

Supplementary Online Content

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eTable 1. Determining the Causative Pathogen: Specimen Type, Test Type, and Criteria

eTable 2. Variables Included in the Multivariable Model Assessing Risk Factors Associated With Mortality at 30 Days After Sepsis Diagnosis

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Determining the Causative Pathogen: Specimen Type, Test Type, and Criteria

Specimen Type	Test Type	Criteria to be included as a causative pathogen	Criteria to determine organism is not a causative pathogen
Blood	Positive Microbiologic Culture	All bacteria, viruses, fungi	Common commensals ¹
	Non-culture Diagnostic Test	All bacteria, fungi, parasites, viruses	
Cerebral Spinal Fluid	Positive Microbiologic Culture	All bacteria, viruses, fungi, parasites	
	Non-culture Diagnostic Test		
Lower Respiratory Specimen	Positive Microbiologic Culture	-- All viruses and bacteria if lower respiratory or pneumonia infection indicated -- Included certain fungi (<i>Cryptococcus</i> and <i>Cladosporium</i>) regardless of whether infection documented	-- Common commensals ² -- All viruses/bacteria/fungi if lower respiratory or pneumonia infection not documented
	Non-culture Diagnostic Test	All viruses	<i>Candida</i> spp or other yeast
Pleural fluid	Positive Microbiologic Culture	Include all bacteria, viruses, fungi	
Stool	Positive Microbiologic Culture	-- All parasites -- Bacteria, fungi, viruses based on documentation of clinical infection	

	Non-culture Diagnostic Test	<i>Clostridium</i> spp. and viruses	
Urine	Positive Microbiologic Culture	-- Bacteria/fungi if urinary tract infection was documented as an infection -- All parasites (<i>Echinococcus</i>)	Bacteria/fungi without documented urinary tract infection
	Non-culture Diagnostic Test	-- Include <i>Legionella/Streptococcus pneumoniae</i> antigen test positive results	Yeast (i.e. beta-d-glucan), certain viruses if no clinical information
Wound	Positive Microbiologic Culture	All bacteria/fungi/viruses if skin and soft tissue infection indicated and/or bone and joint infection documented	Bacteria/fungi/viruses if no infection documented
	Non-culture Diagnostic Test	All fungi, bacteria, viruses only if patient has skin or soft tissue infection or bone and joint infection	Bacteria/viruses/fungi if no infection documented
Other Specimen³	Positive Microbiologic Culture	All bacteria, fungi or viruses isolate from cultures of normally sterile sites	
	Non-culture Diagnostic Test	--All bacteria from a sterile site --Certain bacteria/fungi/viruses from non-sterile sites depending on site and clinical infection	Bacteria/fungi/viruses if no corresponding infection indicated in the medical chart

¹Based on National Healthcare Safety Network (NHSN) criteria for common commensals.

²*Candida* spp, coagulase-negative *Staphylococcus* species, *Enterococcus* species.

³Sterile sites: abdominal abscess, abdominal fluid, abdominal tissue, abscess, blood, bone, brain, eye, maxillary fluid, mediastinum fluid, heart tissue, joint tissue, kidney tissue, lung tissue, lymph nodes, peritoneal fluid, pelvic fluid, pleural biopsy fluid, plasma, serum, shoulder tissue, shut fluid, sinus fluid, brain tissue or other general tissue, thigh fascia, fluid from a thoracentesis, vitreous tissue, muscle . Non-sterile sites: skin abscess, anal swab, bronchialverolar lavage fluid, catheter tips, cervical swab, cheek tissue, chest tube, endotracheal tube, esophageal tissue, eye tissue, fluid (unknown location), gallbladder tissue, cervical swab, groin swab, stomach tissue, incision wound, nephrostomy, nasal swabs, mouth, skin swabs, catheter swabs, vaginal culture, skin, bile.

eTable 2. Variables Included in the Multivariable Model Assessing Risk Factors Associated With Mortality at 30 Days After Sepsis Diagnosis

Variable	Levels	Reference level	Values
Gender	2	Male	Female; Male
Age group	4	18-44 years old	18-44 years old; 45-64 years old; 65-84 years old; 85 years and older
Race	3	White	Black; White; Not black or white
Diabetes	2	No	Yes, No
Immunosuppressed	2	No	Yes, No
Vascular Disease	2	No	Yes, No
Pulmonary Disease	2	No	Yes, No
Alcohol Abuse	2	No	Yes, No
Smoking	2	No	Yes, No
Intravenous Drug Use	2	No	Yes, No
Cirrhosis	2	No	Yes, No
Chronic Dialysis	2	No	Yes, No
Organ dysfunction within 7 days	2	No organ dysfunction	No organ dysfunction; Organ dysfunction within 7 days
Septic Shock	2	No shock	No shock; Shock
Any medical treatment in prior 30 days	2	None	Any treatment in prior 30 days; None
Antimicrobial therapy in prior 30 days	2	Antimicrobial therapy	Antimicrobial therapy; None
Device use in prior 30 days	2	Any device in prior 30 days	Any device in prior 30 days; None
Documented infections	8	No infection documented on discharge as cause of sepsis	Abdominal; More than one infections documented on discharge as cause of sepsis; No infection documented on discharge as cause of sepsis; Other; Respiratory; Skin and Soft Tissue; Undetermined; Urinary
Causative pathogen	2	No pathogen	No pathogen; Any pathogen
Location 4 days prior to sepsis diagnosis	4	Private residence	Private residence; Nursing home/skilled nursing facility; Long term acute care hospital or other acute care hospital; Other
Community or hospital onset	2	Community onset	Community onset; Hospital onset
Outpatient medical encounter	2	None	Any Outpatient encounter; None
Influenza or pneumococcal vaccine	2	Receipt of either vaccine	Influenza or pneumococcal vaccine; Neither