

Supplementary Material 1. Time-weighted average temperature

The primary exposure of interest was Temperature (temp), expressed as degree Celsius (°C) and assessed as the time weightedaverage temperature (TWA^{temp}). Since hourly temperature is a dynamic process, TWA^{temp} over the first 24 hours of receiving renal replacement therapy was calculated as the area under the Hourly temperature-versus-time plot (Eq. 1). This was determined by summing the mean value between consecutive time points multiplied by the period of time between consecutive time points. Hours where data necessary to calculate the hourly temperature were missing were not included in the time weighted-average calculation, Thus, the calculation was adjusted by the number of observations available (Eq. 2).

AUC =
$$\frac{1}{2} \sum_{i=0}^{n-1} (t_{i+1} - t_i)(y_i + y_{i+1})$$
 (Eq. 1)

Where y_1 and y_2 are measurements at time t_1 and t_2

$$TWA^{temp} = \frac{AUC}{n_{observations}} (Eq. 2)$$

Where AUC is the area under the curve calculated according to Eq. 1 and nobservations are the number of observations available in 48 hours.