Appendix 1 (as supplied by the authors): Definitions of chronic comorbidities and acute concurrent illnesses

Chronic comorbidities

Any comorbidity present upon hospital admission prior to the development of septic shock

- Peripheral vascular disease: history of stroke, transient ischemic attack, thoracic or abdominal aortic surgery, peripheral arterial bypass surgery, peripheral angioplasty, claudication.
- Coronary artery disease: history of myocardial infarction, coronary angioplasty, coronary artery bypass, coronary artery stenosis ≥ 50% measured during coronarography.
- Heart failure: cardiac ejection fraction ≤ 50% or diastolic dysfunction on echocardiography.
- Chronic obstructive pulmonary disease: FEV1 ≤ 80% and FEV1/FVC ≤ 0.7.
- Asthma: Methacholine challenge positive/FEV1 variation ≥ 12%/180ml after bronchodilators.
- Hypertension: history of hypertension or any patient receiving more than 3 anti-hypertensive medications; included anti-hypertensive medications are beta-blockers, alpha blockers, alpha2 agonists, ACEi, ARB, renin inhibitor, calcium channel blockers, loop diuretics, thiazide diuretics, potassium sparing diuretics, vasodilators.
- Diabetes mellitus: use of oral hypoglycemic medications (metfomine, glyburide, chlorpropamide, tolbutamide, glimepiride, gliclazide, repaglinide, nateglinide, acarbose, rosiglitazone, pioglitazone) or use of insulin.
- Chronic renal failure: defined according to the recommendations of the "National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI)": estimated glomerular clearance ≤ 60ml/min as per the MDRD method; patients on chronic dialysis are automatically included.
- Cirrhosis: proven cirrhosis on hepatic biopsy, child B or C cirrhosis, history of hepatic encephalopathy or history of upper gastrointestinal tract hemorrhage secondary to esophageal/gastric variceal bleeding.

Appendix to: St-Arnaud C, Éthier J-F, Hamielec C, et al. Prescribed targets for titration of vasopressors in septic shock: a retrospective cohort study. *CMAJ Open* 2013. DOI: 10.9778/cmajo.20130006.

- Active neoplasia: any patient diagnosed with neoplasia within 5 years prior to admission or any patient having received chemotherapy/radiotherapy within 5 years prior to admission.
- Immunosuppression: any patient receiving an immunosuppressant agent. Any patient having received a form of chemotherapy within 6 weeks prior to admission. Any patient known with a hematologic neoplasia (lymphoma or leukemia). Any patient having a past history of solid organ transplantation or bone marrow transplantation (excluding corneal transplant). Any HIV + patient. Immunosupressant agents are 6-mercaptopurine, azathioprine, systemic corticosteroid (prednisone, hydrocortisone, methylprenisolone, dexamethasone), methotrexate, cyclosporine, cyclophosphamide, hydroxychloroquine, mycophenolate mofetil, AntiTNF (infliximab, adalimumab, etanercept, certolizumab pegol), anakinra, rituximab.

Concurrent acute illnesses

Any organ insult or complication occurring within the initial 48 hours of ICU admission. Included if present upon ICU admission.

- Myocardial injury: serum troponins above upper limit of normal and above baseline value if available.
- Cardiac arrhythmia: history of atrial fibrillation, atrial flutter, supraventricular tachycardia, ventricular tachycardia, ventricular fibrillation, torsade de pointes. Chronic atrial fibrillation of atrial flutter is not considered an acute comorbidity.
- Acute pulmonary edema: diagnosis written in the progress notes and with at least 1 objective element present (lung imaging suggestive of edema, improvement after diuretics/dialysis, left heart failure on cardiac echocardiography).
- ARDS/ALI: $PaO2/FiO2 \leq 300mmHg$ with bilateral lung infiltrates on a chest x-ray. Use the radiologist's interpretation of the chest x-ray.
- Massive hemorrhage: deadly bleed or a symptomatic bleed in a critical region or organ (intracranial, spinal, ocular, retroperitoneal, articular, pericardial, or intramuscular with compartment syndrome) or bleed causing a $\downarrow$ Hb 20g/l or leading to a transfusion of ≥ 2 units of packed RBCs.

- Ischemic or hemorrhagic stroke proven on head CT/MRI. If the symptoms were present during the study period but imaging was done within 24 hours after the end of the study period, the event is included.
- Ischemic bowel disease: clinical suspicion mentioned in the progress notes and supported by a radiology exam (abdominal CT, abdominal angiography), endoscopic exam, or by operating room (OR) findings. OR findings are included if surgery performed immediately before the ICU admission.
- Acute renal failure: hemodialysis or CVVH in the ICU or a serum creatinine ↑ 1.5X baseline value or urine output ≤ 0.5ml/kg/hr x ≥ 6 hours or serum creatinine ≥350 μmol/L (only if new creatinine is ≥44 μmol/L compared to baseline value).
- Maximal INR > 2.0. If the patient was on vitamin K antagonist with a therapeutic INR (> 2.0) prior to ICU admission, we do not consider this as being an acute comorbidity.