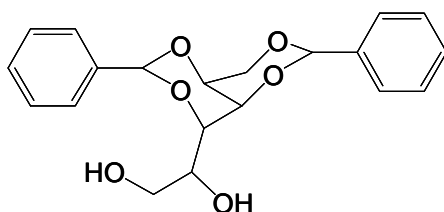


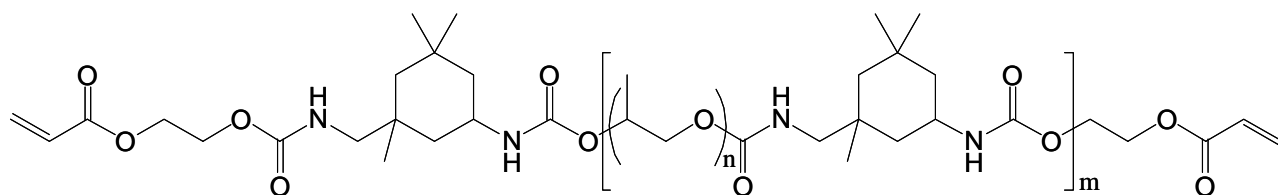
Supporting Information for:

A novel method for centrifugal separation of blood components: Creating a rigid barrier between density-stratified layers using a UV-curable thixotropic gel

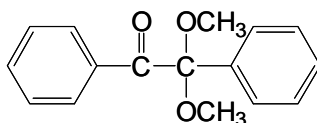
Kunshan Sun, Hyuntaek Oh, Jane F. Emerson and Srinivasa R. Raghavan



(a) Organogelator:
1,3:2,4-di-O-benzylidene-D-sorbitol (DBS)



(b) Oligomer:
Aliphatic polyurethane diacrylate (EBECRYL 230)



(c) Initiator:
2,2-dimethoxy-1,2-diphenylethan-1-one (Additol BDK)

Scheme S1. Structures of the organogelator, UV-crosslinkable oligomer, and UV initiator used in our study.

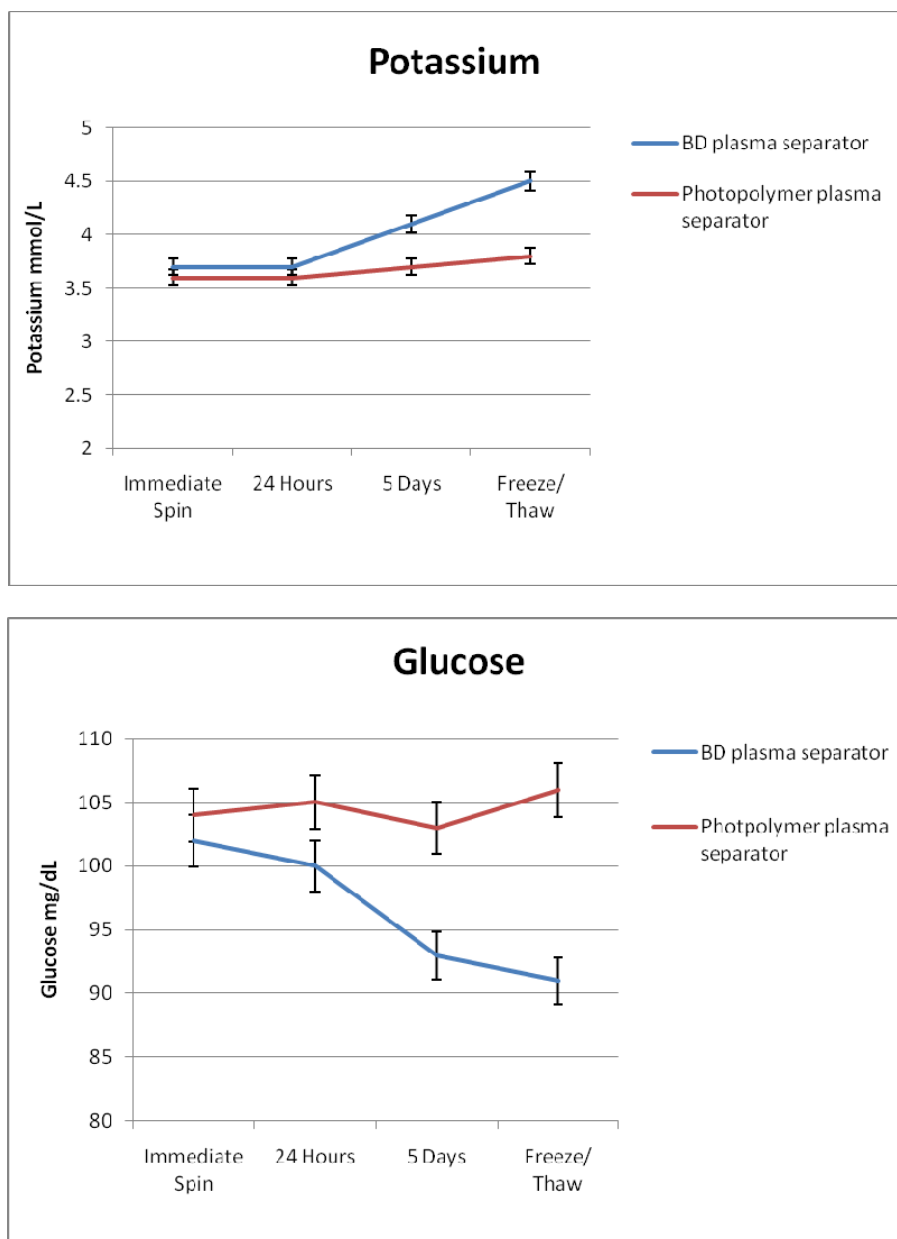


Figure S1. Comparison of analyte stability after storage and with a freeze thaw cycle. Immediate spin represents the value obtained with the primary tubes loaded onto the analyzers immediately after centrifugation. The primary tubes were then stored at 4°C and re-assayed at 24 hours and 5 days.

Measured Analyte	Serum Separator Tubes		Photopolymer Separator Tubes	
sodium (mmol/L)	141	141	141	141
potassium mmol/L	4.4	4.4	4.4	4.3
chlorides (mmol/L)	107	106	105	107
CO2 (mmol/L)	27	27	26	26
glucose (mg/dL)	96	95	97	97
urea nitrogen (mg/dL)	12	12	13	12
creatinine (mg/dL)	0.8	0.9	0.8	0.9
calcium (mg/dL)	9.4	9.4	9.2	9.4
total protein (g/dL)	7	6.9	7	6.9
albumin (g/dL)	3.6	3.6	3.7	3.7
alkaline phosphatase (U/L)	124	123	124	124
aspartate aminotransferase (U/L)	34	36	35	34
alanine aminotransferase (U/L)	43	41	43	42
total bilirubin (mg/dL)	0.5	0.3	0.5	0.4

Table S1. Comprehensive metabolic panel measurements obtained in duplicate in BD serum separator tubes and photopolymer separator tubes from the same subject.