

Figure S1: ¹H-NMR of lactone 6







Figure S3: ¹H-NMR of lactone 7



Figure S4: ¹³C-NMR of lactone 7



Figure S5: ¹H-NMR of lactone 8



Figure S6: ¹³C-NMR of lactone 8







Figure S8:Dose-response curve used to calculate IC_{50} for lactone **6a** and GL-1 cell line.



Figure S9:Dose-response curve used to calculate IC₅₀ for lactone **7a** and CBL70 cell line.



Figure S10:Dose-response curve used to calculate IC_{50} for lactone **7a** and GL-1 cell line.



Figure S11:Dose-response curve used to calculate IC_{50} for lactone **8a** and CBL70 cell line.



Figure S12Dose-response curve used to calculate IC_{50} for lactone 8a and GL-1 cell line.



Figure S13:Dose-response curve used to calculate IC_{50} for lactone **6b** and CBL70 cell line.



Figure S14:Dose-response curve used to calculate IC_{50} for lactone **6b** and GL-1 cell line.



Figure S15:Dose-response curve used to calculate IC_{50} for lactone **7b** and CBL70 cell line.



Figure S16:Dose-response curve used to calculate IC_{50} for lactone **7b** and GL-1 cell line.



Figure S17:Dose-response curve used to calculate IC_{50} for lactone **8b** and CBL70 cell line.



Figure S18:Dose-response curve used to calculate IC_{50} for lactone **8b** and GL-1 cell line.



Figure S19: FT-IR spectra of erythrocyte membrane RBCMs (black lines) and of RBCMs modified with lactones (blue lines - **6a** and **6b**, green lines -**7a** and **7b**, red lines – **8a** and **8b**) for symmetric and asymmetric CH₂ stretching band.

	Control	6a	6b	7a	7b	8a	8b	
Concentration [mM]	Percentage of hemolysis ± SD							
0.5	3 530	3 301	3 031	3 296	3 256	3 301	3 106	
0.5	±	±	±	±	±	±	±	
	0.091	0.162	0.007	0.085	0.028	0.035	0.282	
1	6.362	6.197	5.263	7.435	6.491	5.218	4.729	
	±	±	±	±	±	±	±	
	0.542	1.023	0.607	0.331	0.409	0.403	0.713	

Table S1. Hemolysis of RBCs dependent on concentration of compounds.

	RBCM	6a	6b	7a	7b	8a	8b	
v _s (N-C)	925.98	925.94	926.01	926.01	925.98	926.00	926.00	
v _{as} (N-C)	971.64	971.69	971.58	971.72	971.58	971.62	971.64	
v _s (PO ₂ ⁻)	1064.82	1064.86	1064.77	1064.60	1064.41	1064.44	1064.42	
$v_{as}(PO_2^-)$	1234.60	1234.26	1234.57	1234.42	1234.33	1234.35	1234.47	
v(C=O)	1739.60	1739.71	1739.94	1739.94	1739.26	1737.49	1738.11	
vs(CH ₂)	2851.99	2851.90	2852.08	2852.07	2852.01	2851.93	2851.97	
v _{as} (CH ₂)	2922.46	2922.38	2922.66	2922.68	2922.50	2922.40	2922.53	

Table S2. Selected bands (wave numbers cm⁻¹) of IR spectra of RBCM and RBCM+compounds (100 μ M).