

Supplementary Material

Appendix 1 Search strategy

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Figure S1-S4

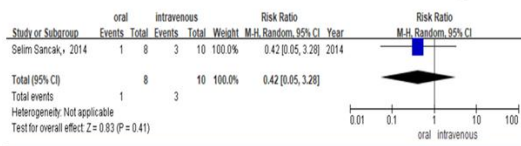


Figure S1 Risk difference of observational studies of Mortality during the paracetamol therapy

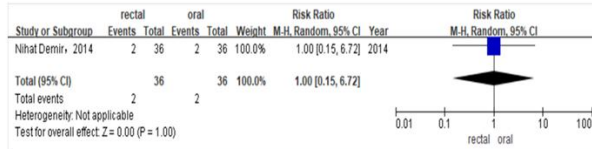


Figure S2 Risk difference of observational studies of Mortality during the ibuprofen therapy

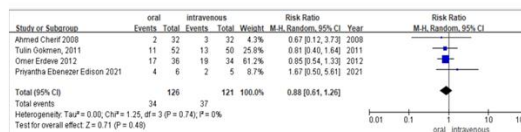


Figure S3 Risk difference of Incidence of BPD/CLD during the ibuprofen therapy

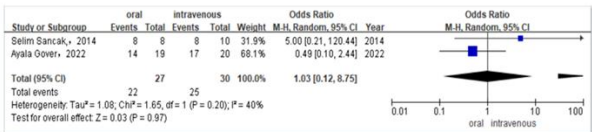


Figure S4 Risk difference of Incidence of BPD/CLD during the paracetamol therapy

Figure S5-S8

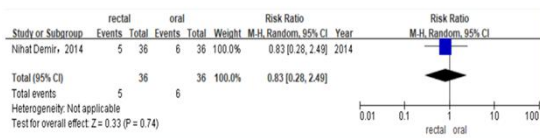


Figure S5 Risk difference of Incidence of BPD/CLD during the ibuprofen therapy

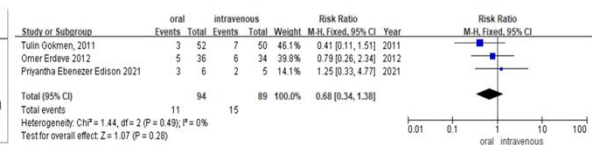


Figure S6 Risk difference of Incidence of ROP during the ibuprofen therapy

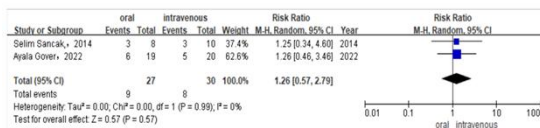


Figure S7 Risk difference of Incidence of ROP during the paracetamol therapy

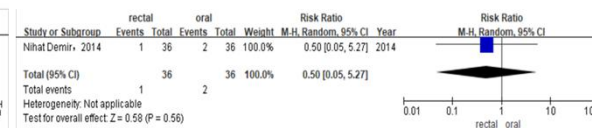


Figure S8 Risk difference of Incidence of ROP during the ibuprofen therapy

Figure S9-S12

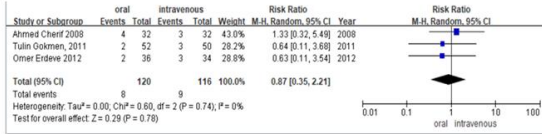


Figure S9 Risk difference of RCTS of Incidence of NEC during the ibuprofen therapy

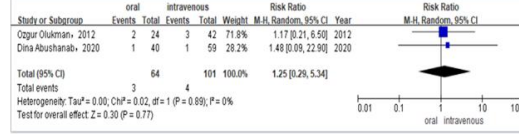


Figure S10 Risk difference of observational studies of Incidence of NEC during the ibuprofen therapy

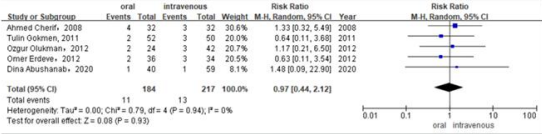


Figure S11 Risk difference of RCTS and observational studies of Incidence of NEC during the ibuprofen therapy

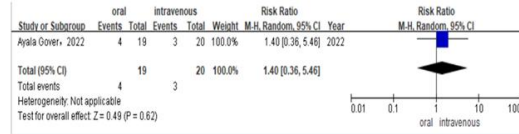


Figure S12 Risk difference of Incidence of NEC during the paracetamol therapy

Figure S13-16

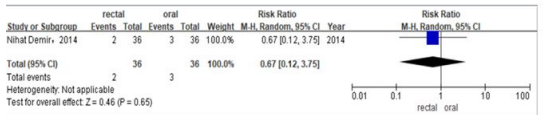


Figure S13 Risk difference of Incidence of NEC during the ibuprofen therapy

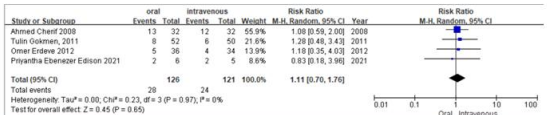


Figure S14 Risk difference of Incidence of IVH during the ibuprofen therapy

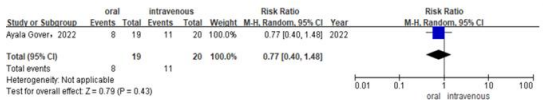


Figure S15 Risk difference of Incidence of IVH during the paracetamol therapy

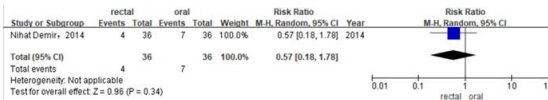


Figure S16 Risk difference of Incidence of IVH during the ibuprofen therapy

Figure S17-S20

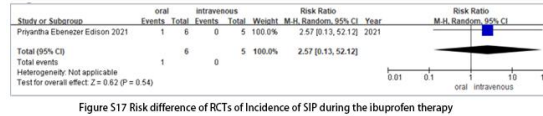


Figure S17 Risk difference of RCTS of Incidence of SIP during the ibuprofen therapy

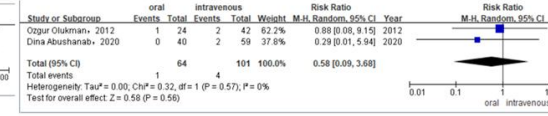


Figure S18 Risk difference of observational studies of Incidence of SIP during the ibuprofen therapy

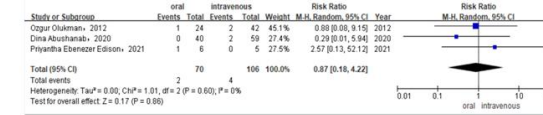


Figure S19 Risk difference of RCTS and observational studies of Incidence of SIP during the ibuprofen therapy

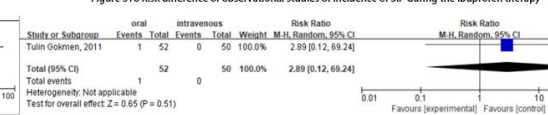


Figure S20 Risk difference of Incidence of GIH during the ibuprofen therapy

Figure S21-24

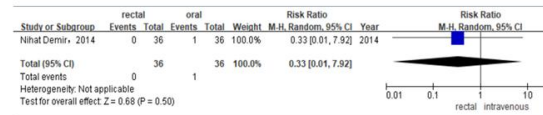


Figure S21 Risk difference of Incidence of GIH during the ibuprofen therapy

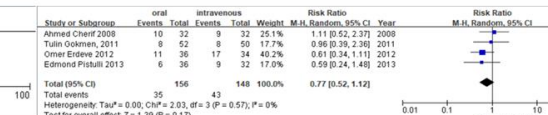


Figure S22 Risk difference of Incidence of Sepsis during the ibuprofen therapy

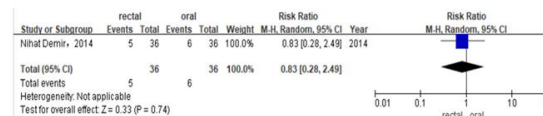


Figure S23 Risk difference of Incidence of Sepsis during the ibuprofen therapy

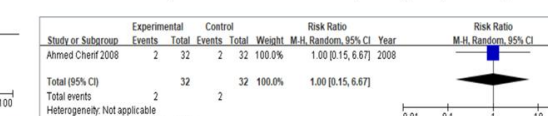


Figure S24 Risk difference of Incidence of PVL during the ibuprofen therapy

Figure S25-28

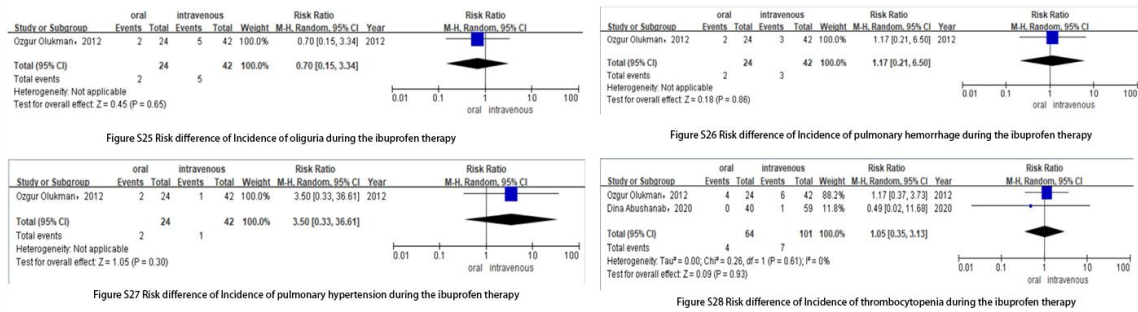


Figure S29-32

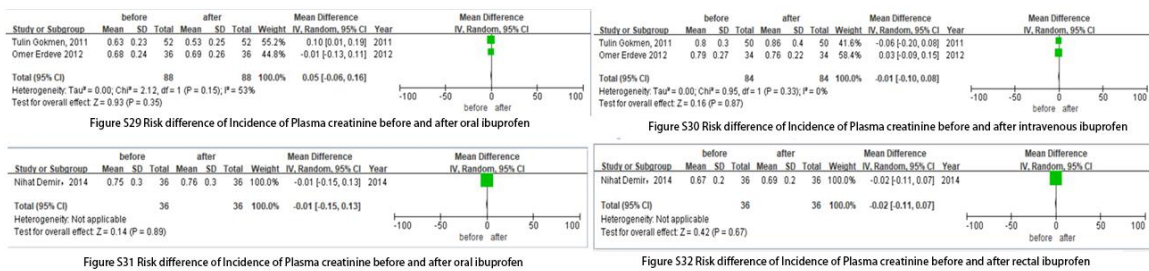
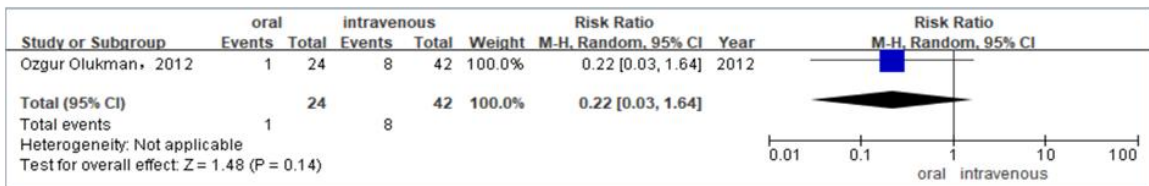
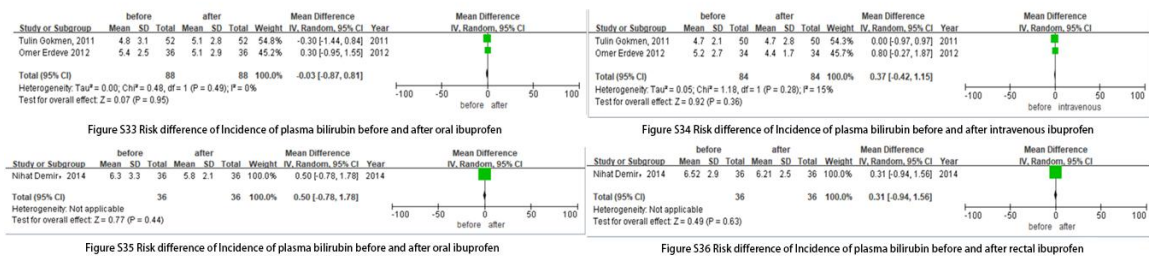


Figure S33-S36



FigureA1-FigureA4

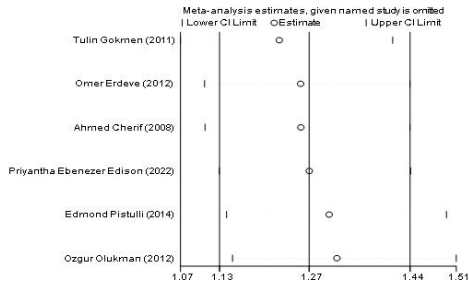


Figure A1 Meta-analysis estimates of PDA closure rate after the first course of ibuprofen

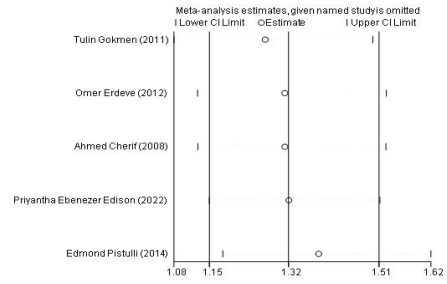


Figure A2 Meta analysis estimates of RCTs of PDA closure rate after the first course of ibuprofen

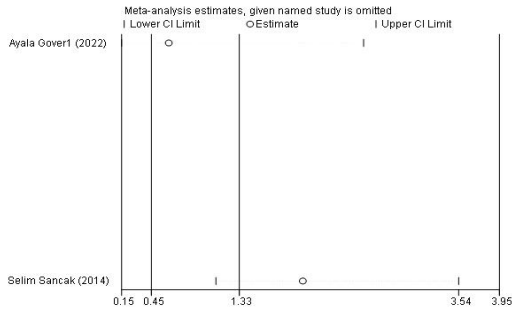


Figure A3 Meta-analysis estimates of observational studies of PDA closure rate after the first course of paracetamol

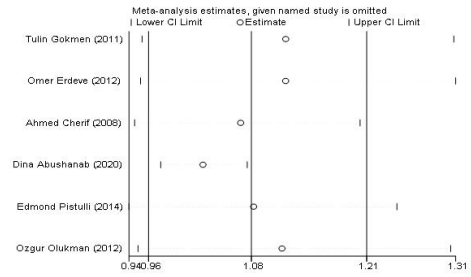


Figure A4 Meta-analysis estimates of combined of RCTs and observational studies of PDA closure rate after the total course of ibuprofen

FigureA5-FigureA8

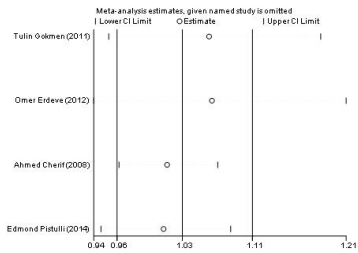


Figure A5 Meta-analysis estimates of RCTs after the total course of ibuprofen

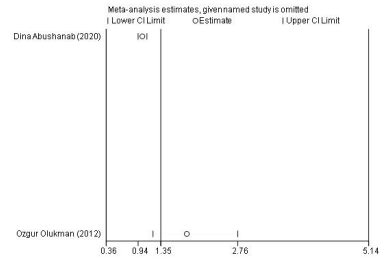


Figure A6 Meta-analysis estimates of observational studies after the total course of ibuprofen

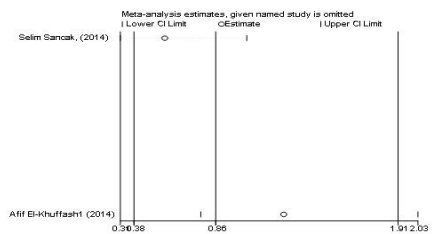


Figure A7 Meta-analysis estimates of observational studies after the total course of paracetamol

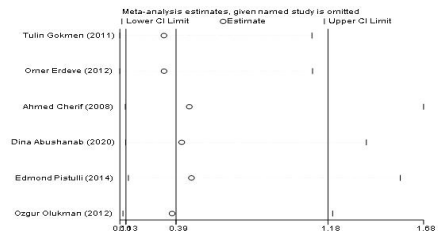


Figure A8 Meta-analysis estimates of RCTs and observational studies of need for surgical ligations of PDA after ibuprofen treatment

FigureA9-FigureA12

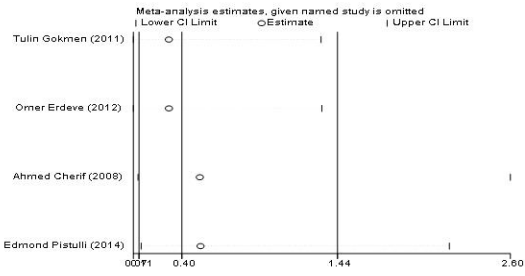


Figure A9 Meta analysis estimates of RCTs of need for surgical ligations of PDA after ibuprofen treatment

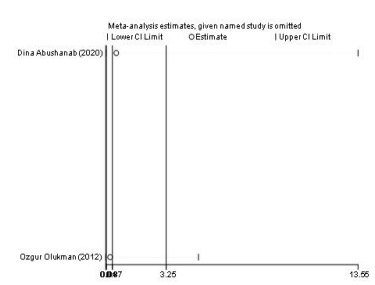


Figure A10 Meta analysis estimates of observational studies of need for surgical ligations of PDA after ibuprofen treatment

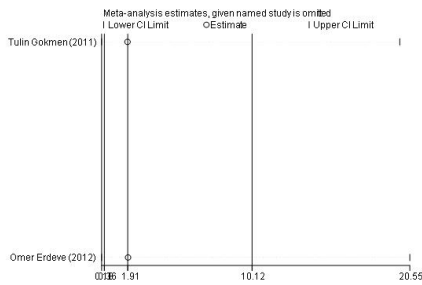


Figure A11 Meta-analysis estimates of RCTs of mortality during ibuprofen treatment

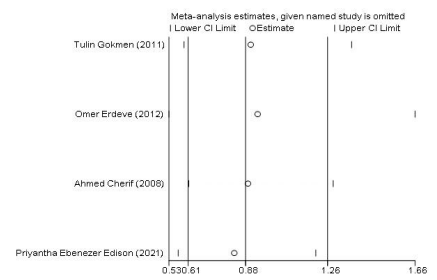


Figure A12 Meta-analysis estimates of incidence of BPD/CLD during ibuprofen treatment

FigureA13-FigureA16

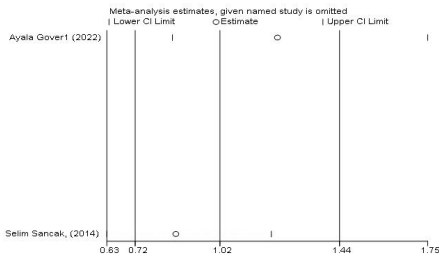


Figure A13 Meta-analysis estimates of incidence of BPD/CLD during paracetamol treatment

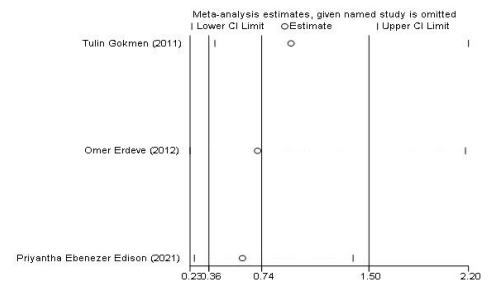


Figure A14 Meta-analysis estimates of incidence of ROP during ibuprofen treatment

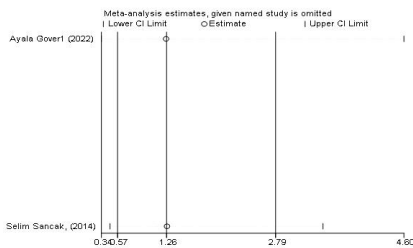


Figure A15 Meta-analysis estimates of incidence of ROP during paracetamol treatment

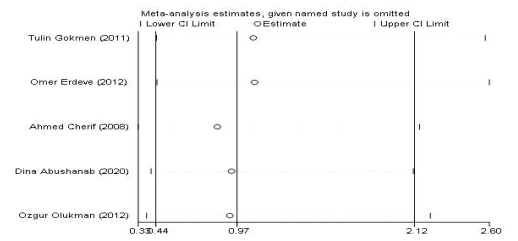


Figure A16 Meta-analysis estimates of RCTs and observational studies of incidence of NEC during ibuprofen treatment

FigureA17-FigureA20

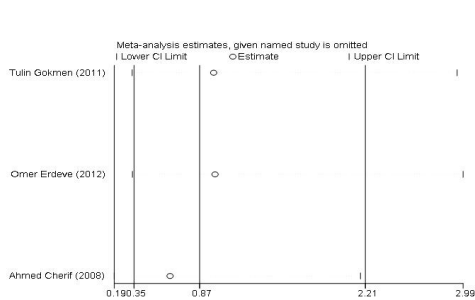


Figure A17 meta-analysis estimates of RCTs of incidence of NEC during ibuprofen treatment

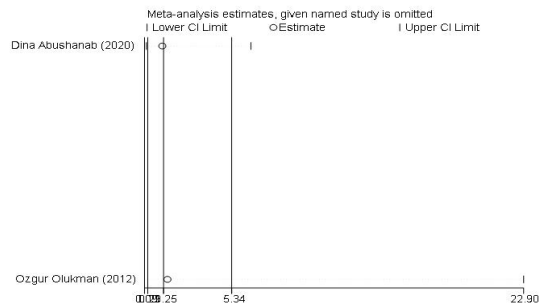


Figure A18 Meta-analysis estimates of observational studies of incidence of NEC during ibuprofen treatment

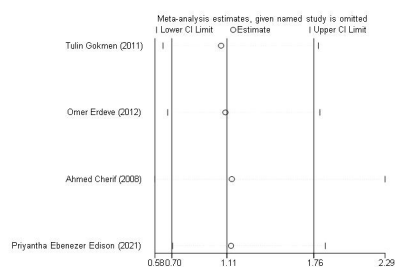


Figure A19 Meta-analysis estimates of incidence of IVH during ibuprofen treatment

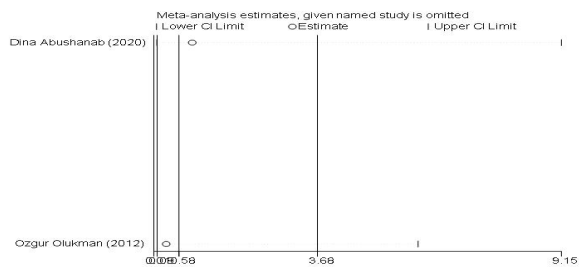


Figure A20 Meta-analysis estimates of observational study of incidence of SIP during ibuprofen treatment

FigureA21-FigureA24

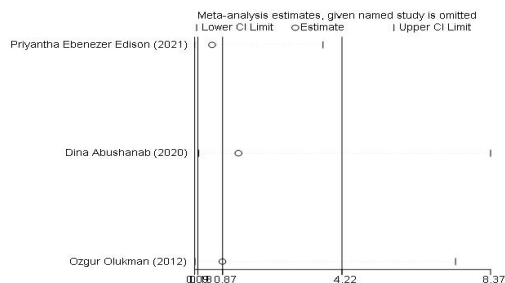


Figure A21 Meta-analysis estimates of RCTs and observational study of incidence of SIP during ibuprofen treatment

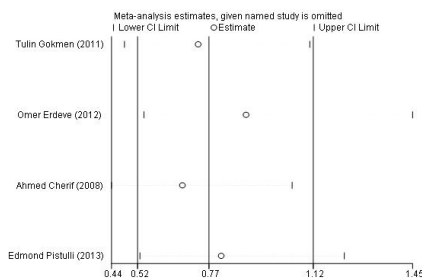


Figure A22 Meta-analysis estimates of incidence of Sepsis during ibuprofen treatment

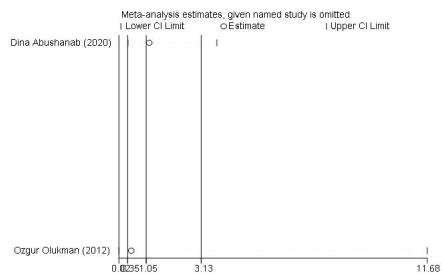


Figure A23 Meta-analysis estimates of incidence of thrombocytopenia during ibuprofen treatment

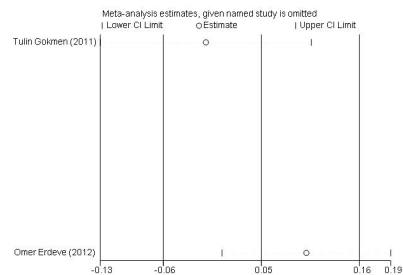


Figure A24 Meta-analysis estimates of plasma creatinine before and after oral ibuprofen

FigureA25-FigureA27

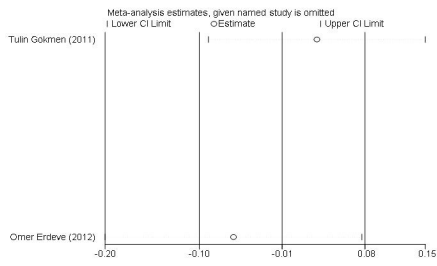


Figure A25 Meta-analysis estimates of plasma creatinine before and after intravenous ibuprofen

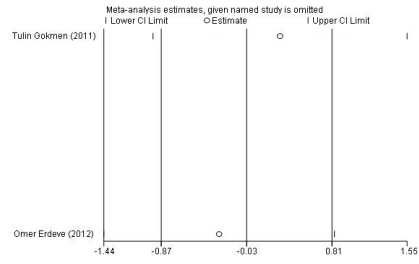


Figure A26 Meta-analysis estimates of plasma bilirubin before and after oral ibuprofen

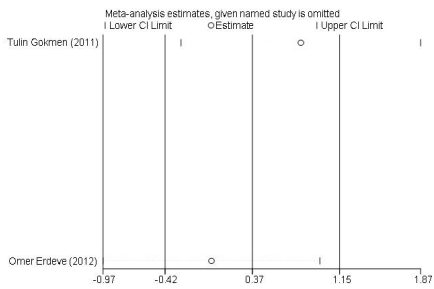


Figure A27 Meta-analysis estimates of plasma bilirubin before and after intravenous ibuprofen

FigureB1-FigureB4

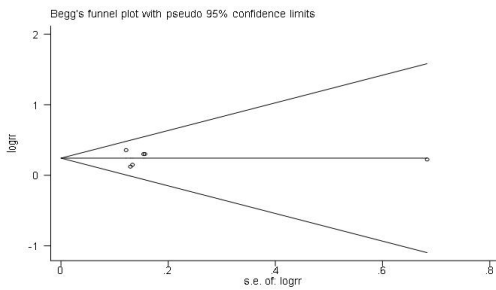


Figure B1 Begg's funnel plot for PDA closure rate after the first course of ibuprofen

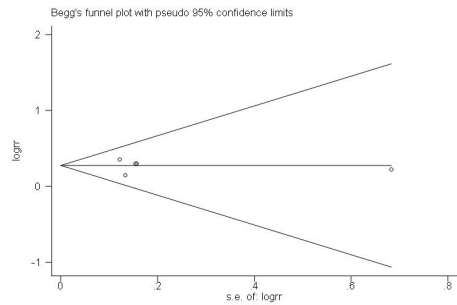


Figure B2 Begg's funnel plot for RCTs of PDA closure rate after the first course of ibuprofen

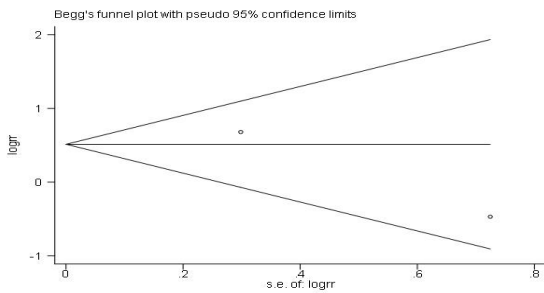


Figure B3 Begg's funnel plot for observational studies of PDA closure rate after the first course of paracetamol

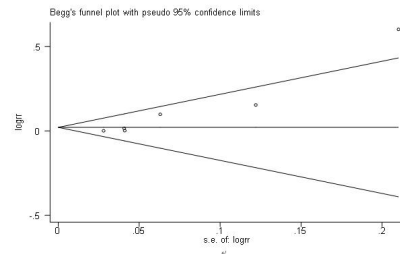


Figure B4 Begg's funnel plot for combined of RCTs and observational studies of PDA closure rate after the total course of ibuprofen

FigureB5-FigureB8

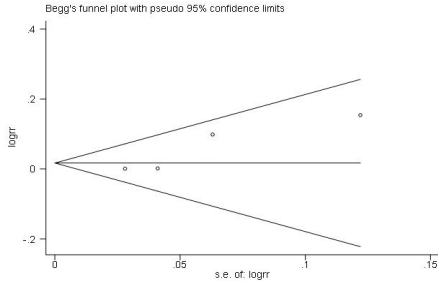


Figure B5 Begg' s funnel plot for RCTs after the total course of ibuprofen

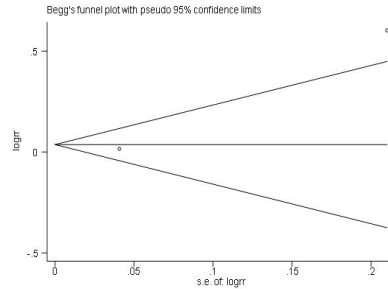


Figure B6 Begg' s funnel plot for observational studies after the total course of ibuprofen

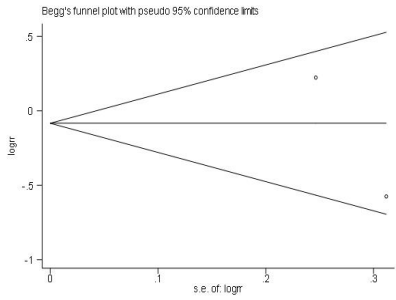


Figure B7 Begg' s funnel plot for observational studies after the total course of paracetamol

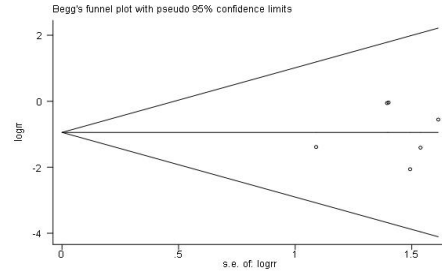


Figure B8 Begg' s funnel plot for RCTs and observational studies of need for surgical ligations of PDA after ibuprofen treatment

FigureB9-FigureB12

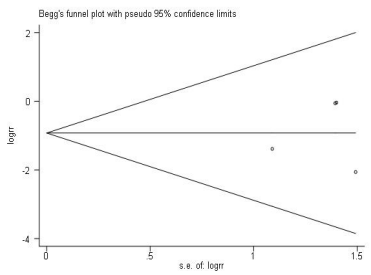


Figure B9 Begg' s funnel plot for RCTs of need for surgical ligations of PDA after ibuprofen treatment

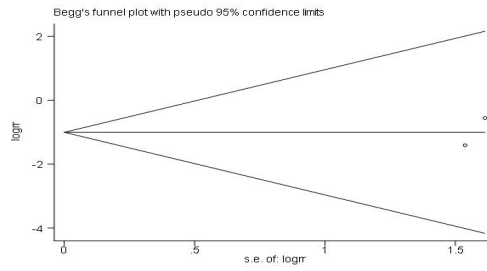


Figure B10 Begg' s funnel plot for observational studies of need for surgical ligations of PDA after ibuprofen treatment

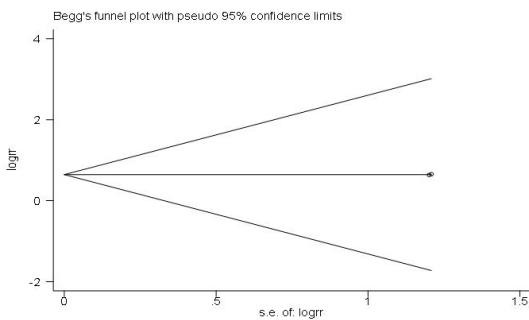


Figure B11 Begg' s funnel plot for RCTs of mortality during ibuprofen treatment

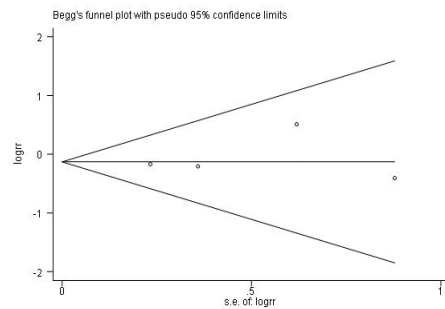


Figure B12 Begg' s funnel plot for incidence of BPD/CLD during ibuprofen treatment

FigureB13-FigureB16

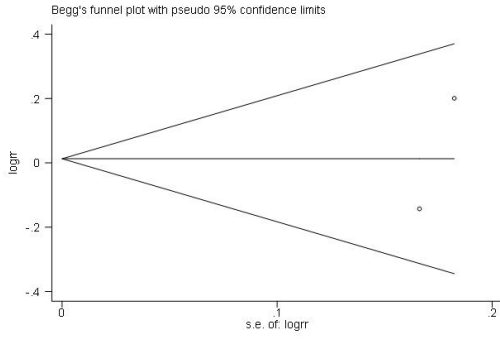


Figure B13 Begg' s funnel plot for incidence of BPD/CLD during paracetamol treatment

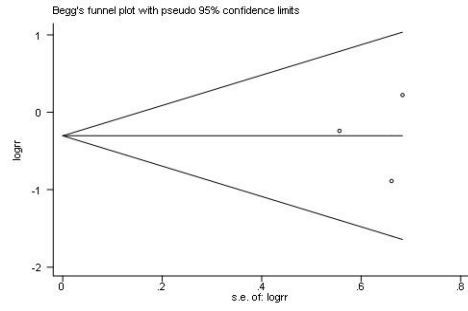


Figure B14 Begg' s funnel plot for ROP during ibuprofen treatment

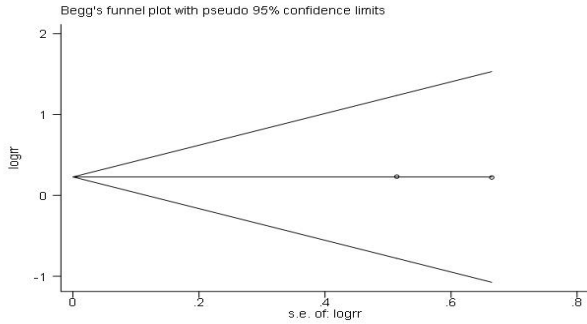


Figure B15 Begg' s funnel plot for ROP during paracetamol treatment

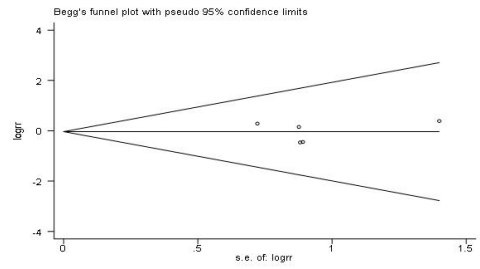


Figure B16 Begg' s funnel plot for RCTs and observational studies of incidence of NEC during ibuprofen treatment

FigureB17-FigureB20

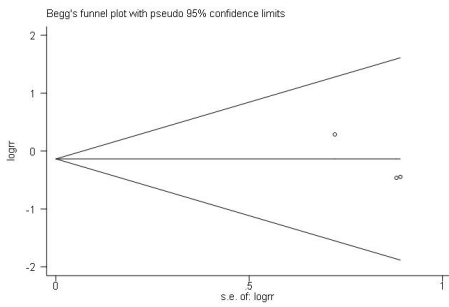


Figure B17 Begg' s funnel plot for RCTs of incidence of NEC during ibuprofen treatment

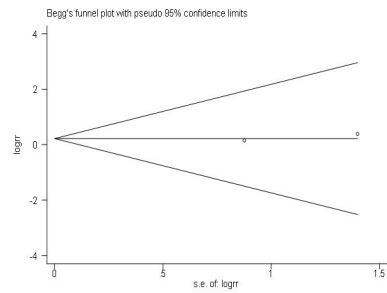


Figure B18 Begg' s funnel plot for observational studies of incidence of NEC during ibuprofen treatment

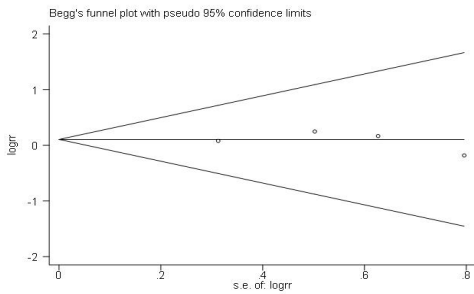


Figure B19 Begg' s funnel plot for incidence of IVH during ibuprofen treatment

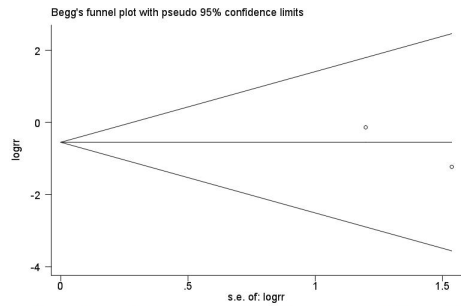


Figure B20 Begg' s funnel plot for observational study of incidence of SIP during ibuprofen treatment

FigureB21-FigureB24

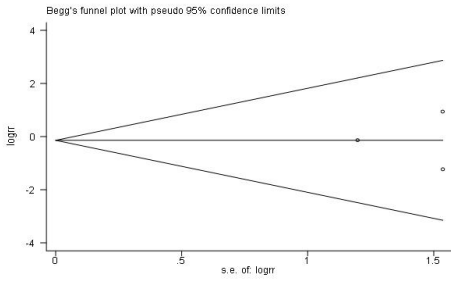


Figure B21 Begg's funnel plot for RCTs and observational study of incidence of SIP during ibuprofen treatment

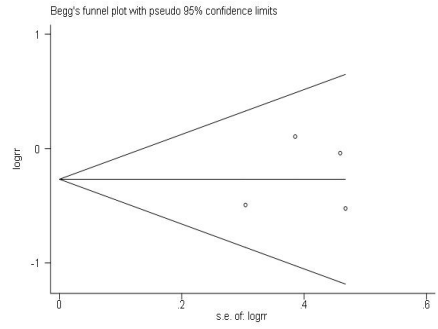


Figure B22 Begg's funnel plot for incidence of Sepsis during ibuprofen treatment

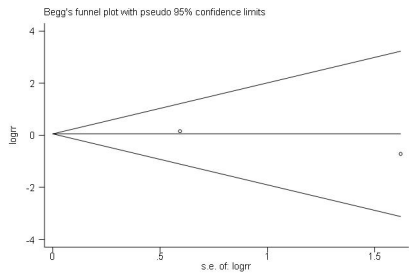


Figure B23 Begg's funnel plot for incidence of thrombocytopenia during ibuprofen treatment

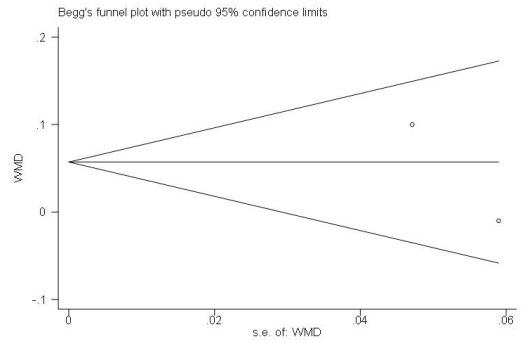


Figure B24 Begg's funnel plot for plasma creatinine before and after oral ibuprofen

FigureB25-FigureB27

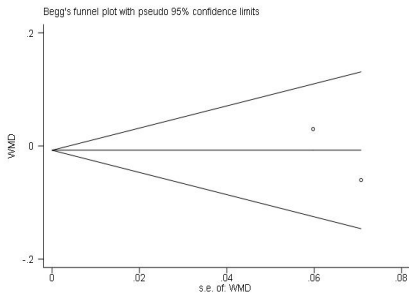


Figure B25 Begg's funnel plot for plasma creatinine before and after intravenous ibuprofen

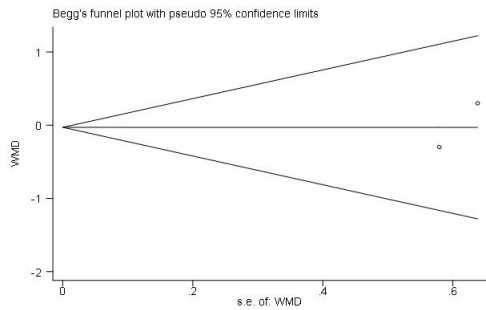


Figure B26 Begg's funnel plot for plasma bilirubin before and after oral ibuprofen

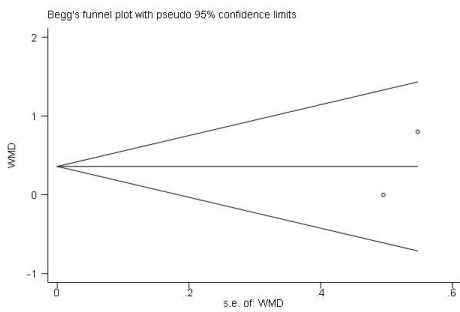


Figure B27 Begg's funnel plot for plasma bilirubin before and after intravenous ibuprofen