Prof. Dr. med. Martin Hildebrandt

Hematologist and transfusion specialist; research focus: T-cell mediated immunomodulation and transplant optimization
Executive Director and Qualified Person at TUMCells (Interdisciplinary Center for Cellular Therapies at TUM School of Medicine).
Member of the working group on blood-associated infectious risks at the German Federal Ministry of Health, Chair of the Ethics Committee of the State of Berlin and member of several editorial boards, national and international professional societies.

Quote: “The Alive project could be used in the future for in vivo monitoring with non-destructive analysis methods and could help improving cell quality control in the field of regenerative medicine, which is becoming an important market with lots of growth potential.”

Quality control is one of two major aspects of drug production and, therefore, also for cell therapeutics. Since quality control costs up 40% of the whole manufacturing process, there is an urgent need to reduce the costs and increase the validity of quality control because Quality control processes are usually based on the analysis of biomarkers. As it is widely known that biomarkers are difficult to control in terms of variability, reproducibility, continuity and costs, there is an urgent need to find alternatives. The Alive project can overcome the problem of biomarkers because they can use transcripts coding for the functionality of cells instead of biomarkers and can help to establish non-destructive in vivo monitoring techniques, which would be a great improvement in pre-clinical quality control compared to today’s methods. The used transcripts in this platform could be more precisely, specific, and stable over a long period.
But the Alive project goes over this point and can help developing non-destructive in vivo monitoring in the field of regenerative medicine and artificial organ transplantation, which is a vast future market and can gain valuable technique in preclinic.