

Normal Values  
 pH Acid 7.4 Alk  
 7.35 7.45

CO<sub>2</sub> Alk 40 Acid  
 35 45

HCO<sub>3</sub><sup>-</sup> Acid 24 Alk  
 22 26

Severe mod mild  
 60 70 80 100

1. 7.38 ↓ Acid (N)

30 ↓ Alk

10 ↓ Acid

60 Severe mod

Metabolic Acidosis  
 w/ Full compensation  
 and moderate hypoxemia

2. 7.60 ↑ Alk

25 ↓ Alk

24 N

72 mild

Respiratory Alkalosis  
 w/ No compensation  
 and mild hypoxemia

3. 7.37 ↓ Acid (N)

59 ↑ Acid

34 ↑ Alk

82 N

Respiratory Acidosis  
 w/ Full compensation  
 and normal oxygenation

4. 7.56 ↑ Alk

40 N

38 ↑ Alk

59

Metabolic Alkalosis  
 w/ No Compensation  
 and Severe hypoxemia

5. 7.34 ↓ Acid

50 ↑ Acid

31 ↑ Alk

65 - mod

Respiratory Acidosis  
 w/ Partial Compensation  
 and moderate hypoxemia

6. 7.15 ↓ Acid

49 ↑ Acid

25 N

74 mild

Respiratory Acidosis  
 w/ No compensation  
 and mild hypoxemia

7. 7.20 ↓ Acid

30 ↓ Alk

18 ↓ Acid

55 Severe

Metabolic Acidosis  
 w/ partial compensation  
 and severe hypoxemia

8. 7.54 ↑ Alk

44 N

36 ↑ Alk 64-O<sub>2</sub> mod

Metabolic Alkalosis  
w/ No Compensation  
and moderate hypoxemia

9. 7.42 N

38 N

25.3 N

92 N

Normal Blood gas  
and Normal oxygenation

10. 7.31 ↓ Acid

33 ↓ Alk

16 ↓ Acid

68 - Mod

Metabolic Acidosis  
w/ Partial Compensation  
and moderate hypoxemia

11. 7.27 ↓ Acid

35 N

10 ↓ Acid

78 - mild

Metabolic acidosis  
w/ No compensation  
and mild hypoxemia

12. 7.55 ↑ Alk

34 - ↓ Alk

16.8 ↓ Acid

91 - N

Respiratory Alkalosis  
w/ Partial Compensation  
and Normal Oxygenation