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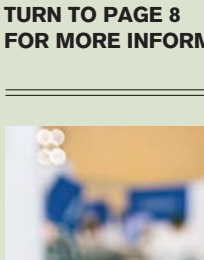
# ACEP17 Daily News

Walter E. Washington Convention Center • Washington, D.C. • Oct. 29– Nov. 1, 2017 • WWW.ACEP.ORG/ACEP17

## SUNDAY ISSUE

## INTRODUCING THE ALL NEW WELLNESS CENTER

The Wellness Center for ACEP17 is brand-new, and you are not going to want to miss it! Visit today from 9:30 a.m. to 3:30 p.m. for stretching sessions, meditation, a copy of ACEP's digital wellness guidebook, and more. The Wellness Center is located in the Resource Center in the Exhibit Hall.




**TURN TO PAGE 8 FOR MORE INFORMATION.**



DARNELL SCOTT

## VISIT THE RESOURCE CENTER FOR ALL THINGS ACEP

ACEP's Resource Center is open 9:30 a.m.–3:30 p.m. today. Stop by to get answers to your *Annals of Emergency Medicine* questions, visit the ACEP Bookstore, learn about the benefits of ACEP membership, and more.

Today at 9:45 a.m., Mike Winters, MD, FACEP, FAAEM, author of *Emergency Department Resuscitation of the Critically Ill, 2nd Edition*, will be holding a book signing in the ACEP Bookstore. Don't miss it!

**TURN TO PAGE 13 FOR MORE INFORMATION.**

WELCOME FROM THE PRESIDENT

## Communication, Health Reform, Billing, and More on ACEP's Agenda

*by* PAUL KIVELA, MD, MBA, FACEP


Dr. Kivela

**WELCOME TO WASHINGTON, D.C.!** We are thrilled to be able to host the capital of emergency medicine conferences in the capital of our nation. ACEP17 is your opportunity to spend time networking with our colleagues from all over the United States and around the world. This is *the* place to be for outstanding education, research, and discussion and, most importantly, to look forward to the year in front of us and what we bring to the practice of emergency medicine from ACEP17.

This meeting is an opportunity to discover just how large the emergency medicine community is and how many different areas of focus and interest the specialty contains. I challenge you to attend section meetings, committee meetings, and networking events and to learn from as many offerings as possible at ACEP17. The future of emergency medicine rests in our multitude of voices and interests coming together to serve one purpose.

I am gratefully accepting the baton of leadership from Immediate Past President Rebecca B. Parker, MD, FACEP, in a continuous, sustained, multiyear effort on our specialty's behalf to at-

**CONTINUED** *on page 6*

QUALITY

### *Improve Quality with CEDR and E-QUAL*

**AS PART OF ITS ONGOING** commitment to providing the highest quality of emergency care, ACEP has developed the Clinical Emergency Data Registry (CEDR) and the Emergency Quality Network (E-QUAL). These first-of-their-kind networks support emergency physicians' efforts to improve quality and practice in all types of emergency departments, even as practice and payment policies change over the coming years.

**TURN TO PAGE 9 FOR MORE INFORMATION.**

CEDR CLINICAL EMERGENCY DATA REGISTRY

E·QUAL EMERGENCY QUALITY NETWORK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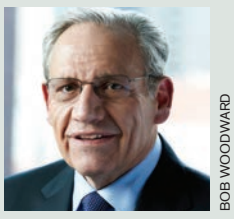
TECHNOLOGY

### *See the Latest at* innovatED

**BACK FOR A FIFTH YEAR,** innovatED will be featured in the Exhibit Hall Sunday through Tuesday. Presented by Janssen Pharmaceuticals, Inc. and Allergan, this space features the latest emergency medicine technology and services presented by dozens of companies.

**TURN TO PAGE 12 FOR MORE INFORMATION.**

## PLUS


BOB WOODWARD

OPENING SESSION

### THE AGE OF THE AMERICAN PRESIDENCY

BY BOB WOODWARD

**8–9:30 A.M.**
**WCC, LEVEL 3, BALLROOM A**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OPENING PARTY

### CELEBRATE YOUR SPECIALTY SUNDAY NIGHT

**SEE PAGE 8**

HOT SESSIONs

SEE PAGE 10


## USE THE ACEP17 MOBILE APP

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# Think ELIQUIS–

## For your appropriate patients with NVAF or DVT/PE

**IMPORTANT SAFETY INFORMATION**

**WARNING: (A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS, (B) SPINAL/EPIDURAL HEMATOMA**

**(A) Premature discontinuation of any oral anticoagulant, including ELIQUIS, increases the risk of thrombotic events. If anticoagulation with ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.**

**(B) Epidural or spinal hematomas may occur in patients treated with ELIQUIS who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors that can increase the risk of developing epidural or spinal hematomas in these patients include:**

- **use of indwelling epidural catheters**
- **concomitant use of other drugs that affect hemostasis, such as nonsteroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants**
- **a history of traumatic or repeated epidural or spinal punctures**
- **a history of spinal deformity or spinal surgery**
- **optimal timing between the administration of ELIQUIS and neuraxial procedures is not known**

**Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary.**

**Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated.**

### CONTRAINDICATIONS

- Active pathological bleeding
- Severe hypersensitivity reaction to ELIQUIS (e.g., anaphylactic reactions)

**IMPORTANT SAFETY INFORMATION**

### WARNINGS AND PRECAUTIONS

- **Increased Risk of Thrombotic Events after Premature Discontinuation:** Premature discontinuation of any oral anticoagulant, including ELIQUIS, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from ELIQUIS to warfarin in clinical trials in atrial fibrillation patients. If ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.
- **Bleeding Risk:** ELIQUIS increases the risk of bleeding and can cause serious, potentially fatal, bleeding.
  - Concomitant use of drugs affecting hemostasis increases the risk of bleeding, including aspirin and other antiplatelet agents, other anticoagulants, heparin, thrombolytic agents, SSRIs, SNRIs, and NSAIDs.
  - Advise patients of signs and symptoms of blood loss and to report them immediately or go to an emergency room. Discontinue ELIQUIS in patients with active pathological hemorrhage.
  - There is no established way to reverse the anticoagulant effect of apixaban, which can be expected to persist for at least 24 hours after the last dose (i.e., about two half-lives). A specific antidote for ELIQUIS is not available.
- **Spinal/Epidural Anesthesia or Puncture:** Patients treated with ELIQUIS undergoing spinal/epidural anesthesia or puncture may develop an epidural or spinal hematoma which can result in long-term or permanent paralysis.

  The risk of these events may be increased by the postoperative use of indwelling epidural catheters or the concomitant use of medicinal products affecting hemostasis. Indwelling epidural or intrathecal catheters should not be removed earlier than 24 hours after the last administration of ELIQUIS. The next dose of ELIQUIS should not be administered earlier than 5 hours after the removal of the catheter. The risk may also be increased by traumatic or repeated epidural or spinal puncture. If traumatic

# Eliquis®
## (apixaban) tablets 5mg 2.5mg

## NVAF
Indicated to reduce the risk of stroke and systemic embolism in patients with NVAF[1]

## DVT/PE
Indicated for the treatment of DVT and PE, and to reduce the risk of recurrent DVT and PE following initial therapy[1]

Learn more about ELIQUIS today at **hcp.eliquis.com**

DVT: deep vein thrombosis; NVAF: nonvalvular atrial fibrillation; PE: pulmonary embolism.

## IMPORTANT SAFETY INFORMATION

### WARNINGS AND PRECAUTIONS (cont'd)
puncture occurs, delay the administration of ELIQUIS for 48 hours. Monitor patients frequently and if neurological compromise is noted, urgent diagnosis and treatment is necessary. Physicians should consider the potential benefit versus the risk of neuraxial intervention in ELIQUIS patients.

- **Prosthetic Heart Valves:** The safety and efficacy of ELIQUIS have not been studied in patients with prosthetic heart valves and is not recommended in these patients.
- **Acute PE in Hemodynamically Unstable Patients or Patients who Require Thrombolysis or Pulmonary Embolectomy:** Initiation of ELIQUIS is not recommended as an alternative to unfractionated heparin for the initial treatment of patients with PE who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

### ADVERSE REACTIONS
- The most common and most serious adverse reactions reported with ELIQUIS were related to bleeding.

### TEMPORARY INTERRUPTION FOR SURGERY AND OTHER INTERVENTIONS
- ELIQUIS should be discontinued at least 48 hours prior to elective surgery or invasive procedures with a moderate or high risk of unacceptable or clinically significant bleeding. ELIQUIS should be discontinued at least 24 hours prior to elective surgery or invasive procedures with a low risk of bleeding or where the bleeding would be noncritical in location and easily controlled. Bridging anticoagulation during the 24 to 48 hours after stopping ELIQUIS and prior to the intervention is not generally required. ELIQUIS should be restarted after the surgical or other procedures as soon as adequate hemostasis has been established.

## IMPORTANT SAFETY INFORMATION

### DRUG INTERACTIONS
- **Strong Dual Inhibitors of CYP3A4 and P-gp:** Inhibitors of cytochrome P450 3A4 (CYP3A4) and P-glycoprotein (P-gp) increase exposure to apixaban and increase the risk of bleeding. For patients receiving ELIQUIS doses of 5 mg or 10 mg twice daily, reduce the dose of ELIQUIS by 50% when ELIQUIS is coadministered with drugs that are strong dual inhibitors of CYP3A4 and P-gp (e.g., ketoconazole, itraconazole, ritonavir, or clarithromycin). In patients already taking 2.5 mg twice daily, avoid coadministration of ELIQUIS with strong dual inhibitors of CYP3A4 and P-gp.
- **Strong Dual Inducers of CYP3A4 and P-gp:** Avoid concomitant use of ELIQUIS with strong dual inducers of CYP3A4 and P-gp (e.g., rifampin, carbamazepine, phenytoin, St. John's wort) because such drugs will decrease exposure to apixaban and increase the risk of stroke and other thromboembolic events.
- **Anticoagulants and Antiplatelet Agents:** Coadministration of antiplatelet agents, fibrinolytics, heparin, aspirin, and chronic NSAID use increases the risk of bleeding. APPRAISE-2, a placebo-controlled clinical trial of apixaban in high-risk post-acute coronary syndrome patients treated with aspirin or the combination of aspirin and clopidogrel, was terminated early due to a higher rate of bleeding with apixaban compared to placebo.

### PREGNANCY CATEGORY B
- There are no adequate and well-controlled studies of ELIQUIS in pregnant women. Treatment is likely to increase the risk of hemorrhage during pregnancy and delivery. ELIQUIS should be used during pregnancy only if the potential benefit outweighs the potential risk to the mother and fetus.

**Reference: 1.** ELIQUIS® Package Insert. Bristol-Myers Squibb Company, Princeton, NJ, and Pfizer Inc, New York, NY.

Please see Brief Summary of Full Prescribing Information, including **Boxed WARNINGS**, on adjacent pages.



Bristol-Myers Squibb Pfizer

## ELIQUIS® (apixaban) tablets, for oral use

℞ ONLY

***Brief Summary of Prescribing Information. For complete prescribing information consult official package insert.***

**WARNING: (A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS**

**(B) SPINAL/EPIDURAL HEMATOMA**

**(A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS**

**Premature discontinuation of any oral anticoagulant, including ELIQUIS, increases the risk of thrombotic events. If anticoagulation with ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant *[see Dosage and Administration, Warnings and Precautions, and Clinical Studies (14.1) in full Prescribing Information]*.**

**(B) SPINAL/EPIDURAL HEMATOMA**

**Epidural or spinal hematomas may occur in patients treated with ELIQUIS who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors that can increase the risk of developing epidural or spinal hematomas in these patients include:**

- **use of indwelling epidural catheters**
- **concomitant use of other drugs that affect hemostasis, such as nonsteroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants**
- **a history of traumatic or repeated epidural or spinal punctures**
- **a history of spinal deformity or spinal surgery**
- **optimal timing between the administration of ELIQUIS and neuraxial procedures is not known**

***[see Warnings and Precautions]***

**Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary *[see Warnings and Precautions]*.**

**Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated *[see Warnings and Precautions]*.**

### INDICATIONS AND USAGE

**Reduction of Risk of Stroke and Systemic Embolism in Nonvalvular Atrial Fibrillation—** ELIQUIS® (apixaban) is indicated to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation.

**Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery—** ELIQUIS is indicated for the prophylaxis of deep vein thrombosis (DVT), which may lead to pulmonary embolism (PE), in patients who have undergone hip or knee replacement surgery.

**Treatment of Deep Vein Thrombosis—**ELIQUIS is indicated for the treatment of DVT.

**Treatment of Pulmonary Embolism—**ELIQUIS is indicated for the treatment of PE.

**Reduction in the Risk of Recurrence of DVT and PE—**ELIQUIS is indicated to reduce the risk of recurrent DVT and PE following initial therapy.

### DOSAGE AND ADMINISTRATION (Selected information)

**Temporary Interruption for Surgery and Other Interventions**

ELIQUIS should be discontinued at least 48 hours prior to elective surgery or invasive procedures with a moderate or high risk of unacceptable or clinically significant bleeding. ELIQUIS should be discontinued at least 24 hours prior to elective surgery or invasive procedures with a low risk of bleeding or where the bleeding would be non-critical in location and easily controlled. Bridging anticoagulation during the 24 to 48 hours after stopping ELIQUIS and prior to the intervention is not generally required. ELIQUIS should be restarted after the surgical or other procedures as soon as adequate hemostasis has been established. (For complete *Dosage and Administration* section, see full Prescribing Information.)

### CONTRAINDICATIONS

ELIQUIS is contraindicated in patients with the following conditions:

- Active pathological bleeding *[see Warnings and Precautions and Adverse Reactions]*
- Severe hypersensitivity reaction to ELIQUIS (e.g., anaphylactic reactions) *[see Adverse Reactions]*

### WARNINGS AND PRECAUTIONS

**Increased Risk of Thrombotic Events after Premature Discontinuation**

Premature discontinuation of any oral anticoagulant, including ELIQUIS, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from ELIQUIS to warfarin in clinical trials in atrial fibrillation patients. If ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant *[see Dosage and Administration (2.4) and Clinical Studies (14.1) in full Prescribing Information]*.

**Bleeding**

ELIQUIS increases the risk of bleeding and can cause serious, potentially fatal, bleeding *[see Dosage and Administration (2.1) in full Prescribing Information and Adverse Reactions]*.

Concomitant use of drugs affecting hemostasis increases the risk of bleeding. These include aspirin and other antiplatelet agents, other anticoagulants, heparin, thrombolytic agents, selective serotonin reuptake inhibitors, serotonin norepinephrine reuptake inhibitors, and nonsteroidal anti-inflammatory drugs (NSAIDs) *[see Drug Interactions]*.

Advise patients of signs and symptoms of blood loss and to report them immediately or go to an emergency room. Discontinue ELIQUIS in patients with active pathological hemorrhage.

*Reversal of Anticoagulant Effect*

A specific antidote for ELIQUIS is not available, and there is no established way to reverse the bleeding in patients taking ELIQUIS. The pharmacodynamic effect of ELIQUIS can be expected to persist for at least 24 hours after the last dose, i.e., for about two drug half-lives. Use of procoagulant reversal agents, such as prothrombin complex concentrate (PCC), activated prothrombin complex concentrate or recombinant factor VIIa, may be considered but has not been evaluated in clinical studies *[see Clinical Pharmacology (12.2) in full Prescribing Information]*. When PCCs are used, monitoring for the anticoagulation effect of apixaban using a clotting test (PT, INR, or aPTT) or anti-factor Xa (FXa) activity is not useful and is not recommended. Activated oral charcoal reduces absorption of apixaban, thereby lowering apixaban plasma concentration *[see Overdosage]*.

Hemodialysis does not appear to have a substantial impact on apixaban exposure *[see Clinical Pharmacology (12.3) in full Prescribing Information]*. Protamine sulfate and vitamin K are not expected to affect the anticoagulant activity of apixaban. There is no experience with antifibrinolytic agents (tranexamic acid, aminocaproic acid) in individuals receiving apixaban. There is no experience with systemic hemostatics (desmopressin and aprotinin) in individuals receiving apixaban and they are not expected to be effective as a reversal agent.

**Spinal/Epidural Anesthesia or Puncture**

When neuraxial anesthesia (spinal/epidural anesthesia) or spinal/epidural puncture is employed, patients treated with antithrombotic agents for prevention of thromboembolic complications are at risk of developing an epidural or spinal hematoma which can result in long-term or permanent paralysis.

The risk of these events may be increased by the postoperative use of indwelling epidural catheters or the concomitant use of medicinal products affecting hemostasis. Indwelling epidural or intrathecal catheters should not be removed earlier than 24 hours after the last administration of ELIQUIS. The next dose of ELIQUIS should not be administered earlier than 5 hours after the removal of the catheter. The risk may also be increased by traumatic or repeated epidural or spinal puncture. If traumatic puncture occurs, delay the administration of ELIQUIS for 48 hours.

Monitor patients frequently for signs and symptoms of neurological impairment (e.g., numbness or weakness of the legs, bowel, or bladder dysfunction). If neurological compromise is noted, urgent diagnosis and treatment is necessary. Prior to neuraxial intervention the physician should consider the potential benefit versus the risk in anticoagulated patients or in patients to be anticoagulated for thromboprophylaxis.

**Patients with Prosthetic Heart Valves**

The safety and efficacy of ELIQUIS (apixaban) have not been studied in patients with prosthetic heart valves. Therefore, use of ELIQUIS is not recommended in these patients.

**Acute PE in Hemodynamically Unstable Patients or Patients who Require Thrombolysis or Pulmonary Embolectomy**

Initiation of ELIQUIS is not recommended as an alternative to unfractionated heparin for the initial treatment of patients with PE who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

### ADVERSE REACTIONS

The following serious adverse reactions are discussed in greater detail in other sections of the prescribing information.

- Increased risk of thrombotic events after premature discontinuation *[see Warnings and Precautions]*
- Bleeding *[see Warnings and Precautions]*
- Spinal/epidural anesthesia or puncture *[see Warnings and Precautions]*

**Clinical Trials Experience**

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

*Reduction of Risk of Stroke and Systemic Embolism in Patients with Nonvalvular Atrial Fibrillation*

The safety of ELIQUIS was evaluated in the ARISTOTLE and AVERROES studies *[see Clinical Studies (14) in full Prescribing Information]*, including 11,284 patients exposed to ELIQUIS 5 mg twice daily and 602 patients exposed to ELIQUIS 2.5 mg twice daily. The duration of ELIQUIS exposure was ≥12 months for 9375 patients and ≥24 months for 3369 patients in the two studies. In ARISTOTLE, the mean duration of exposure was 89 weeks (>15,000 patient-years). In AVERROES, the mean duration of exposure was approximately 59 weeks (>3000 patient-years).

The most common reason for treatment discontinuation in both studies was for bleeding-related adverse reactions; in ARISTOTLE this occurred in 1.7% and 2.5% of patients treated with ELIQUIS and warfarin, respectively, and in AVERROES, in 1.5% and 1.3% on ELIQUIS and aspirin, respectively.

**Bleeding in Patients with Nonvalvular Atrial Fibrillation in ARISTOTLE and AVERROES**

Tables 1 and 2 show the number of patients experiencing major bleeding during the treatment period and the bleeding rate (percentage of subjects with at least one bleeding event per 100 patient-years) in ARISTOTLE and AVERROES.

**Table 1: Bleeding Events in Patients with Nonvalvular Atrial Fibrillation in ARISTOTLE***

| | ELIQUIS N=9088 n (per 100 pt-year) | Warfarin N=9052 n (per 100 pt-year) | Hazard Ratio (95% CI) | P-value |
|---|---|---|---|---|
| Major† | 327 (2.13) | 462 (3.09) | 0.69 (0.60, 0.80) | <0.0001 |
| Intracranial (ICH)‡ | 52 (0.33) | 125 (0.82) | 0.41 (0.30, 0.57) | - |
| Hemorrhagic stroke§ | 38 (0.24) | 74 (0.49) | 0.51 (0.34, 0.75) | - |
| Other ICH | 15 (0.10) | 51 (0.34) | 0.29 (0.16, 0.51) | - |
| Gastrointestinal (GI)¶ | 128 (0.83) | 141 (0.93) | 0.89 (0.70, 1.14) | - |
| Fatal** | 10 (0.06) | 37 (0.24) | 0.27 (0.13, 0.53) | - |
| Intracranial | 4 (0.03) | 30 (0.20) | 0.13 (0.05, 0.37) | - |
| Non-intracranial | 6 (0.04) | 7 (0.05) | 0.84 (0.28, 2.15) | - |

* Bleeding events within each subcategory were counted once per subject, but subjects may have contributed events to multiple endpoints. Bleeding events were counted during treatment or within 2 days of stopping study treatment (on-treatment period).
† Defined as clinically overt bleeding accompanied by one or more of the following: a decrease in hemoglobin of ≥2 g/dL, a transfusion of 2 or more units of packed red blood cells, bleeding at a critical site: intracranial, intraspinal, intraocular, pericardial, intra-articular, intramuscular with compartment syndrome, retroperitoneal or with fatal outcome.
‡ Intracranial bleed includes intracerebral, intraventricular, subdural, and subarachnoid bleeding. Any type of hemorrhagic stroke was adjudicated and counted as an intracranial major bleed.
§ On-treatment analysis based on the safety population, compared to ITT analysis presented in Section 14.
¶ GI bleed includes upper GI, lower GI, and rectal bleeding.
** Fatal bleeding is an adjudicated death with the primary cause of death as intracranial bleeding or non-intracranial bleeding during the on-treatment period.

In ARISTOTLE, the results for major bleeding were generally consistent across most major subgroups including age, weight, $CHADS_2$ score (a scale from 0 to 6 used to estimate risk of stroke, with higher scores predicting greater risk), prior warfarin use, geographic region, and aspirin use at randomization (Figure 1). Subjects treated with apixaban with diabetes bled more (3.0% per year) than did subjects without diabetes (1.9% per year).

**Table 2: Bleeding Events in Patients with Nonvalvular Atrial Fibrillation in AVERROES**

| | ELIQUIS (apixaban) N=2798 n (%/year) | Aspirin N=2780 n (%/year) | Hazard Ratio (95% CI) | P-value |
|---|---|---|---|---|
| Major | 45 (1.41) | 29 (0.92) | 1.54 (0.96, 2.45) | 0.07 |
| Fatal | 5 (0.16) | 5 (0.16) | 0.99 (0.23, 4.29) | - |
| Intracranial | 11 (0.34) | 11 (0.35) | 0.99 (0.39, 2.51) | - |

Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

**Other Adverse Reactions**

Hypersensitivity reactions (including drug hypersensitivity, such as skin rash, and anaphylactic reactions, such as allergic edema) and syncope were reported in <1% of patients receiving ELIQUIS.

*Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery*

The safety of ELIQUIS has been evaluated in 1 Phase II and 3 Phase III studies including 5924 patients exposed to ELIQUIS 2.5 mg twice daily undergoing major orthopedic surgery of the lower limbs (elective hip replacement or elective knee replacement) treated for up to 38 days.

In total, 11% of the patients treated with ELIQUIS 2.5 mg twice daily experienced adverse reactions.

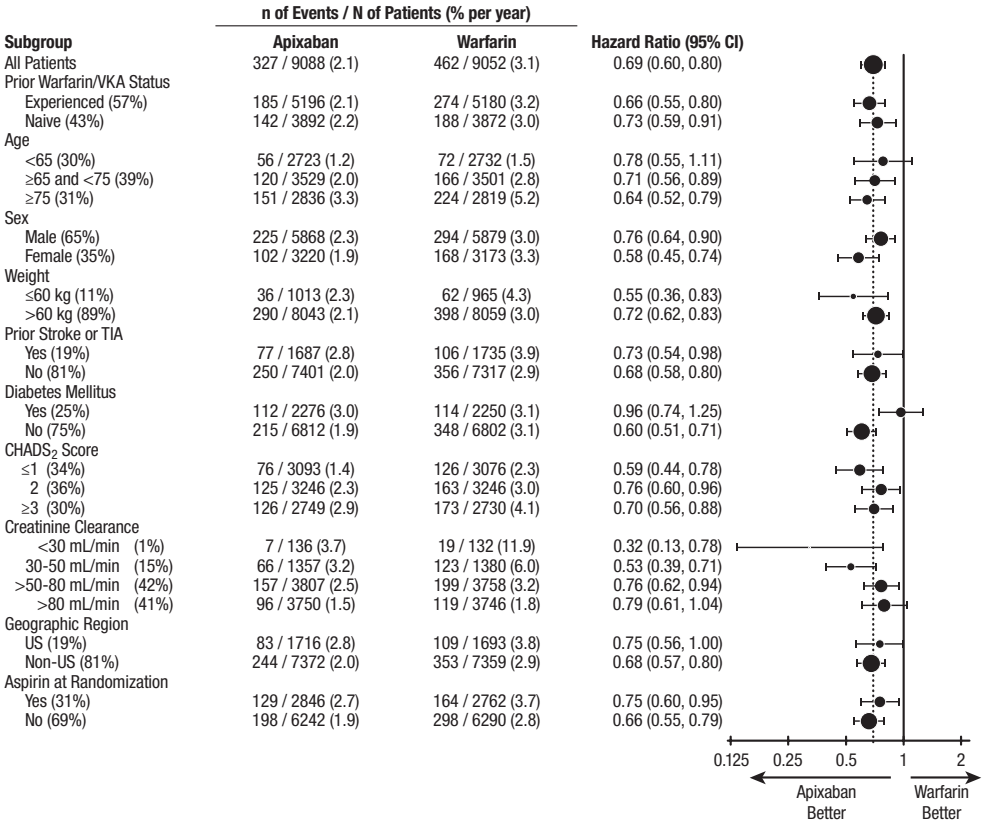
Bleeding results during the treatment period in the Phase III studies are shown in Table 3. Bleeding was assessed in each study beginning with the first dose of double-blind study drug.

**Table 3: Bleeding During the Treatment Period in Patients Undergoing Elective Hip or Knee Replacement Surgery**

| Bleeding Endpoint* | ADVANCE-3 Hip Replacement Surgery | | ADVANCE-2 Knee Replacement Surgery | | ADVANCE-1 Knee Replacement Surgery | |
|---|---|---|---|---|---|---|
| | ELIQUIS 2.5 mg po bid 35±3 days | Enoxaparin 40 mg sc qd 35±3 days | ELIQUIS 2.5 mg po bid 12±2 days | Enoxaparin 40 mg sc qd 12±2 days | ELIQUIS 2.5 mg po bid 12±2 days | Enoxaparin 30 mg sc q12h 12±2 days |
| | First dose 12 to 24 hours post surgery | First dose 9 to 15 hours prior to surgery | First dose 12 to 24 hours post surgery | First dose 9 to 15 hours prior to surgery | First dose 12 to 24 hours post surgery | First dose 12 to 24 hours post surgery |
| All treated | N=2673 | N=2659 | N=1501 | N=1508 | N=1596 | N=1588 |
| Major (including surgical site) | 22 (0.82%)† | 18 (0.68%) | 9 (0.60%)‡ | 14 (0.93%) | 11 (0.69%) | 22 (1.39%) |
| Fatal | 0 | 0 | 0 | 0 | 0 | 1 (0.06%) |
| Hgb decrease ≥2 g/dL | 13 (0.49%) | 10 (0.38%) | 8 (0.53%) | 9 (0.60%) | 10 (0.63%) | 16 (1.01%) |
| Transfusion of ≥2 units RBC | 16 (0.60%) | 14 (0.53%) | 5 (0.33%) | 9 (0.60%) | 9 (0.56%) | 18 (1.13%) |
| Bleed at critical site§ | 1 (0.04%) | 1 (0.04%) | 1 (0.07%) | 2 (0.13%) | 1 (0.06%) | 4 (0.25%) |
| Major + CRNM¶ | 129 (4.83%) | 134 (5.04%) | 53 (3.53%) | 72 (4.77%) | 46 (2.88%) | 68 (4.28%) |
| All | 313 (11.71%) | 334 (12.56%) | 104 (6.93%) | 126 (8.36%) | 85 (5.33%) | 108 (6.80%) |

* All bleeding criteria included surgical site bleeding.
† Includes 13 subjects with major bleeding events that occurred before the first dose of apixaban (administered 12 to 24 hours post surgery).
‡ Includes 5 subjects with major bleeding events that occurred before the first dose of apixaban (administered 12 to 24 hours post surgery).
§ Intracranial, intraspinal, intraocular, pericardial, an operated joint requiring re-operation or intervention, intramuscular with compartment syndrome, or retroperitoneal. Bleeding into an operated joint requiring re-operation or intervention was present in all patients with this category of bleeding. Events and event rates include one enoxaparin-treated patient in ADVANCE-1 who also had intracranial hemorrhage.
¶ CRNM = clinically relevant nonmajor.

**Figure 1: Major Bleeding Hazard Ratios by Baseline Characteristics – ARISTOTLE Study**




Note: The figure above presents effects in various subgroups, all of which are baseline characteristics and all of which were pre-specified, if not the groupings. The 95% confidence limits that are shown do not take into account how many comparisons were made, nor do they reflect the effect of a particular factor after adjustment for all other factors. Apparent homogeneity or heterogeneity among groups should not be over-interpreted.

Adverse reactions occurring in ≥1% of patients undergoing hip or knee replacement surgery in the 1 Phase II study and the 3 Phase III studies are listed in Table 4.

**Table 4: Adverse Reactions Occurring in ≥1% of Patients in Either Group Undergoing Hip or Knee Replacement Surgery**

| | ELIQUIS (apixaban), n (%) 2.5 mg po bid N=5924 | Enoxaparin, n (%) 40 mg sc qd or 30 mg sc q12h N=5904 |
|---|---|---|
| Nausea | 153 (2.6) | 159 (2.7) |
| Anemia (including postoperative and hemorrhagic anemia, and respective laboratory parameters) | 153 (2.6) | 178 (3.0) |
| Contusion | 83 (1.4) | 115 (1.9) |
| Hemorrhage (including hematoma, and vaginal and urethral hemorrhage) | 67 (1.1) | 81 (1.4) |
| Postprocedural hemorrhage (including postprocedural hematoma, wound hemorrhage, vessel puncture site hematoma and catheter site hemorrhage) | 54 (0.9) | 60 (1.0) |
| Transaminases increased (including alanine aminotransferase increased and alanine aminotransferase abnormal) | 50 (0.8) | 71 (1.2) |
| Aspartate aminotransferase increased | 47 (0.8) | 69 (1.2) |
| Gamma-glutamyltransferase increased | 38 (0.6) | 65 (1.1) |

Less common adverse reactions in apixaban-treated patients undergoing hip or knee replacement surgery occurring at a frequency of ≥0.1% to <1%:

*Blood and lymphatic system disorders:* thrombocytopenia (including platelet count decreases)

*Vascular disorders:* hypotension (including procedural hypotension)

*Respiratory, thoracic, and mediastinal disorders:* epistaxis

*Gastrointestinal disorders:* gastrointestinal hemorrhage (including hematemesis and melena), hematochezia

*Hepatobiliary disorders:* liver function test abnormal, blood alkaline phosphatase increased, blood bilirubin increased

*Renal and urinary disorders:* hematuria (including respective laboratory parameters)

*Injury, poisoning, and procedural complications:* wound secretion, incision-site hemorrhage (including incision-site hematoma), operative hemorrhage

Less common adverse reactions in apixaban-treated patients undergoing hip or knee replacement surgery occurring at a frequency of <0.1%:

Gingival bleeding, hemoptysis, hypersensitivity, muscle hemorrhage, ocular hemorrhage (including conjunctival hemorrhage), rectal hemorrhage

*Treatment of DVT and PE and Reduction in the Risk of Recurrence of DVT or PE*

The safety of ELIQUIS has been evaluated in the AMPLIFY and AMPLIFY-EXT studies, including 2676 patients exposed to ELIQUIS 10 mg twice daily, 3359 patients exposed to ELIQUIS 5 mg twice daily, and 840 patients exposed to ELIQUIS 2.5 mg twice daily.

Common adverse reactions (≥1%) were gingival bleeding, epistaxis, contusion, hematuria, rectal hemorrhage, hematoma, menorrhagia, and hemoptysis.

AMPLIFY Study

The mean duration of exposure to ELIQUIS was 154 days and to enoxaparin/warfarin was 152 days in the AMPLIFY study. Adverse reactions related to bleeding occurred in 417 (15.6%) ELIQUIS-treated patients compared to 661 (24.6%) enoxaparin/warfarin-treated patients. The discontinuation rate due to bleeding events was 0.7% in the ELIQUIS-treated patients compared to 1.7% in enoxaparin/warfarin-treated patients in the AMPLIFY study.

In the AMPLIFY study, ELIQUIS was statistically superior to enoxaparin/warfarin in the primary safety endpoint of major bleeding (relative risk 0.31, 95% CI [0.17, 0.55], P-value <0.0001).

Bleeding results from the AMPLIFY study are summarized in Table 5.

**Table 5: Bleeding Results in the AMPLIFY Study**

| | ELIQUIS N=2676 n (%) | Enoxaparin/Warfarin N=2689 n (%) | Relative Risk (95% CI) |
|---|---|---|---|
| Major | 15 (0.6) | 49 (1.8) | 0.31 (0.17, 0.55) p<0.0001 |
| CRNM* | 103 (3.9) | 215 (8.0) | |
| Major + CRNM | 115 (4.3) | 261 (9.7) | |
| Minor | 313 (11.7) | 505 (18.8) | |
| All | 402 (15.0) | 676 (25.1) | |

* CRNM = clinically relevant nonmajor bleeding.
Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

Adverse reactions occurring in ≥1% of patients in the AMPLIFY study are listed in Table 6.

**Table 6: Adverse Reactions Occurring in ≥1% of Patients Treated for DVT and PE in the AMPLIFY Study**

| | ELIQUIS N=2676 n (%) | Enoxaparin/Warfarin N=2689 n (%) |
|---|---|---|
| Epistaxis | 77 (2.9) | 146 (5.4) |
| Contusion | 49 (1.8) | 97 (3.6) |
| Hematuria | 46 (1.7) | 102 (3.8) |
| Menorrhagia | 38 (1.4) | 30 (1.1) |
| Hematoma | 35 (1.3) | 76 (2.8) |
| Hemoptysis | 32 (1.2) | 31 (1.2) |
| Rectal hemorrhage | 26 (1.0) | 39 (1.5) |
| Gingival bleeding | 26 (1.0) | 50 (1.9) |

AMPLIFY-EXT Study

The mean duration of exposure to ELIQUIS was approximately 330 days and to placebo was 312 days in the AMPLIFY-EXT study. Adverse reactions related to bleeding occurred in 219 (13.3%) ELIQUIS-treated patients compared to 72 (8.7%) placebo-treated patients. The discontinuation rate due to bleeding events was approximately 1% in the ELIQUIS-treated patients compared to 0.4% in those patients in the placebo group in the AMPLIFY-EXT study.

Bleeding results from the AMPLIFY-EXT study are summarized in Table 7.

**Table 7: Bleeding Results in the AMPLIFY-EXT Study**

| | ELIQUIS (apixaban) 2.5 mg bid N=840 n (%) | ELIQUIS 5 mg bid N=811 n (%) | Placebo N=826 n (%) |
|---|---|---|---|
| Major | 2 (0.2) | 1 (0.1) | 4 (0.5) |
| CRNM* | 25 (3.0) | 34 (4.2) | 19 (2.3) |
| Major + CRNM | 27 (3.2) | 35 (4.3) | 22 (2.7) |
| Minor | 75 (8.9) | 98 (12.1) | 58 (7.0) |
| All | 94 (11.2) | 121 (14.9) | 74 (9.0) |

* CRNM = clinically relevant nonmajor bleeding.
Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

Adverse reactions occurring in ≥1% of patients in the AMPLIFY-EXT study are listed in Table 8.

**Table 8: Adverse Reactions Occurring in ≥1% of Patients Undergoing Extended Treatment for DVT and PE in the AMPLIFY-EXT Study**

| | ELIQUIS 2.5 mg bid N=840 n (%) | ELIQUIS 5 mg bid N=811 n (%) | Placebo N=826 n (%) |
|---|---|---|---|
| Epistaxis | 13 (1.5) | 29 (3.6) | 9 (1.1) |
| Hematuria | 12 (1.4) | 17 (2.1) | 9 (1.1) |
| Hematoma | 13 (1.5) | 16 (2.0) | 10 (1.2) |
| Contusion | 18 (2.1) | 18 (2.2) | 18 (2.2) |
| Gingival bleeding | 12 (1.4) | 9 (1.1) | 3 (0.4) |

Other Adverse Reactions

Less common adverse reactions in ELIQUIS-treated patients in the AMPLIFY or AMPLIFY-EXT studies occurring at a frequency of ≥0.1% to <1%:

*Blood and lymphatic system disorders:* hemorrhagic anemia

*Gastrointestinal disorders:* hematochezia, hemorrhoidal hemorrhage, gastrointestinal hemorrhage, hematemesis, melena, anal hemorrhage

*Injury, poisoning, and procedural complications:* wound hemorrhage, postprocedural hemorrhage, traumatic hematoma, periorbital hematoma

*Musculoskeletal and connective tissue disorders:* muscle hemorrhage

*Reproductive system and breast disorders:* vaginal hemorrhage, metrorrhagia, menometrorrhagia, genital hemorrhage

*Vascular disorders:* hemorrhage

*Skin and subcutaneous tissue disorders:* ecchymosis, skin hemorrhage, petechiae

*Eye disorders:* conjunctival hemorrhage, retinal hemorrhage, eye hemorrhage

*Investigations:* blood urine present, occult blood positive, occult blood, red blood cells urine positive

*General disorders and administration-site conditions:* injection-site hematoma, vessel puncture-site hematoma

## DRUG INTERACTIONS

Apixaban is a substrate of both CYP3A4 and P-gp. Inhibitors of CYP3A4 and P-gp increase exposure to apixaban and increase the risk of bleeding. Inducers of CYP3A4 and P-gp decrease exposure to apixaban and increase the risk of stroke and other thromboembolic events.

### Strong Dual Inhibitors of CYP3A4 and P-gp

For patients receiving ELIQUIS 5 mg or 10 mg twice daily, the dose of ELIQUIS should be decreased by 50% when it is coadministered with drugs that are strong dual inhibitors of CYP3A4 and P-gp (e.g., ketoconazole, itraconazole, ritonavir, or clarithromycin) *[see Dosage and Administration (2.5) and Clinical Pharmacology (12.3) in full Prescribing Information]*.

For patients receiving ELIQUIS at a dose of 2.5 mg twice daily, avoid coadministration with strong dual inhibitors of CYP3A4 and P-gp *[see Dosage and Administration (2.5) and Clinical Pharmacology (12.3) in full Prescribing Information]*.

### Strong Dual Inducers of CYP3A4 and P-gp

Avoid concomitant use of ELIQUIS with strong dual inducers of CYP3A4 and P-gp (e.g., rifampin, carbamazepine, phenytoin, St. John's wort) because such drugs will decrease exposure to apixaban *[see Clinical Pharmacology (12.3) in full Prescribing Information]*.

### Anticoagulants and Antiplatelet Agents

Coadministration of antiplatelet agents, fibrinolytics, heparin, aspirin, and chronic NSAID use increases the risk of bleeding.

APPRAISE-2, a placebo-controlled clinical trial of apixaban in high-risk, post-acute coronary syndrome patients treated with aspirin or the combination of aspirin and clopidogrel, was terminated early due to a higher rate of bleeding with apixaban compared to placebo. The rate of ISTH major bleeding was 2.8% per year with apixaban versus 0.6% per year with placebo in patients receiving single antiplatelet therapy and was 5.9% per year with apixaban versus 2.5% per year with placebo in those receiving dual antiplatelet therapy.

In ARISTOTLE, concomitant use of aspirin increased the bleeding risk on ELIQUIS from 1.8% per year to 3.4% per year and concomitant use of aspirin and warfarin increased the bleeding risk from 2.7% per year to 4.6% per year. In this clinical trial, there was limited (2.3%) use of dual antiplatelet therapy with ELIQUIS.

## USE IN SPECIFIC POPULATIONS

### Pregnancy

*Pregnancy Category B*

There are no adequate and well-controlled studies of ELIQUIS in pregnant women. Treatment is likely to increase the risk of hemorrhage during pregnancy and delivery. ELIQUIS should be used during pregnancy only if the potential benefit outweighs the potential risk to the mother and fetus.

Treatment of pregnant rats, rabbits, and mice after implantation until the end of gestation resulted in fetal exposure to apixaban, but was not associated with increased risk for fetal malformations or toxicity. No maternal or fetal deaths were attributed to bleeding. Increased incidence of maternal bleeding was observed in mice, rats, and rabbits at maternal exposures that were 19, 4, and 1 times, respectively, the human exposure of unbound drug, based on area under plasma-concentration time curve (AUC) comparisons at the maximum recommended human dose (MRHD) of 10 mg (5 mg twice daily).

### Labor and Delivery

Safety and effectiveness of ELIQUIS during labor and delivery have not been studied in clinical trials. Consider the risks of bleeding and of stroke in using ELIQUIS in this setting *[see Warnings and Precautions]*.

Treatment of pregnant rats from implantation (gestation Day 7) to weaning (lactation Day 21) with apixaban at a dose of 1000 mg/kg (about 5 times the human exposure based on unbound apixaban) did not result in death of offspring or death of mother rats during labor in association with uterine bleeding. However, increased incidence of maternal bleeding, primarily during gestation, occurred at apixaban doses of ≥25 mg/kg, a dose corresponding to ≥1.3 times the human exposure.

### Nursing Mothers

It is unknown whether apixaban or its metabolites are excreted in human milk. Rats excrete apixaban in milk (12% of the maternal dose).

Women should be instructed either to discontinue breastfeeding or to discontinue ELIQUIS (apixaban) therapy, taking into account the importance of the drug to the mother.

### Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

### Geriatric Use

Of the total subjects in the ARISTOTLE and AVERROES clinical studies, >69% were 65 and older, and >31% were 75 and older. In the ADVANCE-1, ADVANCE-2, and ADVANCE-3 clinical studies, 50% of subjects were 65 and older, while 16% were 75 and older. In the AMPLIFY and AMPLIFY-EXT clinical studies, >32% of subjects were 65 and older and >13% were 75 and older. No clinically significant differences in safety or effectiveness were observed when comparing subjects in different age groups.

### Renal Impairment

***Reduction of Risk of Stroke and Systemic Embolism in Patients with Nonvalvular Atrial Fibrillation***

The recommended dose is 2.5 mg twice daily in patients with at least two of the following characteristics *[see Dosage and Administration (2.1) in full Prescribing Information]*:

- age ≥80 years
- body weight ≤60 kg
- serum creatinine ≥1.5 mg/dL

**Patients with End-Stage Renal Disease on Dialysis**

Clinical efficacy and safety studies with ELIQUIS did not enroll patients with end-stage renal disease (ESRD) on dialysis. In patients with ESRD maintained on intermittent hemodialysis, administration of ELIQUIS at the usually recommended dose *[see Dosage and Administration (2.1) in full Prescribing Information]* will result in concentrations of apixaban and pharmacodynamic activity similar to those observed in the ARISTOTLE study *[see Clinical Pharmacology (12.3) in full Prescribing Information]*. It is not known whether these concentrations will lead to similar stroke reduction and bleeding risk in patients with ESRD on dialysis as was seen in ARISTOTLE.

***Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery, and Treatment of DVT and PE and Reduction in the Risk of Recurrence of DVT and PE***

No dose adjustment is recommended for patients with renal impairment, including those with ESRD on dialysis *[see Dosage and Administration (2.1) in full Prescribing Information]*.

Clinical efficacy and safety studies with ELIQUIS did not enroll patients with ESRD on dialysis or patients with a CrCl <15 mL/min; therefore, dosing recommendations are based on pharmacokinetic and pharmacodynamic (anti-FXa activity) data in subjects with ESRD maintained on dialysis *[see Clinical Pharmacology (12.3) in full Prescribing Information]*.

### Hepatic Impairment

No dose adjustment is required in patients with mild hepatic impairment (Child-Pugh class A). Because patients with moderate hepatic impairment (Child-Pugh class B) may have intrinsic coagulation abnormalities and there is limited clinical experience with ELIQUIS in these patients, dosing recommendations cannot be provided *[see Clinical Pharmacology (12.2) in full Prescribing Information]*. ELIQUIS is not recommended in patients with severe hepatic impairment (Child-Pugh class C) *[see Clinical Pharmacology (12.2) in full Prescribing Information]*.

## OVERDOSAGE

There is no antidote to ELIQUIS. Overdose of ELIQUIS increases the risk of bleeding *[see Warnings and Precautions]*.

In controlled clinical trials, orally administered apixaban in healthy subjects at doses up to 50 mg daily for 3 to 7 days (25 mg twice daily for 7 days or 50 mg once daily for 3 days) had no clinically relevant adverse effects.

In healthy subjects, administration of activated charcoal 2 and 6 hours after ingestion of a 20-mg dose of apixaban reduced mean apixaban AUC by 50% and 27%, respectively. Thus, administration of activated charcoal may be useful in the management of apixaban overdose or accidental ingestion.

## PATIENT COUNSELING INFORMATION

*Advise patients to read the FDA-approved patient labeling (Medication Guide).*

Advise patients of the following:

- Not to discontinue ELIQUIS without talking to their physician first.
- That it might take longer than usual for bleeding to stop, and they may bruise or bleed more easily when treated with ELIQUIS. Advise patients about how to recognize bleeding or symptoms of hypovolemia and of the urgent need to report any unusual bleeding to their physician.
- To tell their physicians and dentists they are taking ELIQUIS, and/or any other product known to affect bleeding (including nonprescription products, such as aspirin or NSAIDs), before any surgery or medical or dental procedure is scheduled and before any new drug is taken.
- If the patient is having neuraxial anesthesia or spinal puncture, inform the patient to watch for signs and symptoms of spinal or epidural hematomas *[see Warnings and Precautions]*. If any of these symptoms occur, advise the patient to seek emergent medical attention.
- To tell their physicians if they are pregnant or plan to become pregnant or are breastfeeding or intend to breastfeed during treatment with ELIQUIS *[see Use in Specific Populations]*.
- How to take ELIQUIS if they cannot swallow, or require a nasogastric tube *[see Dosage and Administration (2.6) in full Prescribing Information]*.
- What to do if a dose is missed *[see Dosage and Administration (2.2) in full Prescribing Information]*.

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and
Pfizer Inc
New York, New York 10017 USA

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# DON'T BE CAMERA SHY– COME ON BY!

**STUDIO ACEP OPENS SUNDAY AT 8 A.M. IN THE WCC GRAND LOBBY FOYER AND DOESN'T SHUT DOWN UNTIL THE CAMERA CALLS IT QUITS AT 5 P.M.**

Get your picture taken by a professional photographer, and we'll send you the finished digital headshot after the convention absolutely free. Use it for your LinkedIn page, Facebook profile, or however you'd like. While you're there, please help ACEP with some promotional images. If you've seen some of your colleagues in our advertisements or conference promotions throughout the year, it's because they stopped by the studio and spent a couple of minutes with our marketing team.

While you're there, please give us a video testimonial as well. What's on your mind? What's your favorite ACEP member benefit? What do you love about emergency medicine? Say it for the camera. We very much appreciate the help!

## FROM THE PRESIDENT

CONTINUED FROM PAGE 1

tain our goals. Becky has done an outstanding job representing us, and I look forward to her continued contributions.

I want to share with you some of the major initiatives that our College—supported by committee members, staff, the Board of Directors, and hopefully your assistance—will be working on this year.

- We will focus on efficiency and streamlining in the College and our own practices. We will work to find ways to decrease bureaucracy and improve the efficiency of daily practice. We have over 100 objectives directly tied to improving the practice environment. This means you will be able to spend more time caring for patients and hopefully less time working in front of the computer and on work that does not improve patient care. We must make improving the emergency physician practice environment one of ACEP's top priorities.

- Alongside increased efficiency of practice, ACEP will be improving communication to our members in a great leap forward. An all-new and member-focused website will be launching in early 2018, and our social media channels are evolving to focus even more closely on member needs. Just as you treat patients anytime and anywhere, all the information you need to practice will be at your fingertips anytime, anywhere.

- In this rapidly shifting political landscape, it is more important than ever that ACEP promotes the incredible value we provide in caring for all patients. We must educate the public, media, and government on our roles as expert diagnosticians and our roles as the entry point to medicine in the nation. We will be working with other EM stakeholder groups so we speak with a single united voice wherever possible. With this understanding, we must also be excellent managers of resources to provide the best care, as well as the best value for everyone.

- We will continue the battle against dishonest billing practices that harm our patients as well as our fellow emergency medicine practitioners. Renewed interest from the media, government, and insurance providers in repealing the prudent layperson standard puts lives at risk. ACEP stands with the prudent layperson standard as we have since its inception, and we will continue to advocate and encourage legislation that keeps it a national standard. Patients shouldn't diagnose themselves out of fear their insurance company won't cover a visit to the emergency department.

- We will continue to advocate for protection of emergency care benefits for our members during this time of great debate on health care policy within the government. Our patients should be able to access the emergency care they need when they need it without fear, and emergency physicians should be able to treat without fear as well.

Enjoy your time at ACEP17. I look forward to serving you.

**DR. KIVELA** is President of ACEP; managing partner of Napa Valley Emergency Medical Group; and medical director of Medic Ambulance in Vallejo, California.

ACEP17 Daily News

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# ACEP and Schumacher Clinical Partners Invite You to Attend a Night at the Newseum

**THE NEWSEUM**—one of the top 25 museums in the United States—houses exhibits of how the news covered various national events. Exhibitions include "1967: Civil Rights at 50," the Berlin Wall Gallery, and the Today's Front Pages Gallery.

Attendees can enjoy music, dancing, and light hors d'oeuvres at this family-friendly venue. Drink tickets are available to ACEP17 registrants.

Badges are required for entrance. Guest passes are available at the ACEP17 Registration Area, and all attendees under 18 must be accompanied by an adult. Shuttles will operate to and from the party. See the shuttle schedule in the ACEP17 mobile app for details.

SAM KITTNER/NEWSEUM

# Get Well at ACEP17

The Wellness Center for ACEP17 is brand-new, and you are not going to want to miss this. Come to the Resource Center and check out these events for a new look on your mental, spiritual, and EM wellness. *Supported in part by HBI–Hagan Barron Intermediaries.*

## No Joe, Wake Up and Go

Sunday–Tuesday, 9:30–10 a.m.

Skip the coffee and enjoy a 30-minute stretch session. Held every morning during the first break; no special gear needed!

## Posture Evaluations

*In collaboration with Tired Soles*

Take advantage of this 10-minute evaluation. Experts from Tired Soles will offer advice on specific exercises and stretches that will help (and possibly prevent) spinal and muscle dysfunction.

## Come Tell Your Story

In just 90 seconds, describe how you integrate wellness into your own life. You just might be a star during Wellness Week 2018!

## Silent Meditation Station

Take a moment for yourself. Tune in with a wireless headset and listen to a variety of guided meditations or relaxing tunes.

## Wellness Muralist

This is wellness interpretation provided by you. Chat with our muralist about what wellness means to you, then watch as they interpret your thoughts into a wellness vision for all to see.

## Wellness Guide Book

*Being Well in Emergency Medicine: ACEP's Guide to Investing in Yourself*

This free downloadable book covers how wellness is interconnected in your daily life. In its pages, wellness champions Rita A. Manfredi, MD, FACEP, and Julia M. Huber, MD, FACEP, present the well-being spokes of life in emergency medicine.

## Wellness Talks

Sunday–Tuesday in 10-minute time slots

Come hear Well-Being Committee members, Wellness Section members, and EMRA members share their personal stories on wellness. Each presentation will last 10 minutes.

## Wear It on Your Sleeve

2017 is the year of the well emergency physician! Buy one of the brand-new EM Wellness T-shirts to express your well self.

## Legends of the College Speak Wellness

Five-minute wellness lessons given by champions of EM.

### SUNDAY

10 a.m. **Dara Kass, MD, FACEP**

10:15 a.m. **Gillian Schmitz, MD, FACEP**

2:15 p.m. **Jay Kaplan, MD, FACEP**

2:30 p.m. **Diane Birnbaumer, MD, FACEP**

3 p.m. **Stephen Anderson, MD, FACEP**

3:15 p.m. **Nidhi Garg, MD, FACEP**

### MONDAY

11 a.m. **Al Sacchetti, MD, FACEP**

11:30 a.m. **Chris Kang, MD, FACEP**

Noon **Howie Mell, MD, MPH, CPE, FACEP**

2:30 p.m. **Greg Henry, MD, FACEP**

2:45 p.m. **Kevin Klauer, DO, FACEP**

### TUESDAY

11 a.m. **Chad Kessler, MD, MHPE, FACEP**

11:15 a.m. **Pam Bensen, MD, MS, FACEP**

11:30 a.m. **Tracy Sanson, MD, FACEP**

Noon **Haney Mallemat, MD**

## BEYOND THE WELLNESS CENTER

Wellness initiatives are all over ACEP17! Don't miss these opportunities outside the Wellness Center. **See the ACEP17 mobile app for locations and more details.**

### FIT TO LEARN

Jump on one of the many stationary bikes in the convention center and get a sneak peek at the new Virtual ACEP being recorded at ACEP17.

### MEDITATION/YOGA/ PRAYER ROOM

Open all day for prayer/meditation on your schedule, or join one of the set classes each morning.

### ZUMBA CLASS

Get the blood flowing Monday morning with this high-energy class at the Marriott Marquis.

## emCareers.org LIVE is BACK at ACEP17

Come by the Resource Center in the Exhibit Hall to access great career resources. Be sure to sign up for a free CV consultation. Get tips on how to make your CV shine, learn what employers are looking for, and craft a CV that highlights your skills and expertise.

**Visit the official job bank of ACEP and EMRA, emCareers.org and:**

- Find nearly 1,000 EM openings.
- Register for job alerts.
- Search career development resources.

emCareers.org
WHERE DO YOU WANT TO BE?

# *Improve Quality with CEDR and E-QUAL*

### CEDR

As part of its ongoing commitment to providing the highest quality of emergency care, ACEP has developed the CEDR, the first emergency medicine specialty-wide registry. The ACEP CEDR has been approved by the Centers for Medicare and Medicaid Services (CMS) as a qualified clinical data registry. The CEDR will provide a unified method for ACEP members to collect and submit Physician Quality Reporting System data, maintenance of certification (MOC), ongoing professional practice evaluation and other local and national quality initiatives. Visit us to get more information, watch demonstrations, and sign up.

CEDR CLINICAL EMERGENCY DATA REGISTRY

**Sunday–Monday, 7 a.m.–6 p.m.;**
**Tuesday, 7:30 a.m.–5:30 p.m.**
*Walter E. Washington Convention Center, Level 1, West Salon Foyer*

### E-QUAL

ACEP's E-QUAL is a CMS-supported Support and Alignment Network of the Transforming Clinical Practice Initiative. E-QUAL seeks to enroll more than 24,000 emergency clinicians from more than 2,000 emergency departments into learning collaboratives to demonstrate the value of EM care. Each area is designed to show the importance of EM care in meeting national goals to improve quality and reduce health care costs. The goals of E-QUAL are to:

E·QUAL EMERGENCY QUALITY NETWORK

- Improve outcomes for sepsis.
- Reduce avoidable imaging with ACEP's *Choosing Wisely* program.
- Improve value of ED chest pain evaluation by reducing avoidable admissions.

Participation in E-QUAL can earn your clinicians clinical practice improvement activities credit for the new merit-based incentive payment system program, as well as MOC Part IV credit, access to free eCME, and more resources and guidelines in the E-QUAL toolkits.

**Sunday-Monday, 7 a.m.–6 p.m.;**
**Tuesday, 7:30 a.m.–5:30 p.m.**
*Walter E. Washington Convention Center, Level 1, West Salon Foyer*


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**ACEP's Daily Education Giveaway**, held in the Resource Center (located in Hall A) is giving away the best EM education. Register to win fabulous prizes provided by ACEP eCME, Critical Decisions, and PEER.

**Drawing held at 3:00 pm | Sunday-Tuesday**

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# Save These Dates

American College of Emergency Physicians® ADVANCING EMERGENCY CARE

ACEP's Upcoming EducationalMeetings | Fall 2017 - Spring 2018

**November 13-17, 2017** — SOLD OUT!
Emergency Department Directors Academy - Phase I
Omni Park West - Dallas, TX
acep.org/edda

**January 22-26, 2018**
Reimbursement & Coding Conferences
Omni Nashville - Nashville, TN
acep.org/rc

**February 5-9, 2018**
Emergency Department Directors Academy - Phase I
Omni Park West - Dallas, TX
acep.org/edda

**March 13-15, 2018**
Advanced Pediatric Emergency Medicine Assembly
Disney's Yacht & Beach Club Resort - Lake Buena Vista, FL
acep.org/pem

**April 30-May 4, 2018**
Emergency Department Directors Academy - Phase II
Omni Park West - Dallas, TX
acep.org/edda

**May 20-23, 2018**
Leadership & Advocacy Conference
Grand Hyatt - Washington, DC
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Leadership & Advocacy Conference

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ACEP18 Scientific Assembly
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# Hot Sessions

## Treat Critically Ill Infants with Confidence

*by* KAREN APPOLD

Treating a critically ill pediatric patient can make even seasoned emergency physicians nervous. Become more comfortable with this patient population by attending a refresher course, "The 1st 30 Minutes: Initial Management of the Critically Ill Infant," presented by Jennifer Walthall, MD, MPH, FACEP, FAAP, associate professor of clinical pediatrics and emergency medicine at Indiana University in Indianapolis. Learn about evidence-based strategies that improve clinical outcomes and save lives.

"It's important to employ early comprehensive and aggressive interventions," said Dr. Walthall, who noted that initial management is often delayed and suboptimal.

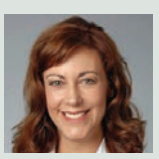
> **"Having a practiced and preset algorithm is critical to ensuring that no step is forgotten. "**
> *–Dr. Walthall*

"Having a practiced and preset algorithm is critical to ensuring that no step is forgotten. Everyone on the team should be trained in a step-like manner; all decision points should already be thought out. Have equipment available and ready, and have a streamlined process for intervention in place," she said.

Dr. Walthall hopes that attendees wil be able to either confirm that they are already following the correct protocols and continue to do so with confidence, or learn about something they should add to their treatment arsenal such as a piece of equipment or skill. For example, ultrasound IV placements can improve outcomes.

"I am very passionate about educating and keeping emergency physicians on the cutting edge of interventions and treatment," said Dr. Walthall, who has spent her career at a Level 1 pediatric trauma center.

**KAREN APPOLD** is a journalist based in Lehigh Valley, Pennsylvania.



**Dr. Walthall**

**THE 1ST 30 MINUTES: INITIAL MANAGEMENT OF THE CRITICALLY ILL INFANT**

**Sunday, Oct. 29**
**11:30–11:55 a.m.**
**WCC, Ballroom A**

## Spot a Deadly Case of Back Pain

*By* RICHARD QUINN

A presentation of nontraumautic back pain in the emergency department rarely leads to paralysis or death. But how do you find the case that does?

Rahul Bhat, MD, FACEP, of MedStar Health in Washington, D.C., aims to answer that question during his session, "Nontraumatic Back Pain: Reasons Why It Should Tighten Your Sphincter."

"It's important to identify the key risk factors based on history and physical exam that would prompt imaging in the emergency department to evaluate for a neurosurgical emergency," Dr. Bhat said. "For example, risk factors such as IV drug use or diabetes or dialysis patients might give a physician pause to order additional testing when a patient complains of back pain.

"If they have one or more of these risk factors, then you really do need to do more of a workup for them," Dr. Bhat said. "But if they have no risk factors with a normal physical exam, then imaging is rarely indicated in the emergency department."

Dr. Bhat suggests using a checklist to obtain all high-risk history and exam findings and avoid a haphazard approach. He warns

> **"It's important to identify the key risk factors based on history and physical exam that would prompt imaging in the emergency department "**
> *–Dr. Bhat*

that not systematically checking for risk factors may work out nearly all of the time, but it only takes one mistake.

"It is something you can get lulled into a sense of security because it is so uncommon that something bad actually is there," Dr. Bhat said. "But you'll miss it if you don't have a vigilant approach to this."

**RICHARD QUINN** is a freelance writer in New Jersey.

**Dr. Bhat**

**NONTRAUMATIC BACK PAIN: REASONS WHY IT SHOULD TIGHTEN YOUR SPHINCTER**

**Sunday, Oct. 29**
**12:30–12:55 p.m.**
**WCC, Ballroom B**

## Make Quick Decisions About Airway Management

*By* KAREN APPOLD

Although he'll be speaking on "The Unexpected Difficult Airway: How to Avoid It and How to Manage It," Michael A. Gibbs, MD, FACEP, said the title is actually a misnomer because all emergency department airway cases are difficult by definition. "These patients are never stable; they often have disrupted anatomy and physiology,"

> **"It's important to know what you'll do if your initial plan fails, o you can move smoothly through a case without panic or chaos"**
> *–Dr. Gibbs*

said Dr. Gibbs, who is professor and chair in the department of emergency medicine at Carolinas Medical Center, Carolinas HealthCare System, in Charlotte, North Carolina.

Emergency physicians must make quick decisions on how to best manage these tenuous patients. "My goal is to elevate the bar in understanding the airway assessment, the physiologic consequences of the airway management process, and the tools at our disposal to manage airways during a broad array of clinical circumstances," said Dr. Gibbs, who will offer insight from the latest literature. "I will provide attendees with an approach to assess patients quickly, identify signs of risk, and proceed with confidence and precision."

The key is to assess the patient quickly and to develop a plan as well as a back-up plan. "It's important to know what you'll do if your initial plan fails, so you can move smoothly through a case without panic or chaos," Dr. Gibbs said. "Focus on what decisions you have to make and the basis for those decisions."

Dr. Gibbs, who has spoken on this topic for 20 years, will provide clinically relevant information that is immediately applicable to any practice setting. "It will be fast-paced, so strap on your seat belts!" he said.

**KAREN APPOLD** is a journalist based in Lehigh Valley, Pennsylvania.

**Dr. Gibbs**

**THE UNEXPECTED DIFFICULT AIRWAY: HOW TO AVOID IT AND HOW TO MANAGE IT**

**Sunday, Oct. 29**
**12:30–1:20 p.m.**
**WCC, Room 146B**

## Improve Outcomes for Hypotensive Heart Failure Patients

*by* KAREN APPOLD

Emergency physicians see a high number of hypotensive heart failure patients. In his session, "Catch 22: Treating the Hypotensive Heart Failure Patient," Peter M. DeBlieux, MD, FACEP, chief medical officer of the University Medical Center New Orleans and clinical professor of medicine at Louisiana State University School of Medicine in New Orleans, will provide an easy, common-sense approach to recognizing these patients and managing their acute presentation.

"There are multiple causes for low blood pressure and heart failure," he said. "Using noninvasive mechanical ventilation and echocardiography at the bedside early on can help direct appropriate management, such as balancing fluid removal versus administration of fluids, choosing a type of pressor, or administering an inotrope."

> **"Using non-invasive mechanical ventilation and echocardiography at the bedside early on can help direct appropriate management."**
> *–Dr. DeBlieux*

Specific cases will be examined, such as right heart failure versus left heart failure, volume-depleted congestive heart failure, and cardiogenic shock. Dr. DeBlieux will also review recent literature and current guidelines on inotropic, vasoactive, diuretic, and other agents that optimize the odds for saving these complex, high-risk patients.

Dr. DeBlieux believes his combination of training in emergency medicine and critical care medicine offers unique insight into the management of these cases from the emergency department to the intensive care unit.

**KAREN APPOLD** is a journalist based in Lehigh Valley, Pennsylvania.

**Dr. DeBlieux**

**CATCH 22: TREATING THE HYPOTENSIVE HEART FAILURE PATIENT**

**Sunday, Oct. 29**
**1:30–1:55 p.m.**
**WCC, Ballroom C**

# Don't Miss These innovatED Events

**innovatED offers an unprecedented look at new technology, products, and services available to emergency practitioners. Don't miss these exciting events.**

**SUNDAY**

### In with the Old: Innovations in Palliative and Geriatric ED Care
**9:45–10:15 a.m.**
Location: Palliative and Geriatric Care Area
*Sponsored by VITAS Healthcare, The John A. Hartford Foundation, and West Health Institute*

### Demonstration of Handheld Butterfly iQ™ Ultrasound: Imaging with a Single Wideband Transducer Connected to Your iPhone
**10–10:06 a.m.**
Location: Innovation Spotlight Theater
Presented by Rick Mendez, clinical development lead, Butterfly Network, Inc.
*Sponsored by Butterfly Network, Inc.*

### The mHealth Toolbox Workshop
**10–11:30 a.m.**
Location: mHealth Toolbox Area
Sponsored by mHealth Toolbox

### Creating, Implementing, and Sustaining an Atrial Fibrillation Protocol in the Emergency Department
**10:15–10:21 a.m.**
Location: Innovation Spotlight Theater
Presented by Christopher Baugh, MD, MBA, FACEP, medical director of emergency department, operations and observation medicine, Brigham and Women's Hospital; assistant professor, Harvard Medical School

### Interactive Discussion: Verbal De-Escalation and Calming Techniques in Management of Agitation
**10:15–10:45 a.m.**
Location: Behavioral and Psychiatric Emergencies Area
Presented by Scott Zeller, MD, VP, acute psychiatric medicine, CEP America; assistant clinical professor of psychiatry, University of California, Riverside
*Sponsored by Foundation for Advancing Alcohol Responsibility and Advanced Recovery Systems*

### Hemodynamic Insights in the ED: A Noninvasive Solution
**10:30–10:36 a.m.**
Location: Innovation Spotlight Theater
Presented by James F. Neuenschwander II, MD
*Sponsored by Edwards Lifesciences*

### Demonstration of Handheld Butterfly iQ™ Ultrasound: Imaging with a Single Wideband Transducer Connected to Your iPhone
**10:45–10:51 a.m.**
Location: Innovation Spotlight Theater
Presented by Rick Mendez
*Sponsored by Butterfly Network, Inc.*

### Back to Basics: A SMARTer Psych Assessment for Your Community
**10:45–11:15 a.m.**
Location: Steelcase Health Idea Lounge
Presented by Seth Thomas, MD, FACEP, director of quality and performance, CEP America

### *The Hospital Visit*
**11–11:10 a.m.**
Location: Innovation Spotlight Theater
A short film by Allergan models the treatment of acute bacterial skin and skin structure infection (ABSSSI).
*Sponsored by Allergan*

### Interactive Discussion: Public Safety Unit = Sobering Unit, A Prehospital Diversion Program
**11:00–11:15 a.m.**
Location: Behavioral and Psychiatric Emergencies Area
Presented by David A. Hnatow, MD, FACEP, emergency physician, GSEP; medical director, public safety unit, Restoration Center, Center for Health Care Services
*Sponsored by Foundation for Advancing Alcohol Responsibility and Advanced Recovery Systems*

### How Technology Can Improve Timely and Seamless Care Transitions to Hospice in Your ED
**11:15–11:21 a.m.**
Location: Innovation Spotlight Theater
Presented by Eric Shaban, MD, regional medical director, VITAS Healthcare
*Sponsored by VITAS Healthcare*

### Simulation: Verbal De-Escalation and Calming Techniques in the Management of Agitation
**2:30–3 p.m.**
Location: Behavioral and Psychiatric Emergencies Area
Presented by Scott Zeller, MD, VP, acute psychiatric medicine, CEP America; assistant clinical professor of psychiatry, University of California, Riverside; and Maria Margaglione, actress, coalition on psychiatric emergencies, web and visual communications director, Depression and Bipolar Support Alliance
*Sponsored by Foundation for Advancing Alcohol Responsibility and Advanced Recovery Systems*

### Buprenorphine in the ED: Know This Drug!
**2:45–2:51 p.m.**
Location: Innovation Spotlight Theater
Presented by Eric Ketcham, MD, MBA, FACEP, FACHE, past president, New Mexico Chapter, ACEP; member of ACEP Pain Management Section

### Utility of the Computerized Assessment and Referral System (CARS) Screener for Mental Health Evaluations in the Emergency Setting
**3–3:06 p.m.**
Location: Innovation Spotlight Theater
Presented by Michael Wilson, MD, PhD, FAAEM, FACEP, assistant professor of emergency medicine; director, emergency medicine behavioral emergencies research lab, University of Arkansas for Medical Sciences

### In with the Old: Innovations in Palliative and Geriatric ED Care
**3–3:30 p.m.**
Location: Palliative and Geriatric Care Area
*Sponsored by VITAS Healthcare, The John A. Hartford Foundation and West Health Institute*

### Creating, Implementing and Sustaining an Atrial Fibrillation Protocol in the Emergency Department
**3–3:30 p.m.**
Location: Steelcase Health Idea Lounge
Presented by Christopher Baugh, MD, MBA, FACEP

### NarxCare: Analytics and Insights to Address Substance Use Disorder
**3:15–3:21 p.m.**
Location: Innovation Spotlight Theater
Presented by Jim Huizenga, MD, chief clinical officer, Appriss Health
*Sponsored by Appriss Health*

## TAKE ADVANTAGE OF THE NEMPAC DONOR LOUNGE

NEMPAC is a critical tool in ACEP's government affairs strategy to strengthen our influence on many legislative initiatives impacting the practice and delivery of emergency medical care. NEMPAC activities at ACEP17 will recognize the support of our most generous donors and highlight our agenda for the coming term. Because of ACEP member support, NEMPAC has become one of the top medical PACs in the country and is a respected political voice in Washington, D.C.

## NEMPAC VIP DONOR RECEPTION

**SUNDAY**
**6:30–8:30 p.m.**
***National Museum of American History***
*(by invitation only)*

To show appreciation to NEMPAC's most generous donors, the ACEP President is hosting an invitation-only reception for ACEP members who have donated $600 or more ($60 for residents) in the past year to NEMPAC. Donations are also accepted at the door for admittance.

## NEMPAC "GIVE-A-SHIFT" DONOR LOUNGE

**SUNDAY-TUESDAY**
**8 a.m.–4 p.m.**
***Washington Convention Center***
*(by invitation only)*

ACEP members who have donated at the Give-a-Shift level in the past year are invited to stop by and relax in this private lounge with complimentary breakfast, lunch, snacks, professional neck and shoulder massages, television, and business center amenities. NEMPAC Board members and staff will be on hand to discuss NEMPAC's mission and activities.

NEMPAC
National Emergency Medicine PAC


DARNELL SCOTT

TECHNOLOGY

# WHO'S DRIVING CHANGE AT innovatED?

Somebody has to take charge, lead, come up with something new. You can find many of the trailblazers in the Exhibit Hall at innovatED. This space features products and services that are vetted by a team of emergency physicians and showcased working together in a true-to-life environment. Engage in dialogue with company representatives and experience the current thinking, departmental design solutions, cutting-edge products and services, and best practices driving change in the emergency department. This experience is particularly valuable for those seeking ways to rebuild their emergency medicine services or bring their facility up to speed with new technologies.

Who's driving change in emergency medicine? The people and companies listed here.

## PRESENTING SUPPORTERS

### Allergan
***www.allergan.com***

Allergan plc (NYSE: AGN) is a bold, global pharmaceutical company focused on developing, manufacturing, and commercializing branded pharmaceuticals, devices, and biologic products for patients around the world. Allergan markets leading brands and best-in-class products for the central nervous system, eye care, medical aesthetics and dermatology, gastroenterology, women's health, urology, and anti-infective therapeutic categories. Allergan is an industry leader in Open Science, the company's research and development model, which defines its approach to developing game-changing ideas and innovation for better patient care. This approach has led to Allergan building one of the broadest development pipelines in the industry. For more information, visit Allergan's website at www.Allergan.com.

### Janssen Cardiovascular
***www.janssen.com/cardiovascular-and-metabolism***

Our vision is to improve the lives of the millions of people with cardiovascular disease and diabetes, and to work tirelessly to eliminate these diseases. Every year 19 million people around the world die from cardiovascular and metabolic diseases. This tremendous global burden compels us to develop new therapies that will change the face of these diseases and, ultimately, eliminate them. We focus on finding and developing truly transformational therapies that target underlying disease pathways, important pathways, and novel mechanisms of action. We have a very successful track record demonstrated by the development and recent successful launches of our products for the treatment of patients suffering from thrombosis and type 2 diabetes. And we continue to seek and develop the next generation of transformational cardiovascular and metabolic therapies.

## DIAMOND SUPPORTERS

### Butterfly Network
***www.butterflynetinc.com***

Butterfly Network® develops handheld semiconductor-based ultrasound systems. Butterfly Network's first product, the Butterfly iQ™ for iPhone, is the world's first personal ultrasound system. The Butterfly iQ supports cardiac, abdominal, and superficial imaging with a single wideband transducer connected to your iPhone. Butterfly Network's Ultrasound-on-a-Chip™ technology modernizes ultrasound by delivering unparalleled diagnostic versatility at a price any clinician can afford. Your visual stethoscope has arrived. The Butterfly iQ is currently undergoing premarket review by the U.S. Food and Drug Administration.

### Collective Medical Technologies
***www.collectivemedicaltech.com***

Collective Medical Technologies (CMT) is the leader in collaborative care management and is dedicated to eliminating avoidable risk and friction from care delivery by closing the provider communication gaps that undermine patient care. CMT uses real-time data, risk analytics, notifications, and shared care guidelines to prompt and guide provider decision making. The result is a network of thousands of physicians, nurses, care coordinators, and others who collaborate to collectively deliver better care to patients in every setting. CMT's Edie (aka Pre-Manage ED) is endorsed by ACEP, and ACEP believes it will confer a significant benefit to its members and their patients.

**"We're seeing how the network effects that stem from connecting providers and care managers from disparate organizations across communities enable genuine, honest-to-goodness care collaboration by providers who may not have ever even met one another but who share a common relationship with the patient. These efforts drive meaningful results in terms of rationalized emergency department utilization and inpatient readmissions."**

*–Chris Klomp, CEO, Collective Medical Technologies*

### Genentech
***www.gene.com***

Genentech is a leading biotechnology company that discovers, develops, manufactures and commercializes medicines to treat patients with serious or life-threatening medical conditions. We are among the world's leading biotech companies, with multiple products on the market and a promising development pipeline.

### Stryker
***www.stryker.com***

Stryker's Medical division develops innovative medical equipment focused on improving outcomes for patients and caregivers. Stryker is focused on safety, prevention, and ease of use—bringing caregivers confidence and delivering proven outcomes.

### VITAS Healthcare
***www.vitas.com***

VITAS® Healthcare lengthens the continuum of care and helps families cope with serious illness by providing palliative and hospice consults and care, medical equipment, medications, and supplies. VITAS manages care transitions—hospital to home, curative to palliative, chronic to end-stage—by helping patients remain home in comfort and dignity.

**"VITAS Healthcare, the nation's leading provider of end-of-life care, offers a full spectrum of medical and psychosocial services delivered to patients in their home. A partnership with VITAS can help reduce unnecessary emergency department visits, hospital readmissions and length of stay, and overall health care costs for high-risk patients while improving patient care delivery and satisfaction."**

*–Eric S. Shaban, MD, Regional Medical Director, VITAS Healthcare*

## GOLD SUPPORTERS

Appriss Health

Edwards Lifesciences

Geriatric Emergency Department Collaborative

HKS, Inc.

MedStar Health Simulation Training & Education Lab (SiTEL)

Steelcase Health

Teleflex

# *2017 ACEP Leadership* AWARD WINNERS

Congratulations to the 2017 recipients of the College's most prestigious awards. Some of these winners were recognized at the President's Gala on Saturday night, while others will receive their awards at Section, Council, or Research Forum events.

## John G. Wiegenstein Leadership Award

***Brian F. Keaton, MD, FACEP***

Chief medical information officer, Cleveland Clinic Akron General in Akron, Ohio

## John A. Rupke Legacy Award

***A. Compton Broders, III, MD***

Emergency physician, Dallas/Fort Worth, Texas; chief operating officer, Emergency Medicine Consultants, Ltd.; clinical professor of emergency medicine, University of Texas Southwestern Medical School

## James D. Mills Outstanding Contribution to Emergency Medicine Award

***Wesley A. Curry, MD, FACEP***

CEO Emeritus, CEP America

## Outstanding Contribution in Education Award

***Francis L. Counselman, MD, CPE, FACEP***

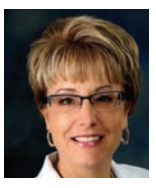
Distinguished professor of emergency medicine and chair of the department of emergency medicine, Eastern Virginia Medical School; partner, Emergency Physicians of Tidewater in Norfolk, Virginia

## Colin C. Rorrie, Jr. Award for Excellence in Health Policy

***Nathan R. Schlicher, MD, JD, FACEP***

Emergency physician at St. Joseph's Medical Center in Tacoma, Washington; regional director of quality assurance for the emergency departments of the Franciscan Health System; and the associate director of the TeamHealth patient safety organization

## Council Meritorious Service Award



***Kelly Gray-Eurom, MD, MMM, FACEP***

Chief quality officer, assistant dean of quality and safety, and professor of emergency medicine, University of Florida College of Medicine–Jacksonville

## Disaster Medical Sciences Award

***Kristi L. Koenig, MD, FACEP, FIFEM, FAEMS***

Professor emeritus of emergency medicine and public health, founding director emeritus of the Center for Disaster Medical Sciences and the international EMS and disaster medical sciences fellowship, University of California at Irvine School of Medicine; and County of San Diego EMS medical director

## Outstanding Contribution in EMS Award (posthumously)

***Salvatore Silvestri, MD, FACEP***

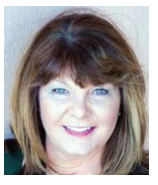
Program director, emergency medicine residency, Orlando Regional Medical Center, Florida; associate medical director, Orange County

## Outstanding Contribution in Research Award

***Edward C. Jauch, MD, MS, FAHA***

Professor and chair, department of emergency medicine, department of medicine, professor, department of neurology, and faculty, college of graduate studies, Medical University of South Carolina; adjunct professor of bioengineering, Clemson University

## Honorary Membership Awards

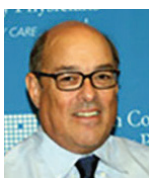


***Patty Stowe, CAE***

Retired from ACEP in 2016 after 43 years and was ACEP's most tenured staff member

***Laura L. Tiberi, CAE***

Executive director, Ohio ACEP



***Gordon Bissell Wheeler***

Retired as associate executive director of the Public Affairs Division/Washington Office of ACEP

Check the **ACEP17 mobile app** for more details on award winners and presentation locations.

# The EM Capital: The ACEP Resource Center

**ACEP is bringing you bigger and better this year at ACEP17!** This one-stop shop for everything ACEP is conveniently located in the Exhibit Hall.

### *Annals of Emergency Medicine*

Find answers from the leading emergency medicine peer-reviewed journal in the ACEP Resource Center during Exhibit Hall hours.

Are you interested in new visual abstracts? See a presentation by *Annals*' social media editor Seth Trueger, MD, MPH, and one of *Annals*' associate editors, Megan Ranney, MD, MPH, at 11 a.m. on Monday.

*Annals*' podcast editor, Rory Spiegel, MD, will also be doing interviews 10–11 a.m. on Tuesday.

### ACEP Bookstore

Check out the variety of emergency medicine titles available for purchase, including the new*PEER IX* Print Companion. Be sure to participate in our booth visitor program for a chance to win one of six valuable prizes. Remember, ACEP members receive special pricing on all products.

Come down for the book signing of the digital edition of *Emergency Department Resuscitation of the Critically Ill, 2nd Edition*. Author Mike Winters, MD, FACEP, FAAEM, will be in the bookstore at 9:45 a.m. on Sunday.

### ACEP Resource Center

Get information on a wide variety of ACEP benefits and services as well as emergency medicine issues. ACEP leaders and staff members will be available to answer your questions, discuss College policy and direction, and provide information on useful and novel products and resources from ACEP.

### ACEP Podcast Recording Booth

New this year! See some of your favorite podcasters in action as they interview some of the biggest names in emergency medicine right on the ACEP17 Exhibit Hall floor.

### ACEP Wellness Center

This year, the ACEP17 Wellness Center will offer a multimodal approach for our members to cultivate and maintain their personal and mental health. Go to page 8 to see all the exciting events offered at the Wellness Center.

## EMF ADVANCES EM RESEARCH

The Emergency Medicine Foundation (EMF) is the charity of emergency physicians. Founded in 1972 by visionary leaders of ACEP, EMF invests its funds to further emergency medicine research and education. To date, EMF has awarded more than $12 million in research grants to advance emergency medicine, science, and health policy. EMF's mission is to promote education and research that develops career emergency medicine researchers, improves patient care, and provides the basis for effective health policy. Because of its generous donors, EMF awards more than $600,000 in emergency medicine grants each year.

**Making Wine, Music, and Memories**
**EMF Reception**
**Sunday, 6–8 p.m., Long View Gallery**
*(by invitation or ticket purchase)*

Complimentary tickets for EMF's $1,200-plus donors and Wiegenstein Legacy Society members. Join loyal major donors, EMF and ACEP leaders, dedicated physician groups, and committed companies invested in emergency medicine at this annual invitation-only, exclusive event.

**EMF Major Donor Lounge**
**Sunday–Tuesday, 7 a.m.–4 p.m.**
**Capitol, Meeting Level 4, Marriott Marquis**
*(by invitation only)*

EMF donors who have given $600 or more since Jan. 1, 2017, and Wiegenstein Legacy Society members can relax in this private setting with comfortable seating, meals, beverages, and business center amenities.

**EMF Silent Auction**
**Sunday–Tuesday, 8 a.m.–5 p.m.**

One-of-a-kind experiences; sports, music, and celebrity memorabilia; art; jewelry; hotel packages; and more. Bid, buy, and support EMF to make a lasting impact on emergency medicine.

## USE THE ACEP17 MOBILE APP

**Maximize your experience!** The app is available in the iOS App Store and the Google Play store. Use your login credentials from your ACEP17 registration to get schedules, syllabi, surveys, and so much more.


# Integrate the Science with the Education at ACEP's Research Forum

**THIS YEAR'S THREE-DAY ELECTRONIC SHOWCASE** is larger than ever and has been integrated throughout ACEP17.

- Research Forum abstracts will be available to view near the course rooms and arranged by subject to enhance your learning experience.
- View and discuss original research that will impact your daily practice on the topics and issues that matter most to you and your patients.
- Learn from a panel of experts during "Prime-Time Practice Changers: Highlights of the Research Forum" on Tuesday and interact with researchers during the Wine and Cheese Networking Social on Monday.

### New at Research Forum!

GE Healthcare and the Emergency Medicine Foundation have partnered on a global initiative to support research in breakthrough applications of POCUS: first, among patients in shock and/or trauma and, second, in innovation in the use of ventilator technology. Four $50,000 grants (plus equipment) were recently awarded and those projects will be featured at Tuesday's luncheon and throughout ACEP17. Signage around the event features a QR code that allows members to vote for their favorite research concept. The winner will earn an additional $150,000 grant to expand the scope of their project.

**SUNDAY SCHEDULE**

*For a full listing of presentations, see the ACEP17 mobile app or pages 33–50 in the onsite program. All events take place at the WCC.*

### Electronic Presentations

**9–9:50 a.m.**

- Administration/Practice Management
  Room 154A
- Airway
  Room 154B
- Critical Care
  Room 155
- Disaster Medical/EMS
  Room 159A
- Cardiovascular
  Room 159B

**10–10:50 a.m.**

- Administration/Practice Management
  Room 154A
- Diagnostics
  Room 154B
- Gastrointestinal
  Room 154B
- Critical Care
  Room 155
- Disaster Medical/EMS
  Room 159A
- Cardiovascular
  Room 159B

**11–11:50 a.m.**

- Administration/Practice Management
  Room 154A
- Education
  Room 154B
- Wellness/Well-Being
  Room 154B
- Critical Care
  Room 155
- Disaster Medical/EMS
  Room 159A
- Cardiovascular
  Room 159B

### Awards Luncheon

**Noon–1 p.m.**
Room 149AB

### State-of-the Art: Clinical Guidelines: From Emergency Care Research to Bedside

**1–1:50 p.m.**
Room 149AB

### Plenary: Late-Breakers—Narrative Abstract That Excludes Specific Data

**2–2:50 p.m.**
Room 149AB

### Electronic Presentations

**3–3:50 p.m.**

- Administration/Practice Management
  Room 159A
- Education
  Room 154B
- Critical Care
  Room 155
- Disaster Medical/EMS
  Room 159A
- Wilderness Medicine
  Room 159A
- Informatics
  Room 159B

**4–4:50 p.m.**

- Administration/Practice Management
  Room 154A
- Education
  Room 154B
- Infectious Diseases
  Room 155
- Simulation
  Room 159A
- International/Global
  Room 159B

# Focus On Your Career with EMRA

**The Emergency Medicine Residents Association (EMRA)** is kicking off ACEP17 with activities to help you reach the next stage in your emergency medicine career. EMRA events come at no charge to residents and medical students.

**SUNDAY**

**EMRA Job and Fellowship Fair**

5–7 p.m.

Find your ideal job at the largest recruiting event in emergency medicine. More than 150 companies will showcase their career opportunities.

## *Thank You to Our EMRA Underwriters*

The leadership and members of EMRA extend sincere appreciation to our gracious supporters who have helped to underwrite the costs of the EMRA events at ACEP17. EMRA could not accomplish all that it does without their generous support.

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## LONG-TIME ACEP MEMBER PHOTOGRAPHY FEATURED IN SMITHSONIAN EXHIBITION

Emergency physicians do more than save lives! Long-time ACEP member (since 1991) Jeff Gusky, MD, FACEP, is also a *National Geographic* photographer featured in an 18-month exhibition at the Smithsonian's National Air and Space Museum. Dr. Gusky's work is featured in "Artist Soldiers: Artistic Expression in the First World War." The exhibition explores the WWI experience through the art of soldiers, allowing us to examine the tangle of events and emotions through their eyes.

Dr. Gusky's photography in the exhibition is of stone carvings made by soldiers in underground quarters in the trenches. His exploration of the trenches and refuges over many years has created a record of previously lost or unknown soldiers' experiences in WWI.

Check out Dr. Gusky's work, along with many more incredible pieces, at the National Air and Space Museum. See the Smithsonian website, **airandspace.si.edu**, for more details.

## THANK YOU, ACEP CORPORATE SUPPORTERS

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