



Presidenza del Consiglio dei Ministri

ITALIAN NATIONAL BIOETHICS COMMITTEE

ITALIAN NATIONAL COMMITTEE FOR BIOSECURITY,
BIOTECHNOLOGY AND LIFE SCIENCES

LONG-TERM STORAGE OF RESIDUAL DOT BLOT SPOTS FROM NEONATAL SCREENING

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Abstract

The opinion deals with the issue of long-term storage of residual dot blot spots (DBS) from neonatal screening. Such practice has two main advantages. First, it allows to make an early postnatal diagnosis of metabolic genetic diseases and to carry on other clinical investigations which are beneficial for the newborn. Secondly, residual blood spots provide biological material that can be used in anonymised form for biological studies.

In this perspective, the document describes short-term storage consisting in the preservation for two years of the samples (for purposes purely in the newborn's interest) and voluntary long-term storage where the newborn is considered as a sample's "donor" whose residual DBS can be used for biomedical research purposes.

The National Bioethics Committee and the National Committee for Biosecurity, Biotechnology and Life Sciences recommend to overcome some current organizational problems of neonatal screening in Italy also considering a positive cost/benefit coefficient, identifiable in the reduced cost of the preservation for two years.

The "Appendix" includes and discusses mostly "technical" aspects, which illustrate hypotheses about how to accomplish the directives of the two Committees, according to the respective competences, hoping that the problems of reorganizing and strengthening this area are tackled by the appropriate establishments.