

**Figure E1.** Hypothetical biomarker data for cases (*solid grey*) and controls (*solid black*) for markers with increasing association with critical illness. We varied the strength of the association between the biomarker and outcome by varying the mean of cases (OR=1.5 shown in *dashed black*, OR=3.0 shown as *light grey*, OR=6.0 shown in *grey dashed*) while maintaining a mean for controls. The odds ratio is interpreted as the ratio of odds of critical illness comparing two patients who differ by one unit of the *log* (marker).

