



## Influence of the Selected Antioxidants on the Stability of the ViaSpan Solution Used for Perfusion and Organ Preservation Purposes

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**SUMMARY.** The paper presents a study on antioxidants' effects on the stability of perfusion and organ preservation liquids, in order to obtain medicinal products characterized by higher stability and efficiency. The subject of this study was a genuine ViaSpan liquid, the composition of which was modified by replacing glutathione with selected antioxidants, e.g. vitamin C, cysteine, and fumaric acid in concentrations of 0.1, 0.3, and 0.5 mmol/l. Liquid stability was evaluated using an "accelerated stability" test. Results indicate that the suggested antioxidants have a significant effect on extending the stability of the ViaSpan liquid. The best results are achieved when the genuine liquid is supplemented with ascorbic acid at a concentration of 0.45 mmol/l. An extension in the ViaSpan liquid's stability from 117 to 178 days was achieved; corresponding to a 1.5-fold increase.

**KEY WORDS:** Accelerated stability test, Antioxidants, Ascorbic acid, Cysteine, Fumaric acid, ViaSpan.

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