GUIDE TO ABSTRACTS
UCB is looking forward to connecting with you at the AES2020 virtual event taking place December 4-8, 2020.

Come visit the UCB booth in the Premier Exhibitor Hall.

Get your picture taken with the Canine Assistants celebrities in our virtual photo booth!

At UCB, patients are at the heart of all we do.
ADVANCING TREATMENT IN PGTCS:
THE NEXT CHAPTER IN THE LEGACY OF VIMPAT (lacosamide)®

PROGRAM OBJECTIVES
• Understand the unmet needs of patients living with IGE and PGTCS, presented by Dr Chung
• Explore the innovative patient-centric ‘time to event’ trial design for VIMPAT in patients living with IGE and PGTCS, presented by Dr French
• Share results of the adjunctive VIMPAT Phase 3, randomized controlled trial in patients with IGE and PGTCS, presented by Dr Vossler and Dr Piña-Garza

INDICATION
VIMPAT® is indicated for the treatment of partial-onset seizures in patients 4 years of age and older.
VIMPAT is indicated as adjunctive therapy in the treatment of primary generalized tonic-clonic seizures in patients 4 years of age and older.

IMPORTANT SAFETY INFORMATION
VIMPAT is associated with important warnings and precautions including suicidal behavior and ideation, dizziness and ataxia, cardiac rhythm and conduction abnormalities, syncope, and Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), also known as multi-organ hypersensitivity.

Partial-Onset Seizures
In the adult adjunctive placebo-controlled trials for partial-onset seizures, the most common adverse reactions (>10% and greater than placebo) were dizziness, headache, nausea, and diplopia. In the adult monotherapy clinical trial, adverse reactions were generally similar to those observed and attributed to drug in adjunctive placebo-controlled trials, with the exception of insomnia (observed at a higher rate of ≥2%). Pediatric adverse reactions were similar to those seen in adult patients.

Primary Generalized Tonic-Clonic Seizures (PGTCS)
In the adjunctive therapy placebo-controlled trial for primary generalized tonic-clonic seizures, the adverse reactions were generally similar to those that occurred in the partial-onset seizures trials. The adverse reactions most commonly reported were dizziness, somnolence, headache, and nausea.

VIMPAT is a Schedule V controlled substance.
Please refer to the full Prescribing Information.

Disclaimer: Opinions presented during this Industry-Sponsored Satellite Educational Activity are those of the speakers and/or the sponsor and/or the accredited provider of continuing medical education, and are not a reflection of American Epilepsy Society opinions, nor are they supported, sponsored, or endorsed by the American Epilepsy Society.
THE MODERN UTILIZATION OF STIRIPENTOL IN THE UNITED STATES

Monday, December 7th
8:00 AM – 5:00 PM EST

Visit the BIOCODEX scientific exhibit to see a range of international posters and clinical data detailing the historic and modern usage of stiripentol.
Virtual Scientific Exhibit and Posters

Because there’s still work to be done

Monday, December 7, 2020
2:00 PM – 5:00 PM EST

Access the Virtual Scientific Exhibit at: aes2020.hubb.me

Featuring poster presentations on cenobamate, including information on:

- Mechanism of action
- Clinical pharmacology
- Clinical efficacy and safety
HENRY'S GOAL
IS TO BE CLEAR AND
IN CONTROL.

With controlled drug delivery over 24 hours and demonstrated safety and efficacy, Oxtellar XR is a proven partial-onset seizure medication for patients like Henry.¹⁶ Consider making Oxtellar XR your sodium channel blocker* of choice for partial-onset seizures.

For more information, visit our AES2020 virtual booth or www.OxtellarXRhcp.com/tradeshow.

INDICATION
Oxtellar XR® is indicated for the treatment of partial-onset seizures in patients 6 years of age and older.

CONTRAINDICATIONS
Oxtellar XR is contraindicated in patients with a known hypersensitivity to oxcarbazepine, or to any of the components of Oxtellar XR, or to eslicarbazepine acetate. Reactions have included anaphylaxis and angioedema.

Please refer to the brief summary of full Prescribing Information on the adjacent pages, or visit www.OxtellarXRhcp.com.

Oxtellar XR is a registered trademark of Supernus Pharmaceuticals, Inc. All other trademarks are the property of their respective owners.

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The use of HLA-B*1502 genotyping has important limitations and does not outweigh the risks. Consideration should also be given to avoid the use of other drugs associated with SJS/TEN in HLA-B*1502 positive patients.

The frequency of HLA-B*1502 allele ranges from 2 to 12% in Han Chinese. In patients receiving Oxtellar XR® in clinical studies discontinued treatment because of an adverse event. The adverse event frequency cannot be directly compared between the two groups.

Most Common Adverse Reactions Reported by Adult Patients Receiving Oxtellar XR® in Clinical Studies

In a pharmacokinetic study in 18 pediatric patients including patients 6 to 17 years of age with partial-onset seizures treated with different formulations of Oxtellar XR®, adverse reactions were observed in 72% of patients seen in association with Oxtellar XR® similar to those seen in adults. Reactions in Immediate-Release Oxcarbazepine

Conclusion

Most Common Adverse Reactions Reported by Adult Patients Receiving Oxtellar XR® in Clinical Studies

Trim Media Type

4.0% B:22

Oxtellar XR is a sustained-release oxcarbazepine formulation that is preferred by some because of its lower incidence of rash and narrower therapeutic index compared to oxcarbazepine.

Among treated patients in a controlled trial of adjunctive therapy with Oxtellar XR and other AEDs, 73% of patients aged 12 years and older reported at least one AE. The majority of AEs were of mild to moderate severity, with 3.2% of patients discontinued treatment because of an adverse event. The adverse event frequency cannot be directly compared between the two groups.

Design of the Study

As with most AEs, Oxtellar XR® should be withdrawn gradually because of the risk of increased seizure frequency and status epilepticus. It is important to note that early manifestations of the serious skin reactions following rechallenge with immediate-release oxcarbazepine has also been reported. There is no clear data on the rate of TEN in patients associated with immediate-release oxcarbazepine use, which is generally accepted to be an underreporting bias. Although most cases of TEN have been reported in patients receiving immediate-release oxcarbazepine, delayed-type hypersensitivity reactions have occurred in immediate-release oxcarbazepine-treated patients who developed hyponatremia were asymptomatic in clinical trials. However, severe hyponatremia (serum sodium levels < 120 mEq/L) requiring discontinuation from treatment, while 2 other patients receiving 1000 mg experienced serum sodium concentrations low enough (128 and 138 mEq/L) to require discontinuation from treatment.

To monitor for potential hepatic dysfunction, serum transaminases should be measured at baseline and at regular intervals during treatment with Oxtellar XR®. The incidence of ADRs associated with immediate-release oxcarbazepine use is low (5% to 15%), and those related to changes in liver function are rare. Therefore, the use of Oxtellar XR® in clinical trials showed that the risk of suicidal thoughts or behavior was generally consistent among drugs in the data analyzed. The finding of increased risk of AEs with varying mechanisms of action and across a range of indications suggests that the risk applies to all AEDs used for any indication. The risk of suicidal thoughts or behavior has been observed as an early as one week after starting drug treatment with AEDs and persisted for the duration of treatment assessed. Because most trials included in the meta-analysis excluded patients who had seizures within 24 weeks, the risk of suicidal thoughts or behavior beyond 24 weeks could not be assessed.

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extrapyramidal disorder, feeling drunk, hemiplegia, hypereosinophilia, hyper- flexia, hypotonia, hypoglycemia, hypophrenia, hypothermia, hydrosis, decreased visual acuity, rash, injection, pain, muscle contractions involuntary, neurosis, neuralgia, ocular gestic, panic disorder, parathesis, paranoia, person disorder, psychosis, ptosis, stupor, tetany, tickling, tremor, ulcers, urticaria, vasodilatation, vasodilatation, venous insufficiency, Plugging.

Skin:
Exanthem, alopecia, angioedema, bruising, burning, dermatitis, contact, eczema, rash, facial, flush, folliculitis, hives, heat rash, dermatitis, photosensitivity reaction, pruritus, generalized, purpura, pustular, rash erythematous, red, rash morbilliform, rash papular, urticaria, urticaria. 

Special: 
Sensations; abortion, abdominal, catarrhal, conjunctival hemor- rhage, conjunctivitis, petechial rash, eczema, erythema, flushing, hypotension, palpitations, pruritus, rash, wheal, vesicle, vesicle; symptoms; rhinorrhea, aphonia, photosensitivity, scotoma, taste perversion, tinnitus, xerostomia.

Urogenital and Reproductive System:
dysuria, hematuria, intermenstrual bleed prolonged, menstrual, ovulation, uterine bleeding, vaginal hemorrhage, uterine bleeding, uterine hemorrhage.

Cardiovascular System:
Hypotension: 0%, 1%, 2%, 0%.

Dietary System:
Headache: 1%, 2%, 3%, 1%; Dizziness: 1%, 2%, 3%, 1%; Dry mouth: 1%, 2%, 3%, 1%; Weight decrease: 1%, 2%, 3%, 1%; Weight decrease: 1%, 2%, 3%, 1%; Weight increase: 1%, 2%, 3%, 1%; Feeling abnormal: 1%, 2%, 3%, 1%; Tinnitus: 1%, 2%, 3%, 1%; Tinnitus: 1%, 2%, 3%, 1%; Vision blurred: 1%, 4%, 3%; Visual impairment: 1%, 3%, 0%.

B:11"
GET TO KNOW NOBELPHARMA AMERICA

OUR MISSION IS TO CONTRIBUTE TO SOCIETY BY PROVIDING CRITICAL BUT NEGLECTED PHARMACEUTICALS AND MEDICAL DEVICES.

We are committed to helping patients who are awaiting novel treatments for their specific diseases. We anticipate our first US approval of a product to help patients with facial angiofibromas associated with tuberous sclerosis complex.

PLEASE VISIT OUR VIRTUAL BOOTH at https://nobelpharma.exhibitcast.net/nobelpharmaamerica/ or visit www.nobelpharma-us.com
NOW IS THE TIME TO STEP INTO THEIR SHOES AND START SEEING THINGS FROM ANOTHER PERSPECTIVE.
STEPINTOXCOPRI.com
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*AES2020 is running on EASTERN TIME for its entire event. The time listed for all events and activities in this book is Eastern Time.*
Each year the American Epilepsy Society provides both venue and audience for researchers to share emerging science in a timely and succinct format. At AES2020, more than 1,000 epilepsy-related studies will be available for attendee review in the poster hall.

Posters at AES2020 cover a wide range of topics and methodologies. The AES Scientific Program Committee, chaired by Edward J. Novotny, MD, FAES and Viji Santhakumar, PhD, reviews and rates abstract submissions based on scientific merit, breadth of audience interest, and quality of presentation.

Top-rated abstracts in selected categories are considered for abstract awards. A list of the AES2020 abstract awardees can be found on the AES2020 website.

The 2020 Guide to Abstracts provides an easy-to-use index to AES posters and authors. In addition, a searchable index supported by Greenwich Biosciences, Inc. can be found on the AES2020 website. It includes more than 20,000 abstracts from the past twenty AES annual meetings.

Many thanks to the basic, translational, and clinical researchers who are advancing epilepsy science and sharing their work through the American Epilepsy Society.

ABOUT AES
Dedicated to eradicating epilepsy and its consequences

AES is a medical and scientific society that provides professionals working in epilepsy with the resources needed to deliver unparalleled patient care, advance their research efforts, and make a difference for people living with epilepsy. For nearly 85 years, AES has provided a dynamic global forum where professionals from across the field of epilepsy can learn, network, and collaborate.

AES®
AMERICAN EPILEPSY SOCIETY
aesnet.org

Executive Office
135 South LaSalle Street
Suite 2850
Chicago, IL 60603
(312) 883-3800
Good morning!

As we embrace five December days together, apart, the American Epilepsy Society Board of Directors joins me in warmly welcoming you and the entire epilepsy professional community to AES2020, our new virtual event.

Despite challenges we all continue to face, at AES we are focused, as always, on bringing you the best meeting ever. Our Annual Meeting Committee volunteers, under the leadership of Dr. Barbara Jobst, set the bar high for AES2020: nothing but the gold standard in epilepsy education and science, with a variety of ways for our collegial, collaborative epilepsy community to find each other and enjoy time together.

They have delivered. As you explore what AES2020 brings to your fingertips and airpods, remember that professionals from all realms of epilepsy will be with you—neuroscientists, clinical researchers, clinicians, industry specialists, patient advocates, and others—who hail from all fifty states and all over the world. This mix of professionals fosters connections and inspiration, which in turn can lead to advances in the diagnosis, treatment, and quality of life for people with epilepsy.

No matter where and how we meet, our Society’s role in bringing together the best minds, the best ideas, and the best science is a constant.

The booklet you are reading spotlights our achievements and efforts as a community. It is an easy way to skim through all the poster titles and authors (great science, great minds) and have it handy whenever you need it after the event is over. You can also search abstracts online, along with finding in-depth descriptions of all the programming offered at AES2020. Visit meeting.aesnet.org/program. You will also find full session descriptions on our virtual platform after you sign in.

Thank you for joining us and thank you for taking the time to learn how our virtual platform can give you the learning and experience you need to advance your own work—during our meeting dates of December 4th through 8th, and then for ninety days after that when you will be able to access all the on-demand content.

No airplanes! No hotel rooms! No box lunches or convention center coffee! Just fabulous content and people. Welcome to AES2020.

Sincerely,

William Davis Gaillard, MD, FAES
President
American Epilepsy Society

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Patient Journeys in Tuberous Sclerosis Complex: Established and Emerging Approaches to Care
This activity is supported by Greenwich Biosciences, Inc. (CME)

Advancing Treatment in PGTCS
This activity is supported by UCB, Inc. (Non-CME)

An Update on Surgical and Neuromodulation Options for the Treatment of Drug-Resistant Epilepsy
This activity is supported by Medtronic (Non-CME)

Updates and Advances in Neuromodulation
This activity is supported by LivaNova, PLC (Non-CME)

Optimal Prehospital Management of Seizure Emergencies
This activity is supported by Neurelis, Inc. (CME)

An Update on Rare Childhood-Onset Epilepsies
This activity is supported by Zogenix, Inc. (CME)
The American Epilepsy Society is proud to present special lectures recognizing the accomplishments of distinguished leaders in clinical epilepsy and research.

18th Judith Hoyer Lecture in Epilepsy: Status Epilepticus – Progress and Challenges  
*Presented by Shlomo Shinnar, MD, PhD, FAES*  
Friday, December 4 | 2:15 – 3:45 PM

Epilepsy in the Time of COVID  
*Chaired by R. Edward Hogan, MD and Barbara C. Jobst, MD, PhD, FAES*  
Saturday, December 5 | 9:00 – 10:30 AM

Space and Time in the Medial and Lateral Entorhinal Cortex (during Hot Topics Symposium)  
*Presented by Edvard Moser, PhD, winner of the 2014 Nobel Prize in Physiology or Medicine along with May-Britt Moser and John O’Keefe for their discoveries of cells that constitute a positioning system in the brain*  
Saturday, December 5 | 2:00 – 4:30 PM

Dialogues to Transform Epilepsy  
*Chaired by Jaideep Kapur, MD, PhD*  
Monday, December 7 | 2:30 – 4:30 PM

Partners Against Mortality in Epilepsy (PAME): The Quest Continues  
*Featuring presentations by Elizabeth Donner, MD, MSc, FRCP; Daniel Friedman, MD; Torbjörn Tomson, MD, PhD; and Kristina Simeone, PhD*  
Monday, December 7 | 2:30 – 4:30 PM

Lombroso Lecture: Intrinsic Brain Networks and Epilepsy – The Next Era of Advanced MR Imaging  
*Presented by Professor Graeme Jackson, BSc (Hons), MBBS, FRACP, MD*  
Monday, December 7 | 5:00 – 6:30 PM

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**2020 AES Fellows Program**

Welcome 2020 Fellows! More than 100 clinical and postdoctoral fellows have been given support to attend AES2020, with expanded programming and mentorship this year.

Participants will:  
- Learn about advances in care and research  
- Engage with expert mentors and peers  
- Participate in newly expanded sessions on career skills and career pathways

The 2020 AES Fellows Program is supported in part by educational grants from:  
- Upsher-Smith Laboratories, LLC  
- Greenwich Biosciences, Inc.  
- Supernus Pharmaceuticals, Inc.  
- SK Life Science, Inc.

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**Thank you for your generosity!**

Many thanks to AES members and supporters who further the Society’s mission with their philanthropic gifts. AES recognizes and deeply appreciates the generosity of all donors and contributors.

**PLANNED GIFTS**  
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**NAMED FUNDS**  
Support fellowships, research grants and travel awards

**ANNUAL FUND**  
Put your dollars to work today where the need is greatest

Learn more and donate at [aesnet.org/impact](http://aesnet.org/impact)
VIRTUAL POSTER HALL SCHEDULE

Saturday, December 5

Author Present: 9:00 – 10:30 AM
Platform A: 2:00 – 3:30 PM
Platform B: 6:00 – 7:30 PM

Sunday, December 6

Author Present: 12:00 – 1:30 PM, 5:15 – 6:45 PM
Poster Tours (four concurrent): 12:15 – 1:15 PM
Platform C: 1:45 – 3:15 PM
Platform D: 3:45 – 5:15 PM

Monday, December 7

Author Present: 9:00 – 10:30 AM, 1:30 – 3:00 PM
Poster Tours (five concurrent): 1:00 – 2:00 PM
Pediatric Highlights: 2:30 – 4:00 PM
Platform E: 2:30 – 4:00 PM
Platform F: 6:30 – 8:00 PM
PAME Poster Tour: 5:30 – 6:30 PM

More than just AES2020

AES offers year-round online education to assist epilepsy professionals in staying ahead of the curve and fulfilling continuing education requirements. These resources are available both live and on-demand to suit your needs!

- Webinars
- Self-assessment Activities
- Performance Improvement Continuing Medical Education Activities
- Fellowship Curriculum
- EPIPORT Clinical Research Training
- Annual Meeting recordings
... and so much more

Visit aesnet.org/education to learn more.

New AES Resources for Training in Clinical Research

The EPIPORT Online Clinical Research Curriculum offers introductory training on key concepts in epilepsy clinical research with 28 online, on-demand modules.

The AES Mentorship Program for Clinical Research provides targeted mentorship for investigators looking to hone their skills in clinical research grantsmanship.

More information is available at aesnet.org/clinical-science

The AES EPIPORT Online Clinical Research Curriculum and the AES Mentorship Program for Clinical Research are supported in part by an educational grant from Eisai Inc.

AES2020 is running on EASTERN TIME for its entire event. The time listed for all events and activities in this book is Eastern Time.
SCIENTIFIC EXHIBITS

These exhibits will provide AES2020 attendees an opportunity to stay up-to-date on the latest epilepsy-related research. Company scientists will be present throughout the exhibits.

Sunday, December 6, 8:00 – 11:00 AM
Research Updates from Eisai
Eisai Inc.
UCB: Inspiring Confidence through the Epilepsy Journey
UCB, Inc.
Zogenix Scientific Poster Exhibit Low-Dose Fenfluramine: An Update on Mechanisms, Efficacy, and Safety in the Treatment of Epileptic Encephalopathies
Zogenix, Inc.

Monday, December 7, 8:00 AM – 5:00 PM
The Modern Utilization of Stiripentol in the US
Biocodex, Inc.

Monday, December 7, 8:00 – 11:00 AM
Epidiolex®: The Only FDA-Approved Cannabidiol Treatment
Greenwich Biosciences, Inc.
Ganaxolone for the Treatment of Refractory Seizure Disorders
Marinus Pharmaceuticals, Inc.

Monday, December 7, 2:00 – 5:00 PM
SK life science Special Scientific Exhibit and Posters
SK life sciences, Inc.
Saturday, December 5

Poster Author Hour 1
9:00 – 10:30 AM EST

BASIC MECHANISMS

Epileptogenesis of Acquired Epilepsies

1. STAT3 knock-down reduces epilepsy severity, cognitive co-morbidities and transcriptomic changes in a mouse model of TLE | A. Tipton; K. Hixson; Y. Cruz Del Angel; J. Carlsen; D. Strode; N. Busquet; M. Mesches; S. Russek; A. Brooks-Kayal

2. 5HT2A receptor antagonist ketanserin reversed the suppressant effects of 5-HTP on seizure-induced respiratory arrest in the DBA/1 mouse SUDEP model | Y. Shen; H. Ma; X. Lian; L. Gu; Q. Yu; J. Sun; Y. Shen; Y. Zhou; H. Zhang

3. Reactivity and Increased Proliferation of NG2 cells Following Viral Infection and Acute Seizures | L. Bell; K. Wilcox

4. Trauma-induced TRPC cation channel plasticity promotes neuronal hyperexcitability and seizure | C. Carver; H. DeWitt; A. Stoja; M. Shapiro

Epileptogenesis of Genetic Epilepsies

5. Cortico-hippocampal circuit dysfunction in a mouse model of Dravet syndrome | J. Mattis; J. Yom; K. Goff; N. Sotuyo; K. Kaneko; H. Feng; A. Somarowthu; E. Goldberg

6. Epileptic Encephalopathy in Kcna1 KO Mice Disrupts Active State Organization | V. Krishnan; C. Schirmer; M. Jankovic; P. Kapadia; J. Bass

7. Neocortical parvalbumin-positive fast-spiking GABAergic interneurons exhibit persistent deficits in axonal function in an experimental mouse model of Dravet syndrome (Scn1a+/- mice) | K. Kaneko; E. Goldberg

8. Sodium channel SCN8A: mapping of a genetic modifier | W. Yu; S. Hill; J. Xenakis; F. Pardo-Manuel de Villena; J. Wagner; M. Meisler

9. Modeling STRADA-related mTORopathy using stem cell derived cerebral organoids | L. Dang; S. Vaid; G. Lin; P. Swaminathan; J. Safran; M. Lee; T. Glenn; F. Majolo; P. Crino; J. Parent

Electrophysiology/High-Frequency Oscillations

10. Selective disruption of declarative memory signals in the epileptic human medial temporal lobe | S. Lee; N. Chandravadia; C. Reed; J. Chung; I. Ross; A. Mamelak; U. Rutishause

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| 133 | Efficacy and Safety of Adjunctive Perampanel in Japanese Patients with Partial-Onset or Primary Generalized Tonic-Clonic Seizures: Post Hoc Analysis of Double-Blind and Open-Label Extension Studies | A. Patten; L. Ngo; A. Salah; M. Malhotra |
| 134 | Long-term retention, efficacy and tolerability of adjunctive brivaracetam by number of lifetime antiepileptic drugs in adults with focal seizures: a post hoc analysis | S. Dimova; C. Brandt; C. Laloay; X. Nondonfaz; S. Elmoufti; P. Klein |
| 135 | Return to full baseline functionality after repeated intermittent use of midazolam nasal spray in patients with seizure clusters: post hoc analysis of an open-label extension trial | K. Detyeniecki; M. Brunnert; R. Campos; S. Dimova; J. Wheless |
| 136 | Perampanel Monotherapy for the Treatment of Epilepsy: Evidence From a Clinical Trial and Real-World Use | A. Gil-Nagel; J. Wheless; J. Kim; R. Wechsler; T. Yamamoto |
| **Cohort Studies** | | |
| 137 | Long-term Efficacy and Safety of Cannabidiol (CBD) in Patients with Tuberous Sclerosis Complex (TSC); 4-year Results from the Expanded Access Program (EAP) | A. Weinstock; E. Bebin; D. Checkettis; G. Clark; J. Szafiarski; L. Seltzer; E. Thiele; F. Sahebkar |
| 138 | Antiepileptic drugs use after responsive neurostimulation therapy | V. Jeeaneret; R. Fasano; K. Bullinger; A. Alwaki; D. Winkel; B. Cabañas; J. Willie; R. Gross; I. Karakis |
| 139 | Early Perampanel Real World Experience in Pediatrics Epilepsy in Thailand | T. Desudchat; C. Khongkhatithum; S. Viravan; P. Suwanpakdee |
| **Drug Side Effects** | | |
| 140 | Starting Stiripentol in Adults with Dravet Syndrome? Watch for Ammonia and Carnitine | Q. Zulfiqar Ali; P. Marques; A. Selvaraj; S. Tabarestani; T. Sadoway; D. Andrade |
| 141 | On the Digital Psychopharmacology of Valproic Acid in Mice: Adult and Prenatal Exposure | C. Schirmer; I. Ton; A. Tuo; M. Jankovic; P. Kapadia; V. Krishnan |
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| 142 | Brivaracetam: Long term experience in Mexico | A. Velasco; P. Saucedo |
| 143 | Patient and physician preferences in epilepsy monotherapy in a real-world study (VOTE): evidence from discrete choice experiments | F. Rosenow; Y. Winter; I. Leunikava; M. Brunnert; J. Sutphin; M. Boeri; F. Villani; C. Brandt |
| 144 | 12-month effectiveness and tolerability of brivaracetam in the real world: the international, non-interventional EXPERIENCE study | V. Villanueva; C. Di Bonaventura; E. Faught; B. Steinhoff; C. Laloay; V. Sendersky; K. Ricchetti-Masterson |
| 145 | Network Meta-analysis Comparing the Psychiatric Treatment-emergent Adverse Events of Eslicarbazepine Acetate and Brivaracetam | D. Mehta; K. Azimpour; G. Tremblay; A. Forsythe; B. Wensel; D. Sanchez; D. Andrade |
| 146 | Disease burden, healthcare resource use and healthcare costs in refractory epilepsy patients using rescue medications: retrospective cohort study | G. Pietri; J. Wilson; R. Baxter; E. Choi; H. Kim |

**SURGERY**

**Adult**

| 147 | Odor Identification Predicts Postoperative Seizure Control Following MR-Guided Laser Interstitial Thermal Therapy | R. Penn; M. Chen; B. Hwang; D. Mampre; V. Kamath; J. Kang |
148 Prognostic model for withdrawal of anti-seizure medication following epilepsy surgery in adults | C. Ferreira-Atuesta; J. De Tisi; F. Rugg-Gunn; A. McEvoy; A. Misericodi; J. Duncan; M. Koepp; M. Galovic
149 Early seizure spread and epilepsy surgery | J. Andrews; S. Ammanuel; J. Kleen; A. Khambhati; R. Knowlton; E. Chang
150 Balancing hemorrhage risk with electrode coverage: a comparison of stereoelectroencephalography to combined subdural grid and depth electrodes | J. A. Lee; N. Nichols; B. Speidel; J. Fan; R. Knowlton; E. Chang
151 High yield regions for exploration in presumed temporal lobe epilepsy - A stereo-EEG study | J. Jamy; I. Podkorytova; M. Agostini; S. Alick; R. Das; H. Dave; M. Dieppa; A. Doyle; J. Harvey; R. Hays; B. Lega; R. Zepeda; G. Perven
152 Resection of the Piriform Cortex for Temporal Lobe Epilepsy: Novel Imaging Segmentation and Surgical Application | J. Leon-Rojas; S. Iqbal; S. Vos; R. Rodionov; A. Misericodi; A. McEvoy; V. Vakharia; L. Mancini; M. Galovic; S. Ourselin; J. Cardoso; M. Koepp; J. Duncan
153 Utilization of Resting state fMRI in predicting Clinical Response to Responsive Neurostimulation in Medial Temporal Lobe Patients | P. Faroouque; J. Arora; I. Quraishi; L. Hirsch; D. Spencer; R. Constable
154 VNS and RNS Patients are Driving: The Impact of Seizure Freedom and Reduction | A. Bhraguvanshi; A. Bach; M. Hoerth; A. Crepeau; K. Noe; J. Drazkowksi; J. Sirven; R. Zimmerman

Pediatrics
155 Changes in caregiver mood and satisfaction with family relationships following pediatric resective epilepsy surgery | N. Phillips; E. Widaja; M. Smith
156 Utilization of Diagnostic Modalities in Pediatric Epilepsy Surgery: the Pediatric Epilepsy Research Consortium Epilepsy Surgery Experience | L. Wong-Kisiel; A. Alexander; P. Tatachar; S. Reddy; J. Bolton; A. Marashly; D. Depositario-Cabacar; E. Romanowski; D. Shrey; N. McNamara; S. Karia; S. Nangia; S. Patel; R. Singh; S. Shandley; S. Perry
157 The Role of a Shared Decision Making Process in Paediatric Epilepsy Surgery | M. Kregel Gratton; B. Wooten; S. DeRibaupierre; A. Andrade
158 Seizure Outcome and Complications in Surgical Treatment of Infantile Epilepsy | M. Iwasaki; K. Iijima; Y. Takayama; S. Yokosako; K. Kosugi; N. Ikegaya; N. Sumitomo; T. Saito; E. Nakagawa; Y. Kimura; Y. Kaneko; A. Takahashi; K. Sugai; T. Otsubi
159 Electrophysiological and histological abnormality extend beyond the MRI-visible bottom-of-sulcus dysplasia in children | P. Jain; A. Ochi; C. McInnis; H. Otsubo; C. Snead; E. Widaja

All Ages
160 Development of a Machine Learning Algorithm for the Early Identification of Epilepsy Surgery Candidates | B. Wissel; H. Greiner; T. Glauser; J. Pestian; A. Kemme; D. Santel; D. Ficker; F. Mangano; R. Szczesniak; J. Dexheimer
162 Resection of the EEG-fMRI peak response is needed for a good outcome in epilepsy surgery | A. Kouppan; N. von Ellenrieder; H. Khoo; N. Zazubovits; D. Nguyen; J. Hall; F. Dubeau; J. Gotman
163 Difficult-to-localize epilepsy after stereoelectroencephalography: safety, efficacy, and technique of placing additional electrodes during the same admission | A. Whiting; J. Bulacio; B. Whiting; L. Jehi; W. Bingaman

DIETARY THERAPIES (KETOGENIC, ATKINS, ETC.)
164 Leveraging the gut microbiota in pediatric refractory epilepsy: safety and feasibility of oligofructose-enriched inulin supplementation for dysbiosis and seizure control | M. Parfyonov; G. Healey; S. Crowley; K. Short; S. Sanhan; J. Appendino; B. Vallance; L. Huh
165 Caregiver Support during Dietary Therapy | G. Sarlo; K. Holton

BEHAVIOR/NEUROPSYCHOLOGY/LANGUAGE

Adult
166 Alterations in the Brain Transcriptome are Associated with Episodic Memory Dysfunction in Temporal Lobe Epilepsy | R. Busch; L. Yehia; P. Bazeley; M. Seyfi; I. Blumcke; B. Hermann; I. Najm; C. Eng
167 Adaptive Behaviour and Skill Changes in Adult Patients with Dravet Syndrome | A. Selvarajah; I. Chandran; Q. Zulfiquar Ali; P. Marques; F. Nascimento; C. Linehan; M. McAndrews; D. Andrade
168 The Memory Assessment Clinics Scale for Epilepsy (MAC-E): A Brief Measure of Subjective Cognitive Complaints in Epilepsy | M. Miller; R. Honomichl; B. Lapin; M. McAndrews; D. Andrade

Pediatrics
169 New-onset seizure in autistic patients during COVID-19 pandemic: a case series report | P. Emmady; D. Sangroula
170 Neuropsychological Predictors of Surgical Outcomes in Medically Refractory Epilepsy | E. Dennis; W. Garvey; K. Samson; M. Garlinghouse; P. Datta

Dietary Therapies (KetoGenic, Atkins, Etc.)
164 Leveraging the Gut microbiota in Pediatric refractory epilepsy: Safety and feasibility of oligofructose-enriched inulin supplementation for dysbiosis and seizure control | M. Parfyonov; G. Healey; S. Crowley; K. Short; S. Sanhan; J. Appendino; B. Vallance; L. Huh
165 Caregiver Support during Dietary Therapy | G. Sarlo; K. Holton

Behavior/Neuropsychology/Language

Adult
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170 Neuropsychological Predictors of Surgical Outcomes in Medically Refractory Epilepsy | E. Dennis; W. Garvey; K. Samson; M. Garlinghouse; P. Datta
**GENETICS**

**Human Studies**

174 Identification of missense ADGRV1 mutation as a candidate genetic cause of familial febrile seizure 4 | J. Han; E. Park

175 Functional data of variants at analogous positions in sodium channel genes can serve as surrogate for variant effects in related sodium channel epilepsies | T. Feng; F. Steckler; I. Ghanty; E. Perez-Palma; D. Lal; S. Schorge; J. Symonds; S. Zuberi; A. Brunklaus

176 Whole exome sequencing with targeted gene analysis and epilepsy after acute symptomatic neonatal seizures | A. Numis; G. da Gente; E. Sherr; H. Glass

177 Microarray, gene panel or exome sequencing? Genetic Testing Strategies in Adults with Epilepsy | G. Besant; T. Sadoway; D. Andrade

178 Diagnostic Yield and Clinical Utility of Genetic Testing in Children with Seizure Onset After Two Years of Age | T. Alastalo; K. Gall; A. Singh; K. Alakurtti; E. Seppala; L. Koskinen; J. Koskenvuo; E. Izzo

179 The Contribution of Low Frequency Mosaicism to Mild Tuberous Sclerosis Complex | Z. Ye; S. Lin; X. Zhao; M. Bennett; R. Vedururu; N. Brown; V. Zhang; M. Wallis; F. Gardiner; X. Gao; J. Wu; Y. Yao; L. Li; L. Chen; S. Mullen; R. Leventer; J. Duan; A. Boys; D. Cao; G. McGillivray; C. Stutterd; Z. Hu; L. Zhang; M. Bahlo; V. Beshay; S. Berkovic; I. Scheffer; J. Liao; M. Hildebrand

**HEALTH SERVICES (DELIVERY OF CARE, ACCESS TO CARE, HEALTH CARE MODELS)**

180 Changes in the patient call volume and call characteristics to an epileptologist during the COVID-19 pandemic | N. Sethi

181 Implementation of a Referral Process to Epilepsy Clinic from Kentucky Neuroscience Institute Resident Clinic | K. Dolbec; J. Chisholm; S. Waheed; J. Clay; R. Ward-Mitchell; M. Bensalem-Owen; S. Mathias

182 Readmission After EMU Discharge in a Nationally Representative Sample | L. Blank; P. Agarwal; N. Jette

183 Adding Nuance to “Zero Seizures and Zero Side Effects” | M. Marathe; R. Derry; K. Toyama; S. Joshi

184 Implementing a Co-located Behavioral Health Service for Parents Within a Pediatric Epilepsy Monitoring Unit: The First Year | K. Aravamudan; L. Thio; S. Lenze; C. Rogers; T. Tinnin

185 Centralized Efforts Transforming Global Care: The Ten-Year Impact of a Patient Advocacy Group - Medical Expert Partnership on Recognizing and Treating a Rare and Complex Epileptic Brain Malformation Syndrome | E. Nott; J. Cross; W. Gaillard; J. Kennan; J. Regis; O. Oatman; M. Beri; V. Boerwinkle; H. Shirozu; M. Hildebrand; S. Berkovic; J. Jacobs; E. Webster; L. Soeby; K. Ranson; K. Jensen; D. Curry; A. Arzimanoglou; A. Schulze-Bonhage; J. Wu

186 Facilitating the Transition from Pediatric to Adult Care for Youth with Epilepsy | F. Tirol; H. Wang

187 Impact of Educational Modules on Knowledge among Neuroscience Nurses Working in the Epilepsy Monitoring Unit | S. Bhatnagar; A. Ostendorf; J. Shoemaker

188 Activity Impairment and Healthcare Utilization in Hispanic People with Epilepsy and Depression | S. O’Kula; K. Kaur; T. Spruill; O. Devinsky; L. Diaz; B. Vazquez; A. Jongeling; D. Friedman

**PRACTICE RESOURCES**

189 A survey of patient’s values regarding their epilepsy management | F. Smith; W. Scharpf; S. Krishnaengar; B. Ramon; K. Zarroli

**EPIDEMIOLOGY**

190 Hospital readmissions in older adults with epilepsy in the US – a population-based study | C. Schreckinger; J. Lin; C. Kwon; P. Agarwal; M. Mazumdar; M. Dhamoon; N. Jette

191 Polypharmacy in patients with epilepsy: a nationally representative cross-sectional study | S. Terman; C. Aubert; C. Hill; D. Maust; J. Betjemann; C. Boyd; J. Burke

192 Sleep duration and quality among U.S. adults with epilepsy | N. Tian; A. Wheaton; M. Zack; K. Greenlund; J. Croft

193 Prevalence of Drug-resistant Epilepsy in an Academic Hospital in Alkhobar, Saudi Arabia | M. Alshurem; M. Aldosari; D. Aljaafari; I. Khuda; E. Shariff; A. Almatar; I. Alhashyan; M. Almuagiel; N. Almohish; H. Altaweel

**PUBLIC HEALTH**

194 The Role of Social Determinants in Epilepsy Treatment Gaps and Health Outcomes for Arizonans on Medicaid | J. Sirven; G. Sprout; M. Speer; G. Simic; S. Reddy

195 Epilepsy Safety Survey | H. Gong; L. Conners

196 Barriers to adherence to neurology clinic appointments for children with epilepsy – A pilot study | G. Kumar; R. Agarwal; J. Bailey; M. West

**CASE STUDIES**

197 A Case of Ictal Asystole in Temporal Lobe Epilepsy | Z. Wang; C. Schaefer; N. Sethi

198 Ictal central apnea in patient with medically intractable epilepsy | K. Schwartz; A. Balabanov; A. Lastra

199 Perampanel for the Treatment of Epilepsy in a Patient with Generalized Tonic-Clonic Seizures and Myoclonic Jerks | M. Holtzman

200 Bilateral Supplementary Motor Area Responsive Neurostimulation for Treatment of Super-Refractory Status Epilepticus | M. Siwoski; V. Shah; U. Uysal; C. Uloa; J. Cheng; P. Landazuri
201 Efficacy and Tolerability of Modified Atkins Diet in Children with Genetic Generalized Epilepsy; A Case Series | S. Kacker; C. Phitsanuwong

202 Leber’s Hereditary Optic Neuropathy and Epilepsy in a Female, Monozygotic Twin | G. Petito; P. Shear; J. Lynch; H. McKee

203 Functional Brain Connectivity from Interictal EEG in Epilepsy | E. Zarafshan; M. Ebrahimi Kalan; P. Forouzannezhad; U. Williams; M. Cabreraizo; M. Adouadi

LATE BREAKING

204 Speech and Cognition After Hemispherectomy for Hemimegalencephaly: A Report from the Global Pediatric Epilepsy Surgery Registry | M. Jones; K. Puka; G. Mathern

205 Feasibility of an ambulatory HD EEG system for home monitoring in Epilepsy Patients | E. Essaki Arumugam; F. Qian; L. Shuo; J. Landes; P. Luu; D. Tucker

206 Epileptic network as a pathological state with disturbed relaxation and increased network noise | L. Abrishami Shokooh; D. Toffa; P. Pouliot; F. Lesage; D. Nguyen

207 The Effects of Novel Cyclophilin D Inhibitors on Mitochondrial Permeability Transition Pore Opening | C. Gavrilovic; Y. Ahn; J. Rho

208 Novel BSN Gene Mutation with Intractable Epileptic Encephalopathy | K. Bricker; C. Lee

209 IV Ganaxolone in Pediatric Super-Refractory Status Epilepticus: A Single Patient Case Study | R. Singh; S. Robinett; A. Stewart; K. Van Poppel; J. Hulihan; M. Gasior; R. Singh

210 Near SUDEP during bilateral stereo-EEG monitoring characterized by diffuse postictal EEG suppression | M. Johnson; N. Samudra; M. Gallagher; B. Abou-Khalil; W. Nobis

211 BrainFocus: an online tool for seizure onset zone localization in patients with ictal EEG monitoring | M. Vila-Vidal; M. AlKhawaja; M. Carreño; P. Roldán; J. Rumia; G. Deco; A. Donaire; A. Tauste Campo

AES2020 is running on EASTERN TIME for its entire event. The time listed for all events and activities in this book is Eastern Time.
Sunday, December 6

Poster Author Hour 2
12:00 – 1:30 PM EST

BASIC MECHANISMS

Epileptogenesis of Acquired Epilepsies

212 The Effects of AZD on Different Neuronal Populations in Tumor-Associated Seizures | F. Khan; B. Gill; E. Merricks; A. Goldberg; X. Wu; A. Sosunov; T. Sudhakar; A. Dovas; M. Larizgoitia; G. McKhann; P. Canoll; C. Schevon

213 Microbiota depletion increases seizure incidence, severity, and modulates CNS inflammation in a mouse model of virus-induced epilepsy | A. DePaula-Silva; D. Doty; J. Sanchez; J. Libbey; K. Wilcox; R. Fujinami

214 Hyperactivation of Epigenetic HDAC Pathway in an Experimental Model of Acquired Epilepsy | V. Golub; D. Reddy

215 Absence of neuronal death during status epilepticus in vitro | K. Lillis; L. Lau; T. Balena; K. Staley

Epileptogenesis of Genetic Epilepsies

216 High-throughput functional evaluation of epilepsy-associated SCN2A variants | F. Potet; C. Thompson; T. Abramova; J. DeKeyser; J. DeKeyser; J. Millichap; A. George

217 Altered excitability, synaptic properties, and plasticity in the Scn1b knockout mouse model of Dravet syndrome | J. Chancey; A. Ahmed; A. McConnell; M. Howard

218 Integrated transcriptomics-metabolomics analysis implicates dysfunction of lysine metabolism in tuberous sclerosis complex | F. Chan; L. Bartolini; Q. Wu; S. Evans; E. Usai; B. Chan; C. Lewis; D. Uzun; N. Neeretti; C. Olugbo; W. Gaillard; J. Liu

219 Excitatory to Inhibitory Transition in GABAergic Currents Guides Circuit Formation of Cortical Interneurons | K. Zavalin; A. Hassan; C. Fu; Z. Khera; E. Delpire; A. Lagrange

220 Analysis of PI3K-AKT-MTOR spectrum disorders through deep genomic and functional models reveals new clinical insights and distinct molecular pathomechanisms | F. Pirozz; R. Shear; M. Berksesh; G. Ruggeri; N. Horsley; L. Gonzales; R. Kapur; J. Wright; J. Ojemann; E. Novotry; R. Saneto; W. Dobyns; G. Mirzaa

Electrophysiology/High Frequency Oscillations

221 Elevated temperature and interictal activity modulate hippocampal sharp-wave ripples in a mouse model of genetic epilepsy | M. Beckman; C. Cheah; W. Catterall; J. Oakley

222 Intercitial Epileptiform Discharges Disrupt Large-Scale Intercortical Networks | P. Dahal; J. Ferrero Lopez; A. Flinker; P. Dugan; D. Friedman; W. Doyle; O. Devinsky; D. Khodagholy; J. Geline

Mechanisms of Therapeutic Interventions

224 Heterozygous deletion of Trpv1 reduces the severity but not the frequency of spontaneous seizures in a Scn1a+- model of Dravet syndrome | V. Satpute; D. Bahceci; L. Anderson; D. Morgan; J. Arnold

225 5-HT2A Receptors Are Implicated in Seizure-Induced Respiratory Arrest in DBA/1 Mice | Y. Pan; Z. Tan; H. Feng

226 Heat shock proteins accelerate the maturation of brain endothelial cell glucocorticoid receptor in focal human drug-resistant epilepsy | C. Ghosh; S. Williams; L. Fergusan; W. Bingaman; I. Najm; M. Hossain

227 The Effect of Serotonergic Neurotransmission and Sleep State on Breathing During and After Kindled Seizures | K. Joyal; A. Petrucci; M. Littlepage-Saunders; G. Buchanan

Models

228 In-Vivo Preclinical Model of Glioblastoma Multiforme Induced Seizures | K. Howard; K. Vinokuroff; E. Pototskiy; K. Major; D. Sharma; V. André; A. Musto

229 Neuroprotection, neurotoxicity, and delayed neuronal death after brain injury and seizures | T. Balena; N. Rahmati; K. Lillis; K. Staley

230 Alzheimer’s disease-associated genetic variants differentially influence the development of corneal kindled seizures | K. Knox; C. Smith; A. Lo; S. Davidson; S. Jayadev; M. Barker-Haliski

231 Epileptic seizures lead to a loss of near-critical brain organisation in the zebrafish brain | D. Burrows; M. Richardson; D. Bassett; M. Meyer; R. Rosch

Other

232 Galanin Agonists as a Novel Neurotherapeutic Strategy for SUDEP | C. Metcalf

233 Identifying cardiac genetic biomarkers to predict the risk of sudden unexplained death in epilepsy | M. Soh; R. Bagnall; L. Bleakley; A. Phillips; C. Mckenzie; E. Mohamed Syazwan; C. Semsarian; I. Scheffer; S. Berkovic; C. Reid

TRANSLATIONAL RESEARCH

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234 My Seizure Gauge: Epilepsy monitoring with noninvasive and minimally invasive devices | B. Brinkmann; P. Viana; E. Nurse; M. Nasser; P. Karoly; B. Joseph; S. Dumanis; A. Schulze-Bonhage; G. Worrell; M. Cook; M. Dümppelmann; M. Richardson; D. Freestone

235 Hypercapnic ventilatory response in epilepsy patients treated with VNS | D. Dragon; H. Winnike; P. Ten Eyck; M. Granner; G. Richerson; B. Gehlbach
Devices, Technologies, Stem Cells

236 Targeted Augmentation of Nuclear Gene Output (TANGO) of SCN1A Reduces Seizures and Rescues Parvalbumin Positive Interneuron Firing Frequency in a Mouse Model of Dravet Syndrome | E. Wengert; P. Wagley; A. Christiansen; S. Strohm; N. Reza; Z. Han; S. Ji; I. Wenker; R. Gaykema; G. Liau; M. Patel

237 Comparative analysis of clozapine and JHU37160 in chemogenetic seizure suppression in a mouse model for drug-resistant temporal lobe epilepsy | J. Desloovere; P. Boon; L. Larsen; M. Goossens; J. Delbeke; E. Carrette; K. Vonck; A. Meurs; W. Wadman; R. Raedt

238 The Byteflies Sensor Dot: A Multimodal, Discreet Wearable to Monitor Focal Seizures | W. Harvey; J. Nys; L. Veelaert; B. Vandendriessche; V. Broux; B. Verhelle; K. Jansen; L. Lagae; W. Van Paesschen

239 Parent Use of Electronic Seizure Diaries for Infantile Spasms and Comparison to Video EEG | B. LaGrant; D. Goldenholz; M. Braun; R. Moss; Z. Grinspan

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247 The relationship of calcium channel activation and optical intrinsic signals during in vivo cortical spreading depolarizations | C. LaSarge; C. McCoy; D. Namboodiri; S. Danzer; J. Skoch

NEUROPHYSIOLOGY

Video EEG Epilepsy-Monitoring

248 Why is Video-EEG Delayed in Dissociative Seizures? | W. Kerr; X. Zhang; E. Janio; C. Albas; A. Karimi; I. Dubey; S. Sreenivasan; J. Engel, Jr.; M. Cohen; J. Stern

249 Fast ripples analyzed from whole-night intracranial EEG recordings accurately predict epilepsy surgery outcome | P. Nevalainen; N. von Ellenrieder; P. Klimeš; F. Dubeau; B. Frauscher; J. Gotman

250 Towards Objective Targeting of Intracranial Electroencephalography Using Data-Driven Semiology-Brain Visualisation | F. Pérez-Garcia; A. Alim-Marvasti; G. Romagnoli; M. Clarkson; R. Sparks; J. Duncan; S. Ourselin

251 Ambulatory EEG versus Epilepsy Monitoring Unit: A Direct Comparison | Y. Mikhaeil-Demo; E. Bachman; K. Gonzalez Otarula; S. Schuele

252 Automating the detection of absence seizures in human non-invasive EEGs - a new tool | A. Sargsyan; L. Millist; P. Ossenblok; D. Melkonian; T. O’Brien

ICU EEG

253 Cefepime Induced Neurotoxicity and EEG changes in patients with elevated cefepime blood levels | V. Ballur Narayana Reddy; C. Hu; M. Alshaer; C. Peloquin; V. Venugopal; M. Bruzzone

254 Preserving Hope for Patients with Anoxic Brain Injury and Malignant EEG Findings | D. Sahajwalla; M. Kurukumbi; Y. Sampathkumar; G. Gilson; C. Shadowen

255 Acute Neurophysiologic Biomarkers Predicting Pediatric Post-Traumatic Epilepsy | B. Appavu; H. Temkit; S. Foldes; A. Jacobson; P. Adelson

256 Lateralized periodic discharges are predictors of seizure recurrence and clinical outcome in critically ill neurological patients | C. Nayak; S. Bandyopadhyay

Other Clinical EEG

257 Interviewing as a tool to increase social media engagement with research in clinical neurophysiology | S. Latif; H. Iwaki; E. Asano

258 The prevalence of REM sleep onset seizures in a cohort of patients who died of SUDEP | L. Goldstein; R. Tarighati Rasekhi; M. Sperling; M. Nei

259 Utilization of continuous EEG among people with intracranial hemorrhage | G. Martz; B. Conroy; S. Thompson; D. Formica; A. Hunter

260 Ride the Wave: Continuous Electroencephalography is Indicated in the Management of Traumatic Brain Injury | A. Eickholtz; S. Abbas; E. James; C. Gibson; G. Iskander; M. Lypka; L. Krech; S. Pounds; K. Burns; A. Chapman
261 Accuracy of seizure reporting in patients with communication deficits | Z. Campbell; K. Paulk

262 Video Ambulatory EEG in Children – A Quality Improvement Study | M. DiGiovine; S. Massey; D. LaFalce; L. Vala; L. Allen-Napoli; B. Banwell; N. Abend

263 Relationships between EEG and MRI findings in V180I and M232R genetic Creutzfeldt-Jakob disease | Y. Kitazawa; H. Kishida; K. Kimura; Y. Miyaji; Y. Higashiyama; H. Joki; H. Doi; H. Takeuchi; N. Ueda; F. Tanaka

264 Contemporary Causes in Over- and Under-reading of scalp EEG | H. Hasegaw

265 Corpus Callosotomy and Intracranial Electroencephalogram: Multi-Staged Diagnostic Procedure for Epileptogenic Focal Localization and Localization in Medically Refractory Focal Epilepsy Syndrome for Epilepsy Surgery | T. Hasan; A. Parvathaneni; A. Stevens; R. Riel-Romero

266 Stability of High Frequency Activity during 24 hours of Intracranial EEG | S. Foldes; A. Jacobson; B. Appavu; J. Kerrigan; P. Adelson

MEG

267 Lateralized neuromagnetic inferior frontal gyrus activation during auditory word recognition: correlation with Wada test results | H. Freeman; J. Killen; R. Martin; I. Mohamed

Brain Stimulation

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401 Living with epilepsy during the COVID-19 pandemic - assessing the global escalation and mitigation of seizure risk | A. Sen; J. Thorpe; S. Ashby; A. Hallab; M. Andraus; D. Ding; P. Dugan; P. Perucca; N. Delanty; D. Costello; D. Andrade; C. Depondt; J. French; N. Jette; R. Sengupta; T. O’Brien; C. Newton; O. Devinsky; M. Brodie; J. Sander; J. Cross; J. Hanna

402 Stakeholder Perceptions of Community Pharmacist Population Health Management of People Living with Epilepsy | J. Bacci; S. Zaraa; A. Stergachis; G. Simic; H. White

**PRACTICE RESOURCES**

403 Management practices for West syndrome in South Asia: a survey study and meta-analysis | P. Madaan; P. Chand; K. Linn; J. Waniqasinghhe; M. Mynak; P. Poudel; R. Riikonen; A. Kumar; P. Dhir; S. Negi; J. Sahu

**EPIDEMIOLOGY**

404 Epilepsy surgery in adult stroke survivors with new-onset refractory epilepsy | J. Burneo; T. Antaya; A. Qureshi; B. Le; L. Richard; S. Shariff

405 Population-Based Surveillance of Sudden Unexpected Death in Epilepsy using the Sudden Death in the Young Case Registry | V. Whittemore; K. Burns; M. Udine; E. Shaw; M. Faulkner; N. Tian

406 Prevalence of dementia and seizure-free outcome for 12 months in patients with late-onset epilepsy with unknown etiology | N. Nagino; Y. Kubota; H. Nakamoto; S. Miyao; T. Kodama; H. Oguni

407 The clinical epidemiology of psychogenic nonepileptic seizures in a hospital sample of 2,346,808 patients | S. Goleva; A. Lake; E. Torstenson; K. Haas; L. Davis

**PUBLIC HEALTH**

408 Awareness and perception of first-aid methods for adult epilepsy patients and caregivers | R. Wu; J. Chiu; W. Leung; Y. Yuen; C. Lo; R. Chang

409 A Journey into the Unknown: An Ethnographic Examination of Epilepsy Treatment Management in the United States | G. Watson

**CASE STUDIES**

410 When walking becomes seizure: a case report | A. Alcantara Lima; S. Surpur; M. Nowak; J. Valeriano

411 Comb Like Rhythm on EEG in Vitamin B6 Responsive Epilepsy (ALDH7A1 mutation) in Newborn | J. Didion; E. Shaw; M. Faulkner; N. Tian

412 Limbic Encephalitis Presenting with Faciobrachial Dystonic Seizures After History of Successfully Treated Thymoma Type B-3 with Excellent Neurocognitive Outcome with Early Immunotherapy | U. Khan; M. Anderson; V. Gonzalez

413 “The Secret Life of Pets” Triggered Low-Frequency Visual Reflex Epilepsy in A Child: A Novel Case | A. Venkat; S. Shekar

414 An EEG Captured Case of Migralepsy / Migraine Aura-Triggered Seizures | A. Hareem; N. Calvo; M. Pahlavanzadeh; S. Monjazeb; C. Anyanwu

415 A Rare Case of Precuneus onset Epilepsy detected with PET and MEG | A. Swaminathan

416 Efficacy and Safety of Perampanel in Pediatric Patients with Partial-Onset Seizures or Primary Generalized Tonic-Clonic Seizures Who Converted to Monotherapy: A Case Series From Study 311 | A. Fogarasi; L. Ngo; A. Pattem; M. Malhotra
LATE BREAKING

417 Neuroimaging phenotyping and structural-metabolic-epileptogenic correlation of temporal neocortex in focal cortical dysplasia | J. Mo; S. Adler; K. Zhang

418 The long-term effects of Fenfluramine on patients with Dravet syndrome and their families: A qualitative analysis | M. Jensen; R. Salem; A. Gammaitoni; B. Galer; D. Wilkie; D. Amtmann

419 Ganaxolone Significantly Reduces Major Motor Seizures Associated with CDKL5 Deficiency Disorder: A Randomized, Double-blind, Placebo-Controlled Phase 3 Study (Marigold Study) | E. Pestana-Knight; S. Amin; T. Benke; J. Cross; T. Fleming; H. Olson; N. Specchio; S. Demarest

420 Concordance between stimulation-induced and spontaneous epileptic seizures and their association with clinical outcome using signal analysis in stereo-electroencephalography. | S. Tousseyn; D. Kreiter; R. van Hoof; K. Gasztych; B. Krishnan; O. Schijns; L. Wagner; A. Colon

421 Cannabidiol (CBD) Phase I Trial to Treat Epilepsy in Rett Syndrome | E. Hurley; A. Johnson; C. Ellaway; J. Lawson

422 All that glitters: Contribution of stereo-EEG in patients with lesional epilepsy | R. McLachlan; A. Suller Marti; A. Parrent; K. MacDougall; S. Mirsattari; D. Diosy; D. Steven

423 GABAergic dysfunction of Hippocampal Sclerosis Linked to SCN1A Mutation with Reduced interneuronal excitability | E. Palma; G. Ruffolo; K. Martinello; P. Cifelli; S. Fucile; G. Di Gennaro; V. Esposito; E. Aronica; A. Gambardella

424 Drug-Resistant Epileptic Patients Have a Compromised Antioxidant Vitamin Status that is Negatively Correlated with Seizure Frequency | N. Abuknesha; F. Ibrahim; I. Mohamed; K. Ghebremeskel

AES2020 is running on EASTERN TIME for its entire event. The time listed for all events and activities in this book is Eastern Time.
**Sunday, December 6**

**Poster Author Hour 3**  
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**Epileptogenesis of Acquired Epilepsies**

425 Brain extracellular matrix alters local ion concentrations and responses to injury | K. Normoyle; V. Dzhala; K. Lillis; K. Egawa; J. Glykys; N. Rahmati; K. Staley

426 Sprouted Mossy Fibers of Adult Born Dentate Granule Cells Preferentially Excite GABAergic Interneurons in a mouse Model of Posttraumatic Epilepsy | Y. Kang; S. Lee; B. Smith

427 Stochastic cellular onset of recurrent spontaneous seizures | L. Lau; K. Lillis; K. Staley

428 Microglial as Promising Targets in the Regulation of Experimental Chemoconvulsant and Febrile Status Epilepticus | K. Sharma; K. Bisht; U. Eyo

**Epileptogenesis of Genetic Epilepsies**

429 Plic-1 Rescue Mechanisms of a Developmental Epileptic Encephalopathy | G. Nwosu; W. Shen; J. Kang

430 TFEB nuclear retention, mTOR activation by rare variants of IPO8 found in childhood absence epilepsy (CAE) evolving to Juvenile myoclonic epilepsy (JME) | M. Tanaka; I. Martinez-Juarez; R. M. Duron; V. Huang Nguyen; A. Ochoa; A. Jara-Prado; M. Elisa Alonso; M. Lopez Ruiz; M. T. Medina; L. Guilhoto; E. Marcia Yacubian; R. Silva; C. Patterson; J. Bailey; A. Delgado-Escueta

431 Functional analysis of adult and neonatal splice isoforms of human NaV1.6 by high-throughput electrophysiology | C. Vanoye; T. Abramova; J. DeKeyser; N. Ghabra; C. Thompson; A. George

432 Increased Propensity for Pharmaco logically Induced Seizures and Sudden Death in Long QT Syndrome Rabbits | C. Bosinski; K. Wagner; D. Auerbach

**Electrophysiology/High-frequency Oscillations**

433 Expansion of the focal epileptic network: identifying predictors and therapeutic targets | J. Ferrero Lopez; P. Dahal; A. Hassan; D. Khodagholy; J. Gelinas

434 Cortical oscillations to measure anti-epileptic drug activity in clinical trials | A. Biondi; I. Premoli; P. Rossini; M. Richardson; G. Beatch; L. Rocchi; V. Santoro

435 Coupled High-frequency Oscillations Demarks “Red Spikes” in Focal Epilepsy | Z. Cai; A. Sohrabpour; H. Jiang; S. Ye; F. Yang; B. Joseph; G. Worrell; B. He

**Mechanisms of Therapeutic Interventions**

436 Altered T-cell clone diversity is associated with successful response to Acthar Gel treatment in infantile spasm patients | A. Dombkowski; D. Cukovic; S. Panday; S. Sundaram; A. Luat

437 Novel Neuroprotective Mechanisms of Cannabidiol (CBD) on Cultured Hippocampal Neurons Against Tetramethylene-disulfotetramine Toxicity | L. Friedman; M. Lauková; M. Shakarjan

438 Microburst and standard vagus nerve stimulation parameters confer different brain responses at 3T fMRI | J. Szaflarski; J. Allendorfer; J. Begnaud; R. McGuire; A. Keith

439 Anakinra, an interleukin-1 receptor antagonist, attenuates seizures induced by antibodies against N-methyl-D-aspartate receptors | O. Taraschenko; H. Fox; S. Pittock; A. Zekeridou; E. Eldridge; F. Farukhuiddin; R. Sharma; F. Al-Saleem; S. Dessain; R. Dinglede

440 Chronic remodeling and enhancement of hippocampal GABAergic circuits in temporal lobe epilepsy mouse model | H. Lin; D. Davila-Portillo; J. Kahn; D. Coulter

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441 GABAergic mechanism of sleep deprivation-induced seizure exacerbation in the Kv1.1-/- mouse model | R. Maganti; S. Konduru; J. Pfammatter; E. Wallace; Y. Pan; M. Jones

442 Increased Neuroinflammation and Seizure Susceptibility in a Rat Model of Depression | J. Jeong; J. White; Y. Jung; S. Kim; R. Sanchez; S. Koh

443 Marked Insomnia in a Mouse Model of Medial Temporal Lobe Epilepsy | L. Aiani; L. Rosenberg; I. Alishah; A. Alwaki; A. Kheder; A. Dickey; N. Pedersen

444 Rapamycin, But Not Minocycline, Significantly Alters Ultrasonic Vocalization Behavior in C57Bl/6 Pups in a Flurothyl Seizure Model | S. Hodges; P. Womble; E. Kwok; A. Darner; S. Senger; M. Binder; A. Faust; S. Condon; S. Nolan; S. Quintero; J. Taube; J. Lugo

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445 Autonomic Dysfunction Is More Prominent in Patients with Focal Rather Than with Generalized Epilepsy | A. Guekht; A. Lebedeva; M. Lebedeva; F. Rider; Y. Solomatin; A. Teplyshova; A. Yakovlev; D. Zhuravlev; M. Hil

446 Altered excitability of the brainstem vagus nerve dorsal motor nucleus in the Scn1b null mouse model of Dravet Syndrome | Y. Yuan; H. O’Malley; Y. Chen; C. Chen; L. Robinson-Cooper; L. Isom
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447 Accelerated Forgetting in Epilepsy Subjects | S. Steimel; R. Tom; B. Jobst

448 Anti-Seizure Medication Termination in Autoimmune Epilepsy Compared to Autoimmune Encephalitis | M. Shabana; S. Nooran; K. Blackburn; R. Das

449 Plasma catecholamine levels in patients with epileptic seizures | M. Rani; N. Lacuey Lecumberri; A. Murugesan; L. Vilella; J. Hampson; L. Zhu; M. Nei; S. Lhatoo

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450 Noninvasive Seizure Detection in Rodents Using Piezoelectric Sensors | D. Huffman; F. Duque-Quiceno; S. Carrizosa; A. Ajwad; J. Wang; E. Johnson; K. Hargis-Staggs; K. Donohue; B. O’Hara; B. Bauer; E. Bialock; S. Sunderland

451 Personalized neuromodulation therapy in drug resistant epilepsy patients treated with vagus nerve stimulation | K. Vonck; A. Mertens; S. Gadeyne; F. Dewaele; J. Allendorfer; L. Foppoli; J. Szaflarski; W. Van Grunderbeek; P. Boon

452 Circadian and Multiday cycles of seizure occurrence from ultra long-term subcutaneous EEG | P. Viana; J. Duun-Henriksen; M. Richardson; T. Kjaer

453 Cell therapy for intractable epilepsy – NTX-001 is safe and effective in reducing electrographic seizures and hippocampal pathology in a mouse model of mesial temporal lobe epilepsy | S. Bröer; M. Parekh; W. Blankenberger; L. Fuentealba; E. Sevilla; D. Traver; C. Priest; C. Nicholas

454 Integrated Digital System for Dense Behavioral Tracking and Adaptive Electrical Brain Stimulation: Canines and Humans with Epilepsy | V. Kremen; B. Brinkmann; V. Sladky; T. Pal Attia; P. Nejedly; D. Crepeau; L. Wheeler; V. Marks; I. Balzekas; I. Kim; M. Nasser; B. Sturges; C. Crowe; F. Mivalt; B. Lundstrom; T. Denison; J. Van Gompel; G. Worrell

Biomarkers

455 Early markers of epilepsy risk in pediatric cerebral malaria | A. Patel; A. Jannati; S. Dhamne; M. Mazumdar; G. Birbeck; A. Rotenberg

456 Ambulatory iEEG biomarkers and epilepsy rhythms during anterior thalamic nuclei stimulation | N. Gregg; V. Sladky; P. Nejedly; B. Lundstrom; B. Brinkmann; V. Kremen; G. Worrell

457 Patients with West syndrome and Autism: Comparative analysis of Genes, Molecular Pathways, Immune Signatures using Blood-based Functional Omics in Children who develop Autism | S. Chakravorty; S. Gedela; A. Berg; L. Groster; R. Logan; N. Call; N. Kadom; S. Bhalla

458 Electrographic Abnormalities during Post-Traumatic Epileptogenesis | U. Kumar; A. Bragin; J. Engel

459 Vanishing multied cycles with seizure freedom | M. Baud; T. Skarpaas; M. Grau; T. Tcheng; V. Rao

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460 Development of Seizures in a Large Animal Model of Post-Traumatic Epilepsy | L. Martinez Ramirez; R. Raiyyani; G. Price; J. Zhao; A. Ding; A. Duhaime; K. Staley; B. Costine-Bartell

461 In vivo Nprl3 knockout results in reduced seizure threshold and abnormal neuronal migration and morphology | P. Iffland; J. Babus; M. Baybis; A. Romanowski; A. Pouloupolous; P. Crino

462 A novel mouse model of focal limbic seizures with impaired behavior and cortical slow waves | L. Sieu; S. Singla; G. Chandrasekaran; A. Sharaf; A. Gummadavelli; R. Martin; C. McCafferty; M. Valcarce-Aspegren; A. Niknahad; I. Fu; N. Dolicho; Q. Pernenoud; J. Cardin; H. Blumenfeld

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463 Reporting of whole exome sequencing studies in epilepsy: An in-depth analysis of literature | A. Shukralla; R. Carton; A. Lacey; H. El Naggar; G. Cavalleri; N. Delanty

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464 Feasibility of stereo electroencephalography (SEEG) when there is little to no bone; a case report | A. Wabulya; D. Nacionales; H. Shin; A. Abumoussa; E. Hadar

465 Satisfaction and change in seizure frequency following an Epilepsy Monitoring Unit (EMU) evaluation: Does having events matter? | C. Schramke; T. Scott; J. Valeriano; K. Kelly

466 Lack of spontaneous seizures in patients implanted with depth electrodes | J. Bottan; A. Suller Marti; J. Burneo; A. Parrent; K. MacDougall; R. McLachlan; S. Mirsattari; D. Dioso; D. Steven

467 Accuracy of parental reporting of epileptic spasms at 2 week follow up- 1 year experience | D. Takacs; A. Kayatyan; K. Vanderslice; B. George; J. Riviello

468 Ictal Epileptic Networks in 34 Patients with Hypothalamic Hamartoma: A Scalp EEG-Study | S. Metzger; F. Scheerer; J. Jacobs; P. Reinacher; A. Schulze-Bonhage; K. Klotz

469 Alteration of consciousness in epilepsy= characteristic of iEEG signal | N. Campora; S. Kochen

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470 Continuous electrophysiological characteristics in critically ill patients presenting with seizures who died during long term EEG monitoring: a preliminary case series study | T. Wang; V. Raman; G. Motamedi

471 Implementation of a standardized quantitative electroencephalography curriculum for seizure detection in the pediatric intensive care unit (PICU): Quality Improvement Initiative | A. Kielian; D. Davila-Williams; S. Donatelli; M. Chijueda; A. Fialkow; A. Sansevere

472 Electrographic Seizures and Outcome in Critically Ill Children | N. Abend; Z. Wang; D. Panik; J. Marin; L. Vala; M. Donnelly; A. Topjian; R. Xiao; F. Fung
473 Longitudinal Spectral Power and Heart Rate Variability Derived from EEG: Visualization of Complicated and Uncomplicated Recovery from Pediatric Cardiac Surgery | A. Doud; L. Morgan; G. Benedetti; X. Bozarth; D. Barry; M. Wainwright

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474 Ambulatory intracranial electrophysiology and ecological momentary assessment of psychiatric symptoms | I. Balzekas; N. Gregg; T. Pal Attia; V. Sladky; P. Croarkin; V. Kremen; B. Brinkmann; G. Worrell
475 Acute and Long-term Electro-clinical Profile of Patients with Herpes Simplex Encephalitis | J. Khoury; V. Punia; T. Fan; C. Snider; A. Bhimraj
476 The symmetry and interhemispheric propagation of pediatric photoparoxysmal response. | J. Strzelecka; T. Skadorwa; S. Jozwiak
477 Neuromonitoring at the height of a pandemic: EEG findings in patients with COVID-19 | G. Tantillo; N. Jette; L. Marcuse; A. Charney; G. Nadkarni; J. Yoo
478 Motor Manifestation of Insular Seizures with spread to the Cingulate cortex | P. Parikh; Z. Fitzgerald; H. Shaker; O. Grinenko; d. nair; P. Chauvel
479 Long Term Video EEG Findings in a Cohort of Hospitalized COVID-19 Patients | N. Zecavati; S. Miri; T. Wang; A. Safadi; G. Motamedi
480 Photic Driving Response During Pediatric Stereotactic-EEG Monitoring | D. Brigham; D. Lowenstein
481 Epileptiform Activity and Seizures in Patients with Coronavirus Disease 2019 | F. Santos de lima; N. Issa; K. Seibert; J. Davis; R. Wlodarski; S. Klein; F. El Ammar; S. Wu; S. Rose; J. Tao
482 Age-related Evolution of EEG in Dravet Syndrome: Meta-Analysis from a Review of Published Patients | E. Minato; K. Myers

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483 Epileptiform activity detected from simultaneous MEG and EEG in patients with Alzheimer’s disease | M. Ochoa-Urrea; M. Funke; F. Maestu; J. Mosher; J. Garcia-Prieto; C. Farrell; O. Hasan; P. Schulz; S. Lhatoor
484 Toward a Clinically Validated Use of SAMepi/SAMg2 for MEG Spike Localization | I. Naggar; J. Scott; S. Robinson; J. Stout; J. Heiss; K. Zaghlioul; S. Sato; W. Theodore; S. Inati

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485 Modelling the Impact of Passive Electrical Properties of Neural Tissue on Volume of Activation during Electrical Stimulation through SEEG Electrodes | S. Sinha; A. Shindhelm
486 Outliers in the Cortico-cortical Evoked Potential (CCEP) Amplitude Versus Distance Relationship Identify Known Anatomical Pathways | A. Dickey; A. Alwaki; A. Kheder; D. Drane; N. Pedersen

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492 Inhibition of evoked potentials and electrographic seizures in-vivo by light activated chloride-channel, stGtACR2 | A. Acharya; L. Larsen; W. Wadman; J. Delbeke; K. Vonck; A. Meurs; P. Boon; R. Raedt
493 Activation and inhibition of locus coeruleus neurons during acute hippocampal seizures in rats | L. Larsen; L. Stevens; K. Vonck; P. Boon; R. Raedt

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494 Spatiotemporal components of neocortical ictal activity approximate a Fourier transformer | S. Lee; S. Deshpande; E. Merricks; C. Schevon; R. Goodman; G. McKhann; W. Van Drongelen
495 Robust identification of children with epileptic spasms using interictal EEG assessment of awake and sleep gamma-delta modulation index | H. Nariai; M. Miyakoshi; R. Rajaraman; D. Bernardo; D. Shrey; B. Lopour; S. Hussain
496 Automated pipeline for preprocessing scalp-recorded EEG data for phase-amplitude coupling analysis of children with and without infantile spasms | M. Miyakoshi; H. Nariai; S. Hussain
497 Use of gamma-delta modulation index to predict and measure response to treatment for infantile spasms | R. Rajaraman; H. Nariai; M. Miyakoshi; D. Bernardo; D. Shrey; B. Lopour; S. Hussain
498 REM sleep preferentially reveals novel source activations in human epileptic brain | G. McLeod; P. Abbasian; A. Ghassemi; T. Duke; C. Rycyk; D. Serletis; Z. Moussavi; M. Ng
499 Towards Establishing a Pretest Measure for Epilepsy when a Patient Presents with a ‘Normal’ Electroencephalogram | Y. Varatharajah; B. Berry; B. Joseph; I. Balzekas; V. Kremen; B. Brinkmann; R. Iyer; G. Worrell
500 Mapping of Information Flow in Human Auditory Processing using Electrocorticographic Signals | J. Swift; G. Schalk; A. Nourmohammadi; M. Adamek; P. Brunner
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503 Frequency of seizures in pediatric patients with neuroinflammatory disease with and without myelin oligodendrocyte glycoprotein antibodies (MOG-Ab) | K. Elkins; A. Lee; G. Gombolay

504 Recrudescence of Epilepsy in a Patient with Parry-Romberg syndrome with En Coup de Sabre | M. Reedy; M. Abdul Azeem; J. Brucker; A. Josiah

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506 Cellphone Videos Change the Paradigm of Nonepileptic Seizure Diagnosis in the Era of COVID-19 | J. Pollard; W. Tatum; A. Emily; J. Wang; C. Atallah; S. Craig; A. Joyner; K. Riley; K. Koehler; S. Hinkle

507 Multi-centre pilot of an interactive, secure, cloud-based, patient to clinician, smartphone video transfer service for epilepsy management during the Covid-19 pandemic | S. Zuber; N. Patel; J. Shetty; E. Ogden; M. Hutchison; A. McLellan; J. Clark; R. Shellhaas; G. Smith; R. Tasker; D. Tchapyjnikov; L. Reece; T. Sheehan; K. Sannagowdara; T. Sands; A. Ostendorf; E. Payne; K. Pearso; J. Piantino; J. Riviello; E. Kaufmann; F. Bartolomei; P. Boon; S. Chabardes; I. Najm; M. Malhotra; L. Ngo; R. McMurray; V. Villanueva

508 Improved Acquisition and Interpretation of Genetic Testing in a Multidisciplinary Epilepsy Genetics Clinic | J. Lockrow; E. Bonkowski; S. Clowes Candadai; N. Zuberi; H.Crudgington; A. Collingwood; L. Imbach; W. Van Paesschen; J. Peltola; R. Rego; T. Theys; A. Colon; L. Eross; D. Faboó; A. Gonçalves-Ferreira; L. Lai; T. McDonough; M. Mikati; L. Morgan; E. Novotny; T. Yamamoto; V. Villanueva; J. Montoya; E. Trinka; W. D’Souza; E. Trinka; V. Villanueva; R. McMurray; A. Rohracher; D. Kim; J. Brenton; J. Carpenter; K. Chapman; J. Clark; R. Farias-Moeller; W. Gaillard; M. Gainza-Lein; T. Glauser; J. Goldstein; H. Goodkin; R. Guerrierio; L. Huh; R. Kahoud; Y. Lai; T. McDonough; M. Mikati; L. Morgan; E. Novotny; A. Ostendorf; E. Payne; K. Pearso; J. Piantino; J. Riviello; E. Kaufmann; F. Bartolomei; P. Boon; S. Chabardes; I. Najm; M. Malhotra; L. Ngo; R. McMurray; V. Villanueva; P. Brunner

509 Pathogenic Variant in GABRA1 Linked to Epileptic Encephalopathy with Focal Seizure Onset from the Occipital Lobe | T. Mieszczanek; K. Johannesen

510 Epilepsy with encephalopathy as a late effect of chemoradiation in survivors of various early childhood cancers with CNS involvement; a pediatric case series | J. Wong; J. Stockman; R. Garcia-Sosa

511 Nonepileptic Events in Children and Adolescents in New Onset Seizure Clinic | J. Yeom; J. Lin; S. Kim; T. DeGrauw; S. Koh

512 Clinical outcomes of patients who had new onset seizures during acute COVID-19 diagnosis at OLSU-S | J. Ansari; M. Chappidi; A. Stevens; F. Gavins; R. Riel-Romero

513 POLG1 Heterozygous De Novo Pathogenic Variant Presenting with Severe Status Epilepticus with Aphasia, Irritability, Hemiparesis and Movement Disorder due to HHV-6 Encephalitis | K. Stroughton; R. Lebel; N. Brescia

514 Utilizing Simulation with Standardized Actors to teach delivering diagnosis of Psychogenic Nonepileptic Seizures | S. Krishnaiengar; B. Nguyen; K. Zarroli; B. Ramon

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515 Association of First and Second-line Medication Dosing and Progression to Pediatric Refractory Convulsive Status Epilepticus (the pSERG cohort) | C. Barcia Aguilar; M. Amenguai-Gual; A. Anderson; B. Appavu; R. Arya; J. Brenton; J. Carpenter; K. Chapman; J. Clark; R. Farias-Moeller; W. Gaillard; M. Gainza-Lein; T. Glauser; J. Goldstein; H. Goodkin; R. Guerrierio; L. Huh; R. Kahoud; Y. Lai; T. McDonough; M. Mikati; L. Morgan; E. Novotny; A. Ostendorf; E. Payne; K. Pearso; J. Piantino; J. Riviello; E. Kaufmann; F. Bartolomei; P. Boon; S. Chabardes; I. Najm; M. Malhotra; L. Ngo; R. McMurray; V. Villanueva

516 Hypothalamic hamartoma and epilepsy in a NYC based population: results from RENYC | J. Beal; E. Yozawitz; S. Wolfe; A. Nelson; P. McGoldrick; D. Hesdorffer; N. Basma; Z. Grinspan

517 CORE-VNS: A Prospective Outcomes Registry of Patients With Drug-resistant Epilepsy Treated With Vagus Nerve Stimulation Therapy | P. Kwan; R. Verne; T. O’Brien; R. El Tahry; K. Keough; J. Bogg; F. Fahoum; T. Greco; W. Van Grunderbeek; A. Sen

518 Effectiveness and Tolerability of Perampanel in Epilepsy Patients Treated in Routine Clinical Practice: a Global Pooled Analysis Study | W. D’Souza; E. Trinka; T. Wu; I. Najm; M. Malhotra; L. Ngo; R. McMurray; V. Villanueva

519 European expert opinion on ANT-DBS therapy for drug-resistant focal epilepsy (Delphi method) | E. Kaufmann; F. Bartolomei; P. Boon; S. Chabardes; A. Colon; L. Eross; D. Faboó; A. Gonçalves-Ferreira; L. Imbach; W. Van Paesschen; J. Peltola; R. Rego; T. Theys; B. Voges

520 Mapping epilepsy-specific patient-reported outcome measures for children to a proposed core outcome set for childhood epilepsy | H. Crudgington; A. Collingwood; L. Bray; S. Lyle; R. Martin; P. Gringras; D. Pal; C. Morris

521 Effectiveness and Safety of Perampanel in Elderly Epilepsy Patients (aged ≥ 65 Years) Treated in Everyday Clinical Practice | R. McMurray; A. Rohracher; D. Kim; J. Rodriguez-Urga; W. D’Souza; E. Trinka; V. Villanueva

522 Effectiveness, Safety and Tolerability of Perampanel in Adolescents with Focal and Generalized Seizures: Evidence from Clinical Practice | E. Gil-López; R. Shankar; T. Yamamoto; J. Montoya; E. Trinka; W. D’Souza; T. Maeda; V. Villanueva

523 Perampanel Monotherapy in Epilepsy Patients with Focal and Generalized Seizures: Real-World Experience | T. Alsadi; M. Toledo; F. Ayuga Loro; E. Trinka; T. Wu; M. Malhotra; L. Ngo; V. Villanueva
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524  Risk of cardiac morbidities and sudden death in epilepsy patients without underlying heart disease: A National Population-Based Study | C. Cheng; C. Hsu; T. Wang; W. Yang
525  Prognostic analysis according to age at epilepsy onset after withdrawal of AEDs following four seizure-free years | S. Park; M. Lee
526  Predictor Risk Factors of In-patient Mortality in Status Epilepticus | N. Naderi; A. Kumar; L. McCullough
527  Predicting outcome of patients with psychogenic non-epileptic seizures after epilepsy monitoring unit discharge | A. Massot-Tarrús; Y. Joe Yu; S. Mirsattari
528  Predictor Risk Factors of Acute Respiratory Failure in Status Epilepticus: Data from the Nationwide Inpatient Sample (NIS) | Y. Rodriguez; N. Naderi; S. Chandra; N. Naderi
529  New-Onset Refractory Status Epilepticus (NORSE): Interim results of a prospective multi-center study | A. Jafri; N. Gaspard; J. O’Bryan; A. Rechtnitzer; J. Bonito; N. Wong; M. Fong; H. Tolba; E. Gilmore; S. Hacker; A. Headlee; S. Hantus; V. Punia; X. Zhang; J. Yoo; O. Eka; T. Golton; G. Laforge; G. Day; P. Kang; H. Haider; M. Newman; C. Pimentel-Farias; B. Foreman; M. Dodd; E. Gerard; E. Bachman; A. Struck; K. Janko; C. Steriade; J. Jeschke; L. Higdon; J. Lee; L. Trouten; L. Hirsch

Women’s Issues
530  Two Cases of Focal Status Epilepticus in Pregnancy on FHT and vEEG Monitoring | A. Serafini; A. Christiana; M. della Torre
531  The Effect of Neuroactive Steroids on Seizure Control during Pregnancy | P. Voinescu; K. Tang; K. Pennell; Z. Stowe; D. Newport; A. Kirschenbaum; P. Pennell

NEUROIMAGING

Structural Imaging
532  Regional myelin alterations linked to post-ictal generalised EEG suppression | L. Allen; J. Hampson; A. Jha; B. Whatley; R. Harper; C. Scott; R. Kumar; J. Ogren; M. Rani; L. Lemeux; S. Lhatoo; S. Vos; B. Diehl
533  MELD Project: Cortical excitability underlies the distribution of epileptogenic focal cortical dysplasia | K. Wagstyl; P. Vertes; J. Seidlitz; A. Raznahan; J. Cross; T. Baldeuweg; S. Adler
534  Prediction of Outcomes From LaserInterstitial Thermal Therapy for Mesial Temporal Lobe Epilepsy Using Tactography | A. Tong; A. Ko; M. Mossa-Bash
535  Multi-scale deep learning network analysis using clinically acquired multi-modal MRI improves the localization of seizure onset zone in children with focal epilepsy | M. Lee; N. O’Hara; M. Sonoda; C. Juhasz; E. Asan
536  Optimal Atlas Size for Correlating Brain Structure and Function | A. Silva; A. Revell; T. Arnold; A. Gibson; J. Stein; S. Das; T. Shinohara; D. Basset; B. Litt; K. Davis

Temporal lobe epilepsy surgical outcomes can be inferred based on structural connectome hubs: a machine learning study | E. Gleichgerrcht; S. Keller; D. Drane; B. Munsell; K. Davis; C. McDonald; E. Kaestner; B. Weber; S. Krantz; W. Vandergrift; J. Edwards; R. Kuzniecky; L. Bonilha

Brain Morphological Abnormalities in Children with CDKL5 Deficiency Disorder | Y. Tang; I. Wang; S. Sawar; J. Choi; S. Wang; X. Zhang; S. Parikh; A. Naduvil Valappil; E. Pestana-Knight

Diffusion MRI connectometry reveals widespread network involvement in patients with temporal lobe epilepsy | E. Gleichgerrcht; D. Drane; S. Keller; S. Krantz; B. Weber; L. Bonilha

Functional Imaging
540  Genetic generalised epilepsy is associated with functional, but not structural, network abnormalities: a resting state fMRI and diffusion tensor imaging study. | T. Haas-Heger; C. Tangwiriyasakul; S. Perani; S. Yakuub; A. Collingwood; M. Steinbrenner; R. Piper; D. Carmichael; M. Richardson
541  Do relationships with cognitive function differ along the longitudinal hippocampal axis? | D. Panjetti-Moore; E. Akinsoji; A. Hamidullah Thiam; L. Sepeta; W. Theodore
542  Functional connectivity in temporal lobe epilepsy and the relationship with disease parameters | S. Buck; L. Allen; J. Duncan; M. Sidhu
543  Relationship between behavioural and functional hemispheric lateralisation in temporal lobe epilepsy | M. Sablik; A. Ramaswamy; S. Slain; J. Duncan; S. Buck; M. Sidhu
544  Imprint of psychogenic non-epileptogenic seizures (PNES) on the brain | S. Mueller; T. Neylan; P. Garcia; N. Garga; K. Laxer
545  Network mechanisms of working memory dysfunction across the epilepsy spectrum: A task-based dynamic fMRI analysis | L. Caciagli; X. He; U. Braun; B. De Blasi; B. Wandschneider; S. Baxendale; P. Thompson; J. Duncan; M. Koepp; D. Bassett
546  Mapping language cortices in school-age children: A comparison of success rates for TMS and fMRI | S. Gibbs; A. Choudhri; J. Wheless; S. Narayana
547  Utility of MEG and TMS in the Pre-Surgical Evaluation of Young Children with Epilepsy: A Case Report | L. Birg; S. Gibbs; T. Willard; R. Rezaie; A. Babajani-Feremi; S. Fulton; A. Warren; F. Boop; S. Narayana

COMORBIDITY (SOMATIC AND PSYCHIATRIC)
548  Screening for suicidality and its relation to undiagnosed psychiatric co-morbidities in children and youth with epilepsy. | A. Dagar; A. Anand; E. Pestana-Knight; J. Timmons-Mitchell; K. Tossone; D. Zemba; T. Falcone
549  Patient Perceptions of Mental Health Treatment in Epilepsy | S. Fulton; A. Warren; F. Boop; S. Narayana
550  Comparison of stress-coping, quality of life and alexithymia in patients who developed psychogenic non-epileptic seizures (PNES) at a younger vs. older age of onset | L. Myers; R. Trobliger; M. Lancman
ANTISEIZURE MEDICATIONS

Animal Studies

551 Validation of in-house drug-in-food pellets for antiseizure drug screening in three epilepsy models at the NINDS-Funded Epilepsy Therapy Screening Program Contract Site | D. Diekjürgen; C. Pernici; K. Thomson; P. West; C. Metcalf; K. Wilcox

552 Antiseizure effect of high dose allopropylnagelone in a rat diisopropyl fluorophosphate model of benzodiazepine-refractory status epilepticus | A. Dhiri; C. Wu; M. Rogawski

Clinical Trials

553 Time to Second Doses in Emergency Seizure Patients Treated With Valtoco® (diazepam nasal spray) Across 24 Hours: Interim Subgroup Results From a Phase 3, Open-label, Repeat Dose Safety Study | J. Desai; E. Segal; D. Tarquinio; I. Miller; D. Dlugos; J. Wheless; R. Hogan; V. Biton; G. Cascino; M. Sperling; K. Liow; B. Vazquez; R. Ayala; W. Mauney; A. Rabinowicz; E. Carrazana

554 Exploring the Impact of Need for a Second Dose of Rescue Therapy for Seizure Clusters on Healthcare Utilization | E. Faught; D. Cook; E. Carrazana; A. Rabinowicz

555 Clinical Factors Associated with Seizure Freedom in Patients with Partial-Onset Seizures (POS) Receiving Perampanel 4 mg/day in FREEDOM Study 342 | T. Yamamoto; A. Patten; J. Kim; S. Lim; H. Ninomiya; Y. Kubota; M. Malhotra

556 Sustained Seizure Freedom with Perampanel 4 mg/day Monotherapy in Patients with Newly Diagnosed/Currently Untreated Recurrent Partial-Onset Seizures: Post Hoc Analysis of Study 342 (FREEDOM) | Y. Kubota; J. Kim; S. Lim; H. Ninomiya; T. Yamamoto; A. Patten; L. Ngo; M. Malhotra

557 Health-Related Quality of life (HRQoL) in Paediatric Subjects with Partial Onset Seizures (POS) or Primary Generalized Tonic Clonic (PGTC) Seizures receiving Adjunctive Perampanel | A. Trigg; E. Brohan; K. Cocks; A. Taham; R. Campbell; L. Ngo

558 Use of a Second Dose of Diazepam Nasal Spray Within 4 Hours and Effect on the Safety Profile in Patients with Seizure Clusters: Interim Results from a Phase 3, Open-label, 12-Month Repeat Dose Safety Study | D. Tarquinio; E. Segal; I. Miller; J. Wheless; R. Hogan; V. Biton; G. Cascino; M. Sperling; K. Liow; B. Vazquez; R. Ayala; W. Mauney; J. Desai; C. Davis; E. Carrazana; A. Rabinowicz

559 Effectiveness of Valtoco® (diazepam nasal spray) Rescue Therapy for Seizure Clusters Based on Analysis of Tolerance After Long-term Use: Interim Results From a Phase 3, Open-label, 12-month Repeat Dose Safety Study | G. Cascino; E. Segal; D. Tarquinio; I. Miller; D. Dlugos; J. Wheless; R. Hogan; V. Biton; M. Sperling; K. Liow; B. Vazquez; R. Ayala; W. Mauney; J. Desai; C. Davis; E. Carrazana; A. Rabinowicz

560 Impact of Seasonal Changes on the Safety and Tolerability of Diazepam Nasal Spray in Patients with Allergies or Rhinitis: Updated Interim Results From a Phase 3, Open-label, 12-Month Repeat Dose Safety Study | B. Vazquez; M. Sperling; E. Segal; D. Tarquinio; I. Miller; J. Wheless; R. Hogan; V. Biton; G. Cascino; K. Liow; R. Ayala; W. Mauney; J. Desai; D. Cook; A. Rabinowicz; E. Carrazana

561 Caregiver Experience With Diazepam Nasal Spray for Seizure Clusters: Caregiver-reported Results From an Exit Survey of a Phase 3, Open-label, Repeat Dose Safety Study | C. Guerra; R. Hogan; P. Penovich; J. Wheless; D. Cook; E. Carrazana; A. Rabinowicz

562 Examining the Patient Experience With Diazepam Nasal Spray for Seizure Clusters: Patient-reported Results From an Exit Survey of a Phase 3, Open-label, Repeat Dose Safety Study | P. Penovich; J. Wheless; R. Hogan; C. Guerra; D. Cook; E. Carrazana; A. Rabinowicz

563 Characteristics of Patients Who Self-Administered Diazepam Nasal Spray for Seizure Clusters: Interim Results From a Phase 3, Open-label, Repeat Dose Safety Study | D. Cook; P. Penovich; J. Wheless; R. Hogan; C. Guerra; E. Carrazana; A. Rabinowicz

564 Long-term Seizure Freedom with Adjuvant Perampanel in Pediatric Patients (Aged 4– < 12 years) with Partial-Onset Seizures or Primary Generalized Tonic-Clonic Seizures: Post Hoc Analysis of Study 311 | R. Flamini; A. Patten; M. Malhotra; L. Ngo

565 Effect of Concomitant Anti-Seizure Medications (ASMs) During Long-Term (52 weeks) Adjunctive Perampanel Treatment in Japanese Pediatric Patients (Aged 4– < 12 Years): Post Hoc Analysis of Study 311 | T. Watanabe; H. Omatsu; R. Kira; J. Togayama; H. Shiraishi; K. Kobayashi; K. Ishiba; A. Patten; T. Takase; L. Ngo

566 PROVE Study 506: Analysis of a Retrospective, Phase IV Study of Perampanel in Real-World Clinical Care of Patients Based on Study Site Participation in Previous Clinical Trials | R. Wechsler; J. Wheless; T. Resnick; A. Salah; A. Patten; M. Malhotra

567 Open-label Phase 2 Study to evaluate the Interchangeability of the Novel Intravenous Formulation of Perampanel from Oral Tablet in Japanese Patients with Epilepsy (Study E2007-J081-240) | R. Hanaya; Y. Kubota; M. Mizobuchi; K. Iida; T. Ono; H. Motooka; N. Nakano; A. Fujimoto; M. Iwasaki; M. Fukuda; A. Kondo; K. Uruno; S. Yamamuro; K. Yamaguchi; K. Onishi; L. Ngo; Y. Inoue

Cohort Studies

568 Comparative Economic Outcomes in Patients with Focal Seizure Initiating First-line Eslicarbazepine Acetate Monotherapy versus Generic Antiepileptic Drugs | B. Wensel; D. Mehta; M. Davis; A. Epstein; G. Williams

Drug Side Effects

569 Antiseizure medications use in psychogenic non-epileptic seizures: Frequency, determinants and impact | N. Ahuruonye; N. Janocko; D. Teagarden; H. Villarreal; M. Morton; O. Groover; D. Loring; D. Drane; I. Karakis

570 Tremor as a Probable Adverse Drug Reaction to Levetiracetam: A Case Report | N. Gupta; M. Seier; A. Vuppala
Other

571 Antiseizure Drug Usage Prior to Pre-Surgical Evaluation | V. Pandya; C. Carlson

572 Quality Improvement Study in Patients with Epilepsy in Treatment with Epidiolex at MUSC Epilepsy Clinic | K. Mora Rodriguez; S. Bhatia; E. Carter; C. Leatheng; L. Horstemeyer Cobb; G. Carmen-Lopez; E. Kutluay

573 US Prescribing Behavior in the First Year of Striportenel Commercial Availability for Dravet Syndrome | A. Bennett; V. Fong; B. Downing; K. Rose; B. Brown

574 Rapid Attainment of Therapeutic Plasma Concentrations Following Intravenous Perampanel Administration with Loading Dose | O. Majid; L. Ngo; Z. Hussein; S. Yasuda; J. Aluri; L. Reyderman; M. Malhotra

575 Loading Dose Approaches to Rapid Attainment of 4-mg Steady-State Perampanel Concentrations | Z. Hussein; M. Malhotra; O. Majid; S. Yasuda; L. Reyderman; J. Aluri; L. Ngo

Surgery

Adult

576 Perioperative safety of Centromedian Nucleus implantation for epilepsy DBS | L. Dalic; A. Warren; W. Thevathasan; A. Roten; K. Bulluss; J. Archer

577 Invasive Evaluations in the Workup of Encephaloceles | S. Riaz; C. Vallin; C. Garcia; J. Bulacio

578 Perception of Quality of Life After VNS and RNS Therapy | A. Bach; A. Bhraguvanshi; A. Crepeau; M. Hoerth; K. Noe; J. Drazkowksi; R. Zimmerman; J. Sirven

579 Stereo-EEG seizure localization and biomarkers of epilepsy surgery outcome in patients with mesial temporal sclerosis | I. Podkorytova; G. Perven; R. Hays; M. Lega; K. Ding

580 Outcomes of medical management after failed epilepsy surgery | L. Kaye; Z. Poolos; J. Miller; N. Poolos

581 Parahippocampal ablation is associated with seizure freedom in mesial temporal lobe epilepsy | D. Satzer; J. Tao; P. Warnke

582 Spectrum-based deep learning demonstrates improved accuracy of intracranial seizure and seizure onset detection | A. Constantino; N. Sisterson; N. Zaher; A. Urban; M. Richardson; V. Kokkinos

583 Multifocal Auras: Effect on Surgical Progression and Post-Operative Outcome | C. Boada; S. Grossman; P. Dugan; J. French

Pediatrics

584 Source Imaging of different ictal EEG patterns on scalp and intracranial EEG: Potential Value before Pediatric Epilepsy Surgery | E. Tamila; M. Alhilani; A. Alter; S. Perry; J. Peters; J. Madsen; P. Pearl; C. Papadelis

585 Caregivers Impression of Epilepsy Surgery in Tuberous Sclerosis Complex Patients | T. Nguyen; B. Porter

586 Factors Leading to >2 Antiseizure Medication Trials Prior to Epilepsy Surgery Referral in Children | G. Newell; S. Shandley; L. Wong-Kisiel; N. McNamara; E. Romanowski; S. Reddy; S. Patel; M. Ciliberto; S. Nangia; Z. Grinspan, MD, MS; D. Depositario-Cabacar; R. Singh; A. Marashly; D. Shrey; S. Karia; A. Ostendorf; P. Tatchar; K. Sannagowdara; S. Lew; K. Chapman; A. Alexander; S. Wolfe; M. McGoldrick; N.P. J. Bolton; J. Coryell; M. Merelman; S. Gedela; C. Papadelis; S. Perry

587 Automatic Path Planning for Stereotactic Hippocampal Targeting with Optimized Penetration | L. Madiraju; R. Monfaredi; R. Keating; W. Gaillard; C. Oluigbo

588 Multimodal neuroimaging in pediatric superior frontal sulcus cortical dysplasia | I. Mohamed; S. Singh; N. Sankhla; A. Harrison; M. Thompson; J. Glenn; M. Goyal; K. Lalor; C. Rozzelle; J. Blount; P. Kankirawatana

589 Limited, Tailored Resections/Ablations After Invasive EEG Studies in Intractable Epilepsy due to Polymicrogyria Have Favorable Outcomes | J. Andrews; S. Lalani; S. Ammanuel; B. Kopold; B. Paul; J. Kleen; C. McDonald; R. Knowlton; E. Chang

Dietary Therapies (Ketogenic, Atkins, Etc.)

592 Use of a ketogenic and protein restricted diet in a patient with Arginase-1 Deficiency and Drug-Resistant Epilepsy | H. Lowe; N. Pai; A. Schulze; M. Zak; J. Kobbyashi; E. Donner

593 Impact of Ketogenic Diet Therapy on growth in children with epilepsy | S. Lu; H. Champion; N. Mills; L. Starace; Z. Simpson; V. Whiteley; N. Schoeler

Behavior/Neuropsychology/Language

Adult

594 Semiology of nonepileptic spells does not predict seizure types in patients with mixed disorders | D. Wei; M. Garlinghouse; W. Li; N. Swingle; K. Samson; O. Taraschenko

595 Cognitive scores of Spanish-speaking people with epilepsy decline as a function of temporal lobe epilepsy duration | L. Corona; A. Ammothumkandy; K. Ravina; V. Wolseley; M. Armacost; C. Heck; J. Russin; C. Liu; M. Bonaguidi; J. Smith

596 A Virtual Reality Framework to Study the Neural Correlates of Déjà Vu | N. Okada; R. Cortez Cuevas; K. Hewitt; T. Shade; J. Neisser; D. Drane; A. Cleary; N. Pedersen
597 Exercise in Epilepsy: Beliefs, Barriers, and Future Directions | M. Arnel; H. Alexander; P. Duncan; H. Munger Clary; J. Fanning; P. Brubaker; N. Fountain

598 Utility of an iPad Based Cognitive Screening Measure in Patients with Epilepsy | A. Postle; O. Hogue; D. Floden; R. Busch

599 Cognitive and psychiatric outcomes following epilepsy surgery at a single academic center | B. Jung; S. Vadera; I. Sen-Gupta; M. Sazgar; J. Lin; L. Mnatsakanyan

Pediatrics

600 Language Laterality in Recent Onset Pediatric Epilepsy | M. Marcelle; E. Fanto; X. You; L. Sepeta; M. Berl; W. Gaillard

601 Reading Development in Childhood Epilepsy and Neuropsychological Predictors: Preliminary Longitudinal Results | J. Schwartz; J. Jones; B. Hermann

GENETICS

Human Studies

602 Characteristics of epilepsy as determined GNAO1 International Registry Survey | E. Axeen; A. Viehoever; C. Sidirooulos; J. Schreiber; H. Goodkin

603 MBD5 Haploinsufficiency causes Developmental and Epileptic Encephalopathy with Prominent Psychiatric Disturbance | C. Marini; G. Carvill; A. McTague; J. Panetta; C. Stutterd; T. Stanley; S. Marin; J. Nguyen; C. Barba; A. Rosati; R. Scott; H. Mefford; R. Guerrini; I. Scheffer

604 A clinico-genetic prediction model facilitates early diagnosis of Dravet syndrome | A. Brunklaus; E. Pérez-Palma; I. Ghanty; E. Brilstra; B. Ceulemans; I. de Lange; R. Guerrini; R. Moller; R. Nabbout; I. Scheffer; J. Symonds; S. Weckhuysen; M. Kattan; S. Zuberi; D. Lal

605 STXBP1.ca - A prospective natural history study of STXBP1 disorders | J. Zuo; J. Engle; L. Beszant; C. Boelman

606 A 9 year old boy with febrile seizures is found to have a likely pathogenic variant in the OTC gene, but does not have OTC deficiency | T. Reynolds

607 Analysis of Clinical Genetic Diagnostic Journey for KCNQ2 Cohort | D. Knight; S. Mohida; R. Pinsky; L. Smith; C. Achkar; B. Sheidley; H. Olson; A. Poduri

608 Research-to-Clinical Results of Trio Exome Sequencing in a Large, Single-Center Cohort | H. Koh

HEALTH SERVICES (DELIVERY OF CARE, ACCESS TO CARE, HEALTH CARE MODELS)

609 Remote Teleprogramming of the Vagus Nerve Stimulation System During the COVID-19 Pandemic | R. Chandak; D. Garibay-Pulido; N. Monica; M. Rossi

610 Non-elective hospital admissions, discharge disposition, and health services utilization in epilepsy patients: a population-based study | C. Kwon; P. Agarwal; J. Lin; M. Mazumdar; M. Dharmoon; N. Jette

611 Development and Evaluation of an In-Service Examination for Epilepsy Fellows – The EpiFITE | S. Kessler; J. Moeller; F. Fung; E. Gonzalez-Giraldo; E. Johnson; A. Kheder; J. Maclean; E. McGinnis; W. Muhlhofer; J. Oster; S. Schmitt; P. Voinescu; L. Wong-Kisiel; A. Kephart

612 Need for a Low-Cost, Portable, Telehealth Point-of-Care Amplitude-Integrated Electroencephalograph in Neonatal Neuro-Diagnostic Monitoring | G. Seifert; D. Leppick; D. Hedin; P. Gibson; A. Thesing; R. Rao; D. Kenney-Jung; S. Wang

613 The Managing Epilepsy Well (MEW) Network Database: Lessons learned in refining and implementing an integrated data tool in service of a national U.S. research collaborative | M. Sajatovic; B. Wilson; R. Shegogg; C. Escoffery; T. Spruill; B. Jobst

614 PACES en español: A Consumer-Driven Epilepsy Self-Management Program for Spanish-Speaking Adults with Epilepsy | E. Johnson; J. Smith; R. Fraser

615 Implementation of an epilepsy education program into an ambulatory care clinic | M. Siodlak; B. E. Gidal; S. Hunter-Banks; J. Thompson; A. Margolis

616 Real-World Data on Patterns of Care and Outcomes in People with Incident Epilepsy | W. Bensken; S. Navale; A. Andrew; B. Jobst; M. Sajatovic; S. Koroukian

PRACTICE RESOURCES

617 Mobile Medication Reminder Application in Combination with Individualized Behavioral Intervention to Improve Adherence among Patients with Epilepsy | W. Barrett; C. Campbell-Grossman

618 Determining Feasibility of Using the Management Information Decision Support Epilepsy Tool (MINDSET) Among Adult Patients at a Level IV Epilepsy Center | P. Rogers

EPIDEMIOLOGY

619 The effect of post-traumatic epilepsy on outcomes after traumatic brain injury: a TRACK-TBI study | J. Gugger; J. Burke; K. Ding; J. Kim; B. Foreman; J. Yue; A. Puccio; E. Yuh; X. Sun; M. Rabinowitz; M. Vassar; S. Taylor; E. Winkel; H. Deng; M. McCrea; M. Stein; C. Robertson; H. Levin; S. Dikmen; J. Barber; J. Giacino; P. Mukherjee; K. Wang; D. Okonkwo; A. Markowitz; S. Jain; D. Lowenstein; G. Manley; N. Temkin; R. Diaz-Arrastia

620 Effect of COVID-19 Pandemic on Epilepsy Patients in Hawaii | M. Nakamoto; M. Smith; J. Crocker; F. Morden; K. Liu; E. Ma; N. Van; A. Chong; C. Mitchell; E. Zhu; N. Dang; E. Carrazana; J. Viereck; K. Liow

621 Outdoor air pollution exposure and the risk of seizures: A systematic review | T. Antaya; A. Qureshi; J. Burneo

622 Enzyme-Inducing Anti-Seizure Medication Utilization in Adults with Epilepsy | S. Ajinkya; J. Fox; A. Lekoubou Looti
PUBLIC HEALTH

623 Population screening for urine antigens to detect asymptomatic subarachnoid neurocysticercosis | S. Allen; L. Fernandez; P. Vilchez; R. Gamboa; C. Muro; Y. Castillo; J. Bustos; H. Garcia; S. O’Neal

624 Rare Epilepsy Landscape Analysis (RELA) | I. Penn Miller

625 Seizure-related Emergency Department visits in pediatric population during COVID-19 – a territory-wide study in Hong Kong | T. Chiu; W. Leung; R. Ho; H. Chan; R. Chang

CASE STUDIES

626 Delayed SCN1A Diagnosis: A Case Series of Three Families | E. Sexton; L. Smith; H. Koh; D. Knight; R. Pinsky; C. Harini; A. Bergin; B. Sheidley; A. Poduri

627 Acute Seizures Occurring in Association with SARS-CoV-2 | S. Hwang; A. Ballout; U. Mirza; A. Sonti; A. Husain; C. Kirsch; R. Kuzniecky; S. Najjar

628 A Role for Electroconvulsive Therapy in the management of New Onset Refractory Status Epilepticus (NORSE) in a young child | M. Nath; Y. Shah; L. Theroux; G. Petrides; S. Sanghani; S. Kothare

629 Combination Epilepsy Surgery Strategies: Resective or Ablative Epilepsy Surgeries Performed in Tandem with Neurostimulator Placement | B. Cheaney II; B. Stedelin; A. Raslan; L. Ernst

630 Herpes Encephalitis Presenting as New Onset Status Epilepticus with MRI Suggestive of Acute Stroke | V. Pandya; A. Barminova; D. Rafie; W. Ma

631 Anorexia and Hippocampus: A Case Report | L. Estofan; M. Privitera

632 Case Report: Use of responsive neurostimulation in a pregnant woman with medically refractory epilepsy | N. Hartmann; S. Chen

LATE BREAKING

633 Epilepsy and Electrical Status Epilepticus in Sleep that Redefines the Clinical Spectrum of Potocki-Lupski Syndrome | T. Burr; G. Turek; M. Sweeney; C. Karakas

634 Cenobamate Trough Plasma Concentrations in Patients with Uncontrolled Focal Seizures Achieving 50% and 100% Seizure Reduction in Two Randomized Clinical Studies | S. Greene; M. Kamin

635 Accelerated Maturation and Early Circuit Effects of Immature Adult Born Granule Cells after Traumatic Brain Injury | L. Corrubia; D. Subramanian; A. Irfan; V. Santhakumar

636 Myoclonus-associated GRIN1 variant: from molecular mechanism to rescue pharmacology | R. Song; X. Bozarth; J. Zhang; W. Tang; Y. Xu; S. Kim; S. Myers; W. XiangWei; G. Shaulsky; W. Dobyns; S. Traynelis; H. Yuan

637 Electrode surface area impacts measurement of high frequency oscillations in human intracranial EEG | K. Remakanthakarup Sindhu; H. Ombao; A. Riba; D. Phillips; J. Olaya; D. Shrey; B. Lopour

638 COVID-19 and De Novo Right Occipitoparietal Seizures: A Case Report | M. Suteanu; E. Ghrooda; M. Ng

639 A Stereo EEG Imaging Sandbox | M. Bindschadler; S. Friedman; J. Hauptman; I. Ojemann; A. Doud; A. Marashly; E. Novotny

640 Teleneuropsychology in the time of COVID-19: the experience of the Australian Epilepsy Project | C. Tailby; A. Collins; D. Vaughan; D. Abbott; M. O’Shea; C. Helmstaedter; G. Jackson
Monday, December 7

Poster Author Hour 4
9:00 – 10:30 AM EST

BASIC MECHANISMS

Epileptogenesis of Acquired Epilepsies
641 Entrainment of retrosplenial cortical neurons by limbic epileptiform activity | J. Lombardo; S. Smirnakis
642 Epileptogenesis in rodents leads to neural system dysfunction and loss of associative memory measured by auditory event related potentials | S. Rudrashetty; K. Ponder; S. Villarrubia; L. Good
643 Mechanisms of chloride influx in hypoxic-ischemic injury | F. Bahari; K. Staley

Epileptogenesis of Genetic Epilepsies
644 Conditional expression of 4EBP1 attenuates epilepsy and neurophysiological abnormalities associated with mTOR hyperactivation | L. Nguyen; Y. Xu; T. Mahadeo; A. Bordey
645 A vitamin D fortified diet increases survival and reduces sex-specific behavioral alterations, but does not rescue bone abnormalities in a mouse model of Cortical Dysplasia (NS-Pten Knockout Mice) | P. Womble; S. Hodges; S. Nolan; M. Binder; A. Holley; J. Huguenard
646 Gender difference in epileptic spike-wave discharge incidence in one IGE model with Gabrg2 Q390X mutation | J. Zhou; M. Catron; R. Howe; M. Gallagher; R. Macdonald

Mechanisms of Therapeutic Interventions
652 Limited Effect of Inhibiting Parvalbumin-Expressing Interneurons in a Mouse Model of Dravet Syndrome | C. Dunbar; A. Sonesra; S. Park; M. Lee; A. Maheshwari
653 N-acetylcysteine administration in a rat post traumatic epilepsy model mitigates oxidative stress, preserves cortical inhibitory interneurons, and mitigates EEG biomarkers of injury | M. Hameed; H. Lee; N. Hodgson; A. Pascual-Leone; S. Dhamne; P. MacMullin; T. Hensch; A. Rotenberg
654 Preclinical In Vitro and In Vivo Comparison of the Kv7 Activator XEN1101 with Ezogabine. | J. Dean; S. Lin; G. Bankar; K. Khakh; J. Mezeyova; J. Li; A. Lindgren; N. Weishauplt; L. Sojo; S. Pimstone; C. Cohen; J. Empfield; S. Goodchild; J. Johnson
655 Increased Hippocampal GABA after Sulfasalazine Infusion in an Animal Model of Temporal Lobe Epilepsy | T. Eid; M. Sandhu; R. Dhaher; K. Deshpande; H. Zaveri

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656 Pharmacology of 6 Hz model in immature rats | P. Mares; H. Kubova
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805 Stigma and Social Functioning in Hispanic Adults with Epilepsy and Depression | K. Kaur; S. O’Kula; D. Friedman; L. Diaz; L. Payano; J. Montesdeoca; C. De Jesus Nater; B. Vazquez; A. Jongeling; O. Devinsky; T. Spruill

806 Factors influencing memory impairments in temporal lobe epilepsy | S. Slain; S. Buck; M. Sidhu; J. Duncan

807 The Clinical Utility of a Memory Specialization Index in Temporal Lobe Epilepsy | S. Baxendale; P. Thompson

808 Distinct naming patterns in older adults with left TLE versus early Alzheimer’s disease | M. Hamberger; E. Caccappolo; N. Heydari; R. Doss; C. Benjamin; R. Busch; W. Seidel

809 Utility of Naming Errors in Older Adults with Right and Left Temporal Lobe Epilepsy | N. Heydari; T. Jacobson; M. Hamberger

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813 Predicting disease severity and developmental outcomes in patients with SCN1A-related epilepsies | F. Steckler; I. Ghantry; E. Pérez-Palma; L. Dorris; J. Symonds; S. Zuberi; D. Lal; A. Brunklaus

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816 The first case of autosomal recessive ELOVL1 gene mutation causing infantile spasm | G. Zhang; Y. Eksioglu; A. Kheder; S. Gedela

817 Neurological disorder-associated genetic variants in individuals with psychogenic nonepileptic seizures | C. Leu; J. Bautista; M. Sudarsanam; L. Niestroj; A. Stefanski; L. Ferguson; M. Daly; L. Jehi; I. Najm; R. Busch; D. Lal

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835 The burden of Symptomatic Seizures in Cerebral Sinus Thrombosis: A Population-Based Study | Z. Mahuwala; N. Patel

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841 New Onset Refractory Status Epilepticus: Longterm outcome and comorbidities in five cases | L. Castro; G. Brito
842 Rhythmic delta synchronized with the beat of the Backstreet Boys: a case of multi-foveal musicogenic and auditory epilepsy with unique intracranial EEG findings | K. Pangelinan; L. Ernst; M. Cohen; M. Kellogg
843 Surgical outcomes and pathological findings in four patients diagnosed with refractory epilepsy in a Peruvian Epilepsy Center. | M. Galecio-Castillo; D. Chacon Zuñiga; J. Delgado Rios
844 Central Apnea and Seizures in a COVID-19 Pediatric Patient | S. Enner
845 Efficacy and Tolerability With FINTEPLA (Fenfluramine) in Adult Patients With Dravet Syndrome: A Case Series of Patients Participating in Phase 3 Studies | I. Miller; O. Devinsky; S. Auvin; E. Thiele; T. Polster; L. Laux; A. Gil-Nagel; A. Agarwal; G. Morrison; A. Gammaitoni; G. Farfel; B. Galer
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848 Porcine Post-Traumatic Epilepsy: Semiology | R. Raiyyani; L. Martinez Ramirez; A. Duhaime; K. Staley; B. Costine-Bartell
849 Efficacy and Tolerability With FINTEPLA (Fenfluramine) in Adult Patients With Dravet Syndrome: A Case Series of Patients Participating in Phase 3 Studies | I. Miller; O. Devinsky; S. Auvin; E. Thiele; T. Polster; L. Laux; A. Gil-Nagel; A. Agarwal; G. Morrison; A. Gammaitoni; G. Farfel; B. Galer
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851 Efficacy, safety and tolerability of soticlestat (TAK-935/OV935) as adjunctive therapy in pediatric patients with Dravet syndrome and Lennox Gastaut syndrome (ELEKTRA) | C. Hahn; Y. Jiang; V. Villanueva; M. Zolnowska; D. Arkilo; J. Tsai; M. Asgharnejad; Y. Yan; D. Dlugos
852 Efficacy and safety of FINTEPLA (fenfluramine) for the treatment of seizures associated with Lennox-Gastaut syndrome: a randomized, double-blind, placebo-controlled clinical trial | K. Knupp; I. Scheffer; B. Ceulemans; J. Sullivan; K. Nickels; I. Miller; L. Lagae; R. Guerrini; S. Zuberi; R. Nabbout; K. Riney; S. Shore; A. Agarwal; G. Morrison; M. Lock; G. Farfel; B. Galer; A. Gammaitoni; R. Davis; A. Gil-Nagel
Fenfluramine (FINTEPLA) in Dravet syndrome: Results of a third randomized, placebo-controlled clinical trial (Study 3) | J. Sullivan; L. Lagae; J. Cross; O. Devinsky; R. Guerrini; K. Knupp; L. Laux; I. Miller; M. Nikanorova; T. Polster; D. Talwar; B. Ceulemans; R. Nabbout; G. Farbel; B. Galer; A. Gammaitoni; G. Morrison; A. Agarwal; I. Scheffer

Comparing in-hospital outcomes in patients with co-occurring autism and epilepsy to patients with epilepsy alone and autism alone: a population-based study | J. Goldstein; L. Mu; N. Jette; C. Kwon

Monday, December 7

Poster Author Hour 5
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856 Mechanisms underlying TLR4 modulation of dentate excitability following brain injury | S. Nguyen; Y. Li; V. Santhakumar

857 Persistent cardiac arrhythmias in long-term recordings following intrahippocampal kainate induction of status epilepticus in mice | A. Levine; H. Born; Y. Lai; A. Anderson

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858 Altered ubiquitin-proteasome system activity in genetic epilepsies with and without mutant protein aggregates | S. Poliquin; F. Mermer; W. Shen; J. Kang

859 Severe sleep disturbances in PIK3CA-related mouse models of focal cortical dysplasia and megalencephaly | J. Ryu; A. Bard; R. Dalvi; J. Skilbo; K. Millen; F. Kalume

860 Gas challenge tests unmask risks for sudden unexpected death in epilepsy (SUDEP) and non-SUDEP fatalities in Leigh syndrome | A. Bard; J. Ryu; F. Kalume

861 Selective Potentiation of Inhibitory Networks Prevents Seizures in a Mouse Model of Dravet Syndrome. | S. Goodchild; C. Dube; A. Williams; K. Burford; N. Welschof; A. Cutts; M. Soriano; R. Dean; V. Lofstrand; C. Cohen; S. Wesolowski; J. Empfield; J. Johnson

862 Early postnatal mTOR inhibitor treatment in a mouse model of TSC with epilepsy delays onset of hyperexcitability, epilepsy, and mortality | L. Lee; G. D’Arcangelo; X. Ji; A. Anderson

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863 Discriminating sharp-wave ripples and interictal epileptiform discharges in patients with mesial temporal epilepsy using intracranial EEG recordings | N. Mortazavi; M. Khaki; G. Gilmore; J. Burneo; D. Steven; J. Martinez-Trujillo; A. Suller Marti

864 Artifact removal in rodent electroencephalogram for accurate high frequency oscillation detection | M. Kasiri; R. Garner; M. La Rocca; P. Andrade; A. Pitkanen; D. Duncan

865 Interneuronal firing patterns through ictal recruitment in humans | E. Merricks; A. Agopyan-Miu; E. Smith; R. Emerson; L. Bateman; G. McKhann; R. Goodman; S. Sheth; B. Greger; P. House; A. Trevelyan; C. Schevon

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867 Redox regulated mTOR, the master charioteer: reining in neuroinflammation and hyperexcitability | A. Sri Hari; L. Liang; J. Roede; M. Patel

868 Seizure-induced activation of the HPA axis worsens epilepsy outcomes and comorbidities | T. Basu; P. Antoniodou; J. Maguire

869 Targeting of the WNK-SPAK kinase complex to modulate neuronal Cl- homeostasis and cell volume for treatment of anticonvulsant resistant seizures | V. Dzhala; K. Staley

870 Vitamin E reduces spasms caused by prenatal stress by lowering calpain expression | H. Kwon; J. Lee; H. Park; J. Shin; Y. Yin; N. Shin; H. Shin; J. Hwang; D. Kim; J. Kang

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871 Social Isolation is a Critical Variable in Acute PTZ-Induced Epilepsy Mouse Models | K. Groff; L. Rossitto; S. Dhamne; A. Rotenberg; M. Sahin; C. Yuskaits

872 Altered Gut Microbiota During the Development of Temporal Lobe Epilepsy | M. Sandhu; D. Song; R. Dhaher; H. Zaveri; N. Palm; T. Eid

873 Deficits in 5-HT2C receptor signaling coordinately impact seizure risk and behavioral activity | C. Massey; S. Thompson; M. Jankovic; J. Bass; V. Krishnan; J. Noebels

874 Indirect Basal Ganglia Pathway Propagates and Modulates Frontal Lobe Seizures | A. Brodovskaya; S. Shiono; J. Kapur

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**Video EEG Epilepsy-Monitoring**

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905 Diffuse Electrographic Suppression Associated with Increased Intracranial Pressure and Paroxysmal Neurologic Events in Patients with Leptomeningeal Carcinomatosis | E. Lewis; N. Gatson; D. Graf; C. Correll

906 Tonic-clonic seizure frequency differentially affects slow-sleep activity in patients with focal vs primary generalized epilepsy | Z. Wang; R. Ciliento; M. Kalkch Aparicio; E. Juan; R. Verhagen; P. Hsu; G. Findlay; T. Bugnon; A. Mensen; R. Maganti; G. Tononi; A. Struck; M. Boly

907 Electroencephalography (EEG) Findings in Patients with COVID-19 | S. Rath; A. Surendranath; D. Harris; C. Hill

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908 Mapping BCI task imagery brain responses using MEG beta power desynchrony effects | S. Roy; V. Youssofzadeh; K. McCreadie; G. Prasad

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910 Cathodal direct current stimulation induces long-term potentiation, instead of depression of cortical excitability in TSC2 mouse in vitro | Y. Sun; S. Dhamme; M. Sahin; A. Rotenberg

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919 Identifying the epileptic network by linking seizure onset, spread and interictal activity | A. Ksendzovskv; P. Farooque; J. Percy; H. McGrath; R. Duckrow; D. Spencer; H. Zaveri

920 Towards the Automation of Visualizing High-Resolution Stereo EEG for Localization of Seizure Focus | A. Doud; S. Friedman; A. Marashly; J. Hauptman; J. Ojemann; M. Bindschadler; E. Novotny

921 Feasability of Using Artificial Intelligence to Identify Seizures in Infants and Neonates | C. Bodden; F. Perkins; M. McManis

922 Crowdsourcing and independently evaluating seizure prediction solutions via Epilepsyecosystem.org | Z. Razavi; M. Cook; L. Kuhlmann

923 From Adults to Neonates: Transfer and Meta-learning Approaches for Knowledge Generalization in Deep Networks for Electroencephalographic Analysis | S. Tang; D. Rubin; C. Lee-Messer

924 Knowing When You Don’t Know: Detecting Overconfidence in Deep Learning Based Algorithms for EEG Interpretation | N. Bhaskhar; D. Rubin; C. Lee-Messer

925 Epileptiform Discharges increase Interhemispheric Connectivity more than Intrahemispheric Connectivity in Benign Epilepsy With Centrotemporal Spikes | F. Baumer; B. Goad; C. Lee-Messer

926 Network Connectivity and Consciousness in Epilepsy | B. Razavi; K. Meador

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927 “The Wandering Patient”: Case studies of Peri-ictal Psychoses over a 6 month period The call for a formal classification system? | A. Cangiato-Heath; D. Bazer; R. Spiegel; B. Blond

928 Sunflower syndrome in two pairs of monozygotic twins | K. Skjei; N. Williams; K. Julich

929 CDKL5 Deficiency Disorder: Impact of Cortical Visual Impairment Severity & Seizure Burden on Development | R. Skoog; R. Fidell; J. Thomas; T. Benke; S. Demarest

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930 Epilepsy Outcomes Measured by a Standardized Method in a Clinical Practice Setting | W. Trescher; S. Paudel; P. Kandel; G. Mainani; A. Kumar; D. Byler; E. Michael; S. Miller; S. Kothari; K. Farrell; B. Fureman; C. Harding; J. Buchhalter

931 Facilitating Epilepsy Diagnosis through a Simple Decision-Making Algorithm | R. McInnis; M. Ayub; J. Jing; F. Mateen; J. Halford; M. Westover
932 Comparison of Seizure Type and EEG findings in Autoimmune Encephalitis: A Multicenter Sample | A. Hong; Y. Shah; A. Morse; J. Pickle; R. Lynch; M. Troester; S. Karkare; S. Kothis

933 Cryptogenic Super Refractory Non-Convulsive Status Epilepticus: Case report and review of literature | S. Pulivarthi; S. Assad; A. Farooqi; S. Katakala; S. Hanif; D. Singh

934 Joint analysis of EEG and MRI in Rasmussen's Encephalitis questions the concept of a unihemispheric pathology | T. Bauer; R. von Wrede; A. Racz; S. Enders; B. David; C. Phillwitz; V. Keil; M. Jeub; B. Weber; A. Radbruch; C. Elger; R. Surges; T. Rüber

935 FHF1 developmental and epileptic encephalopathy: recurrent p.Arg114His is cause of neonatal onset epilepsy | M. Trivisano; A. Ferretti; E. Bebin; L. Huh; G. Lesca; A. Siekierska; R. Takeguchi; M. Carneiro; L. Lagae; B. Minassian; A. Terracciano; G. Cooper; F. Vigevano; M. Demos; I. Scheffer; N. Specchio

936 Ictal Vocalization | M. Alkhaldi; N. Garcia Losarcos; S. Thyagaraj; S. Singh; V. Avori; H. Luders

937 Generalized features in Focal Epilepsy | R. Andrade Machado; M. Elsayed; M. Marawar; D. Zutshi; M. Basha

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938 Tumor-Related Epilepsy and Post-Surgical Outcomes: Tertiary Hospital Experience in Saudi Arabia | A. Alattas; H. Al-hindi; T. AbaAlkhail; A. Bawazir; H. Aldhalaan; I. Althubati; S. Baz

939 Medical cannabis dosage in individuals with epilepsy in the clinical practice | S. Illamola; X. Lyu; S. Dahmer; P. Lehlfeldt; I. Leppik; A. Birnbaum

940 Evaluation of outcomes related to dosage inaccuracies in the treatment of status epilepticus | P. O’Dea; C. Gutierrez

941 A Single Center’s Experience in Establishing a Dedicated Infantile Spasms Program | A. Pasupuleti; K. Havens; C. Brandt; T. Anwar; J. Schreiber; T. Suchida; T. Vu; D. Depositario-Cabacar; T. Zelleke; T. Chang; W. Gaillard

942 Autoimmune Encephalitis and Seizures: Presentation, Treatment and Outcome. A case Series | H. Elkhider; N. Kapoor; F. Ibrahim; B. Shihabuddin

943 Identifying Meaningful Occupational Therapy Goals of Adolescent Patients with Epilepsy | S. Westerberg; J. Lerner; C. Sheridan; M. Harris

944 Outcomes of first-line vigabatrin therapy for infantile spasms in children with Trisomy 21 | A. Datta; J. Crawford; P. Wong

945 Relevance of Genomic Test Results in Drug Choice for Pediatric Patients with Epilepsy | C. Yuan; S. Arnold

946 A Phase 2 Open Label Study of XEN007 (Flunarizine) for Treatment Resistant Absence Seizures | M. Connolly; S. Hadzi-Nikolva; C. Boelman; A. Datta; L. Huh; R. Sherrington; C. Harden; S. Pimstone

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947 Investigating the role of Piriform cortex in human epilepsy using stereoelectroencephalography | V. Nanjagud Shivamurthy; N. Pedersen; J. Willie; A. Kheder

948 Increased sleep spindle power predicts decrease in intellectual function in individuals with epilepsy | K. Conniff; Z. Wang; P. Hsu; R. Ciliento; J. Jones; B. Hermann; E. Juan; R. Verhagen; G. Findlay; T. Bugnon; A. Mensen; G. Tononi; M. Boly

949 Epilepsy is Rare in Children with Congenital Heart Disease | C. Castillo-Pinto; J. Carpenter; M. Donofrio; A. Zhang; G. Wernovsky; P. Sinha; D. Harrar

950 Early EEG Signs of Seizure Resolution in Childhood Absence Epilepsy | C. Niesen; S. Rodriguez

951 What’s Wrong with this Picture: Teenagers with Absence Epilepsy? | S. Rodriguez; C. Niesen

952 Factors that Affect Seizure Resolution in Childhood Absence Epilepsy | S. Rodriguez; R. Rodriguez; C. Niesen

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953 Pregnancy Outcomes for Women with Psychogenic Non-epileptic Seizures and Epilepsy | E. Fertig; A. Lesko; C. Moreno; Z. Smith; E. Baraban

954 Rare genetic variation in folate metabolism in WWE impacts offsprings’ neuropsychological outcomes | Y. Li; S. Zhang; P. Pennell; R. May; C. Brown; M. Cohen; R. Finnell; M. Synder; K. Meador

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955 Intracranial electrode coverage of structural connectivity subnetworks in temporal lobe epilepsy | B. Yang; K. Snyder; K. Dembry; J. Sarlis; S. Abdollahi; A. Goodyear; W. Theodore; K. Zaghoul; S. Inati

956 Magnetic Resonance Fingerprinting for Periventricular Nodular Heterotopia in Patients with Pharmacoresistant Epilepsy | J. Choi; B. Krishnan; I. Najm; S. Jones; K. Sakaie; M. Griswold; D. Ma; I. Wang

957 Robustness of structural network metrics across parcellations in healthy and epileptic brains | R. Rodriguez-Cruces; S. Lariviére; J. Royer; O. Benkarim; L. Concha; B. Bernhardt

958 Correlation of abnormal diffusion properties with regional volume reduction: In Temporal lobe epilepsy with unilateral hippocampal sclerosis | S. Lim; J. Oh

959 Inter-individual variability in changes in the frequency of interictal epileptiform discharges during wake vs sleep: an intracranial study | D. Scott; B. Sevak; C. Denis; V. Kremen; G. Tononi; A. Struck; L. Bateman; C. Schevon; M. Boly

960 Subregional Variations in Ictal Hippocampal Electrophysiology Identified using Stereoelectroencephalography and 7T | N. Christidis; A. Suller Marti; J. Lau; M. Arevalo-Astrada; D. Steven; A. Khan

961 Hippocampal Structural Connectivity in Focal Epilepsy | L. Sepeta; B. Yang; E. Matuska; M. Chronoes; X. You; P. Vukmirovich; W. Theodore; S. Inati; W. Gaillard; M. Berlin

962 Individual Patient Differences in a Pre-Surgical Whole Brain White Matter Connectome Can Predict Post-Surgical Outcome | W. Hinds; X. He; S. Modi; K. Chadhary; A. Beloor-Suresh; J. Tracy
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963 Regional metabolic asymmetries associated with language impairment in left temporal lobe epilepsy | X. He; L. Caciagli; W. Hinds; M. Sperling; J. Tracy; D. Bassett
964 Compensatory neural reorganization in temporal lobe epilepsy during receptive language: A whole brain functional connectivity study | S. Modi; K. Chaudhary; A. Beloo-Suresh; W. Hinds; M. Sperling; J. Tracy
965 Network localisation of cardiorespiratory dysfunction in focal epilepsy | E. Abela; N. Futter; A. Biondi; P. Viana; M. Richardson
966 Topographical reorganization of brain functional networks after early period of experimental status epilepticus predicts development of epilepsy | L. Li; L. He; A. Bragin; J. Engel, Jr.
967 An Investigation of Functional Connectivity and Matched Gray Matter Volume for the Prediction of Episodic Memory Performance in Temporal Lobe Epilepsy | K. Chaudhary; S. Modi; W. Hinds; A. Beloo-Suresh; M. Sperling; J. Tracy
968 Comparison of MEG vs. ictal SPECT as Predictor of Seizure Onset Zone | E. Valenti; L. Ernst; B. Stedelin; J. Edwards; K. Hagen
969 Functional Reorganization of Verbal Episodic Memory Encoding and Retrieval Processes in Temporal Lobe Epilepsy | A. Ramaswamy; M. Sablik; J. Duncan; S. Buck; M. Sidhu

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971 Behavioral Health Screening in Pediatric Epilepsy: We’ve Initiated Screening, Now What? How A Pediatric Epilepsy Clinic Utilizes Depression Screening Data to Identify Patient Behavioral Health Needs and Enhance Clinical Care | H. Kimbley
972 Association Between Generalized Tonic-Clonic Seizure and Cardiopulmonary Risk | T. Kubota; T. Tsushima; G. Fernandez-Baca Vaca
973 Examining brief and ultra-brief anxiety and depression screening methods in a real-world epilepsy clinic sample | H. Munger Clary; M. Wan; G. Brenes; J. Kimball; K. Conner; E. Kim; P. Duncan; B. Snively

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976 Efficacy and Safety of Perampanel as First Adjunctive Therapy in Patients with Partial-Onset Seizures: Post Hoc Analysis of the FAME Study by First-Line Antiepileptic Drug and Perampanel Dose | M. Kim; M. Malhotra; H. Park; A. Dash; J. Lee
977 Treatment With FINTEPLA (Fenfluramine) in Patients With Dravet Syndrome Has No Long-Term Effect on Weight and Growth | A. Gil-Nagel; B. Ceulemans; E. Wirrell; O. Devinsky; R. Nabbout; K. Knupp; S. Perry; T. Polster; M. Lock; A. Agarwal; G. Morrison; A. Gammaitoni; G. Farfel; B. Galer
978 Efficacy and Tolerability of Adjunctive FINTEPLA (Fenfluramine Hydrochloride) in an Open-Label Extension Study of Dravet Syndrome Patients Treated for Up to 3 Years | I. Scheffer; O. Devinsky; S. Perry; J. Wheless; E. Thiele; E. Wirrell; S. Auvin; D. Battaglia; T. Polster; G. Farfel; B. Galer; G. Morrison; M. Lock; A. Agarwal; A. Gammaitoni
979 Perampanel Plasma Concentrations and Clinical Effects Following 4 mg/day Monotherapy in Patients with Partial-Onset Seizures (POS): Post Hoc Analysis of Study 342 (FREEDOM) | I. Leppik; T. Yamamoto; L. Ngo; S. Yasuda; A. Patten; H. Hiramatsu; K. Watanabe; S. Shiba; M. Malhotra
980 Safety of Adjunctive Perampanel by Titration and Maintenance Periods and Dose in Patients With Partial Onset Seizures With/Without Secondarily Generalized Seizures: Post hoc Analysis of the FAME Study | J. Kim; J. Kim; A. Dash; J. Lee; M. Malhotra
981 Long-Term Efficacy and Safety of Perampanel in a Subgroup of Elderly Patients Aged ≥ 60 Years from Phase III Open-Label Extension (OLEx) Studies | J. Marawar; I. Leppik; R. Wechsler; A. Patten; L. Ngo; M. Malhotra
982 Safety Profile of Valtoco® (diazepam nasal spray) in Patients With Epilepsy: Interim Results from a Phase 3, Open-label, 12-Month Repeat Dose Safety Study | R. Hogan; J. Wheless; J. Hulihan; J. Messenheimer; S. Shiba; R. Nabbout; K. Knupp; S. Perry; T. Polster; G. Farfel; A. Patten; H. Hiramatsu; K. Watanabe; S. Shiba; M. Malhotra
983 ZYN002 Cannabidiol Transdermal Gel in Children and Adolescents with Developmental and Epileptic Encephalopathies: An Open label Clinical Trial [BELIEVE (ZYN2-CL-25)] | I. Scheffer; J. Hulihan; J. Messenheimer; S. Ali; N. Keenan; J. Griesser; D. Gutterman; T. Sebree; L. Sadleir
984 Quality of Life and Caregiver Qualitative Assessments in Children with Developmental and Epileptic Encephalopathies Treated with ZYN002 (CBD) Transdermal Gel: BELIEVE (ZYN2-CL-025) | L. Sadleir; J. Hulihan; J. Messenheimer; S. Ali; D. Gutterman; T. Sebree; I. Scheffer
985 Safety and Tolerability of Eslicarbazepine Acetate as Adjunctive Treatment in Adult Patients with Focal-Onset Seizures according to one Concomitant Antiepileptic Drug: Data from Four Double-Blind Pivotal Phase III Studies | J. Chaves; R. Loureiro; J. Moreira; A. Pereira; F. Ikedo
986 Use of Exogenous Ketones as a Nutritional Approach for Patients with Angelman Syndrome: Early Results of a Randomized Control Trial | R. Carson; D. Herber; A. Key; F. Phibbs; P. Ergish; J. Duits
A Randomized, Double-Blind Placebo-Controlled Trial of SGs742, a GABA-B Receptor Antagonist, in Patients with SSADH Deficiency | J. Schreiber; E. Wiggs; R. Cueto; G. Norato; I. Dustin; R. Rolinski; A. Austermuehle; X. Zhou; S. Inati; K. Gibson; P. Pearl; W. Theodore

Strong cenobamate treatment responses are associated with high QOLIE scores after three to eight years of treatment. | E. Gutierrez; R. Elizabeth; P. Coe; J. Yang; E. Zhang; G. Krauss

Treatment Outcome During Up to 8 Years of Treatment With Cenobamate at Johns Hopkins | R. Elizabath; E. Gutierrez; E. Zhang; J. Yang; P. Coe; G. Krauss

Cohort Studies

Tolerability of Higher Dose of Clobazam (60-160 mg/day) as an Adjuvant Therapy in Adult Epilepsy Patients | F. Khan; U. Menon; C. Abraham; R. Esobar

Antiseizure Medication Concentration Trends in Pregnancy and Postpartum: Results from The MONEAD Study | A. Karanam; P. Pennell; K. Meador; E. Gerard; L. Kalayjian; P. Penovich; R. May; A. Birnbaum

Cannabidiol (CBD) and Tetrahydrocannabinol (THC) as Adjunctive Therapy in Drug Resistant Epilepsy: The Texas Experience | C. Damian; R. Whitehall; K. Keough; K. Labiner; N. Cione; B. Banich; A. Cardon

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Psychiatric Adverse Drug Reactions of Anti-Seizure Medications in Veterans with Medically Refractory Focal-onset Epilepsy | N. Gautam; A. Crossley; C. Kim

Hyperammonemonic encephalopathy associated with Perampanel | R. T. Marques; Q. Zulfiqar Ali; A. Selvarajah; H. Faghfoury; R. A. Wennberg; D. Andrade

Other

Frailty correlates with antiepileptic drug tolerability in older adults with epilepsy | A. Vary-O’Neal; S. Miranazdeh; N. Hussein; J. Holroyd Leduc; T. Saboji; S. Wiebe; C. Deacon; J. Tellez-Zenteno; C. B. Josephson; M. R. Keezer

Post-Traumatic Seizure Prophylaxis After Mild Traumatic Brain Injury: Analysis of Practice Patterns | J. Cruz Navarro; G. Brophy; N. Temkin; J. Barber; B. Foreman; G. Manley; R. Diaz-Arrastia; C. Robertson

Characterization of lamotrigine dosing scenarios when co-prescribed with combined oral contraceptives | C. Avachat; A. Karanam; P. Pennell; A. Pack; A. Davis; A. Birnbaum

Safety and Tolerance of Lacosamide for Neonatal Seizures in Preterm Infants | A. Milesi-Halle; P. Alyssa; M. Melo Bacchi; B. Alfars; R. Lopez-Alberola

Response to vigabatrin as first-line treatment for epileptic spasms, not due to Tuberous Sclerosis Complex | K. Brown; J. Park

Surgical Outcomes in Patients with Refractory Temporal Lobe Epilepsy: the significance of intracranial investigations vs direct anterior temporal lobectomy | E. Sokolov; N. Sisterson; H. Hussein; C. Plummer; A. Antony; J. Mettenburg; G. Ghearing; J. Pan; A. Urban; A. Bagic; M. Richardson; V. Kokkinos

The evolution of intracranial electroencephalography at a single institution and around the world | A. Ksendzovsky; M. Sandhu; I. Freedman; B. Gruenbaum; J. Guillet; A. Brackett; H. Zaveri; D. Spencer

When stereotactic laser amygdalohippocampotomy (SLAH) fails: subsequent interventions and outcomes | V. Nanjangud Shivamurthy; A. Greven; R. Faraj; A. Alwaki; R. Gross; J. Willie; K. Bullinger

Comparison of Surgical Outcomes in Elderly Versus Younger Patients | J. Youssefi; J. Chisholm; S. Mashni; C. McLouth; F. Amirza; M. Bensalem-Owen; S. Mathias

An observational study on utilization of Laser Interstitial Thermal Therapy to treat drug resistant bilateral mesial temporal lobe epilepsy | J. Young; C. Ledbetter; H. Sun; E. Gonzalez-Toledo; P. Zhu

Using Perioperative Seizure Volumes to Predict Short and Long Term Seizure Outcomes After Anterior Temporal Lobectomy | B. Larner; D. Vaughan; C. Beh; A. Wynd; A. McIntosh; G. Fitt; G. Jackson

Decision Analytics in the Treatment of Epilepsy | K. Julich; S. Gupta; D. Clarke

Evaluation of surgical outcomes in genetic epilepsies | G. Morris; S. Demarest

Comparison of surgical outcomes in patients with hypothalamic hamartoma alone or with coexisting other potentially epileptogenic focal lesions: A single-center experience | M. Handoko; C. Kerakas; N. Gadgil; A. Wilfong; M. Sandhu; I. Freedman; B. Gruenbaum; J. Guillet; V. Nanjangud Shivamurthy; A. Greven; R. Faraj; A. Alwaki; R. Gross; J. Willie; K. Bullinger

Seizure Outcome after Epilepsy Surgery without Invasive Monitoring in Children with Epileptic Spasms: A report of 70 cases | G. Erdemir; E. Pestana-Knight; D. Lachhwani; P. Kogadag; E. Wylie; A. Gupta; R. Honomich; W. Bingaman; A. Nadiu Valapill

Hospitalization costs and mortality in pediatric patients with drug-resistant epilepsy: vagus nerve stimulation therapy versus medical management | S. Lam; L. Zhang; I. Pan

The accuracy of 3D fluoroscopy (XT) vs computed tomography (CT) registration in frame-based stereo-electroencephalography (SEEG) surgery | C. Restrepo; D. Clarke; P. McNeely; L. Weise
1014 Epileptogenic Zone Prediction from Seizure Semiology: A Data-Driven Tool | A. Alim-Marvasti; G. Romagnoli; F. Pérez-Garcia; G. Scott; F. Geranmayeh; S. Shahrbaft; F. Chowdhury; B. Diehl; M. Clarkson; R. Sparks; S. Ourselin; J. Duncan

1015 Memory & Language Outcomes Following Multiple Hippocampal Transections in a Large High-Risk Cohort | P. Fastenau; N. Garcia Losarcos; J. Zande; J. Miller; B. Grushcow; A. Tanner; D. Nyenhuis; C. Bailey; J. Sweet; G. Fernandez-Baca Vaca; H. Luders

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1016 Long-term success and retention of children with Dravet Syndrome on the ketogenic diet | L. Worden; O. Robinson; A. Bergqvist

1017 Ketogenic Diet can cause acute hepatocellular toxicity during initiation | A. Katyayan; G. Diaz-Medina; A. Nayak; J. Rivielo

1018 Ketogenic Therapy: A review of outpatient initiation, staffing and revenue | C. Wheeler; L. Vanatta; R. Jarrar; A. Wilfong

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1020 Assessing Mood Just Prior to Epilepsy Surgery May Obscure Clinical Emotional Disturbance | K. Hewitt; C. Block; R. Fasano; I. Karakis; D. Drane

1021 Déjà vu and distorted subjectivity in seizure aura | J. Neisser; N. Okada; R. Cortez Cuevas; K. Hewitt; T. Shade; A. Kheder; A. Cleary; D. Drane; N. Pedersen

1022 Epilepsy Stigma in Saudi Arabia: The Roles of Mind-Body Dualism, Supernatural Beliefs, and Religiosity | H. Tayeb; B. Yaghmoor

1023 EEG Data Obtained During Clinical Neuropsychological Testing Demonstrates an Effect of Intercitial and Subclinical Epileptiform Discharges on General Cognitive Performance | D. Drane; I. Karakis; C. Lynam; O. Taraschenko; E. Staikova; K. Hewitt; C. Block; D. Loring

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1024 A comparison of pediatric patients with epileptic seizures (ES) versus those with psychogenic non-epileptic seizures (PNES) on measures of attention and memory | R. Trobliger; L. Myers; M. Lancman

1025 Clinical validation of NIH Toolbox in pediatric epilepsy | E. Matuska; L. Sepeta; A. Pasupuleti; T. Zelleke; M. Berl

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1026 What's All the VUS About?: A Retrospective Look at Genetic Panels for Pediatric-Onset Epilepsies | L. Reed; D. Brock; R. Kammeyer; M. Gibbons; K. Angione; T. Bernard; S. Demarest

1027 Genetic susceptibility may play a role in NORSE and FIRES pathogenesis | M. Kellogg; K. Matthews; I. Bushlin; L. Ernst

1028 A case of Dias-Logan syndrome with BCL11A-related intellectual disability and epilepsy | J. Yu; S. Kim; S. Oh; G. Seo; W. Chung

1029 Yield of Epilepsy Gene Sequencing in the Diagnosis of Epilepsy | M. Feliz-Cepin; M. Van Hirtum-Das; K. Burk; C. Quindipan; M. Kaneko; G. Raca; D. Holder

1030 Clinical features of CDKL5 Deficiency Disorder compared to other infantile onset genetic epilepsies | C. Greene; C. Daniels; J. Love-Nichols; L. Swanson; J. Drew; L. Smith; A. Poduri; H. Olson

1031 Yield and clinical predictors of diagnosis with exome sequencing after a non-diagnostic epilepsy panel in pediatric patients with epilepsy | J. Drew; C. Greene; C. Daniels; J. Love-Nichols; L. Swanson; A. Poduri; B. Sheidley; H. Olson

1032 The spectrum, seizure and long term developmental profiles in SCN2A-related epilepsies | R. Menon; A. McTague; J. Cross; H. Richardson; S. Aylett; S. Bhat; M. Clark; K. Das; C. Eltze; M. Kaliakatsos; S. Varadkar; M. Kurian; F. Elmslie; G. Chow; N. Ismayilova; A. Whitney; E. Hughes; K. Lascelles; A. Kumar; J. Patel

HEALTH SERVICES (DELIVERY OF CARE, ACCESS TO CARE, HEALTH CARE MODELS)

1033 Creation of Anti-Epileptic Drug (AED) Substitution Guidance Document for Patients Unable to Take Oral Medications in the hospital setting | K. Galla; P. yadav; K. Hetrick; L. Glaze; J. Biedny; A. Naduvil Valappil

1034 Disparities in elective video-EEG admissions by race/ethnicity and insurance coverage status in New Jersey | B. Kamitaki; H. Choi; C. Thomas-Hawkins; J. Cantor

1035 TeleEEG in VA Hospitals during the COVID19 Pandemic: A Tale of Three Cities. | D. McCarthy; A. Husain; C. Riley; P. Kelly; M. Kaliakatsos; S. Varadkar; M. Kurian; F. Elmslie; G. Chow; N. Ismayilova; A. Whitney; E. Hughes; K. Lascelles; A. Kumar; J. Patel

1036 Innovating Epilepsy Care During the COVID-19 Pandemic: The Virtual Rapid Access Epilepsy Clinic | E. Lewis; R. Fagbemigun; A. Benchluch; K. Le; C. Muratore; S. Aniol

1037 A Community Health Worker Intervention to Address Social Determinants of Health in Patients with Epilepsy: A Pilot Project | M. Mazanec; C. Baughman; R. Luo; B. L’Heureux; S. Schmidt; B. L’Heureux; S. Schmidt; B. Krief; S. Kothare

1038 Length of Stay linked to Neurodiagnostic Workup in the Pediatric Emergency Department | M. El-Hallal; Y. Shah; P. Eksambe; M. Nath; R. Varughese; L. Theroux; M. Mikati; M. Zafar
Using Electronic Medical Records to Facilitate Transition of Care for Pediatric Patients with Epilepsy to Adult Providers | L. Fried; A. Greenberg; B. Thomas; A. Bullock; L. Caffee; A. Taylor; E. Kauffman; C. Steinway; L. Brown; S. Jan; M. DiGivione

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1041 Design of an Interactive Epilepsy Education Curriculum for Neurology Residents: A Single Institution Experience | J. Clay; R. Wiggins; S. Fredrich; N. Chiota-McCollum; D. Bauer

1042 Evaluating Patient’s Understanding and Perceptions Throughout the Epilepsy Surgical Pathway | J. Newman; M. Kavalir; S. Hornberger; P. Landazuri; U. Uysal; V. Shah; N. Hammond; J. Cheng; C. Ulloa

**EPIDEMIOLOGY**

1043 Clinical and genomic characterisation of early childhood epilepsies | J. Symonds; K. Elliott; J. Shetty; M. Armstrong; A. Brunklaus; I. Cutcutache; L. Diver; L. Dorris; S. Gardiner; A. Jollands; S. Joss; M. Kirkpatrick; A. McLellan; S. MacLeod; M. O’Regan; M. Page; E. Pilley; D. Pilz; E. Stephen; K. Stewart; H. Ashrafian; J. Knight; S. Zuberi

1044 Short-term re-admissions for postpartum complications in women with epilepsy | B. Decker; D. Thibault; A. Willis

1045 Gastrointestinal Symptoms in DEE Channelopathy Patients | V. Beck; L. Isom; A. Berg

1046 Epidemiology of Status Epilepticus at a Tertiary Medical Center | C. Cuello-Oderiz; Y. Wang; S. Izadyar

**PUBLIC HEALTH**

1047 Meeting Patient Self-Care Challenges During the COVID-19 Crisis: Epilepsy Self-Management Virtual Training for Clinicians | E. Kiriakopoulos; S. Schmidt; L. Schommer; M. Mazanec; B. Jobst

1048 Patient Empowerment and Cultural Outreach to Address Epilepsy Disparities among Minority Women | T. Cozart; B. Gilchrist; J. Lopes

1049 Medicaid Managed Care and Anti-Seizure Medication Formulary Coverage Across States | K. Sachdev; H. Sachdev; A. Crossley; S. Dergalust; V. Huong Nguyen

**CASE STUDIES**

1050 Novel SERPIN1 variant associated with progressive myoclonic epilepsy | A. King; I. Bellinski; L. Kinsley; E. Sieg; G. Carvill; E. Gerard

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1061 Mechanisms of epilepsy in PIGB deficiency | P. Pedabaliyasimhuni; K. Toulouse; T. Nguyen; L. Eid; A. Lupien-Meilleur; M. Lachance; P. Campeau; E. Rossignol

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ACTIVITY OVERVIEW
This program will provide a comprehensive overview of tuberous sclerosis complex (TSC), including its pathophysiology, epidemiology, clinical course and manifestations, burden, and management, with a particular focus on the management of TSC-associated seizures. Using patient cases, the faculty will also address the appropriate management of the condition as it relates to patients of different ages, highlighting the continuum of care patients require as they transition from paediatric to adult health care.

Supported by an independent educational grant from Greenwich Biosciences, Inc.

www.medscape.org/symposium/tsc

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AN UPDATE ON SURGICAL AND NEUROMODULATION OPTIONS FOR THE TREATMENT OF DRUG-RESISTANT EPILEPSY

TOPIC 1
Overview of Surgical and Neuromodulation Options for the Treatment of Drug-Resistant Epilepsy (30 minutes)

Speaker
Ausaf Bari, MD, PhD
Assistant Professor & Neurosurgeon
UCLA Department of Neurosurgery
Los Angeles, CA

TOPIC 2
ANT DBS - Patient Candidacy and Current Experience (30 minutes)

Speaker
Dawn Eliashiv, MD
Co-Director Seizure Disorder Center, Professor of Neurology
UCLA Department of Neurology
Los Angeles, CA

TOPIC 3
Future Directions with ANT DBS — Sensing Research (30 minutes)

Speaker
Gregory Worrell, MD, PhD
Professor of Neurology
Mayo Clinic
Rochester, MN

TOPIC 4
Panel Discussion (30 minutes)

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ADVANCING TREATMENT IN PGTCS

DATE: Friday, December 4th
TIME: 6:30 PM ET – 9:30 PM ET
REGISTER HERE: AdvancingPGTCS.com

PRESENTED BY:

Steve Chung, MD
Chairman of Neurology and Executive Director of Neuroscience, Banner University Medical Center, Phoenix, AZ

Jacqueline French, MD
Professor of Neurology, Comprehensive Epilepsy Center at NYU Langone School of Medicine, New York, NY

David Vossler, MD
Medical Director of The Neuroscience Institute, Valley Medical Center, Renton, WA

Eric Piña-Garza, MD
Director of Pediatric Epilepsy, Centennial Children’s Hospital, Nashville, TN

PROGRAM OBJECTIVES

• Understand the unmet needs of patients living with IGE
• Explore ‘time to event’ as innovative, patient-centric Phase 3 trial in patients with IGE
• Present clinical outcomes in patients with IGE

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UPDATE AND ADVANCES IN NEUROMODULATION

Sunday, December 6th, 2020
6:00 - 8:30 PM (EST) | Virtual Symposium

SESSION 1 | 6:00 – 7:00 PM (EST)

Delays in Drug-resistant Epilepsy Treatment:
Occurrence and Consequences in England

Arjune Sen, PhD
Associate Professor, Consultant Neurologist
Oxford University Hospitals – John Radcliffe Hospital, UK
Oxford, United Kingdom

*Dr. Sen is speaking in a personal capacity and not as an academic of the University of Oxford or NICE.

Delays in Drug-resistant Epilepsy Treatment:
Occurrence and Consequences in the U.S.

Sandi K. Lam, MD, MBA
Division Head of Neurosurgery, Ann & Robert Lurie Children’s Hospital, Professor of Neurological Surgery, Northwestern University Feinberg School of Medicine
Chicago, IL, USA

SESSION 2 | 7:15 – 8:15 PM (EST)

Neuromodulation Devices for DRE: Factors to consider during the decision process

Robert S. Fisher, MD, PhD
The Maslah Saul Professor, Department of Neurology and Director of the Stanford Epilepsy Center
Stanford University
Palo Alto, CA, USA

Neuromodulation for Drug-resistant Epilepsy and Chronic Heart Failure:
Targets, Delivery, Composition, and Titration

James Udelson, MD
Chief of Cardiology, The Cardiovascular Center
Tufts Medical Center
Boston, MA, USA

REGISTER YOUR INTEREST
https://epilepsy.livanova.com/vns2020

AES2020 REGISTRATION IS REQUIRED.

This is a FREE event open to registrants of AES2020.

Opinions presented during the Industry Non-CME Satellite Symposium are those of the speakers and are not a reflection of American Epilepsy Society opinions, nor are they supported, sponsored or endorsed by the American Epilepsy Society.
PROGRAM OVERVIEW

In this program, the faculty will review and provide updates on the guidelines for managing seizure emergencies and address how participants can reduce the barriers to prehospital treatment through the use of Seizure Action Plans. They also will discuss recent clinical trials that may improve caregiver acceptance of rescue medications for status epilepticus. In addition, the faculty will address the similarities and differences in managing seizure emergencies for pediatric and adult patients.

CONTENT TOPICS

- Status epilepticus
- Benzodiazepines
- Acute recurrent seizures
- Antiepileptics

To access the Satellite Symposia go to: aes2020.hubb.me

This activity has been approved for AMA PRA Category 1 Credit™ and CNE credit.
Join us for a Virtual Symposium being held during AES2020

An Update on Rare Childhood-Onset Epilepsies

SUNDAY, DECEMBER 6, 2020
6:00 PM – 7:30 PM • aes2020.hubb.me

Elaine C. Wirrell, MD, FRCPC (Program Chair)
Professor of Neurology
Director of Pediatric Epilepsy
Mayo Clinic
Rochester, Minnesota

This activity has been approved for AMA PRA Category 1 Credit(s)™.

Jointly provided by Postgraduate Institute for Medicine and Miller Medical Communications, LLC.

This activity is supported by an independent educational grant from Zogenix, Inc.

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The Epilepsy Leadership Council (ELC) is a coalition of professional, governmental, and non-profit organizations representing patients with epilepsy and their families. The ELC works collaboratively to support research and advocacy to improve the lives of individuals with epilepsy.

The Epilepsy Leadership Council is supported in part by a grant from Eisai Inc.
FYCOMPA (perampanel) tablets, for oral use, CIII
FYCOMPA (perampanel) oral suspension, CIII
Initial U.S. Approval: 2012
Brief Summary of Full Prescribing Information dated September 2020

WARNING: SERIOUS PSYCHIATRIC AND BEHAVIORAL REACTIONS

- Serious or life-threatening psychiatric and behavioral adverse reactions including aggression, hostility, irritability, anger, and homicidal ideation and/or behavior have been reported with FYCOMPA.
- Advising patients and caregivers to contact a healthcare provider immediately if any of these mood, behavior, or personal characteristics are not typical for the patient are observed while taking FYCOMPA or after discontinuing FYCOMPA.
- Close monitoring for mood, behavior, or personal characteristics, particularly during the titration period and at higher doses.
- FYCOMPA should be reduced if these symptoms occur and should be discontinued immediately if symptoms are severe or are worsening.

WARRIORS AND PRECAUTIONS

Serious Psychiatric and Behavioral Reactions: In the controlled partial-onset seizure clinical trials, hostility- and aggression-related adverse reactions occurred in 12% and 20% of patients randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 6% of patients in the placebo group. These effects were dose-related and generally appeared within the first 6 weeks of treatment, although new events continued to be observed through more than 27 weeks. FYCOMPA-treated patients experienced more hostility- and aggression-related adverse reactions that were serious, severe, and led to discontinuation, interruption, and discontinuation more frequently than placebo-treated patients. In general, in placebo-controlled partial-onset seizure clinical trials, neuropsychiatric events were reported more frequently in patients treated with FYCOMPA than in patients taking placebo. These events included irritability, aggression, anger, and anxiety, which occurred in 2% or greater of FYCOMPA-treated patients and twice as frequently as in placebo-treated patients. Other symptoms that occurred with FYCOMPA and were more common with placebo included depression, affect lability, agitation, and physical and sexual assault. Some of these events were reported as serious and life-threatening. Homicidal ideation and/or threat was reported in 0.1% of patients receiving FYCOMPA in controlled and open-label trials, including non-epilepsy trials. Homicidal ideation and/or threat have also been reported postmarketing in patients treated with FYCOMPA. In the partial-onset seizure clinical trials, these events occurred in patients treated with and without prior psychiatric history, prior aggressive behavior, or concomitant use of medications associated with hostility and aggression. Some patients experienced worsening of their pre-existing psychiatric illness, and some patients who were not previously agitated and unsteady reported new-onset affective disorders were excluded from the clinical trials. The combination of alcohol and FYCOMPA significantly worsened mood and increased anger. Patients taking FYCOMPA should avoid the use of alcohol. Similar serious psychiatric and behavioral adverse reactions were observed in the primary generalization tonic-clonic seizure clinical trial. In healthy volunteers taking FYCOMPA, observed psychiatric events included paranoia, euphoric mood, agitation, anger, mental status changes, and disorientation/confusional state. In the non-epilepsy trials, psychiatric events that occurred in patients treated more often than placebo included depression, anxiety, agitation, and suicidal ideation. Psychiatric events that occurred in patients treated more often than placebo included perturbation, restlessness, anxiety, agitation, and suicidal ideation. Psychiatric events that occurred more often than placebo included agitation, anxiety, irritability, and suicidal ideation. These events generally occurred during the titration period and at other times of dose increases. Dose of FYCOMPA should be reduced if these symptoms occur. Permanently discontinue FYCOMPA for persistent severe or worsening psychiatric symptoms or behaviors and refer for psychiatric evaluation.

Suicidal Behavior and Ideation Antiepileptic drugs (AEDs), including FYCOMPA, increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with any AED for a duration of 12 weeks, the estimated incidence of suicidal behavior or ideation among 27,863 AED-treated and 4,767 placebo-treated patients at doses of 8 mg and 12 mg per day, respectively, compared to 2% of placebo-treated patients. Elderly patients had an increased risk of these adverse reactions compared to younger adults and pediatric patients. These adverse reactions occurred mostly during the titration phase and at higher doses.

Table 1. Risk by indication for antiepileptic drugs in the pooled analysis

<table>
<thead>
<tr>
<th>Indication</th>
<th>Placebo Patients with ≥1000 Patients</th>
<th>Drug Patients with ≥1000 Patients</th>
<th>Relative Risk: Incidence of Events in Drug Patients Compared to Placebo Patients</th>
<th>Risk Difference: Additional Drug Patients with Events per 100 Patients</th>
<th>FYCOMPA</th>
<th>Placebo Patients with ≥1000 Patients</th>
<th>FYCOMPA</th>
<th>Placebo Patients with ≥1000 Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy</td>
<td>1.0</td>
<td>10.4</td>
<td>1.05</td>
<td>1.2</td>
<td>1.13</td>
<td>9</td>
<td>6.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Psychotic</td>
<td>1.0</td>
<td>1.7</td>
<td>1.4</td>
<td>1.5</td>
<td>1.39</td>
<td>8</td>
<td>7.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td>1.8</td>
<td>1.09</td>
<td>1.1</td>
<td>1.13</td>
<td>8</td>
<td>7.6</td>
<td>1.0</td>
</tr>
</tbody>
</table>

The relative risk for suicidal thoughts or behavior was higher in clinical trials for epilepsy than in clinical trials for psychiatric or other conditions, but the absolute risk differences were similar for the epilepsy and psychiatric indications. Anyone considering prescribing FYCOMPA or any other AED must balance the risk of using the drug with the risk of not using it or using an alternative therapy. AEDs also present the risk of several other serious adverse reactions, including liver dysfunction and some congenital malformations. Although FYCOMPA contains perampanel and is listed as a Schedule III controlled substance.
suicidal thoughts or behavior was generally consistent among drugs in the data analyzed. The finding of
patients was 0.43%, compared to 0.24% among 16,029 placebo-treated patients, representing an increase of
clinical trials (mono- and adjunctive therapy) of 11 different AEDs showed that patients randomized to one
behavior, and/or any unusual changes in mood or behavior. Pooled analyses of 199 placebo-controlled

Behavior and Ideation

severe or worsening psychiatric symptoms or behaviors and refer for psychiatric evaluation.

and for at least 1 month after the last dose of FYCOMPA, and especially when taking higher doses and

threat were exhibited in 0.1% of 4,368 FYCOMPA-treated patients in controlled and open label trials,

WARNINGS AND PRECAUTIONS

• Closely monitor patients particularly during the titration period and at higher doses
• These reactions occurred in patients with and without prior psychiatric history, prior aggressive

Drug Patients

Relative Risk:

Patients with Events

<table>
<thead>
<tr>
<th>Drug</th>
<th>Relative Risk</th>
<th>Patients with Events</th>
<th>Patients with Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYCOMPA</td>
<td>5.7 8.5 1.5 2.9</td>
<td>12% 16%</td>
<td>12% 16%</td>
</tr>
<tr>
<td>Placebo</td>
<td>1.0 1.8 1.9 0.9</td>
<td>12% 16%</td>
<td>12% 16%</td>
</tr>
</tbody>
</table>

Table 2. Adverse Reactions in Pooled Placebo-Controlled Trials in Adult and Adolescent Patients with Partial-Onset Seizures (Studies 1, 2, and 3) (Reactions ≥ 2% of Adults in FYCOMPA Group and More Frequent than Placebo) (cont.)

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Placebo</th>
<th>FYCOMPA 8 mg</th>
<th>FYCOMPA 12 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confusion</td>
<td>6</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Fatigue</td>
<td>6</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Headache</td>
<td>10</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Somnolence</td>
<td>4</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Irritability</td>
<td>2</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Vertigo</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Weight gain</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Constipation</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Nausea</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Abnormal gait</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Lagophthalmia</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Balance disorder</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Rash</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Weight Gain: Weight gain has occurred with FYCOMPA. In controlled partial-onset seizure clinical trials, FYCOMPA caused weight gain at doses ≥ 12 mg/day as compared to an average of 0.3% in placebo-treated adults with a median exposure of 19 weeks. The percentages of adults who gained at least 7% and 15% of their baseline body weight in FYCOMPA-treated patients were 9.1% and 0.3%, respectively, compared to 4.5% and 0.2% of placebo-treated patients, respectively. Clinical monitoring of weight is recommended. Similar increases in weight were also observed in adult and adolescent patients treated with FYCOMPA in the primary generalized tonic-clonic seizure clinical trial. Euthyroid weight gain increases in triglycerides have occurred with FYCOMPA use. Comparison of Sex and Race: No significant sex differences were noted in the incidence of adverse reactions. Although there were few non-Caucasian patients, no differences in the incidence of adverse reactions compared to Caucasian patients were observed. Postmarketing Experience: The following adverse reactions have been identified during post approval use of FYCOMPA. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure. Dermatologic: Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS). Psychiatric: Acute psychosis, hallucinations, delusions, paranoia, delirium, confusional state, disorientation, memory impairment.

DRUG INTERACTIONS

Concomitant use with FYCOMPA at a dose of 12 mg per day reduced levoamphetamine exposure by approximately 40%. Use of FYCOMPA with contraceptives containing levonorgestrel may render them less effective. Additional non-hormonal forms of contraception are recommended. Moderate and Strong CYP3A4 Inducers: The concomitant use of known moderate and strong CYP3A4 inducers including carbamazepine, phenytoin, or oxcarbazepine with FYCOMPA decreased the plasma levels of perampam by approximately 50-67%. The doses for FYCOMPA should be increased in the presence of moderate or strong CYP3A4 inducers. When these moderate or strong CYP3A4 inducers are introduced or withdrawn from a patient's treatment regimen, the patient should be closely monitored for clinical signs of induction and tolerability. Dose adjustment of FYCOMPA may be necessary. Alcohol and Other CNS Depressants: The concomitant use of FYCOMPA and CNS depressants including alcohol may increase CNS depression. A pharmacodynamic interaction study in healthy subjects found that the effects of FYCOMPA on complex tasks such as driving ability were additive or supra-additive to the impairing effects of alcohol. Multiple dosing of FYCOMPA 12 mg per day also enhanced the effects of alcohol to induce drowsiness, slurred speech, and ataxia, and the increased levels of anger, confusion, and depression. These effects may also be seen when FYCOMPA is used in combination with other CNS depressants. Care should be taken when administering FYCOMPA with these agents. Patients should limit activity until they have established the usual dose of CNS depressants (e.g., benzodiazepines, narcotics, barbiturates, sedating antihistamines). Advise patients not to drive or operate machinery until they have gained sufficient experience with FYCOMPA to gauge whether it adversely affects these activities.

USE IN SPECIFIC POPULATIONS

Pregnancy

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Table 3. Adverse Reactions in a Placebo-Controlled Trial in Patients with Partially Generalized Tonic-Clonic Seizures (Study 4) (Reactions ≥ 4% of Patients in FYCOMPA Group and More Frequent than Placebo)
SERIOUS PSYCHIATRIC AND BEHAVIORAL REACTIONS
In the partial-onset seizures clinical trials, hostility- and aggression-related adverse reactions occurred in 12% and 20% of patients randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 6% of patients in the placebo group. These effects were dose-related and generally appeared within the first 6 weeks of treatment, although new events continued to be observed through more than 37 weeks. These effects in FYCOMPA-treated patients led to dose reduction, interruption, and at higher doses than placebo-treated patients. Homicidal ideation and/or threat have also been reported in patients with prior psychiatric history, prior aggressive behavior, or concomitant use of medications associated with hostility and aggression.

SUICIDAL BEHAVIOR AND IDEATION
Antiepileptic drugs (AEDs), including FYCOMPA, increase the risk of suicidal thoughts or behavior in patients. Anyone considering prescribing FYCOMPA or any other AED must balance the risk of suicidal thoughts and behavior against the risk of untreated illness. Patients should be carefully observed for signs or symptoms of worsening depression, suicidal thoughts or behavior, thoughts about self-harm and/or any unusual changes in mood or behavior. Should suicidal thoughts and behavior emerge during treatment, consider whether the emergence of these symptoms in any given patient may be related to the illness being treated.

DIZZINESS AND GAIT DISTURBANCE
FYCOMPA caused dose-related increases in events related to dizziness and disturbance in gait or coordination. Dizziness and vertigo were reported in 35% and 47% of patients in the partial-onset seizure trials randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 10% of placebo-treated patients. Gait disturbance related events were reported in 12% and 16% of patients in the partial-onset seizure clinical trials randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 2% of placebo-treated patients. These adverse reactions occurred mostly during the titration phase. These adverse reactions were also observed in the PGTC seizure clinical trial.

IMPORTANT SAFETY INFORMATION

WARNING: SERIOUS PSYCHIATRIC AND BEHAVIORAL REACTIONS
• Serious or life-threatening psychiatric and behavioral adverse reactions including aggression, hostility, irritability, anger, and homicidal ideation and threats have been reported in patients taking FYCOMPA.
• These reactions occurred in patients with and without prior psychiatric history, prior aggressive behavior, or concomitant use of medications associated with hostility and aggression.
• Advise patients and caregivers to contact a healthcare provider immediately if any of these reactions or changes in mood, behavior, or personality that are not typical for the patient are observed while taking FYCOMPA or after discontinuing FYCOMPA.
• Closely monitor patients particularly during the titration period and at higher doses.
• FYCOMPA should be reduced if these symptoms occur and should be discontinued immediately if symptoms are severe or are worsening.

SOMNOLENCE AND FATIGUE
FYCOMPA caused dose-dependent increases in somnolence and fatigue-related events. Somnolence was reported in 16% and 18% of patients in the partial-onset seizure trials randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 7% of placebo-treated patients. Fatigue-related events were reported in 12% and 15% of patients in the partial-onset seizure trials randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 5% of placebo-treated patients. These adverse reactions occurred mostly during the titration phase. These adverse reactions were also observed in the PGTC seizure clinical trial. Patients should be advised against engaging in hazardous activities requiring mental alertness, such as operating motor vehicles or dangerous machinery, until the effect of FYCOMPA is known. Patients should be carefully observed for signs of central nervous system (CNS) depression when FYCOMPA is used with other drugs with sedative properties because of potential additive effects.

FALLS
Falls were reported in 5% and 10% of patients in the partial-onset seizure clinical trials randomized to receive FYCOMPA at doses of 8 mg and 12 mg per day, respectively, compared to 3% of placebo-treated patients.

DRUG REACTION WITH EOSINOPHILIA AND SYSTEMIC SYMPTOMS (DRESS)
DRESS, also known as multiorgan hypersensitivity, has been reported in patients taking AEDs, including FYCOMPA. DRESS may be fatal or life-threatening. DRESS typically, although not exclusively, presents with fever, rash, lymphadenopathy, and/or facial swelling, in association with other organ system involvement. If signs or symptoms are present, immediately evaluate the patient and discontinue FYCOMPA if an alternative etiology for signs or symptoms cannot be established.

WITHDRAWAL OF AEDs
A gradual withdrawal is generally recommended with AEDs to minimize the potential of increased seizure frequency, but if withdrawal is a response to adverse events, prompt withdrawal may be considered.

MOST COMMON ADVERSE REACTIONS
The most common adverse reactions in patients aged 12 years and older receiving FYCOMPA (≥5% and ≥10% higher than placebo) include dizziness, somnolence, fatigue, irritability, falls, nausea, weight gain, vertigo, ataxia, headache, vomiting, contusion, abdominal pain, and anxiety. Adverse reactions in patients aged 4 to <12 years were generally similar to patients aged 12 years and older.

DRUG INTERACTIONS
FYCOMPA may decrease the efficacy of contraceptives containing levonorgestrel. Plasma levels of perampanel were decreased when administered with known moderate and strong CYP3A4 inducers, including, carbamazepine, phenytoin, or oxcarbazepine. Multiple dosing of FYCOMPA 12 mg per day enhanced the effects of alcohol on vigilance and alertness, and increased levels of anger, confusion, and depression. These effects may also be seen when FYCOMPA is used in combination with other CNS depressants.

PREGNANCY AND LACTATION
Physicians are advised to recommend that pregnant patients taking FYCOMPA enroll in the North American Antiepileptic Drug (NAAED) Pregnancy Registry. Caution should be exercised when FYCOMPA is administered to pregnant or nursing women as there are no adequate and well-controlled studies in pregnant women, and no data on the presence of FYCOMPA in human milk, the effects on the breastfed child, or the effects of the drug on milk production.

HEPATIC AND RENAL IMPAIRMENT
Use in patients with severe hepatic or severe renal impairment is not recommended. Dosage adjustments are recommended in patients with mild or moderate hepatic impairment. Use with caution in patients with moderate renal impairment.

DRUG ABUSE AND DEPENDENCE
FYCOMPA is a Schedule III controlled substance and has the potential to be abused and lead to drug dependence and withdrawal symptoms including anxiety, nervousness, irritability, fatigue, asthenia, mood swings, and insomnia.

LEARN MORE AT FYCOMPA.COM/HCP

Please see Brief Summary of Prescribing Information on preceding pages.
FYCOMPA® (perampanel) is indicated in patients with epilepsy aged 4 years and older for partial-onset seizures (POS) with or without secondarily generalized seizures and adjunctive therapy for patients aged 12 years and older for primary generalized tonic-clonic (PGTC) seizures.

SEE THE LATEST PARTIAL-ONSET DATA IN BOTH FIRST ADJUNCTIVE AND MONOTHERAPY

RETHINK YOUR APPROACH TO CONVULSIVE SEIZURE FREEDOM

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Please see Important Safety Information, including a Boxed WARNING for Serious Psychiatric and Behavioral Reactions, on adjacent page. Please see Brief Summary of Prescribing Information on preceding pages.