Supplementary Online Content

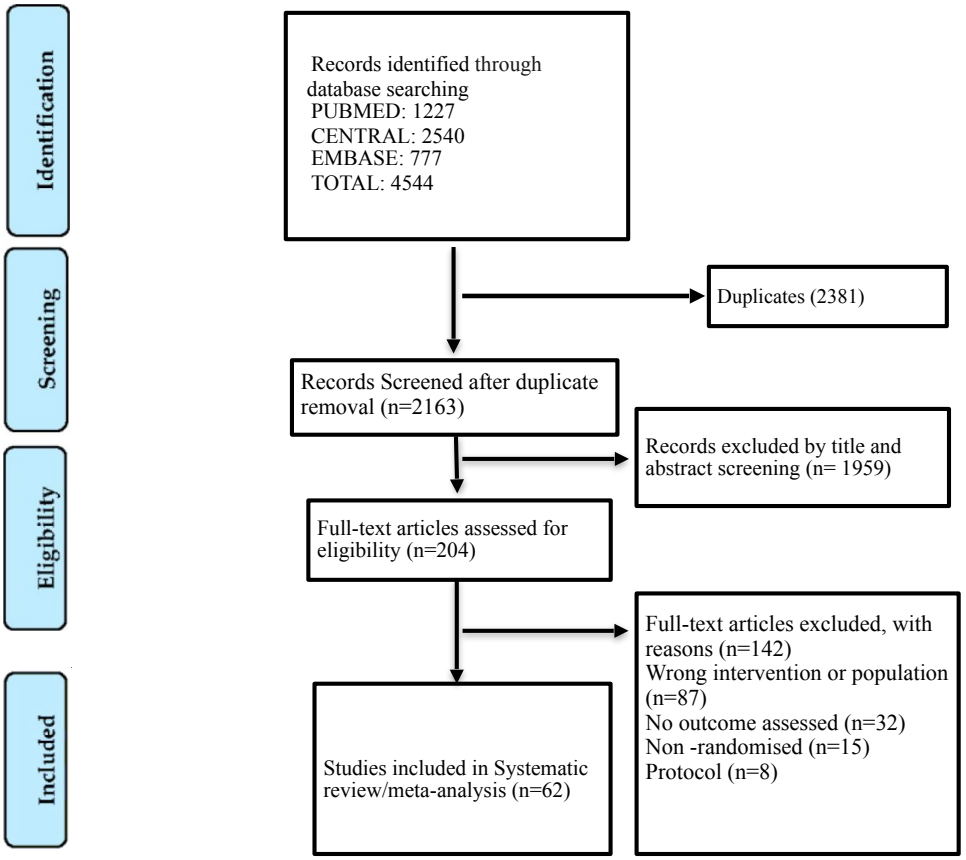
Ramaswamy VV, Bandyopadhyay T, Nanda D, et al. Assessment of postnatal corticosteroids for the prevention of bronchopulmonary dysplasia in preterm neonates: a systematic review and network meta-analysis. *JAMA Pediatr*. Published online March 15, 2021. doi:10.1001/jamapediatrics.2020.6826

eTable 3. Network Characteristics for All the Outcomes and Sensitivity Analysis

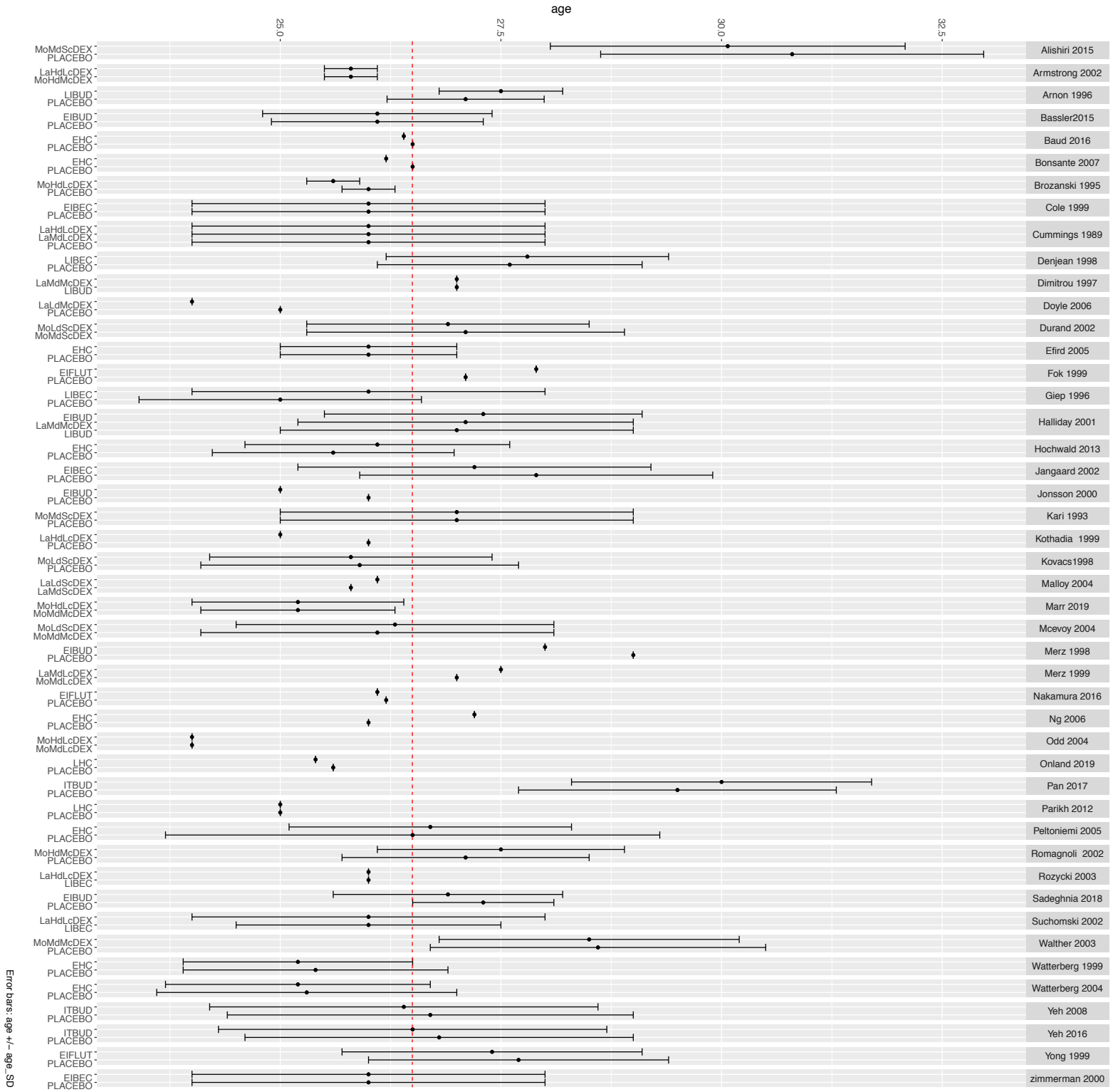
eTable 4. GRADE/Quality of Evidence for Some of the Secondary Outcomes

This supplementary material has been provided by the authors to give readers additional information about their work.

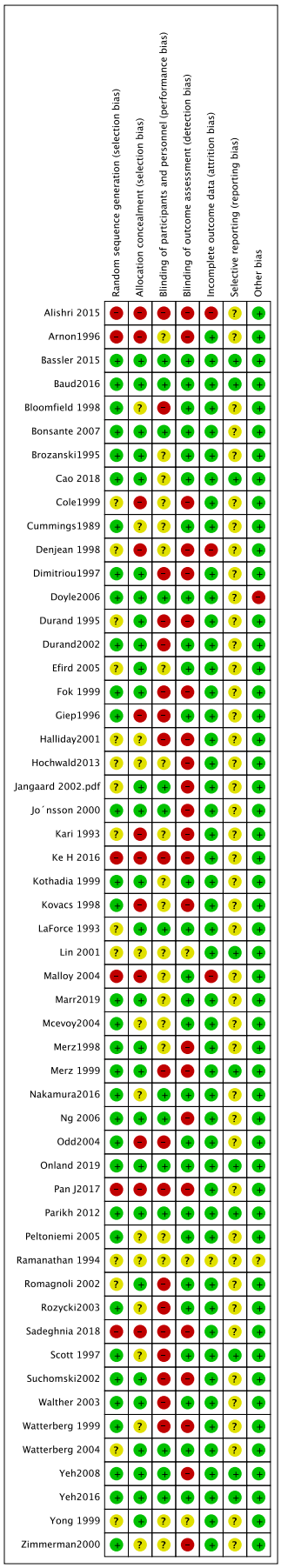
eFigure 1. Literature Search/PRISMA Flow [1-62]

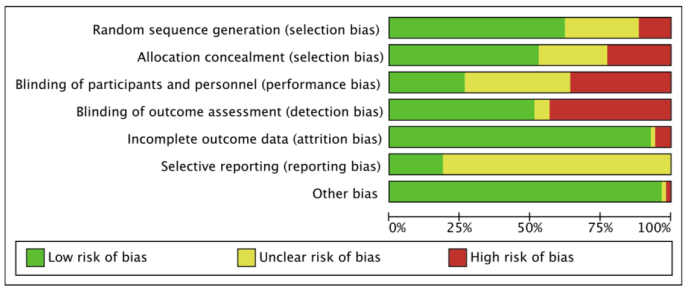


eFigure 2. Mean Gestational Age of the Enrolled Neonates

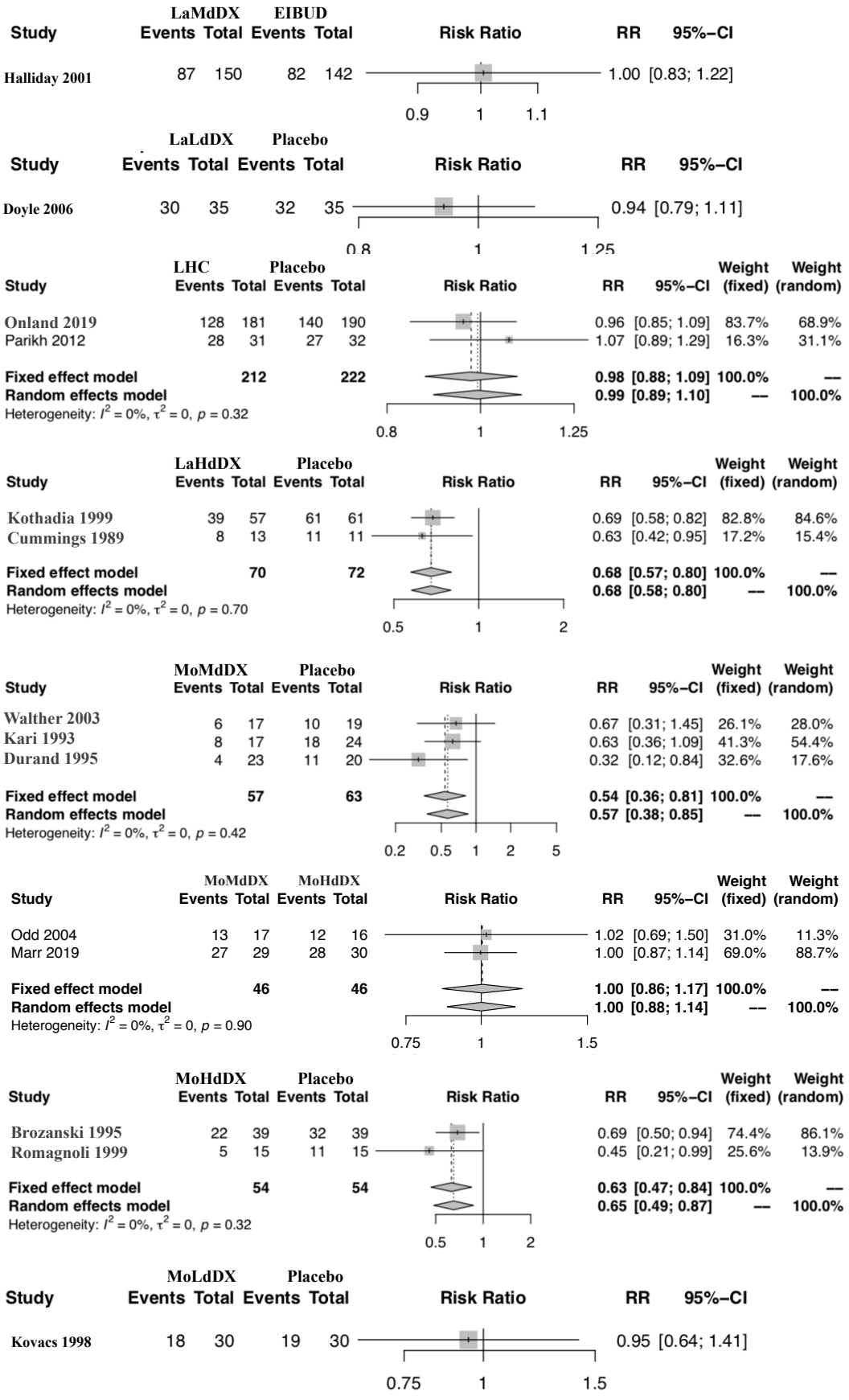


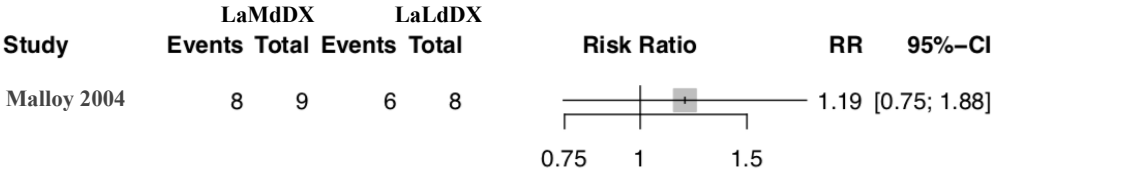
eFigure 3. Risk of Bias Summary and Graph of the Included Trials

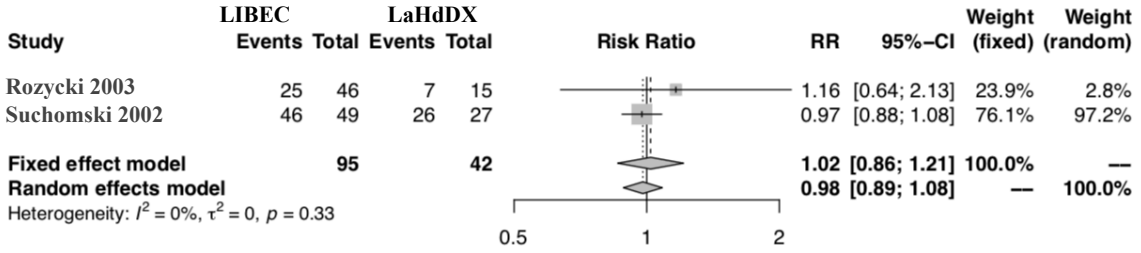


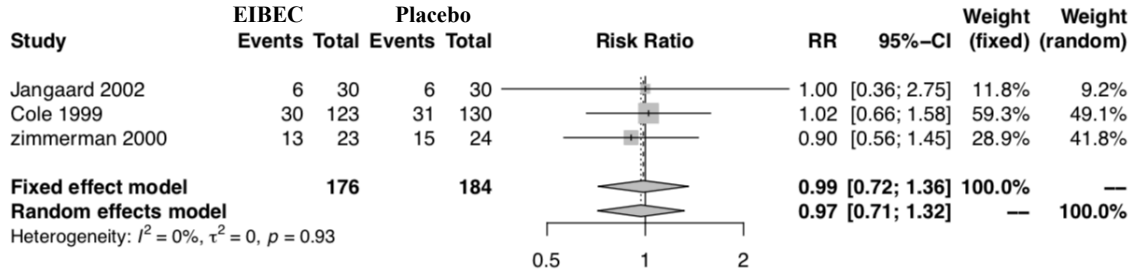


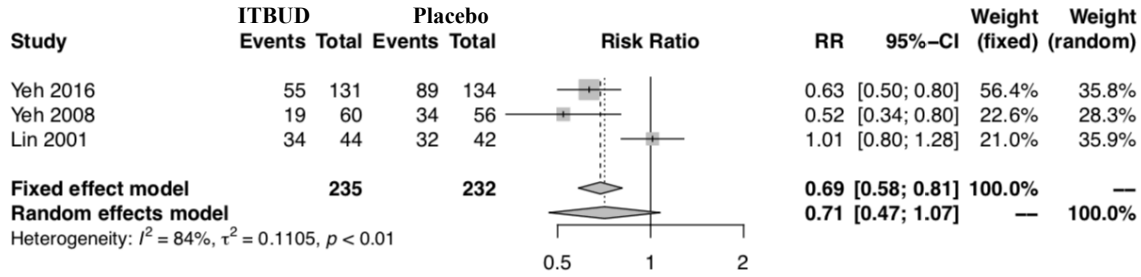
eFigure 4. Direct Evidence from the Pair Wise Comparisons for the Primary Outcome BPD or Mortality at 36 Weeks' PMA

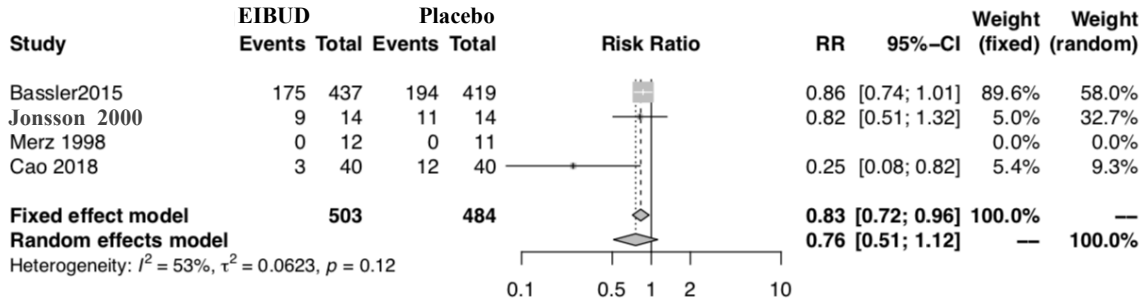


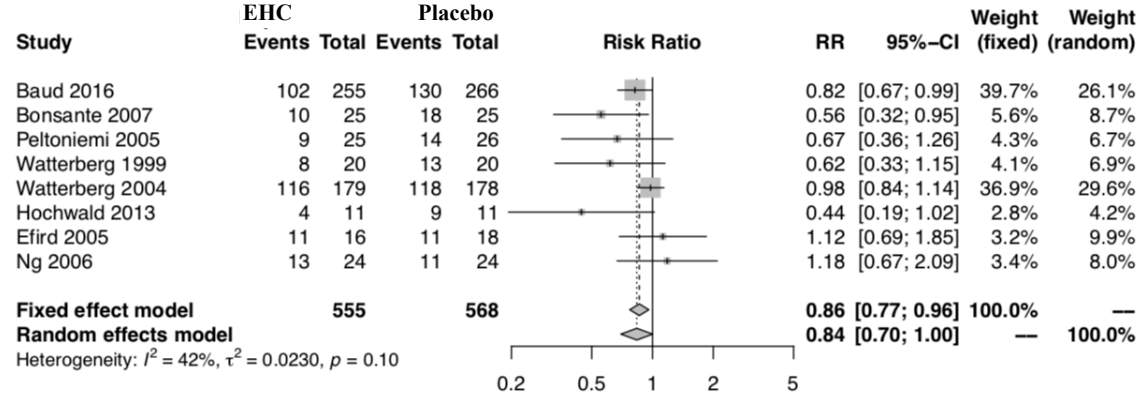


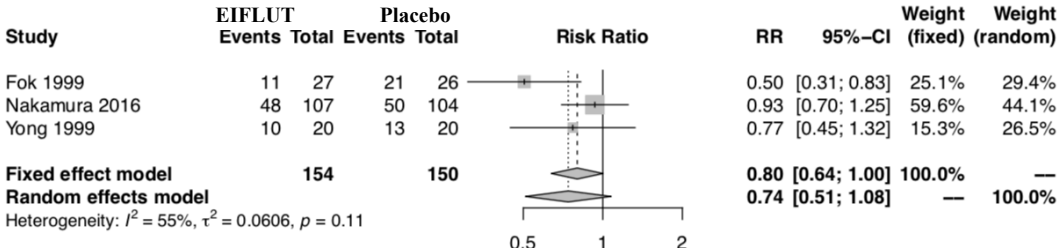


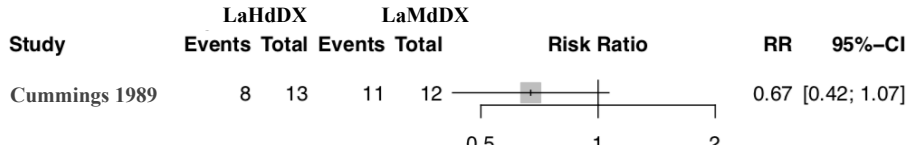


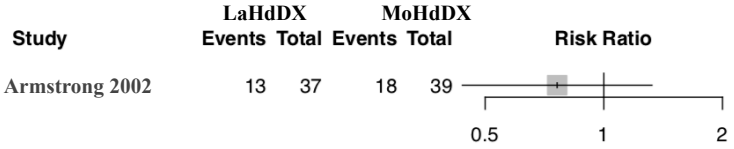


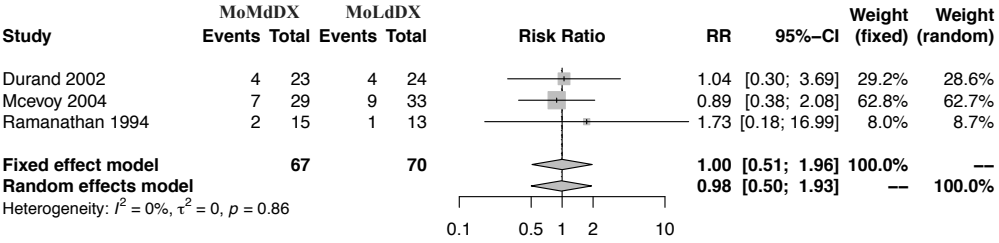


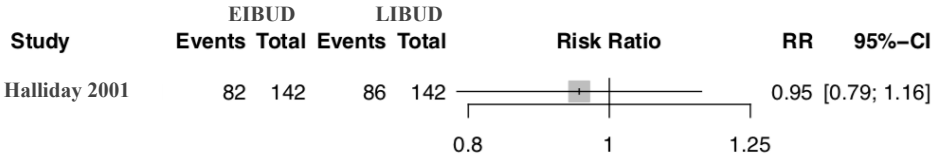


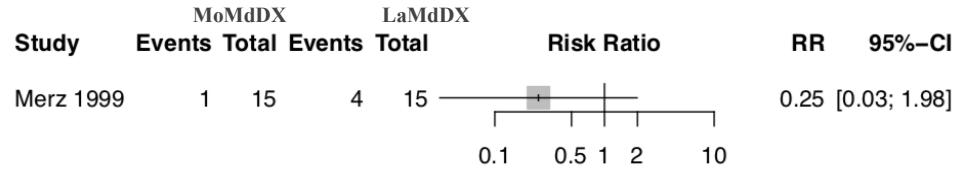


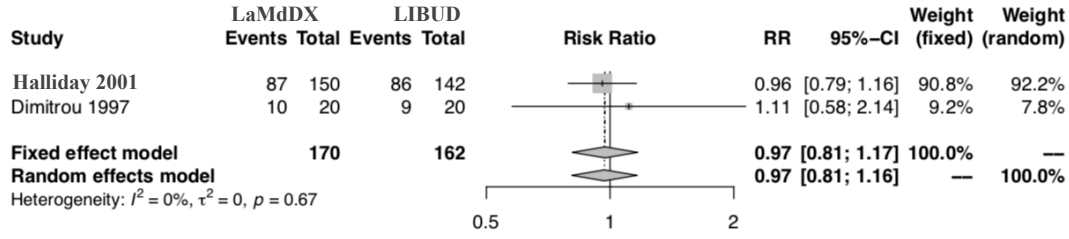


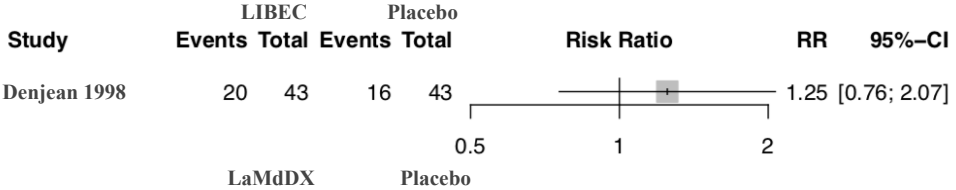


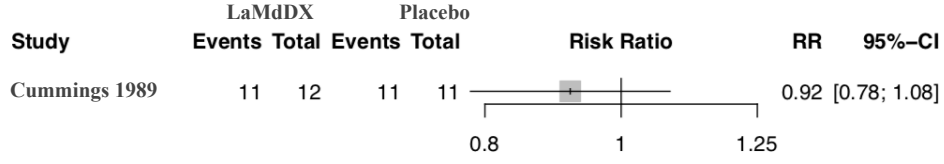




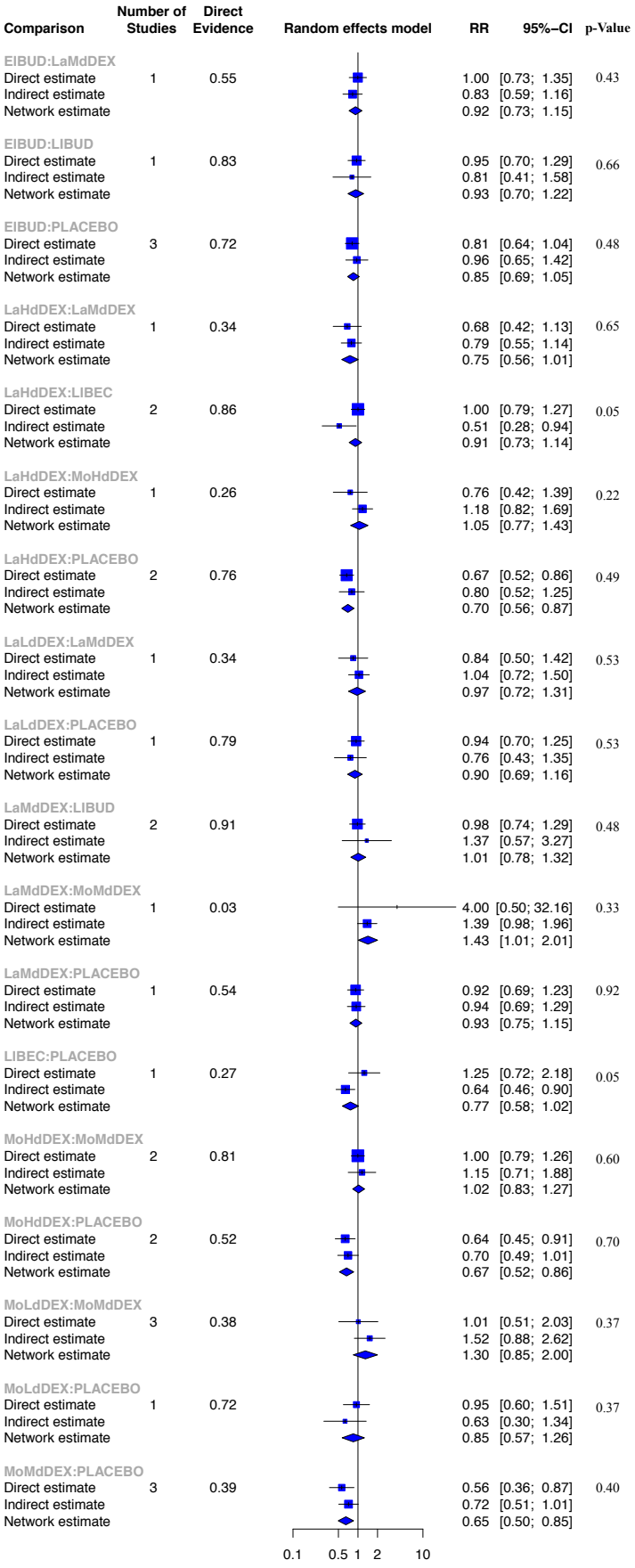




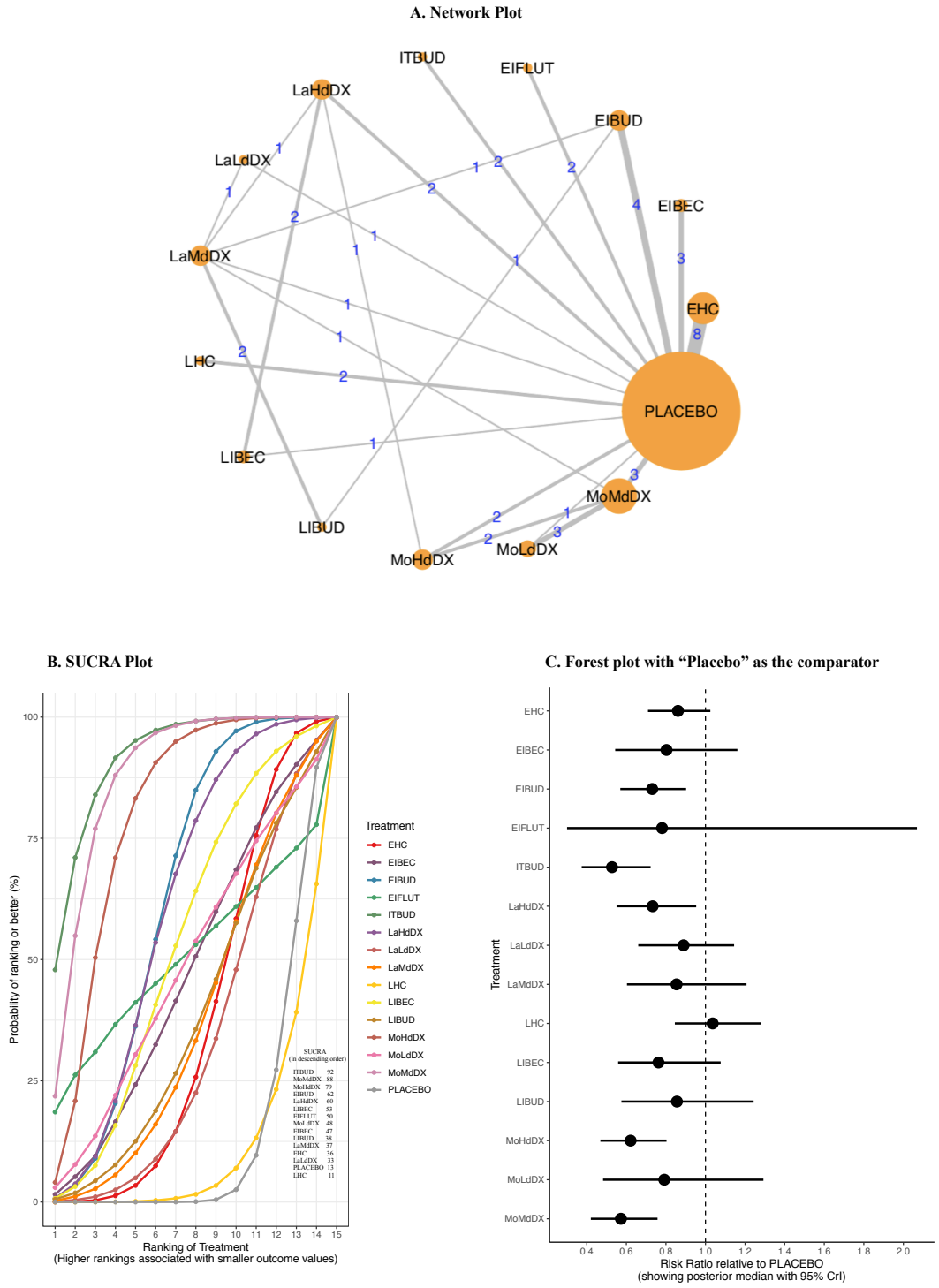




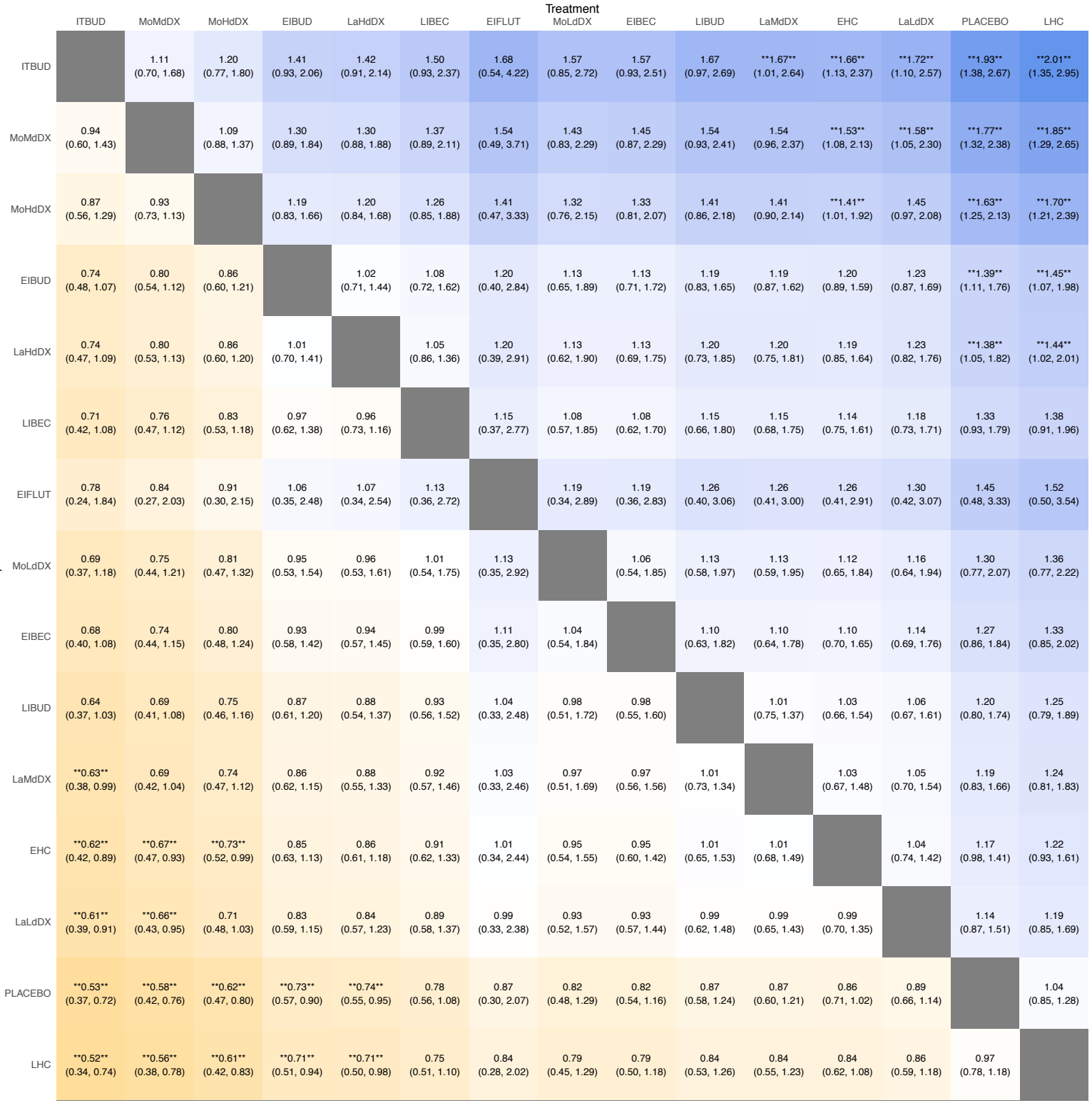
eFigure 5. Split Between Direct and Indirect Evidence for the Primary Outcome BPD or Mortality at 36 Weeks' PMA



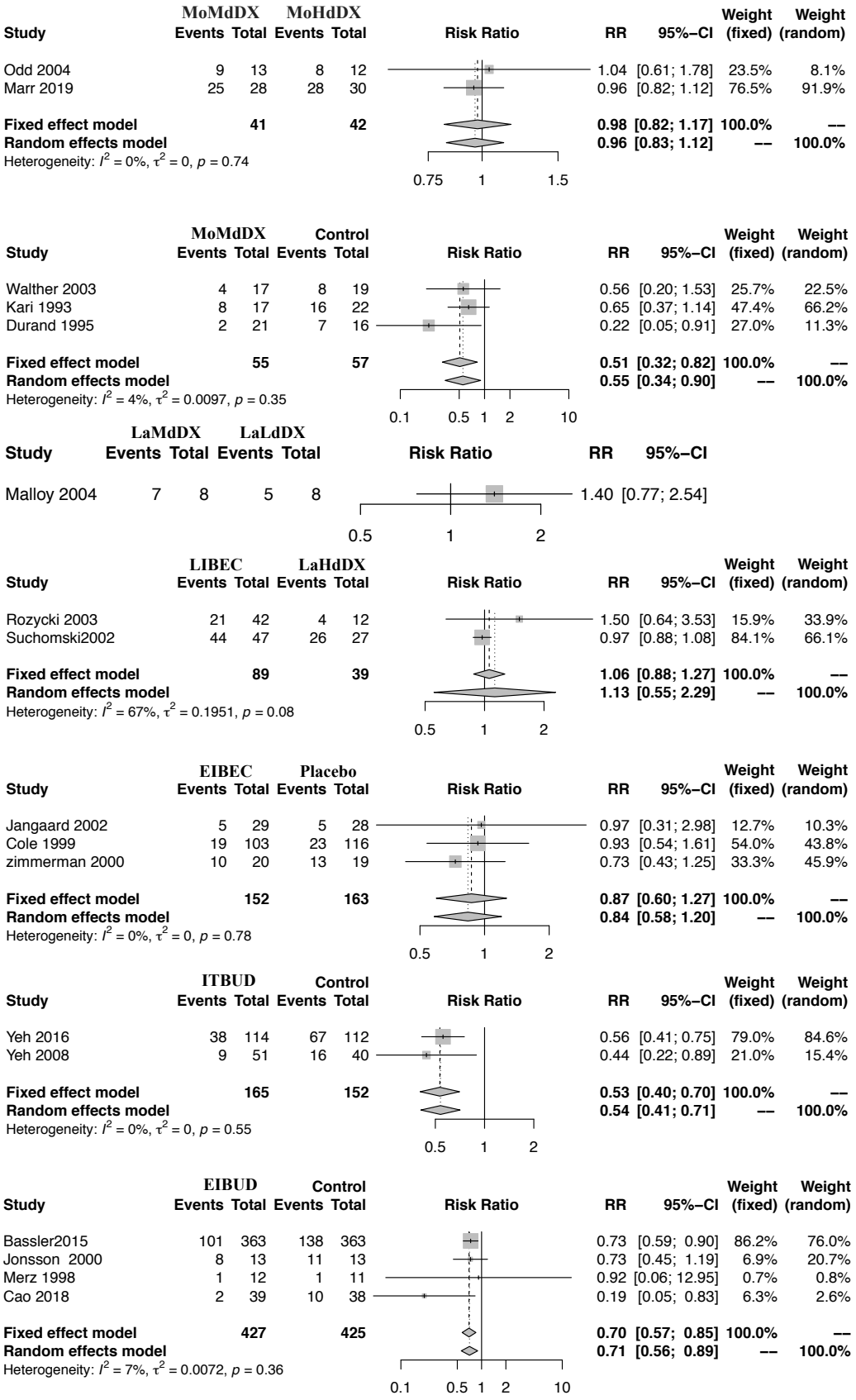
eFigure 6. Network Plot for BPD at 36 Weeks' PMA (A), SUCRA Plot with SUCRA Values (%) for BPD at 36 Weeks' PMA (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for BPD at 36 Weeks' PMA (C)

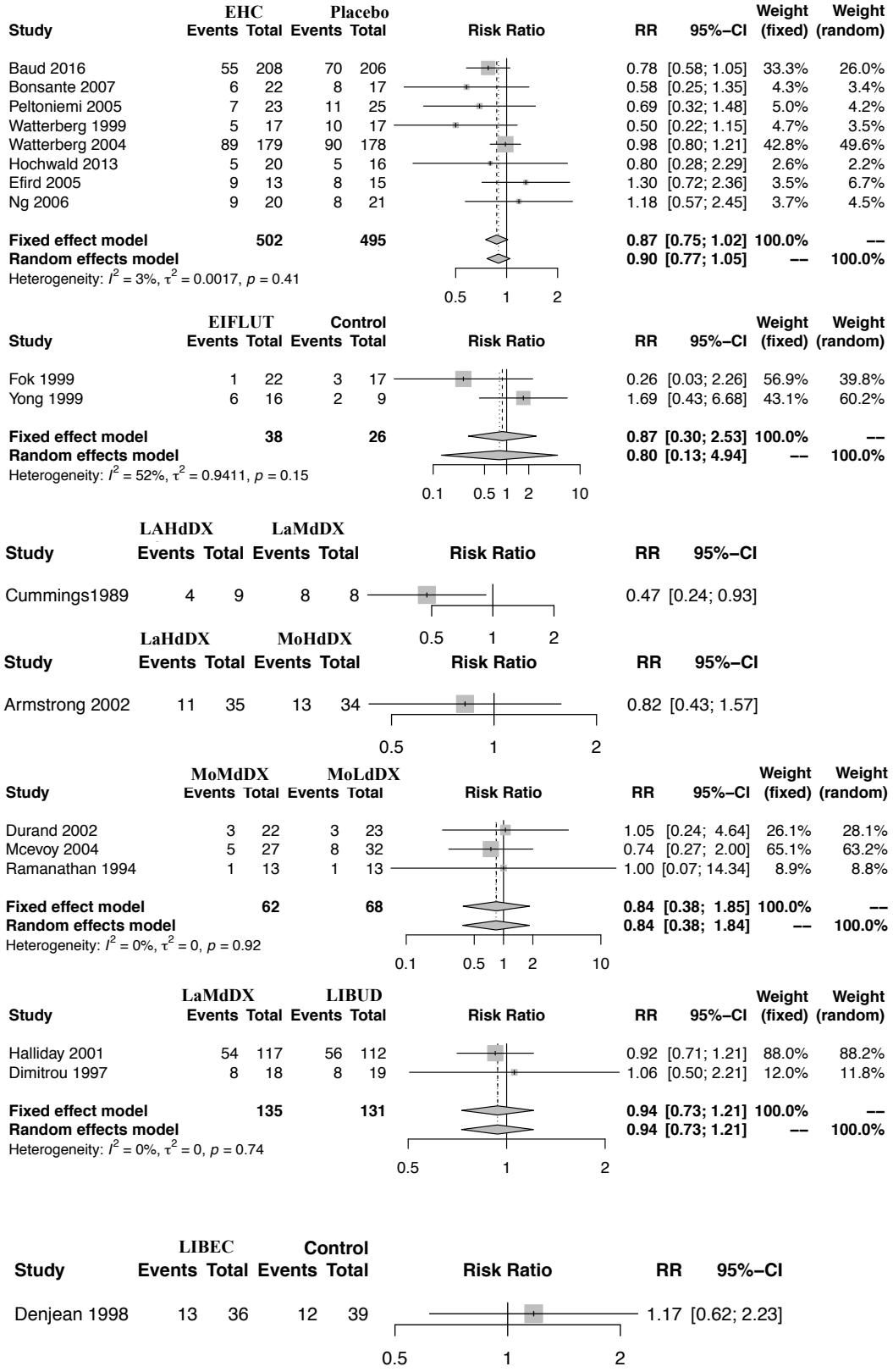


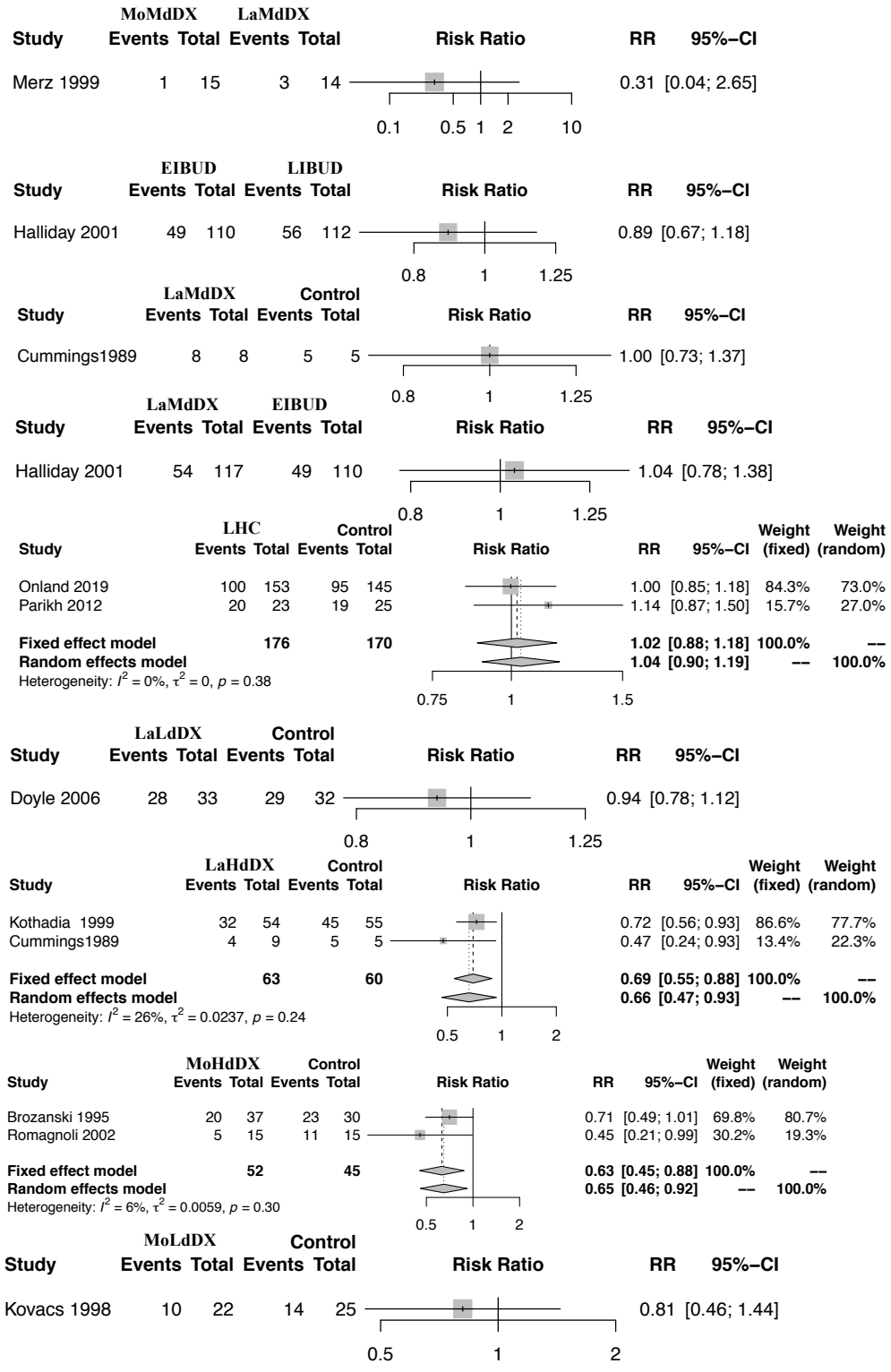
eFigure 7. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for BPD at 36 Weeks' PMA



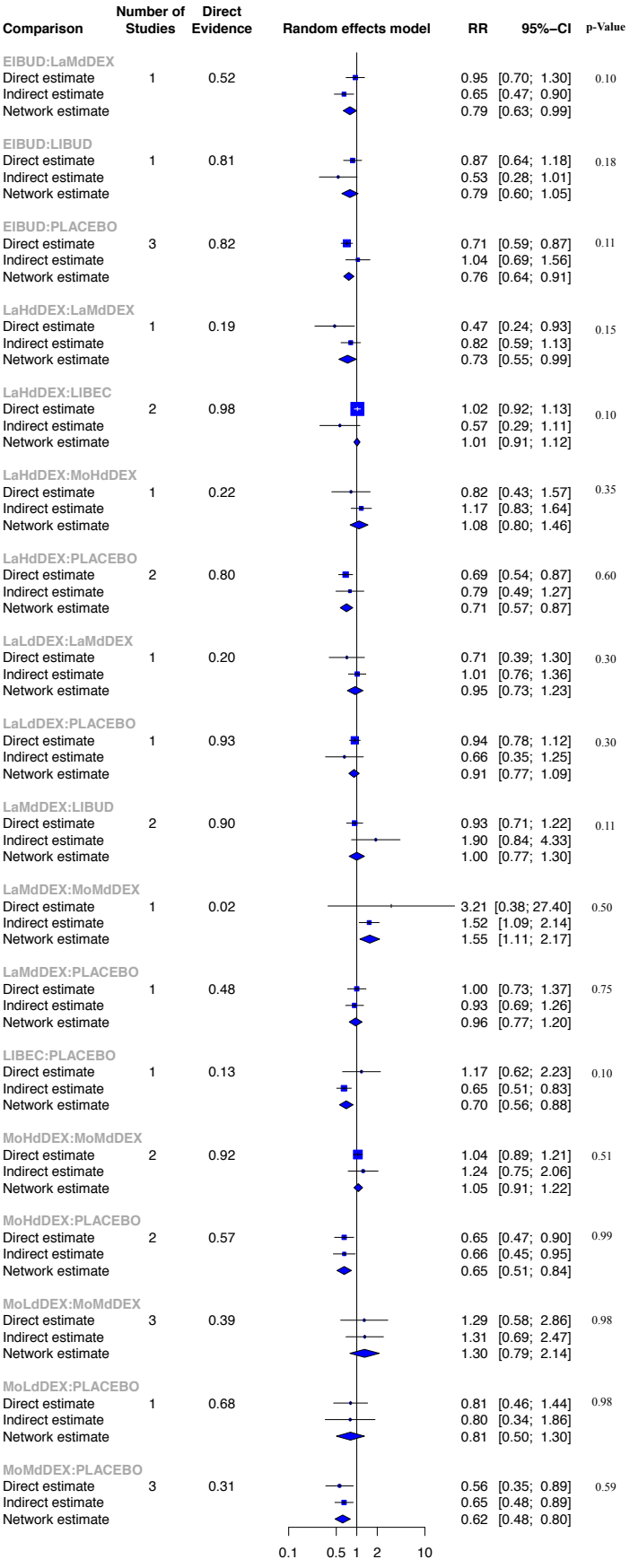
eFigure 8. Direct Evidence from the Pair Wise Comparisons for BPD at 36 Weeks' PMA



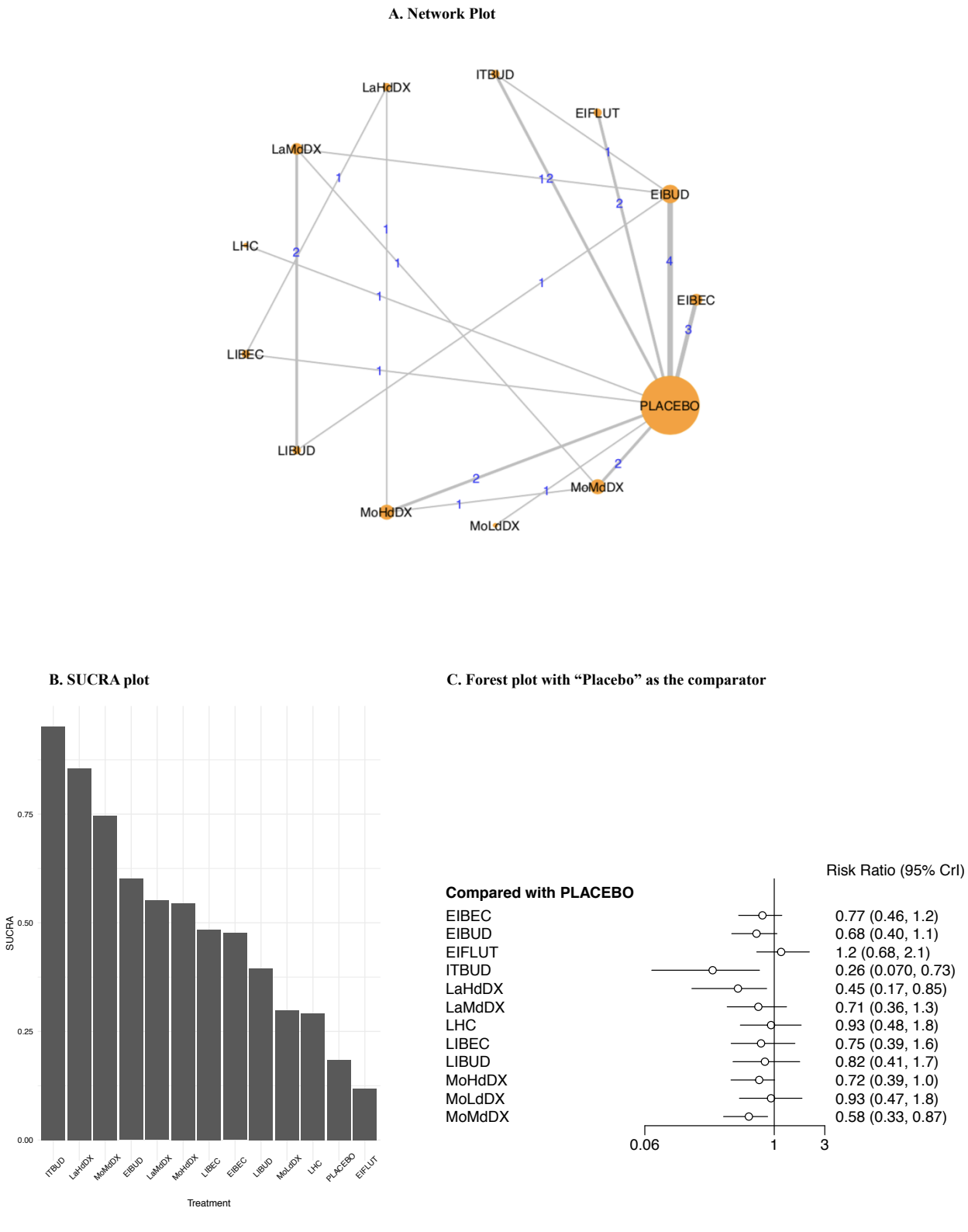




eFigure 9. Split Between Direct and Indirect Evidence for BPD at 36 Weeks' PMA



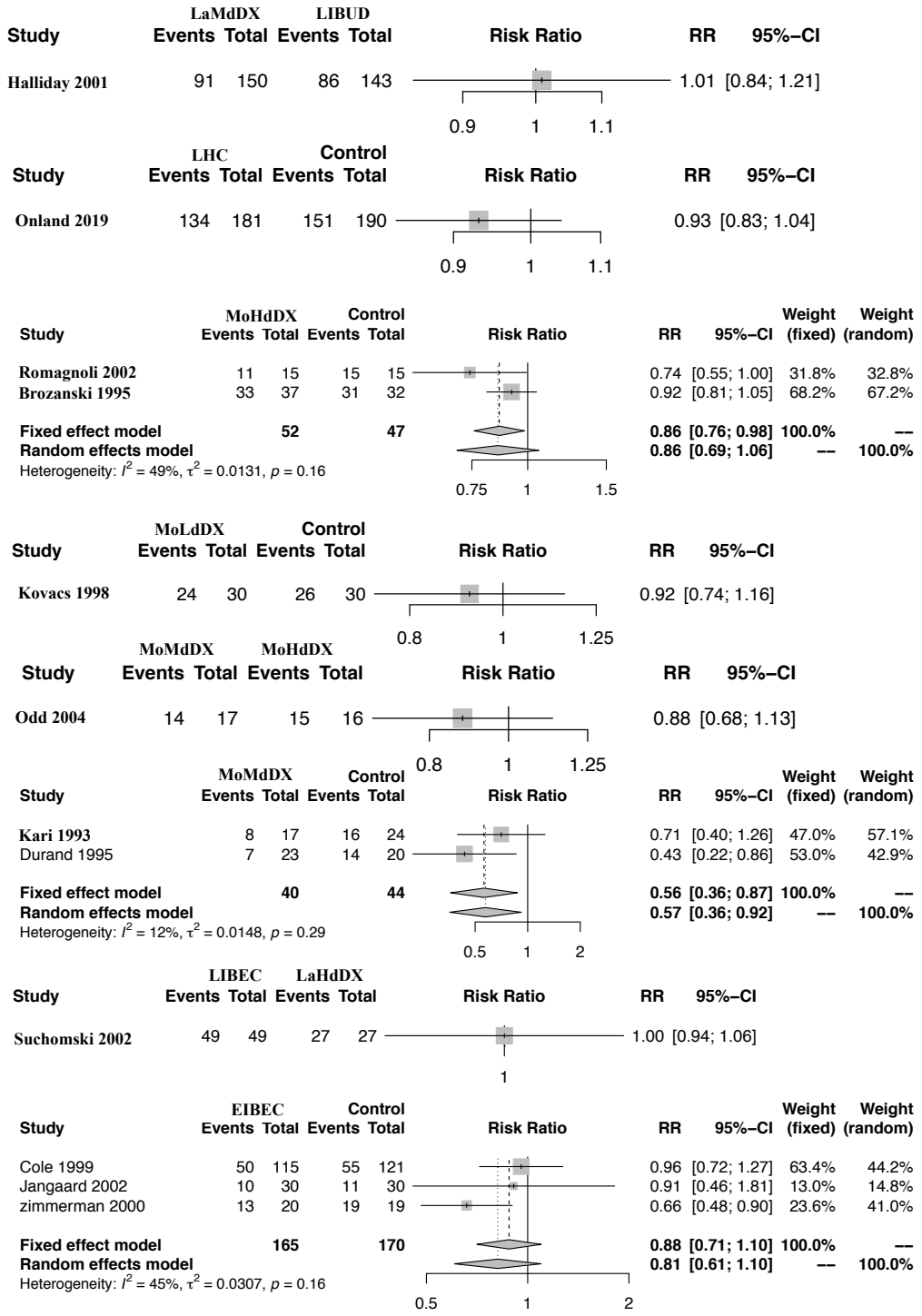
eFigure 10. Network Plot for BPD at 28 Days (A), SUCRA Plot with SUCRA Values (%) for BPD at 28 Days (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for BPD at 28 Days (C)

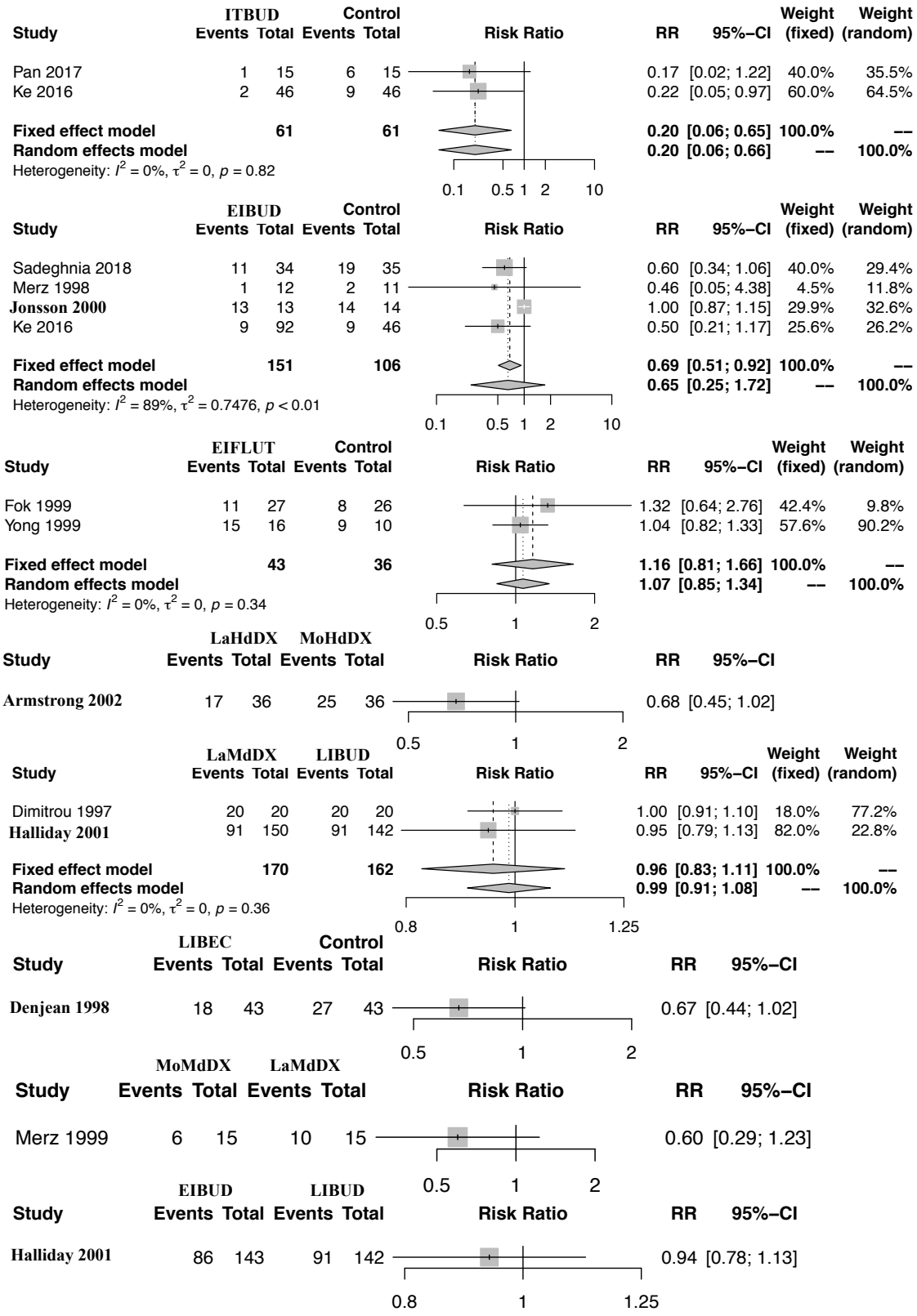


eFigure 11. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for BPD at 28 Days

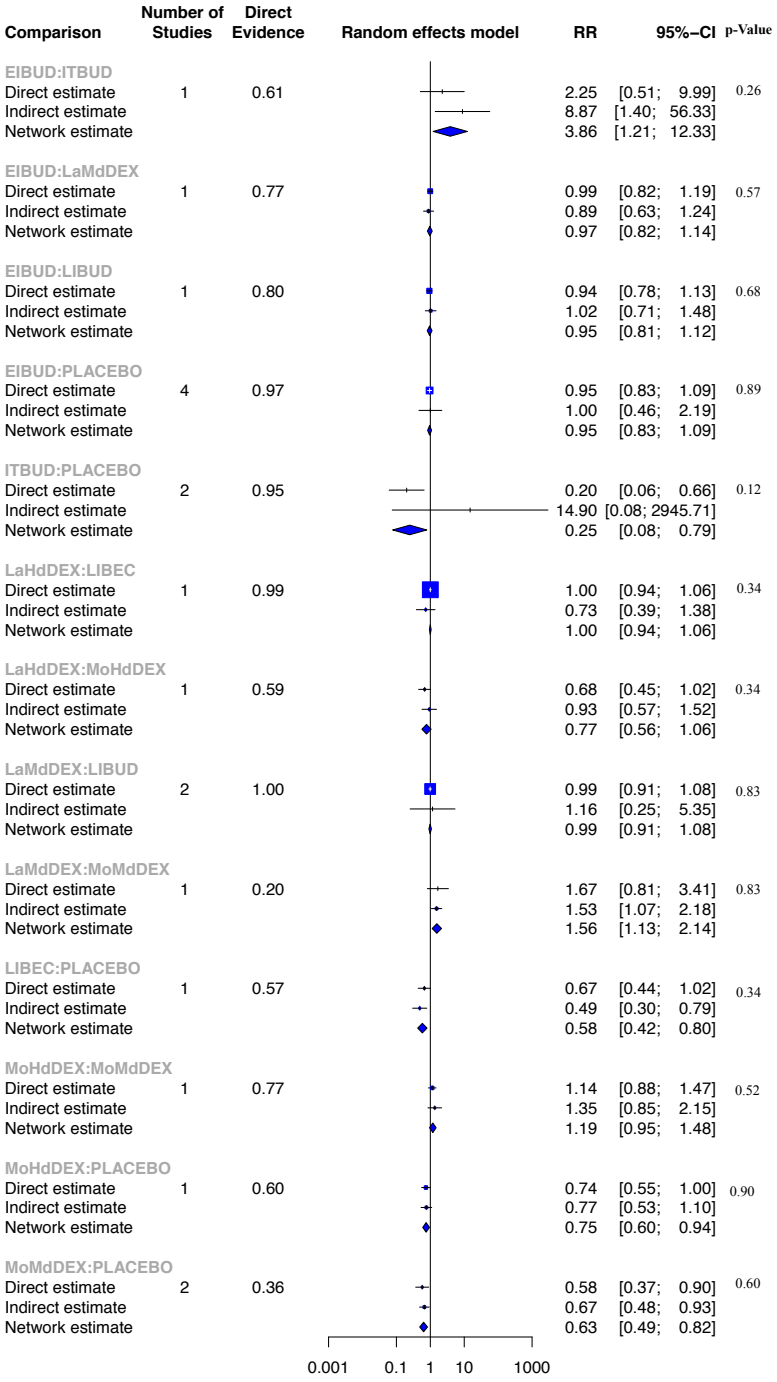
EIBEC	0.88 (0.45, 1.7)	1.51 (0.77, 3.42)	0.34 (0.09, 1.05)	0.59 (0.2, 1.28)	0.92 (0.42, 2.05)	1.21 (0.56, 2.8)	0.98 (0.46, 2.44)	1.06 (0.48, 2.75)	0.93 (0.44, 1.64)	1.2 (0.55, 2.86)	0.75 (0.37, 1.39)	1.29 (0.85, 2.17)
1.13 (0.59, 2.24)	**EIBUD**	1.71 (0.87, 3.93)	0.39 (0.1, 1.15)	0.67 (0.23, 1.48)	1.04 (0.61, 1.82)	1.37 (0.63, 3.23)	1.11 (0.52, 2.8)	1.19 (0.71, 2.44)	1.05 (0.52, 1.89)	1.37 (0.62, 3.32)	0.85 (0.44, 1.53)	1.47 (0.94, 2.52)
0.66 (0.29, 1.3)	0.58 (0.25, 1.15)	**EIFLUT**	**0.22 (0.05, 0.72)**	**0.39 (0.12, 0.86)**	0.61 (0.24, 1.35)	0.8 (0.32, 1.82)	0.64 (0.27, 1.61)	0.7 (0.28, 1.76)	0.62 (0.25, 1.12)	0.8 (0.32, 1.87)	**0.49 (0.21, 0.94)**	0.86 (0.47, 1.46)
2.93 (0.95, 11.76)	2.58 (0.87, 9.86)	**4.5 (1.39, 19.55)**	**ITBUD**	1.7 (0.43, 7.33)	2.71 (0.84, 11.2)	**3.57 (1.09, 15.14)**	2.9 (0.88, 13.02)	3.14 (0.97, 13.75)	2.69 (0.85, 10.47)	**3.56 (1.07, 15.51)**	2.18 (0.7, 8.65)	**3.82 (1.38, 14.33)**
1.69 (0.78, 4.96)	1.5 (0.68, 4.27)	**2.57 (1.16, 8.65)**	0.59 (0.14, 2.32)	**LaHdDX**	1.56 (0.66, 4.87)	2.03 (0.87, 6.94)	1.62 (0.86, 5.55)	1.79 (0.75, 6.5)	1.58 (0.84, 3.37)	2.04 (0.85, 7.23)	1.27 (0.6, 3.29)	**2.2 (1.18, 6)**
1.09 (0.49, 2.37)	0.96 (0.55, 1.64)	1.65 (0.74, 4.19)	0.37 (0.09, 1.2)	0.64 (0.21, 1.52)	**LaMdDX**	1.31 (0.54, 3.4)	1.06 (0.45, 2.98)	1.14 (0.74, 2.18)	1.01 (0.44, 1.97)	1.31 (0.53, 3.46)	0.82 (0.4, 1.54)	1.41 (0.77, 2.78)
0.83 (0.36, 1.78)	0.73 (0.31, 1.58)	1.24 (0.55, 3.12)	**0.28 (0.07, 0.92)**	0.49 (0.14, 1.15)	0.76 (0.29, 1.85)	**LHC**	0.81 (0.33, 2.19)	0.88 (0.34, 2.45)	0.78 (0.3, 1.51)	1 (0.39, 2.6)	0.62 (0.25, 1.28)	1.07 (0.56, 2.09)
1.02 (0.41, 2.19)	0.9 (0.36, 1.94)	1.55 (0.62, 3.77)	0.35 (0.08, 1.14)	0.62 (0.18, 1.16)	0.94 (0.34, 2.23)	1.24 (0.46, 3.05)	**LIBEC**	1.08 (0.4, 2.89)	0.96 (0.36, 1.8)	1.24 (0.45, 3.11)	0.77 (0.29, 1.57)	1.33 (0.64, 2.55)
0.95 (0.36, 2.1)	0.84 (0.41, 1.41)	1.42 (0.57, 3.58)	0.32 (0.07, 1.03)	0.56 (0.15, 1.33)	0.88 (0.46, 1.35)	1.14 (0.41, 2.92)	0.92 (0.35, 2.51)	**LIBUD**	0.88 (0.32, 1.77)	1.14 (0.4, 2.97)	0.71 (0.29, 1.4)	1.22 (0.57, 2.45)
1.07 (0.61, 2.25)	0.95 (0.53, 1.94)	1.62 (0.9, 4.02)	0.37 (0.1, 1.17)	0.63 (0.3, 1.19)	0.99 (0.51, 2.3)	1.28 (0.66, 3.36)	1.04 (0.56, 2.81)	1.14 (0.56, 3.13)	**MoHdDX**	1.28 (0.64, 3.37)	0.81 (0.49, 1.43)	1.39 (0.99, 2.56)
0.83 (0.35, 1.82)	0.73 (0.3, 1.61)	1.25 (0.53, 3.17)	**0.28 (0.06, 0.93)**	0.49 (0.14, 1.17)	0.76 (0.29, 1.89)	1 (0.39, 2.56)	0.81 (0.32, 2.2)	0.88 (0.34, 2.47)	0.78 (0.3, 1.56)	**MoLdDX**	0.62 (0.25, 1.31)	1.07 (0.55, 2.13)
1.34 (0.72, 2.69)	1.18 (0.65, 2.25)	**2.02 (1.06, 4.74)**	0.46 (0.12, 1.43)	0.79 (0.3, 1.67)	1.23 (0.65, 2.5)	1.61 (0.78, 3.97)	1.3 (0.64, 3.39)	1.42 (0.72, 3.48)	1.24 (0.7, 2.03)	1.61 (0.76, 4.01)	**MoMdDX**	**1.74 (1.15, 3.01)**
0.77 (0.46, 1.18)	0.68 (0.4, 1.06)	1.16 (0.68, 2.14)	**0.26 (0.07, 0.73)**	**0.45 (0.17, 0.85)**	0.71 (0.36, 1.31)	0.93 (0.48, 1.8)	0.75 (0.39, 1.57)	0.82 (0.41, 1.74)	0.72 (0.39, 1.01)	0.93 (0.47, 1.83)	**0.58 (0.33, 0.87)**	**PLACEBO**

eFigure 12. Direct Evidence from the Pair Wise Comparisons for BPD at 28 Days

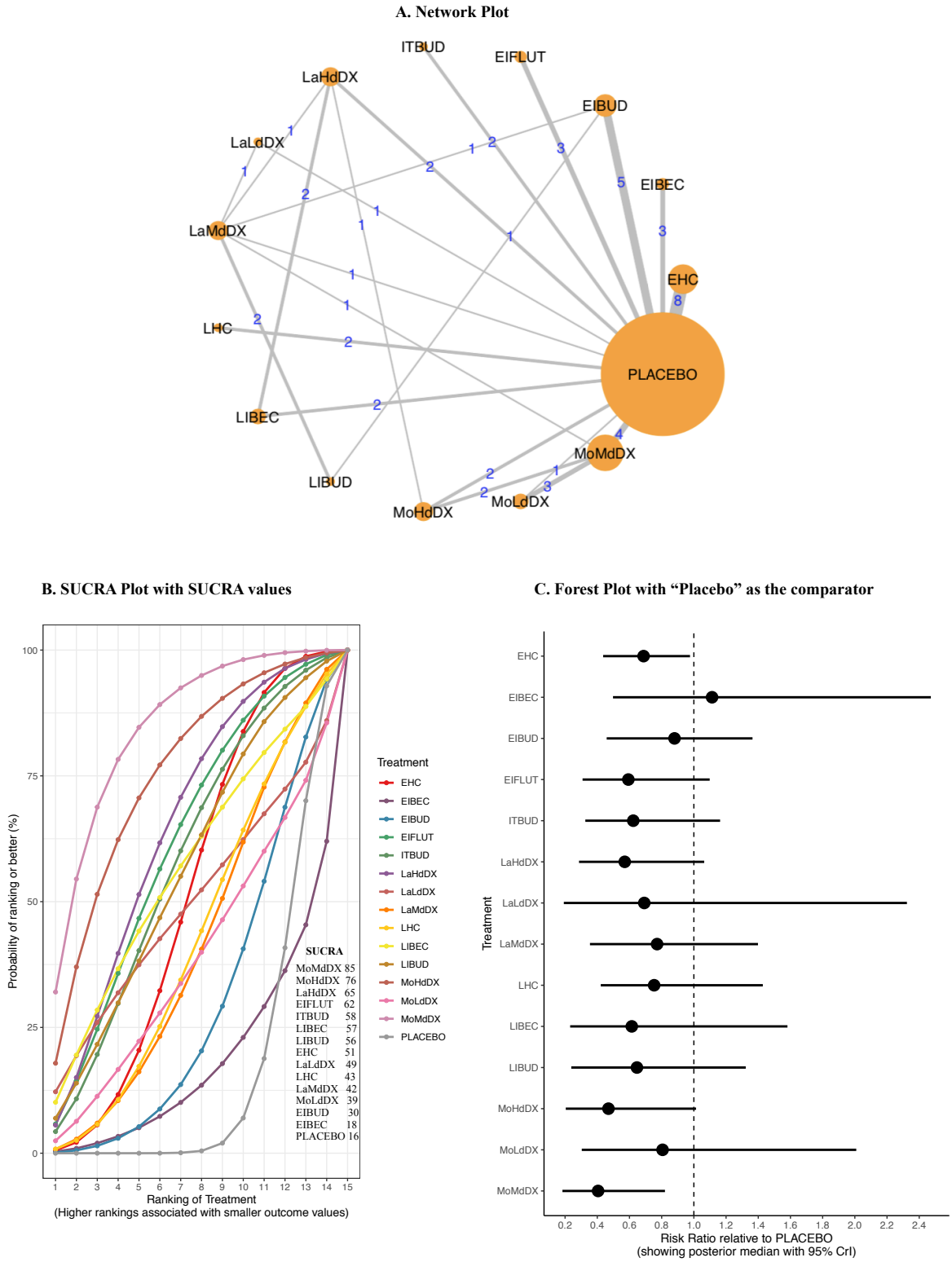




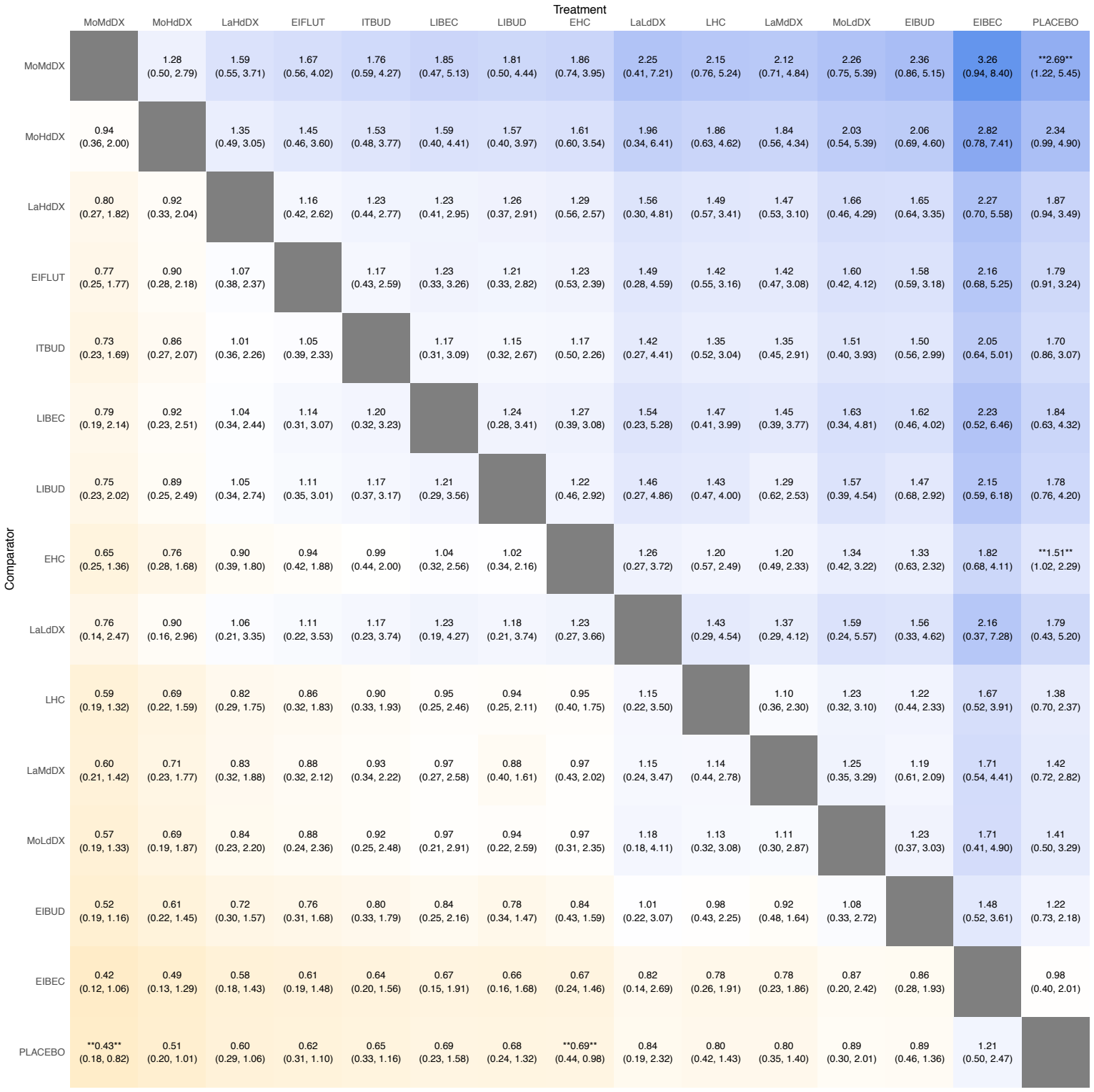
eFigure 13. Split Between Direct and Indirect Evidence for BPD at 28 Days



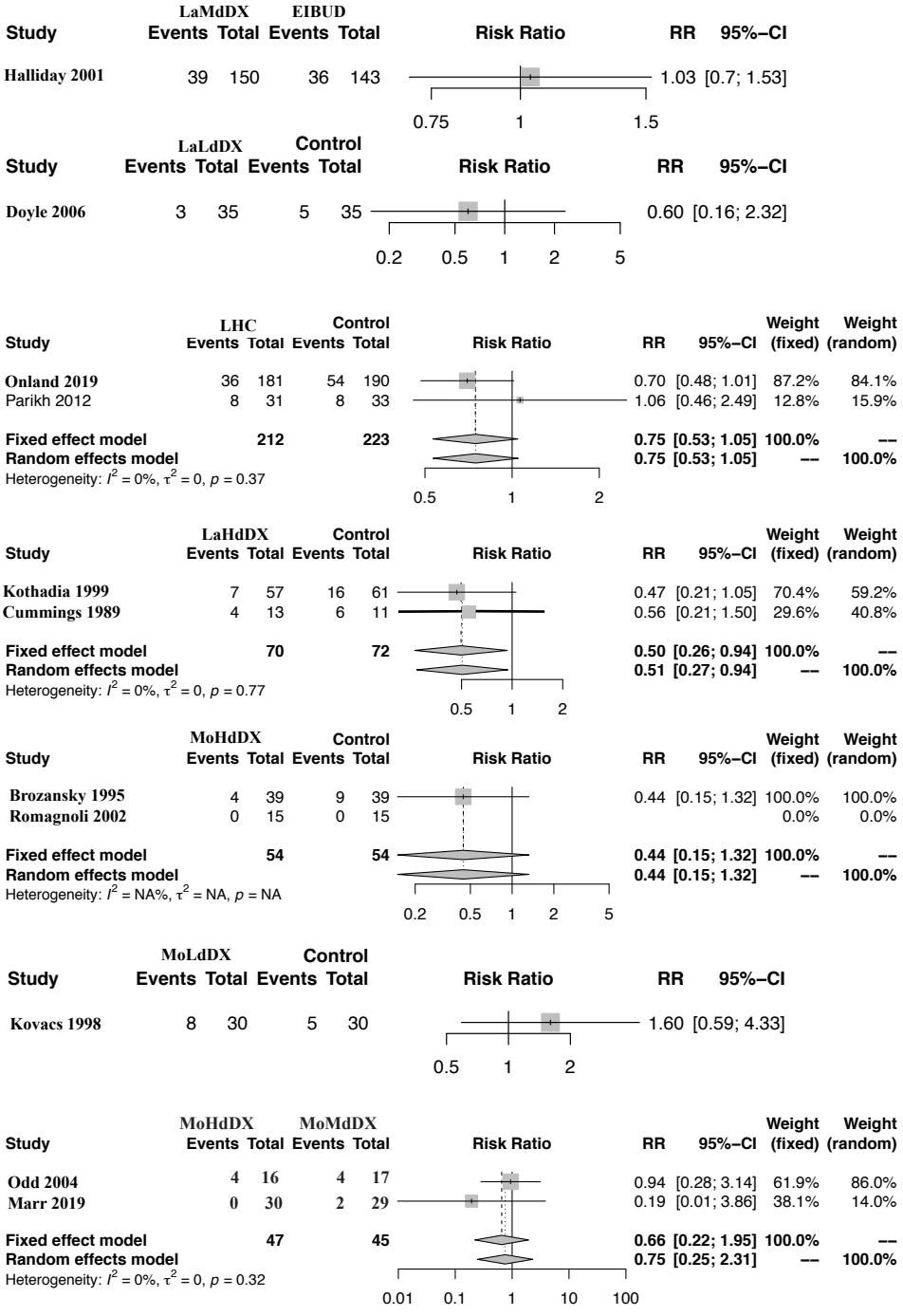
eFigure 14. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Mortality (C)

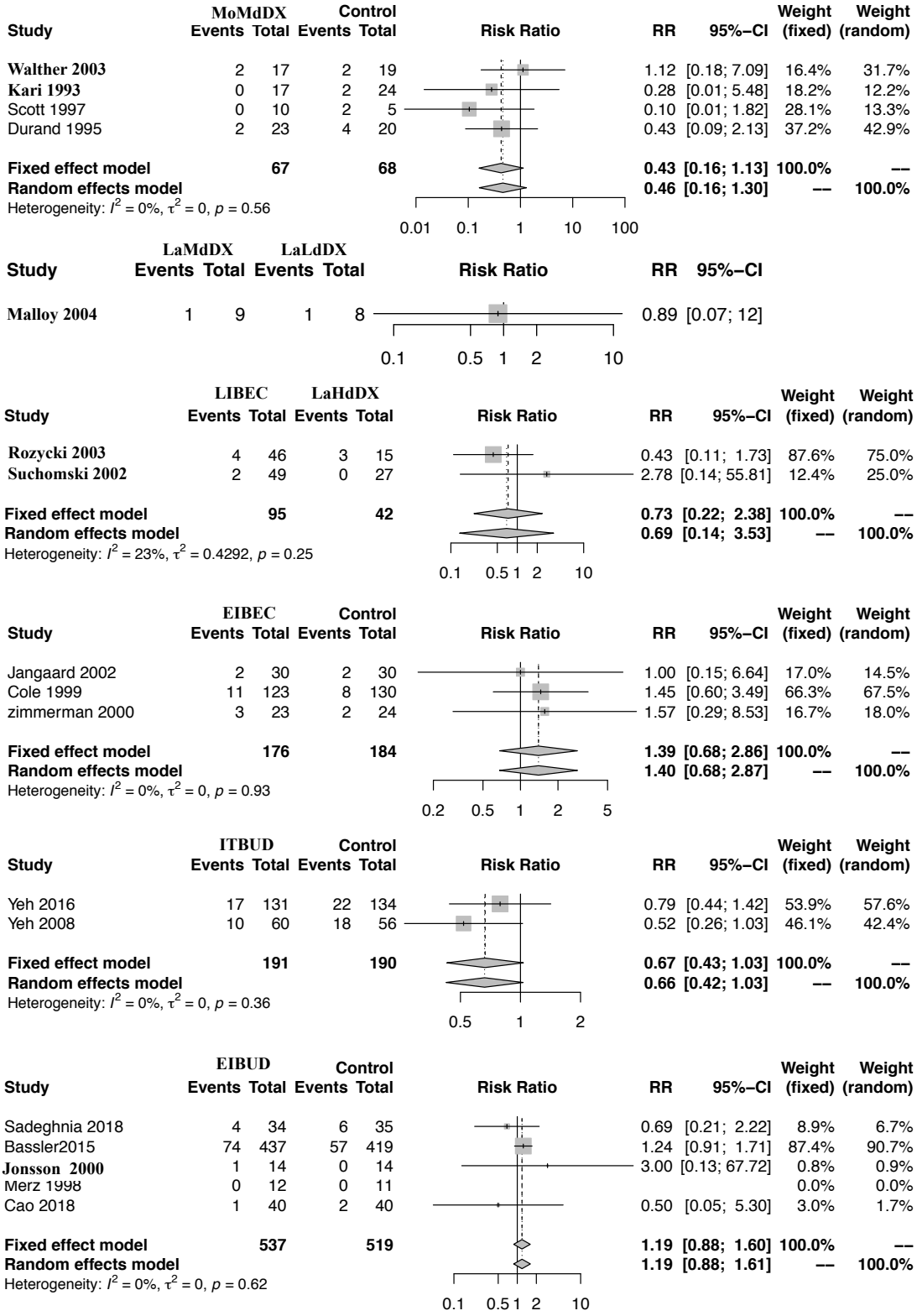


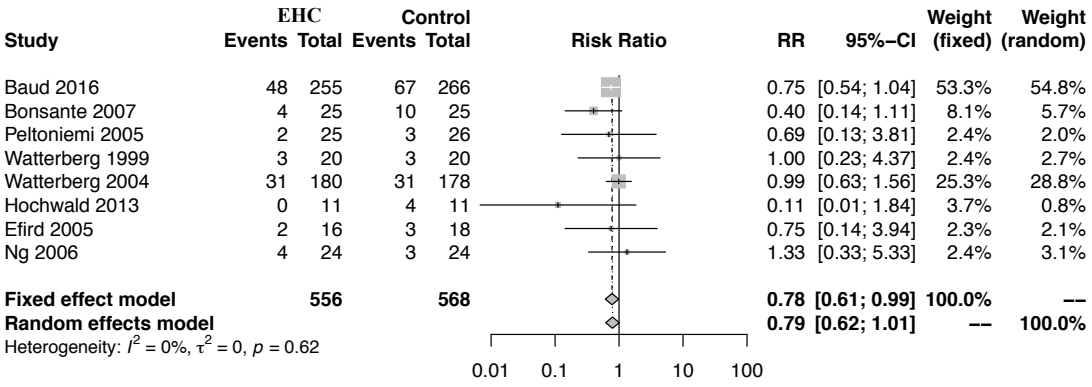
eFigure 15. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Mortality

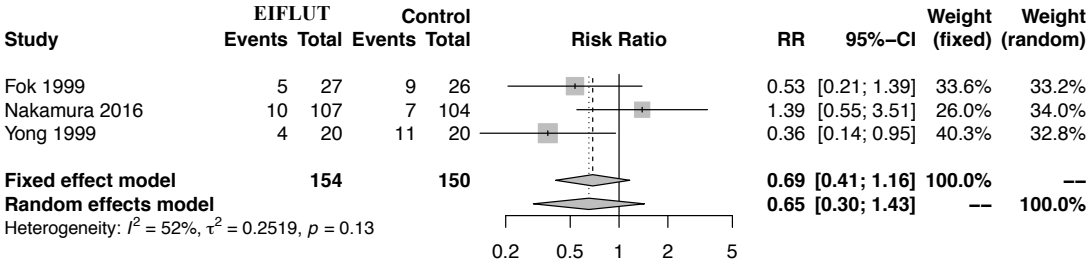


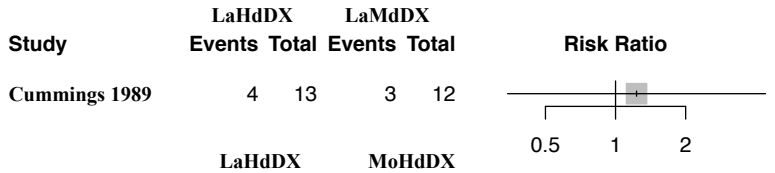
eFigure 16. Direct Evidence from the Pair Wise Comparisons for Mortality

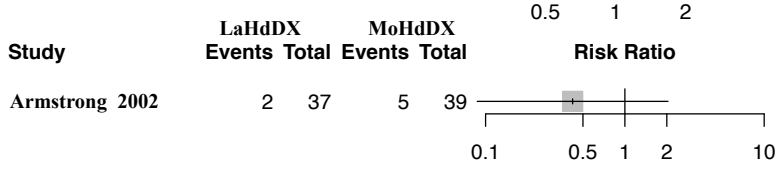


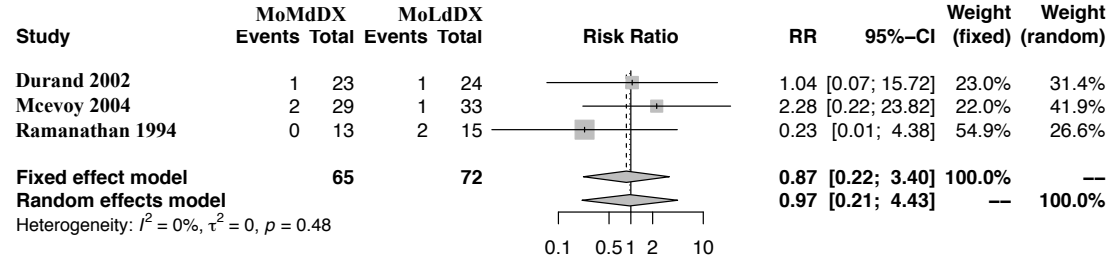


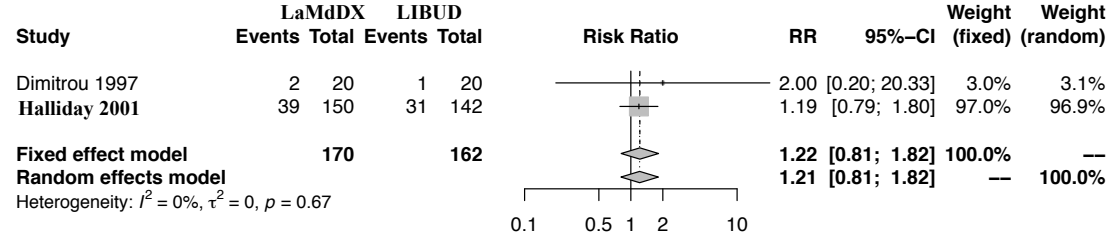


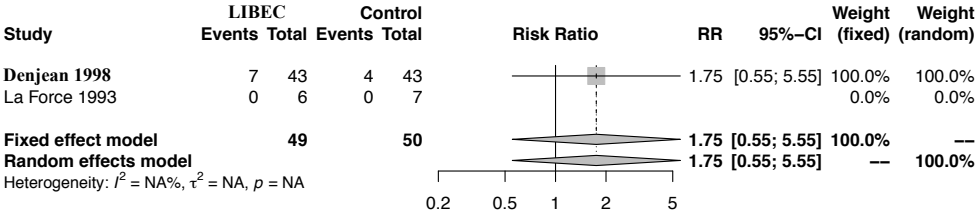


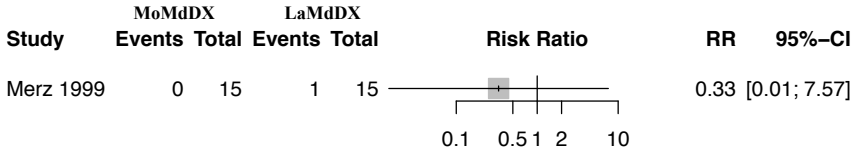


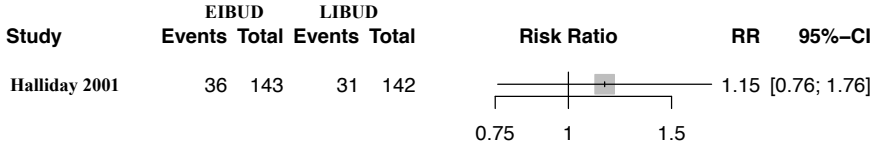


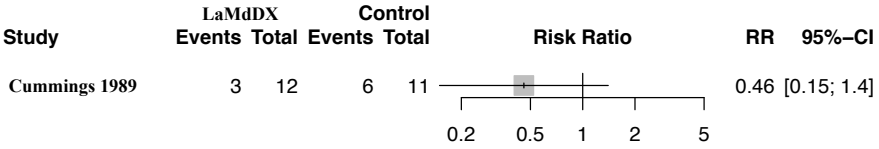




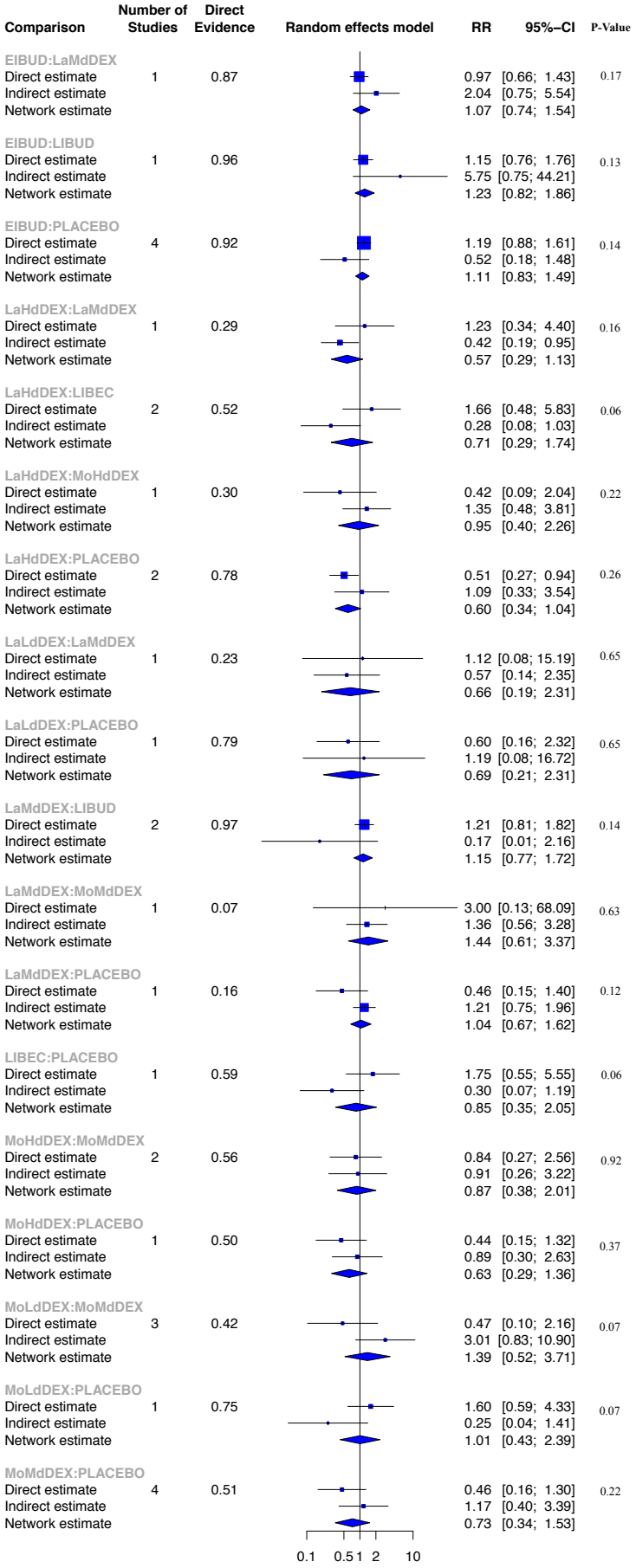




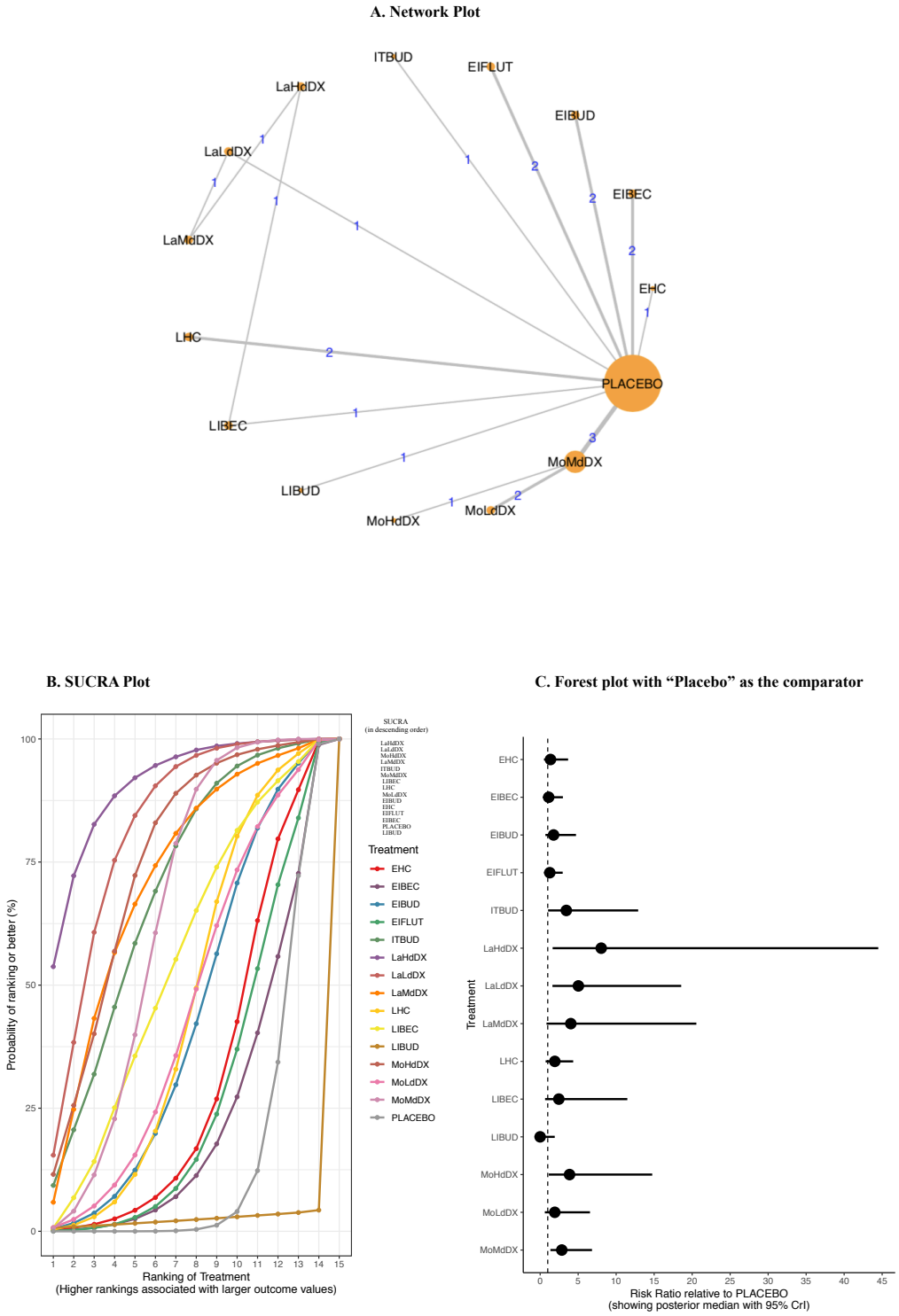




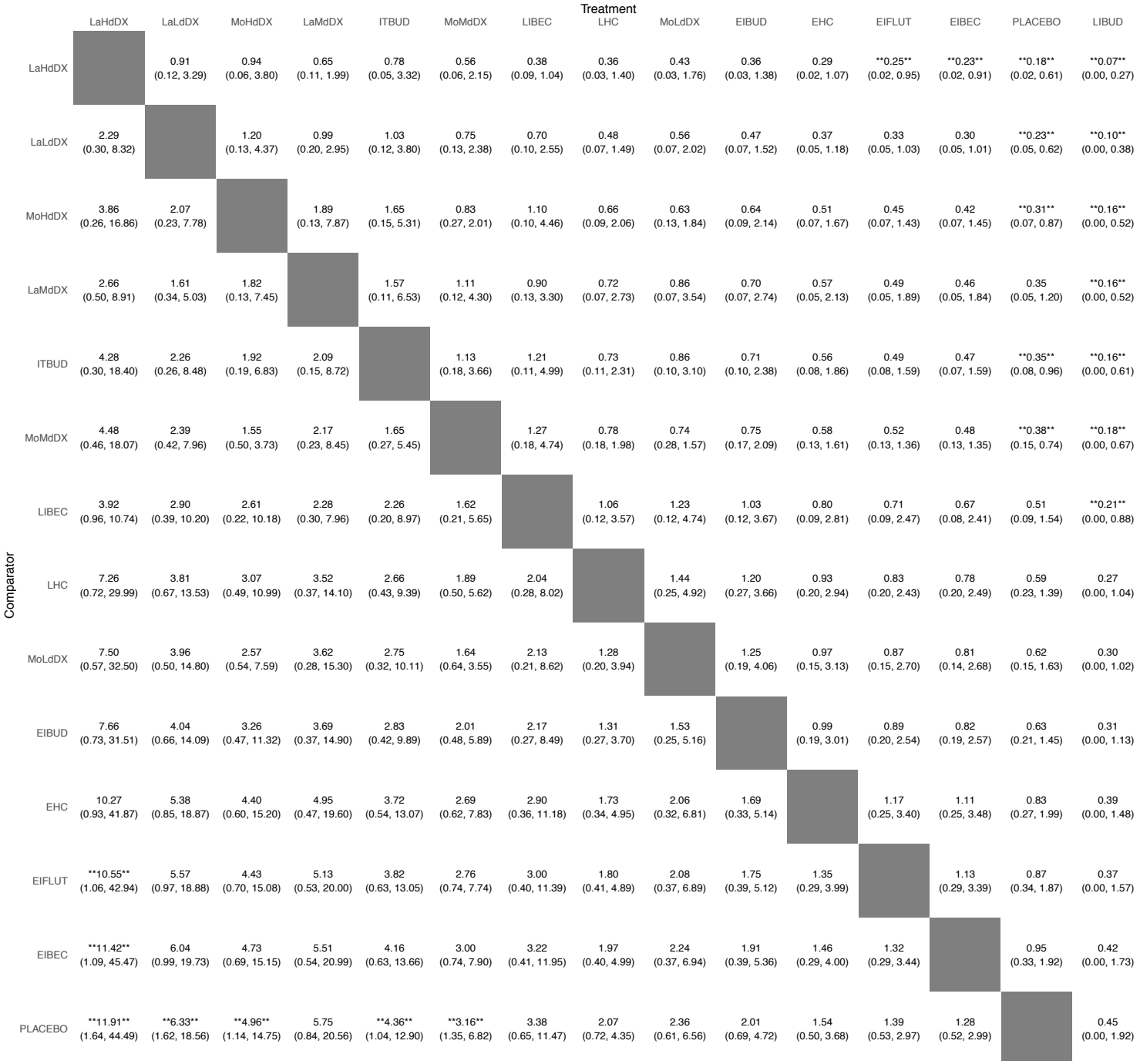
eFigure 17. Split Between Direct and Indirect Evidence for Mortality



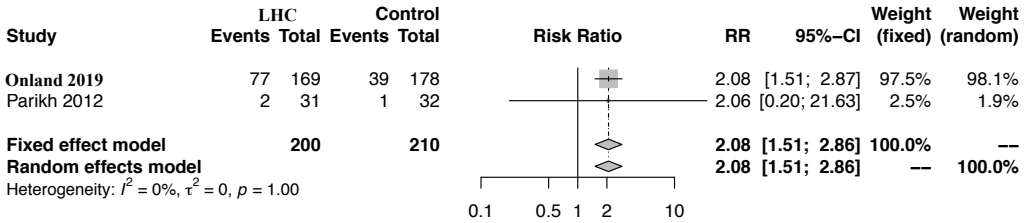
eFigure 18. Network Plot for BPD (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with “Placebo” as the Common Comparator for Successful Extubation (C)

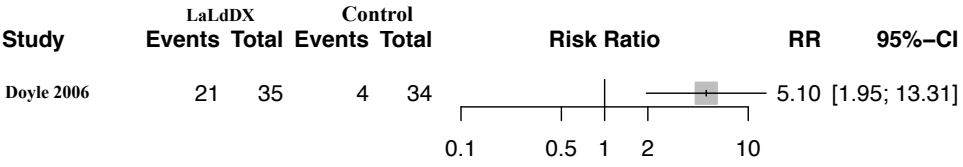


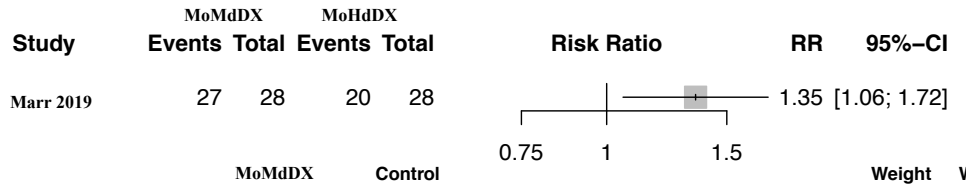
eFigure 19. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Successful Extubation

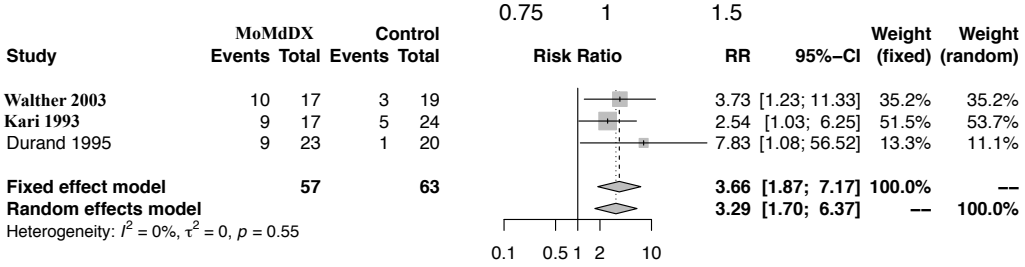


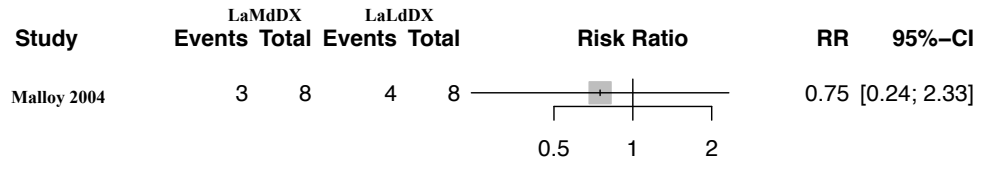
eFigure 20. Direct Evidence from the Pair Wise Comparisons for Successful Extubation

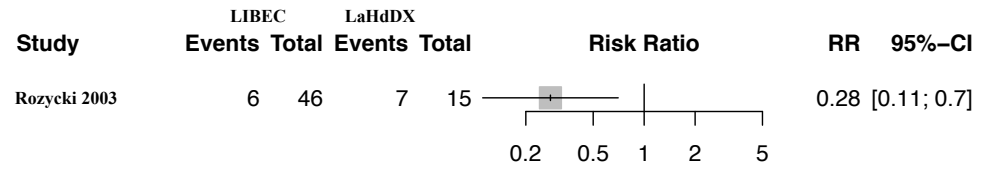


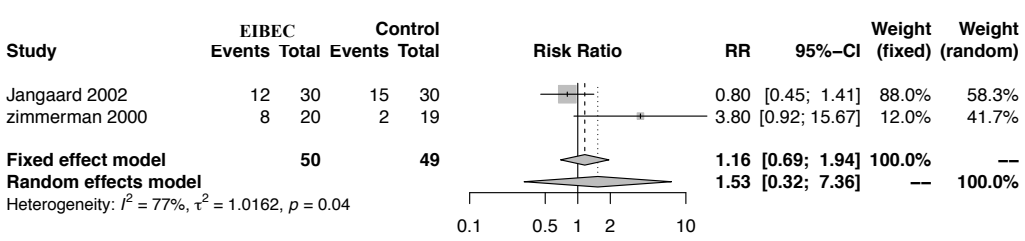


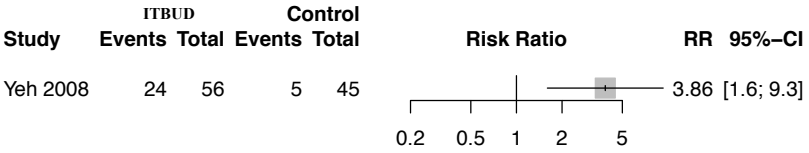


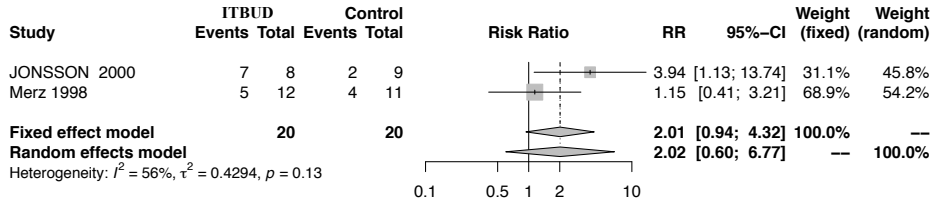


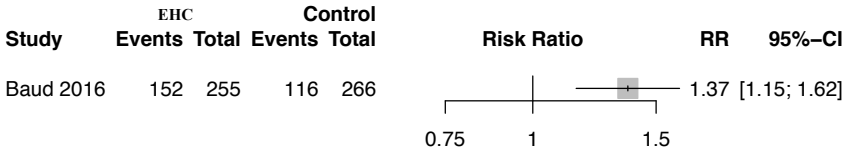


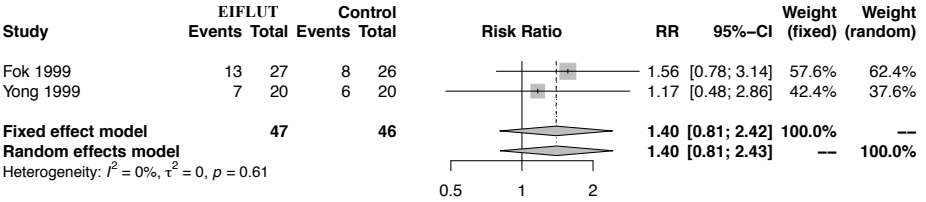


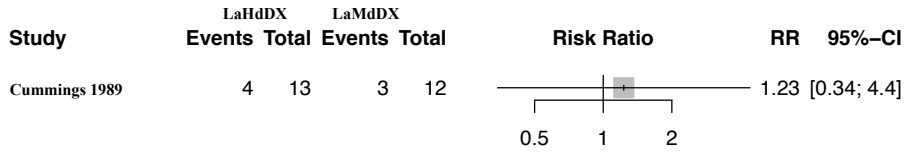


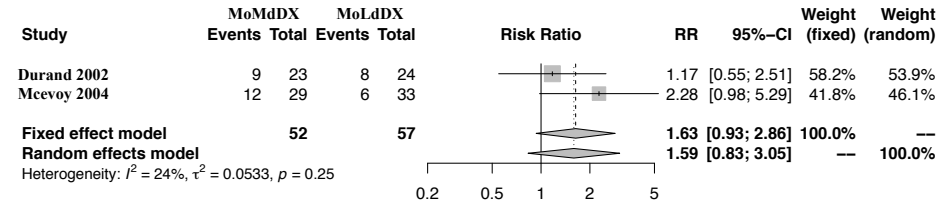


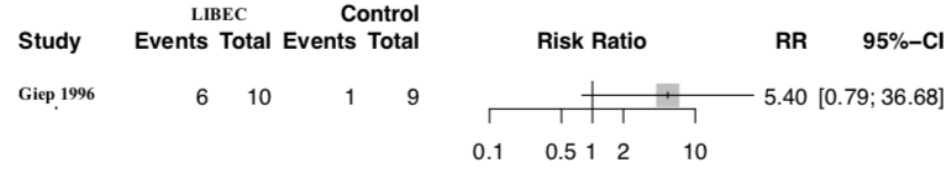




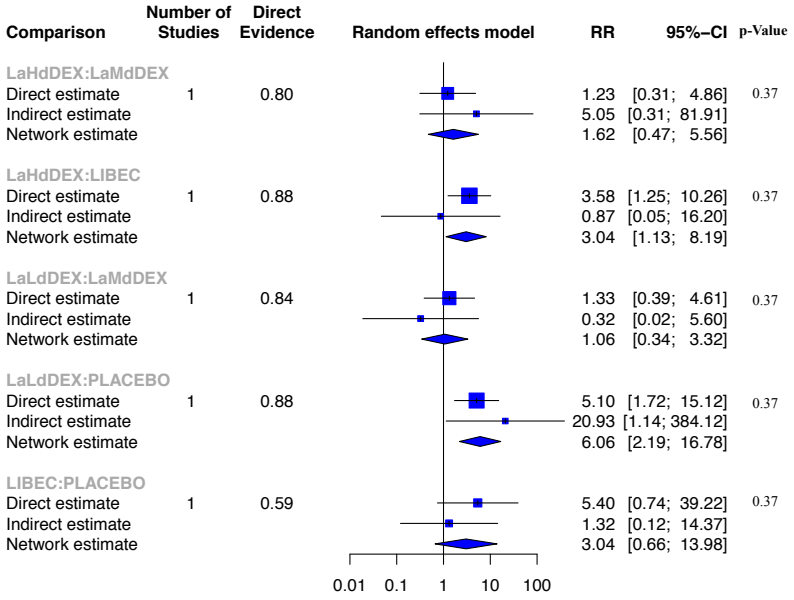




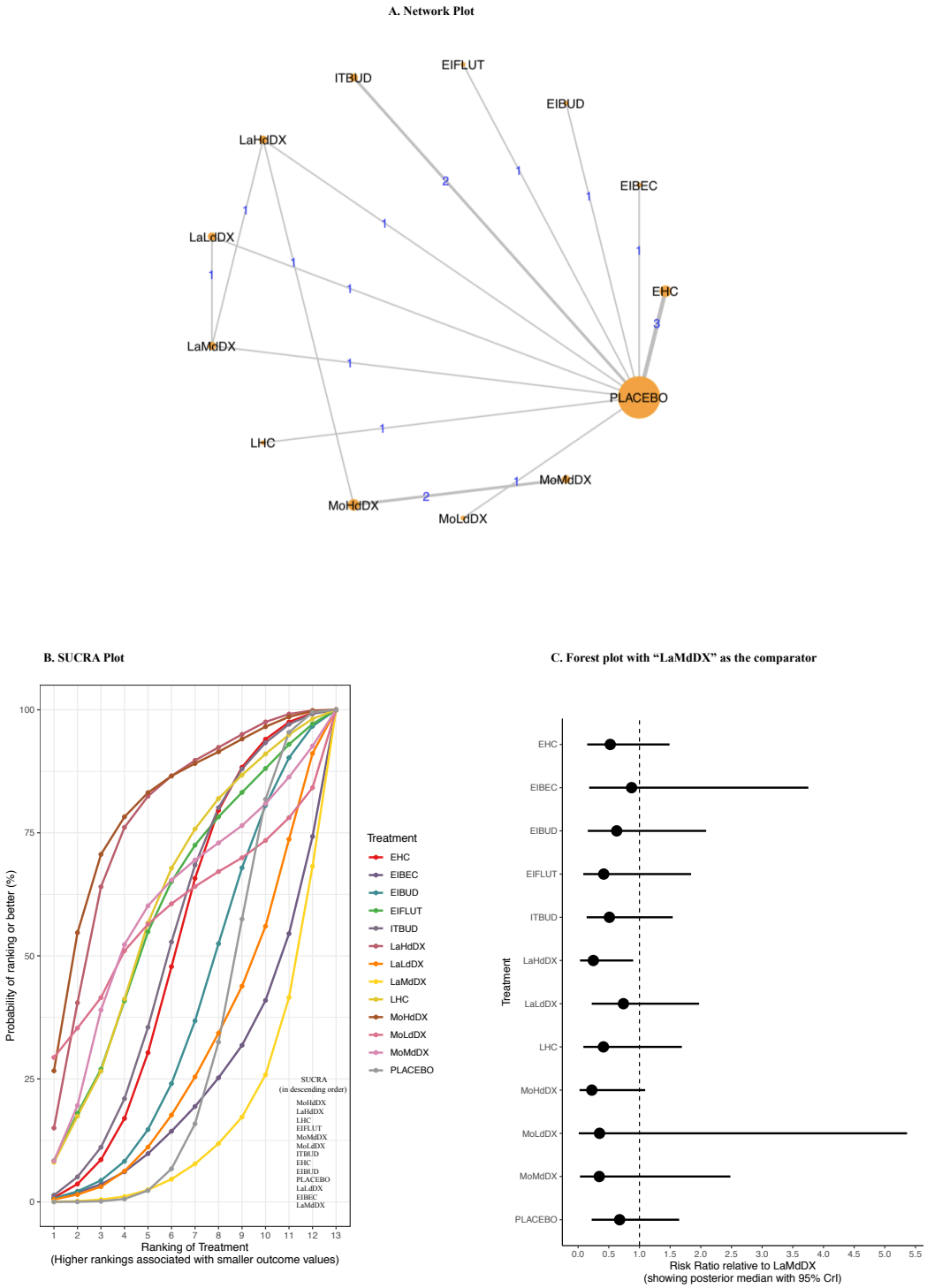




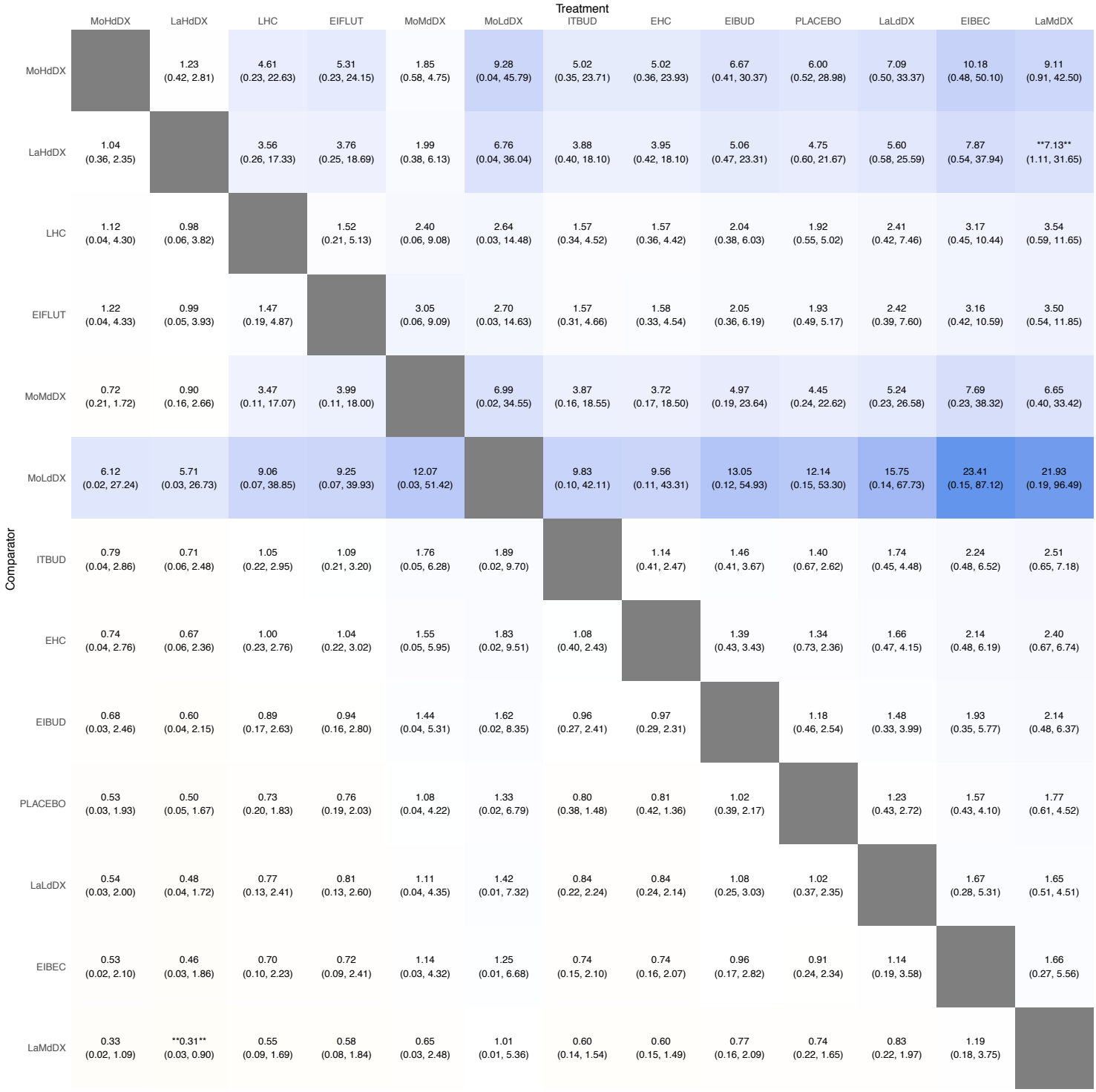
eFigure 21. Split Between Direct and Indirect Evidence for Successful Extubation



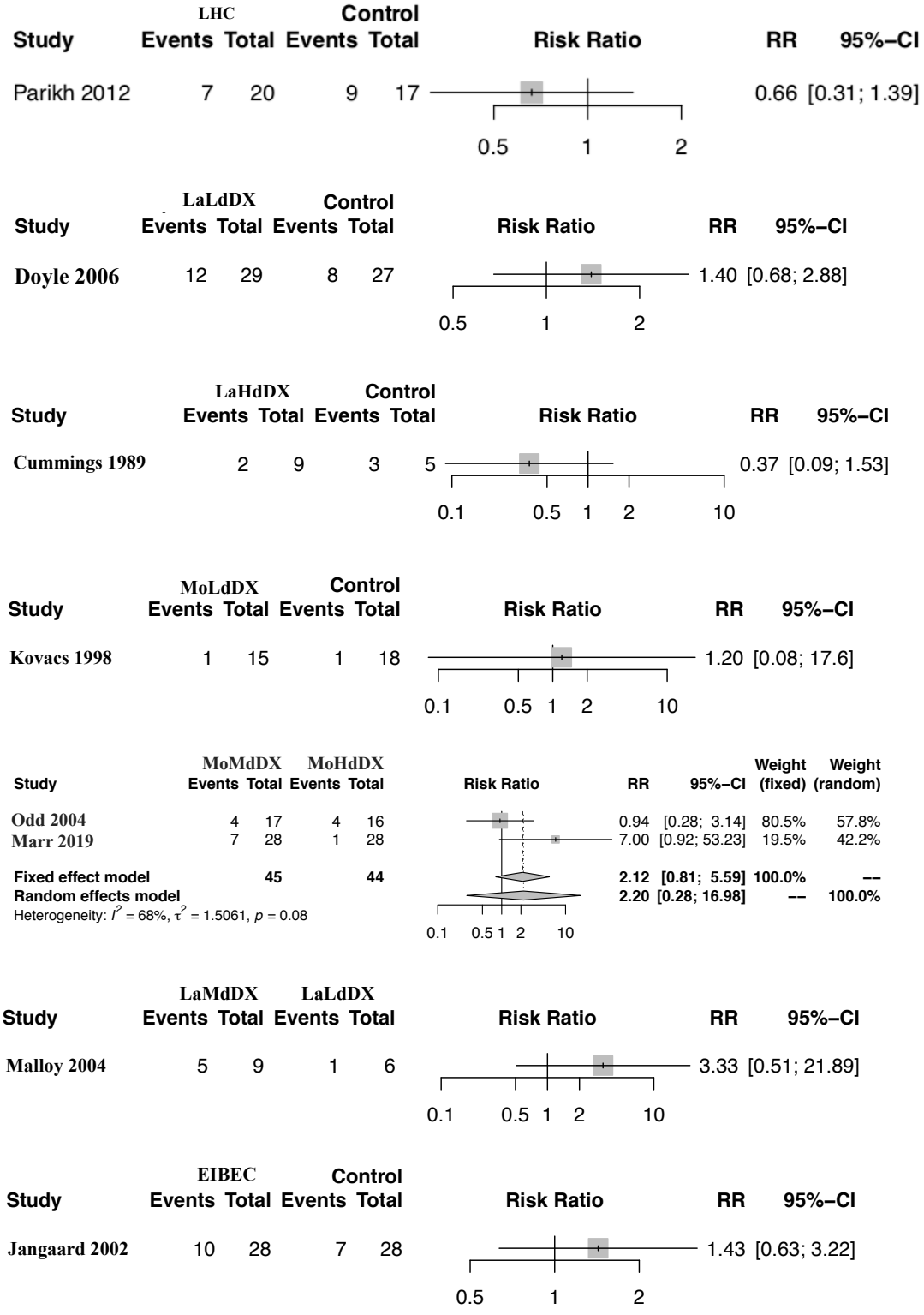
eFigure 22. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "LaMdDX" as the Common Comparator for NDI at 18-24 Months (C)

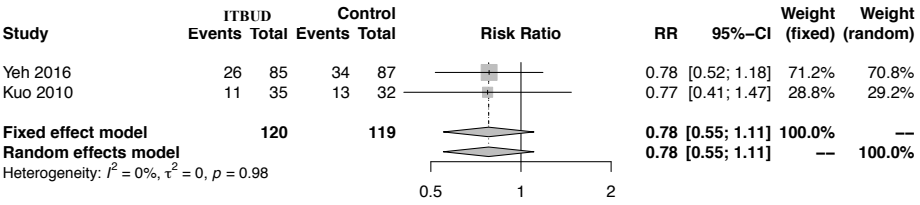


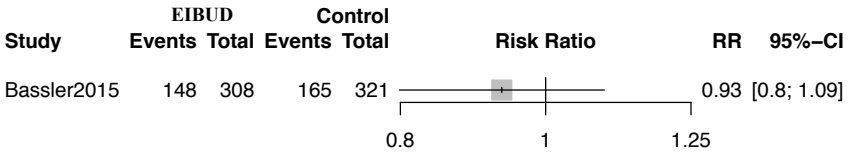
eFigure 23. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for NDI at 18-24 Months

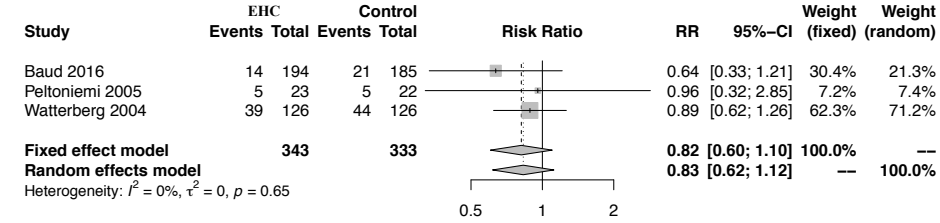


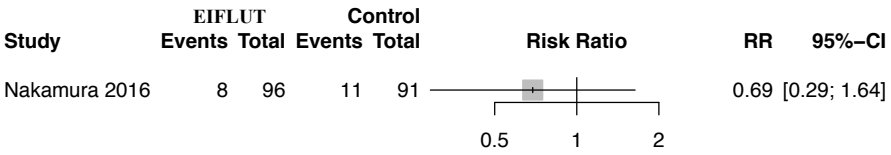
eFigure 24. Direct Evidence from the Pair Wise Comparisons for NDI at 18- 24 Months

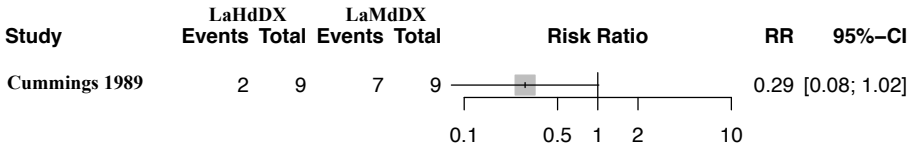


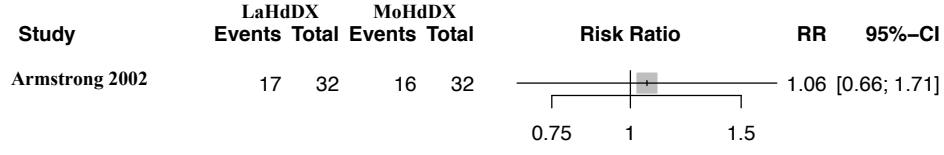


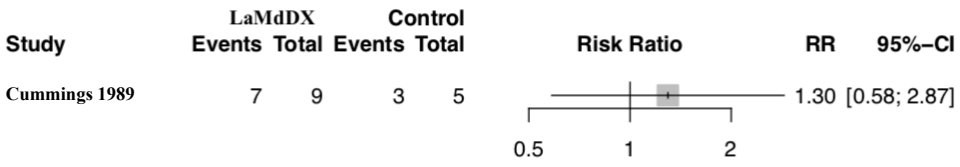




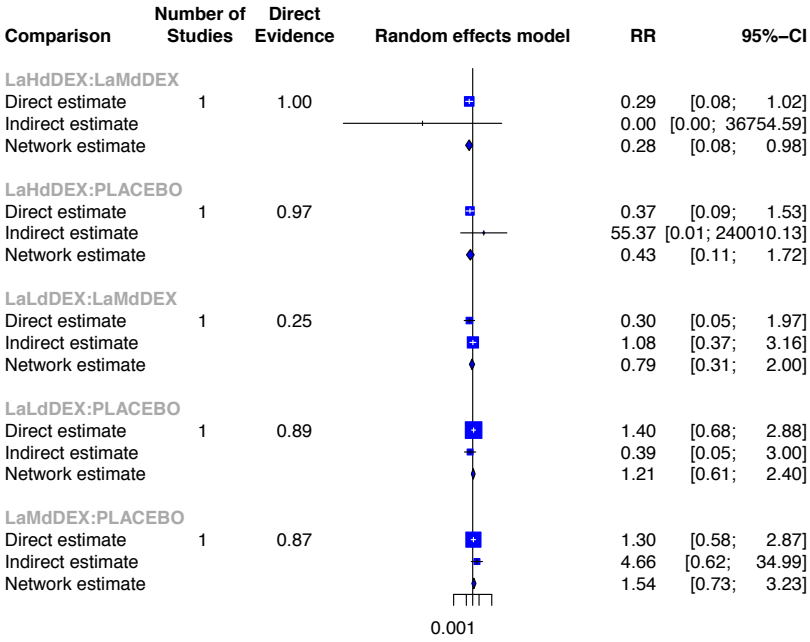






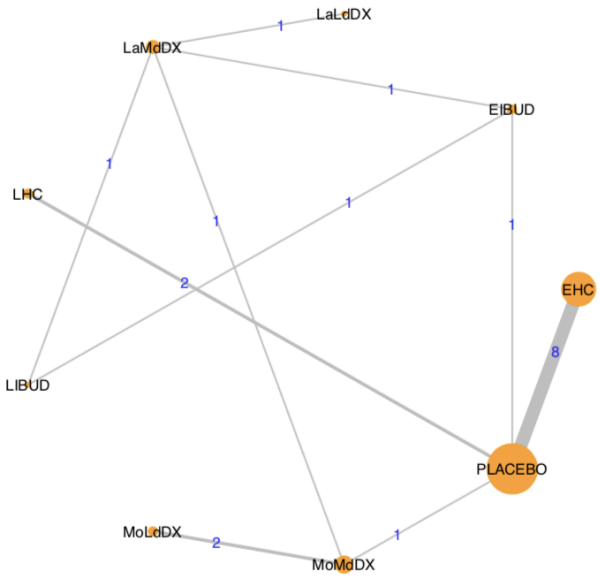


eFigure 25. Split Between Direct and Indirect Evidence for NDI at 18-24 Months

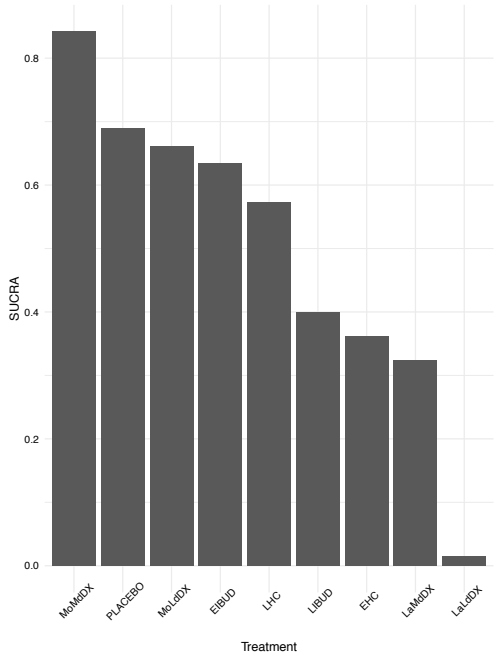


eFigure 26. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for GI Perforation (C)

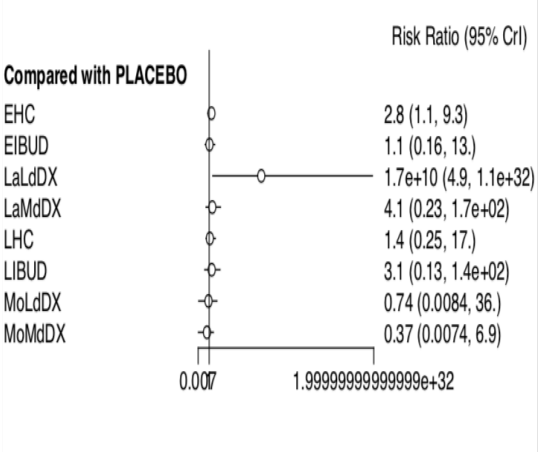
A. Network plot



B. SUCRA Plot



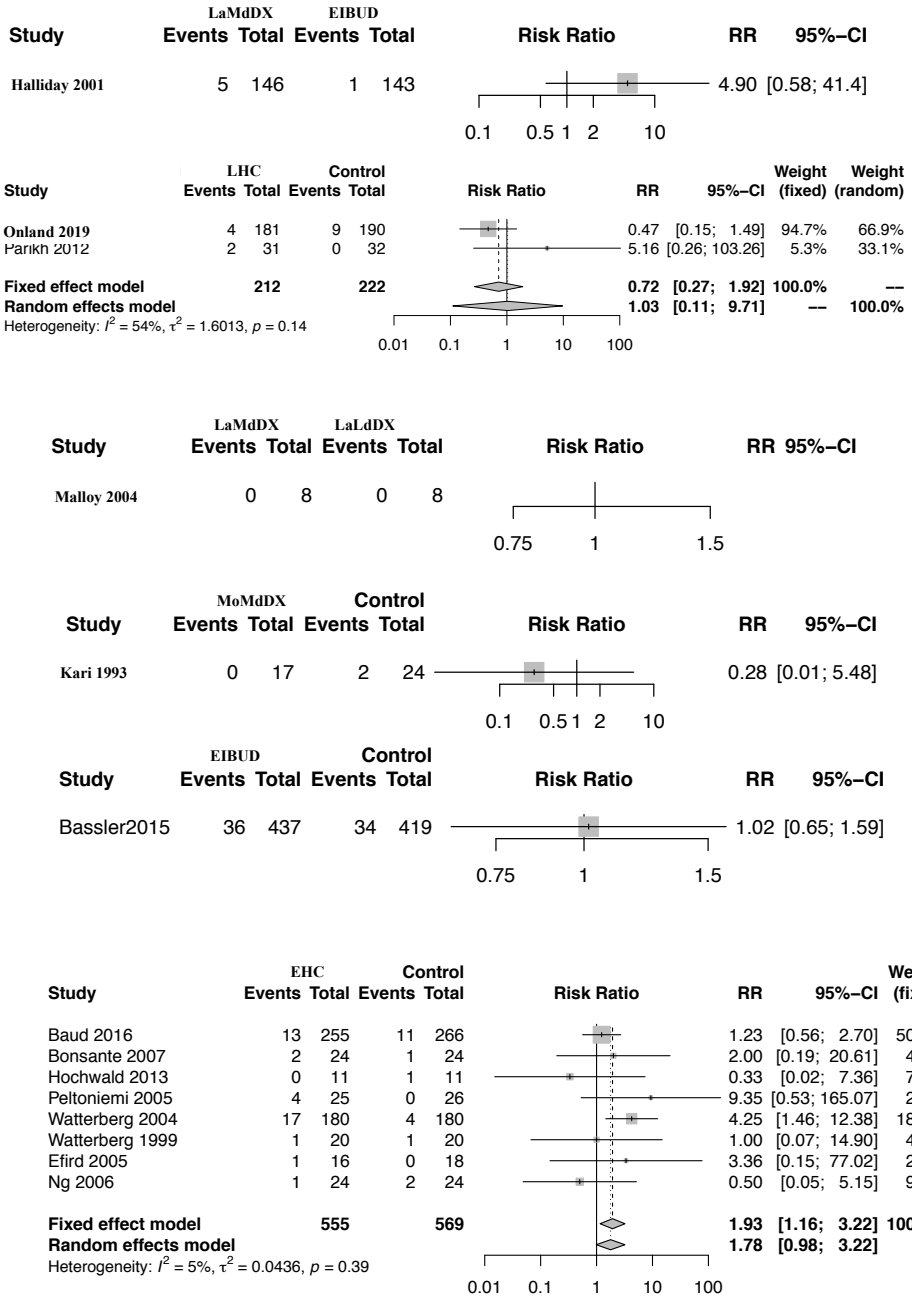
C. Forest plot with "Placebo" as the comparator

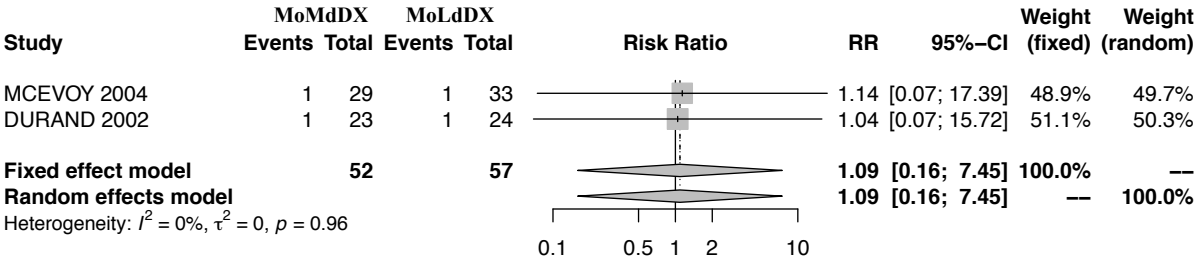


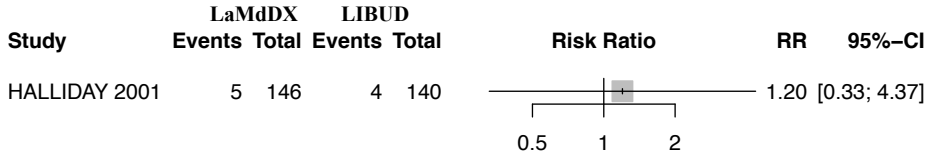
eFigure 27. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for GI Perforation

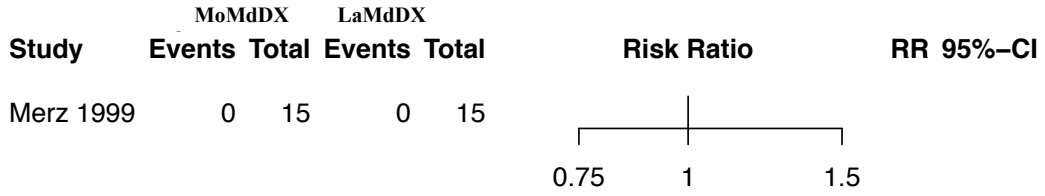
EHC	0.42 (0.04, 4.91)	-	1.48 (0.06, 61.62)	0.49 (0.07, 6.61)	1.11 (0.03, 50)	0.26 (0, 12.93)	0.13 (0, 2.68)	**0.36 (0.11, 0.92)**
2.37 (0.2, 26.06)	**EIBUD**	-	3.51 (0.32, 66.73)	1.13 (0.08, 30.71)	2.67 (0.19, 54.13)	0.63 (0, 38)	0.31 (0, 7.99)	0.87 (0.08, 6.36)
0 (0, 0.6)	**0 (0, 0.22)**	**LaLdDX**	**0 (0, 0.7)**	**0 (0, 0.36)**	**0 (0, 0.62)**	**0 (0, 0.21)**	**0 (0, 0.09)**	**0 (0, 0.2)**
0.67 (0.02, 15.83)	0.28 (0.01, 3.08)	-	**LaMdDX**	0.33 (0.01, 15.72)	0.76 (0.05, 8.66)	0.17 (0, 12.35)	0.09 (0, 2.83)	0.24 (0.01, 4.34)
2.04 (0.15, 15.25)	0.88 (0.03, 12.48)	-	3.03 (0.06, 141.42)	**LHC**	2.32 (0.04, 109.24)	0.52 (0, 33.26)	0.25 (0, 7.48)	0.74 (0.06, 3.95)
0.9 (0.02, 29.2)	0.37 (0.02, 5.34)	-	1.32 (0.12, 18.88)	0.43 (0.01, 27.51)	**LIBUD**	0.23 (0, 23.86)	0.11 (0, 5.45)	0.32 (0.01, 7.83)
3.83 (0.08, 415.97)	1.6 (0.03, 221.29)	-	5.76 (0.08, 1431.68)	1.93 (0.03, 335.69)	4.31 (0.04, 1129.73)	**MoLdDX**	0.49 (0.04, 4.68)	1.35 (0.03, 119.42)
7.76 (0.37, 472.58)	3.28 (0.13, 256.78)	-	11.69 (0.35, 1773.5)	3.99 (0.13, 427.12)	8.82 (0.18, 1456.59)	2.05 (0.21, 27.66)	**MoMdDX**	2.73 (0.15, 134.37)
2.77 (1.09, 9.32)	1.15 (0.16, 12.97)	-	4.1 (0.23, 173.03)	1.36 (0.25, 17.17)	3.12 (0.13, 139.92)	0.74 (0.01, 35.54)	0.37 (0.01, 6.86)	**PLACEBO**

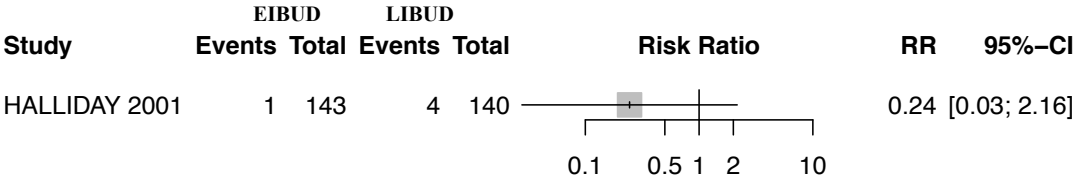
eFigure 28. Direct Evidence from the Pair Wise Comparisons for GI Perforation



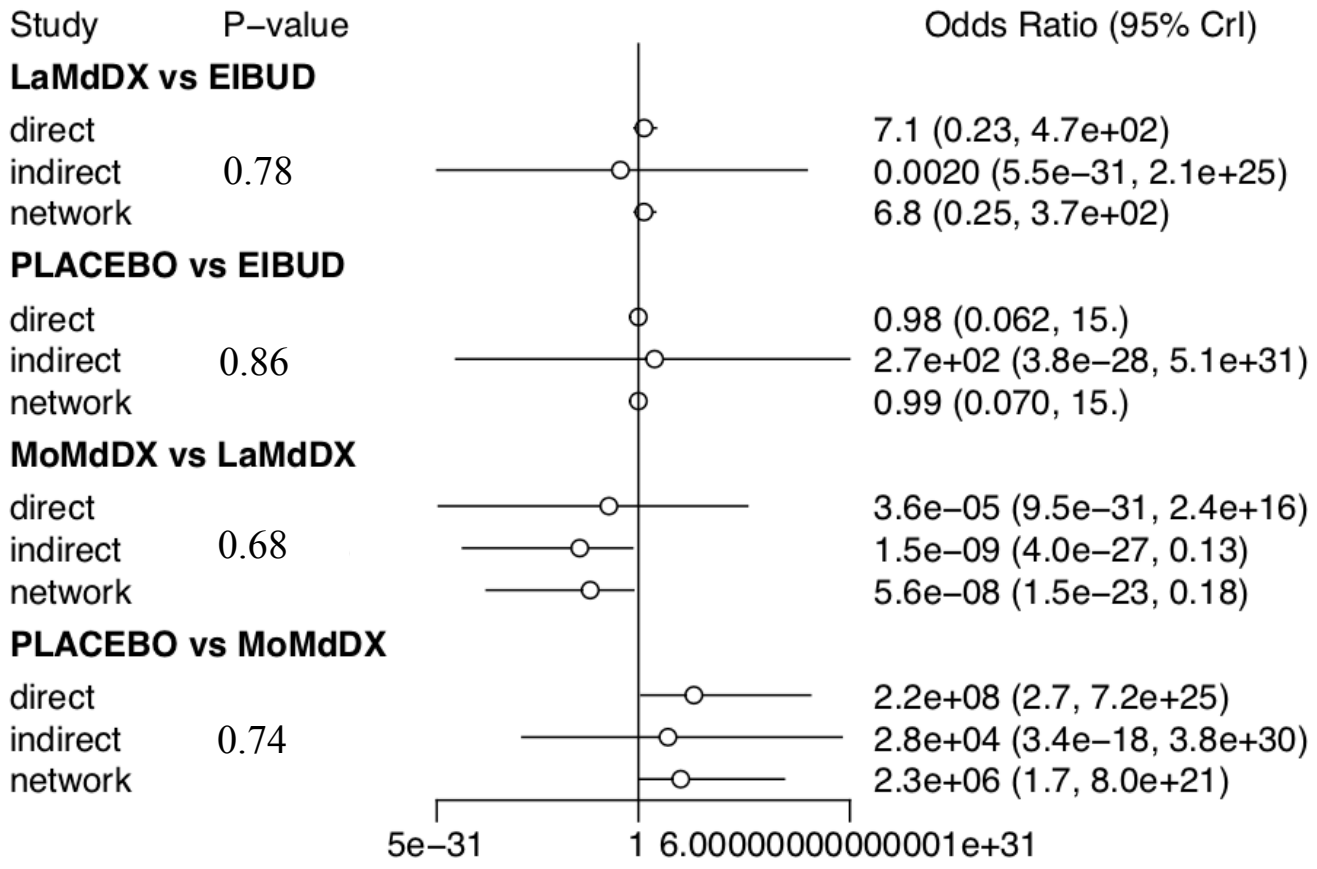




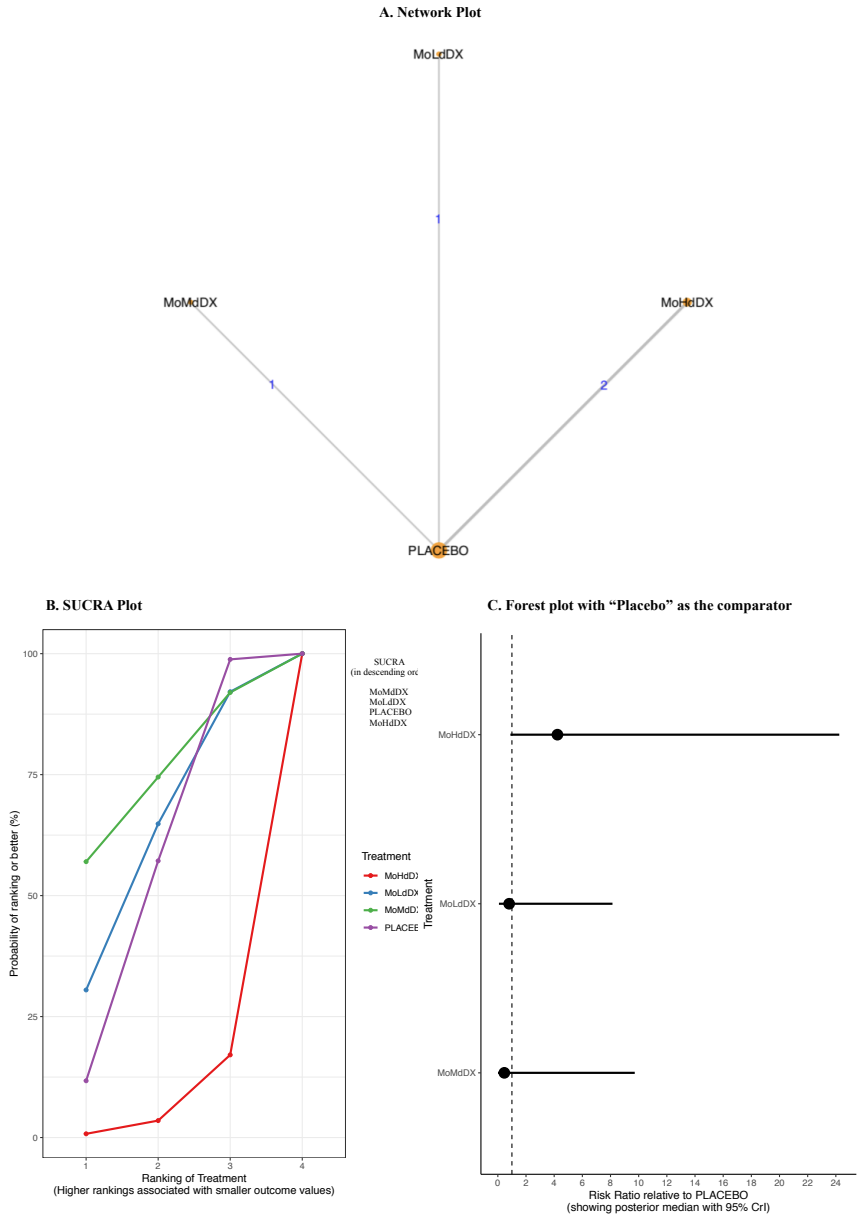




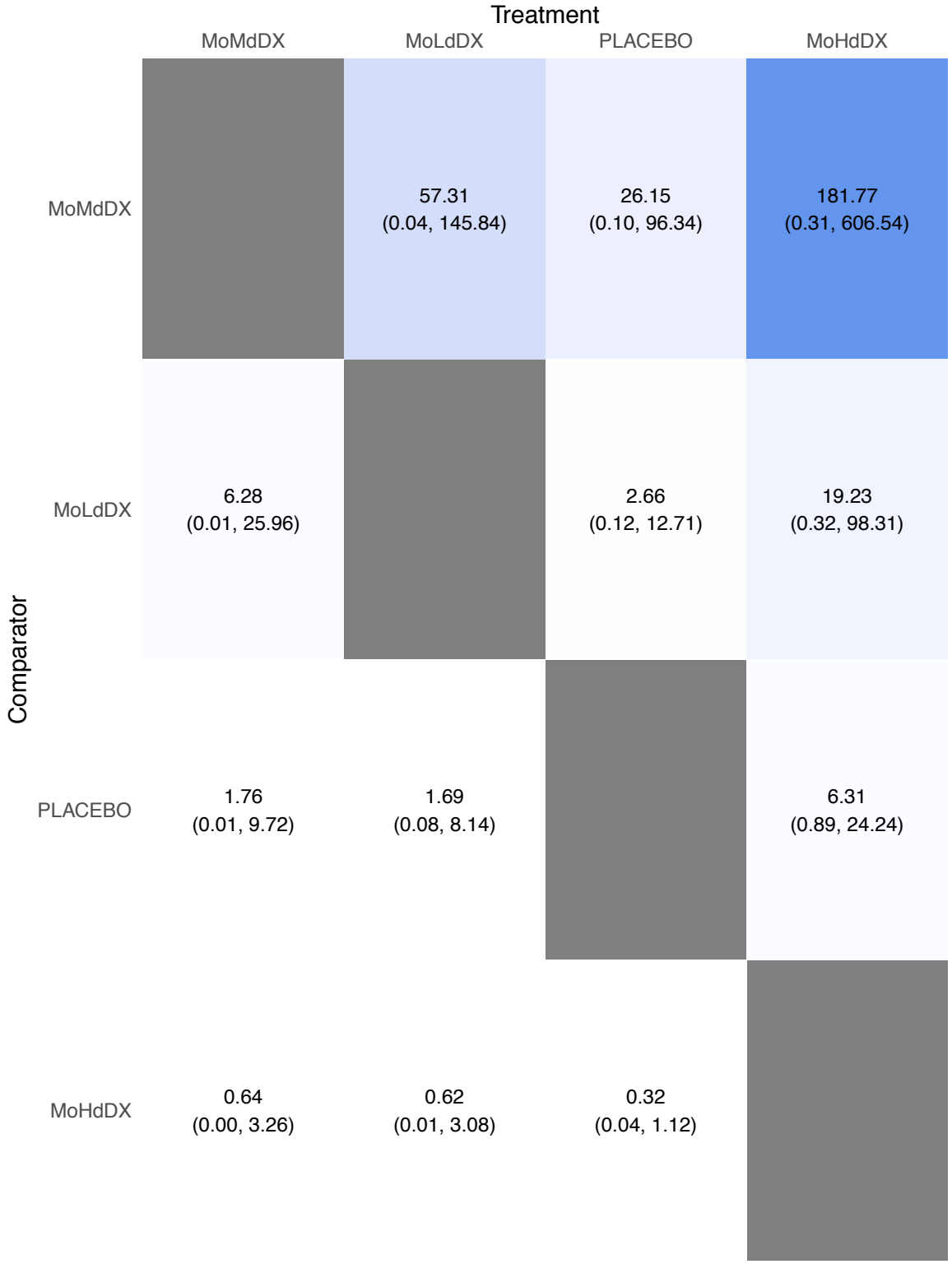
eFigure 29. Split Between Direct and Indirect Evidence for GI Perforation



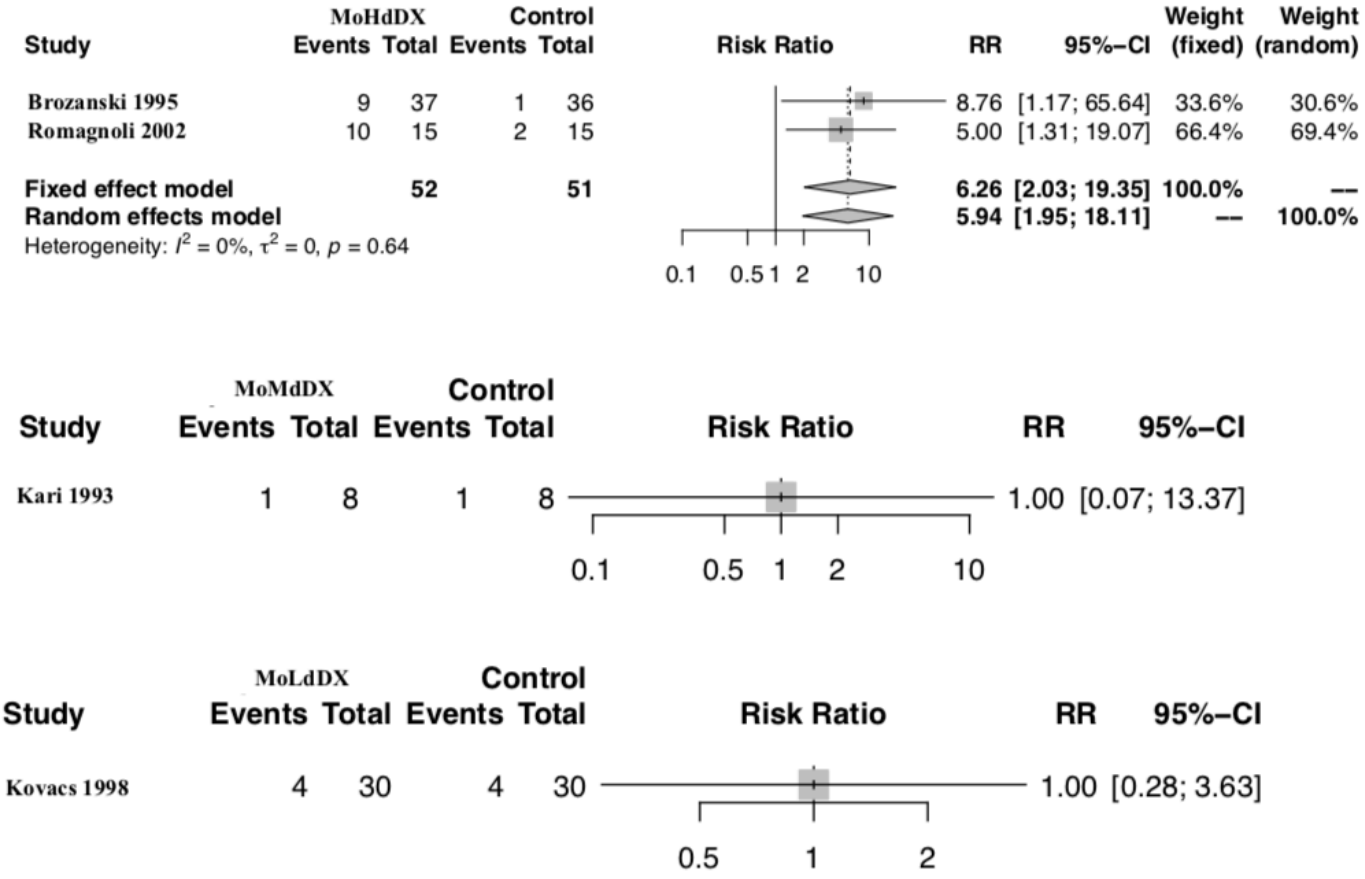
eFigure 30. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Hypertrophic Cardiomyopathy (C)



eFigure 31. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Hypertrophic Cardiomyopathy

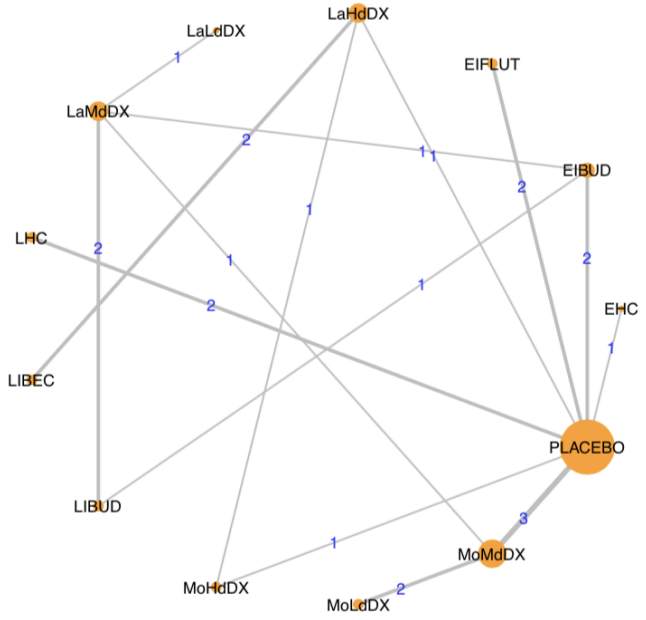


eFigure 32. Direct Evidence from the Pair Wise Comparisons for Hypertrophic Cardiomyopathy

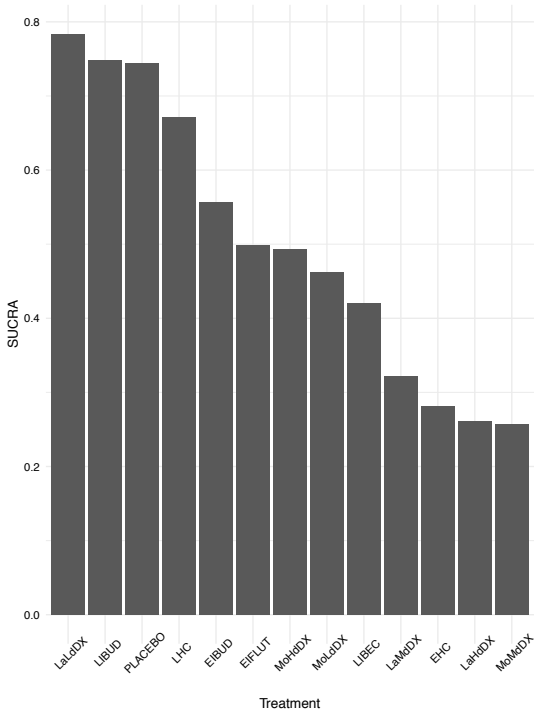


eFigure 33. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Hypertension (C)

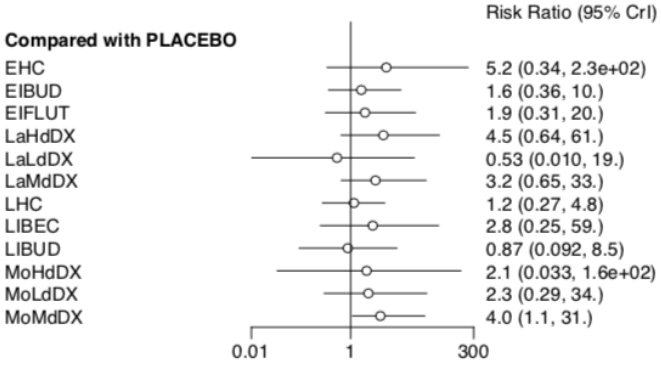
A. Network Plot



B. SUCRA Plot



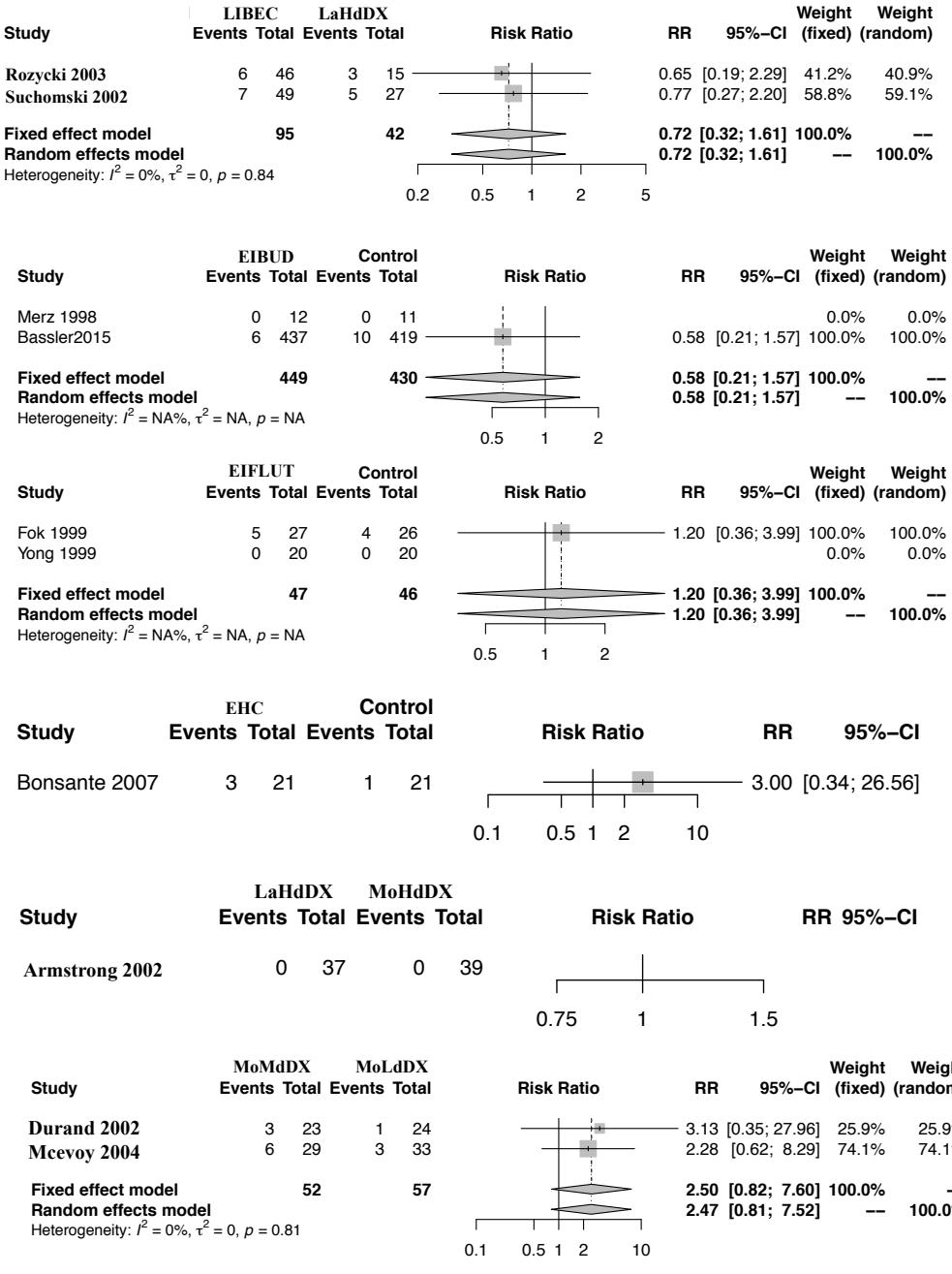
C. Forest plot with "Placebo" as the comparator

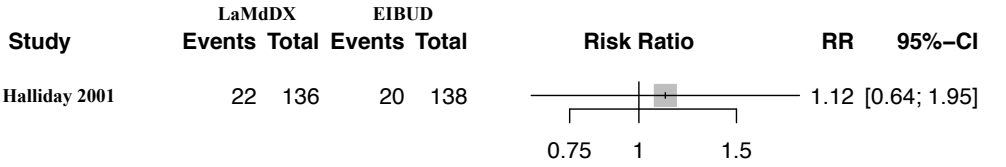


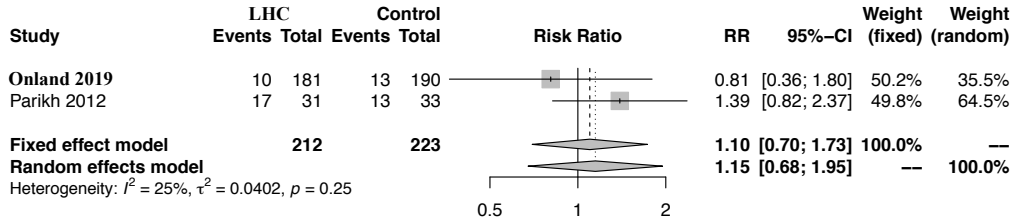
eFigure 34. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Hypertension

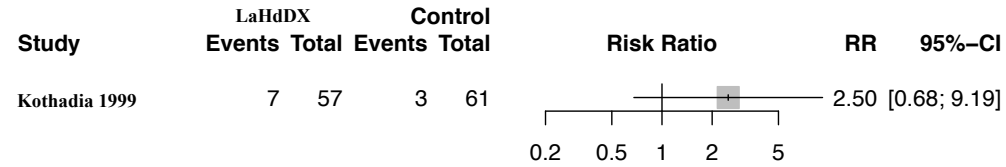
EHC	0.31 (0.01, 8.96)	0.37 (0.01, 13.72)	0.87 (0.01, 40.85)	0.09 (0, 9.57)	0.62 (0.01, 24.35)	0.22 (0, 4.67)	0.52 (0.01, 34.45)	0.16 (0, 5.9)	0.37 (0, 70.47)	0.43 (0.01, 21.61)	0.78 (0.02, 26.32)	0.19 (0, 2.98)
3.21 (0.11, 180.1)	EIBUD	1.18 (0.1, 18.23)	2.73 (0.2, 54.06)	0.32 (0.01, 8.54)	1.93 (0.46, 12.85)	0.71 (0.07, 5.42)	1.68 (0.08, 48.02)	0.53 (0.07, 3)	1.25 (0.01, 119.63)	1.37 (0.14, 22.4)	2.36 (0.46, 21.79)	0.61 (0.1, 2.79)
2.7 (0.07, 166.1)	0.85 (0.05, 10.52)	EIFLUT	2.34 (0.12, 52.41)	0.26 (0, 13.4)	1.65 (0.11, 28.72)	0.6 (0.03, 5.5)	1.44 (0.05, 46.53)	0.45 (0.02, 7.39)	1.05 (0.01, 111.51)	1.16 (0.06, 28.1)	2.05 (0.17, 31.52)	0.52 (0.05, 3.19)
1.16 (0.02, 79.34)	0.37 (0.02, 5.03)	0.43 (0.02, 8.22)	LaHdDX	0.11 (0, 6.11)	0.72 (0.04, 14.29)	0.26 (0.01, 2.65)	0.61 (0.14, 2.95)	0.19 (0.01, 3.66)	0.46 (0.01, 27.76)	0.5 (0.02, 13.33)	0.88 (0.06, 14.8)	0.22 (0.02, 1.56)
10.87 (0.1, 2200.76)	3.11 (0.12, 154.13)	3.8 (0.07, 332.3)	8.97 (0.16, 936.68)	LaLdDX	6.06 (0.45, 249.79)	2.22 (0.04, 135.63)	5.58 (0.08, 732.01)	1.65 (0.05, 81.59)	4.16 (0.02, 1192.65)	4.4 (0.13, 343.1)	7.59 (0.35, 448.9)	1.89 (0.05, 97.56)
1.62 (0.04, 92.64)	0.52 (0.08, 2.2)	0.6 (0.03, 9.28)	1.4 (0.07, 26.73)	0.16 (0, 2.24)	LaMdDX	0.37 (0.02, 2.76)	0.86 (0.03, 23.32)	0.28 (0.03, 1.1)	0.62 (0.01, 59.5)	0.7 (0.07, 7.7)	1.21 (0.24, 7.26)	0.32 (0.03, 1.54)
4.6 (0.21, 247.13)	1.41 (0.18, 15.32)	1.66 (0.18, 29.12)	3.89 (0.38, 78.38)	0.45 (0.01, 23.14)	2.71 (0.36, 47.23)	LHC	2.42 (0.15, 74.05)	0.75 (0.05, 11.45)	1.81 (0.02, 174.14)	1.94 (0.18, 46.46)	3.37 (0.59, 46.95)	0.86 (0.21, 3.7)
1.91 (0.03, 149.44)	0.59 (0.02, 11.83)	0.69 (0.02, 18.64)	1.63 (0.34, 7.38)	0.18 (0, 12.89)	1.16 (0.04, 32.77)	0.41 (0.01, 6.52)	LIBEC	0.31 (0.01, 8.18)	0.74 (0.01, 54.84)	0.81 (0.02, 29.1)	1.42 (0.07, 35.02)	0.36 (0.02, 4.06)
6.18 (0.17, 467.5)	1.87 (0.33, 14.53)	2.21 (0.14, 60.96)	5.25 (0.27, 170.71)	0.61 (0.01, 18.94)	3.63 (0.91, 31.85)	1.32 (0.09, 18.41)	3.25 (0.12, 145.89)	LIBUD	2.4 (0.02, 308.87)	2.57 (0.22, 62.28)	4.45 (0.69, 66.32)	1.15 (0.12, 10.84)
2.69 (0.01, 648.32)	0.8 (0.01, 76.21)	0.95 (0.01, 107.91)	2.15 (0.04, 185.61)	0.24 (0, 60.1)	1.61 (0.02, 184.57)	0.55 (0.01, 44.67)	1.35 (0.02, 145.49)	0.42 (0, 46.21)	MoHdDX	1.13 (0.01, 161.07)	1.98 (0.02, 207.55)	0.48 (0.01, 30.15)
2.34 (0.05, 153.11)	0.73 (0.04, 7.38)	0.86 (0.04, 16.84)	2.01 (0.08, 47.66)	0.23 (0, 7.83)	1.43 (0.13, 14.64)	0.52 (0.02, 5.58)	1.24 (0.03, 40.16)	0.39 (0.02, 4.6)	0.89 (0.01, 96.73)	MoLdDX	1.74 (0.34, 9.91)	0.44 (0.03, 3.41)
1.29 (0.04, 66.42)	0.42 (0.05, 2.18)	0.49 (0.03, 5.73)	1.14 (0.07, 16.77)	0.13 (0, 2.82)	0.83 (0.14, 4.17)	0.3 (0.02, 1.68)	0.7 (0.03, 15.38)	0.22 (0.02, 1.44)	0.5 (0, 44.43)	0.57 (0.1, 2.93)	MoMdDX	0.25 (0.03, 0.91)
5.2 (0.34, 230.2)	1.63 (0.36, 10.17)	1.94 (0.31, 20.03)	4.54 (0.64, 60.54)	0.53 (0.01, 18.94)	3.15 (0.65, 32.97)	1.16 (0.27, 4.83)	2.78 (0.25, 58.54)	0.87 (0.09, 8.51)	2.09 (0.03, 164.71)	2.27 (0.29, 33.89)	**3.96 (1.1, 30.91)**	PLACEBO

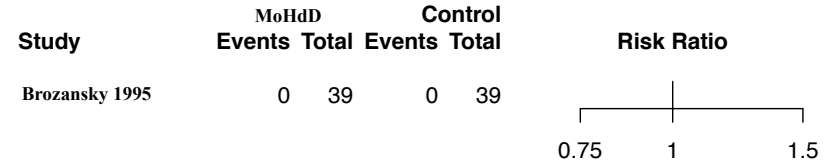
eFigure 35. Direct Evidence from the Pair Wise Comparisons for Hypertension

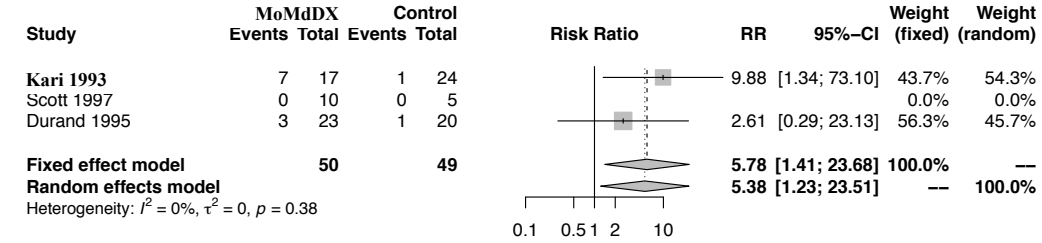


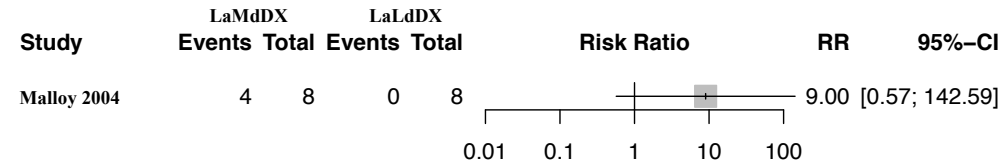




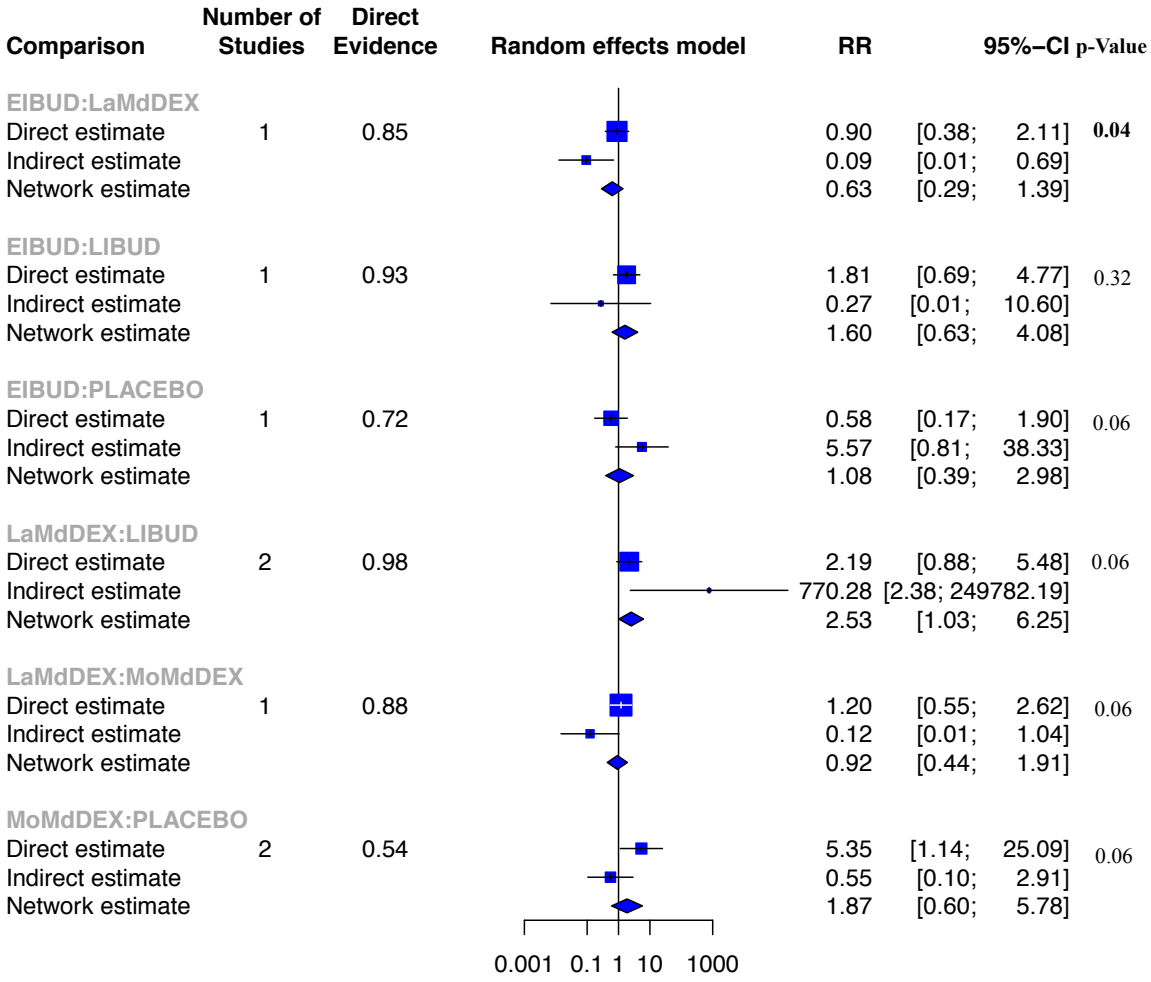




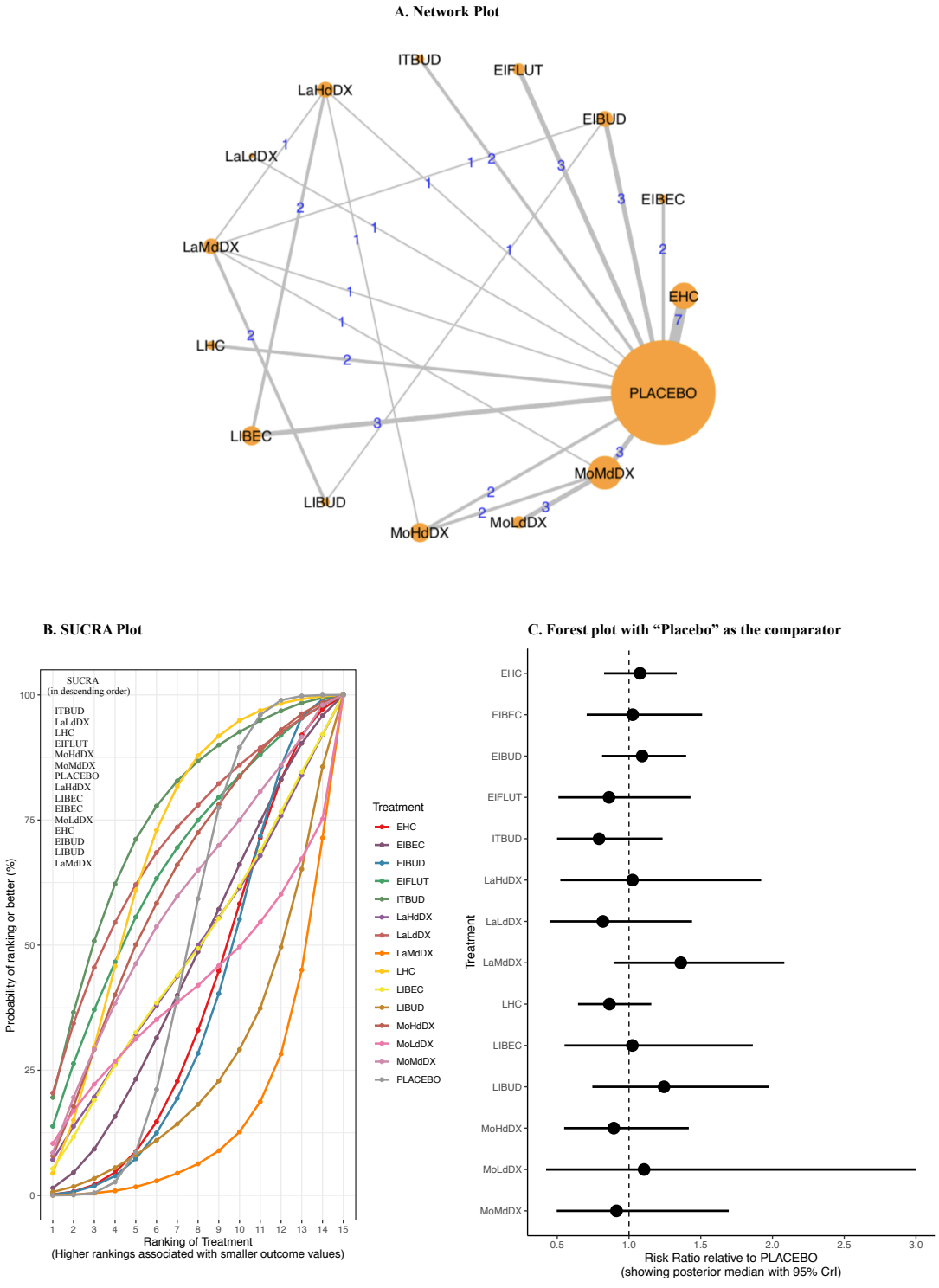




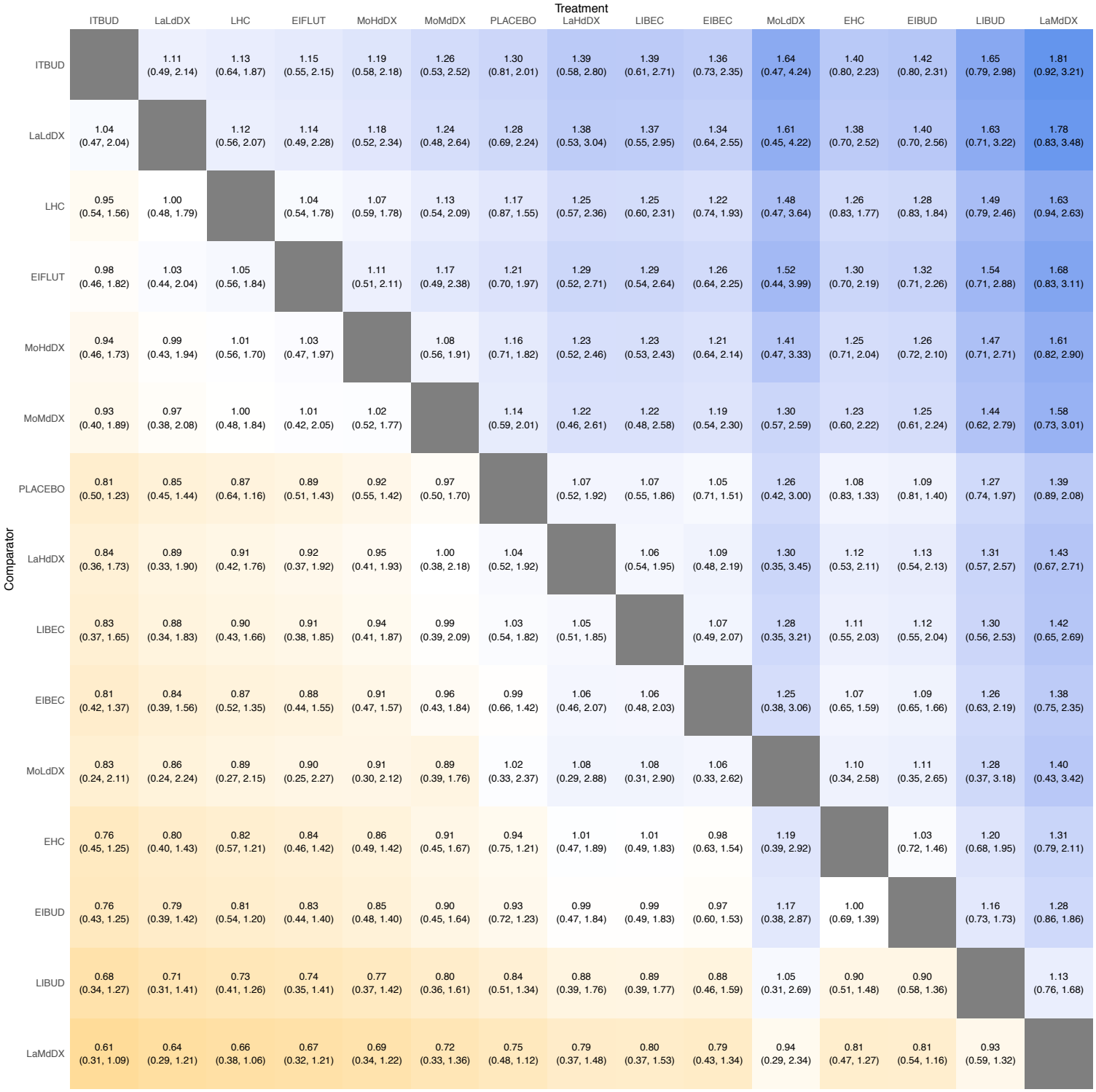
eFigure 36. Split Between Direct and Indirect Evidence for Hypertension



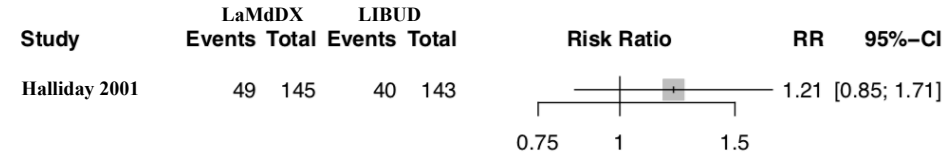
eFigure 37. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Sepsis (C)

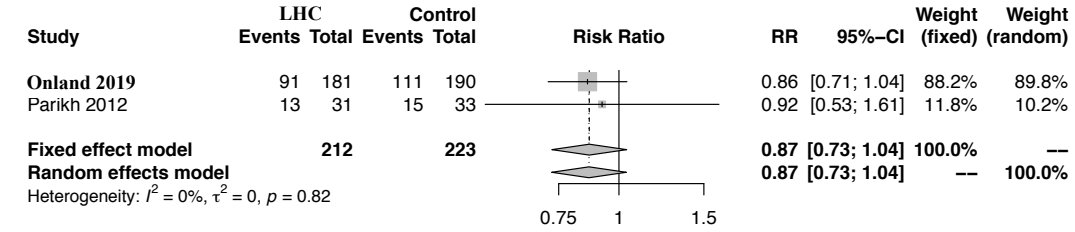


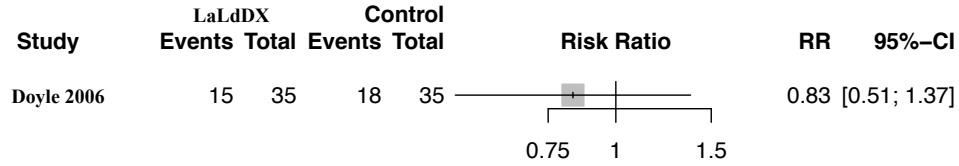
eFigure 38. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Sepsis

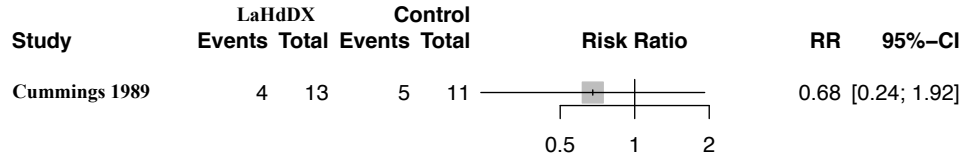


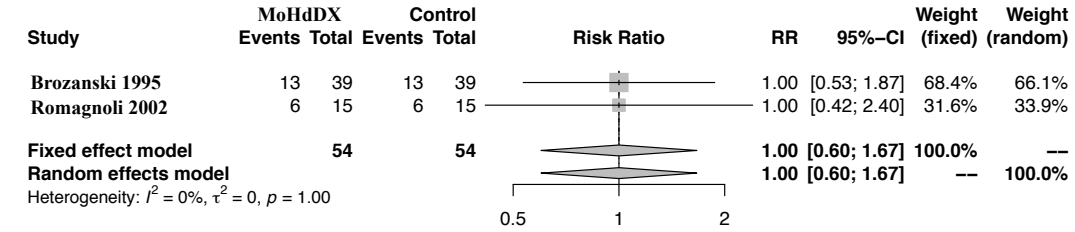
eFigure 39. Direct Evidence from the Pair Wise Comparisons for Sepsis

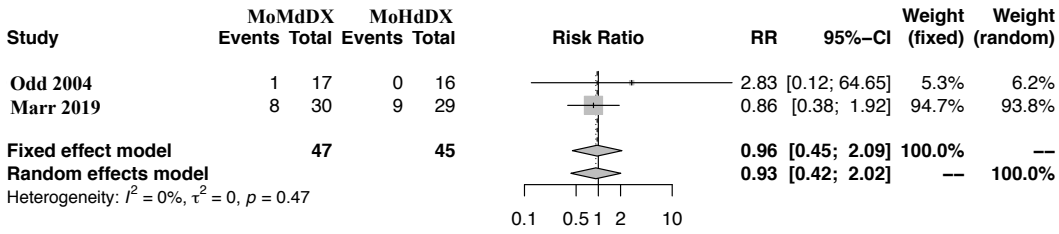


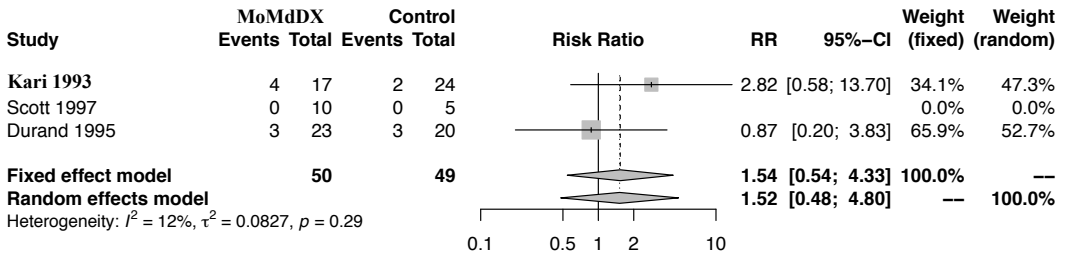


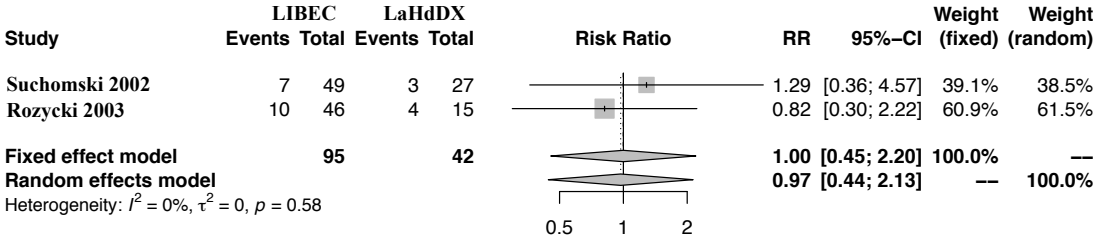


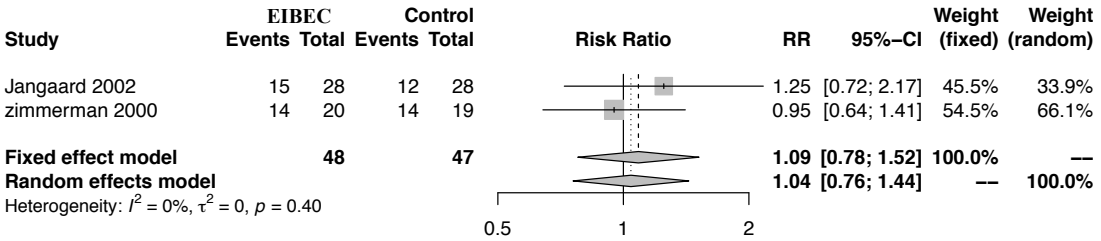


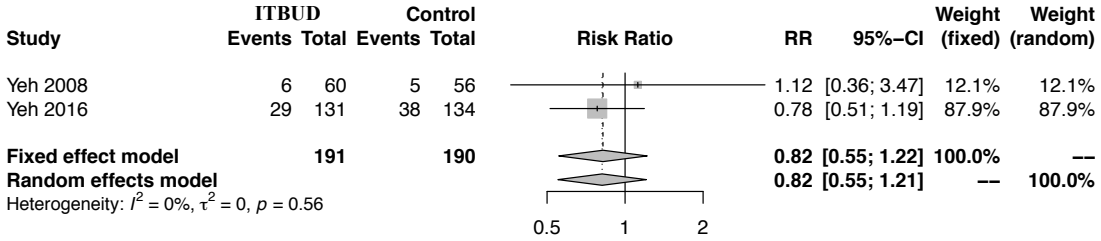


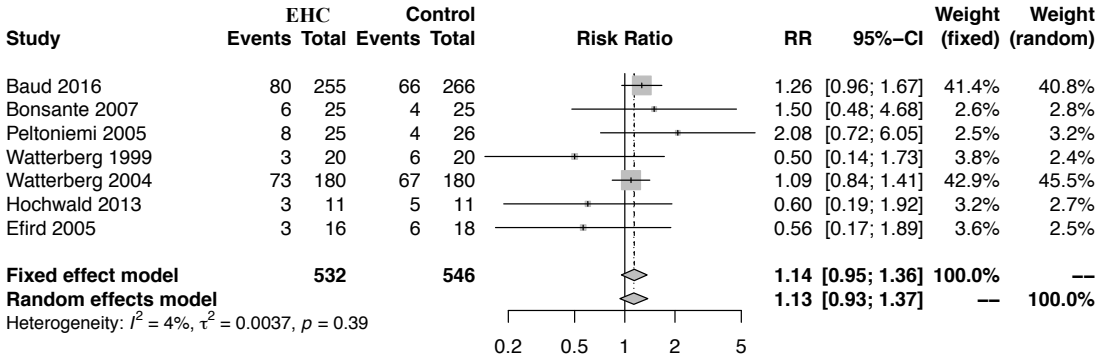


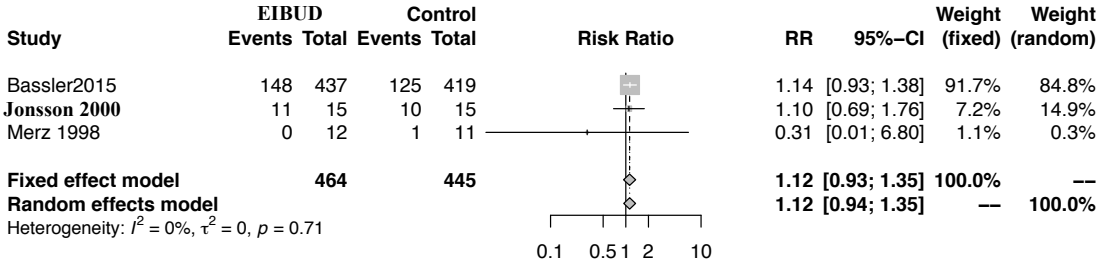


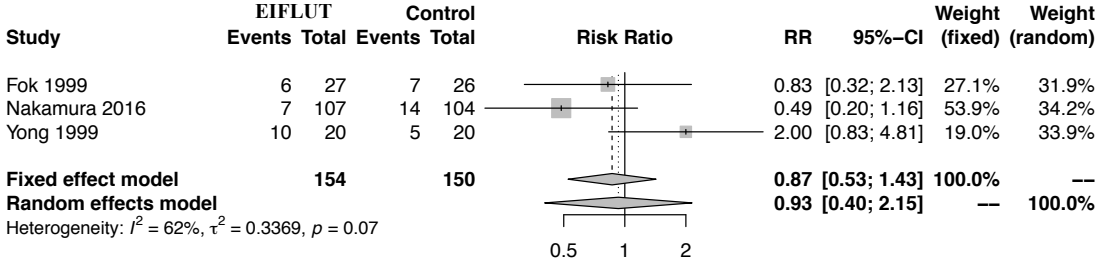


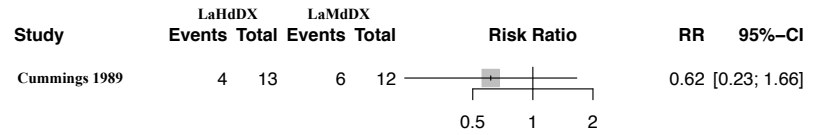


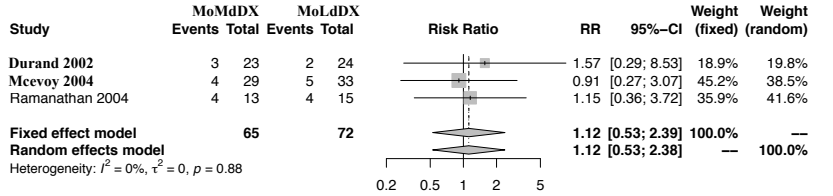


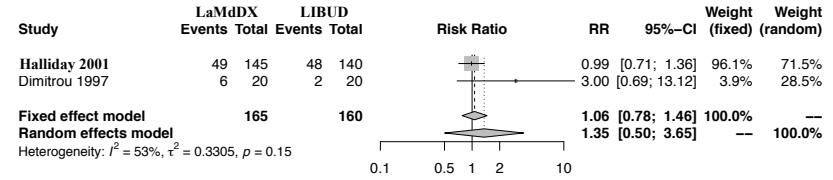


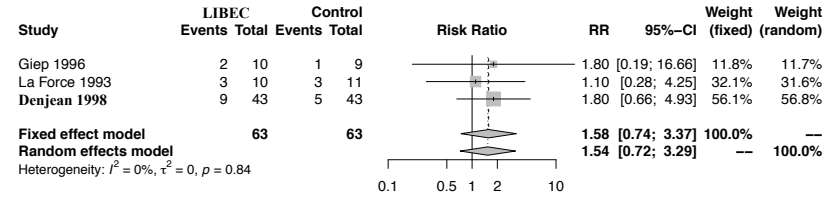


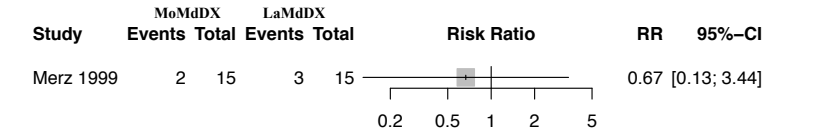


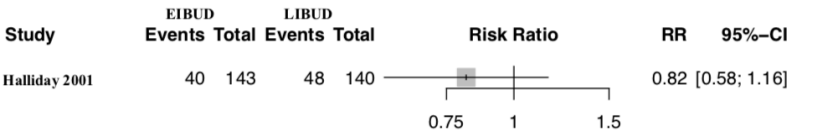


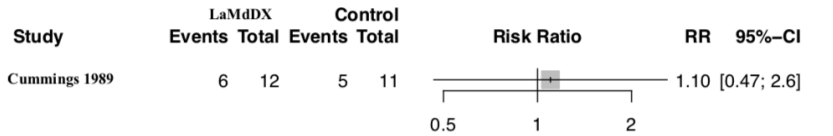




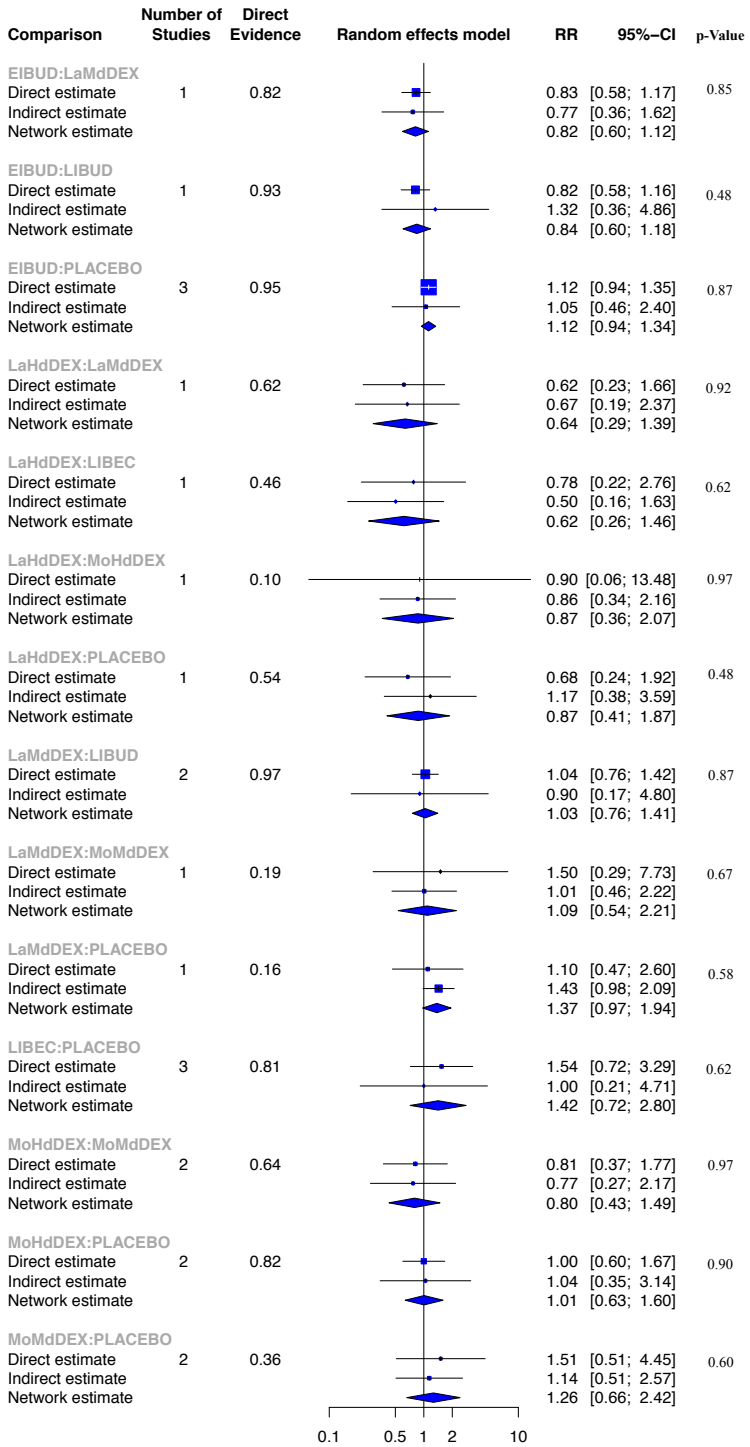




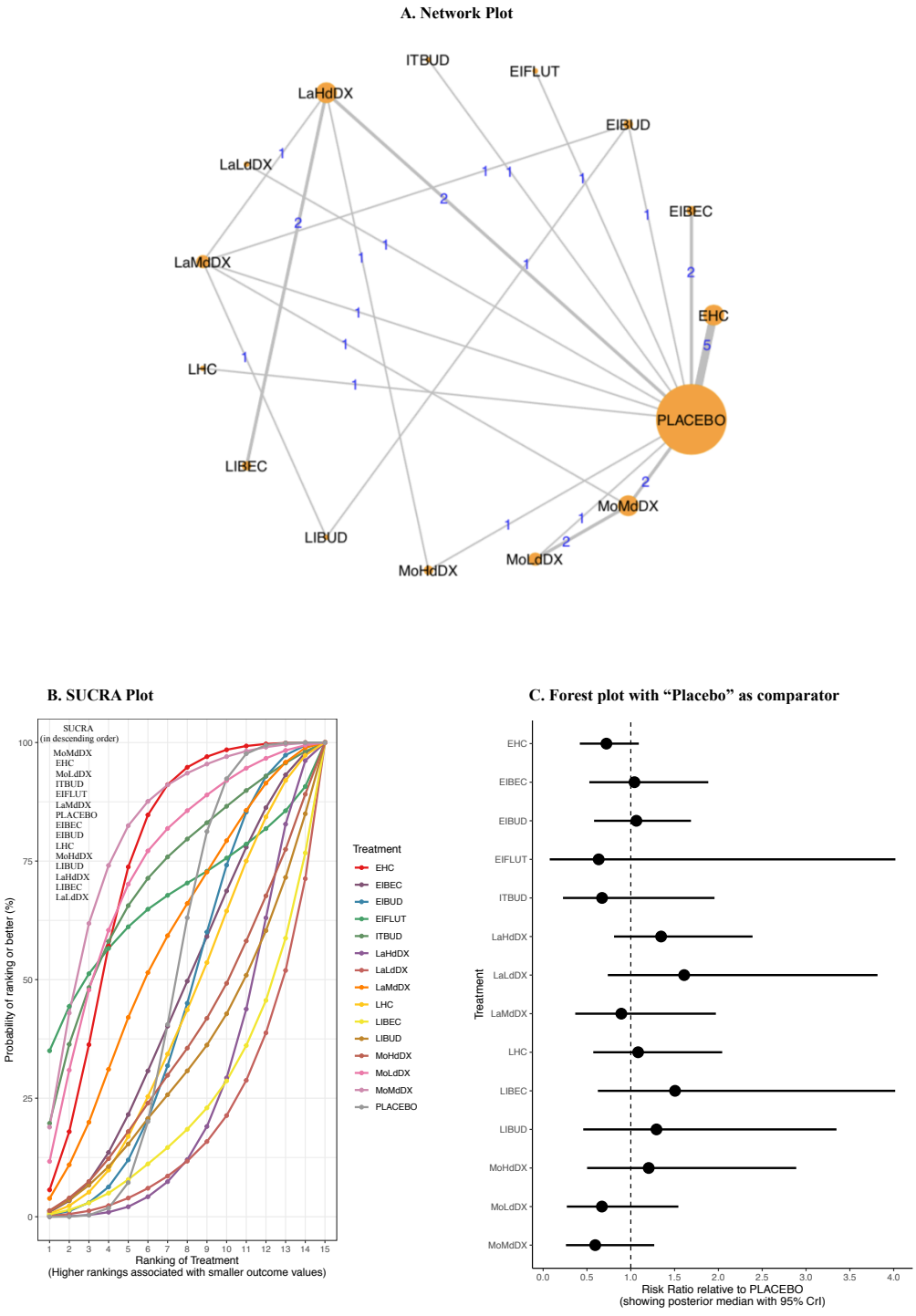




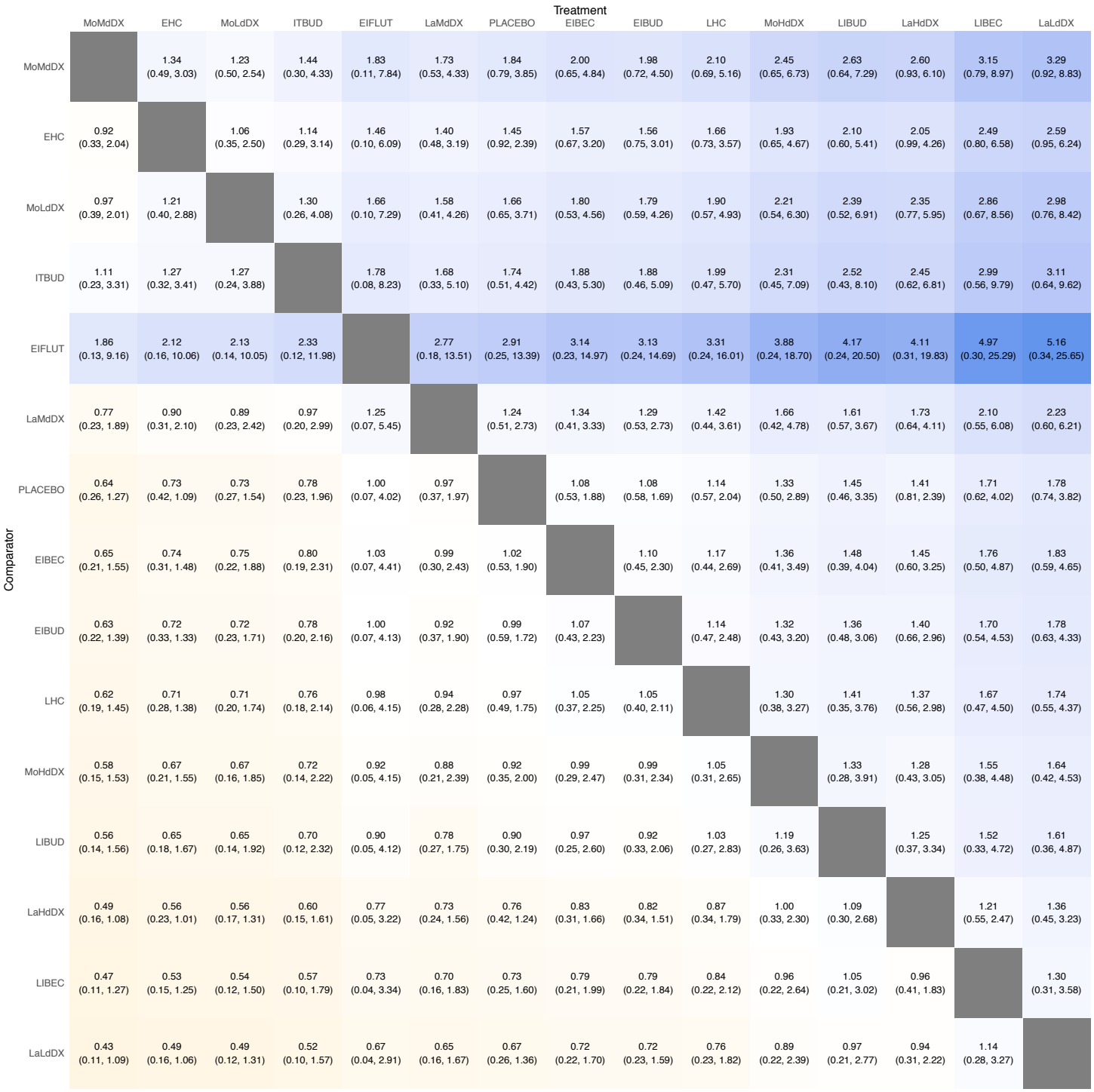
eFigure 40. Split Between Direct and Indirect Evidence for Sepsis



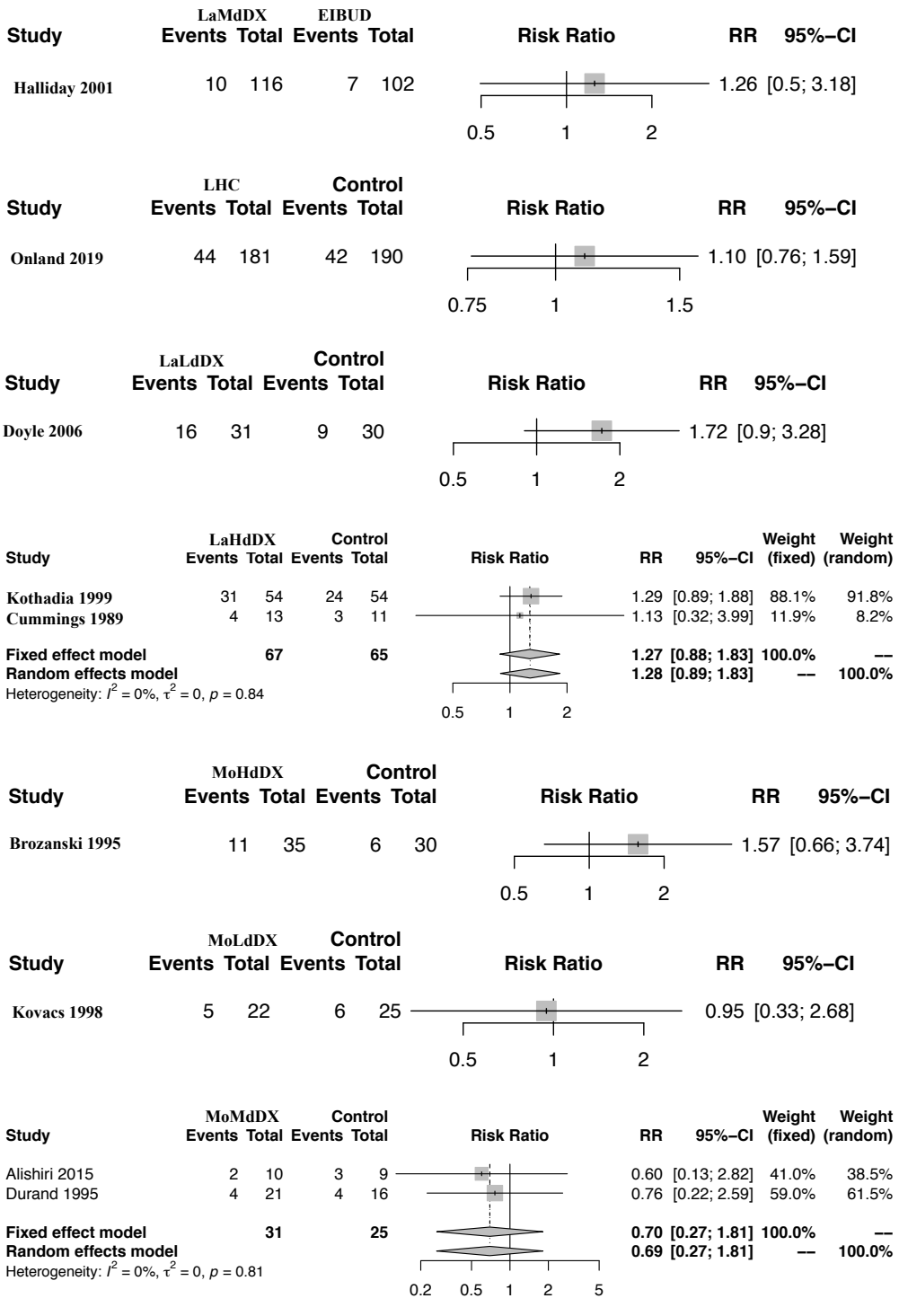
eFigure 41. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Severe ROP (C)

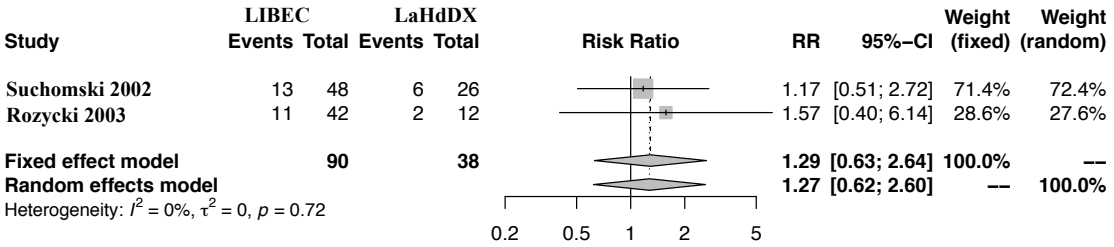


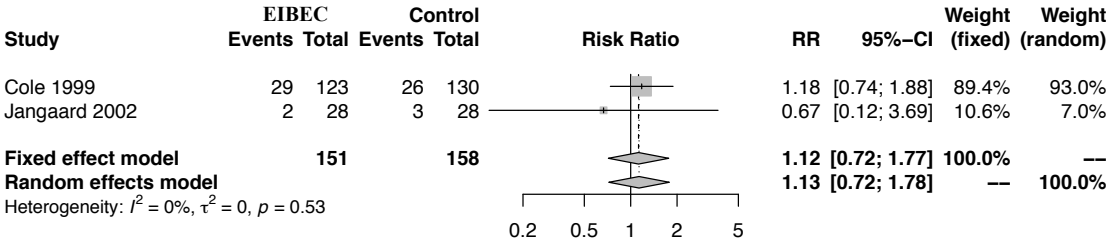
eFigure 42. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Severe ROP

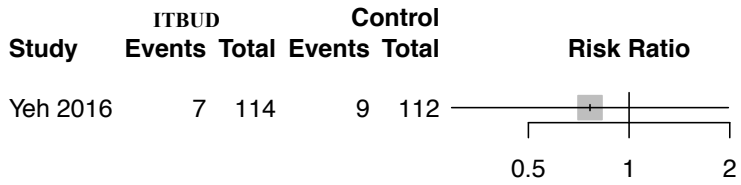


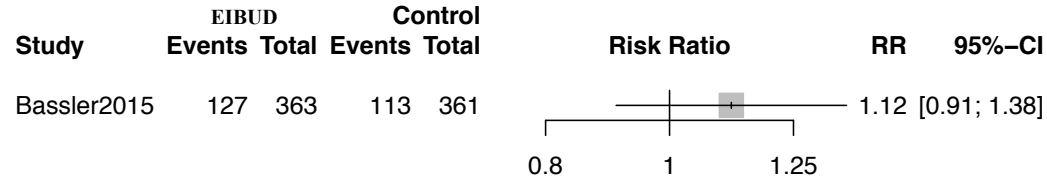
eFigure 43. Direct Evidence from the Pair Wise Comparisons for Severe ROP

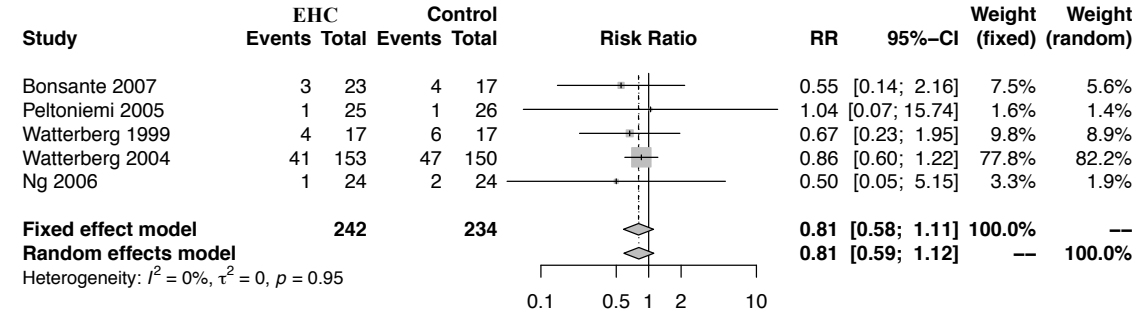


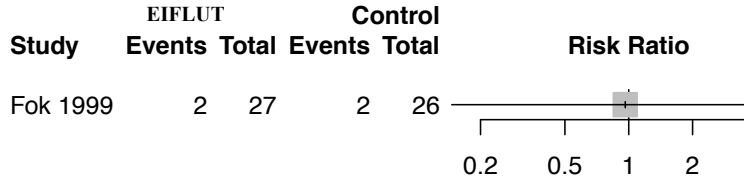


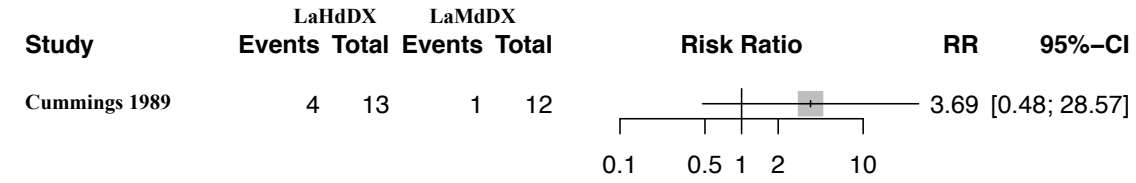


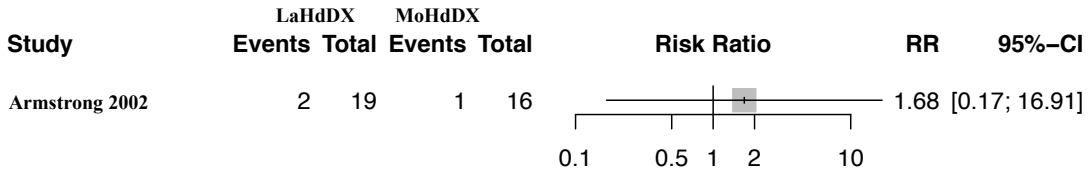


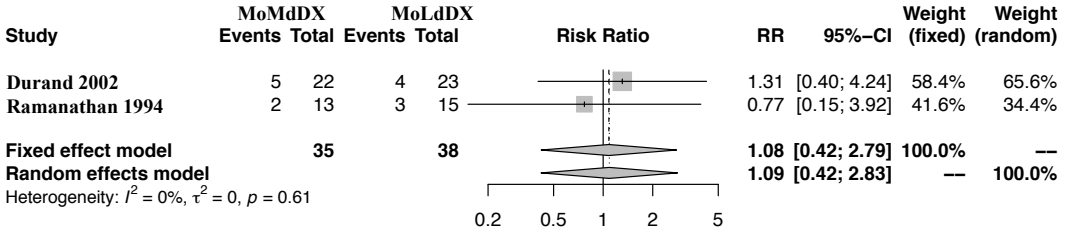


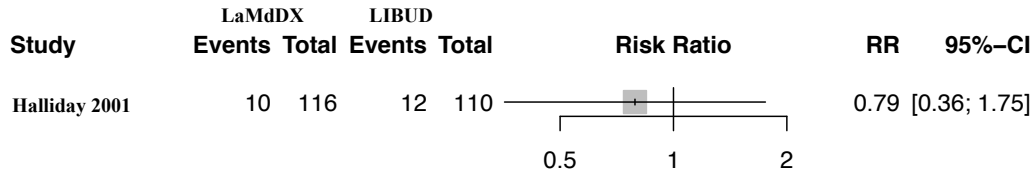


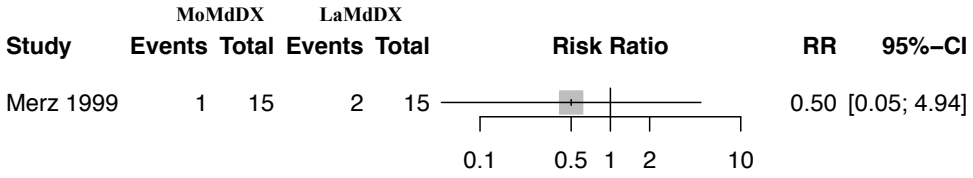


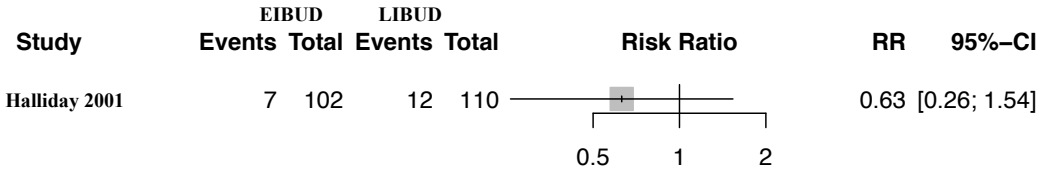


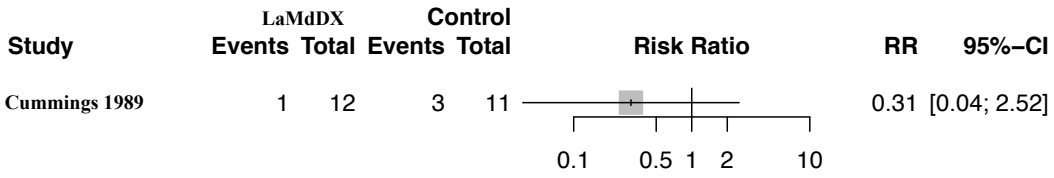




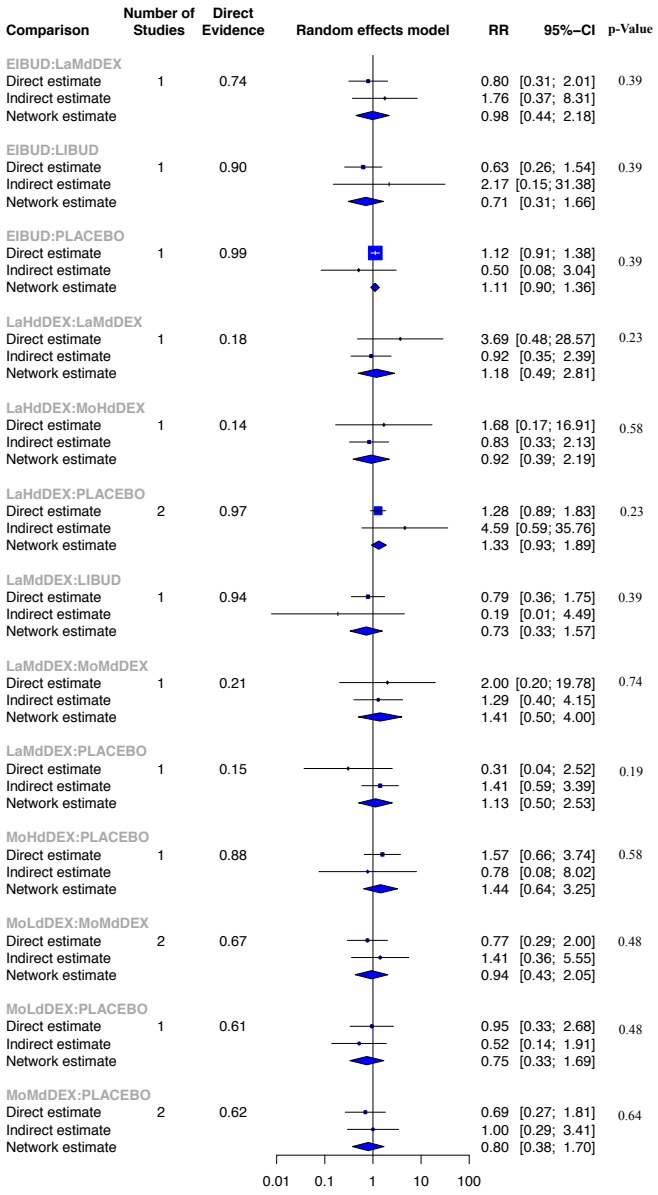




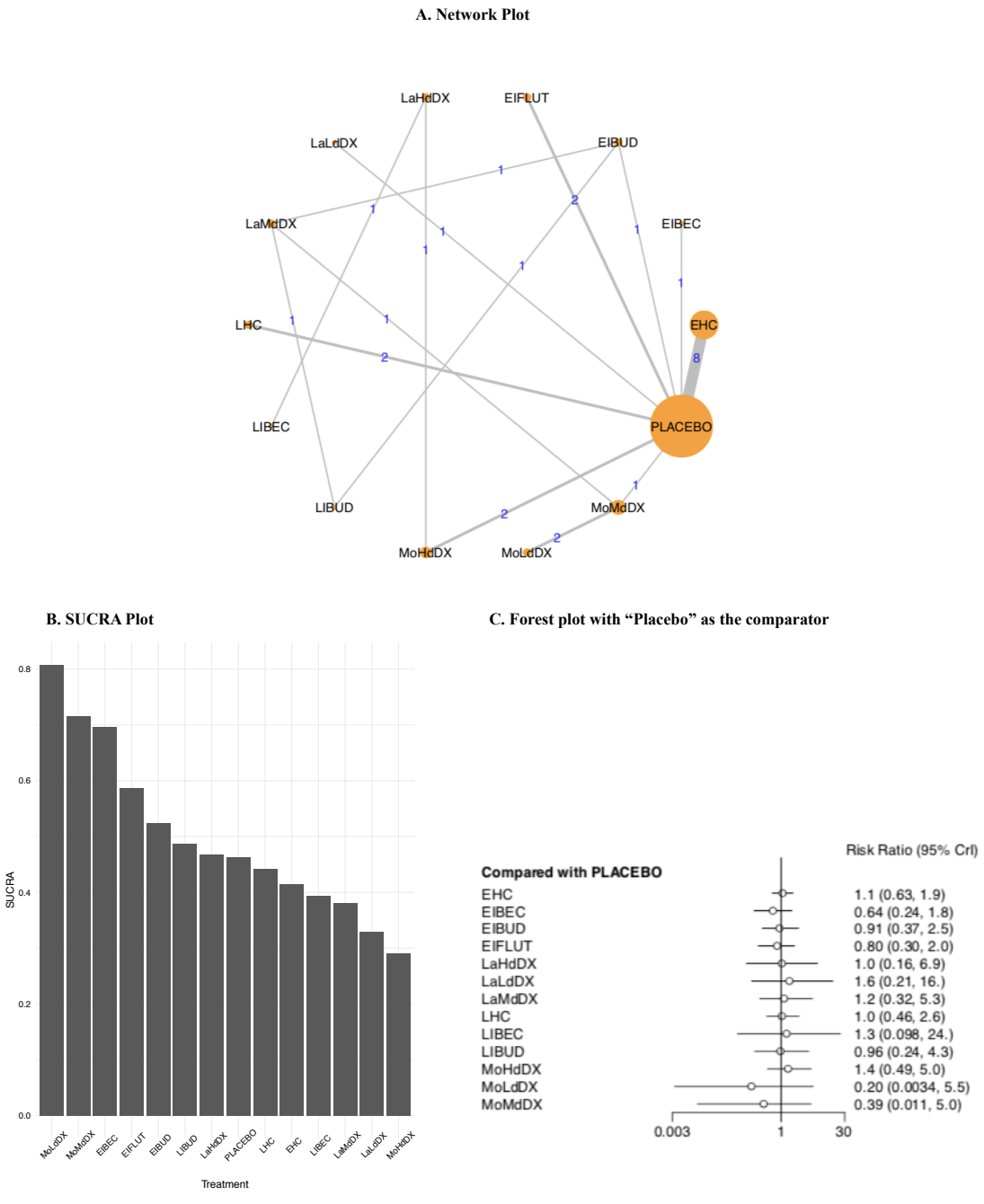




eFigure 44. Split Between Direct and Indirect Evidence for Severe ROP



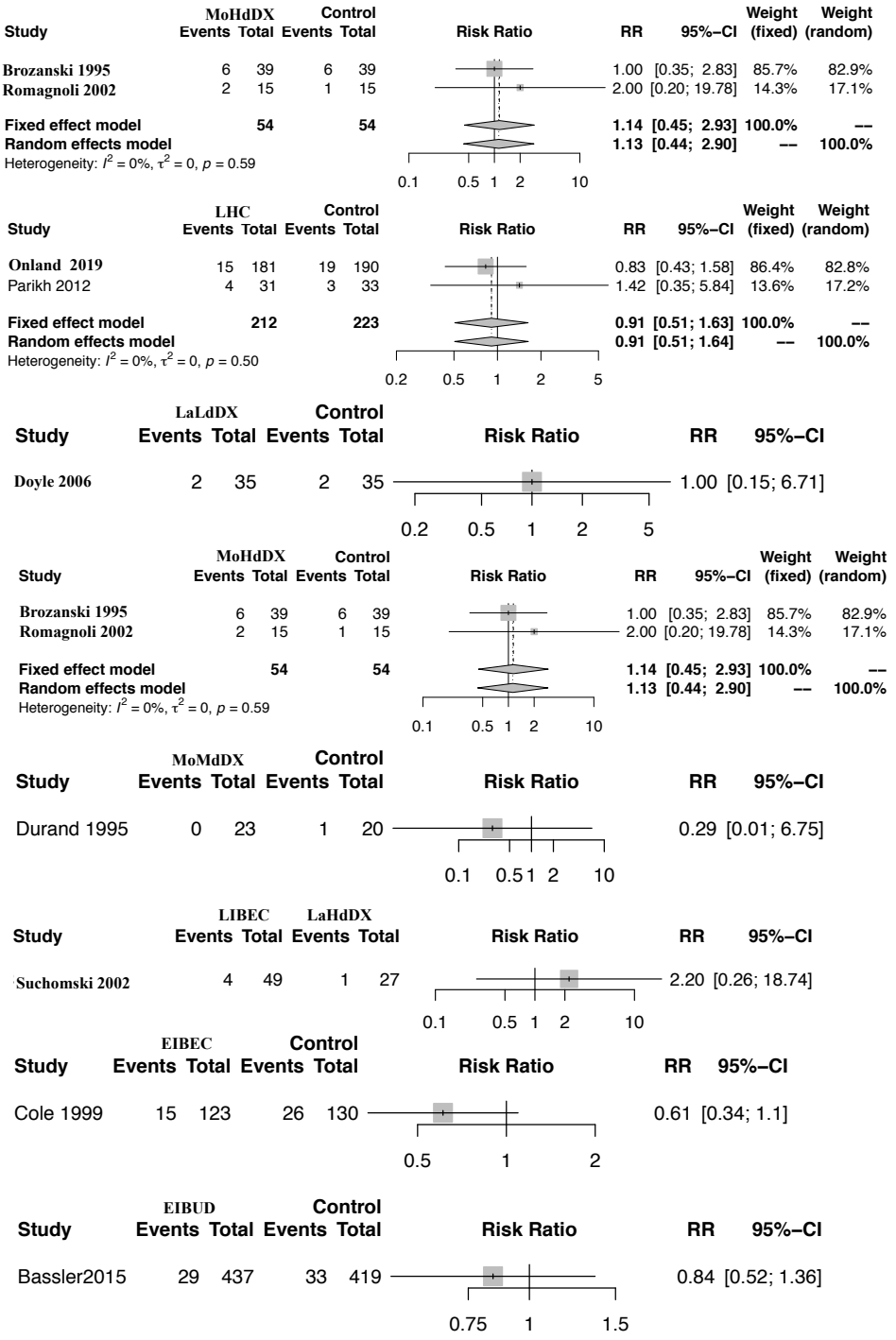
eFigure 45. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for NEC (C)

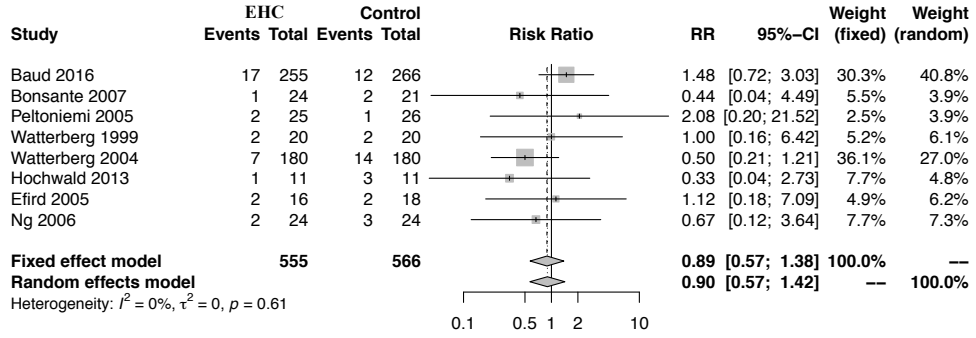


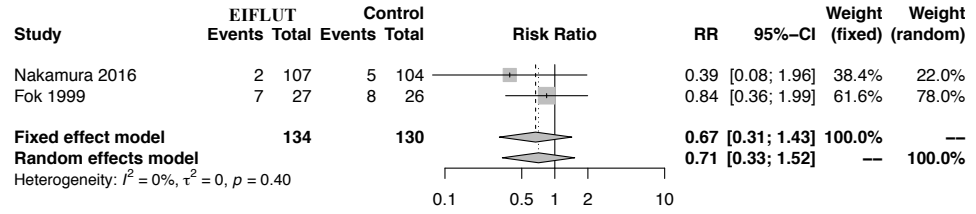
eFigure 46. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for NEC

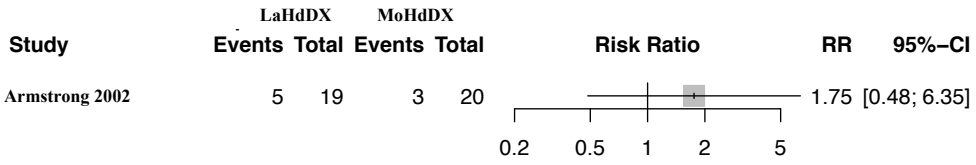
EHC	0.6 (0.19, 1.87)	0.85 (0.3, 2.62)	0.75 (0.24, 2.17)	0.96 (0.13, 6.88)	1.46 (0.18, 15.65)	1.09 (0.26, 5.44)	0.97 (0.37, 2.8)	1.24 (0.09, 23.28)	0.9 (0.2, 4.39)	1.35 (0.4, 5.11)	0.19 (0, 5.48)	0.36 (0.01, 4.86)	0.93 (0.54, 1.58)
1.68 (0.53, 5.24)	EIBEC	1.41 (0.38, 5.94)	1.25 (0.3, 4.71)	1.61 (0.19, 13.78)	2.44 (0.25, 30.94)	1.82 (0.36, 11.27)	1.61 (0.45, 6.46)	2.07 (0.13, 44.38)	1.5 (0.28, 9.39)	2.25 (0.52, 11.1)	0.31 (0, 10.19)	0.6 (0.02, 9.27)	1.56 (0.57, 4.23)
1.18 (0.38, 3.37)	0.71 (0.17, 2.66)	EIBUD	0.88 (0.22, 3.13)	1.13 (0.13, 9.03)	1.7 (0.18, 19.72)	1.28 (0.47, 3.95)	1.14 (0.32, 4.12)	1.46 (0.09, 29.25)	1.06 (0.36, 3.22)	1.58 (0.37, 7.1)	0.22 (0, 6.27)	0.43 (0.01, 5.68)	1.1 (0.4, 2.7)
1.34 (0.46, 4.17)	0.8 (0.21, 3.34)	1.14 (0.32, 4.63)	EIFLUT	1.3 (0.16, 10.97)	1.97 (0.21, 24.94)	1.46 (0.3, 9.11)	1.3 (0.38, 5.02)	1.68 (0.1, 34.07)	1.2 (0.24, 7.27)	1.8 (0.44, 8.87)	0.26 (0, 7.94)	0.49 (0.01, 7.45)	1.25 (0.49, 3.36)
1.04 (0.15, 7.43)	0.62 (0.07, 5.22)	0.89 (0.11, 7.41)	0.77 (0.09, 6.3)	LaHdDX	1.54 (0.1, 27.78)	1.15 (0.12, 12.39)	1.02 (0.13, 8.13)	1.27 (0.2, 11.71)	0.94 (0.09, 10.41)	1.39 (0.32, 6.66)	0.19 (0, 8.7)	0.36 (0.01, 8.68)	0.97 (0.15, 6.3)
0.69 (0.06, 5.59)	0.41 (0.03, 3.97)	0.59 (0.05, 5.6)	0.51 (0.04, 4.75)	0.65 (0.04, 10.3)	LaLdDX	0.75 (0.06, 9.32)	0.68 (0.06, 6.18)	0.86 (0.03, 26.58)	0.61 (0.04, 7.73)	0.92 (0.07, 9.75)	0.12 (0, 6.24)	0.23 (0, 6.3)	0.64 (0.06, 4.78)
0.92 (0.18, 3.81)	0.55 (0.09, 2.75)	0.78 (0.25, 2.15)	0.69 (0.11, 3.29)	0.87 (0.08, 8.34)	1.33 (0.11, 18.1)	LaMdDX	0.89 (0.16, 4.36)	1.13 (0.05, 24.44)	0.82 (0.27, 2.31)	1.22 (0.2, 7.04)	0.17 (0, 4.92)	0.33 (0.01, 4.62)	0.86 (0.19, 3.12)
1.03 (0.36, 2.73)	0.62 (0.15, 2.21)	0.88 (0.24, 3.1)	0.77 (0.2, 2.62)	0.98 (0.12, 7.59)	1.48 (0.16, 17.18)	1.12 (0.23, 6.11)	LHC	1.28 (0.08, 24.63)	0.93 (0.18, 4.98)	1.38 (0.34, 6)	0.19 (0, 5.74)	0.37 (0.01, 5.21)	0.96 (0.39, 2.17)
0.81 (0.04, 11.55)	0.48 (0.02, 7.73)	0.68 (0.03, 11.51)	0.59 (0.03, 9.7)	0.79 (0.09, 4.96)	1.17 (0.04, 39.46)	0.89 (0.04, 18.21)	0.78 (0.04, 12.76)	LIBEC	0.73 (0.03, 14.63)	1.08 (0.08, 12.01)	0.15 (0, 10.32)	0.28 (0, 11.26)	0.75 (0.04, 10.26)
1.11 (0.23, 4.91)	0.67 (0.11, 3.58)	0.94 (0.31, 2.79)	0.83 (0.14, 4.2)	1.06 (0.1, 11.2)	1.63 (0.13, 23.36)	1.21 (0.43, 3.67)	1.07 (0.2, 5.62)	1.37 (0.07, 31.43)	LIBUD	1.49 (0.24, 9.26)	0.21 (0, 6.61)	0.4 (0.01, 6.12)	1.04 (0.23, 4.11)
0.74 (0.2, 2.52)	0.45 (0.09, 1.93)	0.63 (0.14, 2.7)	0.56 (0.11, 2.26)	0.72 (0.15, 3.08)	1.08 (0.1, 13.54)	0.82 (0.14, 4.95)	0.72 (0.17, 2.94)	0.92 (0.08, 12.24)	0.67 (0.11, 4.16)	MoHdDX	0.14 (0, 4.45)	0.27 (0.01, 4.18)	0.69 (0.2, 2.06)
5.32 (0.18, 330.47)	3.19 (0.1, 205.63)	4.48 (0.16, 285.57)	3.88 (0.13, 249.64)	5.15 (0.11, 462.36)	8.03 (0.16, 797.65)	5.75 (0.2, 398.13)	5.16 (0.17, 331.58)	6.83 (0.1, 936.44)	4.72 (0.15, 336.81)	7.19 (0.22, 514.58)	MoLdDX	1.8 (0.25, 16.02)	4.91 (0.18, 295.76)
2.77 (0.21, 97.12)	1.67 (0.11, 65.27)	2.32 (0.18, 87.65)	2.04 (0.13, 83.06)	2.75 (0.12, 143.52)	4.29 (0.16, 254.21)	3.03 (0.22, 124.09)	2.71 (0.19, 105.59)	3.63 (0.09, 334.47)	2.49 (0.16, 105.09)	3.77 (0.24, 158.69)	0.56 (0.06, 4.01)	MoMdDX	2.55 (0.2, 87.74)
1.08 (0.63, 1.86)	0.64 (0.24, 1.75)	0.91 (0.37, 2.49)	0.8 (0.3, 2.02)	1.03 (0.16, 6.89)	1.56 (0.21, 15.79)	1.17 (0.32, 5.33)	1.04 (0.46, 2.59)	1.33 (0.1, 23.7)	0.96 (0.24, 4.32)	1.44 (0.49, 4.96)	0.2 (0, 5.54)	0.39 (0.01, 4.96)	PLACEBO

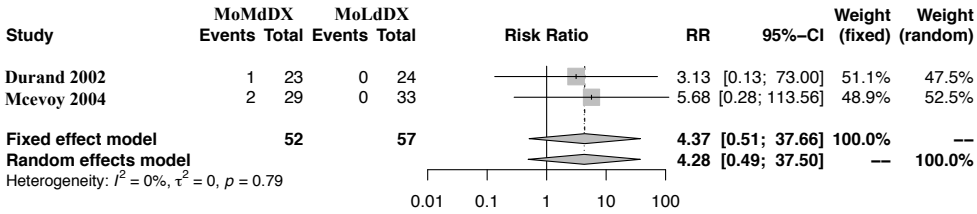
eFigure 47. Direct Evidence from the Pair Wise Comparisons for NEC

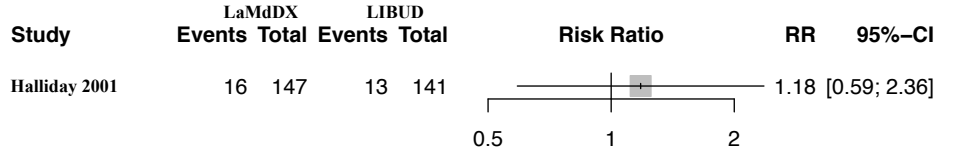


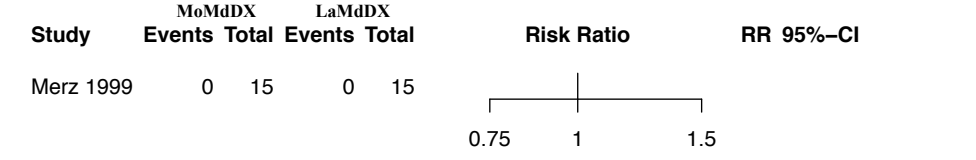


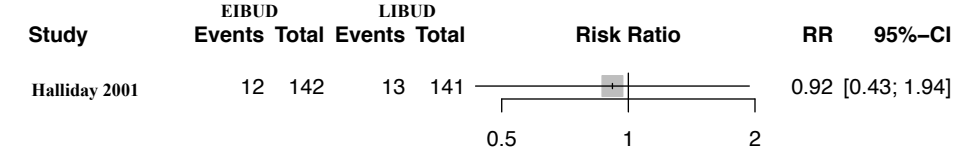




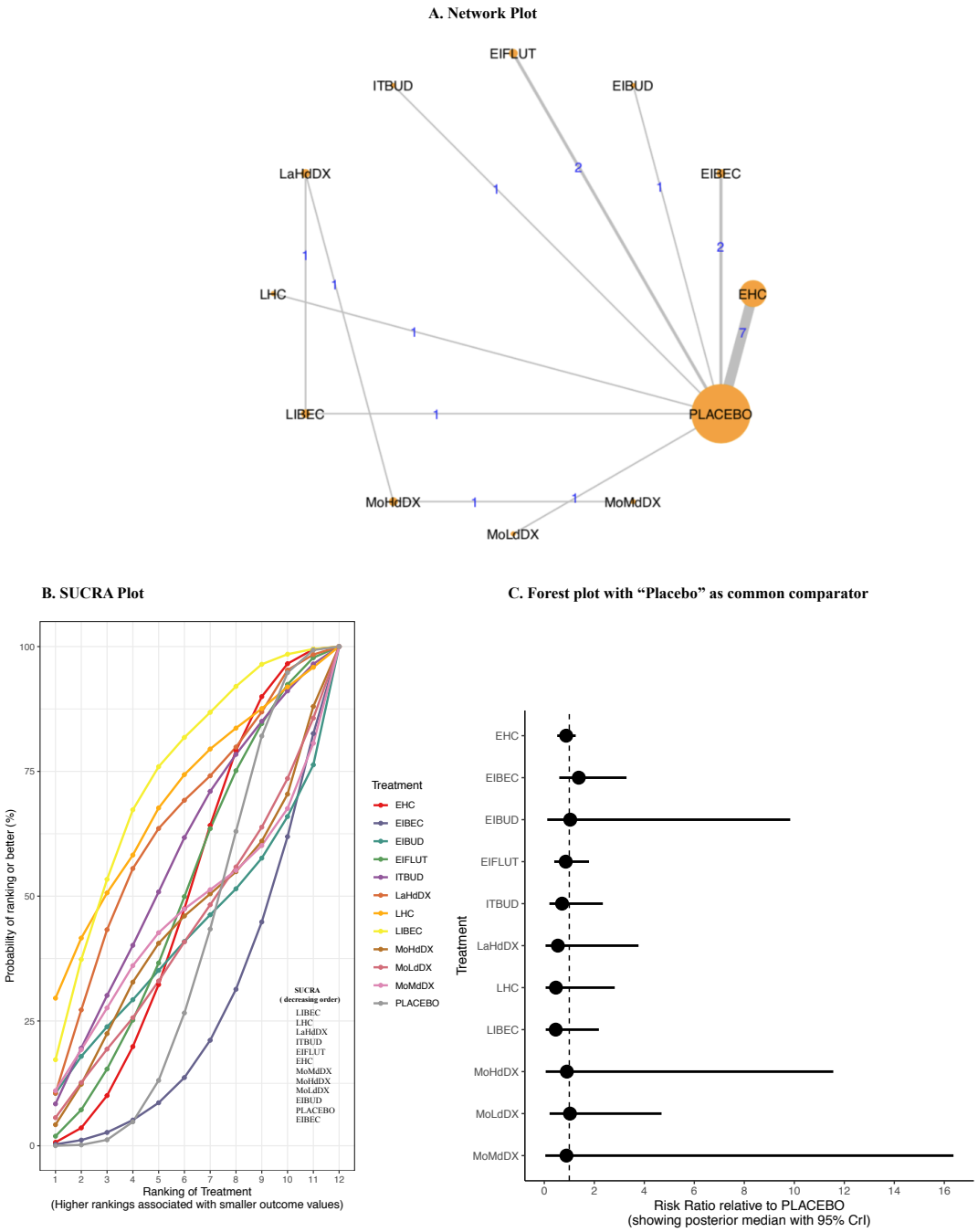




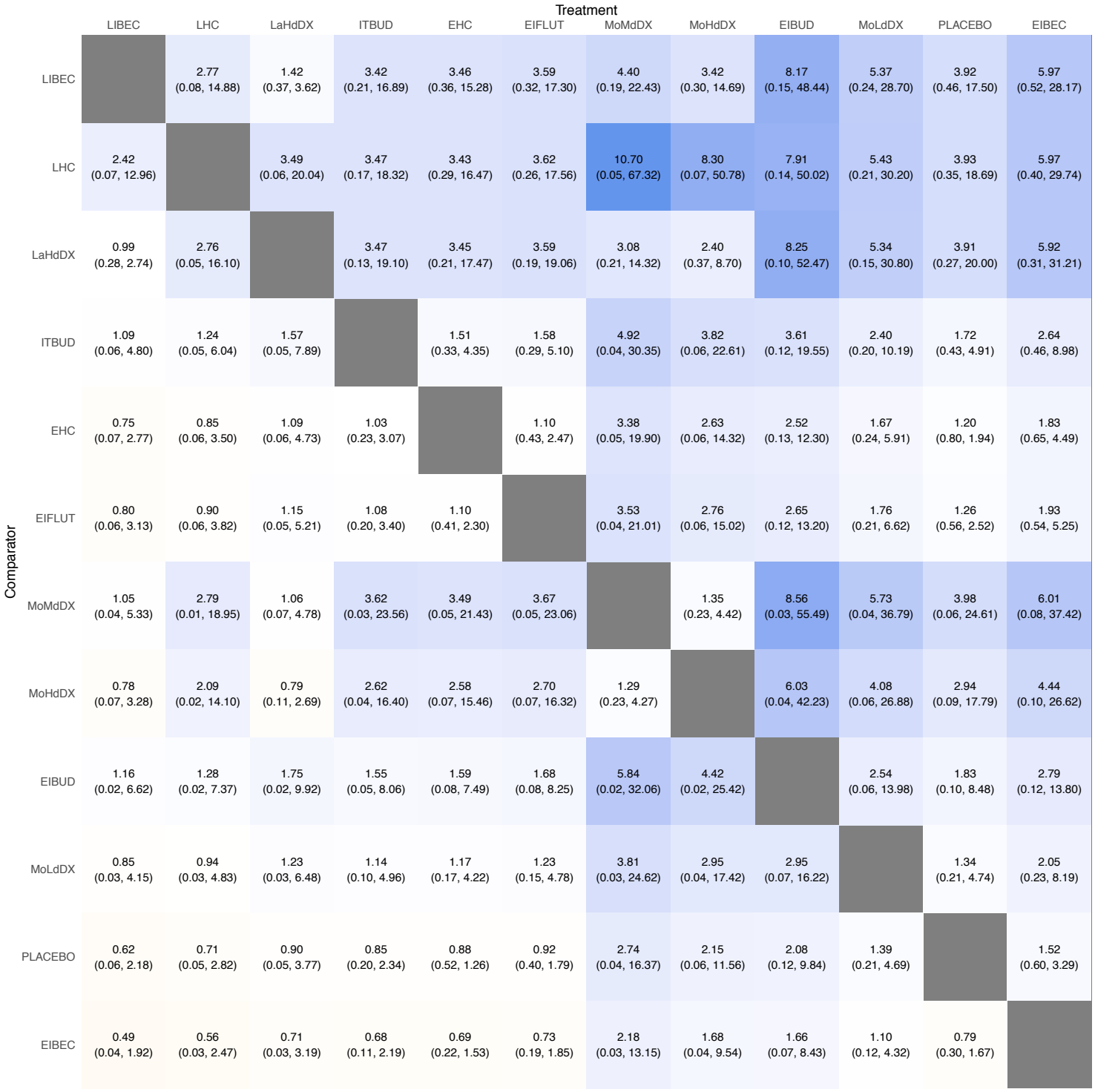




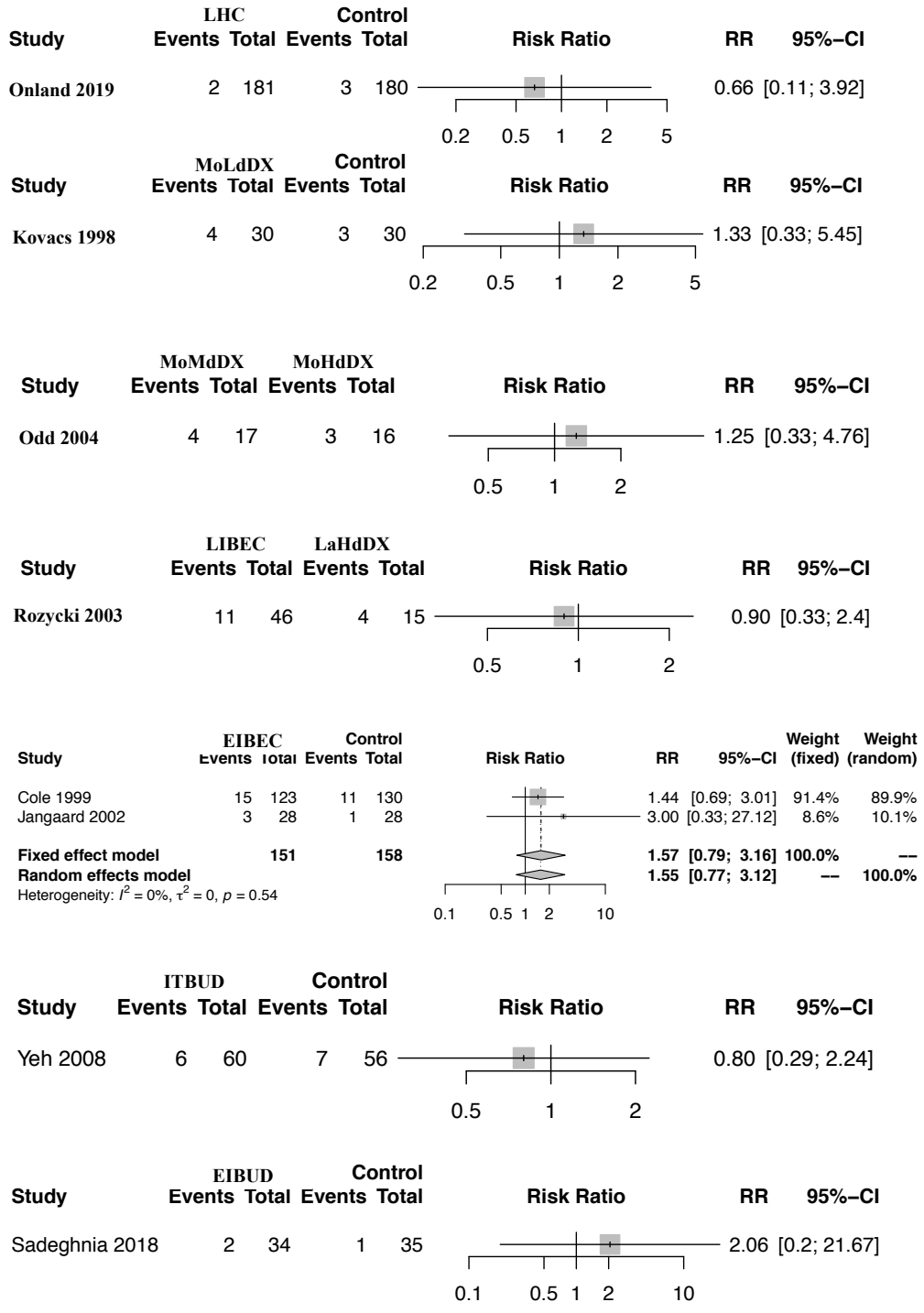
eFigure 48. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for IVH>II (C)

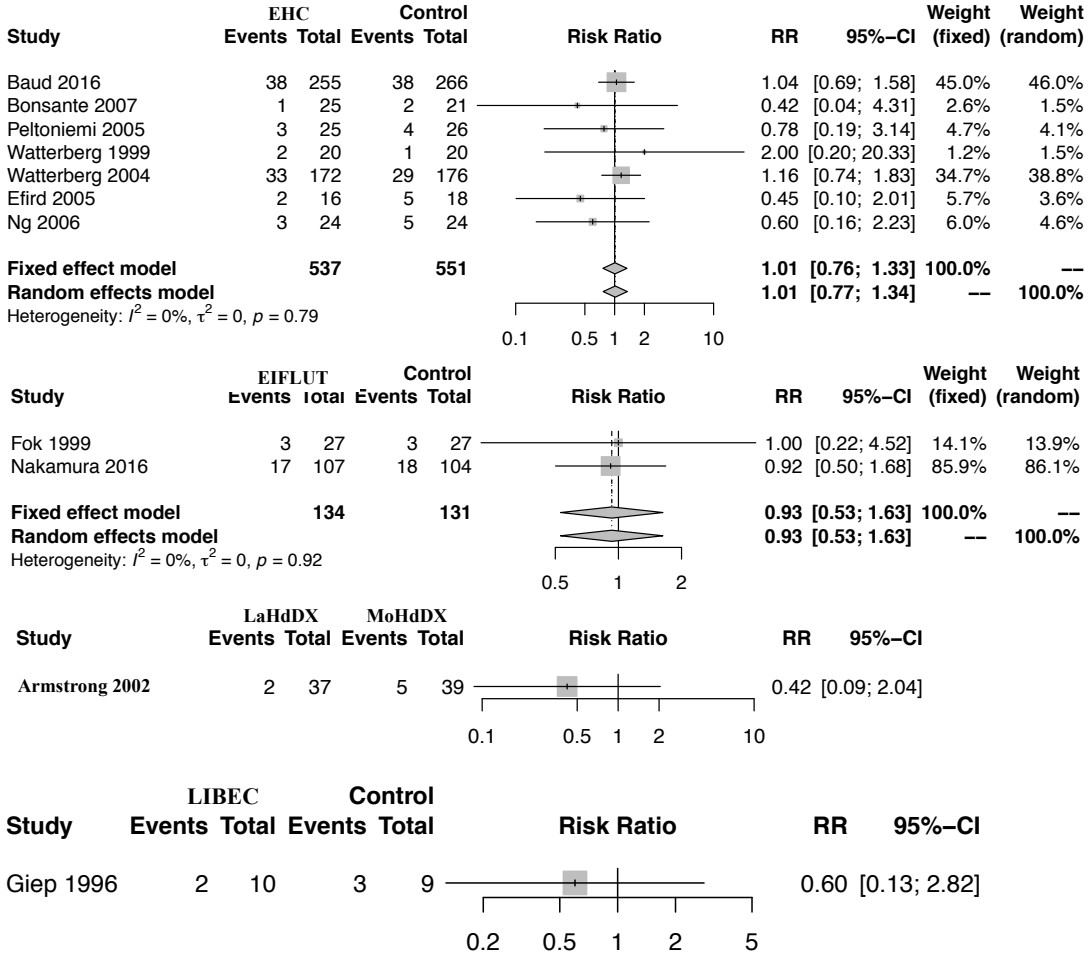


eFigure 49. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for IVH >II

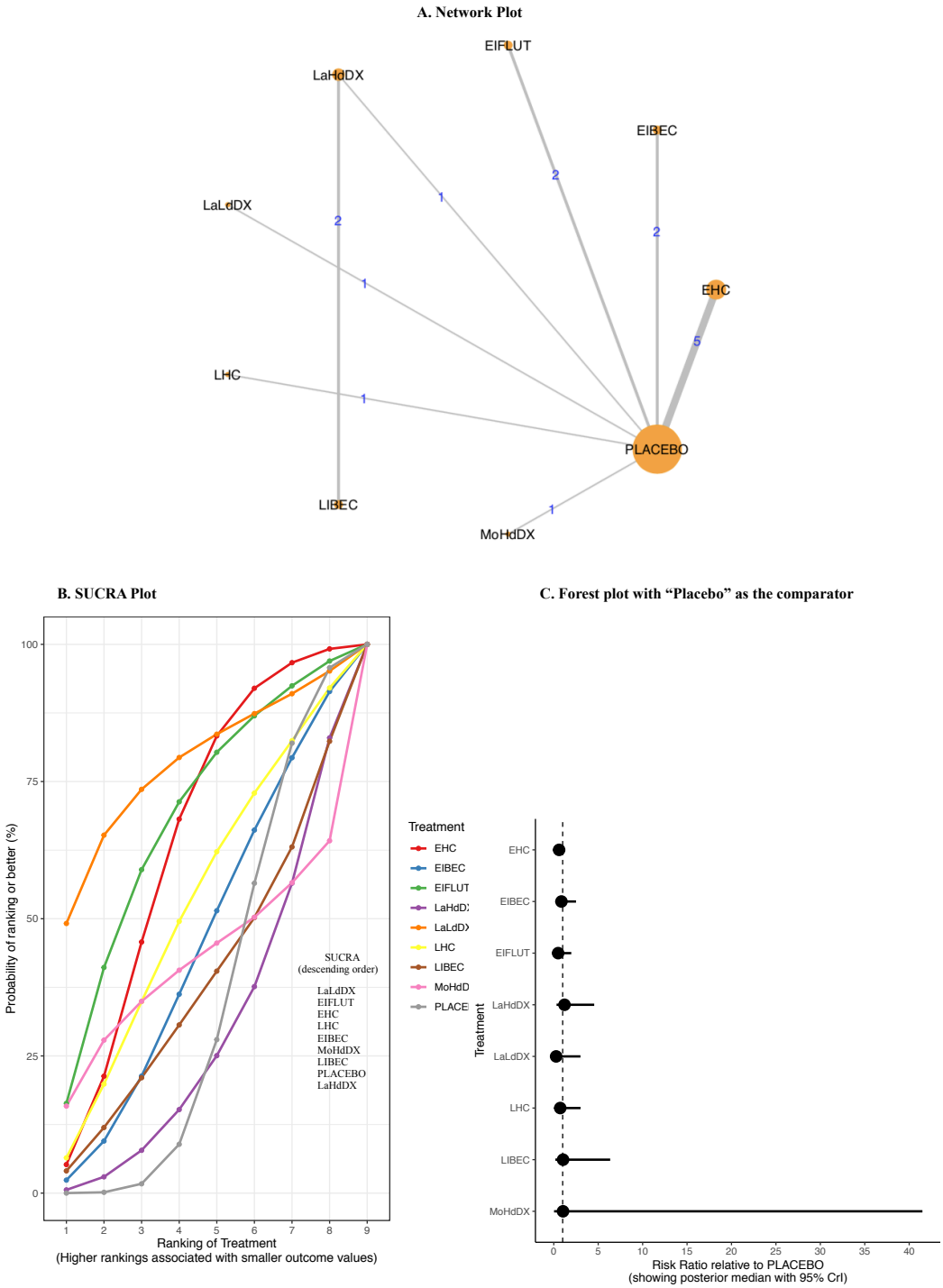


eFigure 50. Direct Evidence from the Pair Wise Comparisons for IVH >II

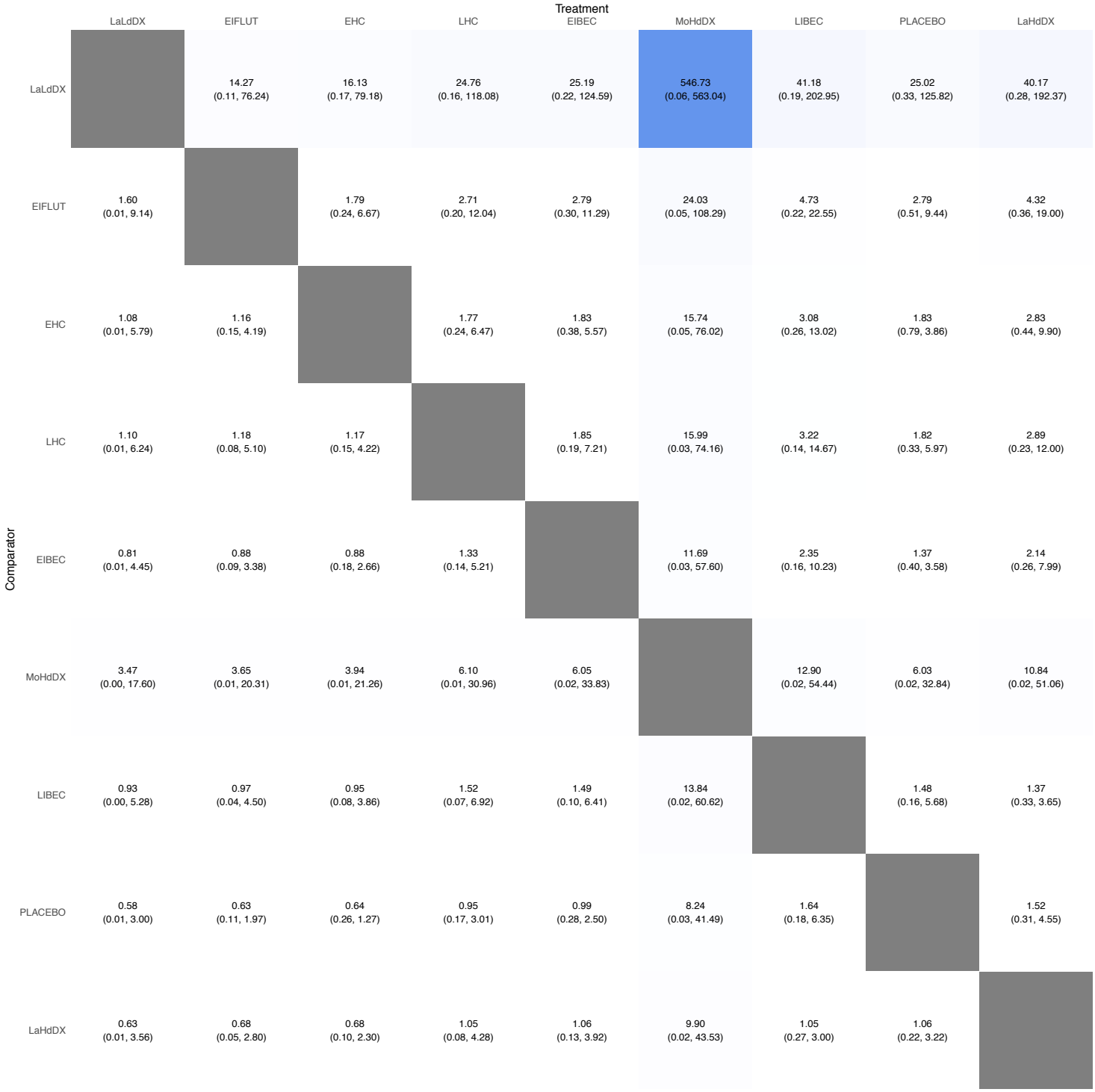




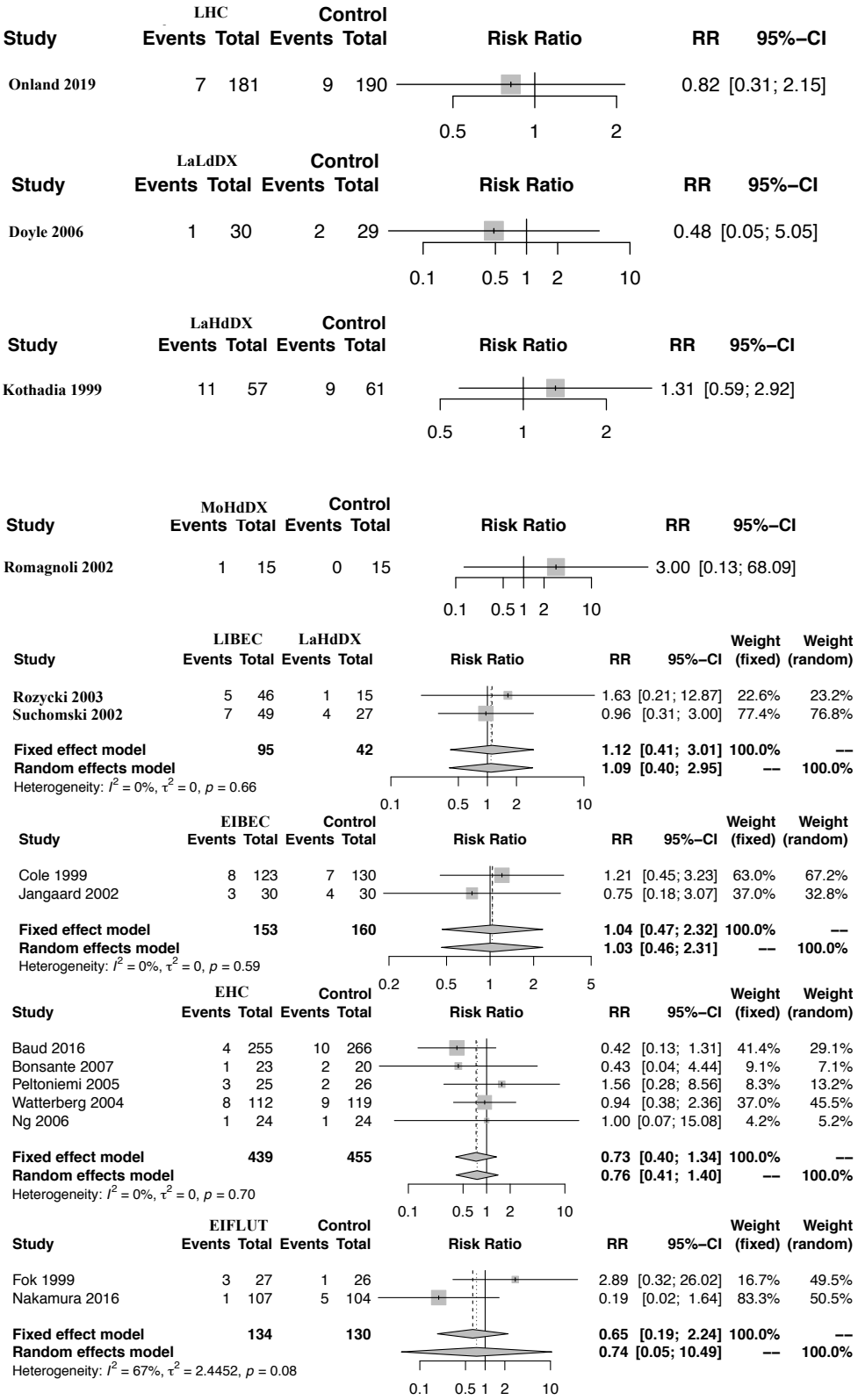
eFigure 51. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for PVL (C)



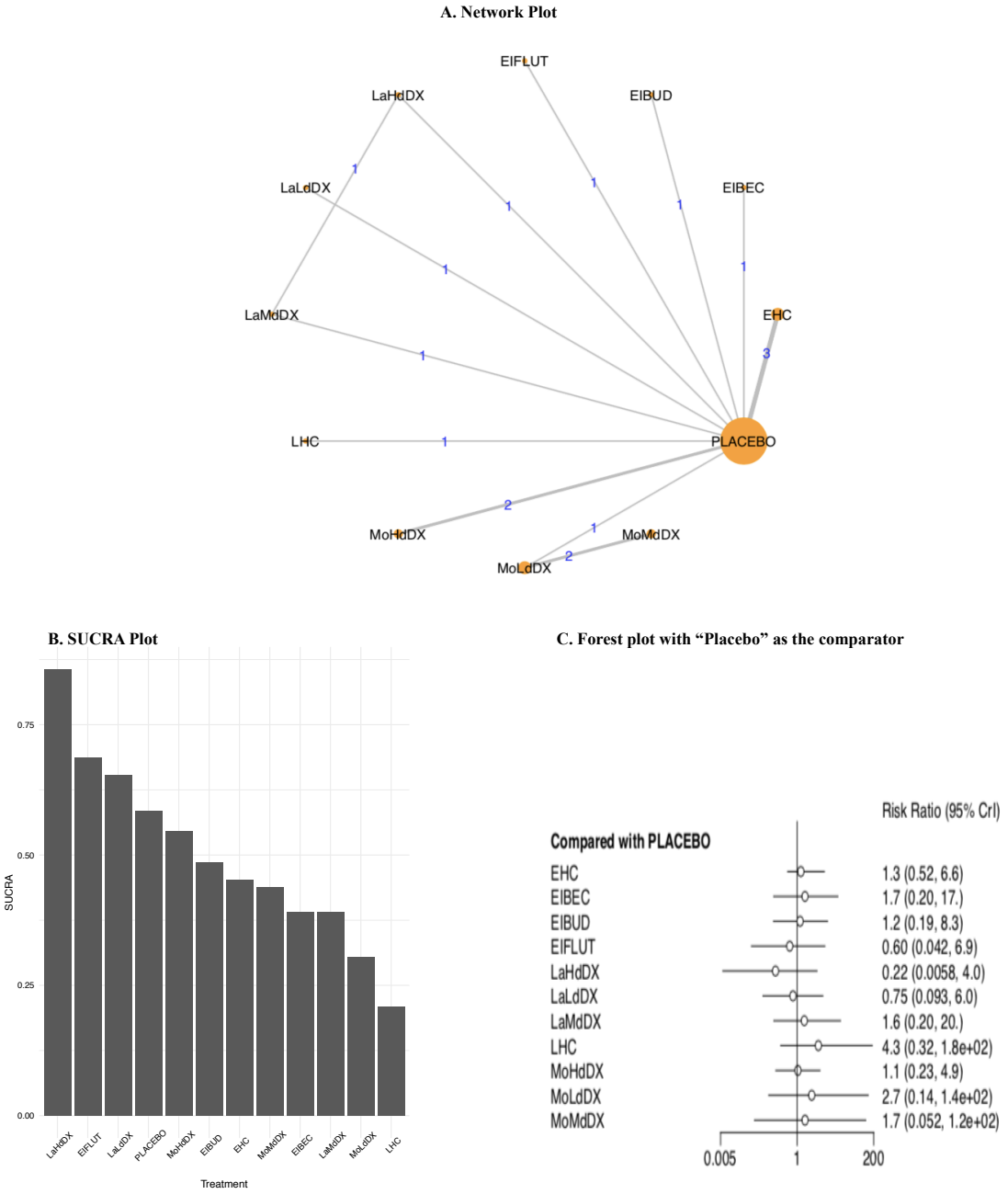
eFigure 52. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for PVL



eFigure 53. Direct Evidence from the Pair Wise Comparisons for PVL



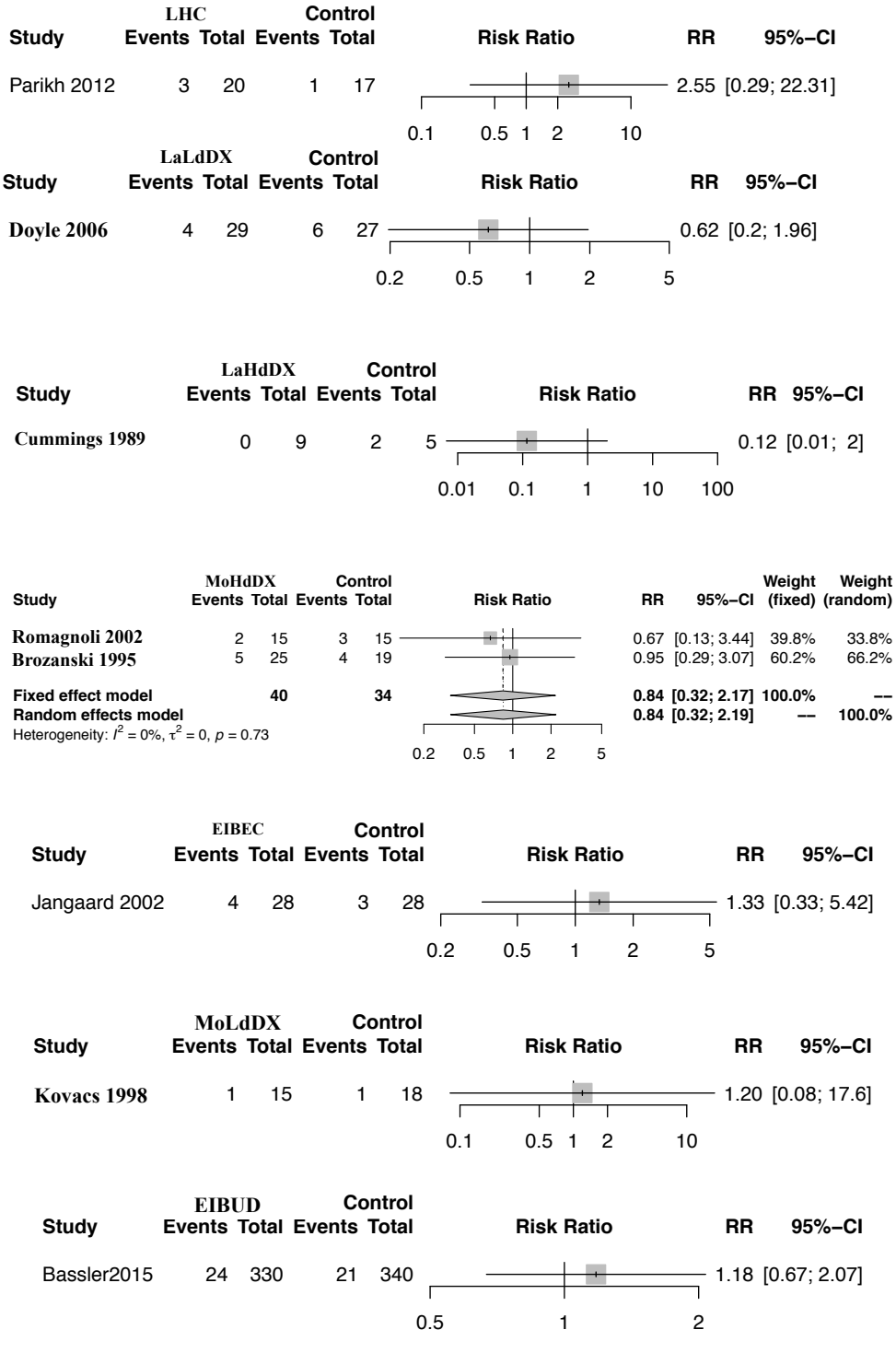
eFigure 54. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for CP (C)

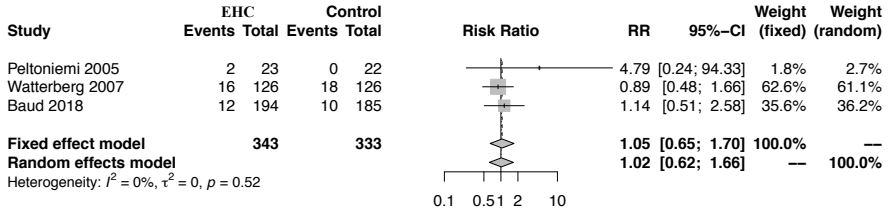


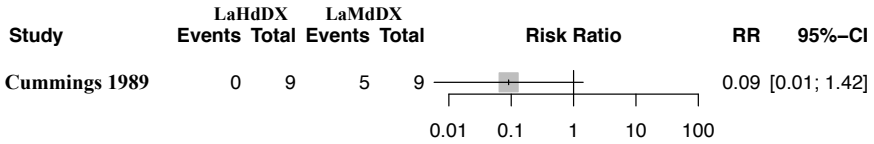
eFigure 55. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for CP

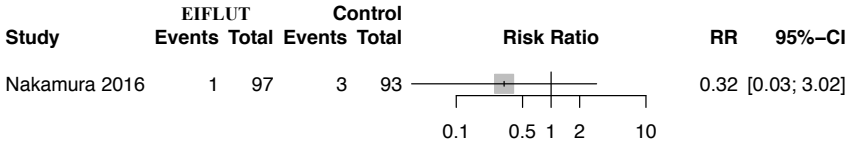
EHC	1.31 (0.08, 13.99)	0.96 (0.07, 6.33)	0.45 (0.02, 5.57)	0.16 (0, 3.3)	0.57 (0.04, 4.66)	1.26 (0.08, 16.2)	3.24 (0.14, 141.56)	0.81 (0.08, 4.28)	2.03 (0.06, 109.61)	1.29 (0.03, 87.89)	0.78 (0.15, 1.94)
0.76 (0.07, 12.93)	**EIBEC**	0.71 (0.04, 12.73)	0.34 (0.01, 9.28)	0.13 (0, 4.7)	0.43 (0.02, 8.74)	0.97 (0.04, 24.31)	2.62 (0.08, 174.82)	0.61 (0.04, 8.86)	1.61 (0.04, 139.31)	1.01 (0.02, 116.61)	0.58 (0.06, 5.1)
1.04 (0.16, 13.91)	1.4 (0.08, 25.59)	**EIBUD**	0.48 (0.02, 9.84)	0.18 (0, 5.03)	0.62 (0.04, 9.59)	1.35 (0.08, 29.22)	3.57 (0.15, 216.15)	0.86 (0.08, 9.25)	2.26 (0.06, 163.22)	1.44 (0.03, 134.2)	0.82 (0.12, 5.17)
2.24 (0.18, 54.06)	2.98 (0.11, 97.19)	2.08 (0.1, 52.91)	**EIFLUT**	0.37 (0, 18.75)	1.26 (0.05, 33.67)	2.87 (0.11, 106.07)	7.68 (0.21, 666.45)	1.78 (0.1, 37.84)	4.82 (0.1, 494.94)	3.01 (0.04, 419.26)	1.68 (0.15, 23.74)
6.08 (0.3, 322.87)	7.81 (0.21, 581.16)	5.54 (0.2, 320.54)	2.73 (0.05, 210.57)	**LaHdDX**	3.36 (0.1, 205.83)	7.28 (0.64, 263.38)	21.47 (0.4, 3315.55)	4.77 (0.19, 234.04)	13.02 (0.2, 2461.42)	8.23 (0.09, 1903.63)	4.48 (0.25, 172.41)
1.75 (0.21, 26.85)	2.31 (0.11, 48.94)	1.62 (0.1, 26.39)	0.79 (0.03, 18.5)	0.3 (0, 9.81)	**LaLdDX**	2.25 (0.12, 53.69)	5.97 (0.22, 409.95)	1.42 (0.1, 18.5)	3.68 (0.1, 311.49)	2.36 (0.04, 246.75)	1.34 (0.17, 10.72)
0.79 (0.06, 12.92)	1.03 (0.04, 23.99)	0.74 (0.03, 12.59)	0.35 (0.01, 9.33)	0.14 (0, 1.56)	0.44 (0.02, 8.49)	**LaMdDX**	2.59 (0.07, 189.1)	0.63 (0.04, 8.45)	1.62 (0.04, 139.63)	1.01 (0.01, 111.4)	0.61 (0.05, 5.05)
0.31 (0.01, 6.99)	0.38 (0.01, 12.47)	0.28 (0, 6.61)	0.13 (0, 4.84)	0.05 (0, 2.53)	0.17 (0, 4.54)	0.39 (0.01, 13.47)	**LHC**	0.24 (0, 5.02)	0.61 (0.01, 66.35)	0.38 (0, 52.66)	0.23 (0.01, 3.14)
1.24 (0.23, 12.95)	1.64 (0.11, 24.48)	1.16 (0.11, 12.95)	0.56 (0.03, 10.23)	0.21 (0, 5.29)	0.71 (0.05, 9.53)	1.59 (0.12, 28.21)	4.18 (0.2, 223.69)	**MoHdDX**	2.63 (0.09, 166.22)	1.64 (0.03, 143.16)	0.95 (0.2, 4.41)
0.49 (0.01, 15.69)	0.62 (0.01, 27.75)	0.44 (0.01, 15.59)	0.21 (0, 10.05)	0.08 (0, 5.07)	0.27 (0, 10.43)	0.62 (0.01, 27.68)	1.64 (0.02, 179.62)	0.38 (0.01, 10.92)	**MoLdDX**	0.63 (0.1, 3.36)	0.37 (0.01, 7.21)
0.77 (0.01, 39.55)	0.99 (0.01, 62.67)	0.69 (0.01, 37.65)	0.33 (0, 24.65)	0.12 (0, 11.76)	0.42 (0, 24.45)	0.99 (0.01, 68.99)	2.64 (0.02, 394.52)	0.61 (0.01, 28.98)	1.6 (0.3, 9.73)	**MoMdDX**	0.58 (0.01, 19.33)
1.29 (0.52, 6.59)	1.72 (0.2, 16.84)	1.22 (0.19, 8.25)	0.6 (0.04, 6.85)	0.22 (0.01, 3.99)	0.75 (0.09, 5.97)	1.64 (0.2, 20.21)	4.33 (0.32, 181.96)	1.05 (0.23, 4.89)	2.74 (0.14, 137.42)	1.72 (0.05, 115.9)	**PLACEBO**

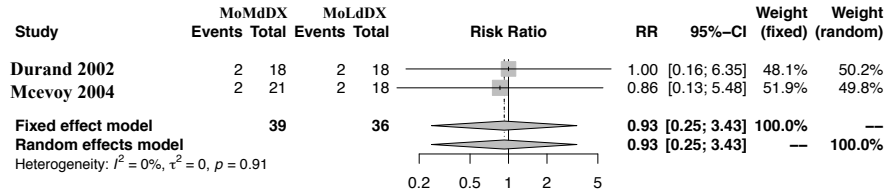
eFigure 56. Direct Evidence from the Pair Wise Comparisons for CP

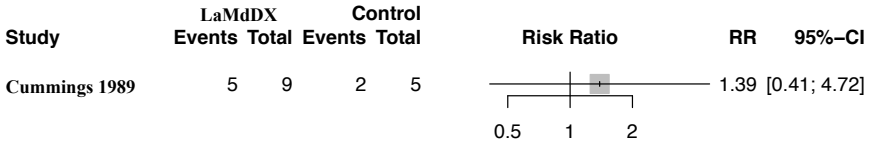




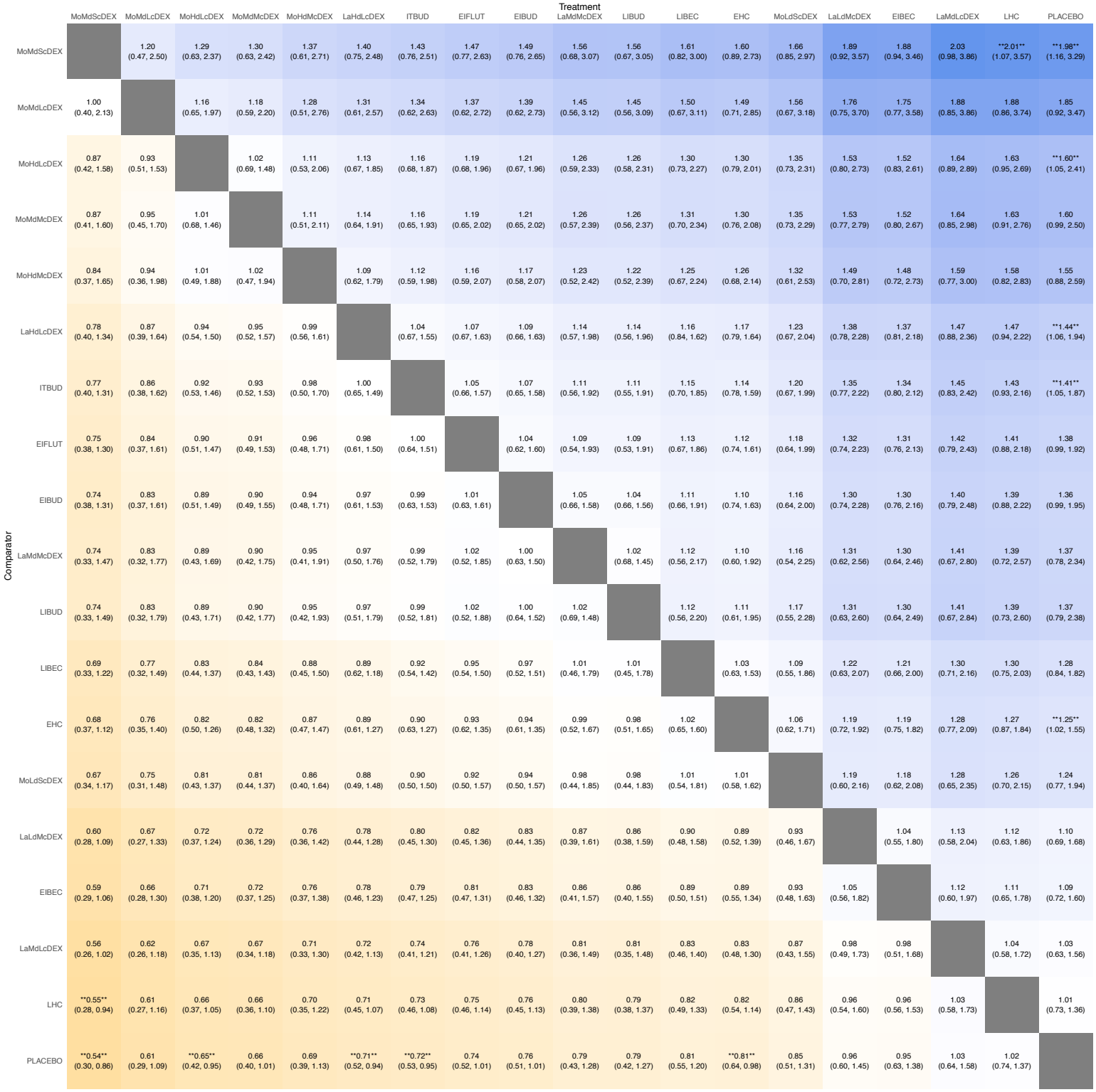




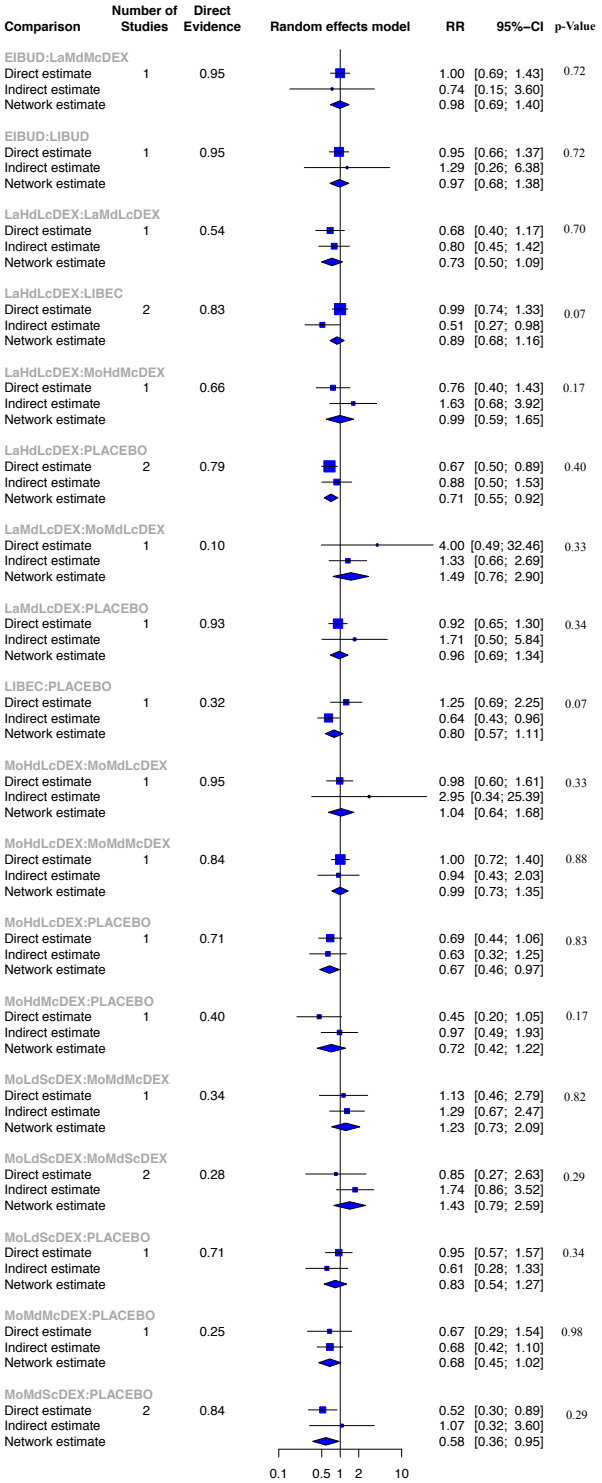




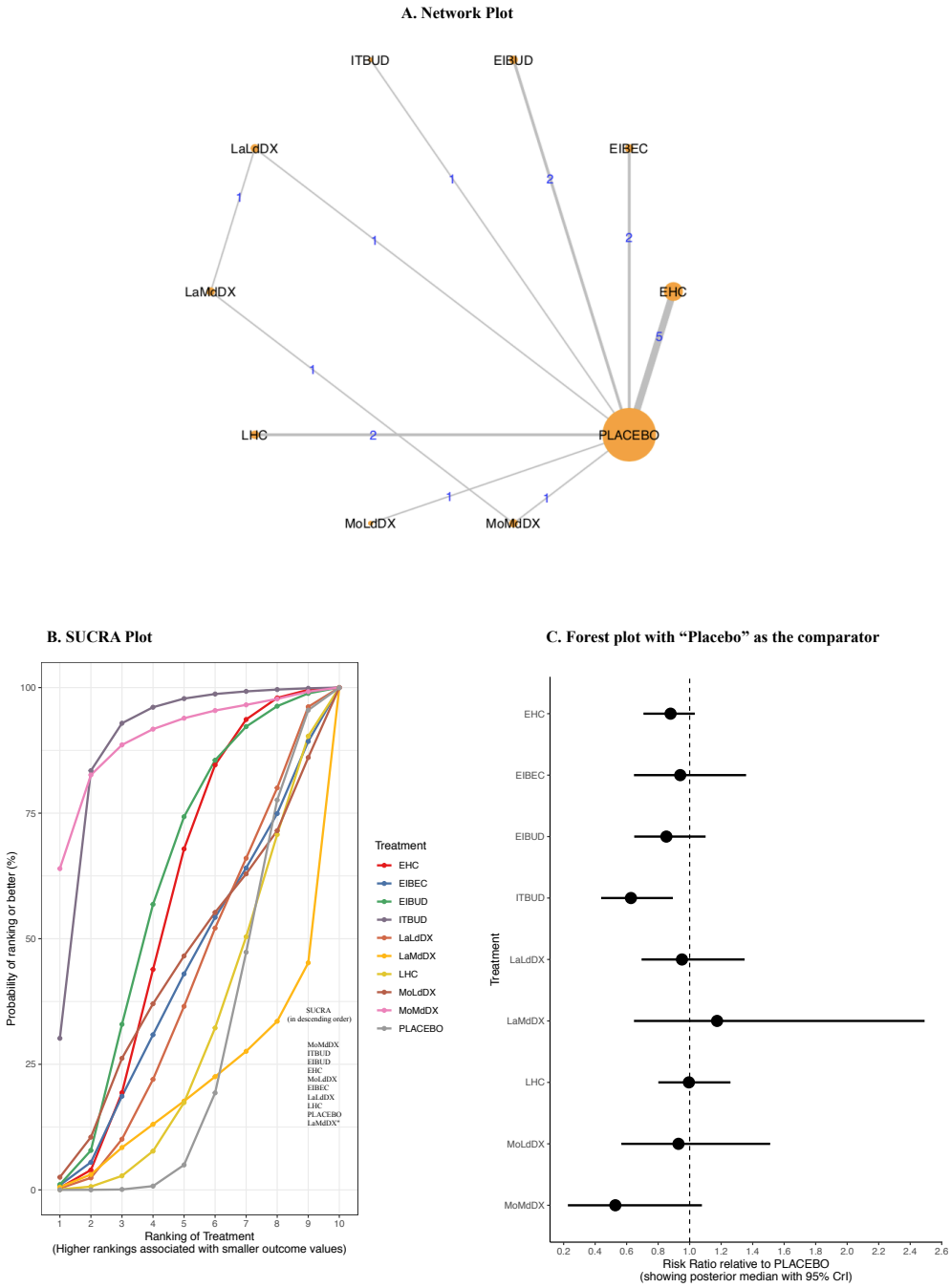
eFigure 57. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Sensitivity Analysis - Duration of Course of Dexamethasone



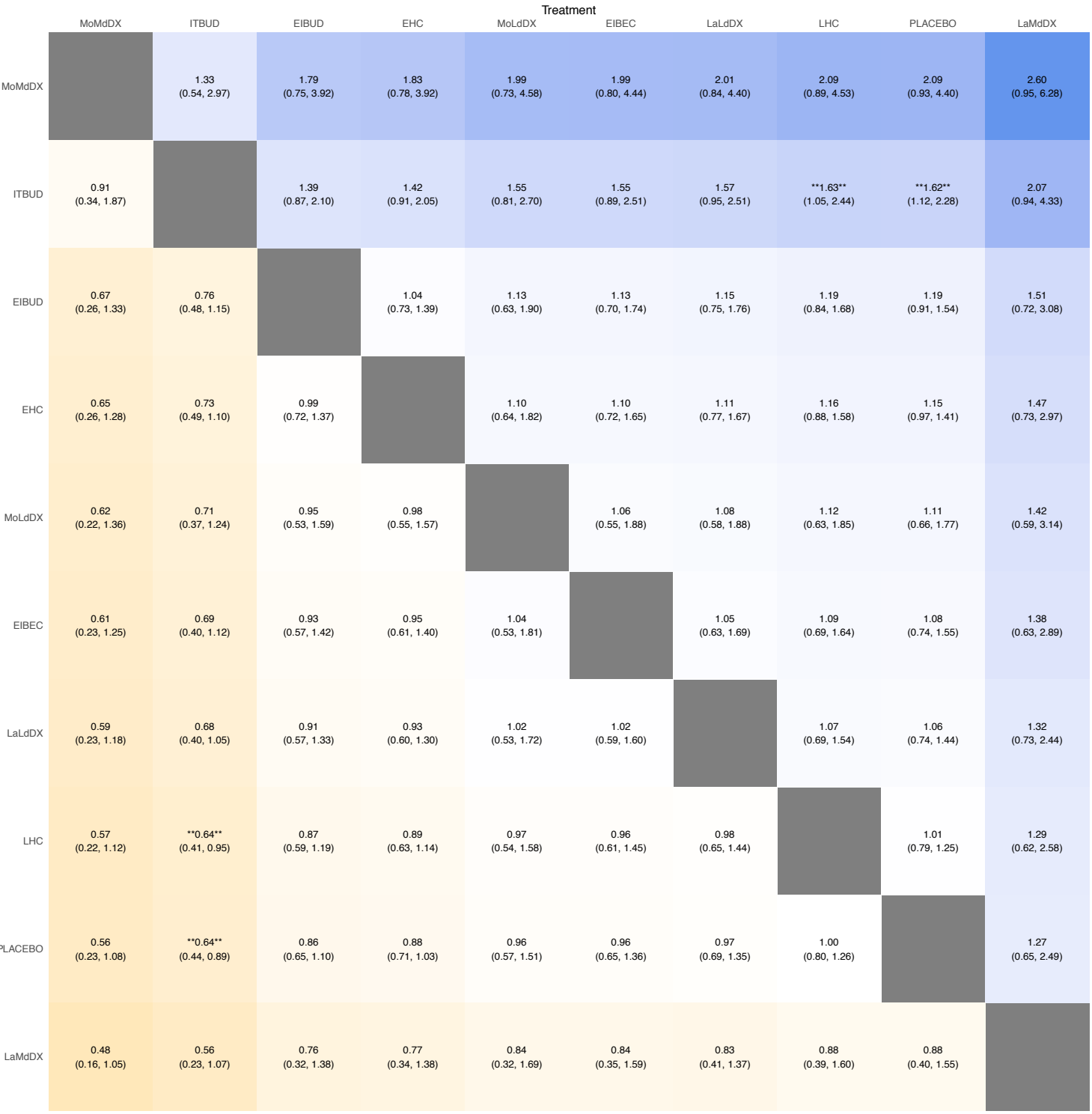
eFigure 58. Split Between Direct and Indirect Evidence for Duration of Course of Dexamethasone



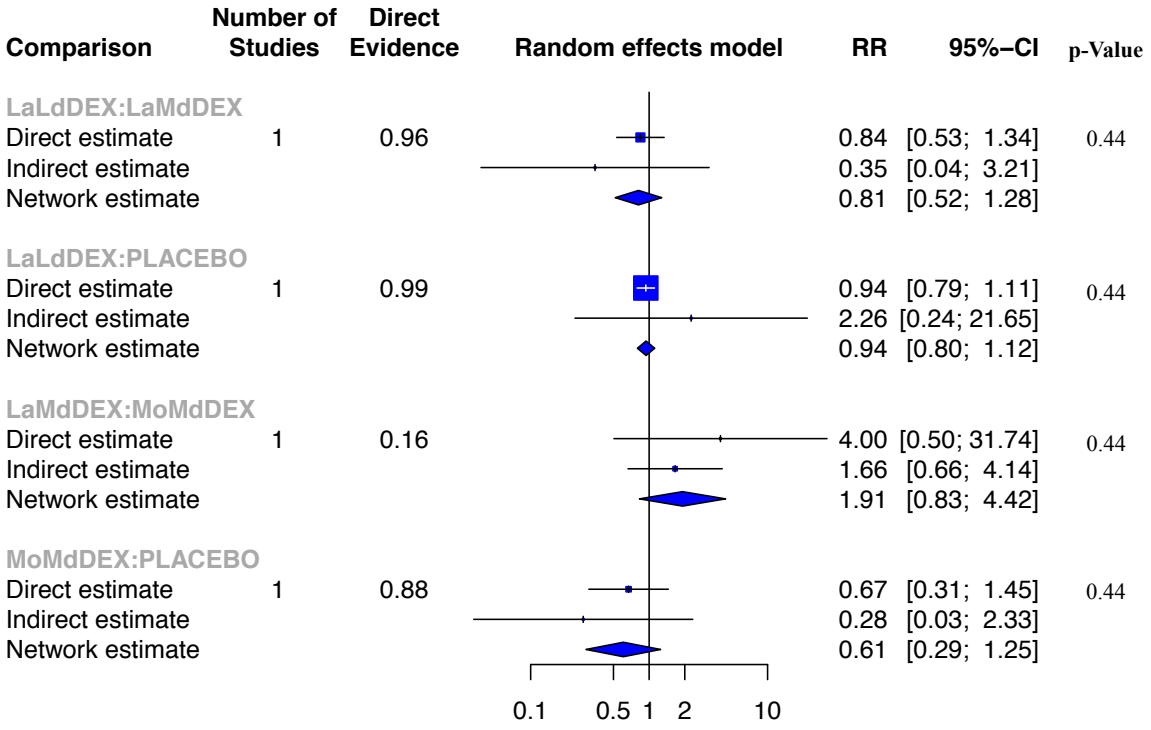
eFigure 59. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Sensitivity Analysis Excluding Trials with Antenatal Corticosteroid Coverage <70% (C)



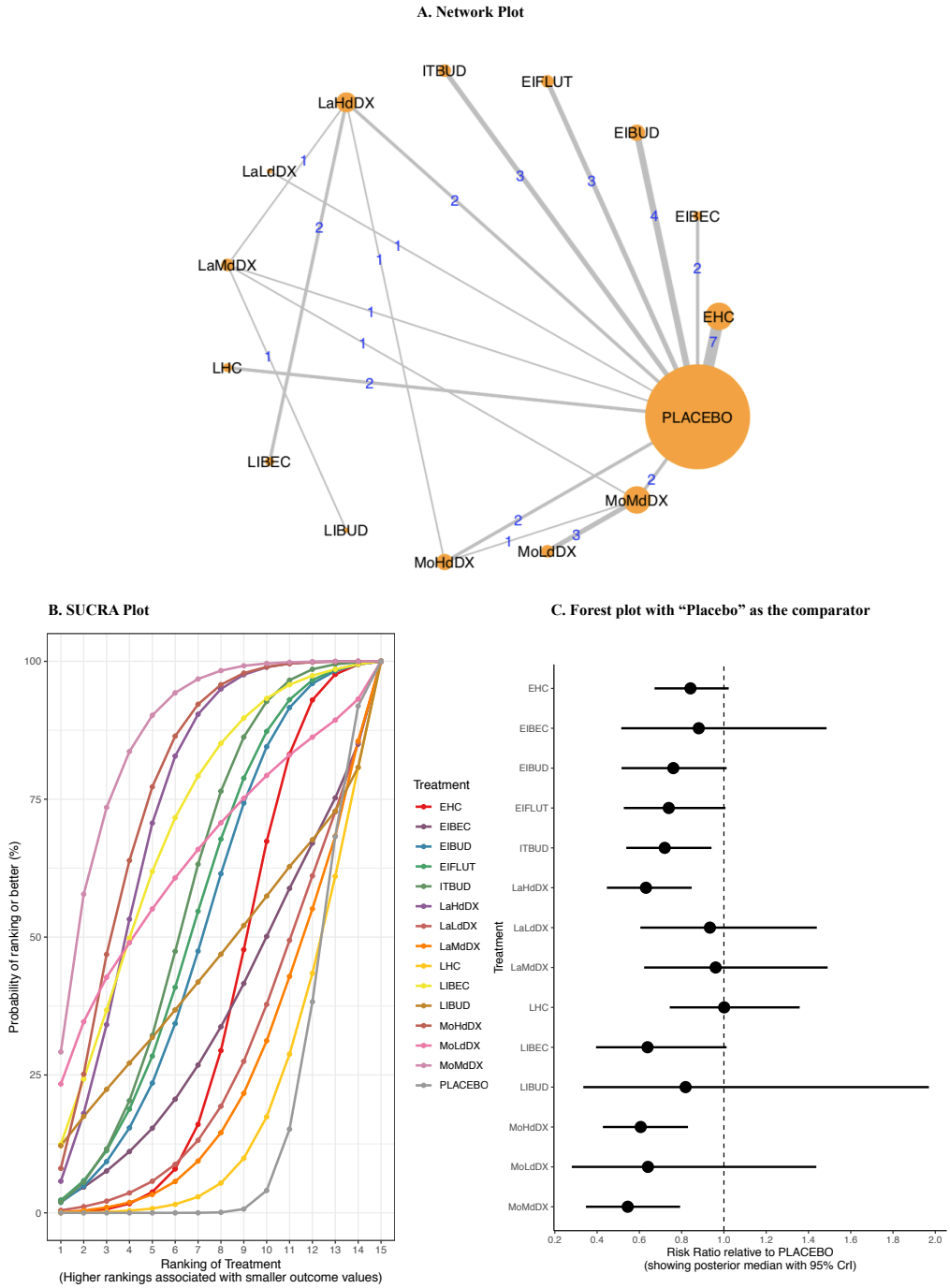
eFigure 60. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Sensitivity Analysis Excluding Trials with Antenatal Corticosteroid Coverage <70%



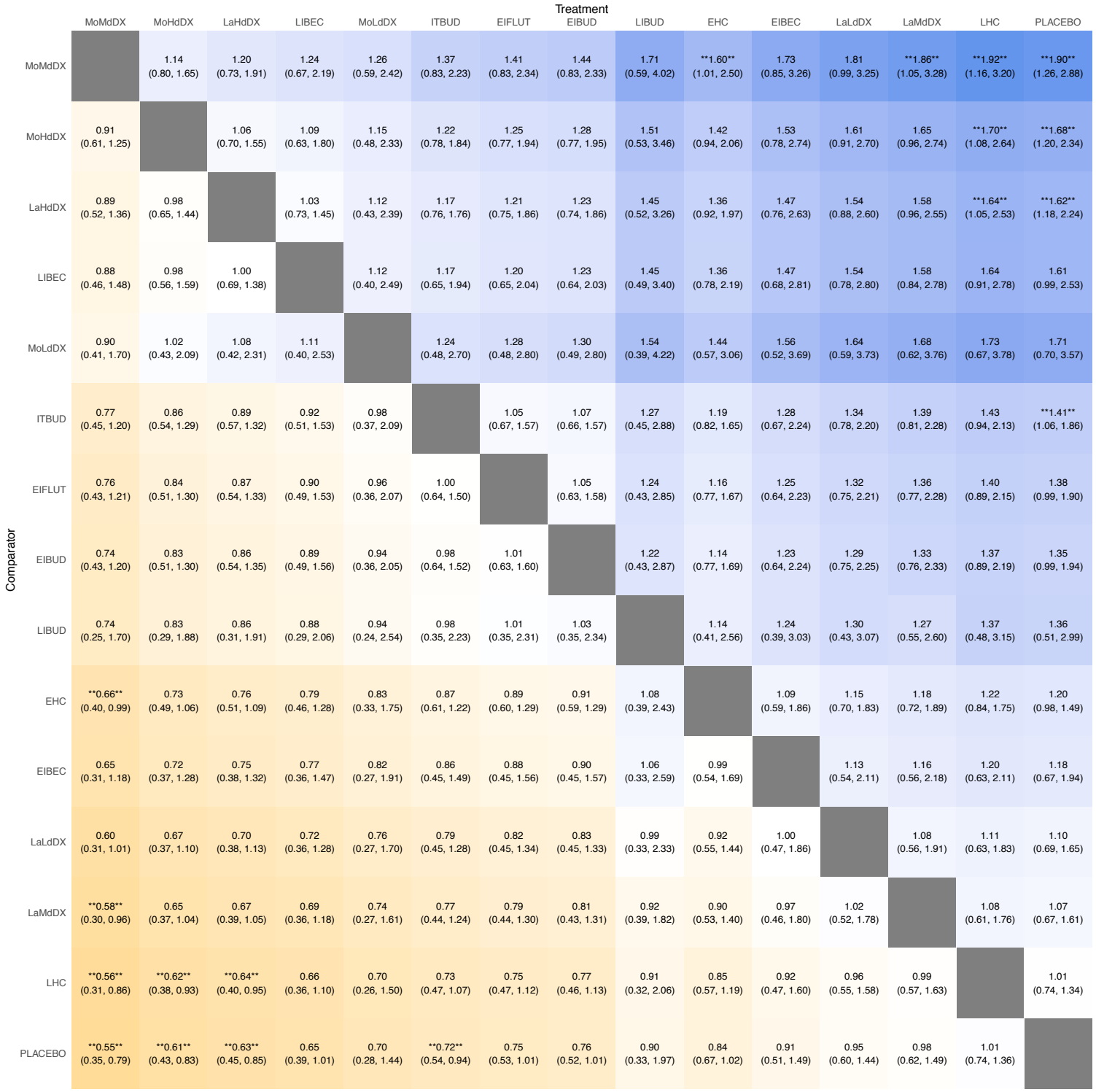
eFigure 61. Split Between Direct and Indirect Evidence for Sensitivity Analysis Excluding Trials with Antenatal Corticosteroid Coverage <70%



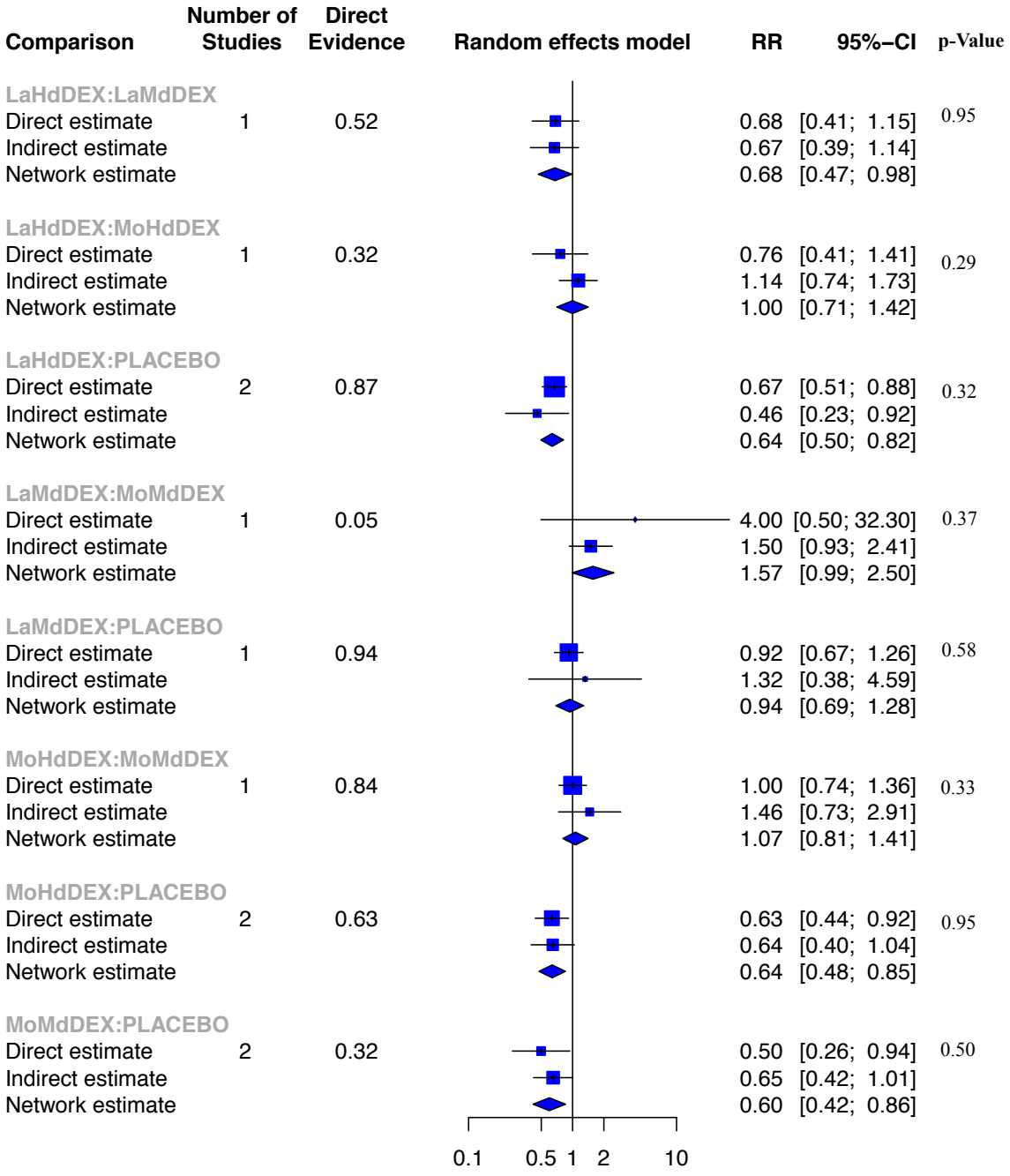
eFigure 62. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Sensitivity Analysis by Excluding Trials with High Risk of Bias (C)



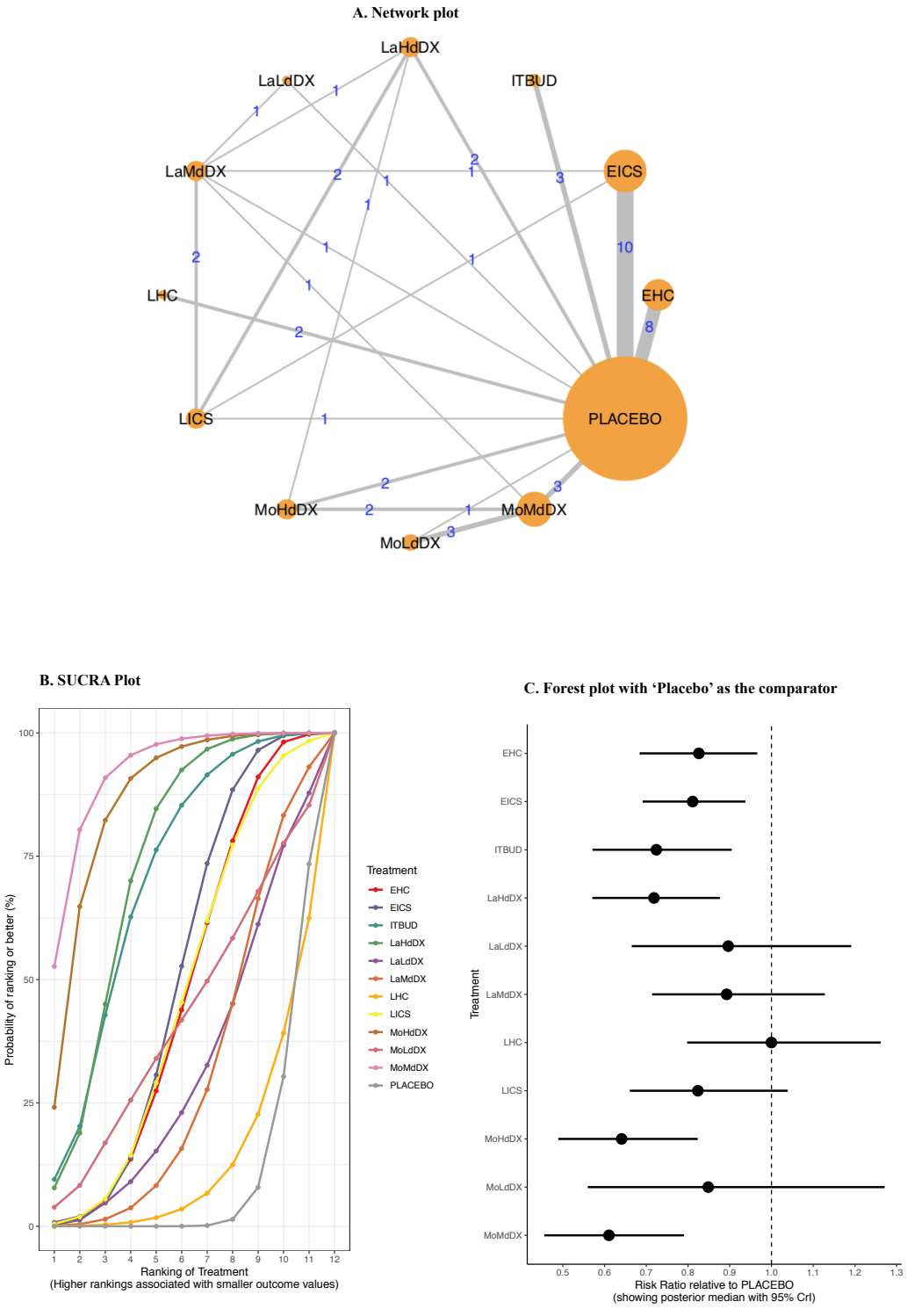
eFigure 63. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Sensitivity Analysis by Excluding Trials with High Risk of Bias



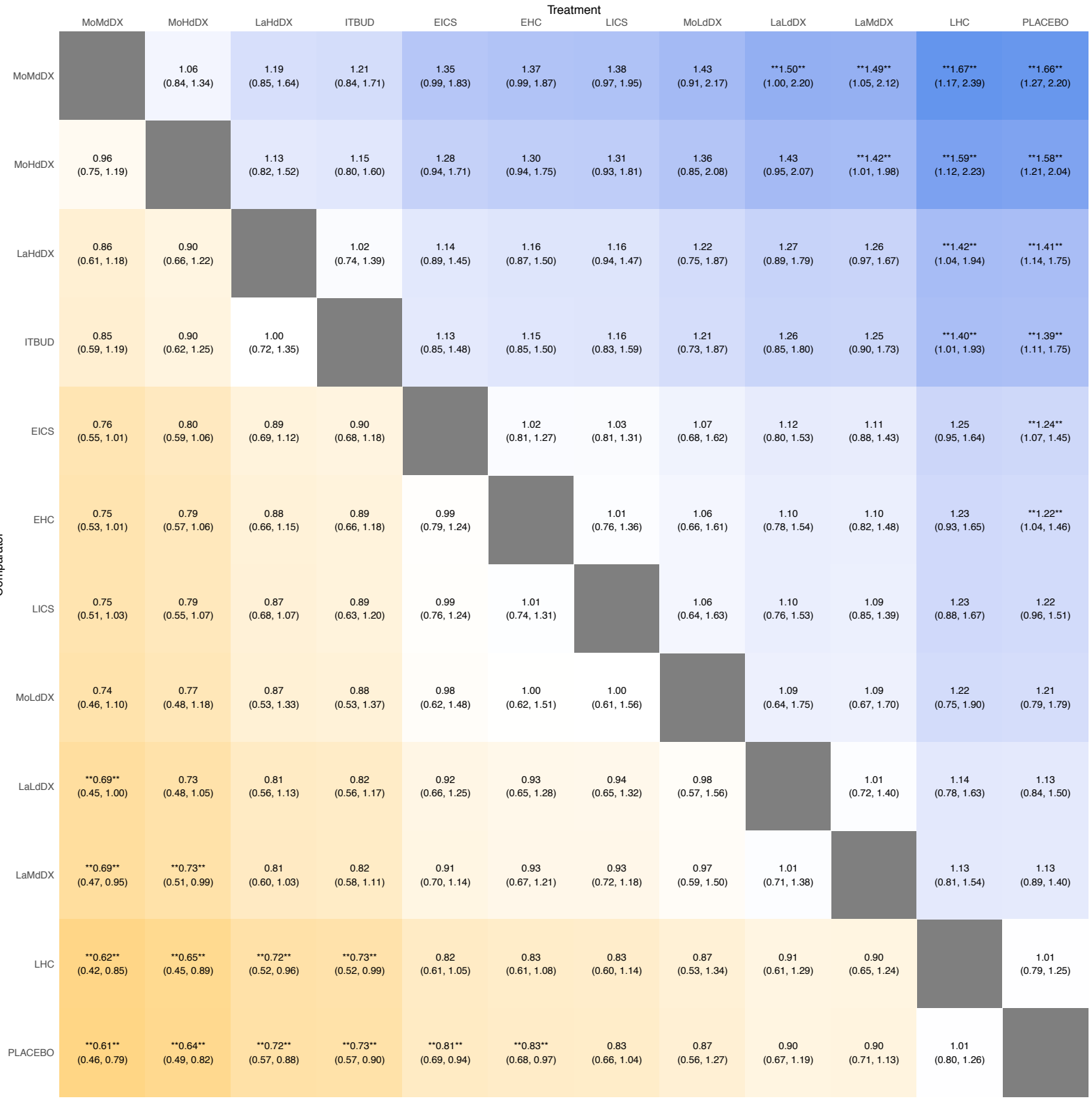
eFigure 64. Split Between Direct and Indirect Evidence for Sensitivity Analysis by Excluding Trials with High Risk of Bias



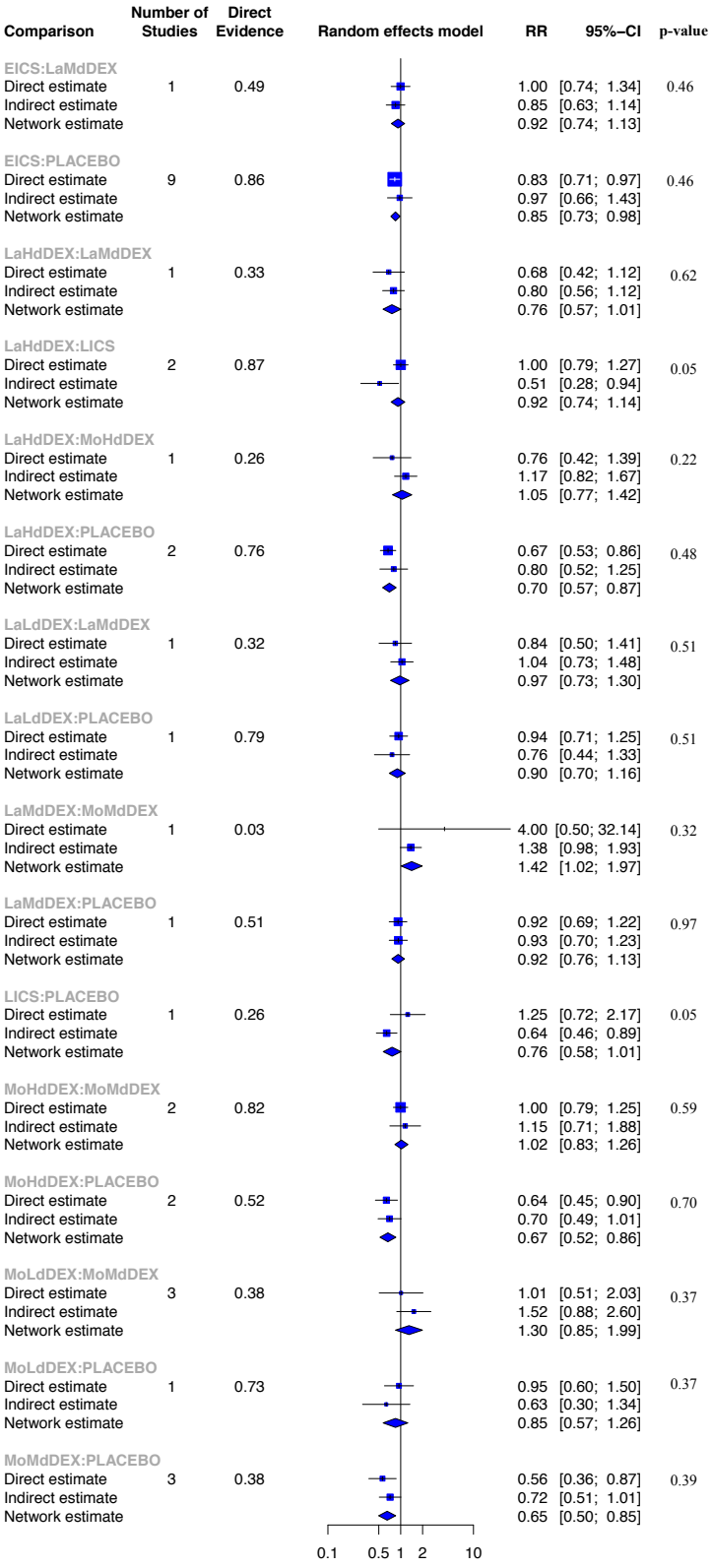
eFigure 65. Network Plot (A), SUCRA Plot with SUCRA Values (%) (B), and Forest Plot Depicting the Network Estimates [RR (95% CrI)] of the Various Interventions with "Placebo" as the Common Comparator for Sensitivity Analysis by Combining Different Types of Inhaled Corticosteroids (C)



eFigure 66. League Plot Depicting the Network Estimates [RR (95% CrI)] of Postnatal Corticosteroids Comparisons for Sensitivity Analysis by Combining Different Types of Inhaled Corticosteroids



eFigure 67. Split Between Direct and Indirect Evidence for Sensitivity Analysis by Combining Different Types of Inhaled Corticosteroids



eTable 1. Literature Search Strategy for Two Electronic Databases

CENTRAL search		
ID	**Search**	**Hits**
#1	MeSH descriptor: [Infant, Newborn] explode all trees	15666
#2	(neonat*) OR (newborn*)	43538
#3	infan*	63805
#4	(elbw*) OR (vlbw*) OR (lbw*) OR (preterm*) OR (prematur*)	29753
#5	#3 and #4	15190
#6	#1 or #2 or #5	45834
#7	(steroid*) OR (corticosteroid*) OR (dexamethasone) OR (betamethasone) OR (hydrocortisone)	67005
#8	budesonide	4874
#9	#7 or #8	69545
#10	(inhaled) AND (steroid*)	2281
#11	(inhaled) AND (corticosteroid*)	5768
#12	(inhaled) AND (budesonide)	2052
#13	#9 or #10 or #11 or #12	69545
#14	(intratracheal) AND (steroid*)	79
#15	(intratracheal) AND (corticosteroid*)	50
#16	(intratracheal) AND (budesonide)	24
#17	#14 or #15 or #16	128
#18	#13 or #17	69545
#19	#6 and #18	2540
Pubmed Search		

(((((((((neonat*)) OR (bab*)) OR (newborn*)) AND ((((((low birth weight) OR (lbw)) OR (elbw)) OR (vlbw)) OR (prematur*)) OR (preterm*))) AND (((((((low birth weight) OR (lbw)) OR (elbw)) OR (vlbw)) OR (prematur*)) OR (preterm*)) AND (infan*))) OR (infant, low birth weight[MeSH Terms])) OR (infant, very low birth weight[MeSH Terms])) OR (infant, extremely low birth weight[MeSH Terms])) AND ((((((randomized controlled trial[MeSH Terms]) OR (controlled clinical trial[MeSH Terms])) OR (randomized[Title/Abstract])) OR (placebo[Title/Abstract])) OR (randomly[Title/Abstract])) OR (trial[Title/Abstract]))) AND ((((((((((corticosteroids) OR (steroids)) OR (betamethasone)) OR (dexamethasone)) OR (hydrocortisone)) OR (budesonide)) OR ((((inhaled) AND (steroids)) OR ((inhaled) AND (corticosteroids))) OR ((inhaled) AND (budesonide)))) OR (((intratracheal) AND (steroids)) OR ((intratracheal) AND (corticosteroids)))) OR ((nebulizer[MeSH Terms]) AND (steroids))) OR ((nebulizer[MeSH Terms]) AND (corticosteroids))) OR ((nebuliser[MeSH Terms]) AND (budesonide[MeSH Terms])))

eTable 2. Some of the Studies That Were Excluded for Valid Reasons

Author / Year	Reason for exclusion
Ariagno 1987[63]	Both arms received systemic dexamethasone with similar day of initiation and similar cumulative dosage.
Baden 1972[64]	Old study using high dose of early hydrocortisone (50 mg/kg over 24 hours)
Barkermeyer 2000[65]	Both arms received systemic dexamethasone with similar day of initiation and similar cumulative dosage.
Biswas 2003[66]	Used hydrocortisone with triiodothyronine in one arm
Collaborative Dexamethasone Trial Group 1991[67]	Classified as systemic dexamethasone use in established BPD as the median age of initiation was > 28 days
Da Silva 2002[68]	Age of initiation of systemic dexamethasone could not be classified since reported as 7-21 days encompassing moderate and late initiation cut-off. Cumulative dose of one arm not mentioned
DeMartini 1999[69]	Age of initiation of systemic dexamethasone could not be classified as reported as 7-21 days encompassing moderate and late initiation cut-off
Dg 2017[70]	Inclusion criterion < 37 weeks
Groneck 1999[71]	Systemic dexamethasone cumulative dose not mentioned
NG 1998[72]	No outcomes reported
Papile 1998[73]	One arm received systemic dexamethasone at more than 28 days (classified as established BPD)
Pappagallo 1998[74]	Injectable dexamethasone used as an inhaled steroid
Pokriefka 1993[75]	No inclusion / exclusion criteria mentioned
Townsend 1998[76]	No relevant outcomes reported

eTable 3. Network Characteristics for All the Outcomes and Sensitivity Analysis

BPD or Mortality at 36 weeks				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC Vs Placebo	8	1123	597	53.2
EIBEC Vs Placebo	3	360	101	28.1
EIBUD Vs LaMdDX	1	292	169	57.9
EIBUD Vs LIBUD	1	284	168	59.2
EIBUD Vs Placebo	4	987	404	40.9
EIFLUT Vs Placebo	3	304	153	50.3
ITBUD Vs Placebo	3	467	263	56.3
LaHdDX Vs LIBEC	2	137	104	75.9
LaHdDX Vs MoHdDX	1	76	31	40.8
LaLdDX Vs Placebo	1	70	62	88.6
LHC Vs Placebo	2	434	323	74.4
LaHd DX Vs Placebo	2	142	119	83.8
MoMdDX Vs Placebo	3	120	57	47.5
MoMdDX Vs MoHdDX	2	92	80	87.0
MoHdDX Vs Placebo	2	108	70	64.8
MoLdDX Vs Placebo	1	60	37	61.7
LaMdDX Vs LaLdDX	1	17	14	82.3
LaHdDX Vs LaMdDX	1	25	19	76.0
MoMdDX Vs MoLdDX	3	137	27	19.7
LaMdDX Vs LIBUD	2	332	192	57.8
LIBEC Vs Placebo	1	43	20	46.5
MoMdDX Vs LaMdDX	1	30	5	16.7
LaMdDX Vs Placebo	1	23	22	95.6
Secondary outcome - BPD at 36 weeks PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	997	395	39.6

EIBEC vs. PLACEBO	3	315	75	23.8
EIBUD vs. LaMdDX	1	227	103	45.4
EIBUD vs. LIBUD	1	222	105	47.3
EIBUD vs. PLACEBO	4	852	270	31.7
EIFLUT vs. PLACEBO	2	64	12	18.8
ITBUD vs. PLACEBO	2	317	130	41.0
LaHdDX vs. LaMdDX	1	17	12	70.6
LaHdDX vs. LIBEC	2	128	95	74.2
LaHdDX vs. MoHdDX	1	69	24	34.8
LaHdDX vs. PLACEBO	2	123	86	69.9
LaLdDX vs. LaMdDX	1	16	12	75.0
LaLdDX vs. PLACEBO	1	65	57	87.7
LaMdDX vs. LIBUD	2	266	126	47.4
LaMdDX vs. MoMdDX	1	29	4	13.8
LaMdDX vs. PLACEBO	1	13	13	100
LHC vs. PLACEBO	2	346	234	67.6
LIBEC vs. PLACEBO	1	75	25	33.3
MoHdDX vs. MoMdDX	2	83	70	84.3
MoHdDX vs. PLACEBO	2	97	59	60.8
MoLdDX vs. MoMdDX	3	130	20	15.4
MoLdDX vs. PLACEBO	1	47	24	51.1
MoMdDX vs. PLACEBO	3	112	45	40.2
Secondary Outcome - Mortality				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1124	218	19.4
EIBEC vs. PLACEBO	3	360	28	7.8
EIBUD vs. LaMdDX	1	293	75	25.6
EIBUD vs. LIBUD	1	285	67	23.5
EIBUD vs. PLACEBO	5	1056	145	13.7
EIFLUT vs. PLACEBO	3	304	46	15.1

ITBUD vs. PLACEBO	2	381	67	17.6
LaHdDX vs. LaMdDX	1	25	7	28.0
LaHdDX vs. LIBEC	2	137	9	6.6
LaHdDX vs. MoHdDX	1	76	7	9.2
LaHdDX vs. PLACEBO	2	142	33	23.2
LaLdDX vs. LaMdDX	1	17	2	11.8
LaLdDX vs. PLACEBO	1	70	8	11.4
LaMdDX vs. LIBUD	2	332	73	22.0
LaMdDX vs. MoMdDX	1	30	1	3.3
LaMdDX vs. PLACEBO	1	23	9	39.1
LHC vs. PLACEBO	2	435	106	24.4
LIBEC vs. PLACEBO	2	99	11	11.1
MoHdDX vs. MoMdDX	2	92	10	10.9
MoHdDX vs. PLACEBO	2	108	13	12.0
MoLdDX vs. MoMdDX	3	137	7	5.1
MoLdDX vs. PLACEBO	1	60	13	21.7
MoMdDX vs. PLACEBO	4	135	14	10.4
Secondary Outcome - BPD at 28 days				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EIBEC vs. PLACEBO	3	335	158	47.1
EIBUD vs. ITBUD	1	138	11	8.0
EIBUD vs. LaMdDX	1	293	177	60.4
EIBUD vs. LIBUD	1	285	177	62.1
EIBUD vs. PLACEBO	4	257	78	30.3
EIFLUT vs. PLACEBO	2	79	43	54.4
ITBUD vs. PLACEBO	2	122	18	14.8
LaHdDX vs. LIBEC	1	76	76	100
LaHdDX vs. MoHdDX	1	72	42	58.3
LaMdDX vs. LIBUD	2	332	222	66.9
LaMdDX vs. MoMdDX	1	30	16	53.3

LHC vs. PLACEBO	1	371	285	76.8
LIBEC vs. PLACEBO	1	86	45	52.3
MoHdDX vs. MoMdDX	1	33	29	87.9
MoHdDX vs. PLACEBO	2	99	90	90.9
MoLdDX vs. PLACEBO	1	60	50	83.3
MoMdDX vs. PLACEBO	2	84	45	53.6
Secondary Outcome - IVH >II				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	7	1088	166	15.2
EIBEC vs. PLACEBO	2	309	30	9.7
EIBUD vs. PLACEBO	1	69	3	4.3
EIFLUT vs. PLACEBO	2	265	41	15.5
ITBUD vs. PLACEBO	1	116	13	11.2
LaHdDX vs. LIBEC	1	61	15	24.6
LaHdDX vs. MoHdDX	1	76	7	9.2
LHC vs. PLACEBO	1	361	5	1.4
LIBEC vs. PLACEBO	1	19	5	26.3
MoHdDX vs. MoMdDX	1	33	7	21.2
MoLdDX vs. PLACEBO	1	60	7	11.7
Secondary Outcome - PVL				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	5	894	41	4.6
EIBEC vs. PLACEBO	2	313	22	7.0
EIFLUT vs. PLACEBO	2	264	10	3.8
LaHdDX vs. LIBEC	2	137	17	12.4
LaHdDX vs. PLACEBO	1	118	20	16.9
LaLdDX vs. PLACEBO	1	59	3	5.1
LHC vs. PLACEBO	1	371	16	4.3
MoHdDX vs. PLACEBO	1	30	1	3.3
Secondary Outcome - Hyperglycemia				

Comparison	Number of studies	Number of subjects	Number of outcomes	Event rate(%)
EHC vs. PLACEBO	3	590	256	43.4
EIBUD vs. LaMdDX	1	277	87	31.4
EIBUD vs. LIBUD	1	266	80	30.1
EIBUD vs. PLACEBO	1	23	3	13.0
EIFLUT vs. PLACEBO	2	93	27	29.0
LaHdDX vs. LaMdDX	1	25	8	32.0
LaHdDX vs. LIBEC	2	137	4	2.9
LaHdDX vs. MoHdDX	1	40	13	32.5
LaHdDX vs. PLACEBO	2	142	20	14.1
LaLdDX vs. LaMdDX	1	16	3	18.8
LaMdDX vs. LIBUD	2	303	94	31.0
LaMdDX vs. MoMdDX	1	30	13	43.3
LaMdDX vs. PLACEBO	1	23	8	34.8
LHC vs. PLACEBO	2	434	77	17.7
MoHdDX vs. PLACEBO	1	78	45	57.7
MoLdDX vs. MoMdDX	2	109	18	16.5
MoMdDX vs. PLACEBO	4	135	34	25.2
Secondary Outcome - Hypertension				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	1	42	4	9.5
EIBUD vs. LaMdDX	1	274	42	15.3
EIBUD vs. LIBUD	1	263	30	11.4
EIBUD vs. PLACEBO	2	879	16	1.8
EIFLUT vs. PLACEBO	2	93	9	9.7
LaHdDX vs. LIBEC	2	137	21	15.3
LaHdDX vs. MoHdDX	1	76	0	0
LaHdDX vs. PLACEBO	1	118	10	8.4
LaLdDX vs. LaMdDX	1	16	4	25.0
LaMdDX vs. LIBUD	2	301	34	11.3

LaMdDX vs. MoMdDX	1	30	22	73.3
LHC vs. PLACEBO	2	435	53	12.2
MoHdDX vs. PLACEBO	1	78	0	0
MoLdDX vs. MoMdDX	2	109	13	11.9
MoMdDX vs. PLACEBO	3	99	12	12.1
Secondary Outcome - NEC >II				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1121	73	6.5
EIBEC vs. PLACEBO	1	253	41	16.2
EIBUD vs. LaMdDX	1	289	28	9.7
EIBUD vs. LIBUD	1	283	25	8.8
EIBUD vs. PLACEBO	1	856	62	7.2
EIFLUT vs. PLACEBO	2	264	22	8.3
LaHdDX vs. LIBEC	1	76	5	6.6
LaHdDX vs. MoHdDX	1	39	8	20.5
LaLdDX vs. PLACEBO	1	70	4	5.7
LaMdDX vs. LIBUD	1	288	29	10.1
LaMdDX vs. MoMdDX	1	30	0	0
LHC vs. PLACEBO	2	435	41	9.4
MoHdDX vs. PLACEBO	2	108	15	13.9
MoLdDX vs. MoMdDX	2	109	3	2.7
MoMdDX vs. PLACEBO	1	43	1	2.3
Secondary Outcome - Sepsis				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	7	1078	334	31.0
EIBEC vs. PLACEBO	2	95	55	57.9
EIBUD vs. LaMdDX	1	288	89	30.9
EIBUD vs. LIBUD	1	283	88	31.1
EIBUD vs. PLACEBO	3	909	295	32.4

EIFLUT vs. PLACEBO	3	304	49	16.1
ITBUD vs. PLACEBO	2	381	78	20.5
LaHdDX vs. LaMdDX	1	25	10	40.0
LaHdDX vs. LIBEC	2	137	24	17.5
LaHdDX vs. MoHdDX	1	40	2	5.0
LaHdDX vs. PLACEBO	1	24	9	37.5
LaLdDX vs. PLACEBO	1	70	33	47.1
LaMdDX vs. LIBUD	2	325	105	32.3
LaMdDX vs. MoMdDX	1	30	5	16.7
LaMdDX vs. PLACEBO	1	23	11	47.8
LHC vs. PLACEBO	2	435	230	52.9
LIBEC vs. PLACEBO	3	126	23	18.2
MoHdDX vs. MoMdDX	2	92	18	19.6
MoHdDX vs. PLACEBO	2	108	38	35.2
MoLdDX vs. MoMdDX	3	137	22	16.1
MoMdDX vs. PLACEBO	3	99	12	12.1
Secondary Outcome - Severe ROP				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	5	476	110	23.1
EIBEC vs. PLACEBO	2	309	60	19.4
EIBUD vs. LaMdDX	1	218	17	7.8
EIBUD vs. LIBUD	1	212	19	9.0
EIBUD vs. PLACEBO	1	724	240	33.1
EIFLUT vs. PLACEBO	1	53	4	7.5
ITBUD vs. PLACEBO	1	226	16	7.1
LaHdDX vs. LaMdDX	1	25	5	20.0
LaHdDX vs. LIBEC	2	128	32	25.0
LaHdDX vs. MoHdDX	1	35	3	8.6
LaHdDX vs. PLACEBO	2	132	62	47.0
LaLdDX vs. PLACEBO	1	61	25	41.0

LaMdDX vs. LIBUD	1	226	22	9.7
LaMdDX vs. MoMdDX	1	30	3	10.0
LaMdDX vs. PLACEBO	1	23	4	17.4
LHC vs. PLACEBO	1	371	86	23.2
MoHdDX vs. PLACEBO	1	65	17	26.1
MoLdDX vs. MoMdDX	2	73	14	19.2
MoLdDX vs. PLACEBO	1	47	11	23.4
MoMdDX vs. PLACEBO	2	56	13	23.2
Secondary Outcome - Moderate to severe NDI at 18-24 months				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	3	676	128	18.9
EIBEC vs. PLACEBO	1	56	17	30.3
EIBUD vs. PLACEBO	1	629	313	49.8
EIFLUT vs. PLACEBO	1	187	19	10.2
ITBUD vs. PLACEBO	2	239	84	35.1
LaHdDX vs. LaMdDX	1	18	9	50.0
LaHdDX vs. MoHdDX	1	64	33	51.6
LaHdDX vs. PLACEBO	1	14	5	35.7
LaLdDX vs. LaMdDX	1	15	6	40.0
LaLdDX vs. PLACEBO	1	56	20	35.7
LaMdDX vs. PLACEBO	1	14	10	71.0
LHC vs. PLACEBO	1	37	16	43.2
MoHdDX vs. MoMdDX	2	89	16	18.0
MoLdDX vs. PLACEBO	1	33	2	6.1
Secondary Outcome - CP at 24 months				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	3	676	58	8.6
EIBEC vs. PLACEBO	1	56	7	12.5
EIBUD vs. PLACEBO	1	670	45	6.7
EIFLUT vs. PLACEBO	1	190	4	2.1

LaHdDX vs. LaMdDX	1	18	5	27.8
LaHdDX vs. PLACEBO	1	14	2	14.3
LaLdDX vs. PLACEBO	1	56	10	17.9
LaMdDX vs. PLACEBO	1	14	7	50.0
LHC vs. PLACEBO	1	37	4	10.8
MoHdDX vs. PLACEBO	2	74	14	18.9
MoLdDX vs. MoMdDX	2	75	8	10.7
MoLdDX vs. PLACEBO	1	33	2	6.1
Secondary Outcome - Successful extubation by day 7 - 14 of randomization				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	1	521	268	51.4
EIBEC vs. PLACEBO	2	99	37	37.3
EIBUD vs. PLACEBO	2	40	18	45.0
EIFLUT vs. PLACEBO	2	93	34	36.5
ITBUD vs. PLACEBO	1	101	29	28.7
LaHdDX vs. LaMdDX	1	25	7	28.0
LaHdDX vs. LIBEC	1	61	13	21.3
LaLdDX vs. LaMdDX	1	16	7	43.7
LaLdDX vs. PLACEBO	1	69	25	36.2
LHC vs. PLACEBO	2	410	119	29.0
LIBEC vs. PLACEBO	1	19	7	36.8
LIBUD vs. PLACEBO	1	20	0	0
MoHdDX vs. MoMdDX	1	56	47	83.9
MoLdDX vs. MoMdDX	2	109	35	32.1
MoMdDX vs. PLACEBO	3	120	37	30.8
Secondary Outcome - Gastrointestinal perforation				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1124	59	5.2
EIBUD vs. LaMdDX	1	289	6	2.1
EIBUD vs. LIBUD	1	283	5	1.7

EIBUD vs. PLACEBO	1	856	70	8.2
LaLdDX vs. LaMdDX	1	16	0	0
LaMdDX vs. LIBUD	1	286	9	3.1
LaMdDX vs. MoMdDX	1	30	0	0
LHC vs. PLACEBO	2	434	15	3.4
MoLdDX vs. MoMdDX	2	109	4	3.7
MoMdDX vs. PLACEBO	1	41	2	4.9
Secondary Outcome - Hypertrophic cardiomyopathy				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
MoHdDX vs. PLACEBO	2	103	22	21.3
MoLdDX vs. PLACEBO	1	60	8	13.3
MoMdDX vs. PLACEBO	1	16	2	12.5
Sensitivity analysis by including duration of systemic corticosteroid therapy for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1123	597	53.2
EIBEC vs. PLACEBO	3	360	101	28.1
EIBUD vs. LaMdMcDEX	1	292	169	57.9
EIBUD vs. LIBUD	1	284	168	59.2
EIBUD vs. PLACEBO	4	987	404	40.9
EIFLUT vs. PLACEBO	3	304	153	50.3
ITBUD vs. PLACEBO	3	467	263	56.3
LaHdLcDEX vs. LaMdLcDEX	1	25	19	76
LaHdLcDEX vs. LIBEC	2	137	104	75.9
LaHdLcDEX vs. MoHdMcDEX	1	76	31	40.8
LaHdLcDEX vs. PLACEBO	2	142	119	83.8
LaLdMcDEX vs. PLACEBO	1	70	62	88.6

LaMdLcDEX vs. MoMdLcDEX	1	30	5	16.7
LaMdLcDEX vs. PLACEBO	1	23	22	95.6
LaMdMcDEX vs. LIBUD	2	332	192	57.8
LHC vs. PLACEBO	2	434	323	74.4
LIBEC vs. PLACEBO	1	86	36	41.2
MoHdLcDEX vs. MoMdLcDEX	1	33	25	75.8
MoHdLcDEX vs. MoMdMcDEX	1	59	55	93.2
MoHdLcDEX vs. PLACEBO	1	78	54	69.2
MoHdMcDEX vs. PLACEBO	1	30	16	53.3
MoLdScDEX vs. MoMdMcDEX	1	62	16	25.8
MoLdScDEX vs. MoMdScDEX	2	75	11	14.7
MoLdScDEX vs. PLACEBO	1	60	37	61.7
MoMdMcDEX vs. PLACEBO	1	36	16	44.4
MoMdScDEX vs. PLACEBO	2	84	41	48.8
Sensitivity analysis by excluding studies with less than 70% antenatal corticosteroids coverage for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	5	1003	532	53
EIBEC vs. PLACEBO	2	300	89	29.7
EIBUD vs. PLACEBO	2	884	389	44
ITBUD vs. PLACEBO	1	265	144	54.3
LaLdDX vs. LaMdDX	1	17	14	82.3
LaLdDX vs. PLACEBO	1	70	62	88.6

LaMdDX vs. MoMdDX	1	30	5	16.7
LHC vs. PLACEBO	2	434	323	74.4
MoLdDX vs. PLACEBO	1	60	37	61.7
MoMdDX vs. PLACEBO	1	36	16	44.4
Sensitivity analysis by excluding studies enrolling non-ventilated neonates at the time of randomization for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	5	1019	538	52.8
EIBEC vs. PLACEBO	3	360	101	28.0
EIBUD vs. LaMdDX	1	292	169	57.9
EIBUD vs. LIBUD	1	284	168	59.1
EIBUD vs. PLACEBO	4	987	404	40.9
EIFLUT vs. PLACEBO	3	304	153	50.3
ITBUD vs. PLACEBO	2	381	197	51.7
LaHdDX vs. LaMdDX	1	25	19	76
LaHdDX vs. LIBEC	2	137	104	75.9
LaHdDX vs. MoHdDX	1	76	31	40.8
LaHdDX vs. PLACEBO	2	142	119	83.8
LaLdDX vs. LaMdDX	1	17	14	82.3
LaLdDX vs. PLACEBO	1	70	62	88.6
LaMdDX vs. LIBUD	2	332	192	57.8
LaMdDX vs. MoMdDX	1	30	5	16.7
LaMdDX vs. PLACEBO	1	23	22	95.6
LHC vs. PLACEBO	2	434	323	74.4
LIBEC vs. PLACEBO	1	86	36	41.9
MoHdDX vs. MoMdDX	2	92	80	86.9
MoHdDX vs. PLACEBO	2	108	70	64.8
MoLdDX vs. MoMdDX	3	137	27	19.7
MoLdDX vs. PLACEBO	1	60	37	61.7
MoMdDX vs. PLACEBO	3	120	57	47.5

Sensitivity analysis by excluding intra-tracheal budesonide studies for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1123	597	53.2
EIBEC vs. PLACEBO	3	360	101	28.1
EIBUD vs. LaMdDX	1	292	169	57.9
EIBUD vs. LIBUD	1	284	168	59.2
EIBUD vs. PLACEBO	4	987	404	40.9
EIFLUT vs. PLACEBO	3	304	153	50.3
LaHdDX vs. LaMdDX	1	25	19	76
LaHdDX vs. LIBEC	2	137	104	75.9
LaHdDX vs. MoHdDX	1	76	31	40.8
LaHdDX vs. PLACEBO	2	142	119	83.8
LaLdDX vs. LaMdDX	1	17	14	82.3
LaLdDX vs. PLACEBO	1	70	62	88.6
LaMdDX vs. LIBUD	2	332	192	57.8
LaMdDX vs. MoMdDX	1	30	5	16.7
LaMdDX vs. PLACEBO	1	23	22	95.6
LHC vs. PLACEBO	2	434	323	74.4
LIBEC vs. PLACEBO	1	86	36	41.8
MoHdDX vs. MoMdDX	2	92	80	87
MoHdDX vs. PLACEBO	2	108	70	64.8
MoLdDX vs. MoMdDX	3	137	27	19.7
MoLdDX vs. PLACEBO	1	60	37	61.6
MoMdDX vs. PLACEBO	3	120	57	47.5
Sensitivity analysis by excluding high risk of bias studies for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EIBEC vs. PLACEBO	3	335	158	47.2
EIBUD vs. ITBUD	1	138	11	7.9

EIBUD vs. LaMdDX	1	293	177	60.4
EIBUD vs. LIBUD	1	285	177	62.1
EIBUD vs. PLACEBO	4	257	78	30.3
EIFLUT vs. PLACEBO	2	79	43	54.4
ITBUD vs. PLACEBO	2	122	18	14.8
LaHdDX vs. LIBEC	1	76	76	100
LaHdDX vs. MoHdDX	1	72	42	58.3
LaMdDX vs. LIBUD	2	332	222	66.9
LaMdDX vs. MoMdDX	1	30	16	53.3
LHC vs. PLACEBO	1	371	285	76.8
LIBEC vs. PLACEBO	1	86	45	52.3
MoHdDX vs. MoMdDX	1	33	29	87.9
MoHdDX vs. PLACEBO	2	99	90	90.9
MoLdDX vs. PLACEBO	1	60	50	83.3
MoMdDX vs. PLACEBO	2	84	45	53.6
Sensitivity analysis by combining the different types of inhaled corticosteroids for the primary outcome - Mortality or BPD at 36 weeks' PMA				
Comparison	**Number of studies**	**Number of subjects**	**Number of outcomes**	**Event rate(%)**
EHC vs. PLACEBO	8	1123	597	53.2
EICS vs. LaMdDX	1	292	169	57.9
EICS vs. LICS	1	284	168	59.2
EICS vs. PLACEBO	10	1651	658	39.9
ITBUD vs. PLACEBO	3	467	263	56.3
LaHdDX vs. LaMdDX	1	25	19	76
LaHdDX vs. LICS	2	137	104	75.9
LaHdDX vs. MoHdDX	1	76	31	40.8
LaHdDX vs. PLACEBO	2	142	119	83.8
LaLdDX vs. LaMdDX	1	17	14	82.3
LaLdDX vs. PLACEBO	1	70	62	88.6
LaMdDX vs. LICS	2	332	192	57.8
LaMdDX vs. MoMdDX	1	30	5	16.6

LaMdDX vs. PLACEBO	1	23	22	95.6
LHC vs. PLACEBO	2	434	323	74.4
LICS vs. PLACEBO	1	86	36	41.9
MoHdDX vs. MoMdDX	2	92	80	86.9
MoHdDX vs. PLACEBO	2	108	70	64.8
MoLdDX vs. MoMdDX	3	137	27	19.7
MoLdDX vs. PLACEBO	1	60	37	61.7
MoMdDX vs. PLACEBO	3	120	57	47.5

eTable 4. GRADE/Quality of Evidence for Some of the Secondary Outcomes

Secondary Outcome - BPD at 36 weeks' PMA				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis$**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**
ITBUD:EHC	Moderate&	-	**0.62 (0.42, 0.89)**	Moderate
ITBUD:PLACEBO	-	Moderate&	**0.53 (0.37, 0.72)**	Moderate
ITBUD:LHC	Moderate&		**0.52 (0.34, 0.74)**	Moderate
ITBUD:LaLdDX	Moderate&	-	**0.61 (0.39, 0.91)**	Moderate
ITBUD:LaMdDX	Low&&		**0.63 (0.38, 0.99)**	Low
MoMdDX:EHC	Low*&	-	**0.67 (0.47, 0.93)**	Low
MoMdDX:LaLdDX	Very low*&&		**0.66(0.43, 0.95)**	Very low
MoMdDX:PLACEBO	Moderate&	Low*&	**0.58 (0.42, 0.76)**	Moderate
MoMdDX:LHC	Low*&	-	**0.56 (0.38, 0.78)**	Low
MoHdDX:EHC	Moderate&	-	**0.73 (0.52, 0.99)**	Moderate
MoHdDX:LHC	Moderate&	-	**0.61 (0.42, 0.83)**	Moderate
MoHdDX:PLACEBO	Low*&	Moderate&	**0.62 (0.47, 0.80)**	Moderate
EIBUD:PLACEBO	Low*&	Moderate&	**0.73 (0.57, 0.90)**	Moderate
EIBUD:LHC	Moderate&	-	**0.71(0.51, 0.94)**	Moderate
LaHdDX:PLACEBO	Low*&	Moderate&	**0.74(0.55, 0.95)**	Moderate
LaHdDX:LHC	Moderate&		**0.71(0.50, 0.98)**	Moderate
Secondary Outcome - Mortality				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**
MoMdDX:PLACEBO	Very low*&&	Low&*	**0.43 (0.18, 0.82)**	Low
EHC:PLACEBO	-	Moderate&	**0.69 (0.44, 0.98)**	Moderate
Secondary Outcome - Cardiomyopathy (only direct evidence assessed)				
	Indirect Evidence	**Direct Evidence**		

Comparison	Quality of evidence	Quality of evidence	Risk Ratio(95% Credible Interval)	
MoHdDX:PLACEBO	-	Low*&	5.94 (1.95;18.11)	
Secondary Outcome - GI Perforation				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**
EHC VS PLACEBO	-	Moderate&	2.77 (1.09, 9.32)	Moderate&
Secondary Outcome - NDI				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**
LaHdDX:LaMdDX	Low&&	Low&&	**0.31(0.03, 0.90)**	Low
Secondary Outcome - Successful extubation				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**
LaHdDX:EIFLUT	Low&&	-	**10.55 (1.06, 42.94)**	Low
LaHdDX:EIBEC	Very low+&&	-	**11.42 (1.09, 45.47)**	Very low
LaHdDX:PLACEBO	Low&&	-	**11.91(1.64,44.49)**	Low
LaLdDX:PLACEBO	Very low*&&	Low&&	**6.33(1.62, 18.56)**	Low
MoHdDX:PLACEBO	Low*&	-	**4.96 (1.14, 14.75)**	Low
ITBUD:PLACEBO	-	Low&&	**4.36 (1.04, 12.90)**	Low
MoMdDX:PLACEBO	-	Low*&	**3.16 (1.35, 6.82)**	Low
Secondary Outcome - Hypertension				
	Indirect Evidence	**Direct Evidence**	**Network Meta-analysis**	
Comparison	**Quality of evidence**	**Quality of evidence**	**Risk Ratio(95% Credible Interval)**	**Quality of evidence**

MoMdDX:PLACEBO	Low*&	Low*&	3.96(1.10,30.91)	Very low++

*Limitations (risk of bias). +Heterogeneity. &Imprecision. &&Severe imprecision.#Indirectness, ++Inconsistency, $ values in bold are statistically significant

GRADE Ranking the Quality of Evidence

High quality - Very confident that the true effect lies close to that of the estimate of the effect

Moderate quality - Moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

Low quality - Confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect

Very low quality - Very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect

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