Supplementary Marterial 1. Search strategy.

Embase and Cochrane

#1 respiratory [ti,ab,kw] OR lung [ti,ab,kw] OR pulmonary [ti,ab,kw] OR breathing [ti,ab,kw] OR respiration [ti,ab,kw]

#2 oxygenation [ti,ab,kw] OR PaO2/FiO2 [ti,ab,kw] OR P/F ratio [ti,ab,kw] OR mechanics [ti,ab,kw] OR resistance [ti,ab,kw] OR compliance [ti,ab,kw] OR dynamic compliance [ti,ab,kw] OR Cdyn [ti,ab,kw] OR airway peak pressure [ti,ab,kw] OR Ppeak [ti,ab,kw] OR peak inspiratory pressure [ti,ab,kw] OR plateau pressure [ti,ab,kw] OR dead space [ti,ab,kw] OR transpulmonary pressure [ti,ab,kw] OR intrapulmonary shunt [ti,ab,kw] OR Qs/Qt [ti,ab,kw]

#3 dexmedetomidine [ti]

#4 #1 AND #2 AND #3

Pubmed

#1 respiratory [TIAB] OR lung [TIAB] OR pulmonary [TIAB] OR breathing [TIAB] OR respiration [TIAB]

#2 oxygenation [TIAB] OR PaO2/FiO2 [TIAB] OR P/F ratio [TIAB] OR mechanics [TIAB] OR resistance [TIAB] OR compliance [TIAB] OR dynamic compliance [TIAB] OR Cdyn [TIAB] OR airway peak pressure [TIAB] OR Ppeak [TIAB] OR peak inspiratory pressure [TIAB] OR plateau pressure [TIAB] OR dead space [TIAB] OR transpulmonary pressure [TIAB] OR intrapulmonary shunt [TIAB] OR Qs/Qt [TIAB]

#3 dexmedetomidine [TI]

#4 #1 AND #2 AND #3

Medline

#1 TS=(respiratory) OR TS=(lung) OR TS=(pulmonary) OR TS=(breathing) OR TS=(respiration)

#2 TS=(oxygenation) OR TS=(PaO2/FiO2) OR TS=(P/F ratio) OR TS=(mechanics) OR TS=(resistance) OR TS=(compliance) OR TS=(dynamic compliance) OR TS=(Cdyn) OR TS=(airway peak pressure) OR TS=(Ppeak) OR TS=(peak

inspiratory pressure) OR TS=(plateau pressure) OR TS=(dead space) OR TS=(transpulmonary pressure) OR TS=(intrapulmonary shunt) OR TS=(Qs/Qt)

#3 TS=(dexmedetomidine)

#4 #1 AND #2 AND #3

ClinicalTrials.gov and Chinese Clinical Trial Registry

#1 oxygenation [ti] OR mechanics [ti] OR compliance [ti] OR resistance [ti] OR peak inspiratory pressure [ti] OR plateau pressure [ti] OR dead space [ti] OR transpulmonary pressure [ti] OR intrapulmonary shunt [ti]

#2 dexmedetomidine [ti]

#3 #1 AND #2