

TABLE 2. (Continued)
Consensus Recommendations

18. There was insufficient evidence to allow a recommendation on performing routine blood testing for viral pathogens in immunocompetent patients in the ICU (e.g., herpesviruses, adenovirus).
19. For critically ill patients with a new fever, we recommend testing for severe acute respiratory syndrome coronavirus 2 by PCR based on levels of community transmission (best-practice statement).
20. If the probability of bacterial infection is deemed low to intermediate in a critically ill patient with a new fever and no clear focus of infection, we suggest measuring procalcitonin (PCT) in addition to bedside clinical evaluation vs bedside clinical evaluation alone (weak recommendation, very low-quality evidence).
21. If the probability of bacterial infection is deemed high in a critically ill patient with a new fever and no clear focus of infection, we suggest not measuring PCT to rule out bacterial infection. (Weak recommendation, very low-quality evidence).
22. If the probability of bacterial infection is deemed low to intermediate in a critically ill patient with a new fever and no clear focus of infection, we suggest measuring C-reactive protein (CRP) in addition to bedside clinical evaluation vs bedside clinical evaluation alone (weak recommendation, very low-quality evidence).
23. If the probability of bacterial infection is deemed high in a critically ill patient with a new fever and no clear focus of infection, we suggest not measuring CRP to rule out bacterial infection (weak recommendation, very low-quality evidence).
24. If the probability of bacterial infection is deemed low to intermediate in a critically ill patient with a new fever and no clear focus of infection, we suggest measuring serum PCT or CRP to rule out bacterial infection (weak recommendation, very low-quality evidence).

FEVER DEFINITION

The normal body temperature range is subject to a variety of factors such as age, gender, diurnal variation, and sampling site (12). In addition, evidence indicates that the normal body temperature has been decreasing in the human population by 0.03°C per birth decade over the last 157 years (13).

The United States Centers for Disease Control and Prevention definition of fever in the diagnosis of hospital-acquired infections is a measured temperature of greater than 38°C (14). The Infectious Diseases Society of America (IDSA) has defined fever in individuals greater than 65 years old residing in long-term care facilities as a single oral temperature greater than 37.8°C, repeated temperature measurements greater than 37.2°C (oral) or greater than 37.5°C (rectal), or an increase from baseline greater than 1.1°C (15). In patients with neutropenia due to chemotherapy, fever is defined by both the IDSA and the National Comprehensive Cancer Network as a single oral temperature measurement greater than or equal to 38.3°C or greater than 38.0°C sustained over at least 1 hour (16). The SCCM and IDSA have previously defined fever in ICU patients as the presence of a single temperature measurement greater than or equal to 38.3°C (3). We used this SCCM/IDSA definition of fever for this guideline.

Not all patients with infection manifest fever and, in fact, the absence of fever in patients with infection is associated with worse outcomes (17, 18). Consequently, the recommendations in this guideline may generally apply to ICU patients with suspected infection regardless of the presence of temperature elevation.

MEASURING BODY TEMPERATURE IN CRITICALLY ILL PATIENTS

Recommendation

1. Central temperature monitoring methods, including thermistors for pulmonary artery catheters, bladder catheters, or esophageal balloon thermistors, are preferred when these devices are in place or accurate temperature measurements are critical to diagnosis and management. For patients without these devices in place, we suggest using oral or rectal temperatures over other temperature measurement methods that are less reliable (such as axillary or tympanic membrane temperatures, noninvasive temporal artery thermometers, or chemical dot thermometers) (weak recommendation, very low-quality evidence).

Rationale: Any device used to measure temperature in a patient should provide reliable, reproducible, safe, and convenient results. This assumes that all devices are calibrated and maintained according to manufacturers' specifications. The thermistor of a pulmonary artery catheter, a bladder catheter, or an esophageal