|  |  |  |  |
| --- | --- | --- | --- |
| NIRS not reported (n=14) | | Start time not documented (n=15) | NIRS commenced after  6 hours of life (n=25) |
| Cunningham et al. 1993 [1] | | Burton et al. 2015 [2] | Alderliesten et al. 2017 [3] |
| De Vis et al., 2014 [4] | | Carrasco et al. 2018 [5] | Bale G et al. 2016 [6] |
| Edwards-Bailey et al. 2016 [7] | | Chalak et al. 2016 [8] | Campbell et al. 2018 [9] |
| Frewen et al 1991 [10] | | Chavez-Valdez et al. 2017 [11] | Chalak et al. 2017 [12] |
| Hanrahan et al. 1996 [13] | | Govindan et al.2016 [14] | Costa et al. 2012 [15] |
| Hebden et al. 2004 [16] | | Howlett et al. 2013 [17] | Dehaes et al. 2014 [18] |
| Kapadia et al. 2013 [19] | | Lee et al. 2017 [20] | Edwards et al. 1988 [21] |
| Kelly et al. 2018 [22] | | Lee et al. 2017 [23] | Estrin et al. 2011 [24] |
| Klinger et al. 2005 [25] | | Meek et al. 1999 [26] | Forman et al.2017 [27] |
| Kusaka et al. 2001 [28] | | Shellhaas et al 2013 [29] | Govindan et al. 2014 [30] |
| Lingappan et al. 2016 [31] | | Shellhaas et al. 2015 [32] | Govindan et al. 2016 [33] |
| Tokuhisa et al. 2015 [34] | | Tekes et al. 2015 [35] | Govindan et al. 2018 [36] |
| Singh et al. 2014 [37] | | Tian et al. 2016 [38] | Holper et al. 2017 [39] |
| Singh et al. 2016 [40] | | Wintermark et al. 2014 [41] | Jain et al. 2017 [42] |
|  | | Zaramella et al. 2007 [43] | Kaya et al. 2014 [44] |
|  | |  | Kondo et al. 2014 [45] |
|  | |  | Massaro et al. 2013 [46] |
|  | |  | Massaro et al. 2015 [47] |
|  | |  | Mitra et al. 2016 [48] |
|  | |  | Mitra et al. 2019 [49] |
|  | |  | Shellhaas et al. 2014 [50] |
|  | |  | Shellhaas et al. 2017 [51] |
|  | |  | Toet et al. 2006 [52] |
|  | |  | Wu et al. 2018 [53] |
|  | |  | Wyatt et al. 1986 [54] |
| Others (n=10) |  | | |
| Bale et al. 2014 [55] | NIRS during desaturation episodes only | | |
| Bale et al. 2019 [56] | NIRS during desaturation episodes only | | |
| Chen et al. 2002 [57] | Effect of auditory stimuli on NIRS | | |
| Gagnon et al. 2016 [58] | Effect of PPHN and HIE | | |
| Kovacsova et al. 2018 [59] | Effect of confounders on different spatially resolved spectroscopy devices | | |
| Skov et al. 1993 [60] | Effect of head tilting in preterm and asphyxiated infants | | |
| Sokoloff et al. 2015 [61] | Effect of seizures on NIRS | | |
| Van Bel et al. 1993 [62] | No standardised assessment of encephalopathy grade used | | |
| van Bel et al. 1998 [63] | Effect of allopurinol on NIRS | | |
| Vesoulis et al. 2018 [64] | NIRS to determine autoregulation threshold | | |

Online Supplementary Table 2. Excluded NIRS studies and reasons for exclusion.

Number in brackets indicates reference number in bibliography below.

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