

Colorectal IV lignocaine meta analysis

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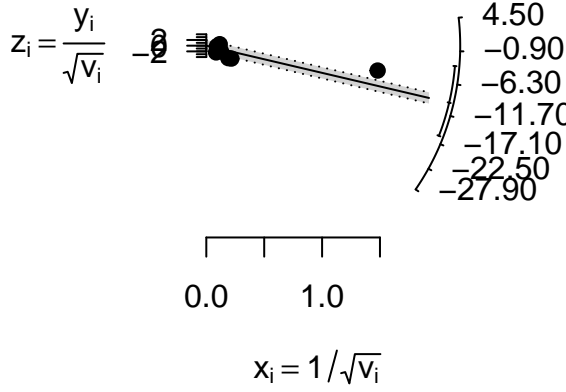
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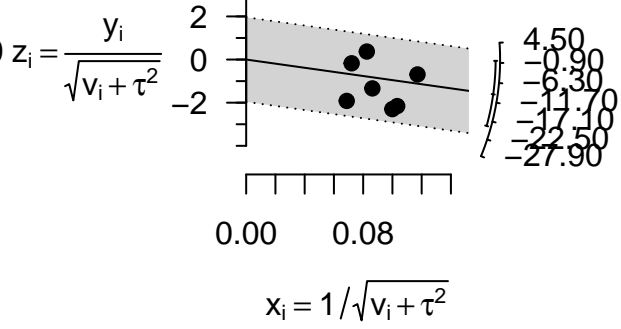
S1a Time until Bowels

Radial Plots

Fixed-Effects Model

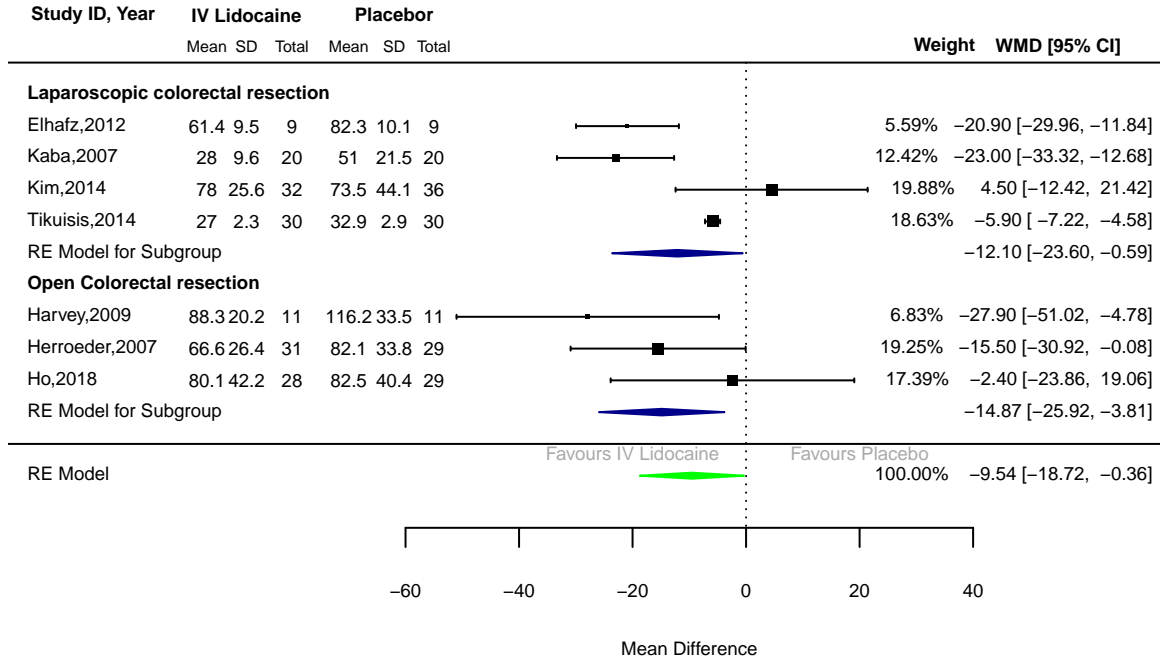


Random-Effects Model



There were 7 studies with a total of 325 patients

Time until resumption of Bowels



- **Bowels: Overall Results**

- Heterogeneity I² = 74.89 %
- WMD = -9.54
- Lower CI = -18.72
- Upper CI = -0.36
- pValue = 0.04
- Funnel Plot Asymmetry pValue = 0.88

- *Bowels: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 0.66 %
- WMD = -14.87
- Lower CI = -25.92
- Upper CI = -3.81
- pValue = 0.008

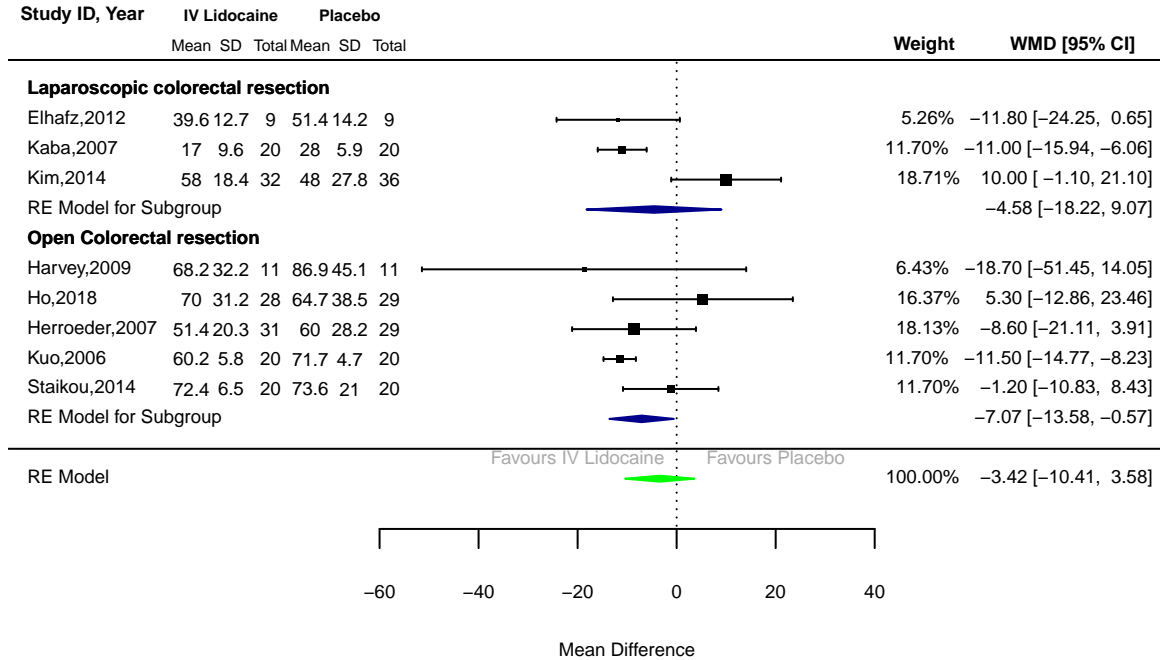
- *Bowels: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 87.42 %
- WMD = -12.1
- Lower CI = -23.6
- Upper CI = -0.59
- pValue = 0.04

S1b Time until Flatus

There were 8 studies with a total of 345 patients

Time until resumption of Flatus



- **Flatus: Overall Results**

- Heterogeneity I² = 72.11 %
- WMD = -3.42
- Lower CI = -10.41
- Upper CI = 3.58
- pValue = 0.338666
- Funnel Plot Asymmetry pValue = 0.98

- *Flatus: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 43.72 %
- WMD = -7.07
- Lower CI = -13.58
- Upper CI = -0.57
- pValue = 0.0331305

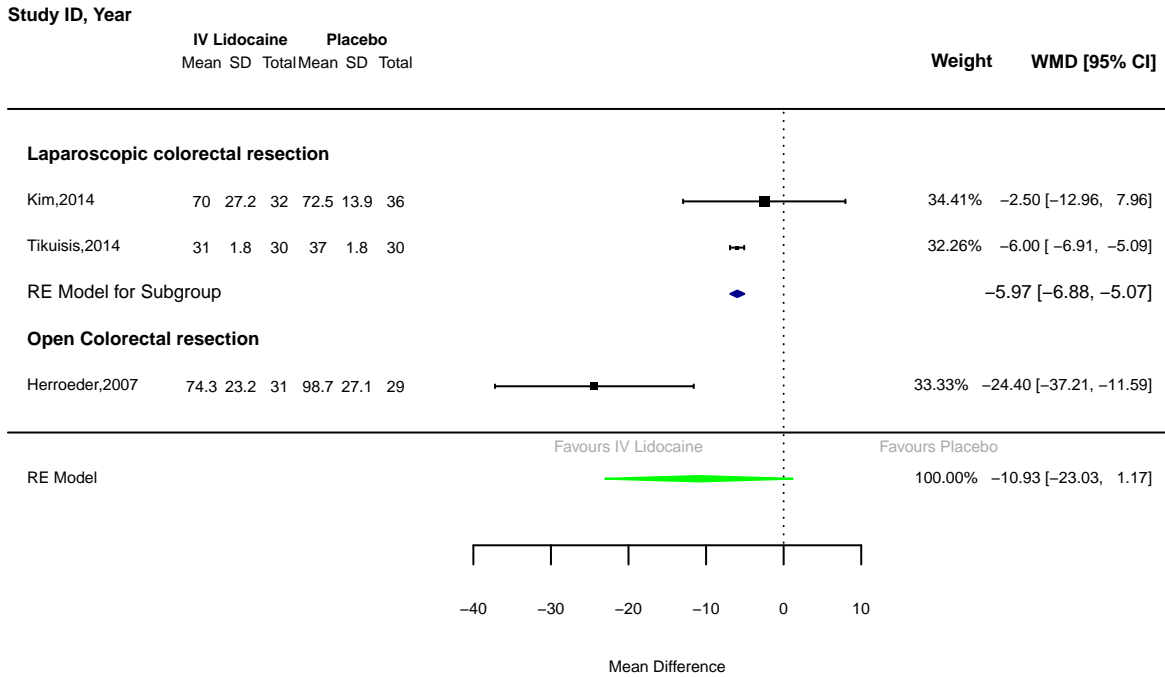
- *Flatus: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 84.43 %
- WMD = -4.58
- Lower CI = -18.22
- Upper CI = 9.07
- pValue = 0.5109973

S1c Time until Diet

There were 3 studies with a total of 188 patients

Time until resumption of Diet



- **Diet: Overall Results**

- Heterogeneity I2 = 83.89 %
- WMD = -10.93
- Lower CI = -23.03
- Upper CI = 1.17
- pValue = 0.0766014
- Funnel Plot Asymmetry pValue = 0.51

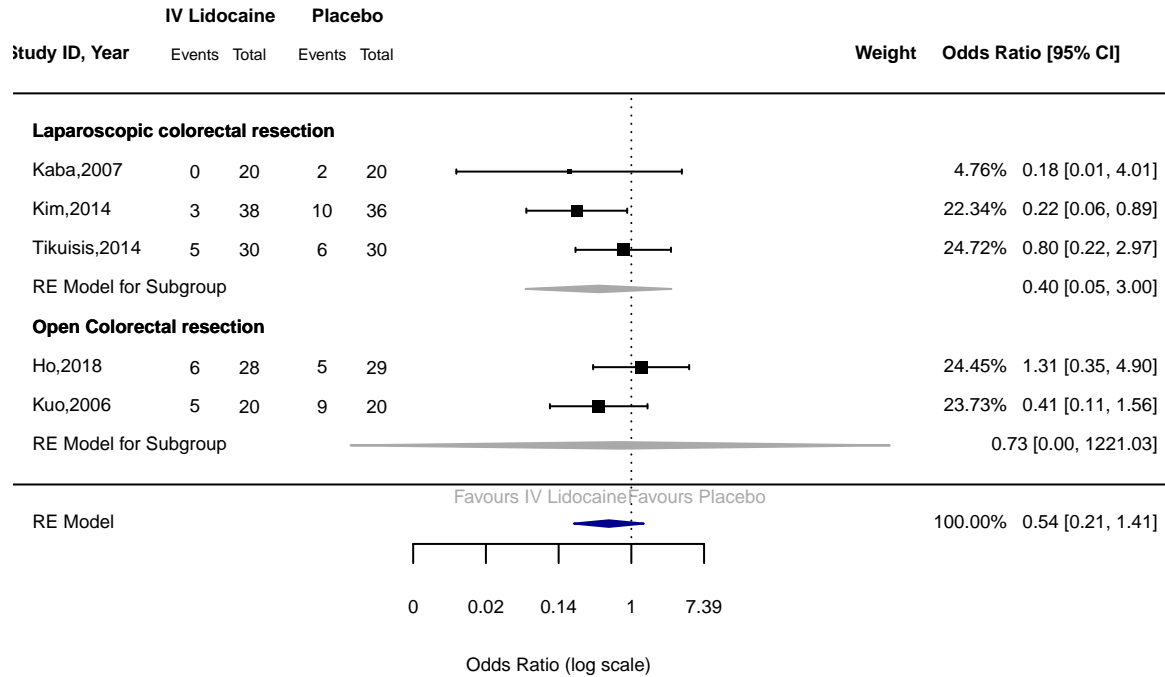
- *Diet: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 0 %
- WMD = -5.97
- Lower CI = -6.88
- Upper CI = -5.07
- pValue = $4.3907807 \times 10^{-38}$

S2 Nausea and Vomiting

There were 5 studies with a total of 271 patients

Nausea and Vomiting



- **Nausea and vomiting: Overall Results**

- Heterogeneity I² = 6.7 %
- OR = 0.54
- Lower CI = 0.21
- Upper CI = 1.41
- *p*Value = 0.15
- Funnel Plot Asymmetry *p*Value = 0.48

- *Nausea and vomiting: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

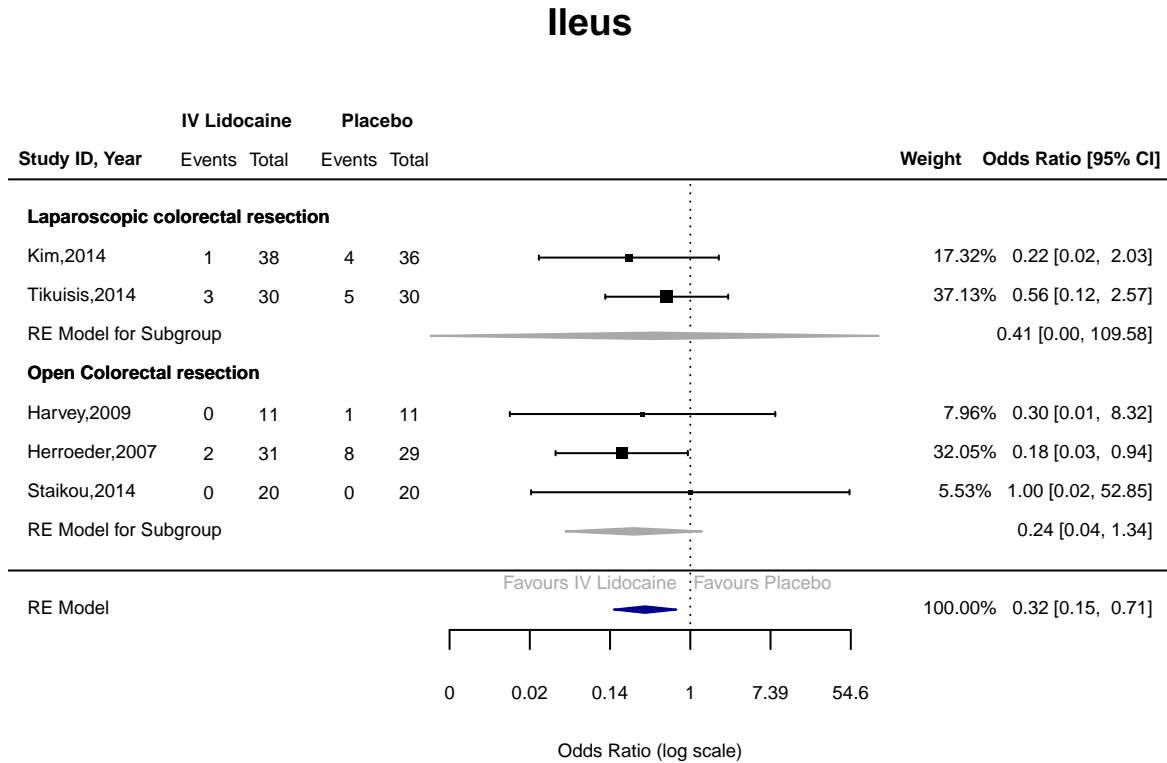
- Heterogeneity I² = 0.38 %
- OR = 0.4
- Lower CI = 0.05
- Upper CI = 3
- *p*Value = 0.19

- *Nausea and vomiting: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 32.3 %
- OR = 0.73
- Lower CI = 0
- Upper CI = 1221.03
- *p*Value = 0.69

S3 Ileus

There were 5 studies with a total of 256 patients



- **Ileus: Overall Results**

- Heterogeneity $I^2 = 0\%$
- OR = 0.32
- Lower CI = 0.15
- Upper CI = 0.71
- $pValue = 0.02$
- Funnel Plot Asymmetry $pValue = 0.77$

- *Ileus: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity $I^2 = 0\%$
- OR = 0.41
- Lower CI = 0
- Upper CI = 109.58
- $pValue = 0.29$

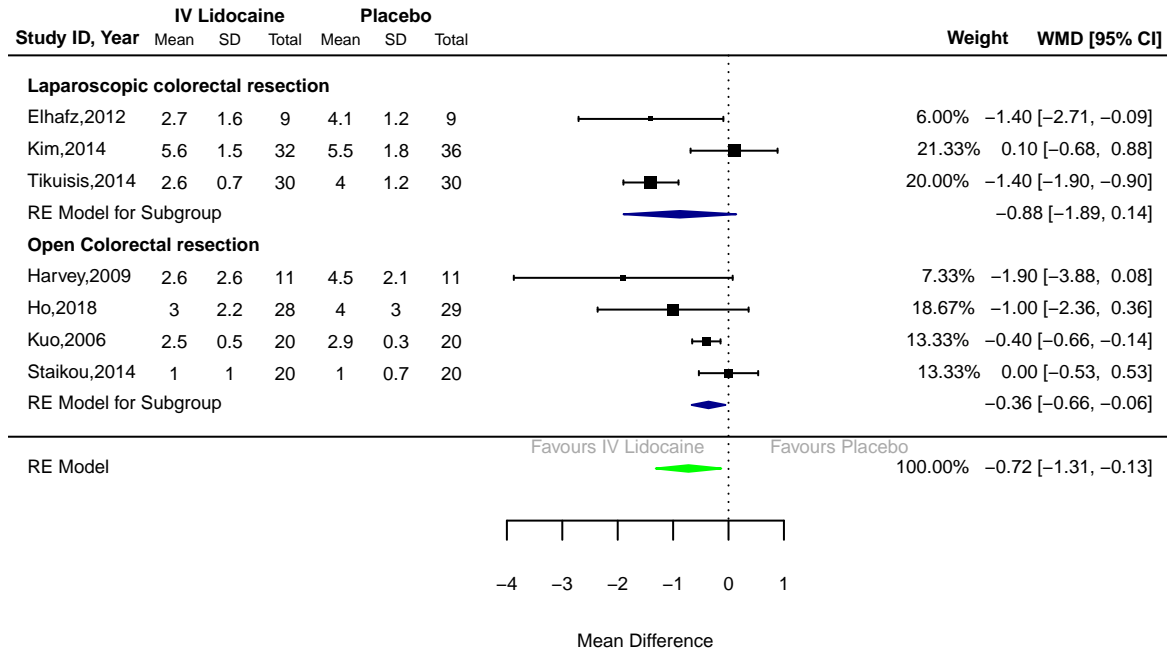
- *Ileus: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity $I^2 = 0\%$
- OR = 0.24
- Lower CI = 0.04
- Upper CI = 1.34
- $pValue = 0.07$

S4 Pain scores at Rest at 24 hours

There were 7 studies with a total of 280 patients

Pain Score at Rest 24hrs



- **PainRest24hrs: Overall Results**

- Heterogeneity I² = 77.03 %
- WMD = -0.72
- Lower CI = -1.31
- Upper CI = -0.13
- *p*Value = 0.02
- Funnel Plot Asymmetry *p*Value = 0.28

- *PainRest24hrs: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 14.45 %
- WMD = -0.36
- Lower CI = -0.66
- Upper CI = -0.06
- *p*Value = 0.02

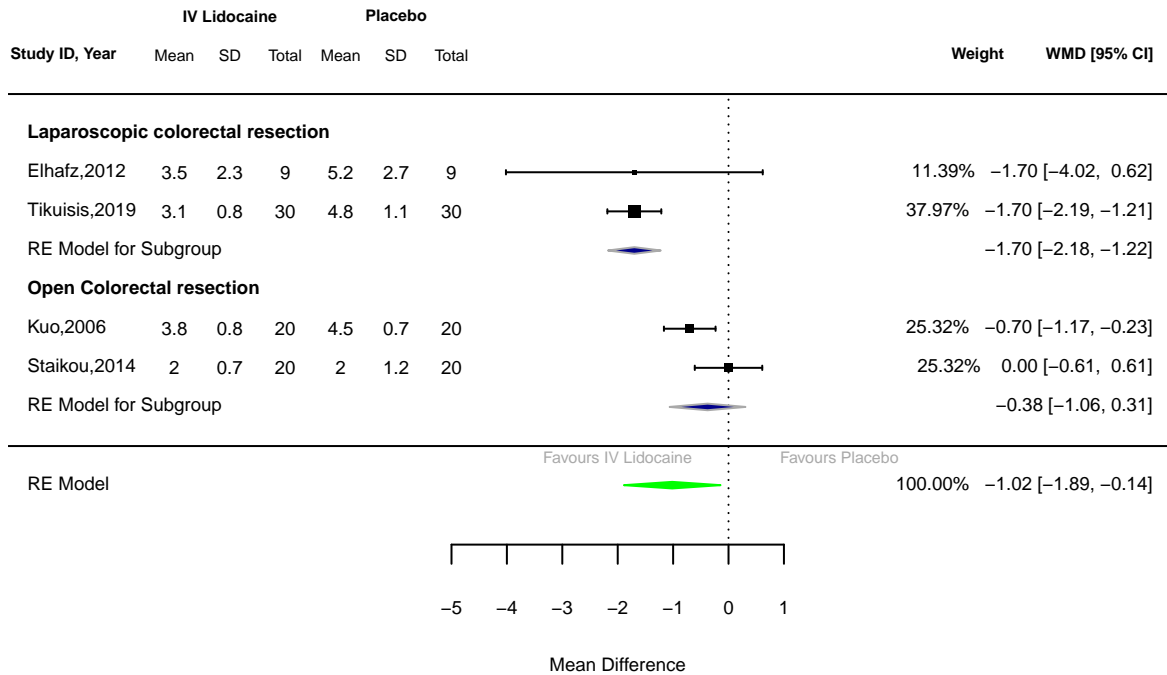
- *PainRest24hrs: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 78.82 %
- WMD = -0.88
- Lower CI = -1.89
- Upper CI = 0.14
- *p*Value = 0.09

S5 Pain scores on Movement at 24 hours

There were 4 studies with a total of 133 patients

Pain Score on Movement 24hrs



- **PainMove24hrs: Overall Results**

- Heterogeneity I2 = 84.85 %
- WMD = -1.02
- Lower CI = -1.89
- Upper CI = -0.14
- pValue = 0.02
- Funnel Plot Asymmetry pValue = 0.69

- *PainMove24hrs: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 68.78 %
- WMD = -0.38
- Lower CI = -1.06
- Upper CI = 0.31
- pValue = 0.28

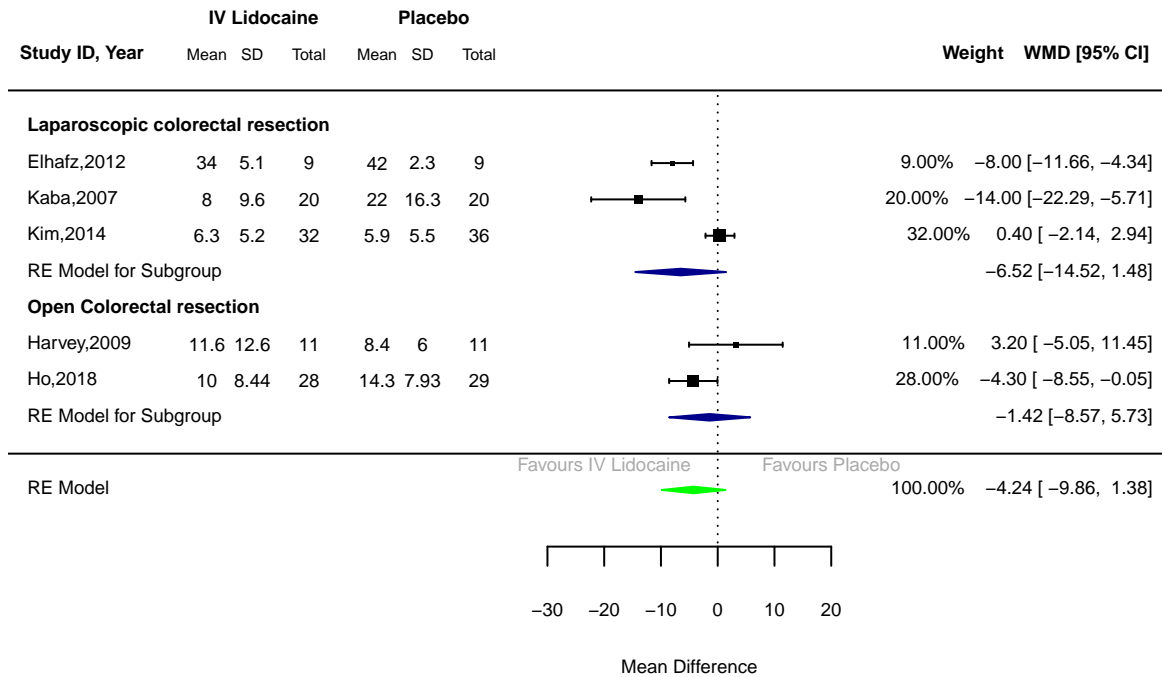
- *PainMove24hrs: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 0 %
- WMD = -1.7
- Lower CI = -2.18
- Upper CI = -1.22
- pValue = 2.65e - 12

S6 Opiate Consumption Day One

There were 5 studies with a total of 205 patients

Opiate Day One



- **OpiateDayOne: Overall Results**

- Heterogeneity I² = 84.83 %
- WMD = -4.24
- Lower CI = -9.86
- Upper CI = 1.38
- pValue = 0.14
- Funnel Plot Asymmetry pValue = 0.36

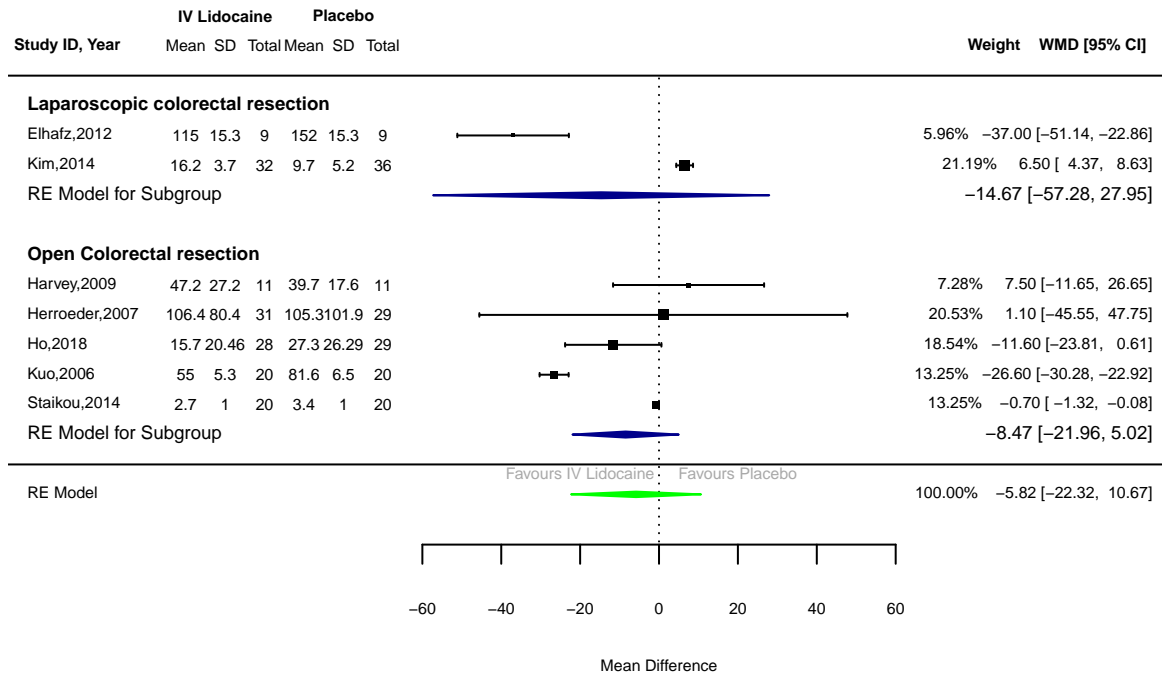
- *OpiateDayOne: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I² = 91.04 %
- WMD = -6.52
- Lower CI = -14.52
- Upper CI = 1.48
- pValue = 0.11

S7 Total Opiate Consumption

There were 7 studies with a total of 305 patients

Total Opiate



- **TotalOpiate: Overall Results**

- Heterogeneity I2 = 98.99 %
- WMD = -5.82
- Lower CI = -22.32
- Upper CI = 10.67
- pValue = 0.49
- Funnel Plot Asymmetry pValue = 0.84

- *TotalOpiate: Open Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 96.47 %
- WMD = -8.47
- Lower CI = -21.96
- Upper CI = 5.02
- pValue = 0.22

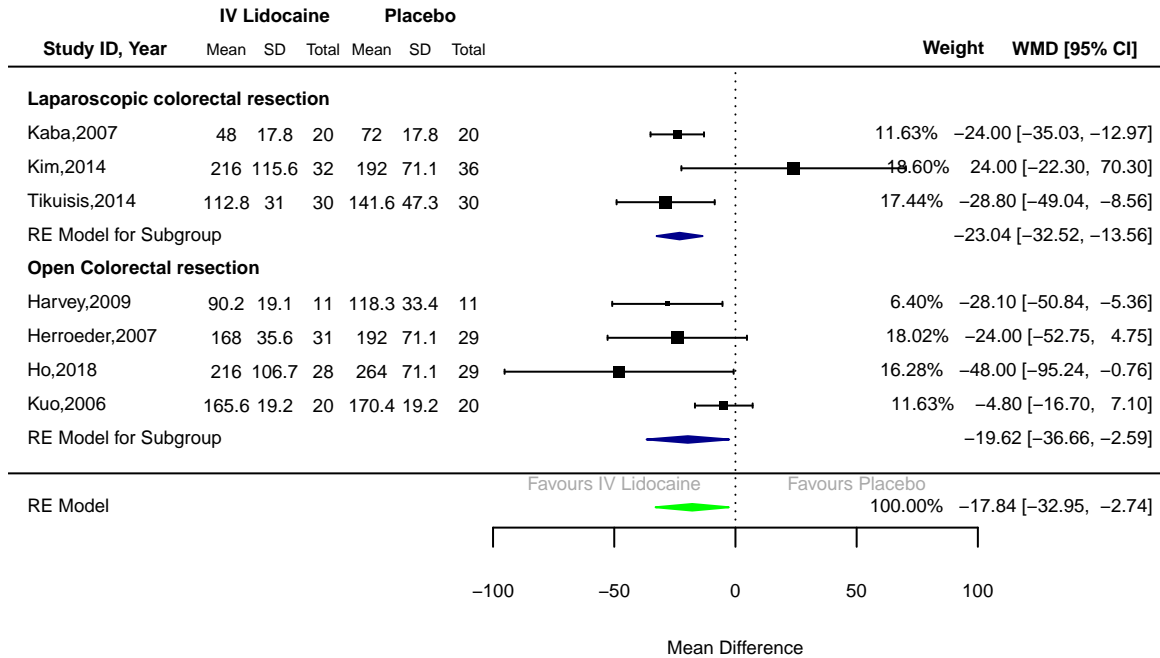
- *TotalOpiate: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 97.19 %
- WMD = -14.67
- Lower CI = -57.28
- Upper CI = 27.95
- pValue = 0.5

S8 Length of Stay

There were 7 studies with a total of 347 patients

Length of Stay



- **LoS: Overall Results**

- Heterogeneity I2 = 45.94 %
- WMD = -17.84
- Lower CI = -32.95
- Upper CI = -2.74
- pValue = 0.02
- Funnel Plot Asymmetry pValue = 0.66

- *LoS: Open Surgery: IV Lidocaine Versus Placebo*

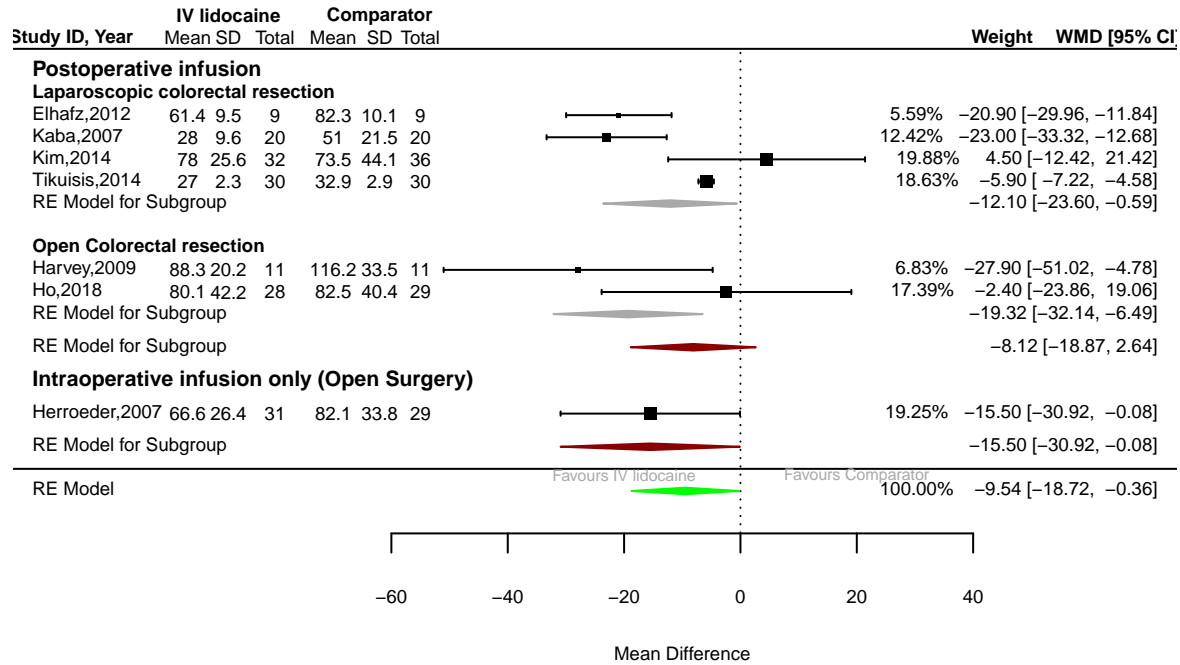
- Heterogeneity I2 = 50.33 %
- WMD = -19.62
- Lower CI = -36.66
- Upper CI = -2.59
- pValue = 0.02

- *LoS: Laparoscopic Surgery: IV Lidocaine Versus Placebo*

- Heterogeneity I2 = 0 %
- WMD = -23.04
- Lower CI = -32.52
- Upper CI = -13.56
- pValue = 1.91e - 06

S9 Sensitivity Analysis 1; Time until Bowels, Infusion duration

Sensitivity Analysis 1: Bowel function – Duration of Infusion



- *Time until Bowels: Post-op infusion*
 - Heterogeneity I2 = 80.15 %
 - WMD = -8.12
 - Lower CI = -18.87
 - Upper CI = 2.64
 - pValue = 0.139
- *Time until Bowels: Intra-Op infusion only*
 - Heterogeneity I2 = 0 %
 - WMD = -15.5
 - Lower CI = -30.92
 - Upper CI = -0.08
 - pValue = 0.049

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