# **Online Resource 4 - Forest Plots**

### Intraoperative Bradycardia

	Dexmedeton	nidine	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Bhagat 2016	1	60	1	60	10.3%	1.00 [0.06, 15.62]	
Bhattacharjee 2010	1	30	1	30	10.3%	1.00 [0.07, 15.26]	
Bielka 2018	6	30	2	30	20.6%	3.00 [0.66, 13.69]	<del>                                     </del>
Chavan 2016	1	30	1	30	10.3%	1.00 [0.07, 15.26]	
Hazra 2014	3	30	0	30	5.1%	7.00 [0.38, 129.93]	<del>-   +</del>
Khare 2017	1	20	1	20	10.3%	1.00 [0.07, 14.90]	
Park 2015	1	15	1	15	10.3%	1.00 [0.07, 14.55]	
Sharma 2017	5	50	0	50	5.1%	11.00 [0.62, 193.80]	<del></del>
Srivastava 2015	1	28	1	29	10.1%	1.04 [0.07, 15.77]	
Ye 2021	12	90	0	30	7.7%	8.52 [0.52, 139.65]	-
Total (95% CI)		383		324	100.0%	2.81 [1.34, 5.91]	•
Total events	32		8				
Heterogeneity: Chi <sup>2</sup> =	5.16, df = 9 (P =	= 0.82); [	l² = 0%				
Test for overall effect:	Z = 2.73 (P = 0.	.006)					0.01 0.1 1 10 100 Favours Dexmedetomidine Favours Placebo

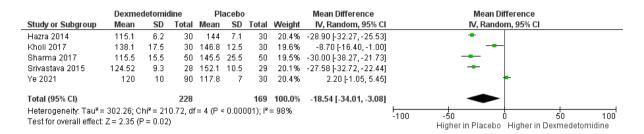
# **Intraoperative Hypotension**

	Dexmedeton	nidine	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Bhagat 2016	1	60	1	60	6.3%	1.00 [0.06, 15.62]	
Bhattacharjee 2010	1	30	1	30	6.3%	1.00 [0.07, 15.26]	
Bielka 2018	8	30	4	30	25.0%	2.00 [0.67, 5.94]	<del></del>
Chavan 2016	1	30	1	30	6.3%	1.00 [0.07, 15.26]	
Chilkoti 2020	6	40	0	40	3.1%	13.00 [0.76, 223.33]	<del>                                     </del>
Hazra 2014	1	30	1	30	6.3%	1.00 [0.07, 15.26]	
Park 2015	1	15	1	15	6.3%	1.00 [0.07, 14.55]	
Srivastava 2015	1	28	0	29	3.1%	3.10 [0.13, 73.12]	<del></del>
Ye 2021	11	90	4	30	37.5%	0.92 [0.32, 2.66]	<del></del>
Total (95% CI)		353		294	100.0%	1.66 [0.92, 2.98]	•
Total events	31		13				
Heterogeneity: Chi <sup>z</sup> =	4.13, df = 8 (P :	= 0.85);1	P = 0%				
Test for overall effect:	Z=1.69 (P=0	.09)					0.01 0.1 1 10 100 Favours (experimental) Favours (control)

### **Mean Arterial Pressure at tracheal intubation**

	Dexme	edetomi	dine	Pl	acebo			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Basar 2008	102	10	20	110	12	20	8.3%	-8.00 [-14.85, -1.15]	
Bhagat 2016	89.5	12.8	60	84.8	12.5	60	9.2%	4.70 [0.17, 9.23]	-
Bhattacharjee 2010	87.5	10.1	30	119.2	16.2	30	8.3%	-31.70 [-38.53, -24.87]	<del></del>
Bielka 2018	70	8	30	74	8	30	9.3%	-4.00 [-8.05, 0.05]	
Chavan 2016	95.8	5.3	30	110.2	5.4	30	9.7%	-14.40 [-17.11, -11.69]	<del></del>
Chilkoti 2020	84.5	5.4	40	87.5	4.8	40	9.8%	-3.00 [-5.24, -0.76]	<b>-</b>
Hazra 2014	88.5	6.8	30	107.4	8.2	30	9.4%	-18.90 [-22.71, -15.09]	<del></del>
Khare 2017	94.1	11.5	20	100.9	9.8	20	8.4%	-6.80 [-13.42, -0.18]	
Kholi 2017	103.5	10.7	30	100.2	12.2	30	8.7%	3.30 [-2.51, 9.11]	+
Srivastava 2015	91.2	9.5	28	109.1	9.3	29	9.1%	-17.90 [-22.78, -13.02]	
Zarif 2015	72.3	3.7	17	80.5	2.8	17	9.8%	-8.20 [-10.41, -5.99]	+
Total (95% CI)			335			336	100.0%	-9.42 [-14.30, -4.55]	•
Heterogeneity: Tau² = Test for overall effect:				= 10 (P	< 0.001	001); l²	= 95%		-50 -25 0 25 50
restror overall ellect.	2-3.79	r – 0.00	102)						Higher in Placebo Higher in Dexmedetomidine

#### **Systolic Blood Pressure at tracheal intubation**



### **Heart Rate at tracheal intubation**

	Dexme	Placebo				Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Basar 2008	71	11	20	90	12	20	7.1%	-19.00 [-26.13, -11.87]	<del></del>
Bhagat 2016	74.9	12.3	60	90.1	13.2	60	7.7%	-15.20 [-19.77, -10.63]	<del></del>
Bhattacharjee 2010	75.1	11	30	97.2	12.7	30	7.4%	-22.10 [-28.11, -16.09]	<del></del>
Bielka 2018	86	5	30	85	9	30	7.9%	1.00 [-2.68, 4.68]	<del></del>
Chavan 2016	86.5	5.16	30	103	7.1	30	8.0%	-16.50 [-19.64, -13.36]	<del></del>
Chilkoti 2020	89.5	5	30	93.3	6	30	8.0%	-3.80 [-6.59, -1.01]	<del></del>
Hazra 2014	74.6	7	30	105.6	10	30	7.8%	-31.00 [-35.37, -26.63]	<del></del>
Khare 2017	76.7	6.2	20	101.2	14.3	20	7.2%	-24.50 [-31.33, -17.67]	<del></del>
Kholi 2017	86.9	10.5	30	106.5	13.2	30	7.4%	-19.60 [-25.64, -13.56]	<del></del>
Sharma 2017	64.5	11.5	50	88.5	10.5	50	7.8%	-24.00 [-28.32, -19.68]	<del></del>
Srivastava 2015	88.2	9.1	28	106.2	9	29	7.7%	-18.00 [-22.70, -13.30]	<del></del>
Ye 2021	79	5	30	96	5	30	8.1%	-17.00 [-19.53, -14.47]	
Zarif 2015	65	5.3	17	69.5	3.8	17	8.0%	-4.50 [-7.60, -1.40]	
Total (95% CI)			405			406	100.0%	-16.30 [-21.48, -11.13]	•
Heterogeneity: Tau <sup>2</sup> =	84.75; Ch	ni² = 261	.42, df=	= 12 (P ·	< 0.000	001); l²	= 95%		<del></del>
Test for overall effect:						,,,			-20 -10 0 10 20 Higher in Placebo Higher in Dexmedetomidine

# **Postoperative Nausea and Vomiting**

	Dexmedeton	nidine	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Bielka 2018	2	30	8	30	17.2%	0.25 [0.06, 1.08]	
Chavan 2016	0	30	4	30	9.7%	0.11 [0.01, 1.98]	<del></del>
Chilkoti 2020	0	40	2	40	5.4%	0.20 [0.01, 4.04]	<del></del>
Park 2015	2	15	3	15	6.5%	0.67 [0.13, 3.44]	<del></del>
Ye 2021	41	90	19	30	61.3%	0.72 [0.50, 1.02]	
Total (95% CI)		205		145	100.0%	0.55 [0.38, 0.79]	•
Total events	45		36				
Heterogeneity: Chi²=	5.03, df = 4 (P :	= 0.28);	l² = 21%				0.01 0.1 1 10 100
Test for overall effect:	Z = 3.27 (P = 0	.001)					Favours Dexmedetomidine Favours Placebo

#### Anesthetics

	Dexme	Placebo			!	Std. Mean Difference	Std. Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
Basar 2008	354	72	20	518	62	20	16.7%	-2.39 [-3.22, -1.56]		
Chilkoti 2020	116	19.6	40	116	15.4	40	17.4%	0.00 [-0.44, 0.44]	+	
Khanduja 2014	2.59	0.26	30	3.88	0.31	30	16.3%	-4.45 [-5.42, -3.48]		
Khare 2017	68.8	9.5	20	108	4.4	20	15.2%	-5.19 [-6.54, -3.84]	<del></del>	
Sharma 2017	83	19.1	50	127.6	24.8	50	17.4%	-2.00 [-2.48, -1.52]	<del></del>	
Srivastava 2015	73.3	11.5	28	105.8	14.3	29	17.0%	-2.47 [-3.17, -1.77]	-	
Total (95% CI)			188			189	100.0%	-2.68 [-4.06, -1.30]	•	
Heterogeneity: Tau <sup>2</sup> =	= 2.81; Ch	i² = 123.	35, df=	- <u> </u>						
Test for overall effect:	Z = 3.79	(P = 0.00)	001)	-4 -2 U 2 4 Favours Dexmedetomidine Favours Placebo						