



**The Skeptics'  
Guide to  
Emergency  
Medicine**

**Episode #262**

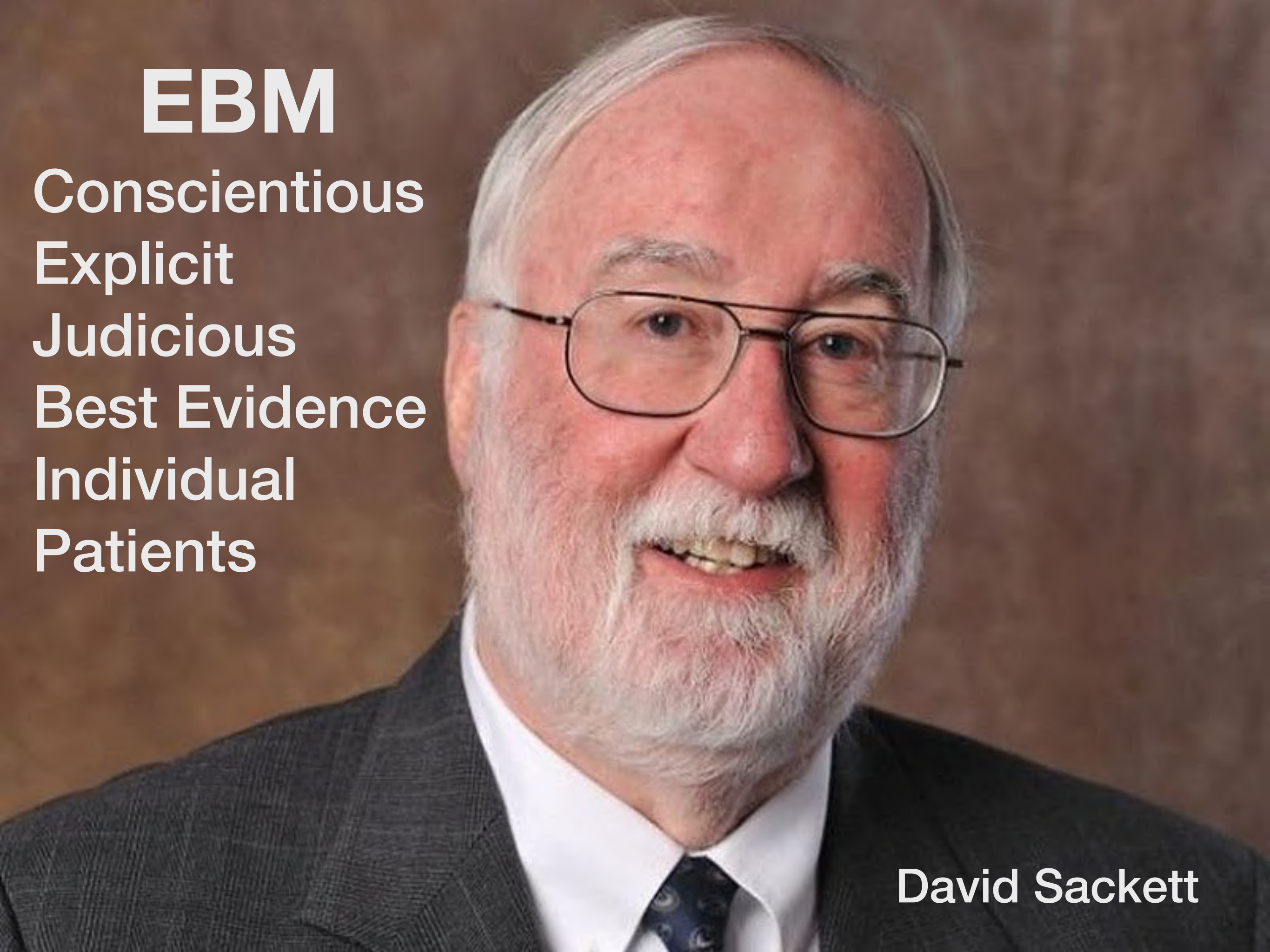
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# EBM

Conscientious  
Explicit  
Judicious  
Best Evidence  
Individual  
Patients



David Sackett



**Sackett et al BMJ 1996**



# Levels of Evidence

Systematic Review

Appraised Topics

Appraised Article

**RCT**

Cohort Study

Case Report

Expert Opinion





# Checklist



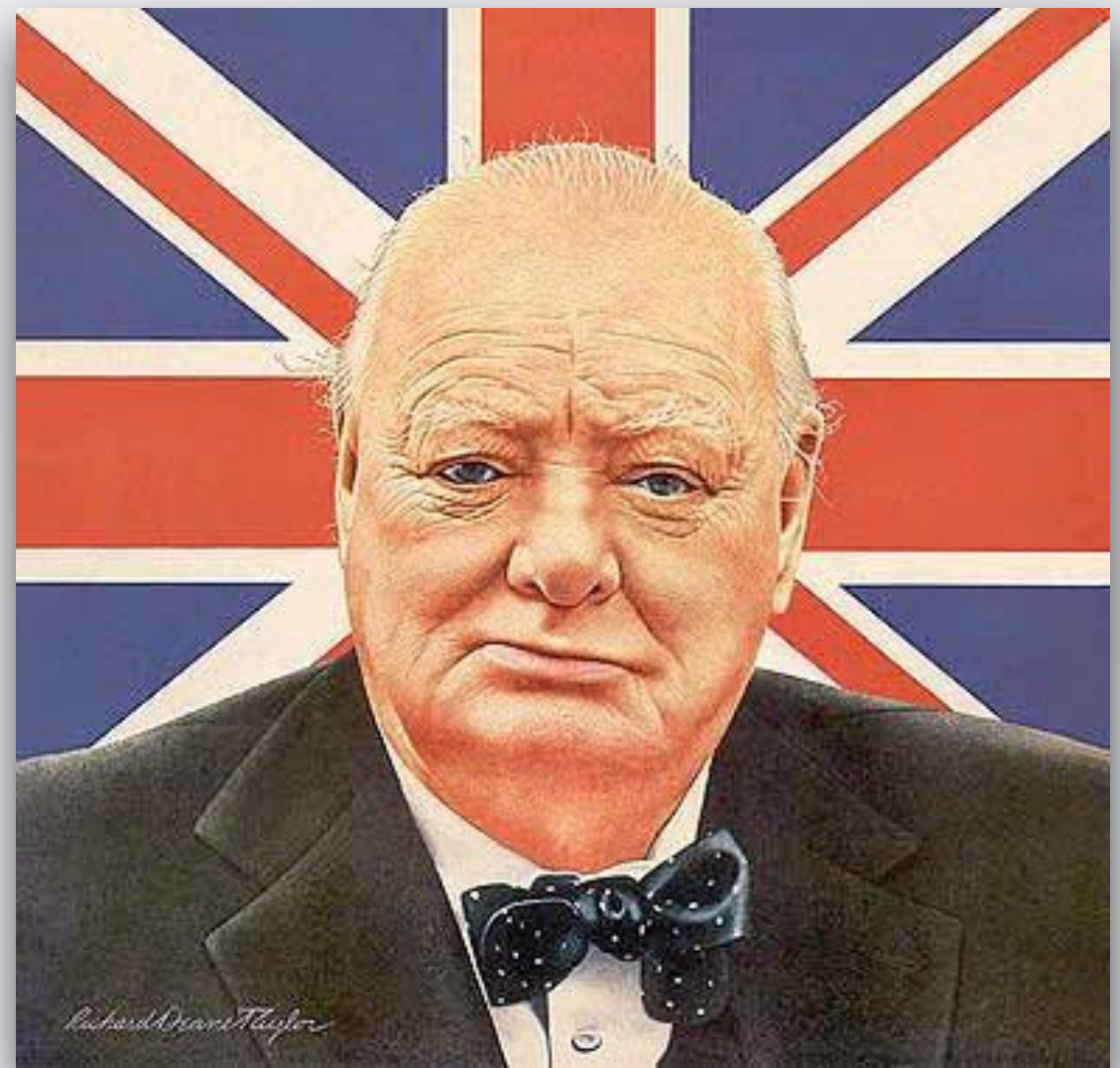
**SGEM Xtra:**  
**Make it So**



# EBM is the Worst...

*"Democracy is the worst form of government except all the others that have been tried."*

**Sir Winston Churchill**







EBM has Been Hijacked: Ioannidis JP. J Clin Epi 2016





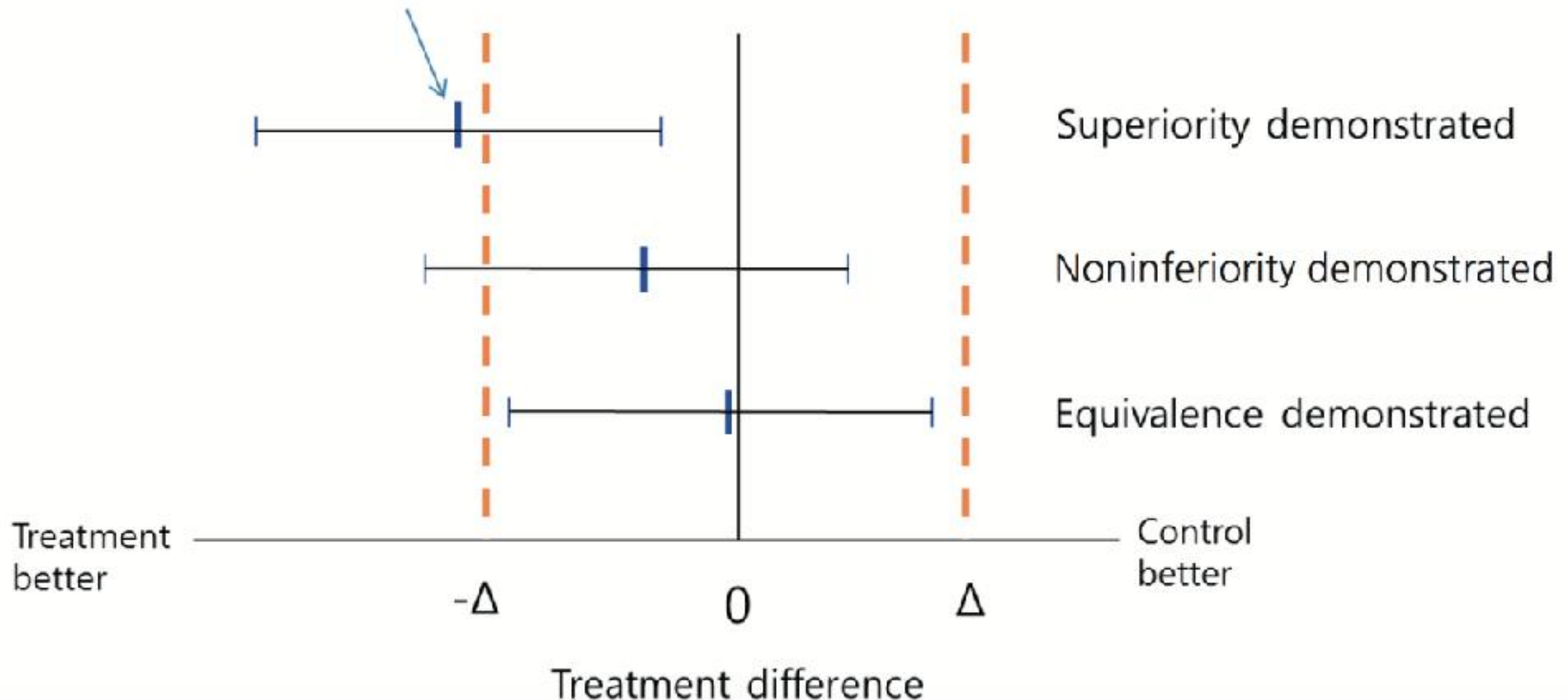
Bekelman et al JAMA 2003  
Okike et al Injury 2008  
Lundh et al Cochrane 2013



# Study Designs

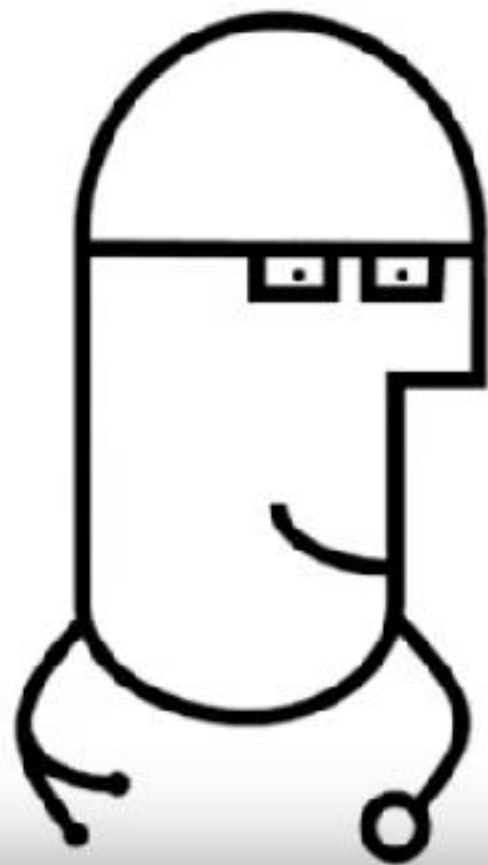
## 95% Confidence interval noninferiority

Observed difference from the trial





# ITT vs. PP Analysis



**Draw your own conclusions**





**the future**  
**is open**



# SGEM#262: Omadacycline

*The NEW ENGLAND JOURNAL of MEDICINE*

ORIGINAL ARTICLE

## Omadacycline for Acute Bacterial Skin and Skin-Structure Infections

William O’Riordan, M.D., Sinikka Green, M.D., J. Scott Overcash, M.D.,  
Ivan Puljiz, M.D., Ph.D., Symeon Metallidis, M.D., J. Gardovskis, M.D.,  
Lynne Garrity-Ryan, Ph.D., Anita F. Das, Ph.D., Evan Tzanis, B.S.,  
Paul B. Eckburg, M.D., Amy Manley, B.S., Stephen A. Villano, M.D.,  
Judith N. Steenbergen, Ph.D., and Evan Loh, M.D.

ABSTRACT



# Guest Skeptic: EM Swami





# New York ACEP Scientific Assembly





Case







**SGEM#: 13, 131, 156, 164 and 209**



## Omadacycline for Acute Bacterial Skin and Skin-Structure Infections

O'Riordan et al NEJM 2018



*“Omadacycline was noninferior to linezolid for the treatment of acute bacterial skin and skin-structure infections and had a similar safety profile”*

# Checklist



**SGEM Xtra:**  
**Make it So**

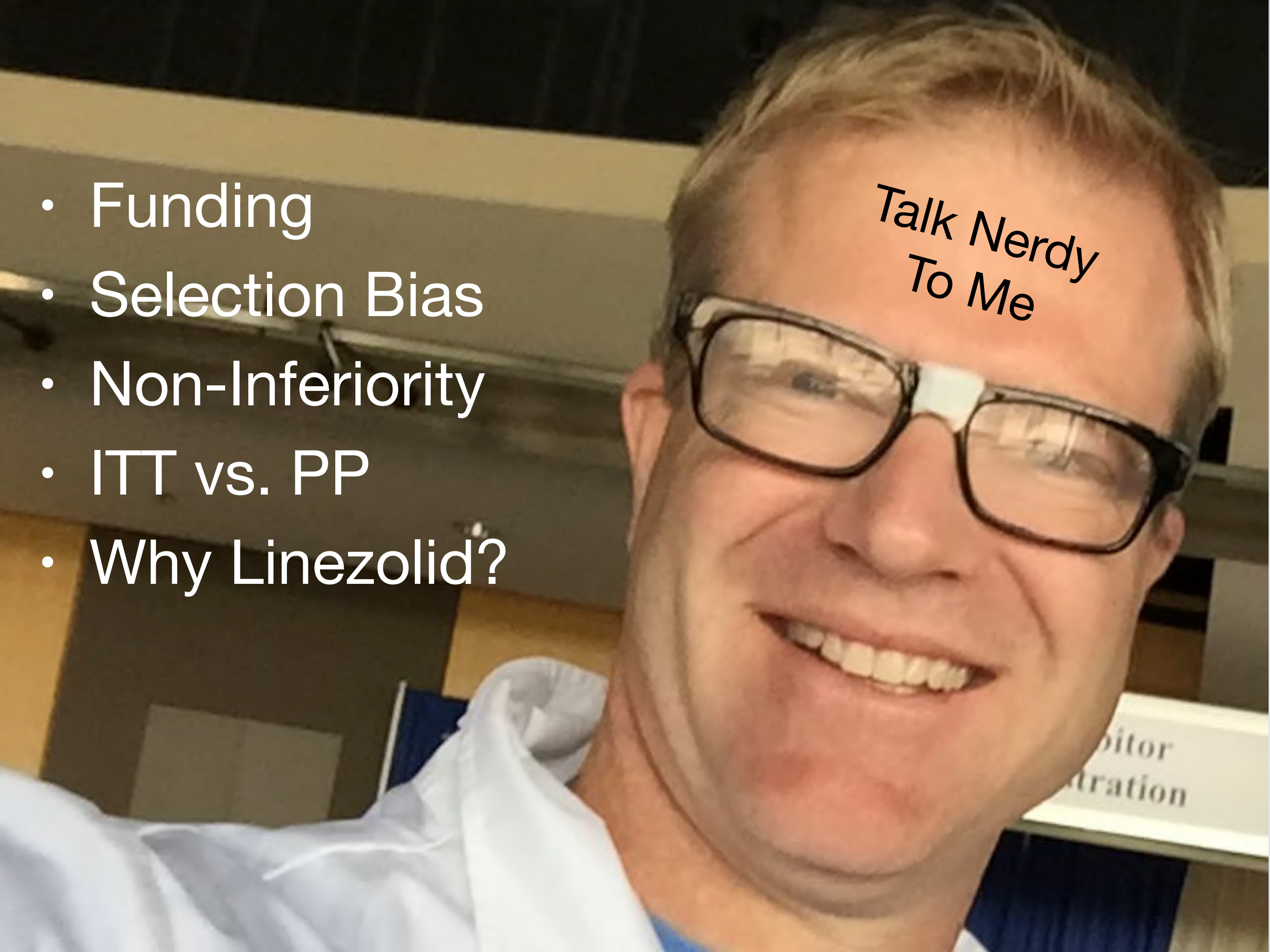




Omadacycline was non-inferior to linezolid

- Funding
- Selection Bias
- Non-Inferiority
- ITT vs. PP
- Why Linezolid?

*Talk Nerdy  
To Me*

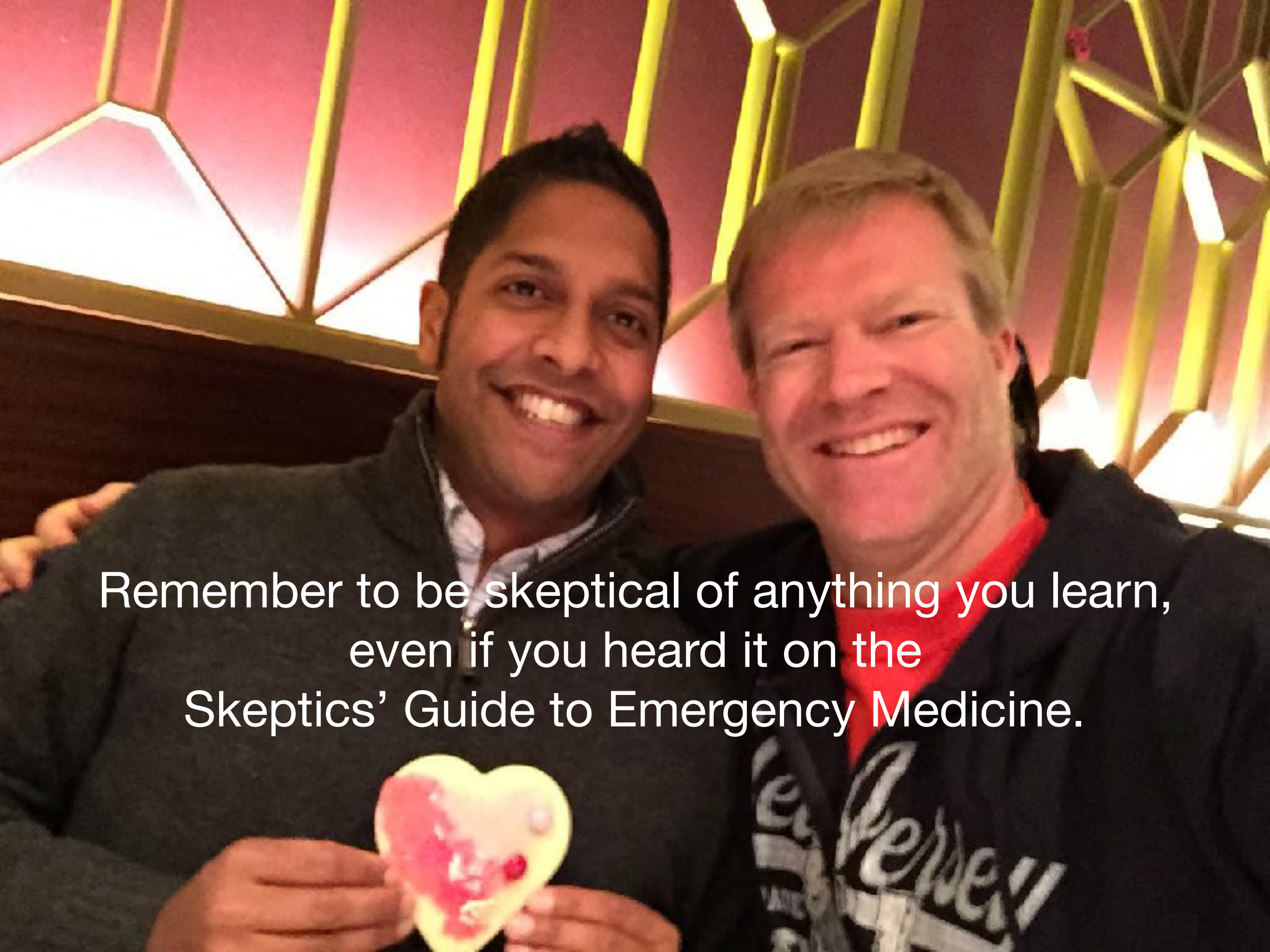




# SGEM Bottom Line

Omadacycline is not recommended  
for the routine use in SSTI



A photograph of two men smiling at the camera. The man on the left is of South Asian descent, wearing a dark grey zip-up jacket over a light-colored collared shirt. The man on the right is of Caucasian descent, wearing a dark blue jacket over a red t-shirt. They are standing in front of a Ferris wheel at night, with its yellow structural beams and illuminated passenger cars visible in the background. The man on the left is holding a small, heart-shaped object with pink and white icing and a red candy. The text "Remember to be skeptical of anything you learn, even if you heard it on the Skeptics' Guide to Emergency Medicine." is overlaid in white on the lower half of the image.

Remember to be skeptical of anything you learn,  
even if you heard it on the  
Skeptics' Guide to Emergency Medicine.