**Practice Guidelines for Central Venous Access: Update 2020**

**Supplement 4: Evidence Tables**

**Studies Evaluating Selection of Antiseptic Solution — Catheter Colonization, Catheter-Related Bloodstream Infection.**



**Meta-analyses of RCTs Comparing Antimicrobial Agent Containing and Standard Catheters — Colonization and Catheter-Related Bloodstream Infection.**



**RCTs Examining Selection of Catheter Insertion Site and Infectious Complications — Catheter Colonization, Catheter-Related Bloodstream Infection or Catheter-Related Sepsis.**



**Selection of Catheter Insertion Site in Burn Patients and Infectious Complications — Catheter Colonization and Catheter-Related Bloodstream Infection.**



**Meta-analyses of RCTs Comparing Chlorhexidine Containing and Standard Dressings — Catheter Colonization, Catheter-Related Bloodstream Infection.**



**Occurrence of Chlorhexidine-Related Dermatitis in RCTs.**



**Association Between Catheter Dwell Time and Risk of Infection in Nonrandomized Comparative Studies.**



**RCTs Comparing Catheter Change at 3 Versus 7 Days and Risk of Infection.**



**RCTs Comparing Catheter Change by Guidewire Versus a New insertion Site.**



**RCTs Comparing Needleless and Standard Connectors — Contamination and Catheter-Related Bloodstream Infection.**



**RCTs Examining Selection of Catheter Insertion Site — Insertion Success, Thrombotic, and Mechanical Complications.**



**Positioning for Needle Insertion and Catheter Placement — Trendelenburg and Right Internal Jugular Vein.**



**Selection of Catheter Size and Type — Case Reports of Unintentional Arterial Cannulation with Large Bore Catheters.**



**RCTs Comparing Thin-Wall and Catheter-Over-the-Needle Techniques.**



**Observational Studies Examining Number of Insertion Attempts and Complication Rate.**



**Observational Study of Two Catheters in Same Vein — Dysrhythmia.**



**Meta-analyses of RCTs Comparing Realtime Ultrasound with Landmark Placement — Internal Jugular Vein.**



**RCTs Comparing Realtime Ultrasound with Landmark Placement — Subclavian Vein.**



**RCT Comparing Realtime Ultrasound With Landmark Placement — Femoral Vein.**



**Meta-analyses of RCTs Comparing Static Ultrasound and Landmark Placement.**



**Observational Studies Examining Sensitivity and Specificity of Ultrasound for Catheter Malposition (Chest X-Ray Reference Standard).**



**Observational Studies Examining Sensitivity and Specificity of Chest X-Ray for Catheter Malposition (Transesophageal Echocardiography Reference Standard)**.

**Summary of 57 Reported Cases of Retained Guidewires Accompanying Central Venous Catheter Insertion.**

