxicity: a first step to identify the hospitalization threshold
Jutta Trompelt¹, Wolfgang Klumb², Dagmar Prasa³, Cornelia Reichert⁴, Elke Faerber⁵, Elisabeth Holder-Koob⁶, Claudia Zatloukal⁷, Oliver Sauer¹, Andreas Stürer¹.
¹Poisons Information Centre, Mainz, Germany; ²Poisons Information Centre, Bonn, Germany; ³Poisons Information Centre, Erfurt, Germany; ⁴National Poisons Centre, Tox Info Suisse, Zurich, Switzerland; ⁵GIZ-Nord Poisons Centre, University Medical Centre Göttingen, Göttingen, Germany; ⁶Poisons Information Centre, Berlin, Germany; ⁷Poison Information Centre, Vienna, Austria.

& Shortlisted for Taylor & Francis best case study award
170. Identification of risk factors for repetition and poor prognosis among patients presenting with acute poisoning in a one-year observational study
Kai Knudsen, Mirella Wictoran.
Anaesthesia and intensive Care, Sahlgrenska University Hospital, Gothenburg, Sweden.

171. Intravenous immunoglobulin (IVIG) use in subacute combined degeneration secondary to vitamin B12 deficiency from nitrous oxide abuse
Alexandra Simpson¹, John Rinker², William F Rushton³.
¹University of Alabama at Birmingham School of Medicine, University of Alabama at Birmingham, Birmingham, United States; ²Department of Neurology, University of Alabama at Birmingham, Birmingham, United States; ³Office of Medical Toxicology, Department of Emergency Medicine, University of Alabama at Birmingham, Birmingham, United States.

172. Characteristics and costs of adults with acute poisoning admitted to the emergency department of a university hospital in Belgium
Anne-Marie K Descamps¹, Dominique Vandijck¹, Walter Buylaert², Martine Mostin³, Peter De Paepe².
¹Public Health, Ghent University, Ghent, Belgium; ²Emergency Medicine, Ghent University Hospital, Ghent, Belgium; ³Poison Centre, Brussels, Belgium.

173. Should endoscopic removal of tricyclic antidepressants be performed in patients with signs of severe poisoning?
Elena Kishinevsky, Galia Karp, Gennady Bregman, Konstantin Brusin.
Intensive Care Unit, Kaplan Medical Center, Rehovot, Israel.

175. The Great Molasses Flood: volume overload and pulmonary symptoms after high dose insulin therapy in amlodipine poisoning
Johanna Nordmark Grass¹, Johan Ahlner², Fredrik C Kugelberg², Erik Lindeman¹.
¹Swedish Poisons Information Center, Stockholm, Sweden; ²Department of Forensic Genetics and Forensic Toxicology, National Board of Forensic Medicine, Linköping, Sweden.

176. Viper envenomation with ocular neurotoxic effects managed without antidote administration: a case report
Michele S Milella, Susanna M Signoretti, Emanuela Lanni, Maria Caterina Grassi.
Clinical Toxicology - Poison Control Centre and Drug Dependence Unit, Policlinico Umberto I - “Sapienza” University of Rome, Rome, Italy.

177. Implementation of a protocol driven Crotalinae Envenomation Unit
William F Rushton¹, Justin Arnold¹, Jessica V Rivera².
¹Office of Medical Toxicology, Department of Emergency Medicine, University of Alabama at Birmingham, Birmingham, United States; ²Department of Pharmacy, University of Alabama at Birmingham, Birmingham, United States.
178. Pharmacokinetic evaluation of *Vipera ammodytes* snakebites treated with currently available antivenoms
Tihana Kurtović ¹, Miran Brvar ², Svjetlana Karabuva ³, Maja Lang Balija ¹, Damjan Grenc ², Igor Križaj ⁴, Boris Lukšić ³, Beata Halassy ¹.
¹ University of Zagreb, Centre for Research and Knowledge Transfer in Biotechnology, Zagreb, Croatia; ² Centre for Clinical Toxicology and Pharmacology, University Medical Centre Ljubljana, Ljubljana, Slovenia; ³ Clinical Department of Infectious Diseases, University Hospital of Split, Split, Croatia; ⁴ Department of Molecular and Biomedical Sciences, Jožef Stefan Institute, Ljubljana, Slovenia.

179. Turnaround time of antidote distribution in Canada
Camille Tétreault ¹, Hugo Langlois ², Éric Villeneuve ², Monique Cormier ³, Juliana Lombardi ⁴, Sophie Gosselin ⁵.
¹ Faculty of Medicine, Sherbrooke University, Sherbrooke, Canada; ² Pharmacy Department, McGill University Health Centre, Montréal, Canada; ³ Montreal Medical Toxicology Initiative, Montréal, Canada; ⁴ Pharmacy Department, Jewish General Hospital, Montréal, Canada; ⁵ Emergency Department, McGill University Health Centre, Montréal, Canada.

180. Failure of computerized tomography to detect a large bezoar after massive aspirin overdose
Jennifer L Parker Cote ¹, Bryan T Gerber ¹, Hyunjeong Lee ¹, Susan N Miller ¹, Robert Dietrich ², William J Meggs ¹.
¹ Emergency Medicine, East Carolina University-Brody School of Medicine, Greenville, United States; ² Pulmonary and Critical Care, East Carolina University-Brody School of Medicine, Greenville, United States.

181. Two cases of intentional cantharidin poisoning in Hong Kong
Chi-Keung Chan, Tin-Yat Chow, Man-Li Tse.
Hong Kong Poison Information Centre, Hong Kong, China.

182. Measurement of QRS intervals in tricyclic antidepressant poisoning
Therese Becker ¹, Nancy Briggs ², Angela L Chiew ³, Ben Ng ³, Corey Smith ³, Jenny Yu ³, Betty S Chan ¹.
¹ Toxicology, Prince of Wales Hospital, Randwick, Australia; ² Statistics, New South Wales University, Randwick, Australia; ³ Cardiology, Prince of Wales Hospital, Randwick, Australia.

183. A comparison between acute-on-chronic versus chronic lithium toxicity
Sonia Cheng ¹, Will Siu ², Angela L Chiew ³, Elia Vecellio ⁴, Nicholas A Buckley ⁵, Betty S Chan ³.
¹ Faculty of Medicine, University of New South Wales, Sydney, Australia; ² Emergency Department, Sutherland Hospital, Sydney, Australia; ³ Department of Emergency Medicine & Clinical Toxicology, Prince of Wales Hospital, Sydney, Australia; ⁴ NSW Health Pathology, Prince of Wales Hospital, Sydney, Australia; ⁵ Department of Clinical Pharmacology, Prince of Wales Hospital, Sydney, Australia.

184. An indisciplinary national antidote preparedness workgroup optimizes antidote availability
Lotte CG Hoegberg.
Department of Anesthesiology and Intensive Care & The Danish Poisons Information Centre, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark.
185. Unintentional ingestion of brimonidine: severe effects in an adult patient
Mariapina Gallo, Andrea Giampreti, Raffaella Butera, Lorella Faraoni, Georgios Eleftheriou, Giuseppe Bacis.
UOSD Poison Control Center and Toxicology, ASST Ospedale Papa Giovanni XXIII, Bergamo, Italy.

186. Intermittent sodium bicarbonate bolus with permissive hypernatremia and alkalemia in severe desipramine cardiotoxicity
Robert Goodnough 1, Ben Tsutaoka 2, Kai Li 3, Daniel Repplinger 1, Adina Badea 4, Kara L Lynch 4, Craig G Smollin 1, Paul D Blanc 5.  
1 Department of Emergency Medicine, University of California San Francisco, San Francisco, United States; 2 California Poison Control System - San Francisco Division, University of California San Francisco, San Francisco, United States; 3 Department of Emergency Medicine, Kaiser San Leandro/Fremont, San Leandro, United States; 4 Department of Laboratory Medicine, University of California San Francisco, San Francisco, United States; 5 Department of Medicine, University of California San Francisco, San Francisco, United States.

187. Successful prolonged cardiopulmonary resuscitation (CPR) followed by extracorporeal membrane oxygenation (ECMO) after venlafaxine-induced takotsubo cardiomyopathy
Sune Forsberg 1, Lis Abazi 2.  
1 Swedish Poisons Information Centre, Stockholm, Sweden; 2 Intensive Care, Tiohundra, Norrtälje, Sweden.

188. The octreotide endgame: reducing glucose infusion after high-dose insulin therapy
Erik Lindeman 1, Marzena Wandas 2, Carsten Metzsch 3, Ala Ghazi 4, Elisabeth Aardal 5, Johan Ahlner 6, Fredrik C Kugelberg 6, Johanna Nordmark Grass 1.  
1 Swedish Poisons Information Center, Stockholm, Sweden; 2 Department of Anesthesiology and Intensive Care, Skåne University Hospital, Malmö, Sweden; 3 Department of Cardiothoracic Anesthesia and Intensive Care, Skåne University Hospital, Lund, Sweden; 4 Department of Anesthesiology and Intensive Care, Vrinnevi Hospital, Norrköping, Sweden; 5 Department of Clinical Chemistry, Linköping University Hospital, Linköping, Sweden; 6 Department of Forensic Genetics and Forensic Toxicology, National Board of Forensic Medicine, Linköping, Sweden.

189. Ecstasy-associated hyponatremia: treat them like marathon runners
Erik Lindeman 1, Inga Fredriksson 2.  
1 Swedish Poisons Information Center, Stockholm, Sweden; 2 Department of Anesthesiology and Intensive Care, Danderyd Hospital, Stockholm, Sweden.

190. Clinical signs in a non-Parkinson’s patient from therapeutic doses of pramipexole given in error – and antidotal reversal
Soeren Bøgevig 1, Sys S Johansen 2, Heidi Kruse 3, Lotte CG Hoegberg 4.  
1 Danish Poisons Information Centre and Department of Clinical Pharmacology, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark; 2 Section of Forensic Chemistry, Department of Forensic Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark; 3 Department of Anesthesiology, Copenhagen University Hospital Herlev, Herlev, Denmark; 4 Danish Poisons Information Centre and Department of Anesthesiology and Intensive Care, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark.
191. Delays, interruptions, and adverse reactions with IV acetylcysteine administration using traditional, 3-bag dosing
Susan C Smolinske, Brandon J Warrick, Steven A Seifert.
New Mexico Poison and Drug Information Center, University of New Mexico College of Pharmacy, Albuquerque, United States.

192. Carbon monoxide poisoning unresponsive to hyperbaric oxygen therapy: synergy between clinicians and laboratory
Azzurra Schicchi¹, Anna Celentano², Roberto Costagliola³, Davide Lonati¹, Francesca Chiara¹, Stefano Paglia⁴, Rossella Giacomello⁵, Chiara Guerrini⁶, Damiano Vignaroli⁷, Pietro Papa⁸, Fabio Garuti⁹, Carlo A Locatelli¹, Franca Davanzo².
¹ Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ² Milan National Poison Control Centre - ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy; ³ S.C. Anestesia e Rianimazione 2, ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy; ⁴ U.O. Pronto Soccorso e Accettazione, Ospedale Maggiore di Lodi, Lodi, Italy; ⁵ Hyperbaric Centre, ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy; ⁶ Internal Medicine Department, Ospedale Maggiore, Lodi, Italy; ⁷ Emergency Medicine Fellowship Program, University of Pavia, Pavia, Italy; ⁸ Laboratory of Analytical Toxicology, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy.

193. Anticholinergic syndrome treated with oral rivastigmine: an inexpensive therapy
Fannie Péloquin¹, Pierre-André Dubé², Maude St-Onge³, Vincent Pichette⁴, Sophie Gosselin⁵.
¹ Emergency Medicine Residency Program, Université Laval, Québec, Canada; ² Institut National de Santé Publique du Québec, Québec, Canada; ³ Centre Antipoison du Québec, Québec, Canada; ⁴ Nephrology Department, Hôpital Maisonneuve-Rosemont, Montréal, Canada.

194. Buprenorphine exposures reported to a regional poison center, 2011-2016
Saumitra Rege¹, Duc Anh Ngo², Nassima Ait-Daoud³, Christopher P Holstege¹.
¹ Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; ² Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States; ³ Psychiatry and Neurobehavioral Sciences, University of Virginia, Charlottesville, United States.

195. Veno-arterial extracorporeal membrane oxygenation (VA-ECMO) and hydroxocobalamin in diphenhydramine-induced cardiac arrest
Jonathan De Olano¹, Nicos Hadjiangelis², Rana Biary¹.
¹ Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; ² Critical Care, New York Presbyterian Brooklyn Methodist Hospital, Brooklyn, United States.

196. Complications of transport in corpore of illicit drug requiring admission to the intensive care unit
Lise Aubry¹, Karim Jaffal¹, Marion Soichot², Laurence Labat², Bruno Mégarbane¹.
¹ Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; ² Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.
197. Metformin intoxication requiring dialysis: a case report of extracorporeal removal and renal elimination
Roberto Zoppellari 1, Milo Vason 1, Alda Storari 2, Anna Talarico 3, Stefano Petrini 1, Margherita Neri 4.
1 Anaesthesia and Intensive Care, S. Anna Hospital, Ferrara, Italy; 2 Nephrology, S. Anna Hospital, Ferrara, Italy; 3 Legal Medicine, S. Anna Hospital, Ferrara, Italy; 4 Legal Medicine, Ferrara University, Ferrara, Italy.

198. Prolonged clinical course from suspected verapamil bezoar formation in an intentional massive overdose of verapamil and enalapril
Lotte CG Hoegberg 1, Sys S Johansen 2, Tonny S Petersen 3, Dorte F Palmqvist 1, Soeren Bøgevig 3.
1 Department of Anesthesiology and Intensive Care and Danish Poisons Information Centre, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark; 2 Section of Forensic Chemistry, Department of Forensic Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark; 3 Department of Clinical Pharmacology and Danish Poisons Information Centre, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark.

199. Physostigmine for atypical antipsychotic agents (quetiapine, olanzapine and clozapine): a retrospective review
Timothy J Wiegand 1, Rachel Gorodetsky 2, Nicole Acquisto 3, Rachel Schult 3, Kimberly Kaukeinen 1, Kenneth Conner 1.
1 Emergency Medicine, University of Rochester Medical Center, Rochester, United States; 2 D’Youville College, School of Pharmacy, Buffalo, United States; 3 Department of Pharmacy, University of Rochester Medical Center, Rochester, United States.

200. Early diagnosis associated with pharmacological and hyperbaric oxygen therapy in a Loxosceles bite in Italy
Franca Davanzo 1, Anna Celentano 1, Valeria Dimasi 1, Fabio Garuti 2, Giovanni Sesana 2, Rossella Giacomello 2, Gianluca Basso 3, Paolo Pantini 4.
1 Milan Poison Control Center, Niguarda Great Metropolitan Hospital, Milan, Italy; 2 Hyperbaric Medicine Center, Niguarda Great Metropolitan Hospital, Milan, Italy; 3 Plastic Surgery, Niguarda Great Metropolitan Hospital, Milan, Italy; 4 Museo Civico di Scienze Naturali “E.Caffi” Bergamo, Bergamo, Italy.

105. Assessing potential health threats by monitoring poison control centre data: a new alert in Italy concerning toxic concentrations of ricin in fertilizers
Franca Davanzo 1, Andrea Bolognesi 2, Laura Settimi 3.
1 Poison Control Center, Niguarda Hospital, Milan, Italy; 2 Department of Experimental Diagnostic and Specialty Medicine, Bologna University, Bologna, Italy; 3 Department of Environment and Health, National Institute of Health, Rome, Italy.
201. Biological monitoring of occupational exposure to 5-fluorouracil by urinary α-fluoro-β-alanine (FBAL) assay with a high-sensitivity analytical method
Mireille Canal Raffin¹, Antoine Villa².
¹ Equipe Epicene - Laboratoire de Pharmacologie et de Toxicologie, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France; ² Service de Pathologies Professionnelles et Environnement, Hôpital la Timone, AP-HM, Marseille, France.

202. Respiratory impairment in workers exposed to nanoparticles
Daniela Pelclova¹, Vladimir Zdimal², Stepanka Vlckova¹, Zdenka Fenclova¹, Lucie Lischkova¹.
¹ Department of Occupational Medicine, Charles University in Prague and General University Hospital, First Faculty of Medicine, Prague, Czech Republic; ² Institute of Chemical Process Fundamentals of the CAS, Prague, Czech Republic.

203. Acute transdermal chromium oxide intoxication after an industrial accident in two tanning workers
Hyun Ho Jung, Jung Taek Park, Kyoung Ho Choi.
Emergency Medicine, The Catholic Medical University of Korea, Uijeonbu, Republic of South Korea.

204. Four incidents of mass occupational herbicide poisoning in Azerbaijan
Ismayil Afandiyev.
Azerbaijan Medical University, Baku, Azerbaijan.

206. Workplace exposures in New Zealand: Enquiries to the poison centre over a five year period
Aleisha Jane King.
New Zealand National Poisons Centre, University of Otago, Dunedin, New Zealand.

207. Occupational exposure and contamination to antineoplastic drugs of healthcare professionals in Mauritania
Antoine Villa¹, Moustapha Mohamedou², Mathieu Molimard³, Mohamed Sidatt Cheikh El Moustaph⁴, Mireille Canal Raffin⁵.
¹ Service de Santé au Travail, Hôpital la Timone, AP-HM, Marseille, France; ² Centre National d’Oncologie, Nouakchott, Mauritania; ³ Laboratoire de Pharmacologie et de Toxicologie, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France; ⁴ Institut National pour la Recherche en Santé Publique, Nouakchott, Mauritania; ⁵ Equipe Epicene - Laboratoire de Pharmacologie et de Toxicologie, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France.

208. Chronic methyl bromide toxicity treated with intermittent haemodialysis
Therese Becker, Betty S Chan, Angela L Chiew.
Toxicology, Prince of Wales, Randwick, Australia.
209. Guttate psoriasis: a case of unusual evolution of dermal chemical burns
Azzurra Schicchi 1, Marco Tresoldi 2, Valeria M Petrolini 1, Marta Crevani 1, Maria Perrone 3, Carlo A Locatelli 1.

1Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 2Plastic Surgery Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 3Emergency Department, IRCCS Policlinico San Matteo, Pavia, Italy.

210. Poisoning by oral exposure in the work environment
Nina Glaser 1, Kathrin Begemann 2, Esther Feistkorn 2, Herbert Desel 2.

1Scientific Service, German Federal Institute for Risk Assessment, Berlin, Germany; 2German Federal Institute for Risk Assessment, Berlin, Germany.

211. Tool development for assessing antineoplastic drugs surface contamination in healthcare services and other workplaces
Benoît Atgé 1, Oscar Da Silva Caçaö 2, Dominique Ducint 3, Catherine Verdun-Esquer 4, Isabelle Baldi 5, Mathieu Molimard 6, Antoine Villa 7, Mireille Canal Raffin 2.

1AHI33, Association d’Hygiène Industrielle, Service de Santé au Travail, Bordeaux, France; 2Equipe Epicene - Laboratoire de Pharmacologie et de Toxicologie, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France; 3Laboratoire de Pharmacologie et de Toxicologie, CHU de Bordeaux, Bordeaux, France; 4Service de Santé au Travail, CHU de Bordeaux, Bordeaux, France; 5Equipe Epicene - Service de Santé au Travail, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France; 6Laboratoire de Pharmacologie et de Toxicologie, Inserm U1219, Université de Bordeaux, CHU de Bordeaux, Bordeaux, France; 7Service de Santé au Travail, Hôpital la Timone, AP-HM, Marseille, France.

212. Detection of occupational exposure to nanoparticles in human biological fluids by transmission electron microscopy for the assessment of chronic toxic effects
Lucie Lischkova 1, Daniela Pelclova 1, Jirí Hlusicka 1, Marian Regenda 2, Tomas Navratil 1, Alena Michalcova 3, Sergey Zakharov 1.

1Department of Occupational Medicine and Toxicological Information Centre, 1st Faculty of Medicine, Charles University, General University Hospital, Prague, Czech Republic; 2Department of Occupational Medicine and Toxicological Information Centre, General University Hospital, Prague, Czech Republic; 3Department of Metals and Corrosion Engineering, University of Chemistry and Technology in Prague, Prague, Czech Republic.

PLANT AND MUSHROOM POISONING

213. Jimsonweed meets Hungarian goulash - case report of a mass intoxication
Dóra O Jakab, István Elek.

Emergency Department and Clinical Toxicology, Péterfy Hospital and National Traumatology Centre, Budapest, Hungary.

214. No, this is not wild garlic... and it can kill you! A case of Colchicum autumnale poisoning involving the Danish Poison Information Center and Authorities
Paula EC Hammer, Ellen B Pedersen, Niels E Ebbehoej,

Danish Poison Information Center, Bispebjerg and Frederiksberg University Hospital, Copenhagen, Denmark.
215. Anticholinergic toxicity associated with lupini beans in Europe: two case reports
Corinne Schmitt1, Romain Torrents1,2, Bastien Domangé1, Luc De Haro1, Nicolas Simon1,2.
1 Clinical Pharmacology, Poison Control Center, St Marguerite Hospital, Marseille, France; 2 Aix-Marseille Univ, APHM, INSERM, IRD, SESSTIM, Marseille, France.

216. Ingestion of raw Aleurites moluccana seeds: experience of the Austrian Poisons Information Centre
Kinga Bartecka-Mino, Helmut Schiel, Tara Arif.
Poisons Information Centre Austria, Vienna, Austria.

217. Evaluation of enquiries regarding Atropa belladonna ingestion to the Austrian Poisons Information Centre
Tara Arif, Helmut Schiel, Kinga Bartecka-Mino.
Poisons Information Centre Austria, Vienna, Austria.

218. Evaluation of enquiries regarding Brugmansia suaveolens exposures to the Austrian Poisons Information Centre
Tara Arif, Dieter Genser, Kinga Bartecka-Mino.
Poisons Information Centre Austria, Vienna, Austria.

219. A 16-year review of enquiries regarding Myristica fragrans ingestion to the Austrian Poisons Information Centre (PIC)
Kinga Bartecka-Mino, Dieter Genser, Tara Arif.
Poisons Information Centre Austria, Vienna, Austria.

220. Ingestion of Veratrum album due to confusion with gentian
Tara Arif, Ursula Schreiner, Kinga Bartecka-Mino.
Poisons Information Centre Austria, Vienna, Austria.

221. A one-year survey of self-collected Allium ursinum ingestion of the Austrian Poisons Information Centre
Susanna Dorner-Schulmeister, Sandra Hruby, Kinga Bartecka-Mino, Dieter Genser, Helmut Schiel, Tara Arif.
Poisons Information Centre Austria, Vienna, Austria.

222. Yew needles poisoning: a case report
Mojca Skafar1, Tomaž Goslar1, Damjan Grenc2, Gordana Koželj3, Miran Brvar2.
1 Centre for Intensive Internal Medicine, University Medical Centre Ljubljana, Ljubljana, Slovenia; 2 Centre for Clinical Toxicology and Pharmacology, University Medical Centre Ljubljana, Ljubljana, Slovenia; 3 Institute of Forensic Medicine, Medical Faculty, University of Ljubljana, Ljubljana, Slovenia.

223. Hepatotoxic mushroom poisoning in Northern Italy
Giuseppe Musella1, Paolo Severgnini2, Francesca Assisi3.
1 Anesthesia and Intensive Care, ASST Sette Laghi, Varese, Italy; 2 Department of Biotechnologies and Life Science, University of Insubria, Varese, Italy; 3 Poison Control Center, Ospedale Niguarda Cà Granda, Milan, Italy.
224. Mushroom poisoning outbreak in Iran: lessons learnt for preparedness of future mycetism
Hossein Hassanian-Moghaddam 1, Nafiseh Mirkatouli 2, Pirhossein Kolivand 2, Nasim Zamani 3, Behjat Barari 4, Zahra Habibi-Nodeh 2.
1 Social Determinants of Health Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran; 2 Civil Defense Secretariat of Ministry of Health, Tehran, Iran; 3 Clinical Toxicology, Loghman Hakim Hospital, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran; 4 Toxicological Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

225. Calcium oxalate crystalluria and hypocalcemia induced by ingestion of Phytolacca americana root
Samuel C Holstege 1, Angela Venuto-Ashton 2, Christopher P Holstege 1.
1 Emergency Medicine/Medical Toxicology, University of Virginia, Charlottesville, United States; 2 Department of Hospitalist Medicine, Roanoke Memorial Hospital, Roanoke, United States.

226. Severe liver injury caused by recommended doses of the food supplement kratom
Soeren Bøgevig 1, Torben Breindal 2, Mikkel B Christensen 1, Trine Nielsen 3, Lotte CG Hoegberg 4.
1 Danish Poisons Information Centre and Department of Clinical Pharmacology, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark; 2 Department of Clinical Biochemistry, North Denmark Regional Hospital (Aalborg University), Hjørring, Denmark; 3 Department of Internal Medicine, Zealand University Hospital, Køge, Denmark; 4 Danish Poisons Information Centre and Department of Anesthesiology and Intensive Care, Copenhagen University Hospital Hospital Bispebjerg, Copenhagen, Denmark.

VETERINARY POISONING

227. Humulus lupulus (hops) ingestion in 13 domestic dogs
Tiffany Blackett, Nicola Bates.
Veterinary Poisons Information Service, London, United Kingdom.

228. Mirabegron toxicosis in dogs: not as bad as we feared
Nicola Bates, Nick Edwards.
Veterinary Poisons Information Service, London, United Kingdom.

229. Xylitol-sweetened gingerbread: an unrecognised danger for dogs
Dave Huiskens 1, Anne A Kan 1, Joris H Robben 2, Dylan W De Lange 1, Marieke A Dijkman 1.
1 Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands; 2 Clinical Sciences of Companion Animals, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands.

230. How "diet" gingerbread increased the awareness of xylitol toxicity in dogs
Dave Huiskens 1, Anne A Kan 1, Joris H Robben 2, Duc Anh Ngo 3, Dylan W De Lange 1, Marieke A Dijkman 1.
1 Dutch Poisons Information Center, University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands; 2 Clinical Sciences of Companion Animals, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands.
Posters

Medicine, Utrecht University, Utrecht, Netherlands; ³ Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.

* 231. 5-Hydroxytryptophan (5-HTP) exposure in 65 dogs
Emilija Kekla, Philip Rawson-Harris, Nicola Bates.
Veterinary Poisons Information Service, London, United Kingdom.

100. Treatment of serotonin syndrome due to 5-hydroxytryptophan intoxication in a Catahoula Leopard Dog
Francesca Morello¹, Caterina Veronesi¹, Silvia Bertocchi¹, Silva Rubini², Carlo A Locatelli³.
¹ Clinica Veterinaria Europa, Ferrara, Italy; ² Sezione di Ferrara, Istituto Zooprofilattico Sperimentale della Lombardia e dell’Emilia Romagna, Ferrara, Italy; ³ Pavia Poison Control Centre - National Toxicology Information Centre, Pavia, Italy.

232. Gorilla Glue ingestion in dogs: an expanding issue
Zoe Tizzard, Nicola Bates.
Veterinary Poisons Information Service, London, United Kingdom.

233. Confirmed ingestion of paralytic shellfish toxins (PST) in a dog
Andrew Turner¹, Nicola Bates², Nick Edwards².
¹ Centre for Environment, Fisheries and Aquaculture Science (Cefas), Weymouth, United Kingdom; ² Veterinary Poisons Information Service, London, United Kingdom.

234. Wildlife poisoning in Emilia Romagna region, Italy: a 10 year survey
Silva Rubini¹, Elena Faggionato², Alberto Biancardi², Giuseppe Merialdi², Marianna Merenda², Paola Massi², Matteo Frasnelli², Chiara A Garbarino², Luca Gelmini², Andrea Luppi², Claudia Cotti³, Carmela Musto³, Mauro Delogu³, Anna Talarico⁴, Rosa M Gaudio⁴, Paolo Frisoni⁴, Sabina Strano Rossi⁵, Carlo A Locatelli⁶, Sandro Mazzariol⁷.
¹ Sezione di Ferrara, Experimental Zooprophylactic Institute of Lombardy and Emilia Romagna, Brescia, Italy; ² Experimental Zooprophylactic Institute of Lombardy and Emilia Romagna, Brescia, Italy; ³ Wildlife and Exotics Animal Service (SeFSE), Department of Veterinary Medical Sciences, University of Bologna, Bologna, Italy; ⁴ Department of Medical Science, University of Ferrara, Ferrara, Italy; ⁵ Institute of Legal Medicine, Catholic University of Sacred Heart, Rome, Italy; ⁶ Pavia Poison Control Centre - National Toxicology Information Centre, Pavia, Italy; ⁷ Department of Comparative Biomedicine and Food Science BCA, University of Padua, Legnaro (PD), Italy.

* Included in poster round
PAEDIATRIC POISONING

256. 7-months-old: kind of blue
Serena Ascione 1, Margherita Rosa 2, Andrea Apicella 2, Paolo Raimondo 2, Eduardo Ponticiello 2, Vincenzo Tipo 3.
1 Department of Medical Translational Sciences, “Federico II” University, Naples, Italy; 2 Department of Emergency, Santobono Children Hospital, Naples, Italy; 3 Santobono Children Hospital, Naples, Italy.

257. Teenagers and self-poisoning in a pediatric emergency department
Virna Carmellino 1, Claudia Bondone 1, Andrea Vermena 1, Ilaria Bergese 1, Emanuela Garrone 1, Sonia Aguzzi 1, Francesca Bosetti 2, Antonio F Urbino 1.
1 Department of Pediatric Emergency, Regina Margherita Children’s Hospital, AOU Città della Salute e della Scienza di Torino, Torino, Italy; 2 Pediatric Department, Cardinal Massaia Hospital, Asti, Italy.

258. Unintentional clozapine ingestion in two siblings due to a pharmacy dispensing error
Madeline H Renny 1, Rana Biary 1, Mary Ann Howland 1, Mark K Su 2.
1 Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; 2 New York City Poison Control Center, Department of Health and Mental Hygiene, New York, United States.

259. Severe intoxication with aspiration in a toddler after ingestion of diluted benzalkonium chloride, a common quaternary ammonium compound
Johanna Nordmark Grass, Emma Petersson.
Swedish Poisons Information Centre, Stockholm, Sweden.

Marta Crevani 1, Mara Pisani 2, Elena Bellelli 2, Carla Olita 2, Tatiana Federici 2, Andrea Deidda 2, Marco Marano 3, Francesco P Rossi 4, Antonino Reale 2.
1 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 2 Emergency Department, IRCCS Bambino Gesù Children Hospital, Rome, Italy; 3 Pediatric Intensive Care Unit, IRCCS Bambino Gesù Children Hospital, Rome, Italy; 4 Emergency Department, IRCCS Bambino Gesù Children Hospital, Rome, Italy.

261. Cannabinoid intoxication: experience in an Italian Pediatric Emergency Department
Eduardo Ponticiello, Laura Ruggiero, Vincenzo Tipo, Onorina Di Mita, Margherita Rosa.
Emergency Department, AORN Santobono-Pausilipon, Naples, Italy.
262. Nalbuphine overdose in children: a case series
Colette Degrandi, Hugo Kupferschmidt, Katharina E Hofer.
National Poisons Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland.

263. Morbidity and mortality of paediatric poisonings at a children’s hospital in South Africa
Kate Balme, Cindy Stephen.
Department of Paediatrics, Poisons Information Centre, Red Cross War Memorial Children’s Hospital and University of Cape Town, Cape Town, South Africa.

264. Double dose guanfacine: harmless of not?
Jenny Westerbergh, Jonas Höjer.
Swedish Poisons Information Centre, Stockholm, Sweden.

265. Out-of-hospital medication errors in children: a 6-year retrospective study
Annalisa Troiano, Claudia Bondone, Virna Carmellino, Emanuele Castagno, Andrea Vermena, Antonio F Urbino.
Department of Pediatric Emergency, Regina Margherita Children’s Hospital, AOU Città della Salute e della Scienza di Torino, Torino, Italy.

266. Childhood acute poisoning: epidemiological assumptions for the elaboration of preventive strategies
Andrea Vermena, Claudia Bondone, Virna Carmellino, Emanuele Castagno, Federico Tremoloso, Antonio F Urbino.
Department of Pediatric Emergency, Regina Margherita Children’s Hospital, AOU Città della Salute e della Scienza di Torino, Torino, Italy.

267. Viper bites in children: experience of a tertiary care pediatric hospital in Central Italy
Martina Di Giuseppe¹, Mara Pisani², Giuseppe Pontrelli³, Barbara Scialanga², Elena Bellelli², Gabriella Bottari⁴, Corrado Cecchetti⁴, Marco Marano⁴.
¹ Pediatric University Hospital Department, Bambino Gesù Children Hospital, University of Tor Vergata, Rome Italy; ² Emergency Department, Bambino Gesù Children Hospital, Rome Italy; ³ Clinical Trial Centre, Bambino Gesù Children Hospital, Rome, Italy; ⁴ Emergency Department PICU, Bambino Gesù Children Hospital, Rome Italy.

268. Accidental repeated supratherapeutic overdose of paracetamol in a neonate with prolonged paracetamol elimination half-life
Monica Abadier¹, Anselm Wong², Andis Graudins³.
¹ Monash Toxicology Unit, Monash Health, Dandenong, Australia; ² Clinical Sciences at Monash Health, Monash University, Clayton, Australia; ³ Monash Toxicology Unit and Emergency Medicine Service, Monash Health and Monash University, Dandenong, Australia.

& Shortlisted for Taylor & Francis best case study award
269. Pediatric, self-harm cases comprise a large proportion of intentional exposures to methylphenidate reported to participating poison centres
Geoff Severtson¹, James J Lagrotteria¹, Zachary R Margolin¹, Samantha J Leroy¹, Antoine Villa², Andreas Schaper³, Martin Ebbecke³, Fabrizio Sesana⁴, Bruno Mégarbane², Janetta L Iwanicki¹, Richard C Dart¹.
¹Rocky Mountain Poison & Drug Center, Denver, United States; ²Centre Antipoison et de Toxicovigilance de Paris, Paris, France; ³GIZ-Nord Poisons Centre, University Medical Centre, Göttingen, Germany; ⁴Poison Control Centre of Milan, Milan, Italy.

270. Differential diagnosis of botulism in an acutely hypotonic infant
Elena Bellelli¹, Mara Pisani¹, Davide Lonati², Francesco P Rossi¹, Maia De Luca³, Daniela Perrotta⁴, Elisabetta Pasotti⁴, Marco Marano⁴.
¹Emergency Department, Bambino Gesù Children Hospital, Rome, Italy; ²Poison Control Centre and National Toxicology Information Centre, Toxicology Unit, IRCCS Maugeri Foundation, Pavia, Italy; ³Bambino Gesù Children Hospital, Rome, Italy; ⁴Emergency Department PICU, Bambino Gesù Children Hospital, Rome, Italy.

271. Yellow sac spider (Cheiracanthium punctorium) bite in a child: a case report
Marcello Montibeller¹, Marta Crevani², Leonardo Genuini³, Mara Pisani⁴, Alessia Mesturino⁴, Roberto A Pantaleoni⁵, Marco Marano³.
¹Faculty of Medicine, La Sapienza University of Rome, Rome, Italy; ²Poison Control Centre, National Toxicology Information Centre, Maugeri Clinical and Scientific Institutes IRCCS, Pavia, Italy; ³Department of Emergency PICU, Bambino Gesù Children Hospital, Rome, Italy; ⁴Emergency Department, Bambino Gesù Children Hospital, Rome, Italy; ⁵Department of Agriculture, University of Sassari, Sassari, Italy.

272. Steel yourself! Trends in iron packaging regulations in the US and pediatric morbidity
James B Leonard¹, Elizabeth Q Hines², Wendy Klein-Schwartz¹.
¹Maryland Poison Center, University of Maryland School of Pharmacy, Baltimore, United States; ²Department of Pediatric Emergency Medicine, University of Maryland School of Medicine, Baltimore, United States.

273. Maternal use of acetaminophen-butalbital-caffeine product resulting in neonate butalbital exposure through breast milk
Varun Vohra, Jeanna M Marraffa.
SUNY Upstate Medical University, Upstate New York Poison Center, Syracuse, United States.

274. Neurotoxicity of high doses intrathecal baclofen in a pediatric patient
Davide Lonati¹, Azzurra Schicchi¹, Sara Olivotto², Silvia Masnada², Rossella Gottardo³, Nadia M Porpiglia³, Franco Tagliaro³, Carlo A Locatelli¹.
¹Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri, Pavia, Italy; ²UOC Pediatric Neurology V. Buzzi-ASST Fatebenefratelli Sacco Hospital, Milan, Italy; ³Department of Diagnostics and Public Health, Unit of Forensic Medicine, University of Verona, Policlinico "G.B. Rossi", Verona, Italy.

* Included in poster round
275. Safekeeping of cleaning agents reported by parents of preschool children in Croatia
Željka Babić 1, Jelena Kovačić 2, Zrinka Franić 2, Adrijana Bjelajac 2, Veda M Varnai 2, Jelena Macan 2, Rajka Turk 2.
1 Croatian Poison Control Centre, Institute for Medical Research and Occupational Health, Zagreb, Croatia; 2 Institute for Medical Research and Occupational Health, Zagreb, Croatia.

276. Pediatric patients with acute neurological disorders: are they poisoned?
Mariapina Gallo 1, Maria D’Agostino 2, Georgios Eleftheriou 1, Lorella Faraoni 1, Raffaella Butera 1, Andrea Giampreti 1, Giuseppe Bacis 1.
1 UOSD Poison Control Center and Toxicology, ASST Ospedale Papa Giovanni XXIII, Bergamo, Italy; 2 UOC Pediatria, ASST Ospedale Papa Giovanni XXIII, Bergamo, Italy.

277. Infant botulism – a misjudged rarity?
Maike Borchers 1, G Christoph Korenke 2, Marie-Madeleine Baeck 1, Andreas Schaper 1, Martin Ebbecke 1.
1 Poisons Information Centre Göttingen, Göttingen, Germany; 2 Pediatrics Hospital, Klinikum Oldenburg, Oldenburg, Germany.

278. Creation of a Choosing Wisely list in the care of paediatric patients with suspected toxic exposure following a modified-Delphi approach
Lidia Martínez-Sánchez 1, Carlos Miguel Angelats-Romero 2, Alberto Barasoain-Millán 3, Javier López-Ávila 4, Juan Carlos Molina-Cabañero 5, on behalf of the Intoxications Working Group, Spanish Society of Paediatric Emergencies.
1 Paediatric Emergency Department, SJD Barcelona Children’s Hospital, Barcelona, Spain; 2 Francesc de Borja University Hospital, Gandía, Spain; 3 University Hospital Foundation of Alcorcon, Madrid, Spain; 4 University Hospital of Salamanca, Salamanca, Spain; 5 Niño Jesús University Children’s Hospital, Madrid, Spain.

279. Use of veno-arterial extracorporeal membrane oxygenation in life-threatening bupropion ingestion in a pediatric patient
James B Leonard 1, Elizabeth Q Hines 2, K Barry Deatrick 3, Katherine Prybys 4, Hong K Kim 4.
1 Maryland Poison Center, University of Maryland School of Pharmacy, Baltimore, United States; 2 Department of Pediatric Emergency Medicine, University of Maryland School of Medicine, Baltimore, United States; 3 Department of Pediatric Cardiothoracic Surgery, University of Maryland School of Medicine, Baltimore, United States; 4 Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, United States.

* 280. Pediatric opioid exposures reported to US Poison Centers, 2011-2017
Saumitra Rege 1, Duc Anh Ngo 2, Marissa Kopatic 1, Christopher P Holstege 1.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; 2 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.

* Included in poster round
281. Digoxin overdose with unstable bradycardia: an uncommon poisoning in a child
Chi Fong Miu¹, Sio Teng Lam², Tam Fei Chang¹.
¹ Emergency Medicine, Centro Hospitalar Conde de São Januário, Macao, China; ² Oncology, Centro Hospitalar Conde de São Januário, Macao, China.

HOUSEHOLD PRODUCTS POISONING

282. Poisoning by ammonia solution: reasons, clinical effects and prevention opportunities
Brigita Petrik¹, Robertas Badaras², Gabija Laubner³.
¹ Vilnius University, Vilnius, Lithuania; ² Toxicology Centre of Vilnius University, Vilnius, Lithuania; ³ Vilnius University Emergency Hospital, Vilnius, Lithuania.

283. Perspectives in the pharmacological treatment of corrosive ingestions
Daniela Pelclova.
Toxicological Information Centre, Charles University in Prague and General University Hospital, First Faculty of Medicine, Prague, Czech Republic.

Rachael Day¹, Sally M Bradberry¹, Gillian Jackson², David J Lupton², Euan A Sandilands², Simon HL Thomas³, John P Thompson⁴, J Allister Vale¹.
¹ National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; ² National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; ³ National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom; ⁴ National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.

285. Unintentional paediatric ingestion of firelighters reported to the National Poisons Information Centre, Dublin
Nicola Cassidy, Edel Duggan.
National Poisons Information Centre, Beaumont Hospital, Dublin, Ireland.

286. Accidental ammonia ingestion in cocaine users: a French case series
Corinne Schmitt¹, Mathieu Glaizal¹, Romain Torrents¹², Bastien Domangé¹, Luc De Haro¹, Nicolas Simon¹².
¹ Clinical Pharmacology, Poison Control Center, St Marguerite Hospital, APHM, Marseille, France; ² Aix-Marseille Univ, APHM, INSERM, IRD, SESSTIM, Marseille, France.

287. Oxygen unleashed: cardiac and neurologic complications following unintentional ingestion of 35% hydrogen peroxide necessitating hyperbaric therapy
Calvin J Tan¹, Mark K Su², Sage W Wiener³, Elie Harmouche⁴, James Willis¹.
¹ SUNY Downstate Medical Center; NYC H+H Kings County, Brooklyn, United States; ² New York City Poison Control Center, New York, United States; ³ SUNY Downstate Medical Center; NYC H+H Kings County; New York City Poison Control Center, Brooklyn, United States; ⁴ New York University School of Medicine, New York City Poison Control Center, New York, United States.

* Included in poster round
288. Role of home-made slime in the rise of boric acid intoxications
Marta Crevani¹, Santi Di Pietro², Francesca Chiara¹, Azzurra Schicchi¹, Valeria M Petrolini¹, Carlo A Locatelli¹.  
¹ Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ² Emergency Medicine Fellowship Program, University of Pavia, Pavia, Italy.

289. Isopropyl alcohol: a cause of anion gap metabolic acidosis with elevated lactate
Elie Harmouche¹, Mark Su², Rana Biary³.  
¹ Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; ² Poison Control Center, Department of Health and Mental Hygiene, New York, United States; ³ Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, New York, United States.

ADVERSE REACTIONS FROM MEDICINES

290. Neutropenia associated with metamizole: a case-control study
Deborah Rudin¹, Stephan Krähenbühl¹, Manuel Haschke².  
¹ Clinical Pharmacology & Toxicology, University Hospital Basel, University of Basel, Basel, Switzerland; ² Clinical Pharmacology and Toxicology, University Hospital Bern, University of Bern, Bern, Switzerland.

291. A case of liraglutide toxicity
Anselm Wong, Joe A Rotella.  
Austin Toxicology and Victorian Poisons Information Centre, Austin Health, Victoria, Australia.

292. Use of rasburicase in "hidden" favism: a case report
Georgios Eleftheriou¹, Mariapina Gallo¹, Raffaella Butera¹, Andrea Giampreti¹, Lorella Faraoni¹, Francesca Bedussi¹, Giuseppe Bacis¹, Roberto Fiocchi².  
¹ Poison Control Center, ASST Papa Giovanni XXIII Hospital, Bergamo, Italy; ² Cardiovascular Unit, ASST Papa Giovanni XXIII Hospital, Bergamo, Italy.

293. Acute renal failure after the administration of the single dose of ketorolac: report of three cases
Gabija Valauskaite¹, Greta Sakalauskaite¹, Robertas Badaras².  
¹ Vilnius University, Faculty of Medicine, Vilnius, Lithuania; ² Vilnius University Emergency Hospital, Centre of Toxicology, Vilnius University, Faculty of Medicine, Vilnius, Lithuania.

294. Paliperidone-induced neuroleptic malignant syndrome: a case report
Eddie C Garcia¹, Robert Goodnough¹, Jeffrey Whitman², Michael Wu³, Craig G Smollin¹, Timur Durrani¹.  
¹ Medical Toxicology, University of California San Francisco, San Francisco, United States; ² Laboratory Medicine, University of California San Francisco, San Francisco, United States; ³ Critical Care Medicine, University of California San Francisco, San Francisco, United States.
295. Prolonged anesthetic emergence after low dose methylene blue for parathyroid gland visualization
Pierre Lavry¹, Martine Mostin².
¹Anesthesiology, André Vésale Hospital, Montigny-le-Tilleul, Belgium; ²Belgian Poison Centre, Brussels, Belgium.

296. A heart-breaking case of loperamide toxicity
Timothy C Backus¹, Catherine Steger¹, Jonathan De Olano², Dean Olsen¹.
¹Emergency Department, Nassau University Medical Center, East Meadow, New York, United States; ²Division of Medical Toxicology, NYU School of Medicine, New York, United States.

297. Drug reactivation with eosinophilia and systemic symptoms (DRESS): a severe adverse drug reaction
Ilaria Melara¹, Valeria M Petrolini ², Giampiero Martini³, Chiara Fulcheri³, Alessandro Raviolo³, Maria Di Primo², Carlo A Locatelli³.
¹Emergency Medicine Fellowship Program, University of Pavia, Pavia, Italy; ²Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ³Emergency Department, AO Santa Croce e Carle, Cuneo, Italy.

298. Zidovudine overdose due to therapeutic error in a newborn
Maria Di Primo¹, Giulia Scaravaggi¹, Davide Lonati¹, Eleonora Buscaglia¹, Giuseppe Bruglieri², Carlo A Locatelli¹.
¹Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ²Pediatrics and Neonatology Unit, AO Marche Nord, Pesaro, Italy.

299. Drug-induced liver injury in androgen anabolic steroid users: a case of acute cholestatic syndrome
Azzurra Schicchi¹, Valeria M Petrolini¹, Giulia Scaravaggi¹, Damiano Cantone², Sergio Neri², Carlo A Locatelli¹.
¹Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; ²Internal Medicine Unit, AOU Policlinico Vittorio Emanuele, Catania, Italy.

300. Prolonged toxicity following self-administration of a kambô cleansing ritual
Shireen Banerji¹, Krissy Melvin², Ken Rooks³, Christopher O Hoyte¹.
¹Rocky Mountain Poison & Drug Center, Denver Health Hospital & Authority, Denver, United States; ²Good Samaritan Medical Center, US Acute Care Solutions, Lafayette, United States.

301. Iatrogenic in-flight buprenorphine overdose on a large European airline caused by a dangerous emergency medical kit
Josh J Wang, Mark K Su, Rana Biary, Robert S Hoffman.
Emergency Medicine, Division of Medical Toxicology, New York University School of Medicine, New York, United States.
302. A case series of medication errors due to changes in the electronic prescription of paracetamol
Kim P Dalhoff¹, Søren Bøgevig², Tonny S Petersen², Lene Reuther².
¹ Clinical Pharmacology, Bispebjerg and Frederiksberg University Hospital, Copenhagen, Denmark; ² Bispebjerg and Frederiksberg University Hospital, Copenhagen, Denmark.

303. Fluoxetine-induced seizure in a pediatric patient
Anthony Scoccimarro, Ryan Marino, Anthony Pizon.
University of Pittsburgh School of Medicine, Pittsburgh, United States.

304. Dose-dependent increased risk of adverse cardiovascular events and mortality in patients with acute drug overdose treated with sodium bicarbonate
Judson Ellis¹, Lynne D Richardson², Rajesh Vedanthan³, Alex F Manini⁴.
¹ Brown University, Providence, United States; ² Emergency Medicine, Icahn School of Medicine at Mount Sinai, New York, United States; ³ Cardiology, New York University Langone School of Medicine, New York, United States; ⁴ Medical Toxicology, Icahn School of Medicine at Mount Sinai, New York, United States.

305. Human exposures to irritants for treatment of common warts
Daniela Acquarone¹, Maren Hermanns-Clausen².
¹ Poisons Information Center, Charité Universitätsmedizin Berlin, Berlin, Germany; ² Poisons Information Center, Center for Pediatrics, Medical Center - University of Freiburg, Freiburg, Germany.

306. Adverse effects of concomitant intravenous administration of beta-adrenergic antagonists and calcium channel blockers
Emily S Taub, Chester Poon, Silas W Smith.
Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States.

Monica R Noori¹, William J Boroughf², Benjamin W Hatten²,³.
¹ Department of Emergency Medicine, Denver Health Medical Center, Denver, United States; ² Toxicology Associates, Rocky Mountain Poison & Drug Center, Denver, United States; ³ University of Colorado School of Medicine, Denver, United States.

308 Will be presented on Wednesday 22 May 2019.

309. Pumping away: Use of the Impella ventricular assist device for cardiogenic shock from clozapine-induced fulminant myocarditis
Madeline H Renny¹, Xingchen Mai², Robert S Hoffman¹, Rana Biary¹.
¹ Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; ² Leon H. Charney Division of Cardiology, NYU School of Medicine, New York, United States.
HEAVY METAL POISONING

310. Two consecutive massive iron intoxications in the same patient: one treated with laparotomic gastrostomy
Maria Kaista.
Poison Information Center, Department of Emergency Medicine and Services, Helsinki University and Helsinki University Hospital, Helsinki, Finland.

311. Mercury poisoning in a fisherman
Davide Lonati 1, Sollaku Irena 2, Arturo Zancan 3, Eleonora Buscaglia 1, Anna Ronchi 1, Giuseppe De Palma 2, Carlo A Locatelli 1.
1 Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy; 2 Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health, Section of Public Health and Human Sciences, University of Brescia, Brescia, Italy; 3 Subacute Care Unit, Istituti Clinici Scientifici Maugeri, IRCCS Maugeri Hospital, Pavia, Italy.

312. Lymphocyte muscarinic receptors: an early biomarker for clinical assessment of mercury exposure
Marta Crevani, Davide Lonati, Teresa Coccini, Elisa Roda, Anna Ronchi, Carlo A Locatelli.
Pavia Poison Control Centre - National Toxicology Information Centre - Clinical and Experimental Lab, Toxicology Unit, Maugeri Clinical and Scientific Institutes IRCCS and University of Pavia, Pavia, Italy.

313. Puberty and resultant increased bone turnover as a possible etiology of an increased lead concentration in a pre-adolescent girl
Rebecca Bruccoleri, Alan D Woolf.
Boston Children’s Hospital, Boston, United States.

314. Successful treatment of acute arsenic poisoning with unithiol
Ildikó Urbán.
Clinical Toxicology, Péterfy Sándor Hospital, Budapest, Hungary.

PHARMACEUTICAL POISONING

315. Non-medical use of prescription GABA analogues (gabapentin and pregabalin) in Europe in the Non-Medical Use of Prescription Drug (NMURx) National Surveys
Caitlin F Bonney 1, Janetta L Iwanicki 2, Joshua C Black 3, Colleen M Haynes 3, Richard C Dart 2.
1 Medical Toxicology, Rocky Mountain Poison & Drug Center, Denver, United States; 2 Rocky Mountain Poison & Drug Center, Denver, United States; 3 RADARS System, Rocky Mountain Poison & Drug Center, Denver, United States.
316. Clinical outcomes of cardiac glycoside poisoning in Thailand
Satariya Trakulsrichai, Kritsada Chumvanichaya, Charuwan Sriapha, Achara Tongpoo, Umaporn Udomsubpayakul, Winai Wananukul.
1 Department of Emergency Medicine, Ramathibodi Poison Center, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand; 2 Department of Emergency Medicine, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand; 3 Ramathibodi Poison Center, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand; 4 Section for Clinical Epidemiology and Biostatistics, Research Center, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand; 5 Department of Medicine, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand.

317. Comparison of adverse reactions to a two-bag versus three-bag intravenous acetylcysteine regimen during treatment of paracetamol overdose
1 Clinical Sciences at Monash Health, Monash University, and Austin Toxicology Unit and Emergency Department, Victoria, Australia; 2 Poison and Drug Information Service, Alberta Health Services, Calgary, Canada; 3 Clinical Toxicology Research Group, University of Newcastle, Newcastle, Australia; 4 Departments of Emergency and of Biomedical and Molecular Sciences, Queen's University, Kingston, Canada; 5 Department of Clinical Pharmacology & Toxicology, Western Sydney Health, New South Wales, Australia; 6 Department of Emergency and Toxicology, Prince of Wales Hospital, Sydney, Australia; 7 Department of Emergency and Toxicology, Princess Alexandria Hospital, Brisbane, Australia; 8 Austin Toxicology Unit and Emergency Department, Austin Health, Victoria, Australia; 9 University of Sydney, New South Wales, Australia; 10 Clinical Sciences at Monash Health, Monash University, and Monash Toxicology Unit and Emergency Service, Monash Health, Dandenong, Australia.

318. Delayed arrhythmia after amisulpride overdose
Mandy Gollmann, Dagmar Prasa.
Poisons Information Centre Erfurt, Erfurt, Germany.

319. Toxicity of clozapine in elderly patients
Undine Burmeister, Maren Hermanns-Clausen.
Poisons Information Center, Department of General Pediatrics, Adolescent Medicine and Neonatology, Center for Pediatrics, Medical Center - University of Freiburg, Freiburg, Germany.

320. Bromazepam poisoning in the intensive care unit: is measurement of the plasma bromazepam concentration useful for patient management?
Sybille Riou, Ahmed S Gouda, Marion Soichot, Hélène Miguéres, Laurence Labat, Bruno Mégarbane.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 National Egyptian Center of Environmental and Toxicological Research (NECTR), Cairo University, Cairo, Egypt; 3 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.
321. Acute quetiapine poisoning admitted in the intensive care unit: features, complications and usefulness of plasma concentration measurement
Sara Chenafi 1, Karim Jaffal 1, Marion Soichot 2, Laurence Labat 2, Bruno Mégarbane 1.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

322. An analysis of fatal iatrogenic therapeutic errors reported to US poison centers
Maryland Poison Center, University of Maryland School of Pharmacy, Baltimore, United States.

323. Impaired high-dose methotrexate clearance: does glucarpidase use conform with current guidelines?
Lucile Bourgue 1, Sabrina Pierre 1, Delphine Castellan 2, Julien Mahe 3, Dominique Hilaire-Buys 4, Kevin Bihan 5, Thierry Vial 1.
1 Hospital University Department of Pharmacotoxicology, Hospices Civils de Lyon, Lyon, France; 2 Pharmacovigilance Center, Assistance Publique Hôpitaux de Marseille, Marseille, France; 3 Pharmacovigilance Center, Hospital University of Nantes, Nantes, France; 4 Pharmacovigilance Center, Hospital University of Montpellier, Montpellier, France; 5 Pharmacovigilance Center, Pitié Salpêtrière, Assistance Publique Hôpitaux de Paris, Paris, France.

324. Epidemiology of benzodiazepine exposures reported to the US Poison Centers, 2014-2017
Saumitra Rege 1, Duc Anh Ngo 2, Christopher P Holstege 1.
1 Division of Medical Toxicology, Department of Emergency Medicine, University of Virginia, Charlottesville, United States; 2 Division of Student Affairs, Department of Student Health, University of Virginia, Charlottesville, United States.

325. Heart of stone: excessively elevated digoxin concentrations with no cardiac toxicity in an infant
Elie Harmouche 1, Robert S Hoffman 1, Mary Ann Howland 2, Rana Biary 1.
1 Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; 2 St. John’s University College of Pharmacy and Health Sciences, Jamaica (NY), United States.

326. Symptoms and toxicokinetics of azilsartan medoximil in overdose: a case report
Katrin Faber 1, Daniel Müller 2, Stefan Weiler 1, Hugo Kupferschmidt 1.
1 National Poisons Centre, Tox Info Suisse, Associated Institute of the University of Zurich, Zurich, Switzerland; 2 Institute for Clinical Chemistry, University Hospital Zurich, Zurich, Switzerland.

327. Fatal metaxalone-induced serotonin toxicity
Elie Harmouche 1, Jonathan De Olano 1, Anas Mashlah 2, Mary Ann Howland 3, William Chiang 1.
1 Division of Medical Toxicology, Ronald O. Perelman Department of Emergency Medicine, NYU School of Medicine, New York, United States; 2 Department of Forensic Medicine, NYU School of Medicine, New York, United States; 3 St. John’s University College of Pharmacy and Health Sciences, Jamaica (NY), United States.
328. Do patients die with or from metformin-associated lactic acidosis (MALA)? Systematic review and meta-analysis of pH and lactate as predictors of mortality in MALA
1 Emergency Medicine, SUNY Downstate Medical Center, Brooklyn, United States; 2 SUNY Downstate Medical Center, Brooklyn, United States; 3 Emergency Medicine, Oregon Health & Science University, Portland, United States.

329. Supratherapeutic digoxin concentration without cardiac manifestations
Emily Green Vance, Justin Arnold, William F Rushton.
1 Department of Pharmacy, UAB Health System, Birmingham, United States; 2 UAB Office of Medical Toxicology, Department of Emergency Medicine, Birmingham, United States.

330. Paracetamol poisoning: cases treated at the National University Hospital of Iceland (NUH)
1 Faculty of Pharmaceutical Sciences at University of Iceland, Reykjavik, Iceland; 2 Emergency Department, National University Hospital, Reykjavik, Iceland; 3 Poison Information Center, National University Hospital, Reykjavik, Iceland; 4 Gastrointestinal and Renal Unit, National University Hospital, Reykjavik, Iceland; 5 Faculty of Pharmaceutical Sciences at University of Iceland, Hospital Pharmacy of National University Hospital of Iceland (NUH), Reykjavik, Iceland.

331. Survival following large verapamil overdose after use of extracorporeal membrane oxygenation (ECMO) and multiple complications
Pardeep S Jagpal, Muhammad EMO Elamin, Mark Pucci, Loretta Ford, Dacia Jones, Simon HL Thomas, Sally M Bradberry.
1 National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 2 Department of Clinical Pharmacology, Queen Elizabeth Hospital, Birmingham, United Kingdom; 3 Clinical Biochemistry, City Hospital, Birmingham, United Kingdom; 4 National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, United Kingdom.

332. Flecainide poisoning in the intensive care unit: predictive factors and usefulness of plasma flecainide concentration on admission
Katia Carvalho Alves, Brigitte Delhotal Landes, Sébastian Voicu, Isabelle Malissin, Nicolas Deye, Bruno Mégarbance.
1 Department of Medical and Toxicological Critical Care, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France; 2 Laboratory of Toxicology, Lariboisière Hospital, Paris-Diderot University, INSERM UMRS-1144, Paris, France.

333. Status epilepticus and cardiac arrest after overdose of lacosamide: a case report
Peter Hultén, Ann-Sofi Skagius, Jonas Höjer.
Swedish Poisons Information Centre, Stockholm, Sweden.
334. Monitoring and management of the 2018 Kilauea Lower East Rift Zone Eruption
Alvin C Bronstein¹, G Fenix Grange², Diana J Felton², Daniel A Spyker³.
¹ Emergency Medical Services Injury Prevention System Branch, Hawaii Department of
Health, Honolulu, United States; ² Hazard Evaluation and Emergency Response (HEER),
Hawaii Department of Health, Honolulu, United States; ³ Emergency Medicine, Oregon
Health & Science University, Portland, United States.

335. Go-kart engine oil ingestion causing seizure
Peter Akpunonu, Jeremiah Phelps.
Emergency Medicine, University of Kentucky, Lexington, United States.

336. The Toxicology Investigators Consortium (ToxIC): an innovative multicenter
medical toxicology research network
Paul Wax¹, Jeffrey Brent², Diane Colello³, Sharan Campleman⁴.
¹ UT Southwestern, Dallas, United States; ² University of Colorado, Denver, United States; ³
Rutgers Medical School, Newark, United States; ⁴ American College of Medical Toxicology,
Phoenix, United States.

337. E-learning in toxicology: development of the new IT-based International Diploma
and Continuous Professional Development Courses in Clinical Toxicology in Egypt
Noha Fawzy Abdelkader¹, Sahar El-Gowilly², Sherif Tarek Elnabarawy³, Safwat A
Mangoura⁴, Yasser HRM Kazem⁵, Mohamed Seif Eldin⁶, Janet Mifsud⁷, Matthew C Wright⁸,
Mark L Zammit⁷, Alexander Campbell⁹.
¹ Department of Pharmacology and Toxicology, Faculty of Pharmacy, Cairo University,
Cairo, Egypt; ² Faculty of Pharmacy, Alexandria University, Alexandria, Egypt; ³ Faculty
of Engineering, Ain Shams University, Cairo, Egypt; ⁴ Department of Pharmacology,
Assiut University, Assiut, Egypt; ⁵ E-Learning Competence Center Director, Ministry of
Communications and Information Technology, Cairo, Egypt; ⁶ Poisons Control and
Burn Care Administration, Ministry of Health and Population of Egypt, Cairo, Egypt; ⁷
Department of Clinical Pharmacology and Therapeutics, Faculty of Medicine and Surgery,
University of Malta, Msida, Malta; ⁸ Institute of Cellular Medicine, Newcastle University,
Newcastle-upon-Tyne, United Kingdom; ⁹ London, United Kingdom.

338. “Gaslighting” by atropine?
Erik Lindeman.
Swedish Poisons Information Center, Stockholm, Sweden.

339. Late, new-onset thrombocytopenia following Fab-treated rattlesnake
envenomation without early thrombocytopenia or post-antivenom platelet increase
Steven A Seifert, Damon N Cano.
New Mexico Poison and Drug Information Center, University of New Mexico Health
Sciences Center, Albuquerque, United States.

* Included in poster round
340. Beware of inhalatory methanol poisoning in illegal drug production
Anja PG Wijnands-Kleukers 1, Maaike A Sikma 2, Wouter Dijkman 3, Jeroen Brogtrop 4, Marlijn JA Kamps 5, Dylan W De Lange 1.

1 Dutch Poisons Information Center, University Medical Center Utrecht, University Utrecht, Utrecht, Netherlands; 2 Intensive Care Center, University Medical Center Utrecht, University Utrecht, Netherlands; 3 Intensive Care Center, Máxima Medical Center, Veldhoven, Netherlands; 4 Department of Clinical Pharmacy, Máxima Medical Center, Veldhoven, Netherlands; 5 Intensive Care, Catharina Hospital, Eindhoven, Netherlands.

341. Vaginal button battery insertion in an adult patient
Alexander C Capleton 1, Rita Arya 2, Charlotte Palmer 2, Alison Thomas 1, John P Thompson 1.

1 National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom; 2 Warrington and Halton Hospitals NHS Foundation Trust, Warrington, United Kingdom.

342. Seasonal and temperature effect on plasma lithium concentration
Sonia Cheng 1, William Siu 2, Angela L Chiew 3, Elia Vecellio 4, Nicholas A Buckley 5, Betty S Chan 3.

1 Faculty of Medicine, University of New South Wales, Sydney, Australia; 2 Department of Emergency Medicine, Sutherland Hospital, Sydney, Australia; 3 Department of Emergency Medicine & Clinical Toxicology, Prince of Wales Hospital, Sydney, Australia; 4 NSW Health Pathology, Prince of Wales Hospital, Sydney, Australia; 5 Department of Clinical Pharmacology, University of Sydney, Sydney, Australia.

343. Medical toxicology as a distinct medical specialty: the US experience
Paul Wax.

UT Southwestern, Dallas, United States.

344. Methanol inhalation poisoning: a life-threatening condition
Hoiip Leong 1, Puii Ieong 1, Iekhou Chu 2, Chumang Ho 2.

1 Emergency Department, Centro Hospitalar Conde de São Januário, Macao, China; 2 Centro Hospitalar Conde de São Januário, Macao, China.

345. False positive acetaminophen concentration due to parenteral acetaminophen administration in a dual port intravenous line
Anthony Scoccimarro, Ryan Marino, Anthony Pizon.

University of Pittsburgh School of Medicine, Pittsburgh, United States.

346. “Rhino 7”-induced priapism leading to penile fibrosis complicated by delirium tremens
Anthony Scoccimarro, Ryan Marino, Joshua Shulman.

University of Pittsburgh School of Medicine, Pittsburgh, United States.

347. Therapeutic errors with hearing aid battery ingestion
Anna Celentano 1, Marcello Ferruzzi 2, Angelo Travaglia 2, Andrea F Stella 2, Fabrizio Sesana 2, Giovanni Milanesi 2, Franca Davanzo 2.

1 Milan Poison Control Center, Great Metropolitan Niguarda Hospital, Milan, Italy; 2 Great Metropolitan Niguarda Hospital, Milan, Italy.
348. Acute poisoning and use of antidotes during pregnancy: the experience of the Florence Teratology Information Service and Poison Control Centre
Sara Traversoni 1, Maya Salimova 1, Alessandra Ieri 2, Francesco Gambassi 3, Andrea Missanelli 2, Brunella Occupati 2, Cecilia Lanzi 2, Cecilia Baccaro 2, Emanuela Masini 1, Guido Mannaioni 1, Alessandra Pistelli 2.

1Department of Neurofarba, Università degli Studi di Firenze, Florence, Italy; 2Toxicology Unit and Centro di Riferimento Regionale Tossicologia Perinatale, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy.

349. The utility of non-contrast head computed tomography in poisoned patients
Richard McNulty 1, Alex Garner 2, Timothy Wong 3, Lashnika Bandaranayake 3, Farhan Tahmid 3, Emily Symes 4, Mohammad Mohammad 2, Mark Salter 4, Naren Gunja 5.

1Emergency Medicine Blacktown Mount Druitt Hospital; Department of Clinical Pharmacology & Toxicology, Western Sydney Health, School of Medicine University of Western Sydney, Sydney, Australia; 2Emergency Medicine Blacktown Mount Druitt Hospital, Sydney, Australia; 3School of Medicine, University of Western Sydney, Sydney, Australia; 4Department of Clinical Pharmacology & Toxicology, Western Sydney Health, Sydney, Australia; 5Department of Clinical Pharmacology & Toxicology, Western Sydney Health, Discipline of Emergency Medicine, Sydney Medical School, Sydney, Australia.

350. Management of patients with acute drug overdose in an emergency department observation unit
Siri Shastry 1, Lynne D Richardson 2, Jonathan Yeo 3, Alex F Manini 4.

1Department of Emergency Medicine, Icahn School of Medicine at Mount Sinai, New York, United States; 2Department of Emergency Medicine and Department of Population Health Science and Policy, Icahn School of Medicine at Mount Sinai, New York, United States; 3Division of Hospital Medicine, Department of Emergency Medicine, Icahn School of Medicine at Mount Sinai, New York, United States; 4Department of Emergency Medicine, Icahn School of Medicine at Mount Sinai and Division of Medical Toxicology, Icahn School of Medicine at Mount Sinai, Elmhurst Hospital Center, New York, United States.

351. Keep the buprenorphine in place! Treating severe pain in a hospitalized patient with opioid dependence
Timothy J Wiegand.

Emergency Medicine, University of Rochester Medical Center, Rochester, United States.

PESTICIDE POISONING

352. Enhanced monitoring of glyphosate exposures by TOXBASE®: the National Poisons Information Service (NPIS) pesticide surveillance project 2004-2018
Richard D Adams 1, David Stewart 1, Michal Klatka 1, Simon HL Thomas 2, Sally M Bradberry 3, John P Thompson 4, Gillian Jackson 1, Euan A Sandilands 1.

1National Poisons Information Service (Edinburgh Unit), Royal Infirmary, Edinburgh, United Kingdom; 2National Poisons Information Service (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; 3National Poisons Information Service (Birmingham Unit), City Hospital, Birmingham, United Kingdom; 4National Poisons Information Service (Cardiff Unit), University Hospital Llandough, Cardiff, United Kingdom.
353. Derivation and validation of a system for predicting mortality in acute paraquat poisoning mortality: Acute Paraquat Poisoning Mortality (APPM) Score
Chih Chuan Lin, Chun-Kuei Chen.
Emergency Medicine Department, Chang Gung Memorial Hospital, Taipei, Taiwan.

354. An unusual case of organophosphate poisoning
Aoife Doolan¹, Nicola Cassidy ², Edel Duggan ².
¹ Department of Anaesthesia, Beaumont Hospital, Dublin, Ireland; ² National Poisons Information Centre, Beaumont Hospital, Dublin, Ireland.

355. Paraquat poisoning in Taiwan: 13 years’ experience
Chun Kuei Chen¹, Chih Chuan Lin².
¹ Department of Emergency Medicine, Linkou Chang Gung Memorial Hospital, Touyuan, Taiwan; ² Linkou Chang Gung Memorial Hospital, Touyuan, Taiwan.

* Included in poster round
The EAPCCT gratefully acknowledges support from the following organisations:
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<td>08:30-10:00</td>
<td>Main Congress</td>
<td>Welcome Reception at Maschio Angioino-Castel Nuovo</td>
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**Thursday, May 23rd**

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**Friday, May 24th**

- **8:00 AM** Welcome Breakfast at Maschio Angioino-Castel Nuovo
- **9:00 AM** Conference Opening Ceremony
- **9:30 AM** Welcome Remarks by Conference Organizers
- **10:00 AM** Plenary Session I: Acute Poisoning Management
- **11:30 AM** Lunch
- **1:00 PM** Plenary Session II: Interdisciplinary Approaches to Poisoning
- **3:30 PM** Welcome Reception at Santa Chiara Monastery
- **7:30 PM** Conference Dinner at the Santa Chiara Monastery

**Saturday, May 25th**

- **8:00 AM** Registration (open all day)
- **9:00 AM** Pre-Congress Sessions
- **10:00 AM** Plenary Session III: Emerging Technologies in Poisoning Management
- **12:00 PM** Lunch
- **2:00 PM** Special Interest Sessions
- **5:00 PM** Welcome Reception at Castel Nuovo

**Sunday, May 26th**

- **8:00 AM** Registration (open all day)
- **9:00 AM** Main Congress Sessions
- **12:00 PM** Lunch
- **2:00 PM** Special Interest Sessions
- **5:00 PM** Welcome Reception at Maschio Angioino-Castel Nuovo

**Naples, May 24-26, 2019**

- **European Association of Poisons Centres and Toxicologists (EAPCCT)**
- **Clinical Toxicologists**
- **Poisons Centres and Toxicologists**

**Location:** Maschio Angioino-Castel Nuovo, Naples, Italy