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Steroid treatment for patients with severe sepsis and septic shock

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Dear Editor,

We read with interest the recent article by Kalil and Sun [1] describing the use of Bayesian statistics to resolve the controversy regarding the use of low-dose steroids for severe sepsis and septic shock. The authors used only three recent meta-analyses. We wonder if the authors' conclusions would change or remain the same after also analyzing two other recent papers, the meta-analysis by Sligl [2] and the Bayesian meta-analysis by Moran [3].

We have just published [4] an evaluation of recent conflicting studies [5, 6] and meta-analyses, emphasizing the problems with meta-analyses and providing recommendations for practice. These recommendations were that without a strong signal for a mortality decrease with corticosteroid therapy, steroids should not be used for all septic shock patients [4]. We believe steroids

should only be used in patients meeting the severe septic shock entry criteria in the Annane et al. study [5] of a systolic blood pressure less than 90 mmHg for greater than 1 h where steroids improved survival and were the basis for the original 2004 Surviving Sepsis Campaign recommendations for the use of steroids in septic patients requiring vasopressors despite fluid therapy requirements [4]. We, however, understand why physicians might use steroids for septic shock patients identified to be poorly responsive to fluid resuscitation and vasopressor therapy based on the recent updated Surviving Sepsis Campaign's recommendations [7]. Patients with severe sepsis not in shock or patients with septic shock stabilized with fluid and vasopressor therapy should not receive steroid therapy [4, 7].

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