**Supplementary Figure Legends**

**Supplementary Figure 1** Detailed search strategy

**Supplementary Figure 2** Risk of bias assessment for primary outcome in individual studies using ROBINS-I assessment tool.

**Supplementary Figure 3** Funnel plot for studies comparing mortality rates in sepsis in patient populations with pre-morbid metformin usage to populations without pre-morbid metformin usage

**Supplementary Figure 4** Sensitivity analysis of association between premorbid metformin usage and mortality. **a** Leave-one-out-at-a-time approach. **b** Excluding studies with serious risk of bias. **c** Studies with non-diabetics as control group; ED patients only. **d** Studies with diabetics as control group; ICU patients only. **e** Studies without significant difference in the presence of chronic renal failure.

**Supplementary Figure 5** Funnel plot for sensitivity analysis of association between premorbid metformin usage and mortality. **a** Excluding studies with serious risk of bias. **b** Studies with non-diabetics as control group; ED patients only. **c** Studies with diabetics as control group; ICU patients only **d** Studies without significant difference in the presence of chronic renal failure.

**Supplementary Figure 6** Funnel Plot for Mean Difference of initial plasma lactate levels comparing populations with pre-morbid metformin usage to populations without pre-morbid metformin usage.