openMetaAnalysis: PICO Table

Trial	Patients	Intervention	Comparison	Outcome
Svoboda, 2007 Hepatogastroenterology PMID: 17523274	72 adults with Severe sepsis after major abdominal surgery or surgery for multiple trauma • Microbiologically proven infection: not reported • Mean age 45.8 years	First day antibiotic cessation allowed: not defined Criteria for antibiotic cessation: not defined Other interventions: if severe sepsis with PCT >2 ng/mL, change antibiotics and intravascular devices	Usual care	Primary: • Mortality during hospitalization Secondary: • Duration of ICU stay, and others
Nobre, 2008 Am J Respir Crit Care Med PMID: 18096708 NCT00250666	79 adults with Suspected severe sepsis or septic shock admitted to the ICU • Microbiologically proven infection: 50%. Blood cultures positive in 32% • Mean age 67.7 years	First day antibiotic cessation allowed: 3 if initial PCT value less than 1 µg/L, 5 if initial PCT value more than 1 µg/L Criteria for antibiotic cessation: PCT value decreased over 90% or PCT value lower than 0.25 µg/L	Usual care	Primary: • Total duration of antimicrobial therapy Secondary: • Mortality during hospitalization and at 28 days • Duration of ICU and hospital stay
Schroeder, 2009 Langenbecks Arch Surg PMID: 19034493	27 adults with Severe sepsis after surgery and admitted to the surgical ICU • Microbiologically proven infection: 67% • Mean age 68.8 years	First day antibiotic cessation allowed: 1 Criteria for antibiotic cessation: PCT less than 1 ng/mL or declined more than 25% to 35% of the initial concentration within 3 days	Usual care	Primary: • Total duration of antimicrobial therapy Secondary: • Others
Hochreiter, 2009 Crit Care PMID: 19493352 ISRCTN10288268	110 adults with Sepsis (confirmed or highly suspected bacterial infection and at least two concomitant SIRS criteria) patients admitted to the surgical ICU • Microbiologically proven infection: not reported • Mean age 66.9 years	First day antibiotic cessation allowed: 1 Criteria for antibiotic cessation: PCT less than 1 ng/mL or declined more than 25% to 35% of the initial concentration within 3 days	Standard regimen of antibiotics over 8 days	Primary: • Total duration of antimicrobial therapy Secondary: • Mortality at 90 days • Duration of ICU stay, and others
Layios, 2012 Crit Care Med PMID: 22809906	509 adults with Sepsis admitted to the ICU (per Layios Table 3, all had sepsis) • Microbiologically proven infection: 61% (87% ot total 'suspected' of having infection) • Mean age 65.51 years	First day antibiotic cessation allowed: 0 Criteria for antibiotic cessation: PCT value lower than 0.5 µg/L	Usual care	Primary: • Antibiotic consumption days Secondary: • Mortality in intensive care • Others
Annane, 2013 BMJ Open PMID: 23418298 NCT01025180	62 adults with non-microbiologically proven apparent severe sepsis admitted to the ICU • Microbiologically proven infection: 0% • Mean age 56.5 years	First day antibiotic cessation allowed: 3 Criteria for antibiotic cessation: PCT value lower than 0.5 µg/L for patients admitted to the medical ICU or lower than 9 µg/L for patients admitted to surgical ICU (less than 4% of patients)	Usual care	Primary: • Proportion of patients receiving antibiotics at day 5 Secondary: • Mortality at 5 days, at ICU discharge, and at hospital discharge, total number of days on antimicrobial therapy, duration of ICU and hospital stay, and others
Oliveira, 2013	94 adults with Severe sepsis or septic	First day antibiotic cessation allowed: 4 if initial PCT	Protocol based on the	Primary:

Crit Care Med PMID: 23921272 NCT00934011	shock admitted to the ICU • Microbiologically proven infection: 46%. Bllod cultures positive in 21% • Mean age 59.6 years	value less than 1 μg/L, 5 if initial PCT value more than 1 μg/L Criteria for antibiotic cessation: PCT value decreased over 90% if initial PCT value more than 1 μg/L or PCT value lower than 0.1 μg/L if initial PCT value less than 1 μg/L or after 7 days of antibiotic therapy	serum levels of CRP	• Duration of antimicrobial therapy Secondary: • Total number of days on antimicrobial therapy, duration of ICU and hospital stay, • Mortality during hospitalization and at 28 days • Others
Liu, 2013 Zhonghua Wei Zhong Bing Ji Jiu Yi Xue PMID: 24225216	82 adults with Sepsis admitted to the ICU • Microbiologically proven infection: not reported but blood cultures positive in 30% • Mean age 49.56 years	First day antibiotic cessation allowed: 1 Criteria for antibiotic cessation: PCT value decreased over 90% or PCT value lower than 0.25 μg/L	Usual care	Primary: • Duration of antimicrobial therapy Secondary: • Duration of ICU and hospital stay • Mortality at 28 days • Others
Deliberato, 2013 Diagnostic Microbiology and Infectious Disease PMID: 23711530 NCT01494675	81 adults with Sepsis, severe sepsis, or septic shock admitted to the ICU • Microbiologically proven infection: 100% • Mean age 65.1 years	First day antibiotic cessation allowed: 5 Criteria for antibiotic cessation: PCT value decreased over 90% or PCT value lower than 0.5 μg/L	Usual care	Primary: • Duration of antimicrobial therapy Secondary: • Mortality during intensive care or hospitalization • Duration of ICU stay • Duration of hospitalization.
Dharaniyadewi, 2013 PMCID: PMC3952512	197 adults with sepsis • Mean age 50 years • Severe sepsis or septic shock 44%	First day antibiotic cessation allowed: not specified Criteria for antibiotic cessation: not specified. Semi-quantitative assay was used	Usual care	Primary: • Mortality at 14 days Secondary: • Speed and appropriateness of antibiotics
Shehabi (ANZICS Clinical Trials Group), 2014 Am J Respir Crit Care Med PMID: 25295709 ACTRN12610000809033	394 adults with suspected sepsis (bacterial infection with SIRS) admitted to the ICU • Microbiologically proven infection: 61% • Mean age 64.4 years	First day antibiotic cessation allowed: 1 Criteria for antibiotic cessation: PCT value decreased over 90% or PCT value lower than 0.25 μg/L	Usual care	Primary: • Duration of antimicrobial therapy at 28 days, hospital discharge, or death, whichever came first Secondary: • Duration of ICU and hospital stay • Mortality at 90 days, and others
de Jong, 2015 Lancet Infect Dis PMID: 26947523 NCT01139489	1575 adults with critical illness admitted to the ICU with sepsis (per de Jong's Table 1, all had sepsis) • Microbiologically proven infection: not reported, but 'Unknown focus' was 9% • Mean age 65 years	First day antibiotic cessation allowed: 1 Criteria for antibiotic Cessation: PCT value decreased over 80% or PCT value lower than 0.5 μg/L	Usual care	Primary: • Duration of antimicrobial therapy Secondary: • Duration of ICU and hospital stay • Mortality at 28 days and 1 year • Others
Bloos, 2015 JAMA Intern Med PMID: 27428731 NCT00832039	1089 adults with severe sepsis or septic shock admitted to the ICU • Mean age 65.7 years	First day antibiotic cessation allowed: 7 Criteria for antibiotic cessation: PCT value decreased over 50% or PCT value lower than 1 μg/L	Usual care	Primary: • Mortality at 28 days Secondary: • Duration of ICU and hospital stay, duration of antimicrobial therapy • Mortality at 90 days

				• Others
Trial	**Patients**	**Intervention**	**Comparison**	**Outcome**