

Supplemental Material for Online Posting

Pharmacokinetics of Ganciclovir during Continuous Venovenous Haemodiafiltration in Critically Ill Patients

Legend to the figure

Fig. S 1.: Relationship between Cl_{tot} and Cl_{CVVHDF} of ganciclovir in the anuric patients undergoing CVVHDF (n = 9)

Tables:

Tab. S1: Patient characteristics

<i>Patient Nr.</i>	<i>Sex</i>	<i>Age (years)</i>	<i>Ht (cm)</i>	<i>Bw (kg)</i>	<i>SAPS II</i>	<i>CMV-PCR (Plasma)</i>
1	M	59	172	75	46	positive
2	M	65	178	85	72	positive
3	M	51	180	115	65	positive
4	F	39	160	41	53	positive
5	M	49	180	75	60	negative
6	M	66	180	120	72	positive
7	M	60	178	110	82	positive
8	M	64	180	75	40	positive
9	M	51	180	80	64	positive

M, male; F, female; Ht, height; Bw, body weight;
SAPS II, severity of disease classification system;
CMV-PCR, CMV detection via polymerase chain reaction

Tab. S2: Haematological parameters

Haematological parameters	Day 1 (n=9)	Day 2 (n=9)	Day 3 (n=9)	Day 4 (n=9)	Day 5 (n=7)	Day 6 (n=7)	Day 7 (n=6)
<i>RBC (T/l)</i>	3 ± 0,3	3,1 ± 0,2	3,1 ± 0,3	3,2 ± 0,3	3,3 ± 0,2	3 ± 0,3	3,3 ± 0,4
<i>HB (mg/dl)</i>	8,7 ± 1	9,5 ± 0,9	9,2 ± 0,8	9,6 ± 1	10 ± 0,7	9,1 ± 1	10 ± 1,2
<i>PLT (G/l)</i>	80 ± 70	83 ± 76	75 ± 86	94 ± 103	111 ± 124	105 ± 134	129 ± 118
<i>WBC (G/l)</i>	7,6 ± 6,3	8,5 ± 8,3	7,5 ± 6,2	8,5 ± 8,1	8,6 ± 10,7	6,6 ± 7,1	8,1 ± 8,5

RBC, red blood cells; HB, haemoglobin; PLT, platelets; WBC, white blood cells; values are expressed as mean (± SD); (baseline value = day 1).

Tab. S3: Ganciclovir individual pharmacokinetic parameter estimates from analysis with NONMEM[®] and WinNonlin[®]

<i>Patient Nr.</i>	<i>AUC_{0-24 h} [mg·h/L]</i>		<i>CL_{tot} [L/h]</i>		<i>V_D [L]</i>	
	<i>NONMEM[®]</i>	<i>WinNonlin[®]</i>	<i>NONMEM[®]</i>	<i>WinNonlin[®]</i>	<i>NONMEM[®]</i>	<i>WinNonlin[®]</i>
1	106.43	104.3	1.73	1.76	62.61	63.11
2	106.83	103.9	2.43	2.48	62.55	64.99
3	93.99	87.96	4.37	4.51	53.05	94.88
4	84.43	75.48	0.70	1.16	50.35	50.31
5	122.34	117.4	1.61	1.63	53.47	57.48
6	73.53	67.83	4.24	4.19	144.81	167.4
7	91.79	87.18	3.13	3.2	90.43	100.4
8	88.59	86.64	1.97	1.78	78.54	90.63
9	100.98	97.43	3.44	3.67	40.66	41.79

AUC_{0-24h}, are under the curve from 0 to 24 hours; CL_{tot}, total clearance; V_D, volume of distribution

Tab. S4: Percentage of patients falling below the target-AUC of 50 mg·h/kg at least once during a course of seven ganciclovir administrations (1000 simulated patients)

<i>Dosage regimen</i>	<i>AUC > 50 mg·h/kg</i>
5 mg/kg/24h	1.1%
2.5 mg/kg/24h	13.8%
1.5 mg/kg/12h	37.6%

AUC, area under the curve

Figure:
Fig. S1

