

Table S1. Mean change in PCO<sub>2</sub> (mmHg) across the dialysis filter.

		Mean change in PCO <sub>2</sub> measured in mmHg (pre-filter PCO <sub>2</sub> - post-filter PCO <sub>2</sub> )						
PCO <sub>2</sub> *	Dialysate	0 ml.min <sup>-1</sup>	2ml.min <sup>-1</sup>	4 ml.min <sup>-1</sup>	6 ml.min <sup>-1</sup>	8 ml.min <sup>-1</sup>	10 ml.min <sup>-1</sup>	20 ml.min <sup>-1</sup>
50	Prismasol™	4.1 ( $\pm 1.4$ )	6.4 ( $\pm 1.3$ )	10.3 ( $\pm 1.2$ )	12.8 ( $\pm 1.4$ )	14.1 ( $\pm 2.8$ )	16.4 ( $\pm 1.9$ )	11.5 ( $\pm 0.9$ )
	Bicarb16	0.8 ( $\pm 0.8$ )	6.3 ( $\pm 2.3$ )	11.9 ( $\pm 1.6$ )	22.6 ( $\pm 2.1$ ) <sup>†</sup>	24.2 ( $\pm 1.7$ ) <sup>†</sup>	24.4 ( $\pm 3.1$ ) <sup>†</sup>	32.7 ( $\pm 1.0$ ) <sup>†</sup>
	Bicarb0	1.8 ( $\pm 2.1$ )	12.6 ( $\pm 1.7$ ) <sup>†</sup>	20.0 ( $\pm 1.1$ ) <sup>†¶</sup>	24.5 ( $\pm 1.6$ ) <sup>†</sup>	27.2 ( $\pm 1.5$ ) <sup>†</sup>	28.7 ( $\pm 0.5$ ) <sup>†</sup>	34.5 ( $\pm 1.4$ ) <sup>†</sup>
	Prismasol™	0.8 ( $\pm 0.8$ )	11.4 ( $\pm 5.3$ )	11.9 ( $\pm 1.6$ )	22.6 ( $\pm 2.1$ )	24.2 ( $\pm 1.7$ )	24.4 ( $\pm 3.1$ )	32.7 ( $\pm 1.0$ )
	Bicarb16	2.9 ( $\pm 2.9$ )	16.1 ( $\pm 8.0$ )	24.5 ( $\pm 3.4$ ) <sup>†</sup>	31.9 ( $\pm 2.4$ ) <sup>†</sup>	40.3 ( $\pm 5.3$ ) <sup>†</sup>	41.5 ( $\pm 1.6$ ) <sup>†</sup>	48.6 ( $\pm 2.9$ ) <sup>†</sup>
	Bicarb0	4.6 ( $\pm 4.3$ )	18.4 ( $\pm 1.1$ )	28.8 ( $\pm 1.4$ ) <sup>†</sup>	37.7 ( $\pm 1.6$ ) <sup>†¶</sup>	43.4 ( $\pm 6.0$ ) <sup>†</sup>	39.4 ( $\pm 5.6$ )	52.3 ( $\pm 4.2$ ) <sup>†</sup>
90	Prismasol™	1.8 ( $\pm 2.1$ )	14.0 ( $\pm 3.8$ )	20.0 ( $\pm 1.1$ )	24.5 ( $\pm 1.6$ )	27.2 ( $\pm 1.5$ )	28.7 ( $\pm 0.5$ )	34.5 ( $\pm 1.4$ )
	Bicarb16	5.2 ( $\pm 3.3$ )	17.6 ( $\pm 4.1$ )	33.2 ( $\pm 3.4$ ) <sup>†</sup>	45.0 ( $\pm 1.4$ ) <sup>†</sup>	53.1 ( $\pm 1.9$ ) <sup>†</sup>	57.1 ( $\pm 2.5$ ) <sup>†</sup>	68.4 ( $\pm 3.6$ ) <sup>†</sup>
	Bicarb0	5.3 ( $\pm 2.4$ )	25.3 ( $\pm 2.4$ ) <sup>†</sup>	38.5 ( $\pm 1.6$ ) <sup>†¶</sup>	48.3 ( $\pm 1.4$ ) <sup>†</sup>	58.2 ( $\pm 1.2$ ) <sup>†¶</sup>	61.9 ( $\pm 4.8$ ) <sup>†</sup>	73.4 ( $\pm 2.2$ ) <sup>†</sup>

\* Target Partial Pressure of carbon dioxide (mm Hg). † PCO<sub>2</sub> change is significantly different from Prismasol™ control ( $p<0.05$ ). ¶ PCO<sub>2</sub> change is significantly different from Bicarb16 dialysate.