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Diseases of the Nervous System in Childhood
4th Edition

Edited by Alexis Arzimanoglou with Anne O’Hare, Michael Johnston and Robert Ouvrier

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*Gabrielle deVeber and Adam Kirton*

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*Alexis Arzimanoglou and Michael S Duchowny*

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*Anne O’Hare*

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Mariacristina Scoto and Francesco Muntoni

Chromosome 5-Proximal Spinal Muscular Atrophy

SMA Type 1 (Severe, Infantile or Werdnig-Hoffman Disease)
SMA Type 2 (Intermediate, sometimes referred to as Dubowitz Disease)
SMA Type 3 (Mild or Kugelberg-Welander Disease)
SMA Type 4 (Adult-Onset)

Genetics of 5-Proximal SMAs

Key Diagnostic Features and Differential Diagnosis

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Manoj Menezes and Robert Ouvrier

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*Paddy Grattan-Smith*

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- Jean-Martin Charcot (1825–1893)
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4th Edition

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