

Supplementary Table 3. Risk factors with reported odds ratios in included studies

Risk factors	Study	OR	95% CI	p-value	Type of spinal deformity	
Male	Kim et al., ⁵⁰ 2017	1.6	0.9–2.7	0.08	ASD	
	Yagi et al., ⁵¹ 2019	1.2	0.3–4.4	0.75	ASD	
PSO	Charosky et al., ⁶ 2012	2.8	1.25–6.55	0.01	ASD	
	Mohanty et al., ⁵² 2023	3.39	1.45–7.76	<0.05	> 1 Type	
Coronal curve size	Boachie-Adjei et al., ²¹ 2014	1.019	0.565–1.836	0.951	> 1 Type	
Osteotomy index	Boachie-Adjei et al., ²¹ 2014	1.623	1.028–2.563	0.376	> 1 Type	
Diabetes mellitus	Kim et al., ⁵⁰ 2017	1.6	0.9–2.7	0.3	ASD	
	Yagi et al., ⁵¹ 2019	1.3	0.4–4.8	0.66	ASD	
	Zhang et al., ⁷⁸ 2018(b)	4.12	1.332–12.761	0.014	ASD	
Fusion to the sacrum	Charosky et al., ⁶ 2012	3.66	2.2–6.0	0.001	ASD	
IONM alerts	Mohanty et al., ⁵² 2023	3.87	1.33–10.63	<0.05	> 1 Type	
The presence of kyphosis	Boachie-Adjei et al., ²¹ 2014	0.946	0.612–1.463	0.803	> 1 Type	
	Kim et al., ⁵³ 2012	4.46	1.31–15.10	0.007	> 1 Type	
Blood loss	Mohanty et al., ⁵² 2023	1.0	1.00–1.01	NA	> 1 Type	
	Kim et al., ⁵³ 2012	3.98	1.84–8.59	0.0004	> 1 Type	
Cobb angle						
	≥ 70°	Yagi et al., ⁵¹ 2019	0.8	0.2–3.4	0.71	ASD
≥ 90°	Li et al., ⁴⁷ 2022	2.34	0.616–8.896	0.212	> 1 Type	
Age	Yagi et al., ⁵¹ 2019	2.6	1.2–5.8	0.02	ASD	
	Li et al., ⁴⁷ 2022	2.5	0.530–11.786	0.247	> 1 Type	
	Mohanty et al., ⁵² 2023	1.04	1.01–1.08	<0.05	> 1 Type	
Preoperative neurologic deficits	Kim et al., ⁵³ 2012	5.55	2.47–12.47	0.004	> 1 Type	
	Boachie-Adjei et al., ²¹ 2014	1.633	0.939–2.840	0.0824	> 1 Type	
	Xie et al., ⁵⁵ 2014	49.322	3.410–713.320	NA	> 1 Type	
	Li et al., ⁴⁷ 2022	8.5	1.676–43.109	0.010	> 1 Type	
History of spine surgery	Kim et al., ⁵⁰ 2017	1.7	1.2–2.4	<0.01	ASD	
Interbody fusion	Kim et al., ⁵⁰ 2017	2.1	1.4–3.2	<0.01	ASD	
BMI	Boachie-Adjei et al., ²¹ 2014	1.219	0.796–1.867	0.362	> 1 Type	
	Mohanty et al., ⁵² 2023	1.08	1.02–1.15	<0.05	> 1 Type	
	Zhang et al., ⁷⁸ 2018(b)	1.16	1.037– 1.300	0.010	ASD	
	< 18.5	Yagi et al., ⁵¹ 2019	0.2	0.1–1.1	0.06	ASD
	> 25	Yagi et al., ⁵¹ 2019	1.2	0.4–3.1	0.76	ASD

OR, odds ratio; CI, confidence interval; ASD, adult spinal deformity; PSO, pedicle subtraction osteotomy; IONM, intraoperative neurophysiological monitoring; BMI, body mass index; NA, not applicable.