Appendix 2. Other reported patient risk factors

Study	Procedure type	Smoking (%)[a]	Alcohol (%)[a]	DM (%)[a]	HTN (%)[a]
Mosaad et al. [10] (2023)	Nonfusion (MD, n=30)	33.3		13.3	13.3
	Fusion (TLIF/PLF, n=30)	20		6.7	20
Ahsan et al. [11] (2021)	Nonfusion (RD, n=110)	66.36[b]		41.82	47.27
	Fusion (TLIF, n=25)	68[b]		44	52
El Shazly et al. [12] (2013)	Nonfusion (RD, n=15)				
	Fusion (TLIF, n=15)				
	Fusion (PLF, n=15)				
Yao et al. [13] (2017 Mar)	Fusion (MIS-TLIF, n=58)	25.86	27.59		12.07
	Fusion (PELD, n=47)	17.02	14.89		17.02
Fu et al. [15] (2005)	Nonfusion (RD, n=15)				
	Fusion (PLF, n=21)				
Yao et al. [14] (2017 Apr)	Fusion (MIS-TLIF, n=26)	19.23	15.38		19.23
	Nonfusion (MED, n=20)	10	10		15
	Nonfusion (PELD, n=28)	17.86	10.71		14.29
Wang and Yu [16] (2020)	Nonfusion (PELD, n=24)	20.83	4.17		
	Fusion (MS-TLIF, n=22)	18.18	0		
Liu and Zhu [17] (2017)	Nonfusion (PELD, n=209)				
	Fusion (MIS-TLIF, n=192)				
Guan et al. [18] (2017)	Nonfusion (RD, n=25)	8		16	32
	Fusion (TLIF, MIS-TLIF, or PLIF; n=12)	17		17	42
D'Oria et al. [19] (2023)	Nonfusion (MD, n=45)	13.3		11.1	
	Fusion (MIS-TLIF, n=45)	15.5		11.1	

DM, diabetes mellitus status; HTN, hypertension status; MD, microdiscectomy; TLIF, transforaminal lumbar interbody fusion; PLF, posterolateral fusion; RD, revision or repeat discectomy (unspecified); MIS-TLIF, minimally invasive transforaminal lumbar interbody fusion; PELD, percutaneous endoscopic lumbar discectomy; MED, microendoscopic discectomy; PLIF, posterior lumbar interbody fusion.

[a]Analysis of variance and chi-square testing found significant differences in gender distribution (p=0.034), smoking prevalence, alcohol consumption, DM, HTN (p<0.001) across procedure groups; while age (p=0.166) and body mass index (p=0.056) showed no significant variation. [b]Z-score analysis identified Ahsan et al. [11] (2021) nonfusion (RD) and Ahsan et al. [9] (2021) fusion (TLIF) groups as outliers in smoking % (Z=+2.18, +2.30); Ahsan et al. [11] (2021) nonfusion (RD) and Ahsan et al. [11] (2021) fusion (TLIF) as outliers in DM % (Z=+2.22, +2.34).