

Appendix A

Layman's summary

In this paper, we screened articles about infants born preterm on magnetic resonance imaging (MRI) abnormalities at term age, and their long-term outcomes. We compared different strength fields and their capability to identify those associations and finally made a statement about prognosis. Our purpose is to detect the paucities on current MRI findings, and to examine the relevance of ultra-high field MRI in prognosis of infants born preterm. First, 1239 articles were screened on title/abstract, of which sixty-seven articles were again screened on full text. Then, an overview of the current MRI studies has been created including the published year, the authors, the MRI sequences, the long-term assessment and the administer age, and their findings. Furthermore, several articles were manually added to provide information about the (dis-)advantages of ultra-high field MRI. Our findings showed that current MRI studies predict motor- and extreme cognitive outcomes. However, those studies lack to find associations between mild or subtle MRI abnormalities and the long-term outcomes. Ultra-high field MRI would be relevant because the scan-time remains the same but the images contain a higher resolution. In future, infants born preterm should be measured with ultra-high field MRI to determine relevant biomarkers associated with long-term outcomes.