

**On-line supplement
to the paper**

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**" Stereologic investigation of the posterior part
of the hippocampus in schizophrenia "**

This on-line supplement provides additional results of our high-precision design-based stereologic analysis of the posterior part of the hippocampus in 10 postmortem brains from patients with schizophrenia and 10 matched controls. Specifically, Table S1 summarizes the results of statistical analysis (p values) of our cell density data with generalized linear model multivariate analysis of variance (MANOVA). Figures S1 to S3 graphically represent these cell density data. Figure S4 shows the results of the post-hoc tests in the analyses of covariance (performed with two-way ANOVAs) of the MANOVA models focusing on differences in mean volumes and mean total neuron numbers between males and females.

Table S1: Results of statistical analysis (p values) with generalized linear model multivariate analysis of variance (MANOVA).

Variable	Brain region	A/ID	PMI	S	D	H	D×H
Density of neurons	All subregions	0.974	0.322	0.794	0.384	0.330	0.996
Density of astrocytes	All subregions	<0.001	0.745	0.129	0.117	0.945	0.927
	CA1	0.007					
	CA2/3	0.030					
	CA4	0.022					
	Subiculum	<0.001					
Density of oligodendrocytes	All subregions	0.499	0.495	0.077	0.156	0.443	0.938

A/ID, age (controls) or adjusted illness duration (patients with schizophrenia), respectively (adjusted illness duration calculated as age at death minus age at onset plus mean age at onset; details are provided in Statistical analysis); PMI, postmortem interval (time between death and autopsy); S, sex; D, diagnosis; H, hemisphere. P values smaller than 0.05 are shown in boldface. Note that region-specific analyses were performed only when MANOVA showed a significant effect.

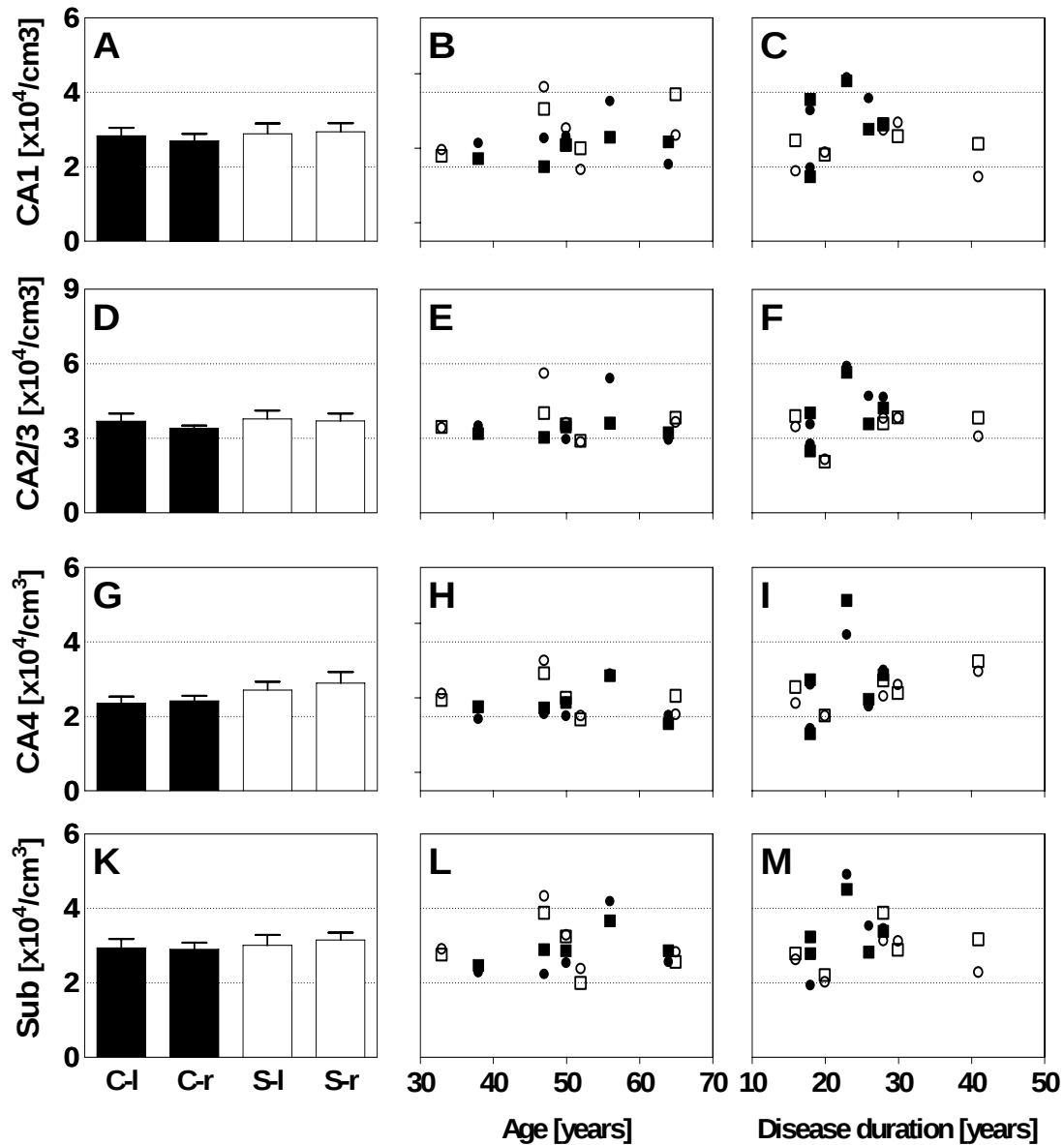


Fig. S1 Density of neurons in CA1 (A,B,C), CA2/3 (D,E,F), CA4 (G,H,I) and the subiculum (K,L,M) in both hemispheres of the brains from 10 patients with schizophrenia (S; open bars in A,D,G,K, and dots and squares in C,F,I,M) and 10 age-matched controls (C; closed bars in A,D,G,K, and dots and squares in B,E,H,L). In A,D,G,K, data are shown as mean and standard error of the mean for the left (l) and right (r) hemispheres from patients with schizophrenia (S-l and S-r) and controls (C-l and C-r). In B,C,E,F,H,I,L,M, individual data for the left hemispheres (closed dots: males; open dots: females) and right hemispheres (closed squares: males; open squares: females) from controls (B,E,H,L) and patients with schizophrenia (C,F,I,M) are shown as function of the controls' age (or the illness duration of the patients with schizophrenia, respectively).

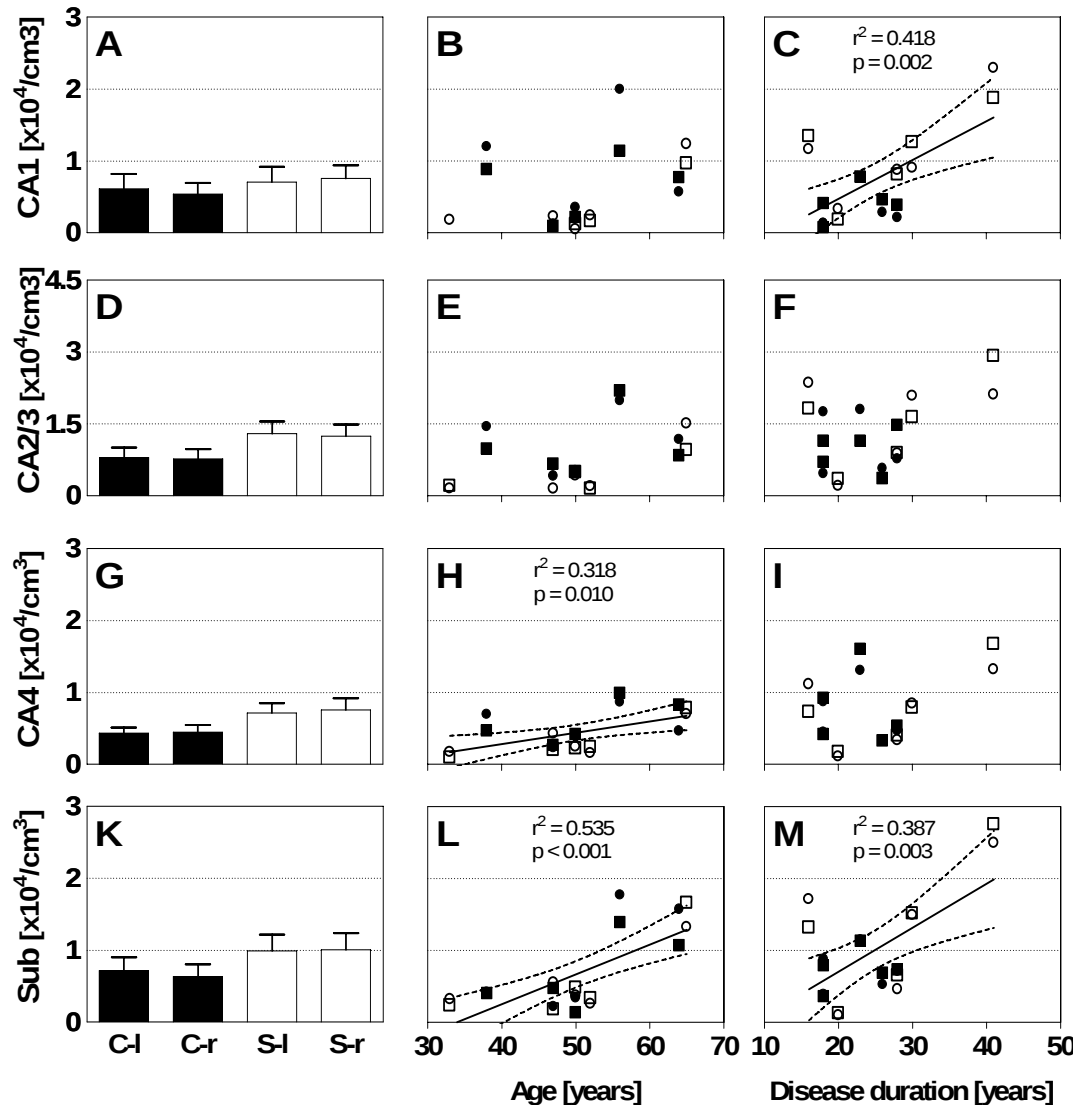


Fig. S2 Density of astrocytes in CA1 (A,B,C), CA2/3 (D,E,F), CA4 (G,H,I) and the subiculum (K,L,M) in both hemispheres of the brains from 10 patients with schizophrenia (S; open bars in A,D,G,K, and dots and squares in C,F,I,M) and 10 age-matched controls (C; closed bars in A,D,G,K, and dots and squares in B,E,H,L). In A,D,G,K, data are shown as mean and standard error of the mean for the left (l) and right (r) hemispheres from patients with schizophrenia (S-l and S-r) and controls (C-l and C-r). In B,C,E,F,H,I,L,M, individual data for the left hemispheres (closed dots: males; open dots: females) and right hemispheres (closed squares: males; open squares: females) from controls (B,E,H,L) and patients with schizophrenia (C,F,I,M) are shown as function of the controls' age (or the illness duration of the patients with schizophrenia, respectively). In C,H,L,M, results of linear regression analysis (regression lines, 95% confidence intervals of the regression lines, regression coefficients and corresponding p values, respectively) are shown, indicating statistically significant relations between the density of the

astrocytes and the controls' age (or the illness duration of the patients with schizophrenia, respectively).

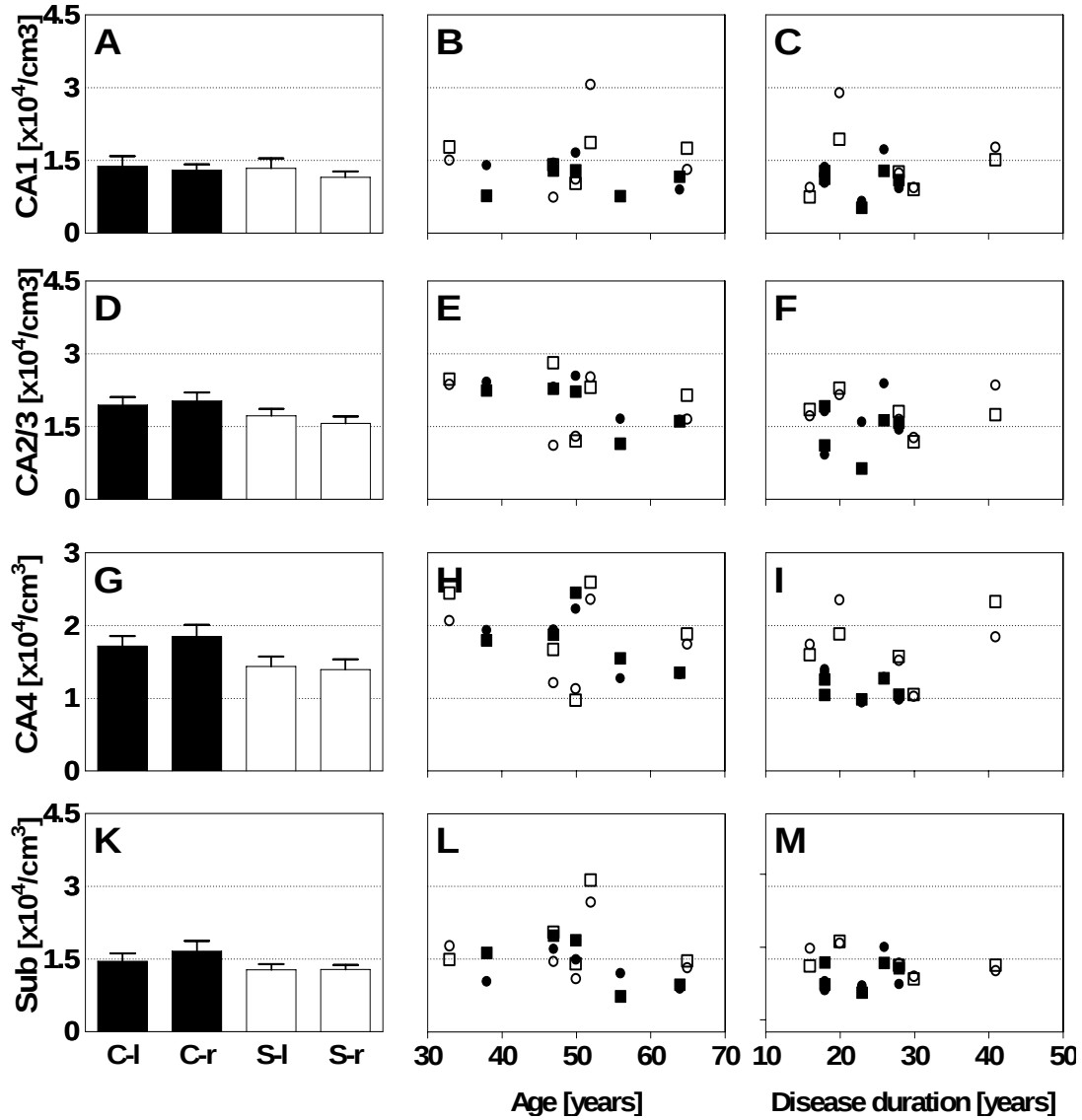


Fig. S3 Density of oligodendrocytes in CA1 (A,B,C), CA2/3 (D,E,F), CA4 (G,H,I) and the subiculum (K,L,M) in both hemispheres of the brains from 10 patients with schizophrenia (S; open bars in A,D,G,K, and dots and squares in C,F,I,M) and 10 age-matched controls (C; closed bars in A,D,G,K, and dots and squares in B,E,H,L). In A,D,G,K, data are shown as mean and standard error of the mean for the left (l) and right (r) hemispheres from patients with schizophrenia (S-l and S-r) and controls (C-l and C-r). In B,C,E,F,H,I,L,M, individual data for the

left hemispheres (closed dots: males; open dots: females) and right hemispheres (closed squares: males; open squares: females) from controls (**B,E,H,L**) and patients with schizophrenia (**C,F,I,M**) are shown as function of the controls' age (or the illness duration of the patients with schizophrenia, respectively).

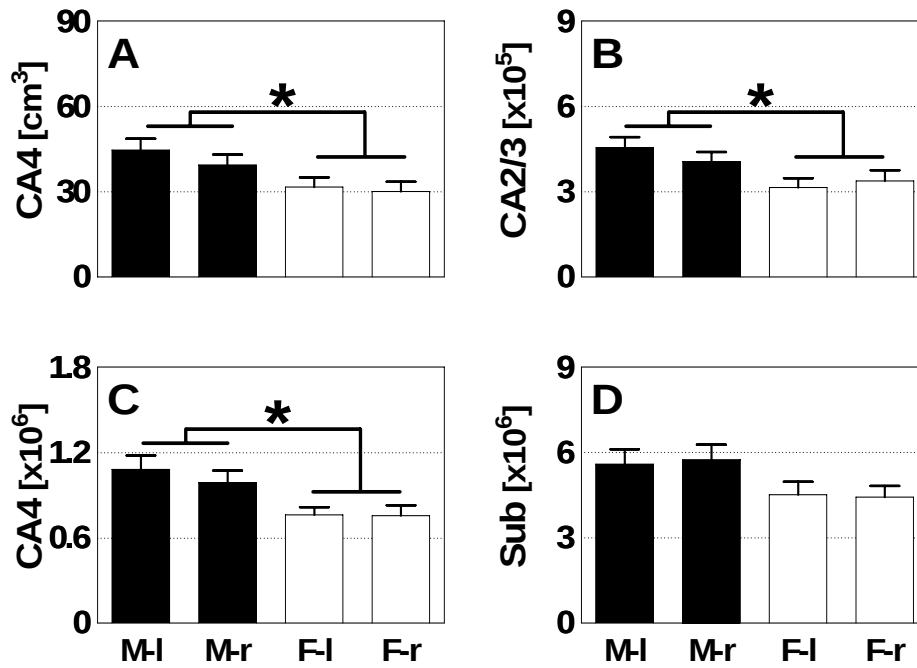


Fig. S4 Mean and standard error of the mean of the volume of CA4 (**A**) as well as the numbers of neurons in CA2/3 (**B**), CA4 (**C**) and the subiculum (**D**) in the left (l) and right (r) hemispheres of either male (M) or female (F) patients with schizophrenia and matched controls. *, $p < 0.05$ for the factor Sex in two-way repeated measures (RM) analysis of variance.