

# *EM MYTH BUSTING*

**I FIND YOUR LACK OF EBM**



**DISTURBING**



Three Stormtroopers from Star Wars stand in a row in a futuristic hallway with blue circular patterns on the walls. The background above the hallway is a black sky filled with white stars. Each trooper is wearing a white helmet and armor, holding a black blaster rifle. Red text is overlaid on each trooper's chest.

**NNT OF  
ONE**

**IT ALL  
DEPENDS**

**BE A  
SKEPTIC**



# ***ED MYTH #1***



**AN LP IS NEEDED POST  
NEGATIVE CT TO RULE  
OUT SAH**



# An Observational Study of 2,248 Patients Presenting With Headache, Suggestive of Subarachnoid Hemorrhage, Who Received Lumbar Punctures Following Normal Computed Tomography of the Head

***SAYER ET AL AEM 2015***



P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

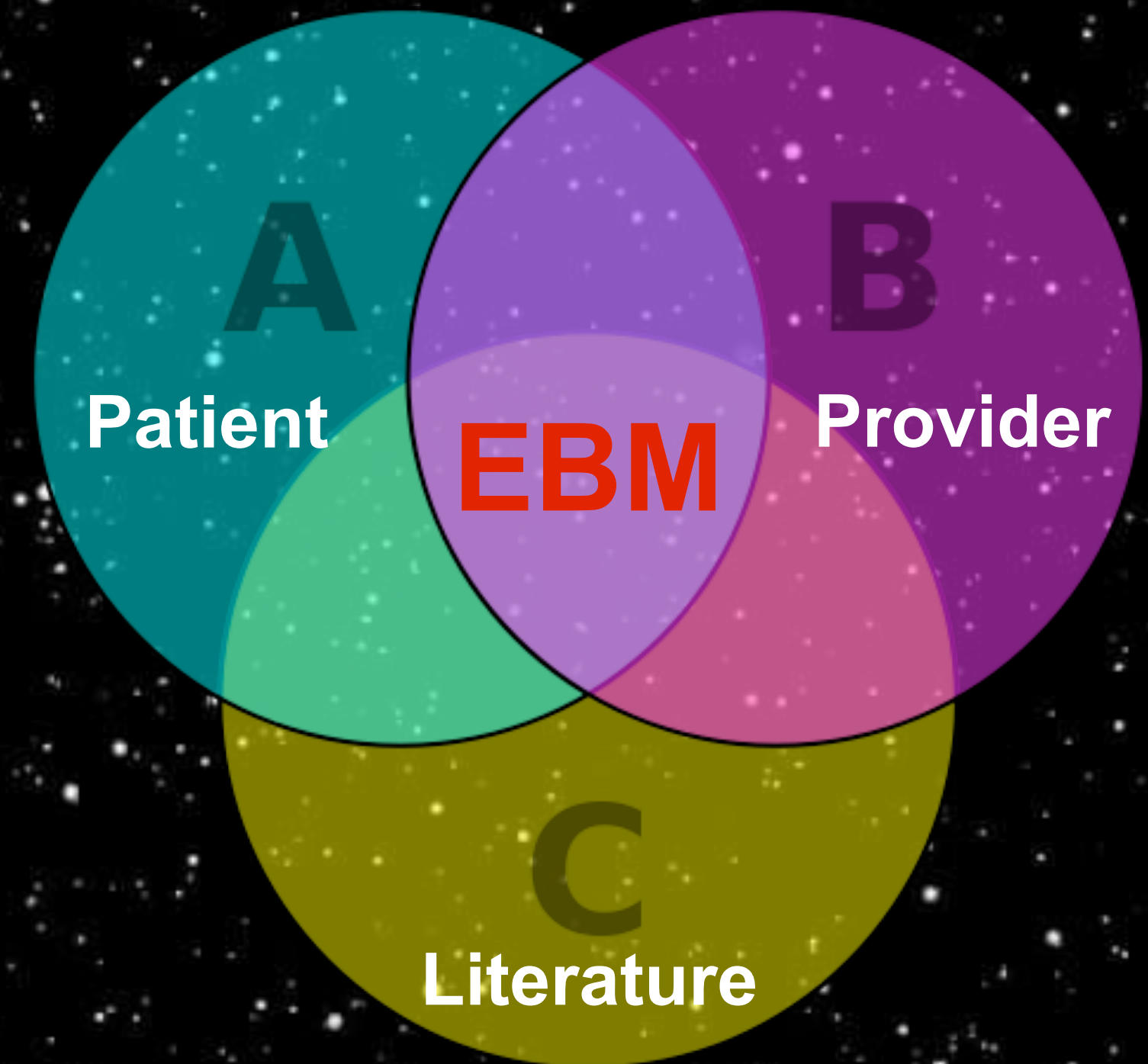


***NNTAP 250***



# ***LP POST CT TO RULE OUT SAH***

***ONE PATIENT WOULD BE  
DIAGNOSED WITH SAH OUT OF  
EVERY 250 PATIENTS  
RECEIVING A LP WHO  
PRESENTED TO THE ED WITH  
A HA THAT DID NOT HAVE  
THEIR BLEED IDENTIFIED ON  
CT SCAN.***



***SCEM#134: LISTEN, TO WHAT THE BRITISH  
DOCTORS SAY ABOUT LPS POST CT FOR SAH***



# ***ED MYTH #2***

**MESA THINKS  
ACLS WORKS**

**FOR OUT OF HOSPITAL  
CARDIAC ARREST**





# Prehospital Advanced Cardiac Life Support for Out-of-hospital Cardiac Arrest: A Cohort Study

***COURNOYER ET AL AEM 2017***



P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

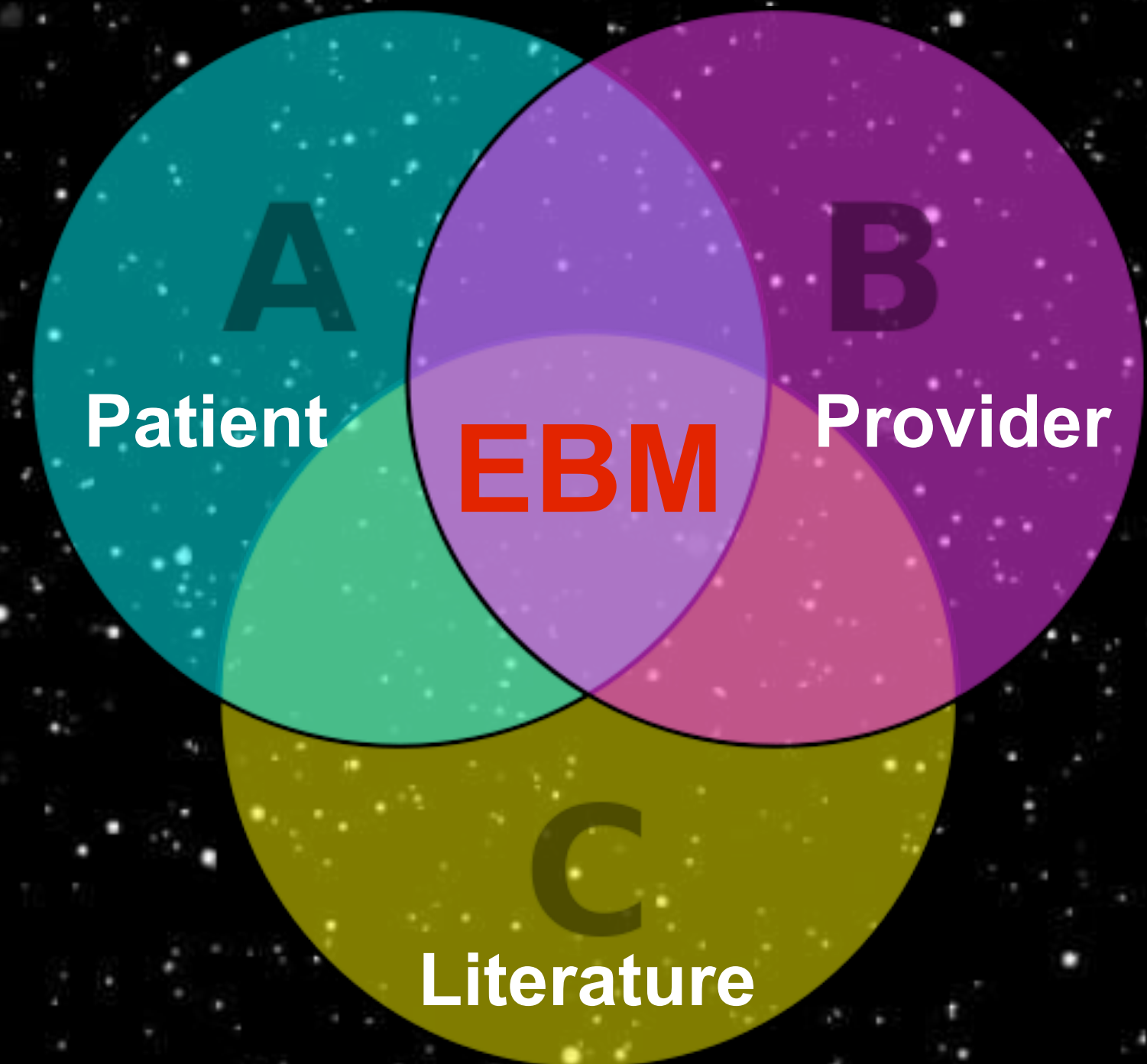


***NO DIFFERENCE***



# ***ACLS FOR OHCA***

***EVEN IN E-CPR  
CANDIDATE PATIENTS,  
THERE IS NO EVIDENCE  
THAT ACLS PROVIDES A  
PATIENT ORIENTED  
BENEFIT.***



***SGEM#189: BRING ME TO LIFE OHCA***



# ***ED MYTH #3***





Emergency Department use of Apneic Oxygenation versus usual care during rapid sequence intubation: A randomized controlled trial  
(The ENDAO Trial)

***CAPUTO ET AL AEM 2017***



P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

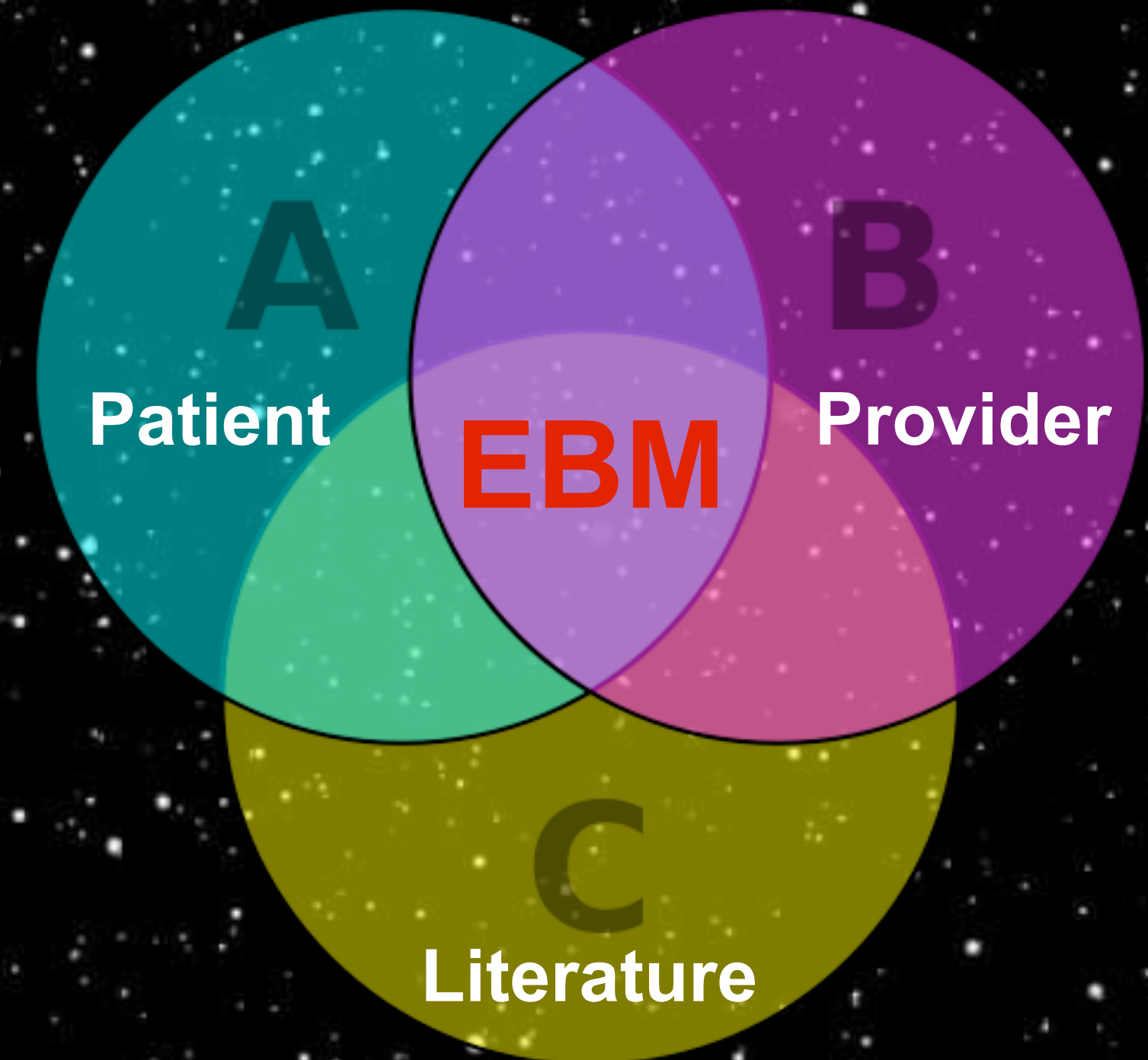


***NO DIFFERENCE***



# ***APNEIC OXYGENATION FOR RSI***

***APNEIC OXYGENATION MAY STILL HAVE A ROLE DURING RSI OF ED PATIENTS BUT IT LIKELY ADDS LITTLE WHEN PROPER PRE-OXYGENATION STRATEGIES ARE USED.***



***SCEM#186: APNEIC AND THE O<sub>2</sub> – FOR RSI***



# **ZDOGGMD: DOC VADER**





# ***ED MYTH #4***

**PEDIATRIC  
GASTROENTERITIS**

**I HAVE TO DRINK WHAT?**





Original Investigation

# Effect of Dilute Apple Juice and Preferred Fluids vs Electrolyte Maintenance Solution on Treatment Failure Among Children With Mild Gastroenteritis

## A Randomized Clinical Trial

***FREEDMAN ET AL JAMA 2016***



P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

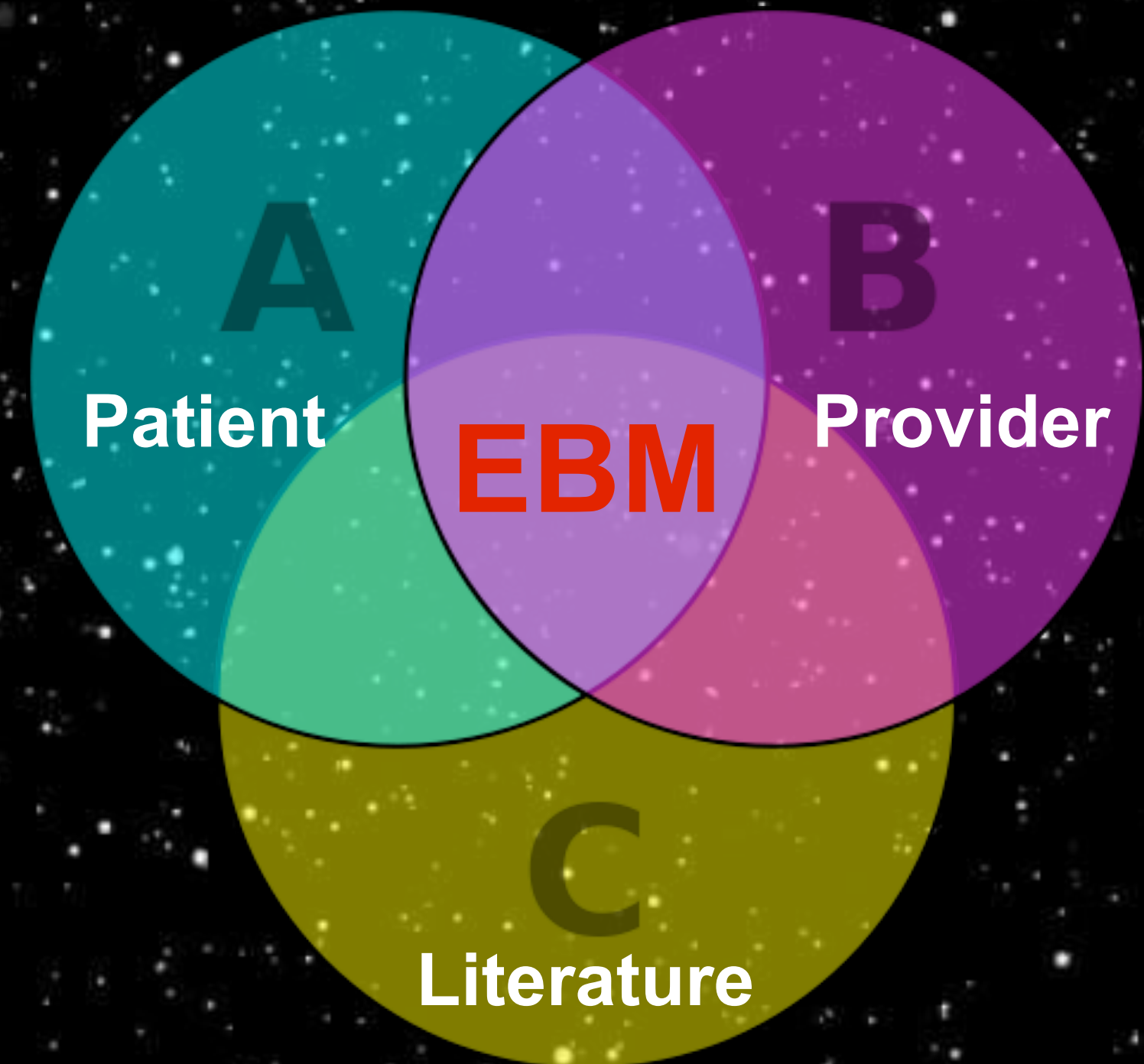


***1/2 AJ/PREFERRED  
FLUIDS SUPERIOR***



# ***1/2 STRENGTH APPLE JUICE OR PREFERRED FLUIDS***

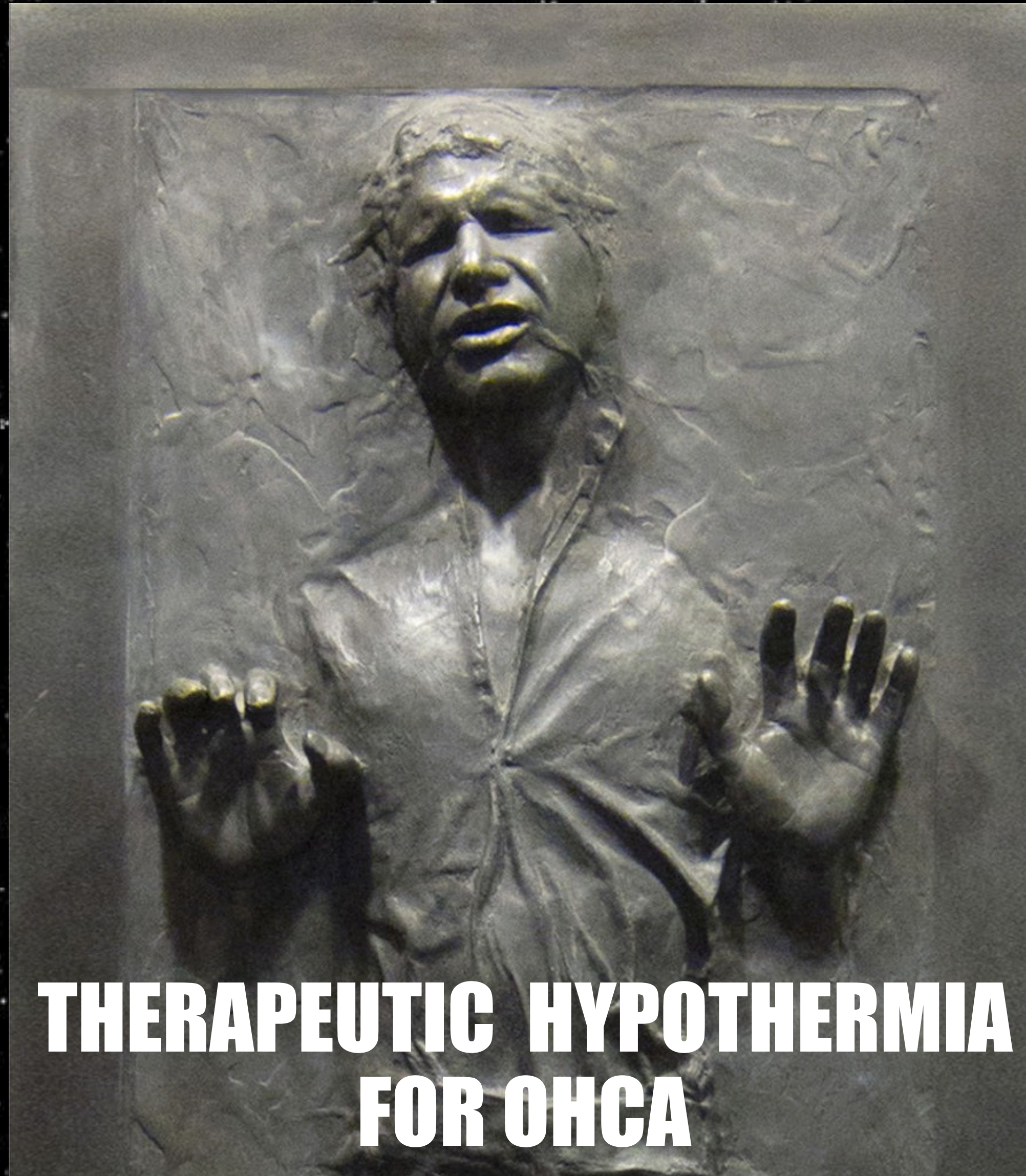
***OFFERING HALF-  
STRENGTH APPLE JUICE  
AND PREFERRED FLUIDS  
COMPARED TO  
ELECTROLYTE SOLUTIONS  
IS A BETTER CHOICE.***



***SCEM#158: TEMPTED BY THE FRUIT OF ANOTHER***



# ***ED MYTH #5***



**THERAPEUTIC HYPOTHERMIA  
FOR OHCA**



# Circulation

## ORIGINAL RESEARCH ARTICLE

### Induction of Therapeutic Hypothermia During Out-of-Hospital Cardiac Arrest Using a Rapid Infusion of Cold Saline

The RINSE Trial (Rapid Infusion of Cold Normal Saline)

***BERNARD ET AL CIRCULATION 2016***



P	• Patient
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C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

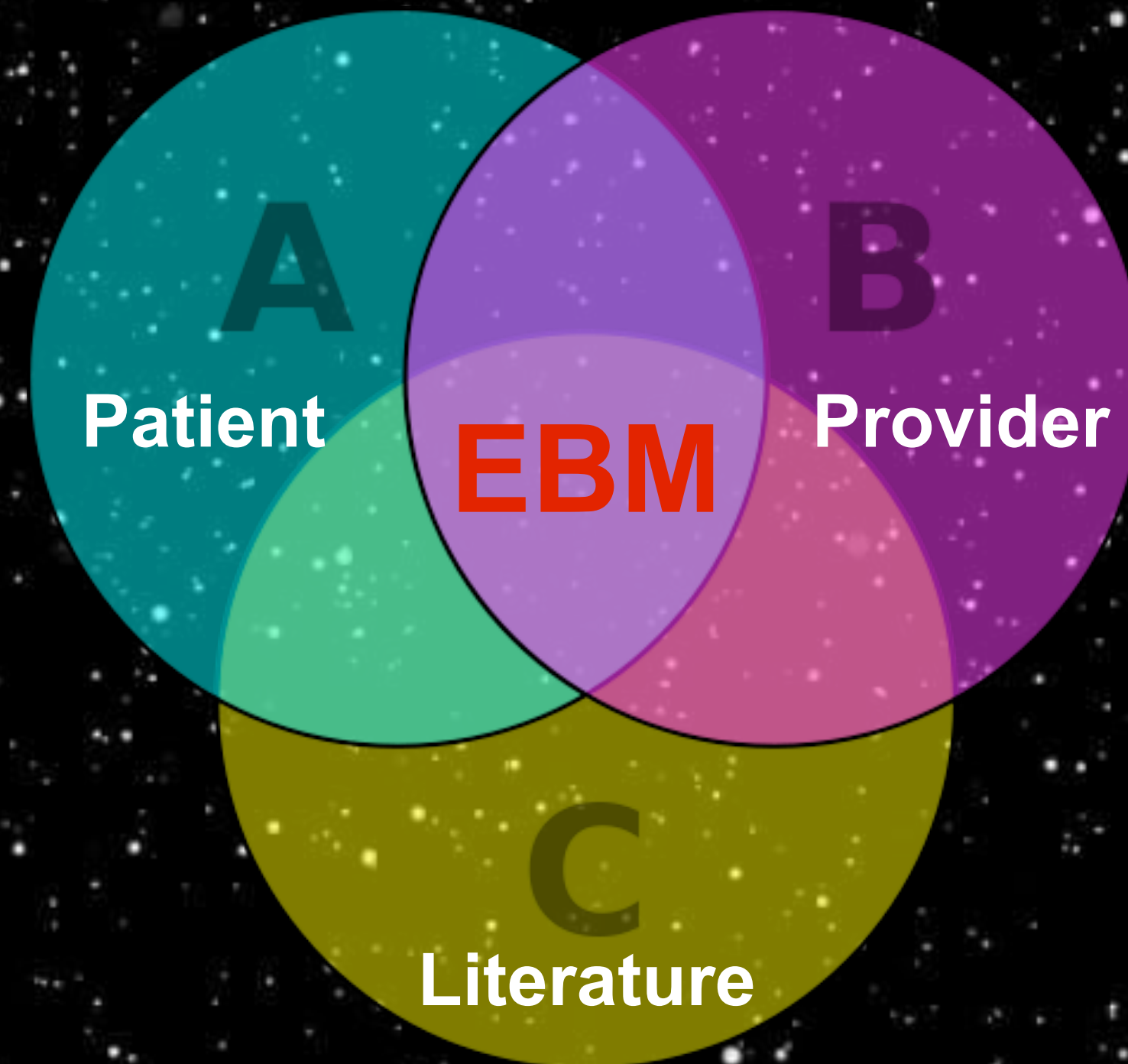


***NO DIFFERENCE IN SURVIVAL  
TO HOSPITAL DISCHARGE***



# ***THERAPEUTIC HYPOTHERMIA***

***THERE IS NO GOOD  
EVIDENCE FOR PRE-  
HOSPITAL COOLING  
FOR PATIENTS WITH  
OHCA***



***SGEM#183: DON'T RINSE, DON'T REPEAT***



# ***ED MYTH #6***



**OBSERVATIONAL STUDY PROVES  
VITAMIN C CAN CURE SEPSIS**



**N0000000000**



# Hydrocortisone, Vitamin C and Thiamine for the Treatment of Severe Sepsis and Septic Shock: A Retrospective Before-After Study

Paul E. Marik, MD, FCCM, FCCP, Vikramjit Khangoora, MD, Racquel Rivera, Pharm D, Michael H. Hooper, M.D., MSc, John Catravas, PhD, FAHA, FCCP

***MARIK ET AL CHEST 2016***



P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



# ***KEY RESULTS AND LIMITATIONS***

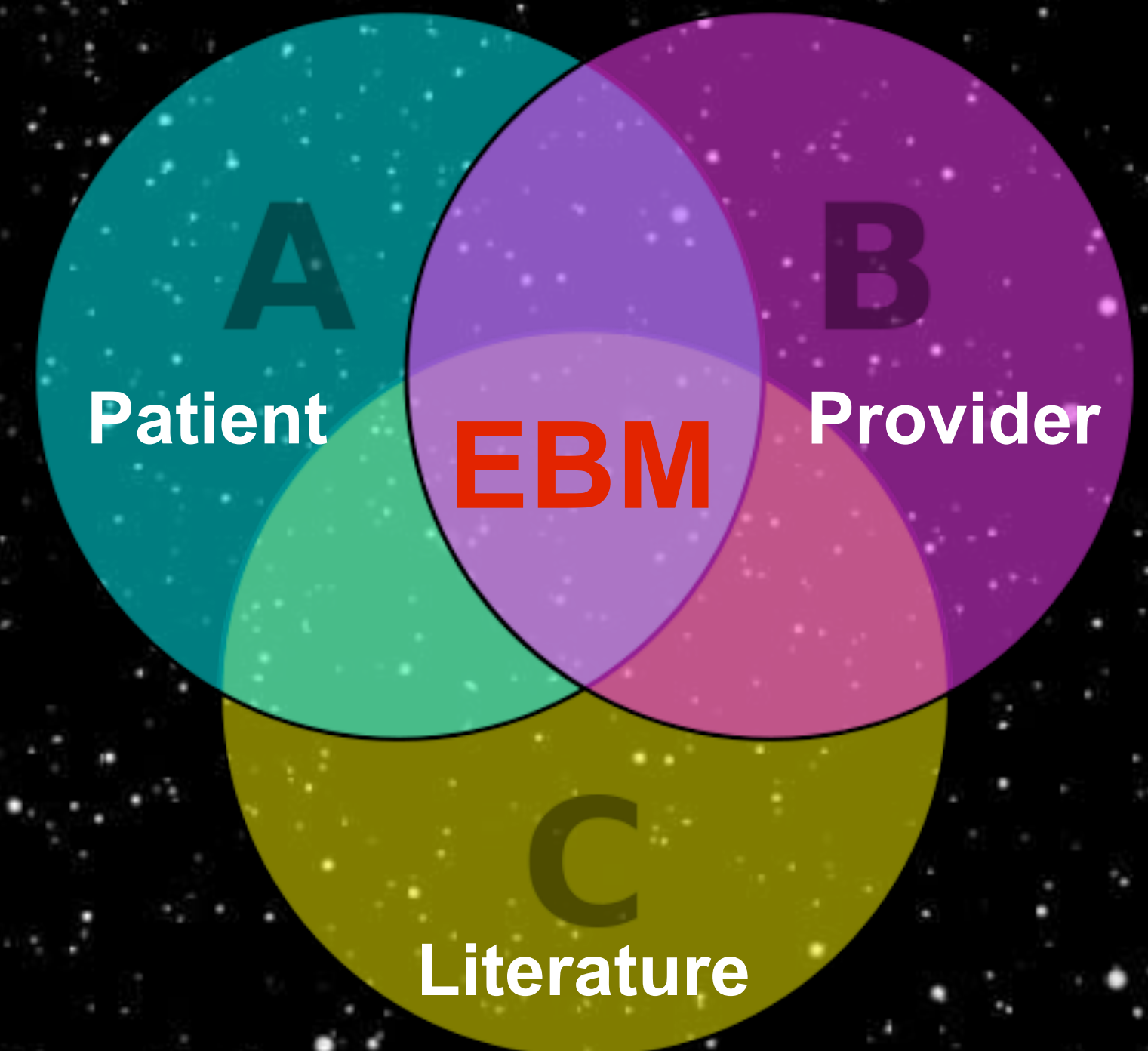


***32% ABSOLUTE DIFFERENCE***  
***NNT 3***



# ***VITAMIN C PROTOCOL FOR SEPSIS***

***VIT C PROTOCOL WAS  
ASSOCIATED WITH LOWER  
MORTALITY IN SEVERE SEPTIC  
AND SEPTIC SHOCK PATIENTS IN  
THIS ONE SMALL, SINGLE CENTER  
RETROSPECTIVE STUDY BUT  
CAUSATION HAS YET TO BE  
DEMONSTRATED.***



***SGEM#174: DON'T BELIEVE THE HYPE***





**NNT OF  
ONE**

**IT ALL  
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# ***SUMMARY***



- 1. LP POST CT - NOT NECESSARY***
- 2. ACLS FOR OHCA - NO BENEFIT***
- 3. APNEIC O2 IN RSI - NO BENEFIT***
- 4. PED CASTRO - 1/2 APPLE JUICE***
- 5. THERAPEUTIC HYPOTHERMIA- NO***
- 6. VIT C - DON'T BELEIVE THE HYPE***





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