

[¹¹C]PE2I compartment model fit with plasma input

Nonlinear fitting

The nonlinear three-compartment model fit to regional TACs was made using program fitk4 2.1, and two-compartment model fit using program fitk2 0.1. Bootstrap method was used to estimate the SDs and 95% confidence limits for each of the fitted parameters. Based on the AIC values (below), the three-compartment (two-tissue compartment) model is clearly better for all regions with low binding, but for striatal regions two-compartment model is better, although if the fitted curves are plotted with original data (not shown), even striatal regions are fitted better with three-compartment model. Note that also white matter region is clearly better fitted with three- than two-compartment model!

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fitk2 0.1 (c) 2004 by Turku PET Centre
Date:      2004-08-07 21:05:43
Study:     JKAR_DY
Data file:  jkaravg.dft
Plasma file: jkar_apc.delay.dat
Blood file:  jkar_ab.delay.dat
Data range: 0 - 63 min (N=15)
Vb:        1.5 %
Data was weighted.
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Region		K1	K1/k2	Vb%	WSS	AIC
ac	All	0.2930	4.5084e+00	1.5000	1.3170e+04	1.0666e+02
	SD	0.0372	1.0236e+00	0.0000	.	.
	CL 95% Lower	0.2111	3.2377e+00	0.0150	.	.
	CL 95% Upper	0.3582	6.7124e+00	0.0150	.	.
cau	All	0.3306	1.0750e+02	1.5000	4.9125e+03	9.1872e+01
	SD	0.0066	4.1154e+01	0.0000	.	.
	CL 95% Lower	0.3190	6.6099e+01	0.0150	.	.
	CL 95% Upper	0.3443	2.0045e+02	0.0150	.	.
cer	All	0.3259	5.1473e+00	1.5000	8.2370e+03	9.9625e+01
	SD	0.0348	8.8400e-01	0.0000	.	.
	CL 95% Lower	0.2470	4.0347e+00	0.0150	.	.
	CL 95% Upper	0.3829	7.1268e+00	0.0150	.	.
dlp	All	0.3104	4.3641e+00	1.5000	1.2898e+04	1.0635e+02
	SD	0.0390	9.0460e-01	0.0000	.	.
	CL 95% Lower	0.2242	3.1930e+00	0.0150	.	.
	CL 95% Upper	0.3740	6.3370e+00	0.0150	.	.
occ	All	0.2580	4.9464e+00	1.5000	1.4533e+04	1.0814e+02
	SD	0.0340	1.4231e+00	0.0000	.	.
	CL 95% Lower	0.1845	3.3069e+00	0.0150	.	.
	CL 95% Upper	0.3150	8.1622e+00	0.0150	.	.
put	All	0.3772	8.8411e+01	1.5000	4.6660e+03	9.1100e+01
	SD	0.0128	4.9168e+01	0.0000	.	.
	CL 95% Lower	0.3564	4.6629e+01	0.0150	.	.
	CL 95% Upper	0.4050	1.8759e+02	0.0150	.	.
sn	All	0.2925	1.3139e+01	1.5000	1.7311e+04	1.1077e+02
	SD	0.0282	4.3722e+00	0.0000	.	.
	CL 95% Lower	0.2538	8.4734e+00	0.0150	.	.
	CL 95% Upper	0.3577	2.1742e+01	0.0150	.	.
tha	All	0.2827	5.6395e+00	1.5000	4.6922e+03	9.1184e+01
	SD	0.0248	8.2234e-01	0.0000	.	.
	CL 95% Lower	0.2298	4.6473e+00	0.0150	.	.
	CL 95% Upper	0.3265	7.5762e+00	0.0150	.	.
wm	All	0.1041	6.1633e+00	1.5000	1.3780e+03	7.2805e+01
	SD	0.0091	3.9935e+00	0.0000	.	.
	CL 95% Lower	0.0882	3.5409e+00	0.0150	.	.
	CL 95% Upper	0.1258	1.4731e+01	0.0150	.	.

fitk4 2.1 (c) 2000-2004 by Turku PET Centre
 Date: 2004-08-07 21:12:30
 Study: JKAR_DY
 Data file: jkaravg.dft
 Plasma file: jkar_apc.delay.dat
 Blood file: jkar_ab.delay.dat
 Data range: 0 - 63 min (N=15)
 Vb: 1.5 %
 Data was weighted.

Region		K1	K1/k2	k3	k3/k4	DV	WSS	AIC
ac	All	0.4307	2.1514	0.0893	1.2254e+00	4.7879e+00	1.4362e+03	8.0426e+01
	SD	0.0234	0.3768	0.0448	7.4629e+00	.	.	.
	CL 95% Lower	0.3821	1.6084	0.0177	0.0000e+00	.	.	.
	CL 95% Upper	0.4677	2.9528	0.1882	1.3277e+00	.	.	.
cau	All	0.3916	1.0872	1.8799	1.0000e+02	1.0980e+02	4.6943e+03	9.8191e+01
	SD	0.0260	2.1730	1.4953	2.4375e+01	.	.	.
	CL 95% Lower	0.3469	0.0601	0.0000	4.5267e+01	.	.	.
	CL 95% Upper	0.4375	9.0501	4.6770	1.2199e+02	.	.	.
cer	All	0.4706	2.0278	0.1635	1.6240e+00	5.3211e+00	5.1339e+02	6.4995e+01
	SD	0.0228	0.3906	0.0615	6.9632e+00	.	.	.
	CL 95% Lower	0.4249	1.4859	0.0449	3.0630e-01	.	.	.
	CL 95% Upper	0.5050	2.9213	0.2926	1.9990e+00	.	.	.
dlp	All	0.4415	2.3162	0.0725	1.0086e+00	4.6524e+00	6.7969e+02	6.9204e+01
	SD	0.0218	0.3501	0.0382	9.8723e+00	.	.	.
	CL 95% Lower	0.3970	1.6903	0.0128	0.0000e+00	.	.	.
	CL 95% Upper	0.4782	3.0853	0.1647	6.5067e-01	.	.	.
occ	All	0.3606	2.7265	0.0457	1.0344e+00	5.5468e+00	3.8067e+02	6.0508e+01
	SD	0.0117	0.2695	0.0175	1.5490e+01	.	.	.
	CL 95% Lower	0.3305	2.2949	0.0117	0.0000e+00	.	.	.
	CL 95% Upper	0.3802	3.3810	0.0809	1.0450e+01	.	.	.
put	All	0.5474	0.9238	1.2506	1.0000e+02	9.3303e+01	3.0518e+03	9.1732e+01
	SD	0.0494	2.8801	0.5167	2.7784e+01	.	.	.
	CL 95% Lower	0.4590	0.0000	0.2580	3.3799e+01	.	.	.
	CL 95% Upper	0.6341	8.6847	2.2227	1.2259e+02	.	.	.
sn	All	0.5111	1.0614	0.5172	1.1824e+01	1.3612e+01	1.1140e+04	1.1115e+02
	SD	0.6082	1.7048	0.3253	2.1347e+01	.	.	.
	CL 95% Lower	0.2646	0.0000	0.0131	0.0000e+00	.	.	.
	CL 95% Upper	2.1878	6.2082	1.1871	9.4289e+01	.	.	.
tha	All	0.4964	0.7734	0.6065	6.4095e+00	5.7306e+00	9.6642e+02	7.4483e+01
	SD	0.0478	0.2258	0.1547	1.8265e+00	.	.	.
	CL 95% Lower	0.4270	0.4350	0.3373	3.4846e+00	.	.	.
	CL 95% Upper	0.5974	1.2754	0.9623	1.0617e+01	.	.	.
wm	All	0.1649	0.6778	0.2998	8.7807e+00	6.6291e+00	2.0650e+02	5.1334e+01
	SD	0.0244	0.3418	0.1208	7.7569e+00	.	.	.
	CL 95% Lower	0.1380	0.2746	0.0866	3.2086e+00	.	.	.
	CL 95% Upper	0.2246	1.3576	0.5839	2.2411e+01	.	.	.

fitk2 0.1 (c) 2004 by Turku PET Centre
 Date: 2004-08-07 22:24:05
 Study: JOMA_DY
 Data file: jomaavg.dft
 Plasma file: joma_apc.delay.dat
 Blood file: joma_ab.delay.dat
 Data range: 0 - 63 min (N=15)
 Vb: 1.5 %
 Data was weighted.

Region		K1	K1/k2	Vb%	WSS	AIC
ac	All	0.1799	2.4798e+00	1.5000	4.2890e+03	8.9836e+01
	SD	0.0412	6.5867e+01	0.0000	.	.
	CL 95% Lower	0.0990	0.0000e+00	0.0150	.	.
	CL 95% Upper	0.2473	4.4456e+01	0.0150	.	.
cau	All	0.2427	3.7359e+01	1.5000	1.2216e+03	7.0998e+01
	SD	0.0094	3.1690e+01	0.0000	.	.
	CL 95% Lower	0.2280	2.1437e+01	0.0150	.	.
	CL 95% Upper	0.2639	7.2833e+01	0.0150	.	.
cer	All	0.2138	2.7446e+00	1.5000	3.4862e+03	8.6728e+01
	SD	0.0423	3.2557e+01	0.0000	.	.
	CL 95% Lower	0.1211	0.0000e+00	0.0150	.	.
	CL 95% Upper	0.2801	5.1803e+00	0.0150	.	.
dlp	All	0.2043	2.6657e+00	1.5000	6.9120e+03	9.6994e+01
	SD	0.0510	6.7498e+01	0.0000	.	.
	CL 95% Lower	0.1133	0.0000e+00	0.0150	.	.
	CL 95% Upper	0.2900	3.6737e+01	0.0150	.	.
occ	All	0.2087	2.6780e+00	1.5000	8.3221e+03	9.9779e+01

	SD	.	.	0.0530	9.2883e+01	0.0000	.	.
	CL	95%	Lower	0.1173	0.0000e+00	0.0150	.	.
	CL	95%	Upper	0.3006	4.7851e+02	0.0150	.	.
put	.	.	All	0.2502	3.2804e+01	1.5000	1.7852e+03	7.6689e+01
	SD	.	.	0.0127	3.5653e+01	0.0000	.	.
	CL	95%	Lower	0.2317	1.5433e+01	0.0150	.	.
	CL	95%	Upper	0.2823	7.3054e+01	0.0150	.	.
sn	.	.	All	0.1522	7.7630e+00	1.5000	2.2827e+03	8.0376e+01
	SD	.	.	0.0224	5.4671e+00	0.0000	.	.
	CL	95%	Lower	0.1227	2.7905e+00	0.0150	.	.
	CL	95%	Upper	0.2120	2.0484e+01	0.0150	.	.
tha	.	.	All	0.2075	3.3947e+00	1.5000	2.7566e+03	8.3206e+01
	SD	.	.	0.0356	3.5225e+01	0.0000	.	.
	CL	95%	Lower	0.1263	0.0000e+00	0.0150	.	.
	CL	95%	Upper	0.2668	5.0726e+00	0.0150	.	.
wm	.	.	All	0.0732	3.7891e+00	1.5000	3.6857e+02	5.3024e+01
	SD	.	.	0.0082	2.1205e+00	0.0000	.	.
	CL	95%	Lower	0.0625	1.9177e+00	0.0150	.	.
	CL	95%	Upper	0.0944	9.3826e+00	0.0150	.	.

fitk4 2.1 (c) 2000-2004 by Turku PET Centre
Date: 2004-08-07 22:30:21
Study: JOMA_DY
Data file: jomaavg.dft
Plasma file: joma_apc.delay.dat
Blood file: joma_ab.delay.dat
Data range: 0 - 63 min (N=15)
Vb: 1.5 %
Data was weighted.

Region		K1	K1/k2	k3	k3/k4	DV	WSS	AIC	
ac	.	All	0.2838	1.3109	0.0610	1.0831e+00	2.7309e+00	2.4234e+02	5.3734e+01
	SD	.	0.0198	0.2726	0.0798	2.7454e+01	.	.	.
	CL	95% Lower	0.2300	0.8282	0.0000	0.0000e+00	.	.	.
	CL	95% Upper	0.3096	1.9053	0.2808	9.0801e+01	.	.	.
cau	.	All	0.3185	1.3182	0.6792	2.9057e+01	3.9620e+01	7.3502e+02	7.0378e+01
	SD	.	0.0197	2.4425	0.3106	8.9945e+00	.	.	.
	CL	95% Lower	0.2793	0.1589	0.0868	1.0197e+01	.	.	.
	CL	95% Upper	0.3491	8.9950	1.2869	4.4949e+01	.	.	.
cer	.	All	0.2912	1.7515	0.0404	7.1121e-01	2.9972e+00	9.9138e+01	4.0327e+01
	SD	.	0.0110	0.1900	0.0239	1.4701e+01	.	.	.
	CL	95% Lower	0.2677	1.4409	0.0046	0.0000e+00	.	.	.
	CL	95% Upper	0.3079	2.1494	0.0976	1.4940e+01	.	.	.
dlp	.	All	0.3063	1.6697	0.0309	9.0996e-01	3.1890e+00	1.1683e+02	4.2789e+01
	SD	.	0.0081	0.0984	0.0099	1.2066e+01	.	.	.
	CL	95% Lower	0.2887	1.4914	0.0130	0.0000e+00	.	.	.
	CL	95% Upper	0.3193	1.8935	0.0512	9.3947e-01	.	.	.
occ	.	All	0.3204	1.6694	0.0297	9.7396e-01	3.2952e+00	2.7256e+02	5.5497e+01
	SD	.	0.0141	0.1558	0.0174	2.8586e+01	.	.	.
	CL	95% Lower	0.2909	1.3984	0.0060	0.0000e+00	.	.	.
	CL	95% Upper	0.3434	1.9682	0.0677	9.0441e+01	.	.	.
put	.	All	0.2997	5.5018	0.1582	5.9418e+00	3.8192e+01	4.2000e+02	6.1983e+01
	SD	.	0.0071	1.9227	0.0624	1.4343e+00	.	.	.
	CL	95% Lower	0.2860	2.9629	0.0584	3.3360e+00	.	.	.
	CL	95% Upper	0.3119	9.4503	0.2842	8.9920e+00	.	.	.
sn	.	All	0.2519	0.8613	0.3336	8.4784e+00	8.1641e+00	9.8590e+02	7.4783e+01
	SD	.	0.1999	0.9741	0.4518	2.9935e+01	.	.	.
	CL	95% Lower	0.1796	0.0000	0.0000	0.0000e+00	.	.	.
	CL	95% Upper	0.2911	3.5495	1.3101	8.9119e+01	.	.	.
tha	.	All	0.2824	1.8682	0.0666	9.2532e-01	3.5969e+00	2.6745e+02	5.5213e+01
	SD	.	0.0156	0.4065	0.0695	1.9495e+01	.	.	.
	CL	95% Lower	0.2472	1.2335	0.0000	0.0000e+00	.	.	.
	CL	95% Upper	0.3020	2.7697	0.2303	9.5726e+01	.	.	.
wm	.	All	0.1003	0.8357	0.1746	3.8662e+00	4.0669e+00	1.2184e+02	4.3420e+01
	SD	.	0.0056	0.4220	0.0941	1.6496e+01	.	.	.
	CL	95% Lower	0.0862	0.3679	0.0082	0.0000e+00	.	.	.
	CL	95% Upper	0.1095	2.1846	0.3860	9.6642e+01	.	.	.

fitk2 0.1 (c) 2004 by Turku PET Centre
Date: 2004-08-07 23:34:39
Study: MAUT_DY
Data file: mautavg.dft
Plasma file: maut_apc.delay.dat
Blood file: maut_ab.delay.dat
Data range: 0 - 63 min (N=15)
Vb: 1.5 %
Data was weighted.

Region		K1	K1/k2	Vb%	WSS	AIC
ac	All	0.3147	4.3528e+00	1.5000	1.2454e+03	7.1288e+01
	SD	0.0409	1.0729e+00	0.0000	.	.
	CL 95% Lower	0.2143	3.1229e+00	0.0150	.	.
	CL 95% Upper	0.3739	6.6396e+00	0.0150	.	.
cau	All	0.3100	3.6781e+01	1.5000	6.9022e+02	6.2434e+01
	SD	0.0135	1.0561e+01	0.0000	.	.
	CL 95% Lower	0.2893	2.6377e+01	0.0150	.	.
	CL 95% Upper	0.3415	6.2535e+01	0.0150	.	.
cer	All	0.3591	4.4761e+00	1.5000	6.5842e+02	6.1727e+01
	SD	0.0393	7.8563e-01	0.0000	.	.
	CL 95% Lower	0.2611	3.5832e+00	0.0150	.	.
	CL 95% Upper	0.4106	5.8995e+00	0.0150	.	.
dlp	All	0.3064	3.9613e+00	1.5000	8.1402e+02	6.4909e+01
	SD	0.0390	9.6574e-01	0.0000	.	.
	CL 95% Lower	0.2062	2.9412e+00	0.0150	.	.
	CL 95% Upper	0.3589	5.7382e+00	0.0150	.	.
occ	All	0.3554	4.9004e+00	1.5000	2.4120e+03	8.1202e+01
	SD	0.0661	3.3533e+01	0.0000	.	.
	CL 95% Lower	0.2099	0.0000e+00	0.0150	.	.
	CL 95% Upper	0.4520	1.0788e+01	0.0150	.	.
put	All	0.3623	3.4151e+01	1.5000	7.4191e+02	6.3518e+01
	SD	0.0189	1.0842e+01	0.0000	.	.
	CL 95% Lower	0.3312	2.3007e+01	0.0150	.	.
	CL 95% Upper	0.4093	5.9845e+01	0.0150	.	.
sn	All	0.2325	1.0317e+01	1.5000	2.7990e+03	8.3434e+01
	SD	0.0151	1.7305e+00	0.0000	.	.
	CL 95% Lower	0.2066	7.8797e+00	0.0150	.	.
	CL 95% Upper	0.2592	1.3819e+01	0.0150	.	.
tha	All	0.3307	5.9427e+00	1.5000	1.0284e+03	6.8416e+01
	SD	0.0423	1.6673e+00	0.0000	.	.
	CL 95% Lower	0.2312	4.2700e+00	0.0150	.	.
	CL 95% Upper	0.3992	1.0158e+01	0.0150	.	.
wm	All	0.0928	4.8227e+00	1.5000	1.8023e+02	4.2292e+01
	SD	0.0091	2.3533e+00	0.0000	.	.
	CL 95% Lower	0.0777	2.6425e+00	0.0150	.	.
	CL 95% Upper	0.1148	1.0267e+01	0.0150	.	.

fitk4 2.1 (c) 2000-2004 by Turku PET Centre
Date: 2004-08-07 23:40:40
Study: MAUT_DY
Data file: mautavg.dft
Plasma file: maut_apc.delay.dat
Blood file: maut_ab.delay.dat
Data range: 0 - 63 min (N=15)
Vb: 1.5 %
Data was weighted.

Region		K1	K1/k2	k3	k3/k4	DV	WSS	AIC
ac	All	0.4139	2.1307	0.1325	1.0898e+00	4.4527e+00	3.1542e+02	5.7688e+01
	SD	0.0256	0.6503	0.1364	2.4423e+01	.	.	.
	CL 95% Lower	0.3521	1.2319	0.0000	0.0000e+00	.	.	.
	CL 95% Upper	0.4482	3.4757	0.4076	9.3467e+01	.	.	.
cau	All	0.3583	1.9336	1.0971	1.7907e+01	3.6557e+01	6.3266e+02	6.8128e+01
	SD	0.0191	1.4512	1.2977	5.6553e+00	.	.	.
	CL 95% Lower	0.3287	1.3236	0.0000	9.4606e+00	.	.	.
	CL 95% Upper	0.4000	9.6323	4.4867	2.7620e+01	.	.	.
cer	All	0.4498	2.2250	0.1736	1.0396e+00	4.5381e+00	8.1970e+01	3.7475e+01
	SD	0.0144	0.4583	0.1020	3.3108e-01	.	.	.
	CL 95% Lower	0.4118	1.4795	0.0015	4.0047e-01	.	.	.
	CL 95% Upper	0.4743	3.4489	0.3825	1.8325e+00	.	.	.
dlp	All	0.3816	2.3416	0.0851	7.3385e-01	4.0601e+00	5.9957e+01	3.2784e+01
	SD	0.0139	0.4040	0.0606	1.1780e+01	.	.	.
	CL 95% Lower	0.3445	1.7431	0.0000	0.0000e+00	.	.	.
	CL 95% Upper	0.3989	3.2785	0.2132	0.0000e+00	.	.	.
occ	All	0.4878	2.5664	0.0876	9.8579e-01	5.0964e+00	9.5795e+01	3.9812e+01
	SD	0.0133	0.2772	0.0303	1.6470e-01	.	.	.
	CL 95% Lower	0.4573	2.1783	0.0328	6.5812e-01	.	.	.
	CL 95% Upper	0.5059	3.1899	0.1428	1.2658e+00	.	.	.
put	All	0.4603	2.6343	0.5421	1.2163e+01	3.4674e+01	3.1860e+02	5.7838e+01
	SD	0.0148	1.7948	0.1473	2.6889e+00	.	.	.
	CL 95% Lower	0.4186	1.9448	0.1236	3.8266e+00	.	.	.
	CL 95% Upper	0.4804	9.4561	0.7875	1.4321e+01	.	.	.
sn	All	0.2526	8.1041	0.0074	1.0000e+02	8.1851e+02	2.2991e+03	8.7483e+01
	SD	0.0123	1.4489	0.0929	4.8838e+01	.	.	.
	CL 95% Lower	0.2307	4.9894	0.0000	5.2076e+01	.	.	.

tha	CL	95%	Upper	0.2788	10.3892	0.1875	1.5198e+02	.	.	.
			All	0.4535	1.9438	0.2600	2.1080e+00	6.0413e+00	1.4811e+02	4.6349e+01
wm	SD	.	.	0.0252	0.8202	0.1347	7.4354e-01	.	.	.
	CL	95%	Lower	0.3863	0.9784	0.0200	7.0867e-01	.	.	.
	CL	95%	Upper	0.4975	4.4213	0.4973	3.6089e+00	.	.	.
			All	0.1124	1.7695	0.0999	1.9214e+00	5.1694e+00	8.3945e+01	3.7832e+01
	SD	.	.	0.0049	0.7030	0.1108	3.6710e+01	.	.	.
	CL	95%	Lower	0.1047	0.6611	0.0000	0.0000e+00	.	.	.
	CL	95%	Upper	0.1216	3.1843	0.3777	8.2353e+01	.	.	.

Multilinear model fitting of regional data

The multilinear three-compartment model fit to regional TACs was made using program lhsoldv 1.3; this program solves DV directly without division. Before this, blood volume correction was done using program dftcbv 0.2. As shown below, DVs are relatively close to the values obtained in the nonlinear fit.

```
lhsoldv 1.3 (c) 2002-2004 by Turku PET Centre
Date:      2004-08-17 19:43:47
Data file:  jkarcbv.dft
Plasma file: jkar_apc.delay.dat
Reference region: cer All
Data range: 63 min (N=15)
Vb:        0 %
Data was weighted.
```

Region	DV	FCM	SS	AIC	DVR
ac .	All	4.6689e+00	2 2.0376e+07	2.2383e+02	8.9273e-01
cau .	All	9.9425e+01	2 1.5602e+10	3.2344e+02	1.9011e+01
cer .	All	5.2299e+00	2 8.4578e+06	2.1064e+02	1.0000e+00
dlp .	All	4.5410e+00	2 1.5721e+07	2.1994e+02	8.6826e-01
occ .	All	5.3217e+00	2 3.3393e+07	2.3124e+02	1.0175e+00
put .	All	9.6894e+01	2 5.4500e+09	3.0766e+02	1.8527e+01
sn .	All	1.3857e+01	2 1.9974e+08	2.5807e+02	2.6495e+00
tha .	All	5.6703e+00	2 8.6412e+06	2.1096e+02	1.0842e+00
wm .	All	6.5660e+00	2 6.2801e+06	2.0617e+02	1.2555e+00

```
lhsoldv 1.3 (c) 2002-2004 by Turku PET Centre
Date:      2004-08-17 19:43:47
Data file:  jomacbv.dft
Plasma file: joma_apc.delay.dat
Reference region: cer All
Data range: 63 min (N=15)
Vb:        0 %
Data was weighted.
```

Region	DV	FCM	SS	AIC	DVR
ac .	All	2.6364e+00	2 5.2381e+06	2.0345e+02	9.0655e-01
cau .	All	4.1246e+01	2 2.4821e+08	2.6133e+02	1.4183e+01
cer .	All	2.9082e+00	2 5.3318e+06	2.0372e+02	1.0000e+00
dlp .	All	3.0077e+00	2 1.5022e+07	2.1925e+02	1.0342e+00
occ .	All	3.0182e+00	2 2.3183e+07	2.2576e+02	1.0378e+00
put .	All	3.4020e+01	2 2.3922e+08	2.6077e+02	1.1698e+01
sn .	All	8.1358e+00	2 2.8112e+07	2.2866e+02	2.7975e+00
tha .	All	3.4815e+00	2 5.5757e+06	2.0439e+02	1.1971e+00
wm .	All	3.8305e+00	2 2.5677e+06	1.9276e+02	1.3171e+00

```
lhsoldv 1.3 (c) 2002-2004 by Turku PET Centre
Date:      2004-08-17 19:43:48
Data file:  mautcbv.dft
Plasma file: maut_apc.delay.dat
Reference region: cer All
Data range: 63 min (N=15)
Vb:        0 %
Data was weighted.
```

Region	DV	FCM	SS	AIC	DVR
ac .	All	4.3960e+00	2 1.0026e+06	1.7865e+02	0.9800
cau .	All	3.6259e+01	2 1.9413e+08	2.5764e+02	8.0835
cer .	All	4.4856e+00	2 3.6508e+05	1.6350e+02	1.0000
dlp .	All	4.0061e+00	2 4.3359e+05	1.6608e+02	0.8931

occ	.	All	5.0126e+00	2	1.3729e+06	1.8337e+02	1.1175
put	.	All	3.4300e+01	2	8.6829e+07	2.4557e+02	7.6466
sn	.	All	1.0110e+01	2	4.4172e+07	2.3543e+02	2.2538
tha	.	All	5.9318e+00	2	6.1236e+05	1.7126e+02	1.3224
wm	.	All	5.0461e+00	2	4.1324e+06	1.9989e+02	1.1249

Conclusions from compartmental model fits

Because the metabolite corrected plasma curve of the third subject (maut) is not reliable, the conclusions should be drawn only based on the first two subjects.

All regions are better fitted with 3-compartment model than 2-compartment model, especially the low-binding regions.

The striatal DV-values are highly variable between the two first subjects (about 100 and 40). In cerebellum and white matter with no specific binding the difference is still high (about 6 and 3). Because the ratio is almost the same, it can be expected that most of this could be explained by different plasma protein binding. However, there is still a quite high difference in DVR ($=DV_{\text{striatal}}/DV_{\text{cerebellum}}$) (about 19 and 13). There may be an actual difference between the specific binding in these subjects.