

John Hickner, MD, MSc Editor-in-Chief

# Which "truths" will be proven false this year?

hen I went to medical school in the early 1970s, one of my professors said, "At least half of what I teach you will not be correct in the future, but I don't know which half." I think that was an underestimate; perhaps she should have said two-thirds. I continue to be amazed at the widespread changes in what we consider to be the correct approach to diagnosis and treatment of even common ailments. Several articles in this issue discuss new "truths," or at least truths as we know them today.

For years, I was taught there was no effective way to detect early-stage lung cancer. However, the National Lung Screening Trial provides evidence that routine low-dose computed tomography (CT) screening can be effective, provided the guidelines

"At least half of what I teach you will not be correct in the future," a professor of mine once said, "but I don't know which half."

are followed strictly and the operative morbidity and mortality is sufficiently low. This is certainly a practice-changer, but balancing risks and benefits of CT screening also depends on judicious management of the "incidentalomas" that are discovered, as described in the article by Yunus and Mazzone. (See page 103.)

In this issue, Hawes et al discussed which oral agents to consider after metformin for patients with type 2 diabetes. (See page 85.) I have been skeptical about the value of oral

antidiabetic medications other than metformin for preventing cardiovascular complications of diabetes. A recently published large randomized controlled trial (RCT) of empagliflozin (a sodium-glucose cotransporter-2 [SGLT2] inhibitor), however, showed significantly lower rates of death from cardiovascular causes (3.7% vs 5.9% in the placebo group), hospitalization for heart failure (2.7% vs 4.1%, respectively), and death from any cause (5.7% vs 8.3%, respectively).² Perhaps an SGLT2 inhibitor should be the preferred second choice?

Finally, I admit to hopping on the bandwagon for using tamsulosin or nifedipine to avoid surgical interventions for ureteral calculi, based on data from small RCTs. However, this issue's PURL discusses a recently published large RCT³ that shows that for small stones ( $\leq 10$  mm), these medications are no more effective than placebo. (See page 118.)

I wonder which "truths" will be proven false this year?

- National Lung Screening Trial Research Team, Aberle DR, Adams AM, Berg CD, et al. Reduced lung-cancer mortality with low-dose computed tomographic screening. N Engl J Med. 2011;365:395-409.
- Zinman B, Wanner C, Lachin JM, et al; EMPA-REG OUTCOME Investigators. Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. N Engl J Med. 2015;373:2117-2128
- Pickard R, Starr K, MacLennan G, et al. Medical expulsive therapy in adults with ureteric colic: a multicentre, randomised, placebo-controlled trial. Lancet. 2015;386:341-349.



#### EDITOR-IN-CHIEF

JOHN HICKNER, MD, MSc University of Illinois at Chicago

#### ASSOCIATE EDITOR

BERNARD EWIGMAN, MD, MSPH University of Chicago Pritzker School of Medicine

# RICHARD P. USATINE, MD

University of Texas Health Science Center at San Antonio (*Photo Rounds*)

#### ASSISTANT EDITORS

DOUG CAMPOS-OUTCALT, MD, MPA Mercy Care Plan, Phoenix

## GARY N. FOX, MD

St. Vincent Mercy Medical Center, Toledo,

# RICK GUTHMANN, MD, MPH

University of Illinois, Chicago

# KEITH B. HOLTEN, MD

Berger Health System, Circleville, Ohio

## ROBERT B. KELLY, MD, MS

Fairview Hospital, a Cleveland Clinic hospital

# GARY KELSBERG, MD, FAAFP

University of Washington, Renton

# E. CHRIS VINCENT, MD

University of Washington, Seattle

# EDITORIAL BOARD FREDERICK CHEN, MD, MPH

University of Washington, Seattle

JEFFREY T. KIRCHNER, DO, FAAFP, AAHIVS

Lancaster General Hospital, Lancaster, Pa

# TRACY MAHVAN, PHARMD

University of Wyoming, Laramie

MICHAEL MENDOZA, MD, MPH, MS, FAAFP University of Rochester, New York

# FRED MISER, MD, MA

The Ohio State University, Columbus

## KEVIN PETERSON, MD, MPH University of Minnesota, St. Paul

MICHAEL RADDOCK, MD

The MetroHealth System, Cleveland, Ohio

## GOUTHAM RAO, MD, MPA University of Chicago

LINDA SPEER, MD

# University of Toledo, Ohio JEFFREY R. UNGER, MD, ABFP, FACE

Unger Primary Care Concierge Medical Group, Rancho Cucamonga, Calif

# DIRECT INQUIRIES TO:

Frontline Medical Communications 7 Century Drive, Suite 302 Parsippany, NJ 07054 Telephone: (973) 206-3434 Fax: (973) 206-9378



Joh Hu