

## STATISTICAL ANALYSIS

The obtained results were analyzed statistically. The values of the analyzed measurable parameters were presented by means of the mean value, median and standard deviation, and for non-measurable ones—by the number and percentage. For measurable features, the normal distribution of the analyzed parameters was assessed using the Shapiro-Wilk test.

The Kruskal-Wallis test was used to compare multiple independent groups with the use of multiple comparison analysis. A significance level of  $p < 0.05$  was adopted, indicating the existence of statistically significant differences. The database and statistical research were carried out on the basis of the STATISTICA 13.0 computer software (StatSoft, Poland).

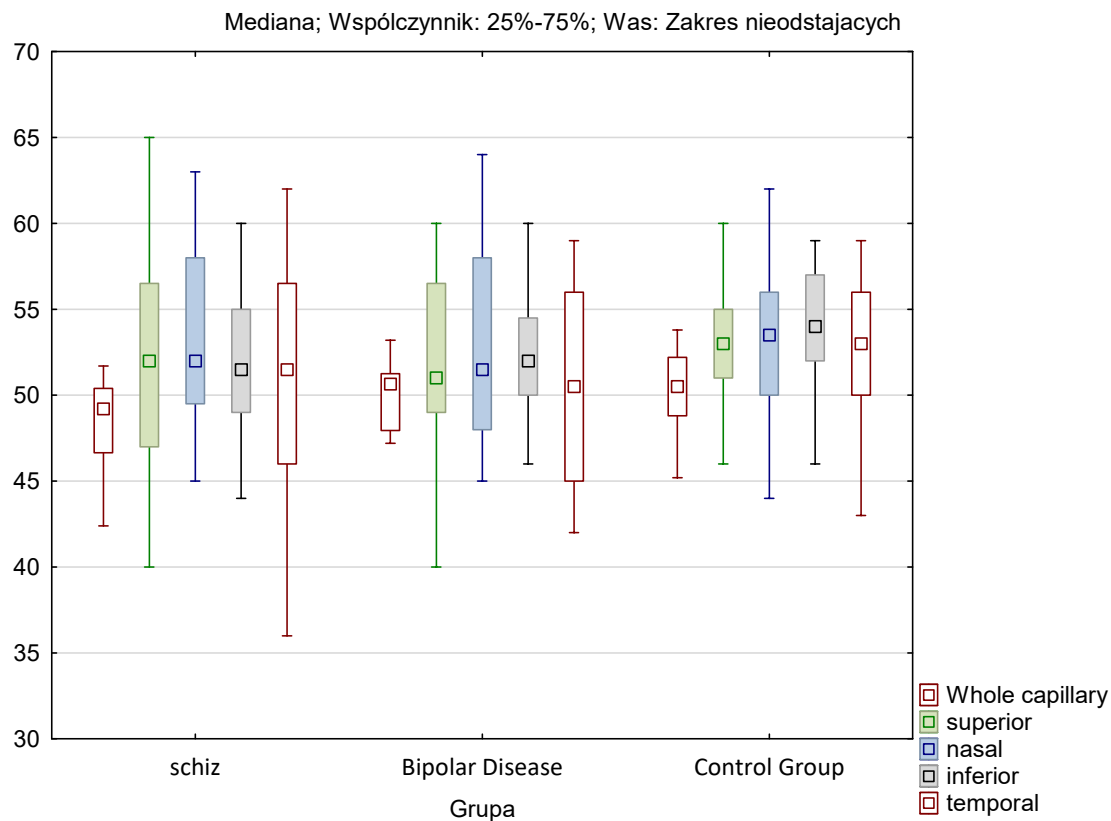
## Findings

The study included 70 patients (eyes), including 34.29% ( $n = 24$ ) with schizophrenia, 22.86% ( $n = 16$ ) with bipolar disorder and 42.85% ( $n = 30$ ) from the control group.

The conducted studies did not show statistically significant differences in the assessment of individual RPC Density% parameters between the groups ( $p > 0.05$ ), with the exception of the Whole capillary assessment ( $p = 0.02$ ), where the values were significantly lower in the group with schizophrenia compared to the respondents with bipolar disorder or control. (table 1).

Supplementary Table S1. Evaluation of RPC Density% parameters in groups.

RPC Density %	Schizophrenia			Bipolar Disorder			Control Group			Statistical Analysis
	Mean	Median	SD	Mean	Median	SD	Mean	Mediana	SD	
Whole capillary	48.09	49.20	3.09	49.99	50.65	1.95	50.10	50.50	2.63	H=7.86, p=0.02*
superior	51.71	52.00	6.02	51.44	51.00	5.99	52.90	53.00	3.38	H=0.75, p=0.69
nasal	52.58	52.00	7.76	52.56	51.50	5.73	53.77	53.50	5.30	H=0.78, p=0.68
inferior	52.42	51.50	5.14	52.06	52.00	4.55	54.10	54.00	3.71	H=3.77, p=0.15
temporal	50.58	51.50	6.82	50.50	50.50	5.79	52.17	53.00	4.34	H=0.97, p=0.61

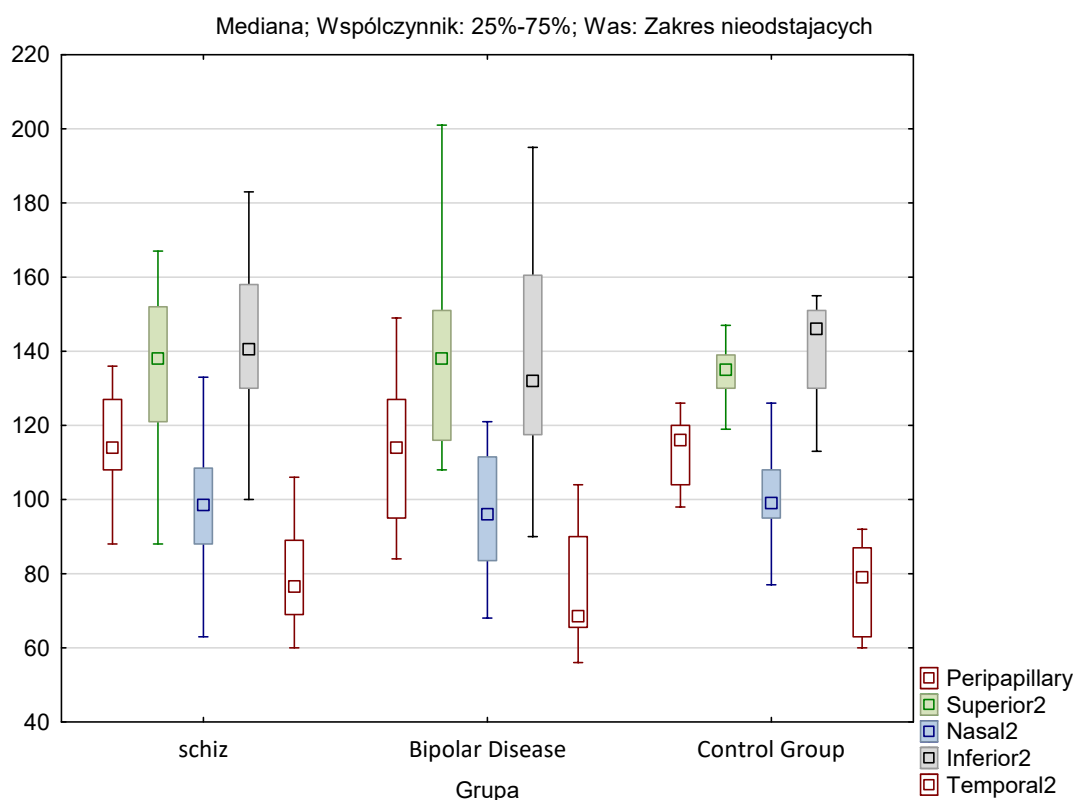


Supplementary Figure S1. Evaluation of RPC Density% parameters in groups

The conducted studies did not show statistically significant differences in the assessment of individual RPC RNFL  $\mu\text{m}$  parameters between the groups ( $p > 0.05$ ) (Table 2).

Supplementary Table S2. Evaluation of RNFL  $\mu\text{m}$  parameters in groups

RNFL $\mu\text{m}$	Schizophrenia			BD			Control Group			Statistical Analysis
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	
Peripapillary	118.09	114.00	23.56	113.07	114.00	20.45	112.57	116.00	9.01	H=0.98, p=0.61
Superior2	137.17	138.00	20.10	140.00	138.00	28.05	132.63	135.00	10.06	H=2.08, p=0.35
Nasal2	97.42	98.50	18.72	96.69	96.00	15.72	100.14	99.00	11.47	H=0.70, p=0.71
Inferior2	142.63	140.50	20.78	138.31	132.00	29.41	140.20	146.00	13.15	H=0.57, p=0.75
Temporal2	79.04	76.50	12.84	76.69	68.50	16.78	76.60	79.00	11.16	H=0.90, p=0.64

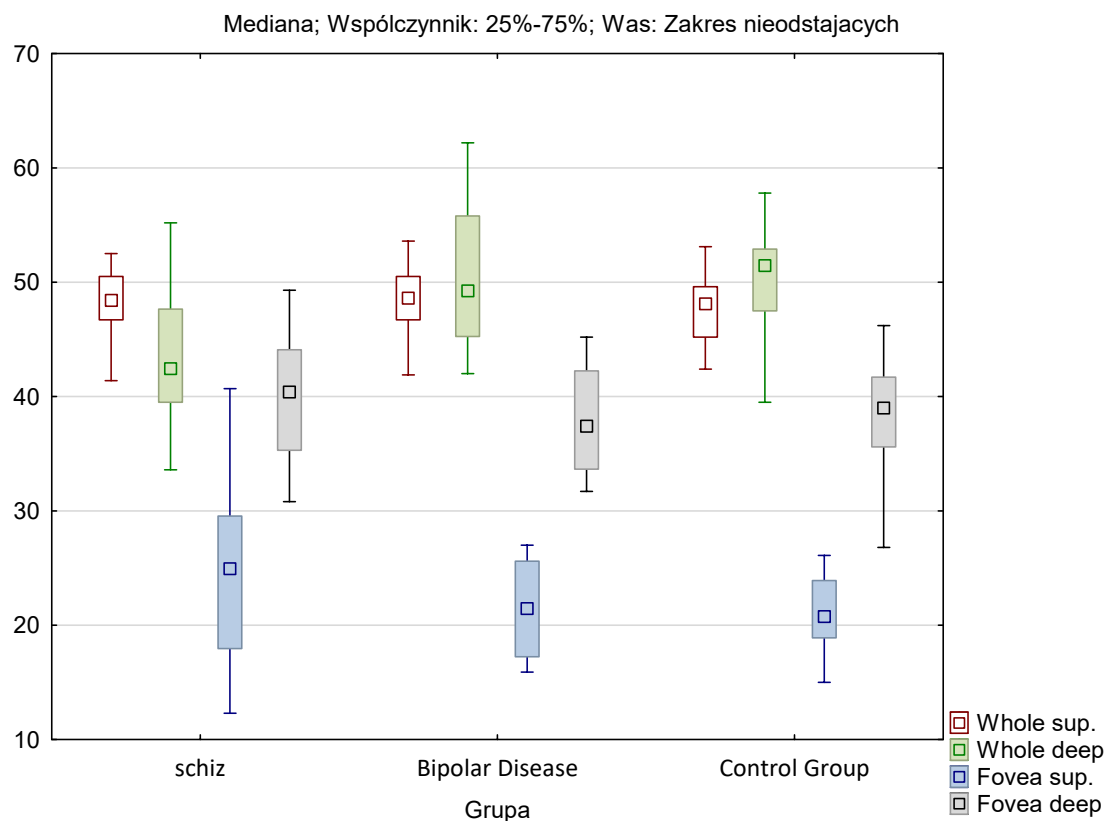


Supplementary Figure S2. Assessment of RNFL  $\mu\text{m}$  parameters in groups.

Statistical analysis showed highly significant differences between the groups as assessed by Whole deep ( $p < 0.0001$ ), where values were significantly lower in the group with schizophrenia. The analysis of multiple comparisons showed differences between the group with schizophrenia and the control group ( $Z = 4.30$ ;  $p = 0.00005$ ) and between the control group and the group with bipolar disorder ( $Z = 3.09$ ;  $p = 0.006$ ). control and bipolar group ( $p > 0.05$ ). However, no significant differences were found between the groups in the assessment of the remaining parameters of Macula/Density% ( $p > 0.05$ ) (Table 3).

Supplementary Table S3. Evaluation of Macula / Density% parameters in groups

Macula/Density %	Schizophrenia			BD			Control Group			Statistical Analysis
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	
Whole sup.	47.93	48.40	3.37	48.56	48.60	3.13	47.80	48.10	2.84	H=0.55, p=0.76
Whole deep	43.66	42.45	5.50	50.41	49.25	6.54	50.66	51.45	4.26	H=19.91, p<0.0001*
Fovea sup.	24.15	24.95	6.96	23.59	21.45	9.45	21.27	20.75	3.86	H=3.00, p=0.22
Fovea deep	38.81	40.40	7.74	39.38	37.40	8.64	38.43	39.00	4.87	H=1.15, p=0.56

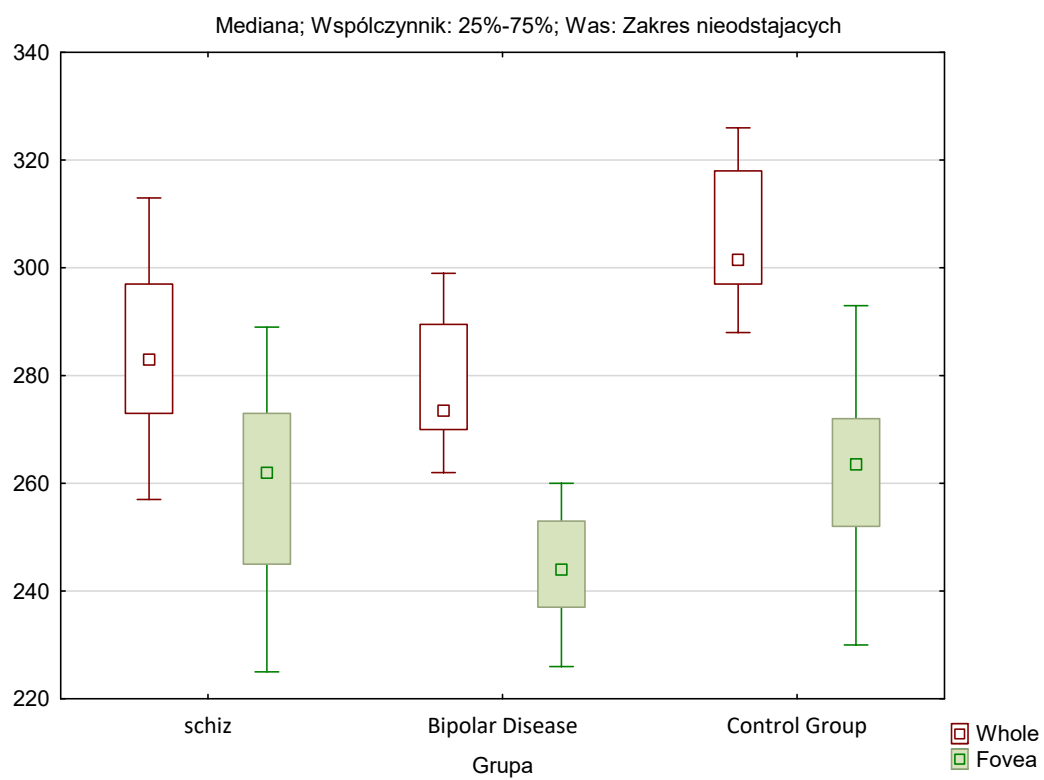


Supplementary Figure S3. Assessment of Macula/Density% parameters in groups.

Statistical analysis showed highly significant differences between the groups in terms of Whole ( $p < 0.0001$ ) and Fovea ( $p = 0.02$ ). The analysis of multiple comparisons showed that the Whole parameter was significantly higher in the control group compared to the group with schizophrenia ( $Z = 4.53$ ;  $p = 0.00002$ ) and compared to the group with bipolar disorder ( $Z = 5.03$ ;  $p = 0.000001$ ), however, no differences in the Whole assessment were found between schizophrenia and bipolar disorder ( $p > 0.05$ ). In the evaluation of the Fovea parameter, in the analysis of multiple comparisons, differences were found between the control group and bipolar disorder ( $Z = 2.71$ ;  $p = 0.02$ ), while between the other groups the differences were not statistically significant ( $p > 0.05$ ).

Supplementary Table S4. Evaluation of Macula thickness  $\mu\text{m}$  parameters in groups

Macula Thickness $\mu\text{m}$	Schizophrenia			BD			Control Group			Statistical Analysis
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	
Whole	284.25	283.00	14.77	278.50	273.50	12.59	305.23	301.50	11.33	H=33.05, $p < 0.0001^*$
Fovea	260.67	262.00	24.28	249.63	244.00	21.43	263.53	263.50	15.37	H=7.41, $p = 0.02^*$



Supplementary Figure S4. Assessment of Macula thickness  $\mu\text{m}$  parameters in groups.