

**On-line Table: Demographics, clinical presentation, and neuroimaging findings**

Patient	Age (yr)/Sex/ Ethnicity	Main Clinical Findings	Typical ACTA2 Neurovascular Abnormalities <sup>a</sup>	Bending/Hypoplasia Anterior Corpus Callosum	Abnormal Radial Gyration Frontal Lobes	Cortical Malformations	Absent Anterior Cingulate Gyrus	Twin Peaks Pons	Squeezed Midbrain	Paramedian Indentation of Pontine Surface	Large Territorial Infarctions	Watershed Infarctions
1	23 months/F/Pakistani	PDA, congenital mydriasis, pulmonary hypertension, right hemiparesis	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes
2	4/F/white	PDA, congenital mydriasis, bilateral hemiparesis, swallowing difficulties	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
3	9/F/white	PDA, multiple TIAs, hypo-contractile bladder, left hemiatrophy of toes and foot	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
4	10/M/white	PDA, congenital mydriasis, unilateral vocal cord paresis, cardiac arrest in newborn period	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
5	10/M/white	PDA, right femoral artery occlusion, dilation aortic arch, pulmonary hypertension	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
6	4/F/Arabic	PFO, thrombophilia, dystonic left hemiparesis, possible seizures	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
7	3/F/white	Aneurysmal PDA, congenital mydriasis, dilation of ascending aorta	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
8	1/F/white	PDA, congenital mydriasis, pulmonary hypertension, decreased due to sepsis	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
9	1/M/Arabic	PDA, congenital mydriasis, bulbar palsy, pulmonary hypertension	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
10	4/F/white	Congenital mydriasis, developmental and speech delays	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
11	8/F/Arabic	PDA, congenital mydriasis hands, clumsiness, recurrent TIA	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
12	11/F/white	PDA, aortic dissection, congenital cataracts, cognitive decline	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
13	6/M/white	PDA, congenital mydriasis, left hemiparesis	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
14	3/F/white	PDA, congenital mydriasis, recurrent TIAs	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
15 <sup>b</sup>	33/F/Black	Pseudobulbar palsy, left-sided pyramidal weakness, swallowing difficulties [symptoms started when she was 10 yr of age]	Yes	Yes	Yes (also abnormal posterior temporal gyration in relation to strengthening of PCAs)	No	Yes	Yes	Yes	Yes	No	Yes (few foci)

**Note:**—PDA indicates patent ductus arteriosus; Pt, patient; PFO, persistent foramen ovale; PCA, posterior cerebellar artery.

<sup>a</sup> Distinctive ACTA2 cerebrovascular features are dilation of the proximal internal carotid arteries, occlusion of the distal internal carotid arteries, a straight course of arteries of the circle of Willis, and absence of Moyamoya collaterals.

<sup>b</sup> Genetic test was not performed, and clinical context was nonpathognomonic for the ACTA2 mutation.