

Table 3. Mortality According to Baseline Characteristics\*

Characteristic†	Number of Patients	Deaths			P Value
		Total	Nocturnal O <sub>2</sub> Therapy	Continuous O <sub>2</sub> Therapy	
	no.	%			
Pa <sub>O<sub>2</sub></sub> , mm Hg					
<52	89	39.3	47.7	31.1	0.06
≥52	113	25.7	34.5	16.4	0.06
Paco <sub>2</sub> , mm Hg					
<43	96	31.2	34.6	27.3	0.78
≥43	106	32.1	46.0	19.6	0.002
pH					
<7.40	95	28.4	42.2	16.0	0.004
≥7.40	107	34.6	38.6	30.0	0.46
Hematocrit, %					
<47.4	99	32.3	41.5	21.7	0.03
≥47.4	102	31.4	38.8	24.5	0.20
FEV <sub>1</sub> , L					
<0.69	97	35.0	43.4	25.0	0.07
≥0.69	101	29.7	39.1	21.8	0.08
FVC, L					
<1.89	99	31.3	43.5	20.8	0.01
≥1.89	99	33.3	39.6	26.1	0.20
FRC, L					
<6.06	81	30.9	40.0	22.0	0.10
≥6.06	82	32.9	42.9	22.5	0.05
Sleep, mean Sa <sub>O<sub>2</sub></sub> , air breathing, %					
<85	89	37.1	50.0	24.4	0.02
≥85	92	23.9	31.1	17.0	0.14
Maximum work load, W					
<35	85	42.4	48.8	35.7	0.13
≥35	113	23.9	33.9	14.0	0.02
Resting heart rate, beats/min					
<92	101	28.7	38.8	19.2	0.08
≥92	102	34.3	41.5	26.5	0.06
Mean pulmonary artery pressure, mm Hg					
<27	86	27.9	37.0	17.5	0.03
≥27	98	31.6	39.6	24.0	0.14
Pulmonary vascular resistance, dyne/s·cm <sup>5</sup>					
<279	84	23.8	33.3	12.8	0.03
≥279	84	36.9	45.2	38.6	0.11
Neuropsychological rating					
<4.5	92	25.0	31.7	19.6	0.24
≥4.5	94	39.4	48.0	29.5	0.04
Russell-Neuringer average impairment index					
<2.17	85	25.9	31.7	20.5	0.30
≥2.17	89	37.1	45.8	26.8	0.03
Halstead impairment index					
<0.75	87	26.4	34.1	19.6	0.19
≥0.75	87	36.8	43.8	28.8	0.05
Mood disturbance (POMS)					
<43	89	29.2	30.2	28.3	0.80
≥43	92	37.0	52.2	21.7	0.005

\* Groups defined according to the median value for each characteristic. Data percentages for the continuous and nocturnal therapy groups are for deaths in each group divided according to the criteria for "Characteristic" and are not percentages of the totals in Column 2.

† FEV<sub>1</sub> = forced expiratory volume in 1 second; FVC = forced vital capacity; FRC = functional residual capacity; POMS = Profile of Mood States.

was still significantly ( $P = 0.03$ ) greater than in the nocturnal O<sub>2</sub> therapy group. We have included all patients in our major analysis of mortality because we believe that even in the cases cited above, it is impossible to argue that the patient's severe respiratory disease did not contribute to their death. An example of this complexity is afforded by our experience with coronary artery disease. Three patients (two on nocturnal O<sub>2</sub>, one on continuous O<sub>2</sub> therapy) died of arrhythmias after documented myocardial infarctions. On the other hand, nine other pa-

tients had sudden deaths—they were found dead in bed—some with a history of increasing respiratory difficulty but most without. Presumably these patients had fatal arrhythmias, but few would argue that their deaths were not primarily respiratory.

In an effort to discern if certain types of patients benefited from continuous O<sub>2</sub> therapy, we split nocturnal O<sub>2</sub> and continuous O<sub>2</sub> therapy patients into subgroups according to median values of baseline characteristics thought to be clinically important. Many subgroups