|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Imaging technique** | | | |  | **CT** | | **MRI** | | | | | | **SPECT** | | **PET** | | **NIRS** |
| **Study** | **Age** | **Diagnosis** | **Psychiatric condition** | **Non psychiatric condition** | **C**  **T** | **M**  **R**  **I** | **S**  **P**  **E**  **C**  **T** | **PET** | **Abnormality in at least one exam** | **Abnormality (scan)** | **Contribution to diagnosis** | **Abnormality (MRI)** | **Contribution to diagnosis** | **Unique lesion** | **Multiple focal lesions** | **Diffuse abnormalities** | **Other** | **Abnormality (SPECT)** | **Amelioration after the end of the catatonic episode** | **Abnormality (PET)** | **Amelioration after the end of the catatonic episode** | **Abnormality (NIRS)** |
| **Alberdi 2011** | 16 | Lupus |  | **x** |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Ali 2014** | 20 | Lupus |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Amin 2011** | 16 | Bilateral infarctus of thalami |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Anbarasan 2011** | 35 | Drug induced leukoencephalopathy (cocaïne) |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  | **x** |  |  |  |  |  |
| **Appu 2014** | 16 | Anti-NMDAr Encephalitis |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bachmann 2006** | 25 | Schizophrenia and ADEM | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  | **x** |  |  |  |  |  |
| **Baker 2005** | 46 | Depression | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Barry 2011** | 20 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  |  |  |  |  |
| **Bica 2015** | 26 | Lupus |  | **x** |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Bica 2015** | 25 | Lupus |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bica 2015** | 35 | Lupus |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bigman 2018** | 66 | Von Economo Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Blanc 2010** | 42 | Multiple sclerosis |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Brasić 1999** | 23 | None |  | **x** |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Breker 2013** | 19 | None |  | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Butala 2018** | 37 | Cerebral venous sinus thrombosis |  | **x** | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |
| **Carboncini 2014** | 43 | Cranial traumatism and hydrocephaly |  | **x** | **x** |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Carneiro 2015** | 56 | Anti-VGKC encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** | **x** |  |  |  |  |  |  |
| **Carroll 2000** | 32 | Thalamus degenerescence |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  |
| **Carroll 2005** | 69 | Vascular dementia |  | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |  |  |
| **Caudron 2016** | 32 | Cannabis withdrawal | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  |  |  |  |  |
| **Cheong 2007** | 42 | Mothball withdrawal encephalopathy |  | **x** |  | **x** | **x** |  | **x** |  |  | **x** | **x** |  | **x** |  | **x** |  |  |  |  |  |
| **Chiou 2015** | 60 | NMS | **x** |  | **x** | **x** |  |  | **x** |  |  | **x** |  | **x** |  |  | **x** |  |  |  |  |  |
| **Choi 2011** | 20 | NMS | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Chopra 2012** | 57 | Tacrolimus toxicity |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  |
| **Chrobak 2016** | 49 | Creutzfeld Jacob |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Cordova 2014** | 46 | Drug induced leukoencephalopathy |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Demma 2017** | 28 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Denewet 2015** | 74 | Depression and dementia | **x** | **x** | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |
| **Desarkar 2018** | 26 | Schizophrenia and mental retardation | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Dhossche 2004** | 15 | Autism and psychotic disorder | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Diesing 2006** | 15 | Anoxic cerebral injury |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Doran 2018** | 75 | Bipolar disorder and Olanzapine withdrawal | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Doran 2018** | 65 | Schizo-affective disorder | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Doval 2015** | 32 | Japanese encephalitis and haloperidol |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Dranovsky 2014** | 20 | Hypoventilation syndrome |  | **x** | **x** | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Ducharme 2015** | 55 | Bipolar disorder | **x** |  |  | **x** |  | **x** | **x** |  |  | **x** |  |  |  | **x** |  |  |  | **x** |  |  |
| **D'Urso 2012** | 37 | Obssessive Compulsive Disorder | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |
| **Dziadziuszko 2014** | 38 | Cerebral metastatic miliary |  | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Elia 2005** | 11 | Obsessive Compulsive Disorder (PANDAS) |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |
| **Ene-Stroescu 2014** | 18 | Schizophrenia | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Espinola-Nadurille 2009** | 33 | Pituitary adenoma |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Figueiredo 2017** | 45 | Cerebral venous sinus thrombosis and cerebral infarction |  | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Fujimori 2016** | 39 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Galynker 1997** | 40 | Schizophrenia | **x** |  |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |
| **Gaszner 2013** | 33 | Schizo-affective disorder | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  |
| **Ghaziuddin 2002** | 17 | NMS | **x** |  | **x** | **x** | **x** |  | **x** | **x** |  | **x** |  | **x** |  |  |  | **x** |  |  |  |  |
| **Ghignone 2015** | 30 | Drepanocytose and moya moya syndrome |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Greenberg 2014** | 56 | Bipolar disorder | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grignon 2008** | 31 | Schizophrenia | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **x** |
| **Grover 2013** | 22 | Lupus and stroke |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Gulyayeva 2014** | 22 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Gulyayeva 2014** | 19 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Hennings 2008** | 27 | Mental retardation | **x** |  |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Hindi 2018** | 60 | Dementia with Lewy Bodies |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ho 2010** | 13 | Cerebral folate deficiency |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Howard 1989** | 72 | Bilateral parietal and occipital infarctus |  | **x** | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |
| **Iizawa** | 79 | Depression | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |
| **Iseki 2009** | 32 | None |  | **x** |  | **x** | **x** |  | **x** |  |  | **x** |  |  |  | **x** | **x** | **x** | **x** |  |  |  |
| **Ishitobi 2014** | 17 | Autism, bipolar disorder, and cerebral calcifications | **x** | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Isomura 2013** | 69 | Fronto-temporal dementia |  | **x** |  | **x** | **x** | **x** | **x** |  |  | **x** | **x** |  |  | **x** |  | **x** | **x** | **x** | **x** |  |
| **Ito 2010** | 63 | Pachymeningitis |  | **x** |  | **x** | **x** |  | **x** |  |  | **x** | **x** |  |  | **x** |  | **x** | **x** |  |  |  |
| **Jauhar 2010** | 27 | Vitamin B12 deficiency |  | **x** | **x** | **x** | **x** |  | **x** | **x** |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Jellinek 2007** | 13 | Acute psychotic episode | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Jensen 2015** | 35 | Anti-NMDAr Encephalitis |  | **x** |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |
| **Jhamnani 2014** | 60 | Small vessel vascular lesions |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Joseph 1985** | 65 | Depression and Alzheimer disease | **x** | **x** | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |
| **Joseph 1985** | 73 | Temporal epilepsy |  | **x** | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Joseph 1985** | 90 | Depression and Alzheimer disease | **x** | **x** | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |
| **Joseph 1985** | 49 | Bipolar disorder and alcohol | **x** |  | **x** |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Joseph 1985** | 50 | Bipolar disorder and alcohol | **x** |  | **x** |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ju Seok Ryu 2009** | 17 | MELAS |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Júnior Rabello 2014** | 13 | Lupus |  | **x** | **x** | **x** |  |  | **x** | **x** |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Kaestner 2008** | 40 | Paraneoplasic syndrome |  | **x** |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** | **x** |  |
| **Kataoka 2017** | 18 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Kaur 2014** | 9 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Kho 2007** | 23 | None |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Kitabayashi 2007** | 19 | PRESS syndrome |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Kopala 1998** | 18 | Schizophrenia | **x** |  | **x** | **x** | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Koussa 2003** | 59 | extra-pontine myelinolysis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Kramina 2015** | 15 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Kumar 2011** | 37 | Mega cisterna magna |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **LeFoll 2010** | 24 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Leigh 1978** | 27 | Corticotherapy |  | **x** | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Maeda 2011** | 76 | Dementia with Lewy Bodies |  | **x** |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |
| **Martin 2009** | 44 | Encephalitis (HIV) |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Massengale 2009** | 53 | Cranyopharingome and schizophrenia | **x** | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  | **x** |  |  |  |  |  |
| **Mendez 1999** | 29 | Multiple sclerosis |  | **x** |  | **x** |  | **x** | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  | **x** |  |  |
| **Michot 2008** | 56 | MTHFR Deficit |  | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Mogi 2017** | 44 | Schizophrenia and MERS | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Mon 2012** | 15 | Lupus |  | **x** | **x** | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Morris 2016** | 67 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** | **x** |  |  |  |  |  |
| **Muñoz Zúñiga 2015** | 26 | Disseminated encephalomyelitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Muqit 2001** | 21 | Astrocytome |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Nahar 2017** | 30 | Baclofen overdose |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Nath 2018** | 43 | Sheehan Syndrome |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Nikolaus 2018** | 8 | Anti-GABA-A encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Nzwalo 2011** | 55 | Diffuse hypoxic-ischemic leukoencephalopathy |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Ohi 2017** | 53 | Schizophrenia | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Okazaki 2015** | 18 | Autism | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Onishi 2003** | 49 | Depression | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Palakkuzhiyil 2018** | 47 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Parmar 2017** | 15 | Subacute sclerosing panencephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |
| **Patry 2003** | 20 | None |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  |  |  |  |  |
| **Pérez-Esparza 2018** | 21 | Valproate-induced Hyperammonemic Encephalopathy |  | **x** |  | **x** |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |
| **Pigato 2016** | 48 | Schizophrenia | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **x** | **x** |  |
| **Poyraz 2016** | 80 | Parkinson Disease |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  |  |  |  |  |
| **Pustilnik 2011** | 46 | Lupus |  | **x** | **x** | **x** |  |  | **x** | **x** |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Quinn 2009** | 57 | Anoxic injury |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Quinn 2014** | 56 | Schizophrenia and Delayed post-hypoxic syndrome | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Rhoads 2010** | 14 | Depression | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Saddawi-Konefka 2014** | 78 | Benzodiazepine withdrawal |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Saddawi-Konefka 2014** | 48 | Schizo-affective disorder, clozapine+quetiapine withdrawal, and stroke | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Saddawi-Konefka 2014** | 52 | NMS | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Saddawi-Konefka 2014** | 77 | Benzodiazepine withdrawal |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Salgado 2010** | 65 | Methadone toxicity |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Satoh 1993** | 24 | Schizophrenia | **x** |  |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  | **x** |  | **x** |  |  |
| **Satoh 1993** | 51 | Bipolar disorder | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  | **x** |  | **x** |  |  |  |  |  |  |
| **Saver 1993** | 75 | Stroke |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  | **x** |  |  |  |  |  |
| **Schein 2016** | 52 | Anti-NMDAr Encephalitis after HSV-associated encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Scott 2018** | 28 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Serata 2015** | 27 | Schizophrenia | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |
| **Shah 2013** | 40 | Neurocysticercosis |  | **x** | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sheikhi 2015** | 61 | Fronto-temporal dementia |  | **x** |  | **x** |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  | **x** |  |  |  | **x** |  |  |
| **Shetageri 2011** | 19 | Wilson disease |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Shiner 2014** | 80 | Depression and Parkinson Disease | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  | **x** |  |  |  |  |  |  |  |
| **Shulga 2015** | 23 | NMS, bipolar disorder, transient lesion of corpus callosum | **x** | **x** | **x** | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sinawi 2013** | 19 | Bipolar disorder | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Slooter 2005** | 13 | None |  | **x** | **x** | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Smith 2012** | 68 | Fronto-temporal dementia |  | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Smith 2012** | 73 | Fronto-temporal dementia |  | **x** |  |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Smith 2012** | 52 | Hashimoto encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Smith 2012** | 65 | Fronto-temporal dementia |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Spiegel 2011** | 48 | PRESS syndrome |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Splendiani 2016** | 17 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Steiner 2013** | 18 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sulentic 2018** | 17 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Tatewaki 2012** | 65 | Osmotic myelinolysis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Theroux 2018** | 15 | Autoimmune GFAP astrocytopathy |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Tibrewal 2017** | 40 | Schizophrenia and white matter abnormalities | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Trojak 2014** | 45 | Schizophrenia | **x** |  |  | **x** |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  | **x** |  |  |
| **Tsujino 2011** | 64 | Schizophrenia | **x** |  |  | **x** | **x** |  | **x** |  |  | **x** |  |  |  | **x** |  | **x** | **x** |  |  |  |
| **Tsutsui 2017** | 24 | Anti-NMDAr encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Turkdoğan 2014** | 15 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Valji 2015** | 16 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vancaester 2007** | 55 | NMS and cranial traumatism | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Vancaester 2007** | 67 | Dementia with Lewy Bodies |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Vancaester 2007** | 49 | Psychotic depression | **x** |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vancaester 2007** | 35 | NMS and bipolar disorder | **x** |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **VanDerGucht 2016** | 67 | Dementia with Lewy Bodies |  | **x** |  | **x** |  | **x** | **x** |  |  | **x** |  |  |  | **x** |  |  |  | **x** |  |  |
| **Verbraeken 2018** | 36 | Post epileptic seizures |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vidaurre 2018** | 15 | Encephalopathy with status epilepticus |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |
| **Wachtel 2010** | 15 | NMS and hemispheric lesion | **x** | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Watanabe 2017** | 58 | Fronto-temporal dementia TDP-43 |  | **x** |  | **x** |  |  | **x** |  |  | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Wattchow 2015** | 16 | None |  | **x** |  | **x** |  |  | **x** |  |  | **x** |  |  |  | **x** |  |  |  |  |  |  |
| **Wilson 2013** | 14 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wolanczyc 1997** | 14 | Arachnioïd kyst, anorexia, and psychotic disorder | **x** | **x** | **x** | **x** |  |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |  |  |  |
| **Wright 2010** | 28 | Lupus |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |
| **Xu 2012** | 33 | CMV encephalitis |  | **x** | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |  | **x** |  |  |  |  |  |  |
| **Yasaki 2013** | 66 | None |  | **x** |  | **x** | **x** |  | **x** |  |  |  |  |  |  |  |  | **x** |  |  |  |  |
| **Yen 2015** | 28 | NMS and transient lesion of corpus callosum | **x** | **x** | **x** |  |  |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Zubkov 2015** | 17 | Anti-NMDAr Encephalitis |  | **x** |  | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Supplementary Table 1.** Case reports published about brain imaging and catatonia.

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