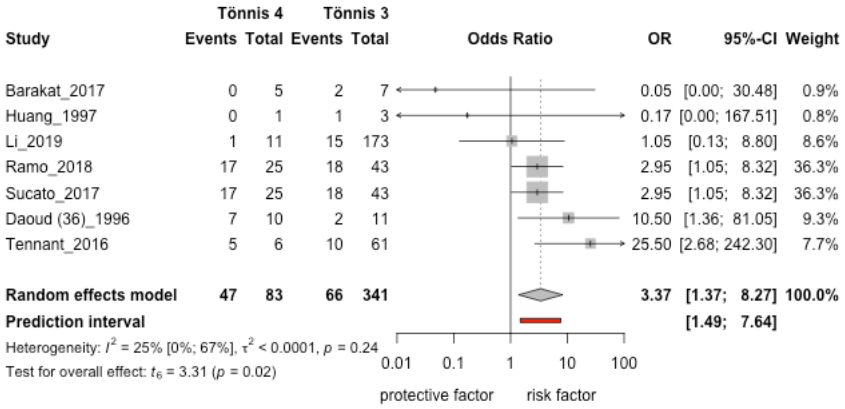
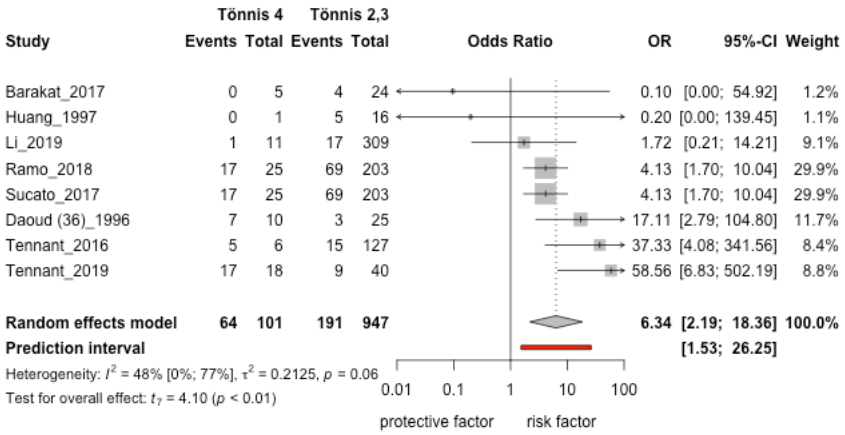
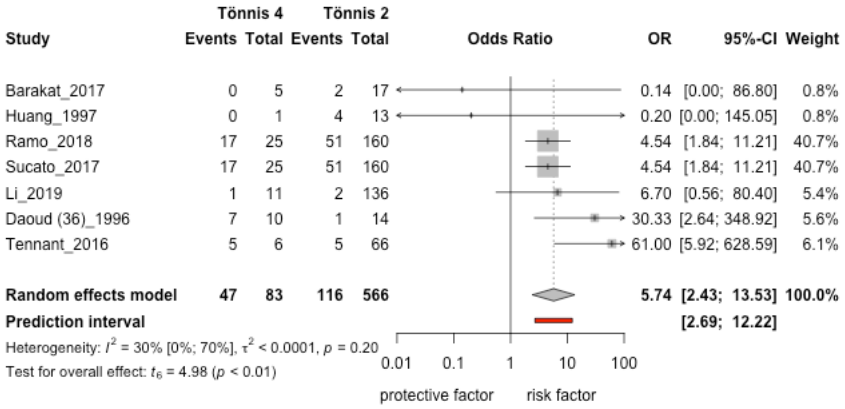
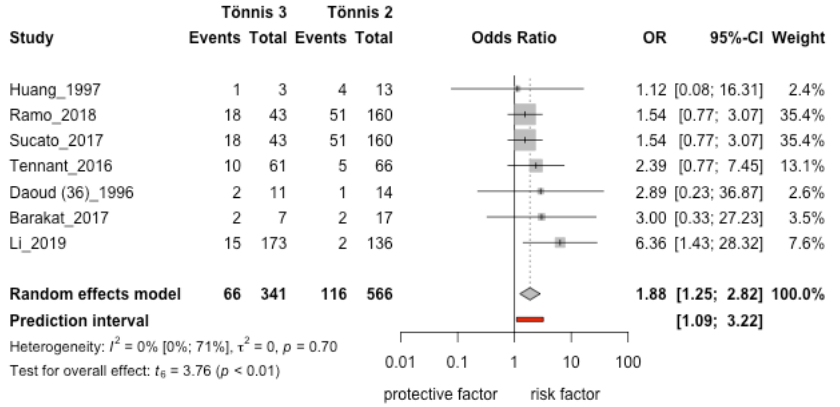
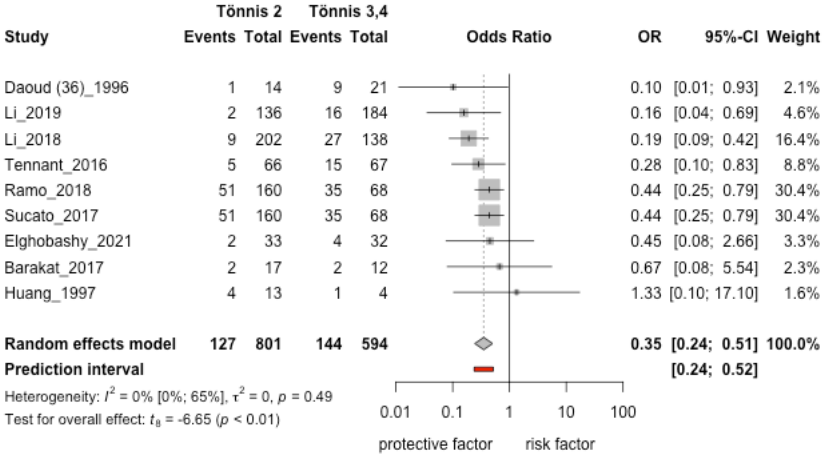
RISK FACTORS – OVERALL (GROUP 0-36)

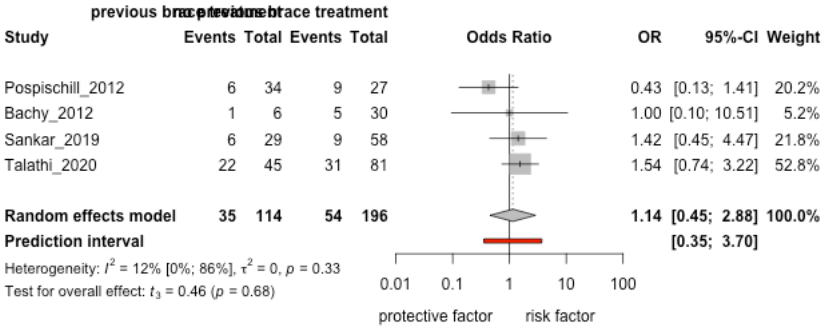


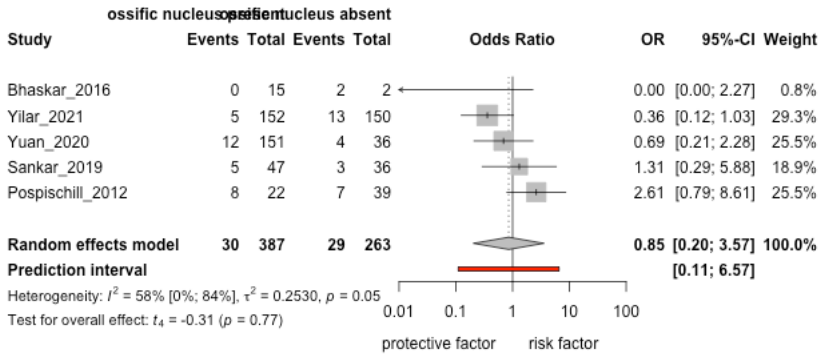


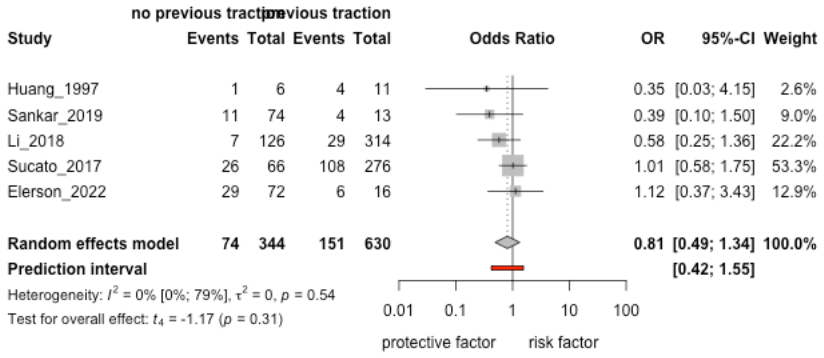

Tönnis 4
Tönnis 2
Study
Events Total Events Total
Odds Ratio
OR
95%-CI
Weight
Barakat_2017 0 5 2 17 0.14 [0.00; 86.80] 0.8%
Huang_1997 0 1 4 13 0.20 [0.00; 145.05] 0.8%
Ramo_2018 17 25 51 160 4.54 [1.84; 11.21] 40.7%
Sucato_2017 17 25 51 160 4.54 [1.84; 11.21] 40.7%
Li_2019 1 11 2 136 6.70 [0.56; 80.40] 5.4%
Daoud (36)_1996 7 10 1 14 30.33 [2.64; 348.92] 5.6%
Tennant_2016 5 6 5 66 61.00 [5.92; 628.59] 6.1%
Random effects model 47 83 116 566 5.74 [2.43; 13.53] 100.0%
Prediction interval [2.69; 12.22]
Heterogeneity: I^2 = 30% [0%; 70%], τ^2 < 0.0001, p = 0.20
Test for overall effect: t_6 = 4.98 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

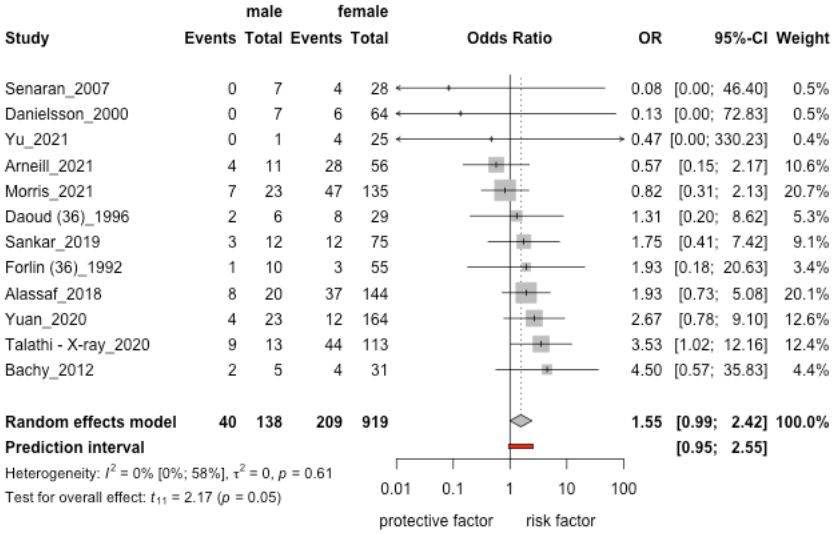

Tönnis 3
Tönnis 2
Study
Events Total Events Total
Odds Ratio
OR
95%-CI
Weight
Huang_1997 1 3 4 13 1.12 [0.08; 16.31] 2.4%
Ramo_2018 18 43 51 160 1.54 [0.77; 3.07] 35.4%
Sucato_2017 18 43 51 160 1.54 [0.77; 3.07] 35.4%
Tennant_2016 10 61 5 66 2.39 [0.77; 7.45] 13.1%
Daoud (36)_1996 2 11 1 14 2.89 [0.23; 36.87] 2.6%
Barakat_2017 2 7 2 17 3.00 [0.33; 27.23] 3.5%
Li_2019 15 173 2 136 6.36 [1.43; 28.32] 7.6%
Random effects model 66 341 116 566 1.88 [1.25; 2.82] 100.0%
Prediction interval [1.09; 3.22]
Heterogeneity: I^2 = 0% [0%; 71%], τ^2 = 0, p = 0.70
Test for overall effect: t_6 = 3.76 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

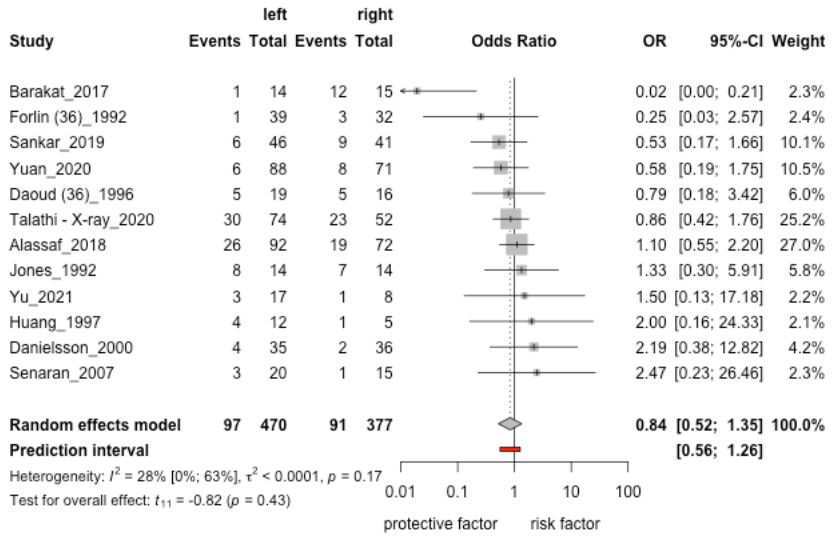

Tönnis 2
Tönnis 3,4
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Daoud (36)_1996 1 14 9 21 0.10 [0.01; 0.93] 2.1%
Li_2019 2 136 16 184 0.16 [0.04; 0.69] 4.6%
Li_2018 9 202 27 138 0.19 [0.09; 0.42] 16.4%
Tennant_2016 5 66 15 67 0.28 [0.10; 0.83] 8.8%
Ramo_2018 51 160 35 68 0.44 [0.25; 0.79] 30.4%
Sucato_2017 51 160 35 68 0.44 [0.25; 0.79] 30.4%
Elghobashy_2021 2 33 4 32 0.45 [0.08; 2.66] 3.3%
Barakat_2017 2 17 2 12 0.67 [0.08; 5.54] 2.3%
Huang_1997 4 13 1 4 1.33 [0.10; 17.10] 1.6%
Random effects model 127 801 144 594 0.35 [0.24; 0.51] 100.0%
Prediction interval [0.24; 0.52]
Heterogeneity: I^2 = 0% [0%; 65%], τ^2 = 0, p = 0.49
Test for overall effect: t_8 = -6.65 (p < 0.01)
0.01 0.1 1 10 100
protective factor risk factor

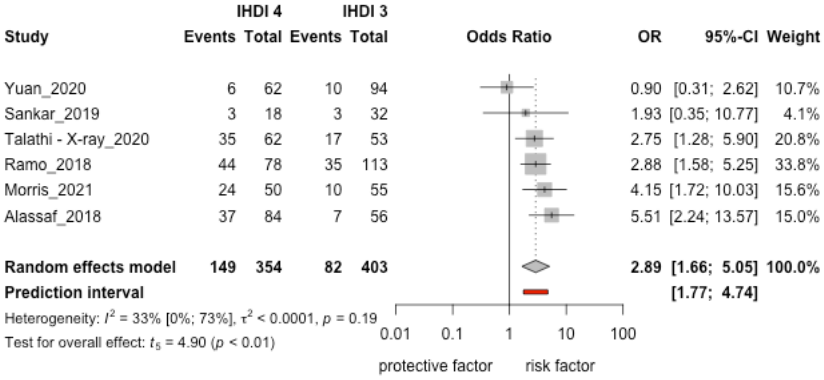

previous brace treatment
no previous brace treatment
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Pospischill_2012 6 34 9 27 0.43 [0.13; 1.41] 20.2%
Bachy_2012 1 6 5 30 1.00 [0.10; 10.51] 5.2%
Sankar_2019 6 29 9 58 1.42 [0.45; 4.47] 21.8%
Talathi_2020 22 45 31 81 1.54 [0.74; 3.22] 52.8%
Random effects model 35 114 54 196 1.14 [0.45; 2.88] 100.0%
Prediction interval [0.35; 3.70]
Heterogeneity: I^2 = 12% [0%; 86%], τ^2 = 0, p = 0.33
Test for overall effect: t_3 = 0.46 (p = 0.68)
0.01 0.1 1 10 100
protective factor risk factor

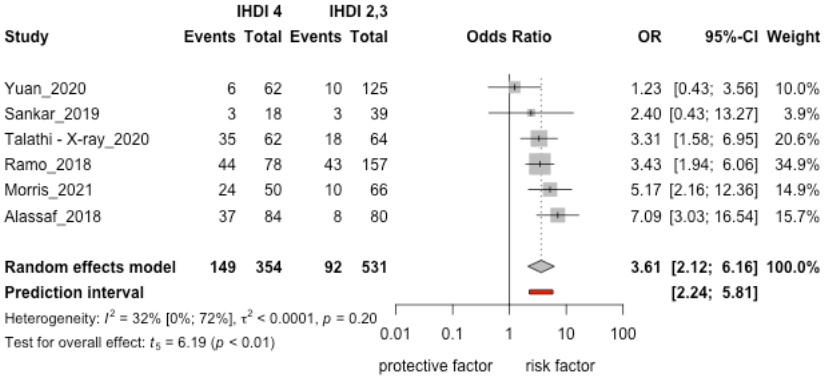

ossific nucleus present
ossific nucleus absent
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Bhaskar_2016 0 15 2 2 0.00 [0.00; 2.27] 0.8%
Yilar_2021 5 152 13 150 0.36 [0.12; 1.03] 29.3%
Yuan_2020 12 151 4 36 0.69 [0.21; 2.28] 25.5%
Sankar_2019 5 47 3 36 1.31 [0.29; 5.88] 18.9%
Pospischill_2012 8 22 7 39 2.61 [0.79; 8.61] 25.5%
Random effects model 30 387 29 263 0.85 [0.20; 3.57] 100.0%
Prediction interval [0.11; 6.57]
Heterogeneity: I^2 = 58% [0%; 84%], τ^2 = 0.2530, p = 0.05
Test for overall effect: t_4 = -0.31 (p = 0.77)
0.01 0.1 1 10 100
protective factor
risk factor

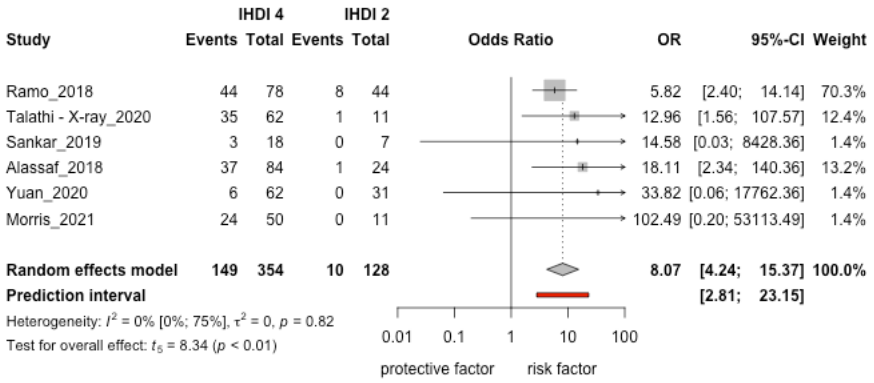

no previous traction
previous traction
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Huang_1997 1 6 4 11 0.35 [0.03; 4.15] 2.6%
Sankar_2019 11 74 4 13 0.39 [0.10; 1.50] 9.0%
Li_2018 7 126 29 314 0.58 [0.25; 1.36] 22.2%
Sucato_2017 26 66 108 276 1.01 [0.58; 1.75] 53.3%
Elerson_2022 29 72 6 16 1.12 [0.37; 3.43] 12.9%
Random effects model 74 344 151 630 0.81 [0.49; 1.34] 100.0%
Prediction interval [0.42; 1.55]
Heterogeneity: I^2 = 0% [0%; 79%], τ^2 = 0, p = 0.54
Test for overall effect: t_4 = -1.17 (p = 0.31)
0.01 0.1 1 10 100
protective factor
risk factor

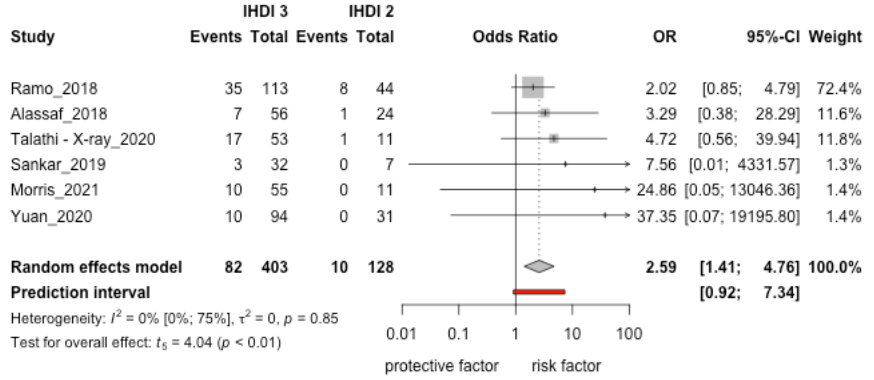

male
female
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Senaran_2007 0 7 4 28 0.08 [0.00; 46.40] 0.5%
Danielsson_2000 0 7 6 64 0.13 [0.00; 72.83] 0.5%
Yu_2021 0 1 4 25 0.47 [0.00; 330.23] 0.4%
Arneill_2021 4 11 28 56 0.57 [0.15; 2.17] 10.6%
Morris_2021 7 23 47 135 0.82 [0.31; 2.13] 20.7%
Daoud (36)_1996 2 6 8 29 1.31 [0.20; 8.62] 5.3%
Sankar_2019 3 12 12 75 1.75 [0.41; 7.42] 9.1%
Forlin (36)_1992 1 10 3 55 1.93 [0.18; 20.63] 3.4%
Alassaf_2018 8 20 37 144 1.93 [0.73; 5.08] 20.1%
Yuan_2020 4 23 12 164 2.67 [0.78; 9.10] 12.6%
Talathi - X-ray_2020 9 13 44 113 3.53 [1.02; 12.16] 12.4%
Bachy_2012 2 5 4 31 4.50 [0.57; 35.83] 4.4%
Random effects model 40 138 209 919 1.55 [0.99; 2.42] 100.0%
Prediction interval [0.95; 2.55]
Heterogeneity: I^2 = 0% [0%; 58%], τ^2 = 0, p = 0.61
Test for overall effect: t_{11} = 2.17 (p = 0.05)
0.01 0.1 1 10 100
protective factor risk factor

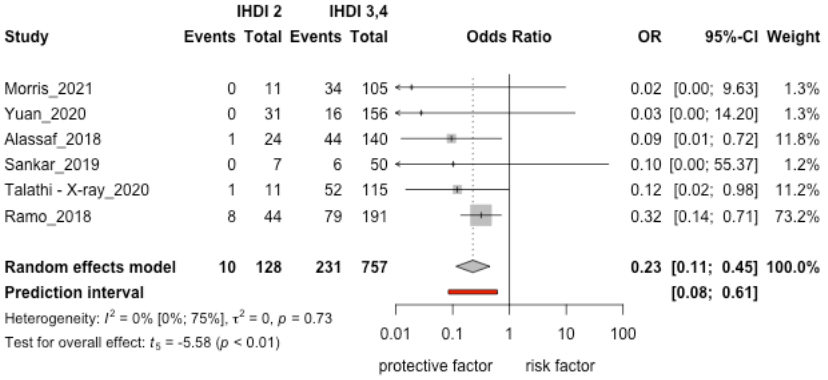

left
right
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Barakat_2017 1 14 12 15 0.02 [0.00; 0.21] 2.3%
Forlin (36)_1992 1 39 3 32 0.25 [0.03; 2.57] 2.4%
Sankar_2019 6 46 9 41 0.53 [0.17; 1.66] 10.1%
Yuan_2020 6 88 8 71 0.58 [0.19; 1.75] 10.5%
Daoud (36)_1996 5 19 5 16 0.79 [0.18; 3.42] 6.0%
Talathi - X-ray_2020 30 74 23 52 0.86 [0.42; 1.76] 25.2%
Alassaf_2018 26 92 19 72 1.10 [0.55; 2.20] 27.0%
Jones_1992 8 14 7 14 1.33 [0.30; 5.91] 5.8%
Yu_2021 3 17 1 8 1.50 [0.13; 17.18] 2.2%
Huang_1997 4 12 1 5 2.00 [0.16; 24.33] 2.1%
Danielsson_2000 4 35 2 36 2.19 [0.38; 12.82] 4.2%
Senaran_2007 3 20 1 15 2.47 [0.23; 26.46] 2.3%
Random effects model 97 470 91 377 0.84 [0.52; 1.35] 100.0%
Prediction interval [0.56; 1.26]
Heterogeneity: I^2 = 28% [0%; 63%], τ^2 < 0.0001, p = 0.17
Test for overall effect: t_{11} = -0.82 (p = 0.43)
0.01 0.1 1 10 100
protective factor risk factor

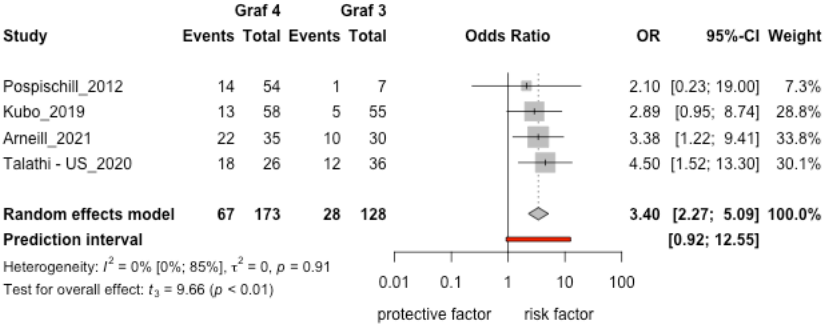

IHDI 4
IHDI 3
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Yuan_2020 6 62 10 94 0.90 [0.31; 2.62] 10.7%
Sankar_2019 3 18 3 32 1.93 [0.35; 10.77] 4.1%
Talathi - X-ray_2020 35 62 17 53 2.75 [1.28; 5.90] 20.8%
Ramo_2018 44 78 35 113 2.88 [1.58; 5.25] 33.8%
Morris_2021 24 50 10 55 4.15 [1.72; 10.03] 15.6%
Alassaf_2018 37 84 7 56 5.51 [2.24; 13.57] 15.0%
Random effects model 149 354 82 403 2.89 [1.66; 5.05] 100.0%
Prediction interval [1.77; 4.74]
Heterogeneity: I^2 = 33% [0%; 73%], τ^2 < 0.0001, p = 0.19
Test for overall effect: t_5 = 4.90 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

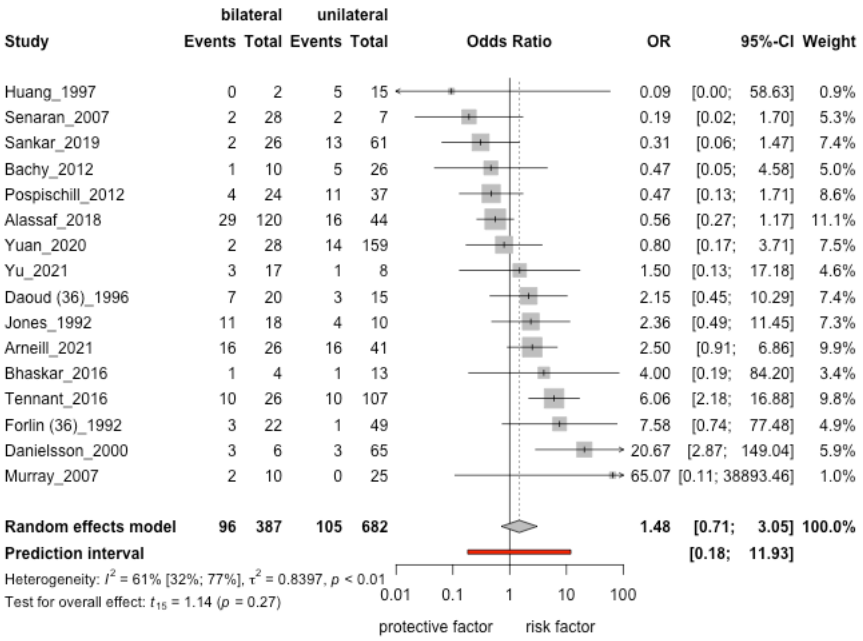

IHDI 4
IHDI 2,3
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Yuan_2020 6 62 10 125 1.23 [0.43; 3.56] 10.0%
Sankar_2019 3 18 3 39 2.40 [0.43; 13.27] 3.9%
Talathi - X-ray_2020 35 62 18 64 3.31 [1.58; 6.95] 20.6%
Ramo_2018 44 78 43 157 3.43 [1.94; 6.06] 34.9%
Morris_2021 24 50 10 66 5.17 [2.16; 12.36] 14.9%
Alassaf_2018 37 84 8 80 7.09 [3.03; 16.54] 15.7%
Random effects model 149 354 92 531 3.61 [2.12; 6.16] 100.0%
Prediction interval [2.24; 5.81]
Heterogeneity: I^2 = 32% [0%; 72%], τ^2 < 0.0001, p = 0.20
Test for overall effect: t_5 = 6.19 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

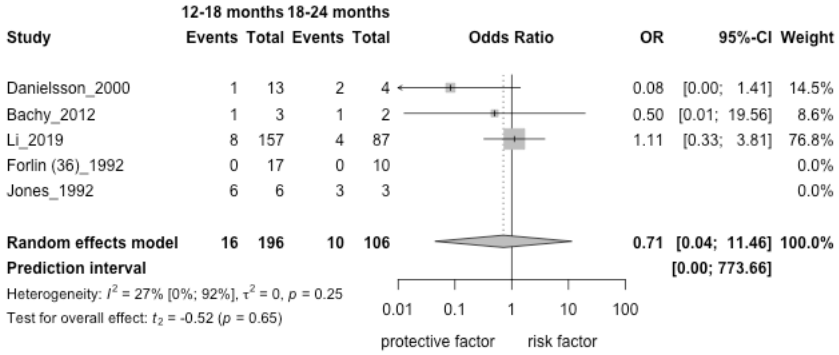

IHDI 4
IHDI 2
Study
Events Total Events Total
Odds Ratio
OR
95%-CI Weight
Ramo_2018 44 78 8 44 5.82 [2.40; 14.14] 70.3%
Talathi - X-ray_2020 35 62 1 11 12.96 [1.56; 107.57] 12.4%
Sankar_2019 3 18 0 7 14.58 [0.03; 8428.36] 1.4%
Alassaf_2018 37 84 1 24 18.11 [2.34; 140.36] 13.2%
Yuan_2020 6 62 0 31 33.82 [0.06; 17762.36] 1.4%
Morris_2021 24 50 0 11 102.49 [0.20; 53113.49] 1.4%
Random effects model 149 354 10 128 8.07 [4.24; 15.37] 100.0%
Prediction interval [2.81; 23.15]
Heterogeneity: I^2 = 0% [0%; 75%], τ^2 = 0, p = 0.82
Test for overall effect: t_5 = 8.34 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

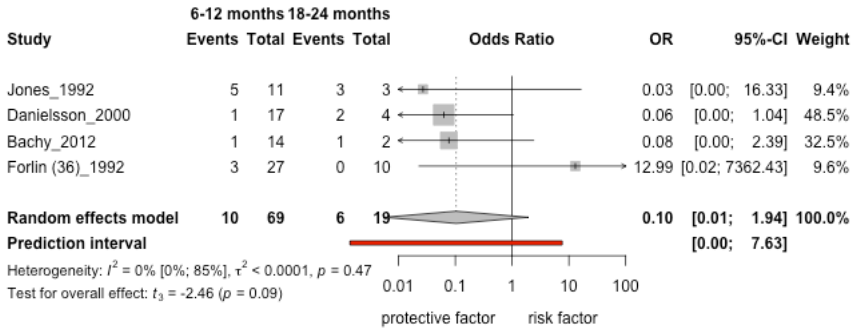

IHDI 3
IHDI 2
Study
Events Total Events Total
Odds Ratio
OR
95%-CI Weight
Ramo_2018 35 113 8 44 2.02 [0.85; 4.79] 72.4%
Alassaf_2018 7 56 1 24 3.29 [0.38; 28.29] 11.6%
Talathi - X-ray_2020 17 53 1 11 4.72 [0.56; 39.94] 11.8%
Sankar_2019 3 32 0 7 7.56 [0.01; 4331.57] 1.3%
Morris_2021 10 55 0 11 24.86 [0.05; 13046.36] 1.4%
Yuan_2020 10 94 0 31 37.35 [0.07; 19195.80] 1.4%
Random effects model 82 403 10 128 2.59 [1.41; 4.76] 100.0%
Prediction interval [0.92; 7.34]
Heterogeneity: I^2 = 0% [0%; 75%], τ^2 = 0, p = 0.85
Test for overall effect: t_5 = 4.04 (p < 0.01)
0.01 0.1 1 10 100
protective factor
risk factor

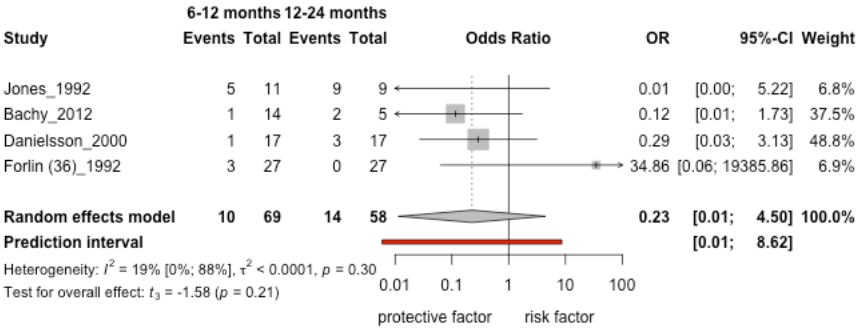

IHDI 2
IHDI 3,4
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Morris_2021 0 11 34 105 0.02 [0.00; 9.63] 1.3%
Yuan_2020 0 31 16 156 0.03 [0.00; 14.20] 1.3%
Alassaf_2018 1 24 44 140 0.09 [0.01; 0.72] 11.8%
Sankar_2019 0 7 6 50 0.10 [0.00; 55.37] 1.2%
Talathi - X-ray_2020 1 11 52 115 0.12 [0.02; 0.98] 11.2%
Ramo_2018 8 44 79 191 0.32 [0.14; 0.71] 73.2%
Random effects model 10 128 231 757 0.23 [0.11; 0.45] 100.0%
Prediction interval [0.08; 0.61]
Heterogeneity: I^2 = 0% [0%; 75%], τ^2 = 0, p = 0.73
Test for overall effect: t_5 = -5.58 (p < 0.01)
0.01 0.1 1 10 100
protective factor risk factor

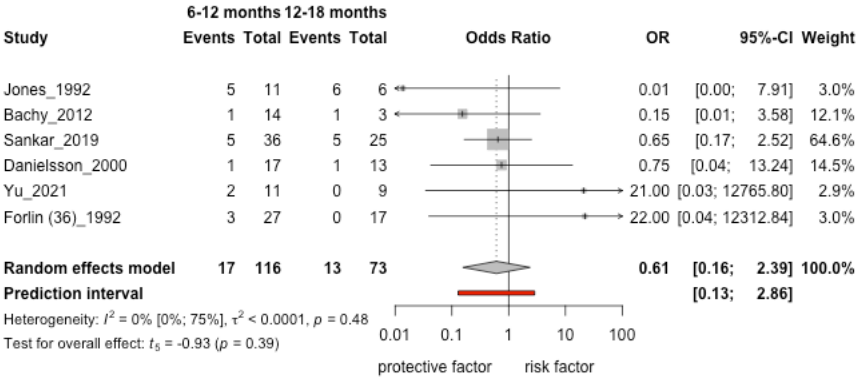

Graf 4
Graf 3
Study
Events Total Events Total
Odds Ratio
OR 95%-CI Weight
Pospischill_2012 14 54 1 7 2.10 [0.23; 19.00] 7.3%
Kubo_2019 13 58 5 55 2.89 [0.95; 8.74] 28.8%
Arneill_2021 22 35 10 30 3.38 [1.22; 9.41] 33.8%
Talathi - US_2020 18 26 12 36 4.50 [1.52; 13.30] 30.1%
Random effects model 67 173 28 128 3.40 [2.27; 5.09] 100.0%
Prediction interval [0.92; 12.55]
Heterogeneity: I^2 = 0% [0%; 85%], τ^2 = 0, p = 0.91
Test for overall effect: t_3 = 9.66 (p < 0.01)
0.01 0.1 1 10 100
protective factor risk factor

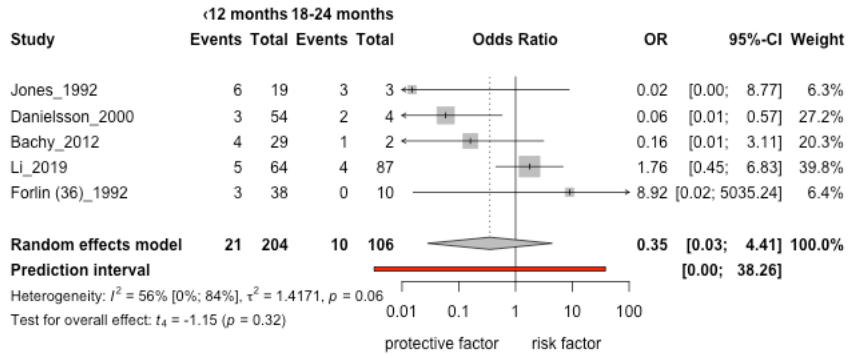

bilateral
unilateral
Study
Events Total Events Total
Odds Ratio
OR
95%-CI
Weight
Huang_1997 0 2 5 15 0.09 [0.00; 58.63] 0.9%
Senaran_2007 2 28 2 7 0.19 [0.02; 1.70] 5.3%
Sankar_2019 2 26 13 61 0.31 [0.06; 1.47] 7.4%
Bachy_2012 1 10 5 26 0.47 [0.05; 4.58] 5.0%
Pospischill_2012 4 24 11 37 0.47 [0.13; 1.71] 8.6%
Alassaf_2018 29 120 16 44 0.56 [0.27; 1.17] 11.1%
Yuan_2020 2 28 14 159 0.80 [0.17; 3.71] 7.5%
Yu_2021 3 17 1 8 1.50 [0.13; 17.18] 4.6%
Daoud (36)_1996 7 20 3 15 2.15 [0.45; 10.29] 7.4%
Jones_1992 11 18 4 10 2.36 [0.49; 11.45] 7.3%
Arneill_2021 16 26 16 41 2.50 [0.91; 6.86] 9.9%
Bhaskar_2016 1 4 1 13 4.00 [0.19; 84.20] 3.4%
Tennant_2016 10 26 10 107 6.06 [2.18; 16.88] 9.8%
Forlin (36)_1992 3 22 1 49 7.58 [0.74; 77.48] 4.9%
Danielsson_2000 3 6 3 65 20.67 [2.87; 149.04] 5.9%
Murray_2007 2 10 0 25 65.07 [0.11; 38893.46] 1.0%
Random effects model 96 387 105 682 1.48 [0.71; 3.05] 100.0%
Prediction interval [0.18; 11.93]
Heterogeneity: I^2 = 61% [32%; 77%], τ^2 = 0.8397, p < 0.01
Test for overall effect: t_{15} = 1.14 (p = 0.27)
0.01 0.1 1 10 100
protective factor
risk factor

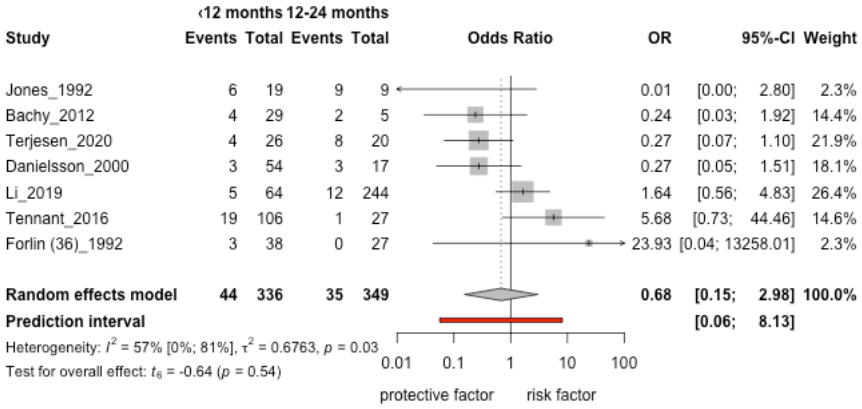

12-18 months
18-24 months
Study
Events Total Events Total
Odds Ratio
OR
95%-CI
Weight
Danielsson_2000 1 13 2 4 0.08 [0.00; 1.41] 14.5%
Bachy_2012 1 3 1 2 0.50 [0.01; 19.56] 8.6%
Li_2019 8 157 4 87 1.11 [0.33; 3.81] 76.8%
Forlin (36)_1992 0 17 0 10 0.0%
Jones_1992 6 6 3 3 0.0%
Random effects model 16 196 10 106 0.71 [0.04; 11.46] 100.0%
Prediction interval [0.00; 773.66]
Heterogeneity: I^2 = 27% [0%; 92%], τ^2 = 0, p = 0.25
Test for overall effect: t_2 = -0.52 (p = 0.65)
0.01 0.1 1 10 100
protective factor
risk factor


6-12 months 18-24 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 5 11 3 3 0.03 [0.00; 16.33] 9.4%
Danielsson_2000 1 17 2 4 0.06 [0.00; 1.04] 48.5%
Bachy_2012 1 14 1 2 0.08 [0.00; 2.39] 32.5%
Forlin (36)_1992 3 27 0 10 12.99 [0.02; 7362.43] 9.6%
Random effects model 10 69 6 19 0.10 [0.01; 1.94] 100.0%
Prediction interval [0.00; 7.63]
Heterogeneity: I^2 = 0% [0%; 85%], τ^2 < 0.0001, p = 0.47
Test for overall effect: t_3 = -2.46 (p = 0.09)
0.01 0.1 1 10 100
protective factor risk factor


6-12 months 12-24 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 5 11 9 9 0.01 [0.00; 5.22] 6.8%
Bachy_2012 1 14 2 5 0.12 [0.01; 1.73] 37.5%
Danielsson_2000 1 17 3 17 0.29 [0.03; 3.13] 48.8%
Forlin (36)_1992 3 27 0 27 34.86 [0.06; 19385.86] 6.9%
Random effects model 10 69 14 58 0.23 [0.01; 4.50] 100.0%
Prediction interval [0.01; 8.62]
Heterogeneity: I^2 = 19% [0%; 88%], τ^2 < 0.0001, p = 0.30
Test for overall effect: t_3 = -1.58 (p = 0.21)
0.01 0.1 1 10 100
protective factor risk factor


6-12 months 12-18 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 5 11 6 6 0.01 [0.00; 7.91] 3.0%
Bachy_2012 1 14 1 3 0.15 [0.01; 3.58] 12.1%
Sankar_2019 5 36 5 25 0.65 [0.17; 2.52] 64.6%
Danielsson_2000 1 17 1 13 0.75 [0.04; 13.24] 14.5%
Yu_2021 2 11 0 9 21.00 [0.03; 12765.80] 2.9%
Forlin (36)_1992 3 27 0 17 22.00 [0.04; 12312.84] 3.0%
Random effects model 17 116 13 73 0.61 [0.16; 2.39] 100.0%
Prediction interval [0.13; 2.86]
Heterogeneity: I^2 = 0% [0%; 75%], τ^2 < 0.0001, p = 0.48
Test for overall effect: t_5 = -0.93 (p = 0.39)
0.01 0.1 1 10 100
protective factor risk factor

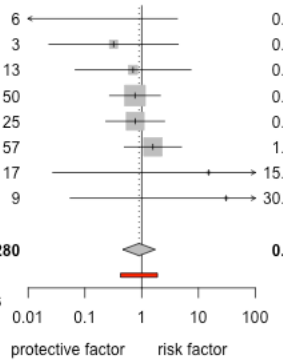

‹12 months 18-24 months
Study
Events Total Events Total
Odds Ratio
OR
95%-CI Weight
Jones_1992 6 19 3 3 0.02 [0.00; 8.77] 6.3%
Danielsson_2000 3 54 2 4 0.06 [0.01; 0.57] 27.2%
Bachy_2012 4 29 1 2 0.16 [0.01; 3.11] 20.3%
Li_2019 5 64 4 87 1.76 [0.45; 6.83] 39.8%
Forlin (36)_1992 3 38 0 10 8.92 [0.02; 5035.24] 6.4%
Random effects model 21 204 10 106 0.35 [0.03; 4.41] 100.0%
Prediction interval [0.00; 38.26]
Heterogeneity: I^2 = 56% [0%; 84%], τ^2 = 1.4171, p = 0.06
Test for overall effect: t_4 = -1.15 (p = 0.32)
0.01 0.1 1 10 100
protective factor
risk factor


‹12 months 12-24 months
Study
Events Total Events Total
Odds Ratio
OR
95%-CI Weight
Jones_1992 6 19 9 9 0.01 [0.00; 2.80] 2.3%
Bachy_2012 4 29 2 5 0.24 [0.03; 1.92] 14.4%
Terjesen_2020 4 26 8 20 0.27 [0.07; 1.10] 21.9%
Danielsson_2000 3 54 3 17 0.27 [0.05; 1.51] 18.1%
Li_2019 5 64 12 244 1.64 [0.56; 4.83] 26.4%
Tennant_2016 19 106 1 27 5.68 [0.73; 44.46] 14.6%
Forlin (36)_1992 3 38 0 27 23.93 [0.04; 13258.01] 2.3%
Random effects model 44 336 35 349 0.68 [0.15; 2.98] 100.0%
Prediction interval [0.06; 8.13]
Heterogeneity: I^2 = 57% [0%; 81%], τ^2 = 0.6763, p = 0.03
Test for overall effect: t_6 = -0.64 (p = 0.54)
0.01 0.1 1 10 100
protective factor
risk factor

Study	‹12 months Events	Total	12-18 months Events	Total	OR	95%-CI	Weight
Jones_1992	6	19	6	6	0.01	[0.00; 4.25]	0.9%
Bachy_2012	4	29	1	3	0.32	[0.02; 4.41]	5.2%
Danielsson_2000	3	54	1	13	0.71	[0.07; 7.39]	6.5%
Zhang_2020	9	71	8	50	0.76	[0.27; 2.13]	33.7%
Sankar_2019	10	62	5	25	0.77	[0.23; 2.53]	25.2%
Li_2019	5	64	8	157	1.58	[0.50; 5.02]	26.7%
Forlin (36)_1992	3	38	0	17	15.10	[0.03; 8420.80]	0.9%
Yu_2021	4	16	0	9	30.83	[0.05; 17333.53]	0.9%
Random effects model	**44**	**353**	**29**	**280**	**0.90**	**[0.46; 1.74]**	**100.0%**
Prediction interval						**[0.43; 1.90]**	

Heterogeneity: I^2 = 0% [0%; 68%], τ^2 < 0.0001, p = 0.56

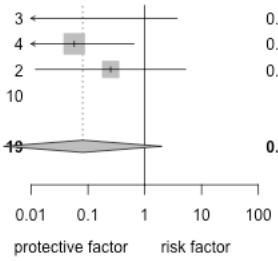
Test for overall effect: t_7 = -0.38 (p = 0.71)



Study	‹6 months Events	Total	18-24 months Events	Total	OR	95%-CI	Weight
Jones_1992	1	8	3	3	0.00	[0.00; 3.71]	7.6%
Danielsson_2000	2	37	2	4	0.06	[0.01; 0.64]	56.6%
Bachy_2012	3	15	1	2	0.25	[0.01; 5.26]	35.8%
Forlin (36)_1992	0	11	0	10			0.0%
Random effects model	**6**	**71**	**6**	**19**	**0.08**	**[0.00; 2.00]**	**100.0%**
Prediction interval						**[0.00; 10926.56]**	

Heterogeneity: I^2 = 0% [0%; 90%], τ^2 = 0, p = 0.53

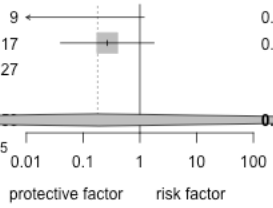
Test for overall effect: t_2 = -3.38 (p = 0.08)

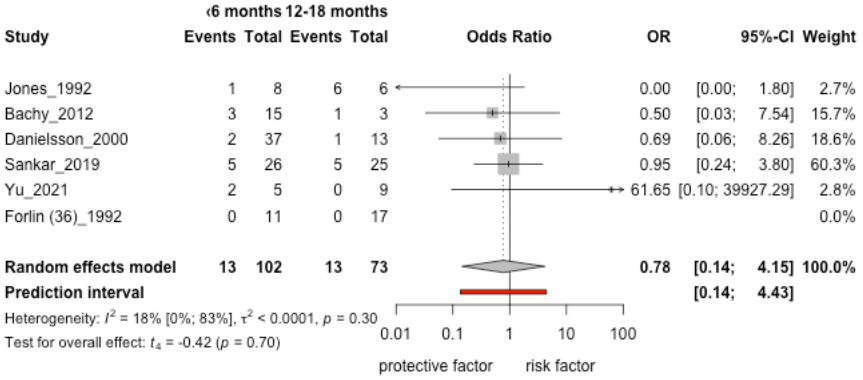


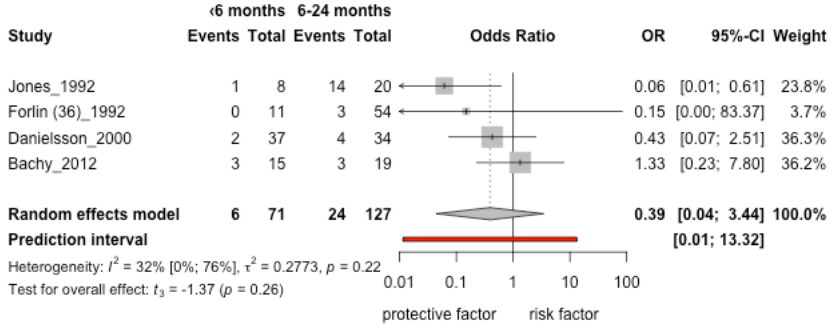
Study	‹6 months Events	Total	12-24 months Events	Total	OR	95%-CI	Weight
Jones_1992	1	8	9	9	0.00	[0.00; 1.19]	7.7%
Danielsson_2000	2	37	3	17	0.27	[0.04; 1.77]	92.3%
Forlin_1992	0	11	0	27			0.0%
~~**Random effects model**~~	~~**3**~~	~~**59**~~	~~**12**~~	~~**53**~~	~~**0.18**~~	~~**[0.00; 5004078.16]**~~	~~**100.0%**~~

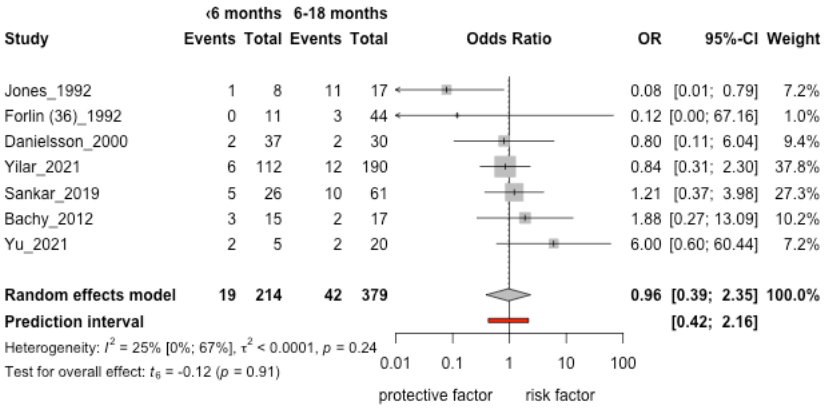
Heterogeneity: I^2 = 53% [0%; 88%], τ^2 < 0.0001, p = 0.15

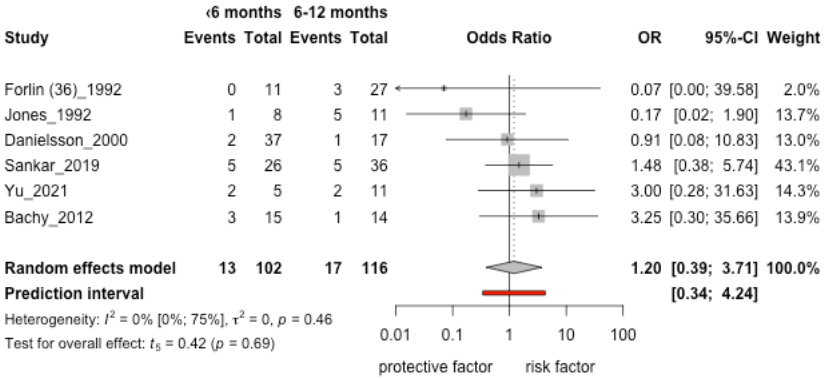
Test for overall effect: t_1 = -1.27 (p = 0.42)

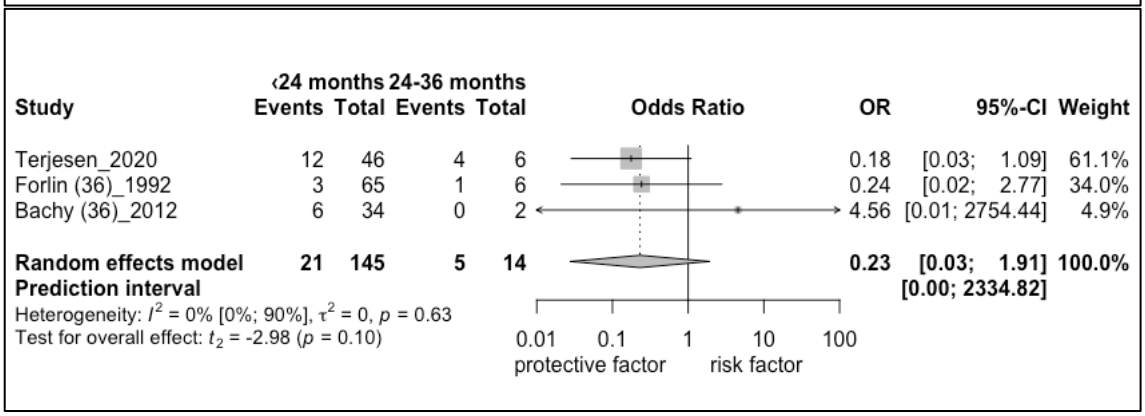



‹6 months 12-18 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 1 8 6 6 0.00 [0.00; 1.80] 2.7%
Bachy_2012 3 15 1 3 0.50 [0.03; 7.54] 15.7%
Danielsson_2000 2 37 1 13 0.69 [0.06; 8.26] 18.6%
Sankar_2019 5 26 5 25 0.95 [0.24; 3.80] 60.3%
Yu_2021 2 5 0 9 61.65 [0.10; 39927.29] 2.8%
Forlin (36)_1992 0 11 0 17 0.0%
Random effects model 13 102 13 73 0.78 [0.14; 4.15] 100.0%
Prediction interval [0.14; 4.43]
Heterogeneity: I^2 = 18% [0%; 83%], τ^2 < 0.0001, p = 0.30
Test for overall effect: t_4 = -0.42 (p = 0.70)
0.01 0.1 1 10 100
protective factor risk factor


‹6 months 6-24 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 1 8 14 20 0.06 [0.01; 0.61] 23.8%
Forlin (36)_1992 0 11 3 54 0.15 [0.00; 83.37] 3.7%
Danielsson_2000 2 37 4 34 0.43 [0.07; 2.51] 36.3%
Bachy_2012 3 15 3 19 1.33 [0.23; 7.80] 36.2%
Random effects model 6 71 24 127 0.39 [0.04; 3.44] 100.0%
Prediction interval [0.01; 13.32]
Heterogeneity: I^2 = 32% [0%; 76%], τ^2 = 0.2773, p = 0.22
Test for overall effect: t_3 = -1.37 (p = 0.26)
0.01 0.1 1 10 100
protective factor risk factor


‹6 months 6-18 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Jones_1992 1 8 11 17 0.08 [0.01; 0.79] 7.2%
Forlin (36)_1992 0 11 3 44 0.12 [0.00; 67.16] 1.0%
Danielsson_2000 2 37 2 30 0.80 [0.11; 6.04] 9.4%
Yilar_2021 6 112 12 190 0.84 [0.31; 2.30] 37.8%
Sankar_2019 5 26 10 61 1.21 [0.37; 3.98] 27.3%
Bachy_2012 3 15 2 17 1.88 [0.27; 13.09] 10.2%
Yu_2021 2 5 2 20 6.00 [0.60; 60.44] 7.2%
Random effects model 19 214 42 379 0.96 [0.39; 2.35] 100.0%
Prediction interval [0.42; 2.16]
Heterogeneity: I^2 = 25% [0%; 67%], τ^2 < 0.0001, p = 0.24
Test for overall effect: t_6 = -0.12 (p = 0.91)
0.01 0.1 1 10 100
protective factor risk factor


‹6 months 6-12 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Forlin (36)_1992 0 11 3 27 0.07 [0.00; 39.58] 2.0%
Jones_1992 1 8 5 11 0.17 [0.02; 1.90] 13.7%
Danielsson_2000 2 37 1 17 0.91 [0.08; 10.83] 13.0%
Sankar_2019 5 26 5 36 1.48 [0.38; 5.74] 43.1%
Yu_2021 2 5 2 11 3.00 [0.28; 31.63] 14.3%
Bachy_2012 3 15 1 14 3.25 [0.30; 35.66] 13.9%
Random effects model 13 102 17 116 1.20 [0.39; 3.71] 100.0%
Prediction interval [0.34; 4.24]
Heterogeneity: I^2 = 0% [0%; 75%], τ^2 = 0, p = 0.46
Test for overall effect: t_5 = 0.42 (p = 0.69)
0.01 0.1 1 10 100
protective factor risk factor


‹24 months 24-36 months
Study Events Total Events Total Odds Ratio OR 95%-CI Weight
Terjesen_2020 12 46 4 6 0.18 [0.03; 1.09] 61.1%
Forlin (36)_1992 3 65 1 6 0.24 [0.02; 2.77] 34.0%
Bachy (36)_2012 6 34 0 2 4.56 [0.01; 2754.44] 4.9%
Random effects model 21 145 5 14 0.23 [0.03; 1.91] 100.0%
Prediction interval [0.00; 2334.82]
Heterogeneity: I^2 = 0% [0%; 90%], τ^2 = 0, p = 0.63
Test for overall effect: t_2 = -2.98 (p = 0.10)
0.01 0.1 1 10 100
protective factor risk factor