**Appendix C: Risk of bias assessment graph and summary of each included study according to the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Studies Reporting Prevalence Data**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Studies** | **JBI item 1** | **JBI item 2** | **JBI item 3** | **JBI item 4** | **JBI item 5** | **JBI item 6** | **JBI item 7** | **JBI item 8** | **JBI item 9** |
| Al Dahmani (2020) (62) |  |  |  |  |  |  |  |  |  |
| Al-Futaisi (2007) (40) |  |  |  |  |  |  |  |  |  |
| Alexopoulou (2014) (115) |  |  |  |  |  |  |  |  |  |
| Almalki (2012) (116) |  |  |  |  |  |  |  |  |  |
| AlMalki (2020) (63) |  |  |  |  |  |  |  |  |  |
| Anagnostis (2011) (64) |  |  |  |  |  |  |  |  |  |
| Annamalai (2013) (117) |  |  |  |  |  |  |  |  |  |
| Arya (1997) (59) |  |  |  |  |  |  |  |  |  |
| Arya (1997; diabetes) (118) |  |  |  |  |  |  |  |  |  |
| Asha (2019) (119) |  |  |  |  |  |  |  |  |  |
| Aström (1990) (120) |  |  |  |  |  |  |  |  |  |
| Atquet (2021) (121) |  |  |  |  |  |  |  |  |  |
| Attanasio (2008) (122) |  |  |  |  |  |  |  |  |  |
| Babic (2006) (30) |  |  |  |  |  |  |  |  |  |
| Baldelli (2007) (31) |  |  |  |  |  |  |  |  |  |
| Banerji (2016) (60) |  |  |  |  |  |  |  |  |  |
| Baser (2014) (123) |  |  |  |  |  |  |  |  |  |
| Baum (1986) (124) |  |  |  |  |  |  |  |  |  |
| Berg (2013) (23) |  |  |  |  |  |  |  |  |  |
| Berker (2010) (38) |  |  |  |  |  |  |  |  |  |
| Berkmann (2021) (125) |  |  |  |  |  |  |  |  |  |
| Bhansali (2004) (17) |  |  |  |  |  |  |  |  |  |
| Bogazzi (2010; colonoscopy) (126) |  |  |  |  |  |  |  |  |  |
| Bogazzi (2008) (127) |  |  |  |  |  |  |  |  |  |
| Bogazzi (2010; voice) (32) |  |  |  |  |  |  |  |  |  |
| Briet (2019) (128) |  |  |  |  |  |  |  |  |  |
| Caglar (2011) (129) |  |  |  |  |  |  |  |  |  |
| Caron (2017) (130) |  |  |  |  |  |  |  |  |  |
| Castellani (2016) (131) |  |  |  |  |  |  |  |  |  |
| Castellanos-Bueno (2021) (132) |  |  |  |  |  |  |  |  |  |
| Ciresi (2013) (133) |  |  |  |  |  |  |  |  |  |
| Ciresi (2018) (134) |  |  |  |  |  |  |  |  |  |
| Ciulla (2004) (135) |  |  |  |  |  |  |  |  |  |
| Colao (2009) (136) |  |  |  |  |  |  |  |  |  |
| Colao (2007; colonic neoplasms) (21) |  |  |  |  |  |  |  |  |  |
| Colao (2011) (22) |  |  |  |  |  |  |  |  |  |
| Colao (2006) (137) |  |  |  |  |  |  |  |  |  |
| Colao (2008) (138) |  |  |  |  |  |  |  |  |  |
| Dal (2016) (34) |  |  |  |  |  |  |  |  |  |
| Damjanovic (2002)(24) |  |  |  |  |  |  |  |  |  |
| Davi (2008) (139) |  |  |  |  |  |  |  |  |  |
| Dogansen (2018) (140) |  |  |  |  |  |  |  |  |  |
| Dogansen (2019) (141) |  |  |  |  |  |  |  |  |  |
| Dural (2014) (25) |  |  |  |  |  |  |  |  |  |
| Dutta (2015) (18) |  |  |  |  |  |  |  |  |  |
| Elbueishi (2018) (142) |  |  |  |  |  |  |  |  |  |
| Ernaga Lorea (2017) (143) |  |  |  |  |  |  |  |  |  |
| Espinosa-de-los-Monteros (2018) (20) |  |  |  |  |  |  |  |  |  |
| Evran (2014) (144) |  |  |  |  |  |  |  |  |  |
| Fernandez (2010) (145) |  |  |  |  |  |  |  |  |  |
| Fieffe (2011) (146) |  |  |  |  |  |  |  |  |  |
| Franco (1973) (147) |  |  |  |  |  |  |  |  |  |
| Füchtbauer (2017) (148) |  |  |  |  |  |  |  |  |  |
| Fukuda (2001) (149) |  |  |  |  |  |  |  |  |  |
| Ganokroj (2021) (48) |  |  |  |  |  |  |  |  |  |
| Gsponer (1986) (55) |  |  |  |  |  |  |  |  |  |
| Gonzalez (2017) (19) |  |  |  |  |  |  |  |  |  |
| Guo (2015) (26) |  |  |  |  |  |  |  |  |  |
| Guo (2018) (150) |  |  |  |  |  |  |  |  |  |
| Guo (2020) (151) |  |  |  |  |  |  |  |  |  |
| He (2019) (152) |  |  |  |  |  |  |  |  |  |
| Herrmann (2004) (35) |  |  |  |  |  |  |  |  |  |
| Heydari (2021) (153) |  |  |  |  |  |  |  |  |  |
| Hofeldt (1973) (154) |  |  |  |  |  |  |  |  |  |
| Hong (2016) (36) |  |  |  |  |  |  |  |  |  |
| Hoskuldsdottir (2015) (155) |  |  |  |  |  |  |  |  |  |
| Iliaz (2018) (27) |  |  |  |  |  |  |  |  |  |
| Ioachimescu (2020) (47) |  |  |  |  |  |  |  |  |  |
| Jenkins (2000) (156) |  |  |  |  |  |  |  |  |  |
| Jialal (1982) (49) |  |  |  |  |  |  |  |  |  |
| Khan (2021) (61) |  |  |  |  |  |  |  |  |  |
| Kinnman (1976) (157) |  |  |  |  |  |  |  |  |  |
| Kinoshita (2011) (158) |  |  |  |  |  |  |  |  |  |
| Klijn (1980)(51) |  |  |  |  |  |  |  |  |  |
| Kreze (2001) (159) |  |  |  |  |  |  |  |  |  |
| Larwence (2020)(160) |  |  |  |  |  |  |  |  |  |
| Lucas (2003) (161) |  |  |  |  |  |  |  |  |  |
| Lundin (1978) (162) |  |  |  |  |  |  |  |  |  |
| Martin-Rodriguez (2013) (163) |  |  |  |  |  |  |  |  |  |
| Matano (2005) (28) |  |  |  |  |  |  |  |  |  |
| Matsubayashi (2020) (164) |  |  |  |  |  |  |  |  |  |
| Matyja (2006) (165) |  |  |  |  |  |  |  |  |  |
| Mercado (2004; biochemically discordant) (166) |  |  |  |  |  |  |  |  |  |
| Mercado (2004; LAR) (167) |  |  |  |  |  |  |  |  |  |
| Minniti (2001) (168) |  |  |  |  |  |  |  |  |  |
| Nachtigall (2008) (52) |  |  |  |  |  |  |  |  |  |
| Newman (1998) (169) |  |  |  |  |  |  |  |  |  |
| Nezu (2018) (170) |  |  |  |  |  |  |  |  |  |
| Ohno (2018) (171) |  |  |  |  |  |  |  |  |  |
| Olarescu (2016) (172) |  |  |  |  |  |  |  |  |  |
| Famuyiwa (1990) (173) |  |  |  |  |  |  |  |  |  |
| Pekkarinen (1987) (174) |  |  |  |  |  |  |  |  |  |
| Pelkonen (1975) (175) |  |  |  |  |  |  |  |  |  |
| Petrossians (2017) (12) |  |  |  |  |  |  |  |  |  |
| Popielarz-Grygalewicz (2020) (29) |  |  |  |  |  |  |  |  |  |
| Portocarrero-Ortiz (2016) (65) |  |  |  |  |  |  |  |  |  |
| Reid (2010) (9) |  |  |  |  |  |  |  |  |  |
| Reyes-Vidal (2015) (176) |  |  |  |  |  |  |  |  |  |
| Rick (2018) (177) |  |  |  |  |  |  |  |  |  |
| Shao (2013) (178) |  |  |  |  |  |  |  |  |  |
| Stelmachowska-Banas (2011) (179) |  |  |  |  |  |  |  |  |  |
| Sumbul (2019) (180) |  |  |  |  |  |  |  |  |  |
| Sze (2007) (181) |  |  |  |  |  |  |  |  |  |
| Szydelko (2021) (41) |  |  |  |  |  |  |  |  |  |
| Tseng (2019) (56) |  |  |  |  |  |  |  |  |  |
| Tzanela (2011) (182) |  |  |  |  |  |  |  |  |  |
| Varlamov (2021) (183) |  |  |  |  |  |  |  |  |  |
| Vlad (2015) (184) |  |  |  |  |  |  |  |  |  |
| Voit (1999) (66) |  |  |  |  |  |  |  |  |  |
| Vouzouneraki (2021)(185) |  |  |  |  |  |  |  |  |  |
| Wang (2012)(186) |  |  |  |  |  |  |  |  |  |
| Wang (2019) (187) |  |  |  |  |  |  |  |  |  |
| Wani (2019) (188) |  |  |  |  |  |  |  |  |  |
| Wolters (2020) (189) |  |  |  |  |  |  |  |  |  |
| Yamamoto (2015) (39) |  |  |  |  |  |  |  |  |  |
| Yan (2020) (42) |  |  |  |  |  |  |  |  |  |
| Zarool-Hassan (2016) (10) |  |  |  |  |  |  |  |  |  |

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