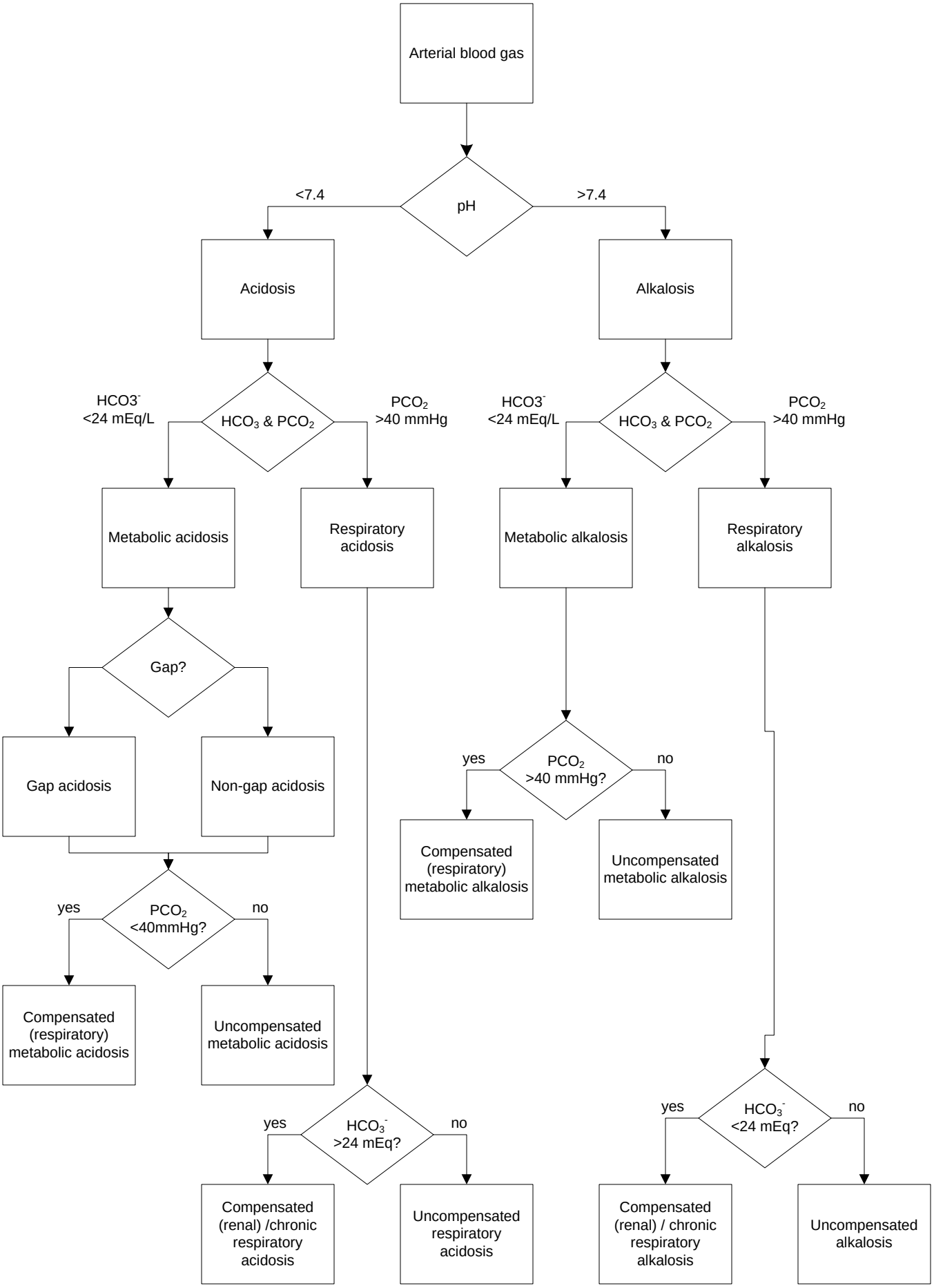
Arterial blood gas
pH
<7.4
>7.4
Acidosis
Alkalosis
HCO3-
<24 mEq/L
HCO3 & PCO2
PCO2
>40 mmHg
HCO3-
<24 mEq/L
HCO3 & PCO2
PCO2
>40 mmHg
Metabolic acidosis
Respiratory acidosis
Metabolic alkalosis
Respiratory alkalosis
Gap?
Gap acidosis
Non-gap acidosis
yes
PCO2
>40 mmHg?
no
Compensated (respiratory) metabolic alkalosis
Uncompensated metabolic alkalosis
yes
PCO2
<40mmHg?
no
Compensated (respiratory) metabolic acidosis
Uncompensated metabolic acidosis
yes
HCO3-
>24 mEq?
no
Compensated (renal) /chronic respiratory acidosis
Uncompensated respiratory acidosis
yes
HCO3-
<24 mEq?
no
Compensated (renal) / chronic respiratory alkalosis
Uncompensated alkalosis