

Top 20 Research Studies of 2025 for Primary Care Physicians

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This article summarizes the top 20 research studies of 2025 identified as POEMs (patient-oriented evidence that matters). Treating male sex partners of female patients with oral and topical medication reduces recurrence of bacterial vaginosis. Anti-influenza drugs do not reduce hospitalizations or mortality. COVID-19 vaccines still improve mortality and reduce hospitalizations. Influenza vaccines are safe in pregnancy. Vaginal estrogen appears to be safe in breast cancer survivors. Women with normal bone density given zoledronic acid every 5 years have fewer fractures. Early postpartum insertion of a long-acting reversible contraceptive is associated with fewer pregnancies vs delayed insertion. Early medication abortion before pregnancy confirmation is safe and effective. After stent placement in patients with atherosclerotic coronary vascular disease who are taking an anticoagulant, adding aspirin worsens outcomes. After catheter ablation for atrial fibrillation, discontinuing anticoagulants after 1 year is safe if atrial arrhythmia does not recur, whereas left atrial appendage closure is superior to oral anticoagulation. For patients with provoked venous thromboembolism and at least one ongoing risk factor, 12 months of apixaban is better than 3 months. Clopidogrel is slightly more effective than aspirin for the secondary prevention of myocardial infarction and stroke over 3 years. Intensive blood pressure lowering decreases cardiovascular events but increases rates of hypotension and syncope, and there are concerns about the applicability of the data to the United States. Duloxetine, milnacipran, and pregabalin provide meaningful pain reduction in adults with fibromyalgia. Amyloid-directed monoclonal antibodies do not provide clinically meaningful cognitive benefits and may cause harms. Bright light therapy is effective for nonseasonal depression. Water exposure 6 hours after cutaneous surgery does not increase the risk of complications. A meta-analysis of platelet-rich plasma injections for knee osteoarthritis concluded that high-quality studies found no meaningful pain improvement. Using an oral challenge to rule out sulfonamide allergy is safe when used with a risk assessment tool.

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For more than 25 years, a team of six clinicians has reviewed more than 100 clinical medical journals monthly to identify studies that are most likely to change primary care practice for the better. The team includes experts in family medicine, pharmacy, hospital medicine, and women's health.

The goal of this process is to identify POEMs (patient-oriented evidence that matters). To qualify as a POEM, the study should report at least one patient-oriented outcome,

defined as improvement in outcomes that matter to patients, such as morbidity, mortality, symptoms, or quality of life. This contrasts with disease-oriented evidence, which describes results such as changes in laboratory values, imaging studies, or other parameters that do not inherently reflect patient-oriented improvements. The study should be free of biases that threaten the validity of the results.^{1,2} The word “matters” in POEM also means that the results would change what many primary care physicians do by encouraging the adoption of a new practice or discontinuing an old one. Each year, more than 20,000 research studies are reviewed by the POEMs team, but in 2025, only 260 met the inclusion criteria. All new POEMs are emailed to subscribers of *Essential Evidence Plus* (Wiley-Blackwell, Inc), and a selection appears in *American Family Physician* (AFP; available at <https://www.aafp.org/tag/collection/aafp-departments/poems>).

To choose the top 20 POEMs of 2025, each member of the POEMs team identified the most relevant studies from among those they summarized, yielding 52 candidate POEMs. These six authors, supplemented by Dr. Grad, three AFP editors (Drs. Sumi Sexton, Kenny Lin, and Jay Siwek) and three additional experienced primary care physicians (Drs. Kate Rowland, Gary Ferenchick, and Brian Rayala) then ranked each POEM from

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TABLE 1

Infections

Clinical question	Bottom-line answer
Does treatment of the male sex partner reduce the likelihood of recurrent bacterial vaginosis in women? ²³	Oral and topical treatment of male sex partners of female patients with bacterial vaginosis reduces recurrence. Treating male sex partners of women with bacterial vaginosis with oral metronidazole and topical clindamycin decreased the likelihood of recurrence (number needed to treat = 3). Ensuring adherence to the regimen is key; these results were achieved despite only 47 of 80 male partners being at least 70% adherent to the protocol.
How effective are anti-influenza drugs for patients with influenza? ²⁴	Anti-influenza drugs have no effect on mortality or hospitalization and reduce the duration of symptoms by 24 hours or less. Oseltamivir and baloxavir marboxil (Xofluza) do not reduce hospitalization or mortality for patients with low risk, high risk, or severe influenza. They also have only a small effect on the duration of symptoms (about 1 day less for baloxavir marboxil and 0.75 days for oseltamivir).
In the era of Omicron, previous vaccinations, and previous infections, do COVID-19 vaccines still provide a clinically important benefit? ²⁵	COVID-19 vaccines still reduce emergency department visits, hospitalizations, and mortality. COVID-19 vaccines remained effective at reducing emergency department visits, hospitalizations, and deaths in this high-quality observational study. Vaccine effectiveness is similar to earlier randomized trials, with a 39% reduction in hospitalization and a 64% reduction in mortality.

Information from references 3-5.

1 to 5 for relevance to the practice of a typical full-spectrum primary care physician in the United States or Canada. The 20 highest ranked studies are the focus of this article, the 15th annual installment of the top 20 POEMs. The full POEM summaries from this article are available at <https://www.aafp.org/toppoems2025>. A collection of the annual top 20 research articles from 2011 to 2024 is available at <https://www.aafp.org/afp/collections/top-poems/>. This page also has links to the full text of POEMs for each year.

INFECTIONS

The highest rated POEM overall was a study of the common infection bacterial vaginosis³ (Table 1³⁻⁵). Researchers randomized 164 male-female dyads to topical and oral treatment of the male sex partner or usual care. Treating the male partner led to a large and statistically significant reduction in the rate of bacterial vaginosis recurrence (35% vs 63%; number needed to treat [NNT] = 3). This long-standing controversy now appears to be settled, with the key being both topical and oral treatment of male sex partners.

Several previous meta-analyses have reviewed medications for influenza.^{6,7} The second POEM in this category is an updated meta-analysis that included 73 randomized controlled trials (RCTs), of which 19 were never published because the results were presumably not favorable enough.⁴ The authors concluded that oseltamivir and baloxavir marboxil (Xofluza) reduced the

duration of symptoms by at most an average of 1 day, but neither drug significantly reduced mortality or hospitalization for patients with low risk, high risk, or severe influenza.⁴ Oseltamivir was also associated with significantly more treatment-related adverse events (28 more per 1,000 patients; 95% CI, 12-48) than patients given placebo or usual care.⁴

The US Centers for Disease Control and Prevention estimates that between October 2024 and September 2025, COVID-19 led to 4.1 million outpatient visits, 470,000 hospitalizations, and 54,000 deaths (about as many as a severe influenza season).⁸ The next POEM compared outcomes for 164,132 veterans who received both the COVID-19 and influenza vaccines with a second group of 131,839 veterans who received only the influenza vaccine during the same time period.⁵ The researchers adjusted for demographics, comorbidities, health care use, and other factors associated with vaccine uptake. The relative risks were substantially lower and statistically significant for decreases in emergency department visits (0.71), hospitalizations (0.61), and mortality (0.36). The absolute risk reduction was 18.3 fewer per 10,000 persons for emergency department visits, 7.5 fewer per 10,000 persons for hospitalization, and 2.2 fewer per 10,000 for mortality.⁵

WOMEN'S HEALTH

Another POEM reported on a cohort study of 174,000 Korean mothers vaccinated for influenza during pregnancy⁹

TABLE 2

Women's Health

Clinical question	Bottom-line answer
What adverse effects are associated with influenza vaccine administration during pregnancy? ⁹	There is no association between influenza vaccination and most maternal or neonatal adverse outcomes. In this large cohort study conducted during the COVID-19 pandemic, influenza vaccine administration during pregnancy was not associated with preeclampsia, antenatal bleeding, or other disorders in mothers or prematurity, low birth weight, congenital defects, or mortality in their children. There were small increases in gestational diabetes in the mothers and lower rates of respiratory infection in newborns, which may not be clinically relevant.
In women with normal bone density or osteopenia, does zoledronic acid (Reclast) given at baseline and 5 years later reduce fracture risk over 10 years? ¹⁰	Zoledronic acid given twice, 5 years apart, to women with normal bone density or osteopenia reduces fracture risk (number needed to treat = 9 over 10 years). Zoledronic acid is normally given annually for the prevention of osteoporotic fractures in adults with increased fracture risk. This study showed a clinically and statistically meaningful benefit in younger postmenopausal women with lower risk even when given only once, with some added benefit if repeated 5 years later.
Is the use of vaginal estrogen in breast cancer survivors associated with increased recurrence or mortality? ¹¹	Topical vaginal estrogen is not associated with increased risk in breast cancer survivors. This meta-analysis of observational studies of female breast cancer survivors showed no increase in the incidence of breast cancer recurrence, breast cancer-specific mortality, or overall mortality with the use of topical vaginal estrogen. The use of topical vaginal estrogen was associated with better outcomes for breast cancer recurrence and overall mortality. There may have been a healthy volunteer effect among estrogen users.
Does insertion of a long-acting reversible contraceptive before postpartum hospital discharge reduce pregnancy rates more than delayed insertion? ¹²	Early postpartum insertion of a long-acting reversible contraceptive is associated with fewer pregnancies. This meta-analysis of randomized controlled trials showed that immediate (before postpartum discharge) insertion of a long-acting reversible contraceptive is associated with improved continuation rates and fewer pregnancies at 6 months. On subgroup analysis, implants but not intrauterine devices were associated with reduced pregnancy rate. The expulsion rate of intrauterine devices was higher among patients who had immediate insertion after vaginal delivery.
Is medication abortion before confirmation of an intrauterine pregnancy safe and effective? ¹³	Early medication abortion before pregnancy confirmation is safe and effective. Early medication abortion was as effective as delaying treatment until confirmation of intrauterine pregnancy with respect to complete abortion. The reason for failed abortion differed between the groups, with ongoing pregnancy more likely in the early group and surgical intervention needed more often in the standard care group.

Information from references 9-13.

(Table 2⁹⁻¹³). Influenza vaccination during pregnancy was safe and not associated with adverse outcomes among mothers or their children apart from very small increases in gestational diabetes in mothers and fewer respiratory infections in newborns.⁹

For primary prevention, bisphosphonates may reduce hip and clinical vertebral fractures in postmenopausal women. An RCT tested the effect of intravenous zoledronic acid (Reclast). The participants had a mean age of 56 years and mean T-scores of

−0.36 to −0.55, and 85% had European ancestry. The effect of this drug was compared with placebo after one or two doses, with the second given 5 years after the first. No other interventions such as vitamin D or calcium were offered. Women who received zoledronic acid had fewer fractures overall (25% vs 35%; NNT = 10) and fewer fragility fractures (20% vs 28%; NNT = 12).¹⁰ According to these data, zoledronic acid may not be needed every year. The data may also support offering it to

TABLE 3

Cardiovascular Disease

Clinical question	Bottom-line answer
For patients with atherosclerotic cardiovascular disease with a stent, who have high residual atherosclerotic risk and an indication for anticoagulation, is aspirin plus anticoagulation preferred vs anticoagulation alone? ¹⁴	After stent placement for patients with atherosclerotic cardiovascular disease who are taking an anticoagulant, adding aspirin worsens outcomes. This high-quality trial should end the practice of adding supplemental aspirin for patients with atherosclerotic cardiovascular disease and atrial fibrillation who are taking an anticoagulant. Even in this high-risk population, adding aspirin for only more than 2 years increased mortality (NNH = 20) vs anticoagulation alone, mainly by increasing the risk of major bleeding (NNH = 15).
Is it safe to discontinue oral anticoagulation therapy after 1 year in adults without recurrence of atrial arrhythmia following catheter ablation for atrial fibrillation? ¹⁵	Discontinuing anticoagulation therapy after catheter ablation for atrial fibrillation is safe if atrial arrhythmia does not recur after 1 year. This study found that discontinuing oral anticoagulation therapy in adults at intermediate or high risk of thromboembolism (CHA₂DS₂-VASc score 1-3) without recurrent atrial arrhythmia 1 year after catheter ablation for atrial fibrillation results in a lower risk of stroke, systemic embolism, and major bleeding compared with continuing anticoagulation therapy (NNT = 53 over 2 years).
For patients who have undergone catheter ablation for atrial fibrillation, is left atrial appendage closure with a device superior to oral anticoagulation? ¹⁶	After ablation for atrial fibrillation, left atrial appendage closure is superior to oral anticoagulation. Following catheter ablation for atrial fibrillation, implantation of a device that occludes the left atrial appendage obviates the need for oral anticoagulation after 3 months and reduces the risk of nonmajor bleeding (NNT = 10) while being noninferior for mortality and vascular events. The device company estimates the out-of-pocket costs of device implantation for a Medicare patient at \$2,600.Z
For patients with a provoked episode of venous thromboembolism and at least one ongoing risk factor, is 12 months of apixaban (Eliquis) better than 3 months? ¹⁷	For patients with provoked venous thromboembolism and at least one ongoing risk factor, 12 months of apixaban is better than 3 months. For patients with a provoked venous thromboembolism and at least one ongoing risk factor (ie, obesity, chronic lung disease, or chronic inflammatory disease), 12 months of apixaban, 2.5 mg twice daily reduced recurrent venous thromboembolism compared with only 3 months of treatment (NNT = 11).

continues ►

CHA₂DS₂-VASc = congestive heart failure; hypertension; age of at least 75 years (doubled); diabetes; previous stroke, transient ischemic attack, or thromboembolism (doubled); vascular disease; age 65 to 74 years; sex category; NNH = number needed to harm; NNT = number needed to treat.

younger postmenopausal women with osteopenia (as opposed to offering preventive treatment only to older women at higher risk).¹⁰

Vaginal estrogen after menopause improves dryness, itching, and painful intercourse. A systematic review and meta-analysis of observational studies found no increase in the rate of breast cancer recurrence, breast cancer-specific mortality, or all-cause mortality among breast cancer survivors who used topical vaginal estrogen. The results of observational studies, however, can be confounded by the healthy user phenomenon, demonstrated in this study by topical vaginal estrogen being associated with better outcomes for breast cancer recurrence and overall mortality.¹¹

A meta-analysis of RCTs found that compared with insertion at 4 to 12 weeks after birth, immediate insertion of a contraceptive implant or intrauterine device before postpartum discharge was associated with higher continuation rates and fewer pregnancies. Four studies reported on pregnancy within 6 months, which also favored immediate insertion. On subgroup analysis, the reduction was found for implants but not intrauterine devices.¹² The expulsion rate of intrauterine devices was higher among patients who had immediate insertion after vaginal delivery.

The combination of mifepristone and misoprostol is highly effective and safe for abortion once intrauterine pregnancy is confirmed. However, there is insufficient evidence on its

TABLE 3 (continued)**Cardiovascular Disease**

Clinical question	Bottom-line answer
Is clopidogrel more effective than aspirin for the secondary prevention of cardiovascular and cerebrovascular events? ¹⁸	Clopidogrel is slightly more effective than aspirin for the secondary prevention of cardio- and cerebrovascular events. Based on this analysis of pooled individual participant data, clopidogrel is slightly more effective than aspirin in the secondary prevention of major cardiovascular and cerebrovascular events without increasing the risk of major bleeding. The main difference was in lower rates of subsequent myocardial infarction (NNT = 358) and stroke of any etiology (NNT = 667) over 2.3 years.
What are the benefits and harms from intensive blood pressure lowering? ¹⁹	Intensive blood pressure lowering decreases cardiovascular events (NNT = 58) but increases hypotension and syncope (NNH = 55). This meta-analysis of six trials with more than 80,000 adults concluded that the cardiovascular benefits of intensive therapy outweigh the harms. Although the rate of cardiovascular events was lower in the intensively controlled group (NNT = 58 over 3.2 years), hypotension and syncope occurred more often (7.2% vs 5.4%; NNH = 56 over 3.2 years), especially in adults 65 years or older. More than 80% of the data are from studies where harms reporting seems less complete, including 43% from a trial in small Chinese villages where the usual care group had poorly controlled systolic blood pressure (156 mm Hg).

CHA₂DS₂-VASc = congestive heart failure; hypertension; age of at least 75 years (doubled); diabetes; previous stroke, transient ischemic attack, or thromboembolism (doubled); vascular disease; age 65 to 74 years; sex category; NNH = number needed to harm; NNT = number needed to treat.

Information from references 14-20.

effectiveness and safety before a pregnancy can be visualized with ultrasonography. The fear of mistreating an undetected ectopic pregnancy also gives pause to some clinicians who may be asked to provide medication abortion very early in pregnancy. An RCT compared early medication abortion against a standard care group for the primary outcome of complete abortion at 26 sites across nine countries, mostly in Europe. Women with an intrauterine device, previous ectopic pregnancy, or symptoms of ectopic pregnancy were excluded. To be included, the women had to have an empty sac or a sac-like structure without an embryonic pole or yolk sac on vaginal ultrasonography. They were then randomized to receive early medication abortion immediately after enrollment or standard medication abortion after confirmation of their pregnancy via repeat ultrasonography. Nearly identical rates of complete abortion occurred in both groups at about 95%.¹³ Surgical intervention to complete the abortion was less common in the early abortion group (1.8% vs. 4.5%; NNT = 37), although ongoing pregnancy was more common (3.0% vs. 0.1%; NNT = 34).¹³

CARDIOVASCULAR DISEASE

Six of the POEMs addressed cardiovascular diseases, with four answering questions about anticoagulation (Table 3¹⁴⁻²⁰). The first POEM randomized 872 patients with atherosclerotic cardiovascular disease who also had an indication for

anticoagulation to oral anticoagulation plus aspirin or to oral anticoagulation alone.¹⁴ The indication was atrial fibrillation for 89%, with 62% receiving apixaban (Eliquis) and 25% receiving rivaroxaban (Xarelto). After a median follow-up of 2.2 years, the trial was stopped early because of a clinically and statistically significant increase in all-cause mortality in the aspirin group (13.4% vs 8.4%; number needed to harm [NNH] = 20) and a large increase in major bleeding (10.2% vs 3.4%; NNH = 15) with no reduction in thrombotic or cardiovascular events.¹⁴ Another study found similar results when comparing edoxaban (Savaysa) plus aspirin with edoxaban alone in patients with comorbid heart disease and atrial fibrillation.²¹

The second cardiovascular POEM identified 840 patients who had successful catheter ablation for atrial fibrillation at least 1 year earlier with no recurrence. Patients were randomized to another 2 years of anticoagulation or to stopping the anticoagulant.¹⁵ The primary outcome of a composite of stroke, systemic embolism, and major bleeding occurred significantly less often in the group that stopped oral anticoagulation (0.3% vs 2.2%; NNT = 53 over 2 years).

The next POEM looked at atrial appendage closure in 1,600 adults with an increased clotting risk based on their CHA₂DS₂-VASc (congestive heart failure; hypertension; age of at least 75 years [doubled]; diabetes; previous stroke, transient ischemic

attack, or thromboembolism [doubled]; vascular disease; age 65 to 74 years; sex category) score.¹⁶ Patients were randomized to implantation of the left atrial appendage closure device (Watchman FLX) or oral anticoagulation. The device group received 3 months of oral anticoagulation plus aspirin, and then aspirin alone for the next 9 months. At 36 months, there were significantly more clinically relevant major or nonmajor bleeds in the anticoagulation group (18.1% vs 8.5%, NNH = 10 over 3 years).¹⁶ Left atrial appendage closure was noninferior to oral anticoagulation for the composite efficacy outcome of death, stroke, or systemic embolism and for major bleeding events. Taken together these studies support a reduced role for postprocedure anticoagulation for the management of atrial fibrillation.

The fourth cardiovascular POEM had a contrasting conclusion regarding patients with provoked venous thromboembolism and at least one ongoing risk factor. The authors identified 600 adults with an episode of venous thromboembolism provoked by major surgery, acute illness, or immobility.¹⁷ Participants also had at least one persistent risk factor for venous thromboembolism, such as body mass index of at least 30 kg/m², chronic inflammatory disease, or chronic lung disease. After 3 months of anticoagulation, they were randomized to apixaban, 2.5 mg twice daily, or matching placebo for the next 9 months. After 1 year, recurrent venous thromboembolism was significantly less likely in the apixaban group (1.3% vs 10.0%; NNT = 11).¹⁷ Major bleeding was rare in both groups.

The balance of benefits and harms of clopidogrel vs aspirin has been uncertain for many years. A systemic review and meta-analysis pooled individual patient data from seven trials, randomizing 28,982 participants with established atherosclerotic cardiovascular disease to clopidogrel or aspirin.¹⁸ Studies had a median follow-up of 2.3 years. Clopidogrel was more effective than aspirin for myocardial infarction (NNT = 358) and stroke (NNT = 667) but not cardiovascular death.¹⁸ Still, these benefits are a reason to pick clopidogrel instead of aspirin for patients with established atherosclerotic cardiovascular disease.

The balance of benefits and harms for intensive blood pressure targets remains controversial.²² The final cardiovascular POEM is a meta-analysis of six RCTs with 80,220 participants followed for a median of 3.2 years.¹⁹ The rate of cardiovascular events was lower in the intensively controlled participants than in the standard control group (5.3% vs 7.1%; NNT = 58 over 3.2 years), but hypotension and syncope occurred more often (7.2% vs 5.4%; NNH = 56 over 3.2 years), especially in adults

TABLE 4

Neurology

Clinical question	Bottom-line answer
What are the most effective medications for providing meaningful pain relief in adults with fibromyalgia? ²²	Moderate- to good-quality evidence indicates that duloxetine, milnacipran (Savella), and pregabalin provide meaningful pain reduction in adults with fibromyalgia. In this synthesis of 21 Cochrane reviews, the authors found moderate- to good-quality evidence that duloxetine, milnacipran, and pregabalin were each effective in providing meaningful pain relief at 4 to 12 weeks. Data on long-term effectiveness are lacking.
Are amyloid-directed monoclonal antibodies effective and safe in improving cognition in adults with mild cognitive impairment or Alzheimer disease? ²³	Amyloid-directed monoclonal antibodies provide no clinically meaningful cognitive benefits at the risk of clinically important harms. This meta-analysis demonstrates (as do previous studies) that amyloid-directed monoclonal antibodies have clinically insignificant effects on various scales that measure cognition. These minimal improvements come at serious physical and economic costs.

Information from references 23 and 24.

65 years or older. Notably, 83% of the data in this analysis came from studies in China, including 43% from a cluster randomized trial in rural Chinese villages, making generalizability to the United States questionable. In the latter study, the final systolic blood pressure values were 126 mm Hg vs 156 mm Hg, in effect comparing intensive therapy with inadequate therapy. Shared decision-making can balance the harms and burdens of more intensive control with more medications vs usual blood pressure targets.

NEUROLOGY

The next top POEM is from a review of 21 Cochrane reviews (Table 4^{23,24}). Based on good-quality evidence, duloxetine, milnacipran (Savella), and pregabalin provide meaningful pain relief at 4 to 12 weeks in patients with fibromyalgia. The authors found no efficacy data beyond 6 months. The frequency of serious adverse effects was no different than placebo.²³

A meta-analysis of 13 RCTs looked at the effect of amyloid-targeting monoclonal antibodies vs placebo in 18,826 adults with Alzheimer disease or mild cognitive impairment. On various cognition scales, the monoclonal antibodies were superior to placebo, but effect sizes were trivial compared with the risk of harm from adverse effects.²⁴ Last year, we reported on a POEM about a similar meta-analysis that came to the same conclusion.²⁵

TABLE 5

Miscellaneous

Clinical question	Bottom-line answer
Is bright light therapy an effective treatment for adults with nonseasonal depressive disorders? ²⁵	Bright light therapy is effective for nonseasonal depressive disorders. A previous review found moderate-quality evidence that supports the effectiveness of bright light therapy for the treatment of nonseasonal depressive disorders.²⁶ An updated meta-analysis of 11 trials published since 2000 found additional evidence to support the benefit of bright light therapy as an effective primary or adjunctive treatment for adults with nonseasonal depressive disorders.
Are platelet-rich plasma injections effective in improving pain or function in adults with degenerative joint disease of the knee? ²⁷	A high-quality meta-analysis of platelet-rich plasma injections for knee osteoarthritis concluded that there is no meaningful pain improvement. This meta-analysis of randomized trials found that most studies of platelet-rich plasma injections in adults with degenerative joint disease of the knee are not of high methodologic quality. Although overall the studies suggest that platelet-rich plasma injections improve pain and function, the high-quality studies demonstrated no significant pain reduction and showed improved function only after 12 months of follow-up. The authors provided no data on adverse events.
Is water exposure safe 6 hours after cutaneous surgical treatment of benign and malignant lesions, including standard excisional surgery and Mohs surgery with immediate reconstruction? ²⁸	Water exposure 6 hours after cutaneous surgery does not increase the risk of complications. This study found that early water exposure, as soon as 6 hours after cutaneous surgery of dermatologic lesions, did not increase the risk of infection or bleeding compared with standard instructions to keep wound dressing dry for 48 hours. In addition, scar quality at 6 months was similar in both treatment groups.
Is an oral challenge safe and accessible for identifying an erroneous sulfonamide allergy label in adults? ²⁹	An oral challenge is safe when used with a risk assessment tool to remove an erroneous sulfonamide allergy label. This study identified 104 adults who were initially labeled as having a sulfonamide allergy with a low risk of a true allergy. A total of 100 patients completed the oral challenge with no reactions, resulting in the removal of the erroneous allergy label. Four patients had reactions, which were all mild and required minimal intervention. Clinicians can use this the same questions in the PEN-FAST tool (https://www.mdcalc.com/calc/10422/penicillin-allergy-decision-rule-pen-fast) to identify adults who are incorrectly labeled as having a sulfonamide allergy.

Information from references 26-30.

MISCELLANEOUS

Four of the top POEMs did not fit into a specific category (Table 5²⁶⁻³⁰). We know that many people with a depressive disorder do not respond to antidepressants. Others do not want pharmacotherapy. Although cognitive behavior therapy and other talk therapies can be helpful, the cost and time commitment of these interventions limit uptake. Bright light therapy is a convenient and relatively inexpensive option. This treatment involves using a fluorescent light box producing 10,000 lux white light for at least 30 minutes daily. Based on a meta-analysis of 11 RCTs involving 858 patients, bright light therapy improved remission (41% vs 23%; NNT = 6) and response (60% vs 39%; NNT = 5) rates.²⁶

A meta-analysis of RCTs examined the effect of platelet-rich plasma injection vs placebo on physical function and pain in adults with degenerative joint disease in the knee. The analysis included 1,995 participants from 18 trials, but only seven of these trials were high quality (at low risk of bias). No improvement in pain from platelet-rich plasma injection compared with placebo was found in the high-quality studies. Improvement in physical function was seen but only at 12 months following the injection. Although the authors said they extracted data on adverse effects, they did not report any. Many guidelines do not routinely recommend this treatment.²⁸

Patients have traditionally been asked to keep postoperative dressings dry for 24 to 72 hours following cutaneous surgery.

TABLE 6

Guidelines

Clinical question	Bottom-line answer
What are the benefits and harms of medications for adults with type 2 diabetes who have varied risks of cardiovascular and kidney-related complications? ³⁰	Guidelines suggest new diabetes medicine choices based on cardiovascular and chronic kidney disease risk. This British guideline continues the trend of questioning whether blood glucose control has been overemphasized in the treatment of diabetes. It suggests using the newer classes of medicines for type 2 diabetes solely based on risk of cardiovascular disease and chronic kidney disease. According to the guidelines, sodium-glucose cotransporter-2 inhibitors or glucagon-like peptide-1 agonists should not be used in patients with low risk, should be considered in patients with moderate risk, and are strongly recommended in patients with high risk. The MATCH-IT tool can be used to quickly apply these data at the point of care (https://matchit.magicevidence.org/250709dist-diabetes/#!/).
What is the role of newer medications for type 2 diabetes? ³¹	The American College of Physicians de-emphasizes blood glucose control and suggest new treatments for type 2 diabetes. The American College of Physicians reaffirms an A1C goal of 7%-8% for most people with type 2 diabetes. Rather than focusing solely on blood glucose control, they also suggest an early addition of newer treatments such as a sodium-glucose cotransporter-2 inhibitor (eg, dapagliflozin [Farxiga], empagliflozin [Jardiance]) or glucagon-like peptide-1 agonist (eg, liraglutide [Victoza], semaglutide [Ozempic]) for most patients due to demonstrated benefit on morbidity and mortality. The choice of treatment should be based on comorbidity.
Should steroids be administered to hospitalized patients with sepsis, acute respiratory distress syndrome, or community-acquired pneumonia? ³²	Updated guidelines from the Society of Critical Care Medicine strongly recommend steroids for hospitalized adults with severe community-acquired pneumonia. This updated guideline strongly recommends the administration of steroids for adult patients who are hospitalized with severe community-acquired pneumonia. Conditional recommendations also suggest the use of steroids for hospitalized adults with septic shock or acute respiratory distress syndrome.

Information from references 31-33.

New evidence suggests this is much too long. Adults 18 years or older who underwent surgical treatment of benign or malignant lesions were randomly assigned to early water exposure (ie, removing the dressing after 6 hours and wetting the wound for at least 10 minutes) or a control group advised to keep the dressing dry for 48 hours. No group differences were found in the rate of postoperative infection, defined by a positive wound culture, or in the rate of bruising or hematoma. After 6 months, scar quality was similar in both groups.²⁹

Many patients report being allergic to sulfa antibiotics. In one POEM, 125 people initially labeled as having a sulfonamide allergy completed the SULF-FAST tool, which consists of the same questions as the PEN-FAST tool (<https://www.mdcalc.com/calc/10422/penicillin-allergy-decision-rule-pen-fast>). Of these, 104 patients were considered low risk and were given an oral challenge of trimethoprim, 80 or 160 mg, with sulfamethoxazole, 400 or 800 mg. A mild reaction (ie, skin rash, joint pain, or transient fever) occurred

in four people, who then required an antihistamine and/or ibuprofen or acetaminophen. The remaining 100 patients (96%) had the sulfonamide allergy label removed from their medical record. Similar to penicillin allergy, people who carry a label of sulfa allergy can complete an oral challenge in the primary care office and, following a negative result, have this label removed.³⁰

Several guidelines from 2025 were also highly rated and are summarized in Table 6.³¹⁻³³

Editor's Note: This article was cowritten by Dr. Mark Ebell, deputy editor for evidence-based medicine for *AFP* and cofounder and editor-in-chief of Essential Evidence Plus, published by Wiley-Blackwell, Inc. Because of Dr. Ebell's dual roles and ties to Essential Evidence Plus, the concept for this article was independently reviewed and approved by a group of *AFP*'s medical editors. In addition, the article underwent peer review and

editing by *AFP's* medical editors. Dr. Ebell was not involved in the editorial decision-making process.—Sumi Sexton, MD, *AFP* Editor-in-Chief

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