

Table 4. Compensation table

Primary disorder	Primary change	Compensation
Respiratory acidosis - acute	1 unit ΔPCO_2	$\Delta\text{HCO}_3=0.1(\Delta\text{PCO}_2)$
Respiratory acidosis - chronic	1 unit ΔPCO_2	$\Delta\text{HCO}_3=0.35(\Delta\text{PCO}_2)$
Respiratory alkalosis - acute	1 unit ΔPCO_2	$\Delta\text{HCO}_3=0.2(\Delta\text{PCO}_2)$
Respiratory alkalosis - chronic	1 unit ΔPCO_2	$\Delta\text{HCO}_3=0.5(\Delta\text{PCO}_2)$
Metabolic acidosis	1 unit ΔHCO_3	$\text{PCO}_2=1.5(\text{HCO}_3)+ 8(\pm 2)$
Metabolic alkalosis	1 unit ΔHCO_3	$\Delta\text{PCO}_2=0.6(\Delta\text{HCO}_3)$