| List of the Strong Recommendations based on Moderate/High Quality Evidence in SSC Guidelines 2016 |  |
| :---: | :---: |
| Antibiotics | Antibiotics ASAP and within 1 hour for sepsis and septic shock |
|  | Empiric broad-spectrum antimicrobials to cover all likely pathogens |
|  | AGAINST routine combination therapy (i.e. 2 GNR agents) in neutropenic sepsis/bacteremia |
| Volume Expansion | Crystalloids as resuscitation fluid of choice (rather than colloids) |
|  | AGAINST use of hydroxyethyl starches |
|  | Use transfusion threshold of Hgb <7.0 in absence of AMI, severe hypoxemia, hemorrhage |
|  | AGAINST use of EPO for anemia |
|  | AGAINST use of AT-III |
| Vasopressors | Target MAP>65 with vasopressors if needed |
|  | Norepinephrine as vasopressor of choice |
|  | AGAINST low dose dopamine for renal protection |
| Mechanical <br> Ventilation and <br> Sepsis-induced ARDS | Lung protective ventilation: Vt 6cc/kg, Pplat <30 |
|  | Prone positioning for P:F<150 |
|  | AGAINST high-frequency oscillatory ventilation |
|  | Conservative fluid management in absence of tissue hypoperfusion |
|  | AGAINST B-agonists in absence of bronchospasm |
|  | AGAINST routine use of PA catheters |
|  | Use a weaning protocol including daily SBTs |
| Glucose Control | Protocol with target <=180 |
| DVT PPX | Use something, and LMWH>UFH unless contraindicated |
| Nutrition | AGAINST early TPN where enteral feeding possible or before 7 days |
|  | AGAINST IV selenium or glutamine |
| Goals of Care | Incorporate goals of care into treatment and end-of-life care planning, utilizing palliative care principles where appropriate |

## Beyond the Guidelines

## Diagnosis

-What's in a name?: Sepsis-3 vs. "good old SIRS"; what do we do without a gold standard?

## Treatment

-Protocolized sepsis resuscitation:
-The trials: PROCESS, PROMISE, ARISE: "failure" of the bundle or improvement in usual care?
-The meta-analysis: PRISM: protocolized care increased costs without improving outcomes
-Real-world impact of care protocols: Rory's Regulations in NY State: antibiotics help, but what about fluids?
-The Federal Government enters the fray: The SEP-1 Bundle
-How much fluid should I give?: Enough but not too much!
-The Magic Bullet?: Hydrocortisone/VitaminC/Thiamine

## Epidemiology

-Long-term outcomes: among previously independent patients with severe sepsis, $1 / 3$ die; of the survivors, $1 / 3$ are not independent at 6 months
-Major driver of readmissions

