Microsampling for Special Populations

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Special populations, including the elderly, children, and pregnant women present a unique challenge in bioanalysis. Microsampling, the collection of biological matrices of less than 50 µL, provides an opportunity to include these special populations in the drug development process. Microsampling is less invasive and reduces the ethical and logistical barriers to obtaining pharmacokinetic profiles of special populations from which limited sampling is required. The small sample volume collected is especially important for inclusion of pediatric and neonate subjects. Collection of microsamples is simpler and requires less training, which facilitates the PK sampling of populations in hard to reach areas of the world and the potential of at-home sampling for post-market patient monitoring. Microsampling does have its bioanalytical challenges. In this presentation, Alturas Analytics shares its success in utilizing microsampling techniques to improve the bioanalysis of small sample volumes of blood and plasma and non-invasive matrices.