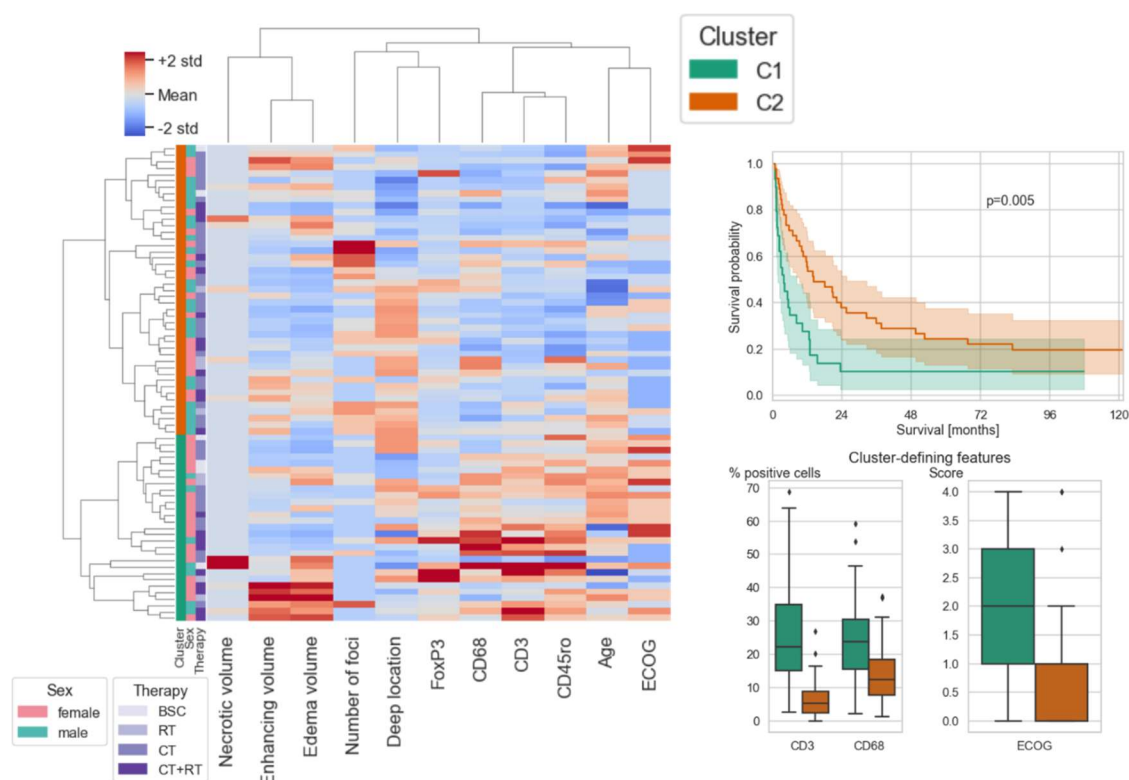
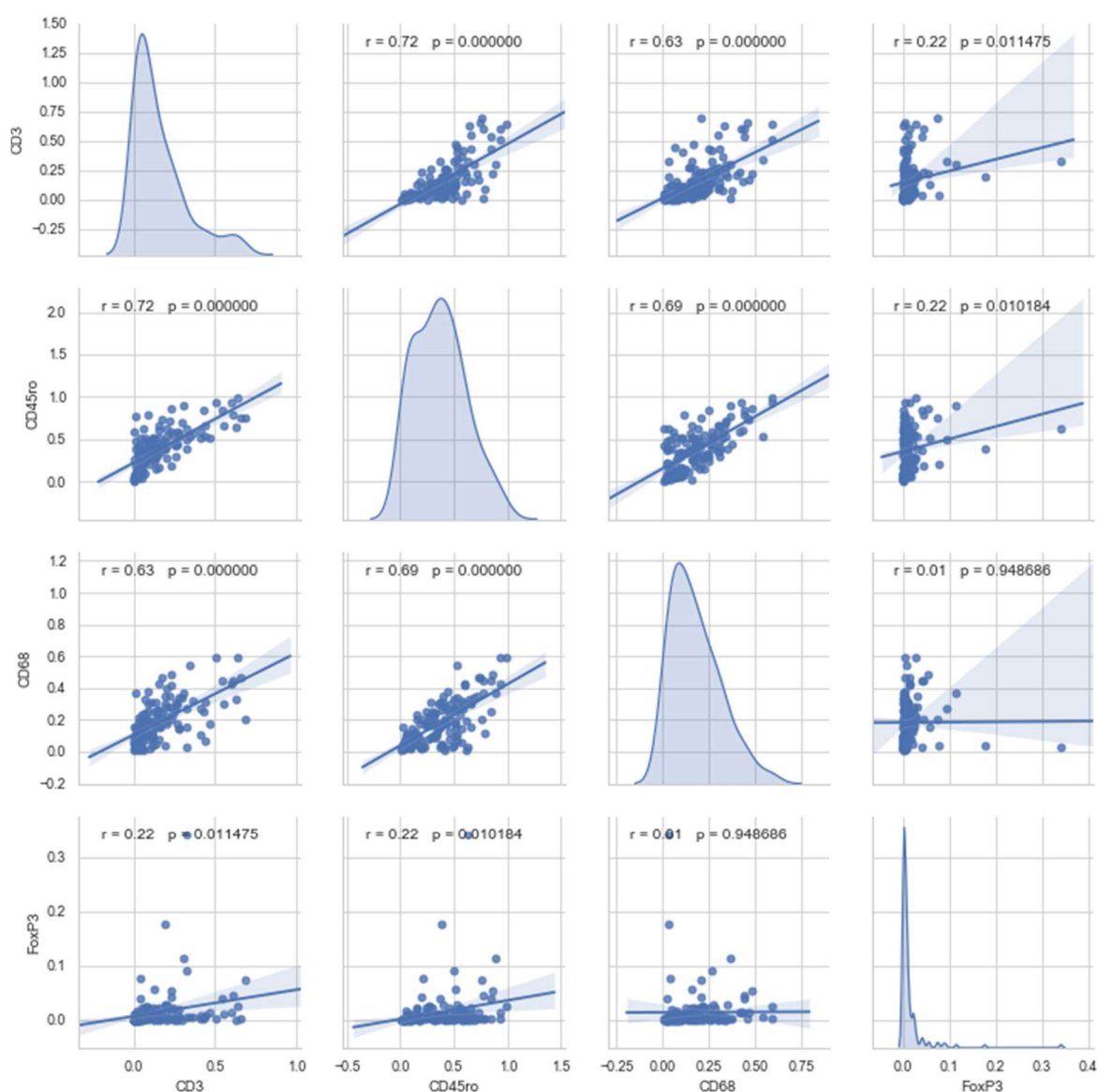


# Supplementary Materials: Sex-Specific Differences in Primary CNS Lymphoma

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**Figure S1.** Clustering results for the whole patient cohort.



**Figure S2.** Distribution and correlations of different immunohistochemical markers on the same tissue microarrays (TMA) tissue core.

**Table S1.** Cluster comparisons. P-values were calculated with ANOVA (continuous variables) or Kruskal–Wallis *H*-tests (ordinal variables).

Female Patients				
	fc1	fc2	fc3	p-Value
Age	53.5 ±10.7yrs	68.7 ±11.9yrs	68.6 ±11.6yrs	<0.01
ECOG	0 (0-1)	2 (2-2)	2 (0-3)	<0.01
Enhancing volume	10.6 ±8.2cm <sup>3</sup>	64.9 ±22.0cm <sup>3</sup>	12.0 ±9.2cm <sup>3</sup>	<0.01
Edema volume	77.1 ±68.7cm <sup>3</sup>	233.1 ±56.8cm <sup>3</sup>	73.0 ±49.8cm <sup>3</sup>	<0.01
Necrotic volume	1.3 ±4.0cm <sup>3</sup>	0.1 ±0.2cm <sup>3</sup>	0.1 ±0.3cm <sup>3</sup>	<0.01
Deep location	54.3 ±26.2%	45.3 ±14.2%	66.7 ±31.8%	<0.01

Number of foci	2 (1-3)	1 (1-1)	1 (1-1)	<0.01
CD3	4.3 ±3.4%	18.1 ±14.5%	18.4 ±11.7%	<0.01
CD45ro	17.1 ±11.3%	38.7 ±17.7%	51.7 ±16.6%	<0.01
FoxP3	0.4 ±0.5%	0.7 ±0.5%	1.1 ±2.0%	<0.01
CD68	11.6 ±7.6%	11.8 ±4.7%	25.8 ±12.4%	<0.01

**Male patients**

	mC1	mC2	<i>p</i> -value
Age	47.9 ± 13.3yrs	67.4 ± 9.5yrs	<0.01
ECOG	1 (1–2)	1 (1–1)	<0.01
Enhancing volume	4.1 ± 2.7 cm <sup>3</sup>	24.4 ± 12.9 cm <sup>3</sup>	<0.01
Edema volume	20.7 ± 12.3 cm <sup>3</sup>	113.0 ± 56.8 cm <sup>3</sup>	<0.01
Necrotic volume	0.2 ± 0.5 cm <sup>3</sup>	0.3 ± 0.8 cm <sup>3</sup>	<0.01
Deep location	80.8 ± 32.0%	49.4 ± 30.8%	<0.01
Number of foci	2 (1–2)	2 (1–3)	<0.01
CD3	4.3 ± 3.3%	13.7 ± 12.8%	<0.01
CD45ro	16.6 ± 9.7%	35.0 ± 18.8%	<0.01
FoxP3	0.9 ± 0.9%	0.5 ± 0.6%	<0.01
CD68	12.5 ± 7.4%	15.5 ± 9.1%	<0.01

**All patients**

	C1	C2	<i>p</i> -value
Age	60.8 ± 13.2 yrs	67.1 ± 14.2 yrs	0.06
ECOG	1 (0–1)	2 (1–3)	<0.01
Enhancing volume	17.0 ± 13.9 cm <sup>3</sup>	24.0 ± 25.9 cm <sup>3</sup>	0.14
Edema volume	82.7 ± 58.1 cm <sup>3</sup>	119.7 ± 92.3 cm <sup>3</sup>	0.04
Necrotic volume	0.2 ± 0.6 cm <sup>3</sup>	0.9 ± 3.0 cm <sup>3</sup>	0.16
Deep location	60.0 ± 31.7%	57.1 ± 31.6%	0.71
Number of foci	2 (1–3)	1 (1–1)	<0.01
CD3	7.0 ± 6.0%	28.0 ± 17.6%	<0.01
CD45ro	27.1 ± 16.9%	54.6 ± 20.3%	<0.01
FoxP3	0.6 ± 0.8%	1.5 ± 2.1%	0.01

CD68

14.2 ± 9.1%

25.2 ± 13.9%

&lt;0.01

**Table S2.** Split-points and survival for dichotomized variables obtained by RPA. mOS: median overall survival.

	Female Patients				Male Patients				All Patients			
	Groups	n	mOS	p	Groups	n	mOS	p	Groups	n	mOS	p
Age	≤64 years	12	not reached	<0.0001	≤59.5 years	8	not reached	0.00038	≤59.5 years	18	not reached	<0.0001
	>64 years	19	4.21 months		>59.5 years	17	5.59 months		>59.5 years	38	5.51 months	
ECOG	≤1.5	20	12.5 months	0.024	≤1.5	18	17.4 months	0.021	≤1.5	38	13.5 months	0.0012
	>1.5	11	4.21 months		>1.5	7	4.7 months		>1.5	18	4.45 months	
Enhancing volume	≤16.3 cm <sup>3</sup>	17	7.13 months	0.23	≤5.54 cm <sup>3</sup>	7	37.7 months	0.086	≤1.99 cm <sup>3</sup>	9	82.9 months	0.058
	>16.3 cm <sup>3</sup>	14	16.8 months		>5.54 cm <sup>3</sup>	18	6.92 months		>1.99 cm <sup>3</sup>	47	10.1 months	
Necrotic volume	≤0 cm <sup>3</sup>	26	11.3 months	0.44	≤0 cm <sup>3</sup>	22	13 months	0.31	≤0.05 cm <sup>3</sup>	49	11.9 months	0.81
	>0 cm <sup>3</sup>	5	9.21 months		>0 cm <sup>3</sup>	3	1.41 months		>0.05 cm <sup>3</sup>	7	9.21 months	
Edema volume	≤55.3 cm <sup>3</sup>	13	13 months	0.11	≤23.9 cm <sup>3</sup>	7	37.7 months	0.13	≤29 cm <sup>3</sup>	13	37.7 months	0.12
	>55.3 cm <sup>3</sup>	18	9.63 months		>23.9 cm <sup>3</sup>	18	9.95 months		>29 cm <sup>3</sup>	43	10.5 months	
Left location	≤49.5%	14	9.63 months	0.32	≤58.5%	16	5.44 months	0.071	≤50.5%	29	5.88 months	0.042
	>49.5%	17	13 months		>58.5%	9	25.5 months		>50.5%	27	15.4 months	
Cerebellar location	≤0%	27	10.5 months	0.36	≤2%	18	14.1 months	0.31	≤22%	49	12 months	0.45
	>0%	4	4.21 months		>2%	7	5.59 months		>22%	7	5.59 months	
Frontal location	≤2.5%	17	7.13 months	0.046	≤13%	13	11.6 months	0.16	≤2.5%	30	8.73 months	0.015
	>2.5%	14	35.3 months		>13%	12	31.9 months		>2.5%	26	33.9 months	
Temporal location	≤7.5%	23	12 months	0.29	≤0.5%	16	12.8 months	0.63	≤7.5%	47	12 months	0.26
	>7.5%	8	7.55 months		>0.5%	9	11.9 months		>7.5%	9	9.21 months	
Parietal location	≤6%	19	9.21 months	0.37	≤1%	14	14.5 months	0.38	≤1%	29	13 months	0.53
	>6%	12	11.7 months		>1%	11	11.9 months		>1%	27	10.5 months	
Occipital location	≤0%	25	10.5 months	0.57	≤0.5%	18	9.95 months	0.87	≤1.5%	46	11.1 months	0.46
	>0%	6	11.5 months		>0.5%	7	20.7 months		>1.5%	10	12.4 months	
Deep location	≤30%	7	9.21 months	0.1	≤85.5%	15	14.1 months	0.2	≤88.5%	42	13 months	0.086
	>30%	24	11.8 months		>85.5%	10	6.92 months		>88.5%	14	6.36 months	
Number of foci	≤1.5	18	8.6 months	0.29	≤2.5	17	8.25 months	0.43	≤3.5	49	10.5 months	0.22
	>1.5	13	12 months		>2.5	8	16.3 months		>3.5	7	11.9 months	
CD3	≤3.37%	7	NA months	0.039	≤16.6%	18	17.4 months	0.29	≤15.7%	39	14 months	0.058
	>3.37%	24	9.63 months		>16.6%	7	5.59 months		>15.7%	17	5.59 months	

CD45ro	≤33.6%	17	18.2 months	0.027	≤18%	7	37.7 months	0.25	≤7.14%	8	67.6 months	0.025
	>33.6%	14	5.31 months		>18%	18	9.95 months		>7.14%	48	9.63 months	
CD68	≤19.5%	19	12.9 months	0.21	≤20.3%	18	13 months	0.31	≤27.2%	49	12 months	0.11
	>19.5%	12	4.87 months		>20.3%	7	8.25 months		>27.2%	7	2.86 months	
FoxP3	≤0.141%	7	not reached	0.049	≤1.01%	18	11.8 months	0.16	≤0.141 %	15	37.7 months	0.15
	>0.141%	24	9.63 months		>1.01%	7	49.6 months		>0.141 %	41	9.21 months	



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