



Supplemntary Materials: Shelf-life evaluation and lyophilization of PBCA-based polymeric microbubbles

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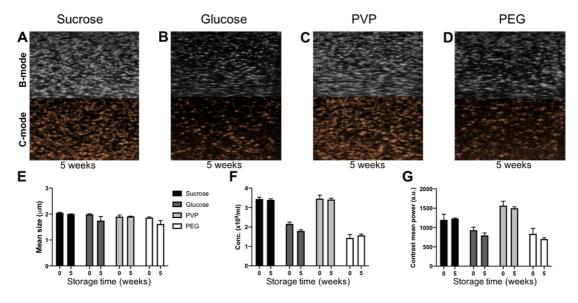


Figure S1. Characterization of lyophilized PBCA-MB upon reconstitution and storage. Representative bright mode (B-mode) and contrast mode (C-mode) US images (**A–D**) of reconstituted PBCA-MB upon initial lyophilization with 5% sucrose, glucose, PVP and PEG and subsequent storage at 25 °C for 5 weeks. The average size and concentration of lyophilized and reconstituted PBCA-MB monitored (**E–F**). A marginal reduction in size and concentration of reconstituted was observed for MB lyophilized with 5% glucose and PEG after 5 weeks of storage at 25 °C whereas no change was seen for MB lyophilized with 5% sucrose and PVP. Similarly, quantification of the ultrasound images revealed a marginal decrease in backscatter signals of MB lyophilized with 5% glucose and PEG after 5 weeks of storage at 25 °C (**G**) whereas no change was observed for MB lyophilized with 5% sucrose and PVP. Values represent average ± SD of three different batches, measured in triplicates.