



**Fig. S8** The relative content of ceramide (CER-NSd) molecular species in the liver lipids of mice taking various nanoliposomal complexes. Along the abscissa axis: 1-st group – 2-month-old control mice maintained on a normal diet; 2-d group was fed PC; 3-d group was fed (PC+CEO); 4-th group was fed (PC+SC); 5-th group was fed (PC+CEO+SC); 6-th group was fed (PC+FO+SC); 7-th group was fed (PC+FO+CEO+SC); 8-th group – control mice aged 5 months, was fed only a standard vivarium diet of dry meals and water throughout the experiment. The content of the corresponding molecular type of CER-NSd in the liver of control 2-month-old mice (group 1) was used as a reference unit. The values for CER NSd18:1-20:0 (a), CER NSd18:1 - 22:0 (b), CER NSd 18:1 - 22:1 (c), CER NSd 18:1-24:0 (d), CER NSd 18:1-24:1 (e), and CER NSd 18:2 - 24:1 (f) were  $4.2 \times 10^5$ ,  $2.8 \times 10^6$ ,  $3.5 \times 10^6$ ,  $5.2 \times 10^6$ ,  $7.4 \times 10^6$ , and  $1.2 \times 10^6$  (Abs. intens. [arb. units]), respectively. The data are presented as mean ( $n = 6$ )  $\pm$  SD, and p-values were calculated using unpaired Mann-Whitney and Kruskal tests. The statistical significance is indicated as follows: a –  $p < 0.05$  – in comparison with the 1st group, b –  $p < 0.05$  - in comparison with the 8th group; and c –  $p < 0.05$  – the 8th group in comparison with the 1st group.