# MRI – Interpreting the results: Quick reference guide

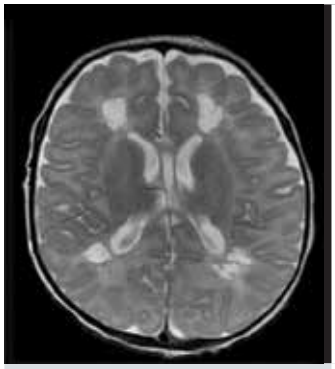
CLINICAL FACT SHEET

## Magnetic Resonance Imaging (MRI)

Abnormal Magnetic Resonance Imaging (MRI) +/- serial cranial ultrasound (CUS) in pre-term infants, with neuroanatomical abnormalities predictive of cerebral palsy.

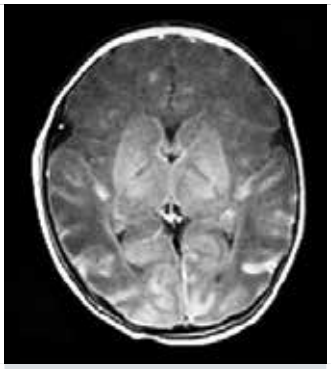
**ABNORMAL NEURO IMAGING**
MRI +/- CUS

The most predictive MRI patterns are:



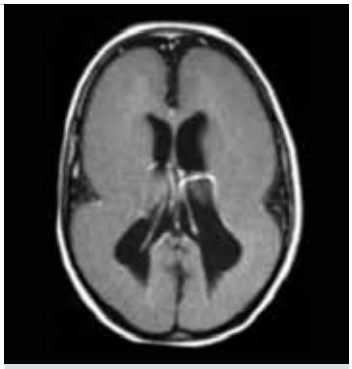
Predominant white matter injury [cystic periventricular leukomalacia (PVL) or periventricular haemorrhagic infarctions] (56%)

IMAGE 1



Cortical and deep grey matter lesions [basal ganglia/thalamus lesions, watershed injury (parasagittal injury), multicystic encephalomalacia, stroke] (18%)

IMAGE 2



Brain maldevelopments [lissencephaly, pachygyria, cortical dysplasia, polymicrogyria, and schizencephaly] (9%)

IMAGE 3

## Cranial ultrasound

The most predictive cranial ultrasound patterns are:

- Cystic PVL (periventricular cystic lesions and/or tissue loss)
- IVH Grade III-IV (PVHI)
- Persistent ventricular dilatation/abnormal shape of ventricle at term age.

IMAGES 1 AND 2 PROVIDED BY ASSOCIATE PROFESSOR ANDREA GUZZETTA AND DR SIMONA FIORI FROM THE UNIVERSITY OF PISA.
IMAGE 3 PROVIDED BY DR CATHY MORGAN, CEREBRAL PALSY ALLIANCE RESEARCH INSTITUTE.

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