**Table 3. Gaps in evidence**

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| Domain | Gaps in evidence |
| Definition | Pathophysiology is not clarified  Definition is not unique |
| Classification | AMI patients at risk for CS  Recognition of early stages (pre-shock states)  Whether transitions to higher or lower grade stages of CS change the prognosis  Phenotyping CS patients will improve decision-making algorithms |
| Prognosis | Risk stratification in nonACS CS populations  Prospective validation and impact studies for contemporary risk scores  The incremental value of proteonomics in risk stratification |
| Monitoring | Which markers shall we follow for optimal monitoring?  PAC, Echo, Lactate?  Define markers for specific organ dysfunction, if prognostic |
| Medical Management | Patient selection for inotropes/vasopressors  Dose, up-titration and combination of vasopressors and inotropes  How and when to wean the patients from inotropes/vasopressors  Novel therapies  The role of proteonomics for individualized targeted interventions |
| MCSs | Patient selection for MCS  The type and timing of MCSs implant by CS etiology  The timing of mechanical LV unloading relative to coronary reperfusion in ACS-CS  How and when to wean the patients  Optimal approach to prevent and manage potential MCS-related complications: New devices with less complications |
| Systems of care | Which is the safer trajectory of a CS patient?  Network between CS centers  The link between hospitalization and rehabilitation/palliation |