

Appendix A1. Summary of search queries and terms.

<i>Database</i>	<i>Search Terms</i>
Ovid Search: MEDLINE(R), ERIC, and EMBASE	((("Spinal surgery" OR "Spine procedure" OR Spine surgery) AND (("racial determinants" OR "social determinants" OR "healthcare disparities" OR "sociodemographic factor" OR social disparities gender disparities OR "social factors" OR "socioeconomic factors" OR racial disparities"))
PubMed	((spine surgery OR spinal surgery)) AND ((Race OR socioeconomic OR social disparity OR racial disparity)) AND ((readmission OR re-admission))
PubMed	((spine surgery OR spinal surgery)) AND ((non-routine discharge OR discharge disposition OR non routine discharge))
PubMed	((elective AND spine NOT (tumor)) AND (spinal surgery OR spine surgery)) AND ((any complication))
Scopus	TITLE-ABS-KEY((spine surgery OR spinal surgery)) AND (Race OR socioeconomic OR social disparity OR racial disparity) AND (readmission OR re-admission))
Scopus	TITLE-ABS-KEY((spine surgery OR spinal surgery) AND (non-routine discharge OR discharge disposition OR non routine discharge))
Scopus	TITLE-ABS-KEY((elective AND spine NOT tumor) AND (spinal surgery OR spine surgery) AND (any complication))

Appendix A2. Description of exceptions during data extraction.

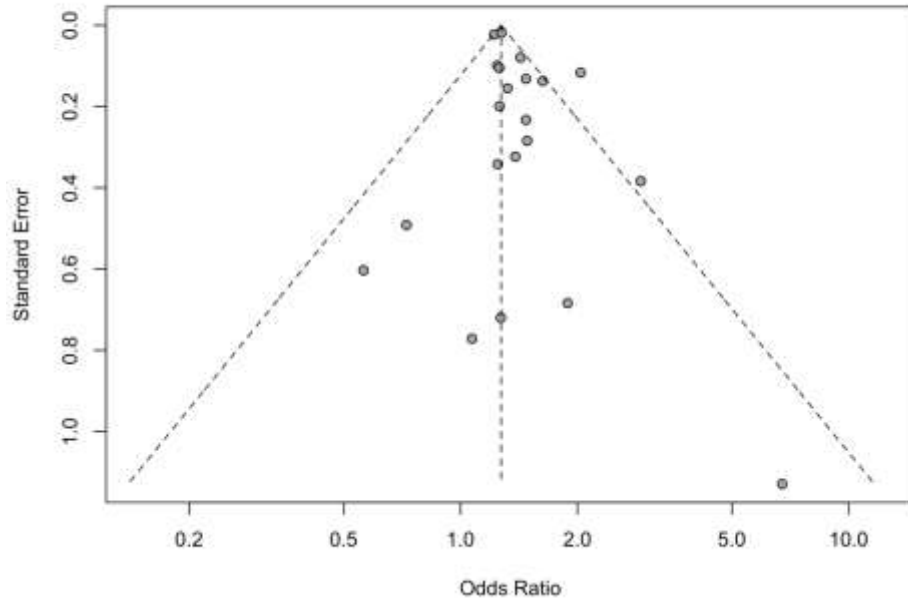
<i>Study Name</i>	<i>Description of Exception</i>
<i>Sholasky et al. 2014</i>	Study classified post-operative infection as surgical site infection. We extracted data as surgical site infection.
<i>(a)Elsamadicy et al. 2021</i>	Study did not report incidence rate if number of events was less than 10 patients. Values were approximated to 5 patients.
<i>Macki et al. 2021</i>	Values for "Returned to OR w/in 90 day" were counted as Re-Operation.
<i>Lad et al. 2013</i>	Study did not provide re-operation at 1 year. Therefore, values were not extracted.
<i>Elsamadicy et al. 2020</i>	Study reported discharge disposition routine, non-routine, and other. Only routine and non-routine values were extracted.
<i>Murphy et al. 2017</i>	Study separated white population into Hispanic vs. Non-Hispanic. Data was only extracted from the Non-Hispanic White population.
<i>Mummaneni et al. 2021</i>	Study split routine discharge into "Home" and "Home w/ home healthcare services". These values were grouped under routine discharge for analysis.
<i>Ogura et al. 2020</i>	Study reported "Home, self-care" and "Home, health service" as separate subcategories for discharge disposition. These values were grouped under routine discharge for analysis.
<i>Engler et al. 2022</i>	Cerebrovascular outcomes were counted as Stroke.

Appendix A3. Evaluating quality of eligible studies using Newcastle-Ottawa Scale.

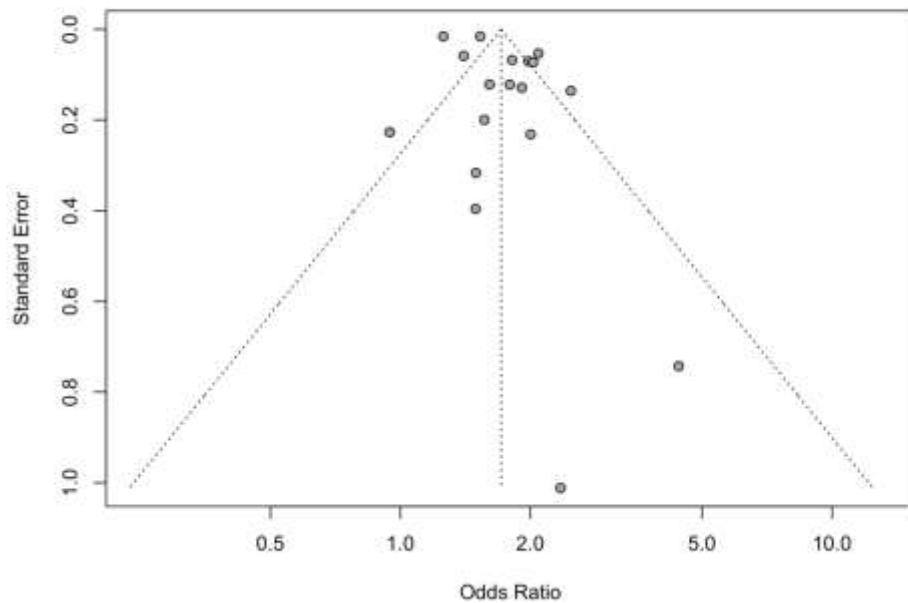
<i>Study</i>	<i>Newcastle-Ottawa Score</i>	<i>Study</i>	<i>Newcastle-Ottawa Score</i>
<i>Adogwa et al. 2016</i>	7	<i>Lee et al. 2018</i>	8
<i>Aladdin et al. 2020</i>	8	<i>Macki et al. 2021</i>	7
<i>Arena et al. 2020</i>	8	<i>Malik et al. 2018</i>	6
<i>Baek et al. 2019</i>	7	<i>Marquez-Lara et al. 2014</i>	7
<i>Cook et al. 2018</i>	7	<i>Mohanty et al. 2022</i>	9
<i>De la Garza-Ramos et al. 2016</i>	7	<i>Mummaneni et al. 2021</i>	8
<i>Dial et al. 2020</i>	7	<i>Murphy et al. 2017</i>	8
<i>Doherty et al. 2020</i>	7	<i>Nandyala et al. 2014</i>	5
<i>Drazin et al. 2017</i>	7	<i>Ogura et al. 2020</i>	5
<i>Elsamadicy et al. 2016</i>	6	<i>Park et al. 2018</i>	9
<i>Elsamadicy et al. 2017</i>	8	<i>(a)Passias et al. 2018</i>	7
<i>Elsamadicy et al. 2018</i>	6	<i>(b)Passias et al. 2018</i>	5
<i>Elsamadicy et al. 2020</i>	7	<i>Passias et al. 2022</i>	9
<i>(a)Elsamadicy et al. 2021</i>	5	<i>Phan et al. 2017</i>	8
<i>(b)Elsamadicy et al. 2021</i>	7	<i>(a)Poorman et al. 2018</i>	6
<i>Engler et al. 2022</i>	9	<i>(b)Poorman et al. 2018</i>	5
<i>Feng et al. 2018</i>	6	<i>Pugely et al. 2014</i>	9
<i>Fineberg et al. 2013</i>	7	<i>Quinn et al. 2017</i>	7
<i>Gephart et al. 2012</i>	6	<i>Sanford et al. 2019</i>	8
<i>Ghenbot et al. 2022</i>	8	<i>Schoenfeld et al. 2012</i>	7
<i>Guan et al. 2018</i>	7	<i>Seicean et al. 2017</i>	6
<i>Hardman et al. 2022</i>	8	<i>Sivaganesan et al. 2019</i>	7
<i>Kashkoush et al. 2019</i>	5	<i>Skolasky et al. 2014</i>	9
<i>Kerezoudis et al. 2019</i>	6	<i>Snyder et al. 2019</i>	8
<i>Kim et al. 2018</i>	6	<i>Thirumala et al. 2017</i>	6
<i>Knusel et al. 2020</i>	8	<i>Wick et al. 2022</i>	8
<i>Kohls et al. 2018</i>	8	<i>Woodard et al. 2022</i>	8
<i>Lad et al. 2013</i>	9	<i>Ye et al. 2018</i>	9
<i>Lee et al. 2017</i>	7	<i>Zakaria et al. 2019</i>	9

Risk bias was assessed using the Newcastle Ottawa Scale for retrospective cohort studies. The scores represent the best efforts of two independent investigators to evaluate the risk of bias of each study, with a score of 7-9 classified as a low risk of bias and a score of 4-6 as a high risk of bias.

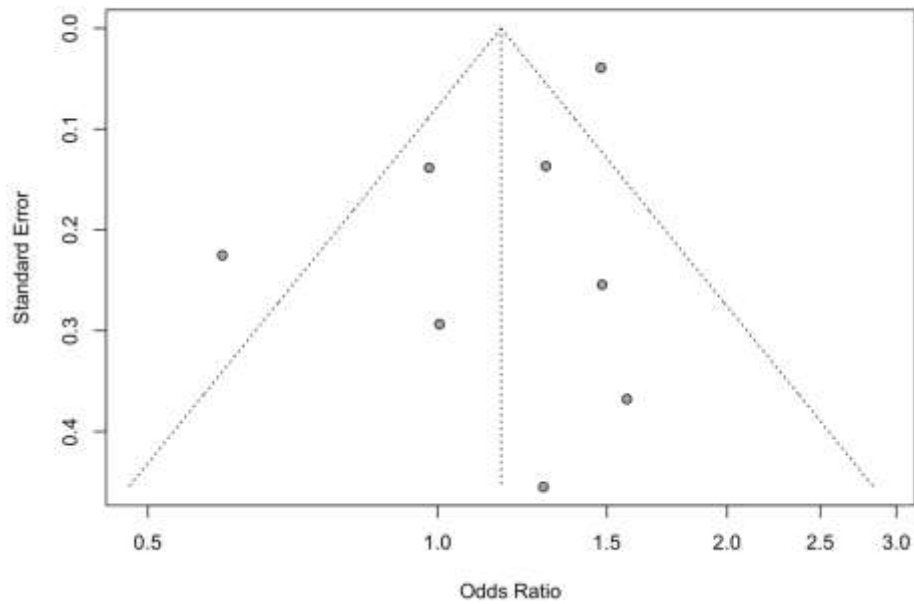
Appendix B1.1. Funnel plot analysis performed of all studies on the outcome re-admission complications. The natural log of standard error is reported on the y-axis.



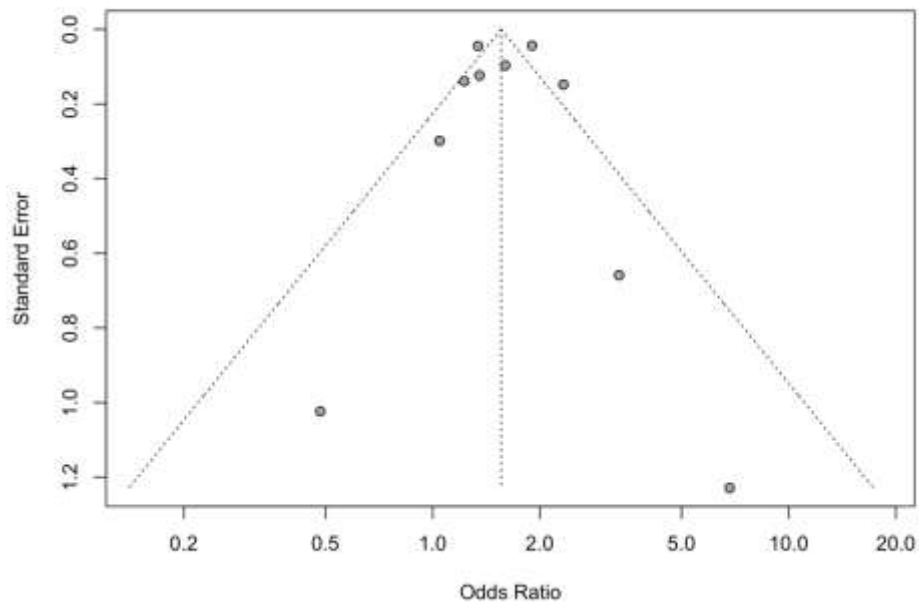
Appendix B1.2. Funnel plot analysis performed of all studies on the outcome non-routine discharge complications. The natural log of standard error is reported on the y-axis.



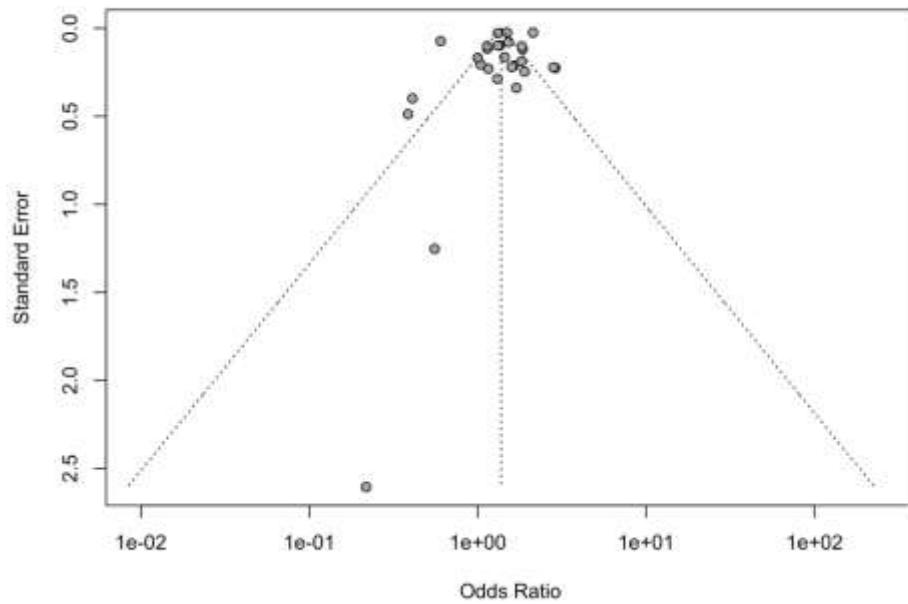
Appendix B1.3. Funnel plot analysis performed of all studies on the outcome re-operation complications. The natural log of standard error is reported on the y-axis.



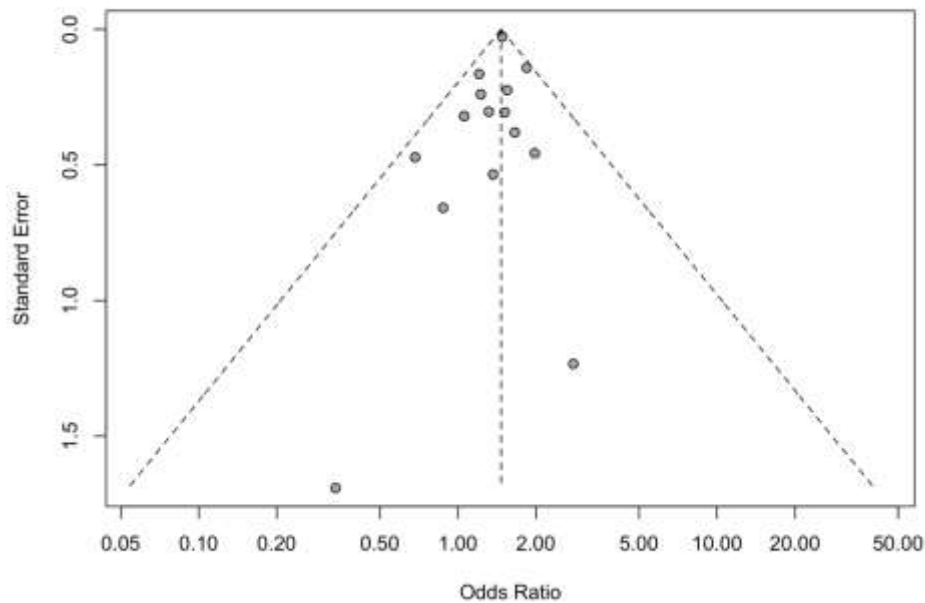
Appendix B1.4. Funnel plot analysis performed of all studies on the outcome mortality complications. The natural log of standard error is reported on the y-axis.



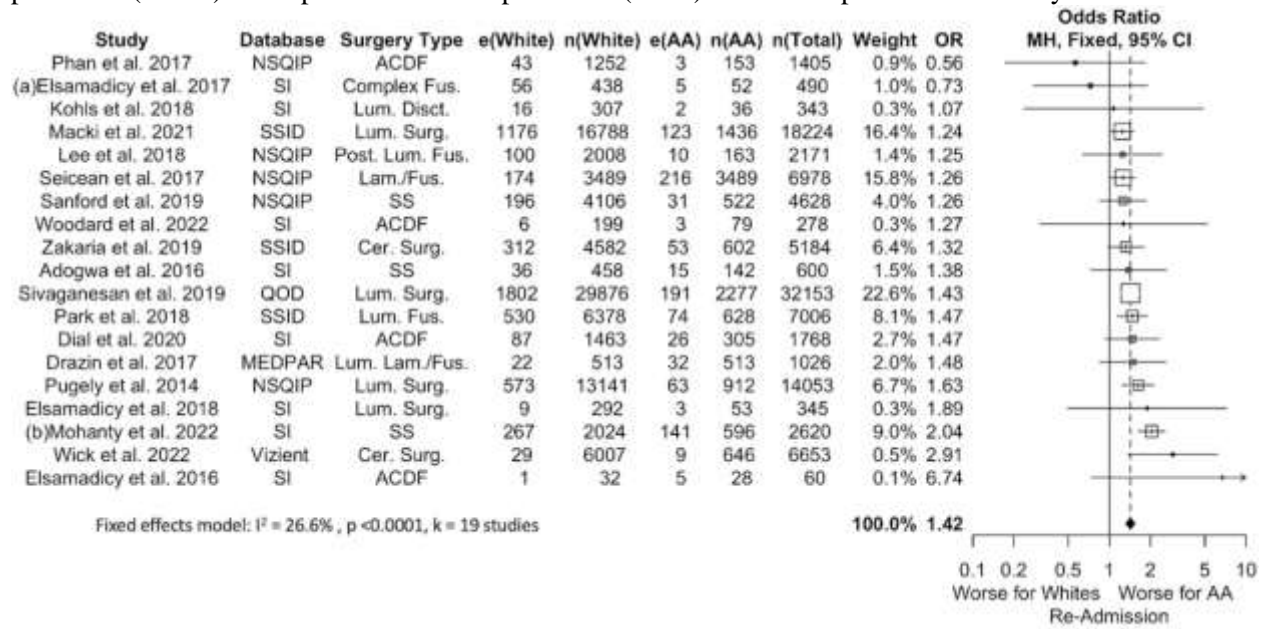
Appendix B1.5. Funnel plot analysis performed of all studies on the outcome all medical complications. The natural log of standard error is reported on the y-axis.



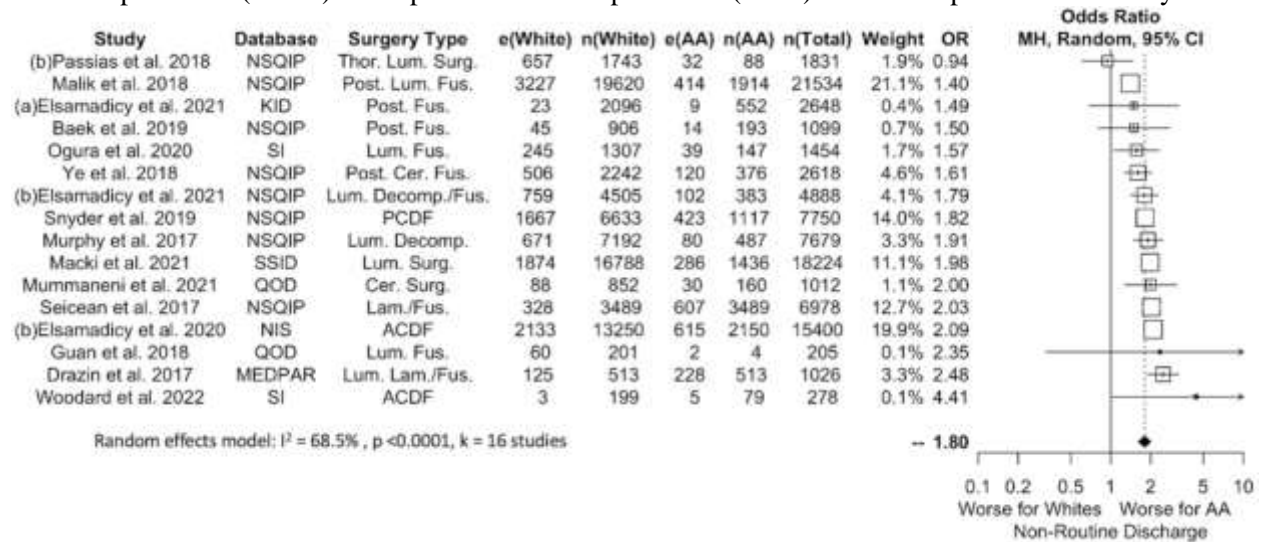
Appendix B1.6. Funnel plot analysis performed of all studies on the outcome wound related complications. The natural log of standard error is reported on the y-axis.



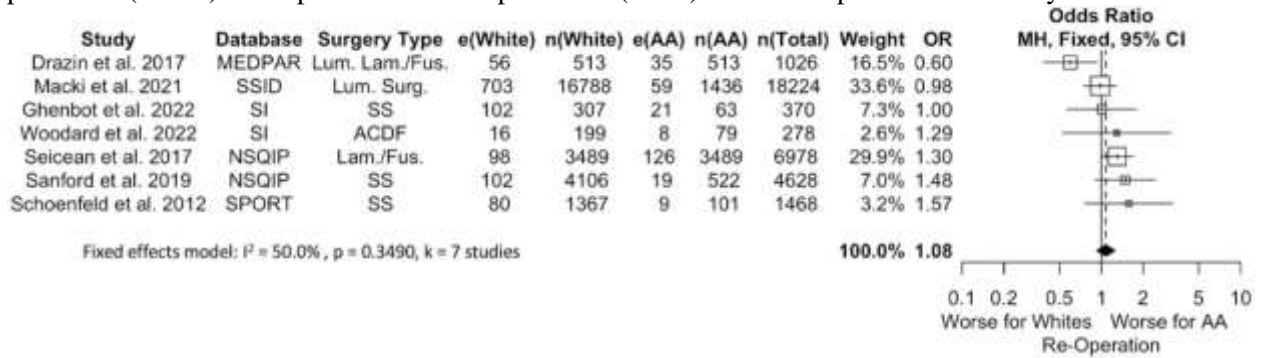
Appendix B2.1. Meta-analysis with a fixed effects model of studies with <100,000 patients reporting re-admission complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



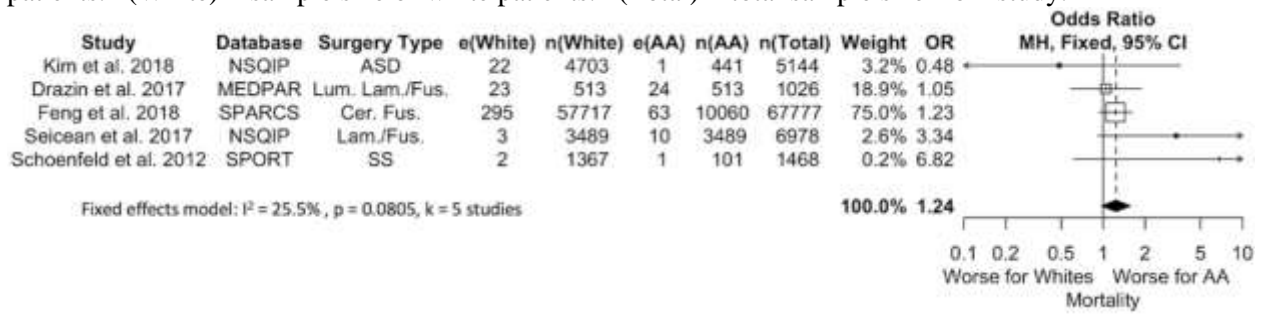
Appendix B2.2. Meta-analysis with a random effects model of studies with <100,000 patients reporting non-routine discharge complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



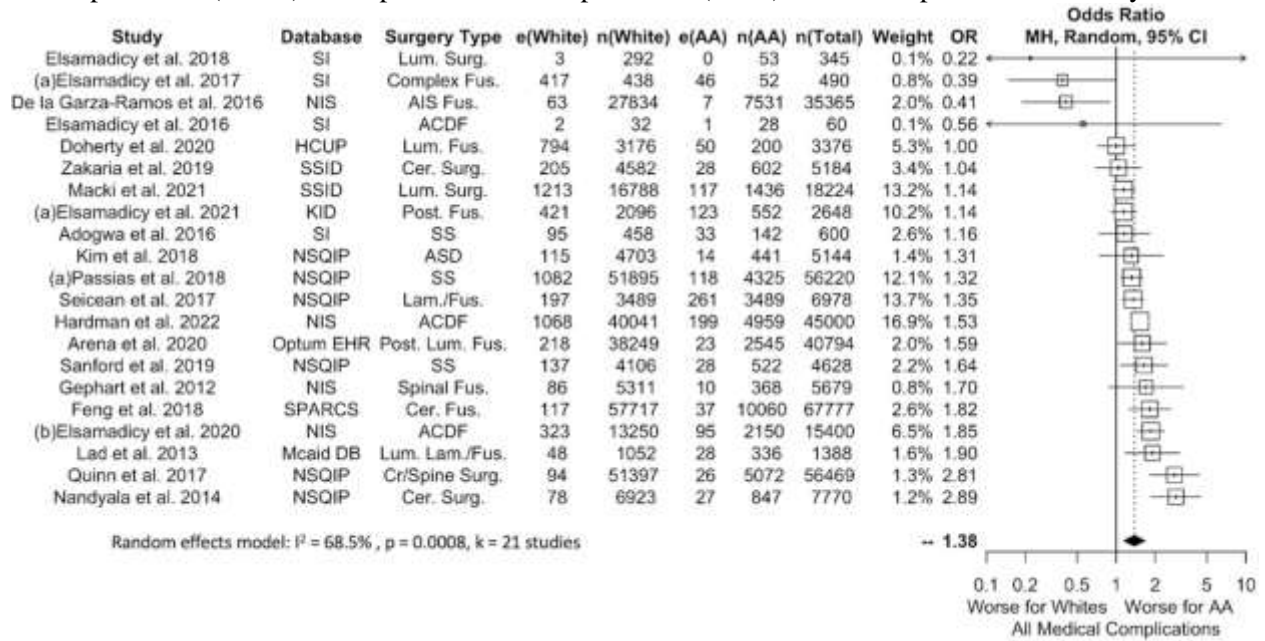
Appendix B2.3. Meta-analysis with a fixed effects model of studies with <100,000 patients reporting re-operation complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



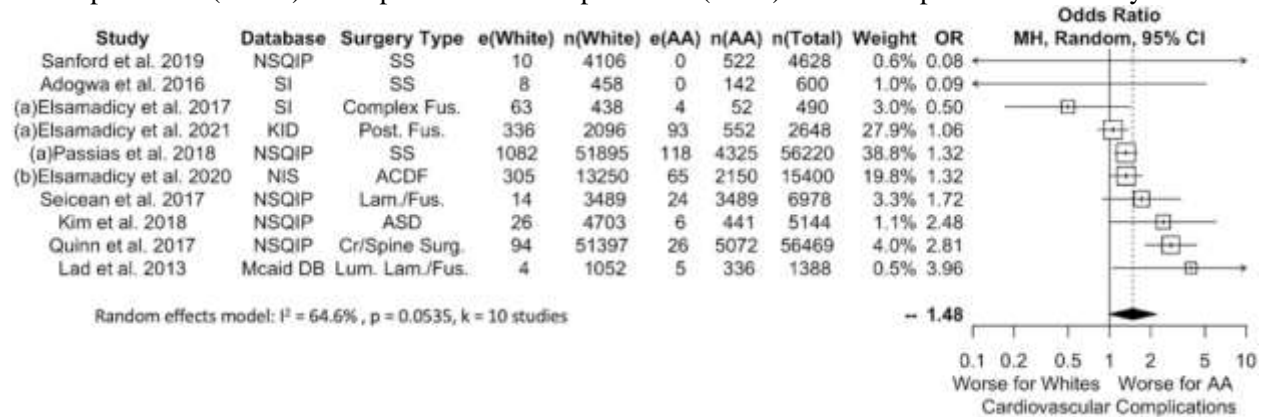
Appendix B2.4. Meta-analysis with a fixed effects model of studies with <100,000 patients reporting mortality complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



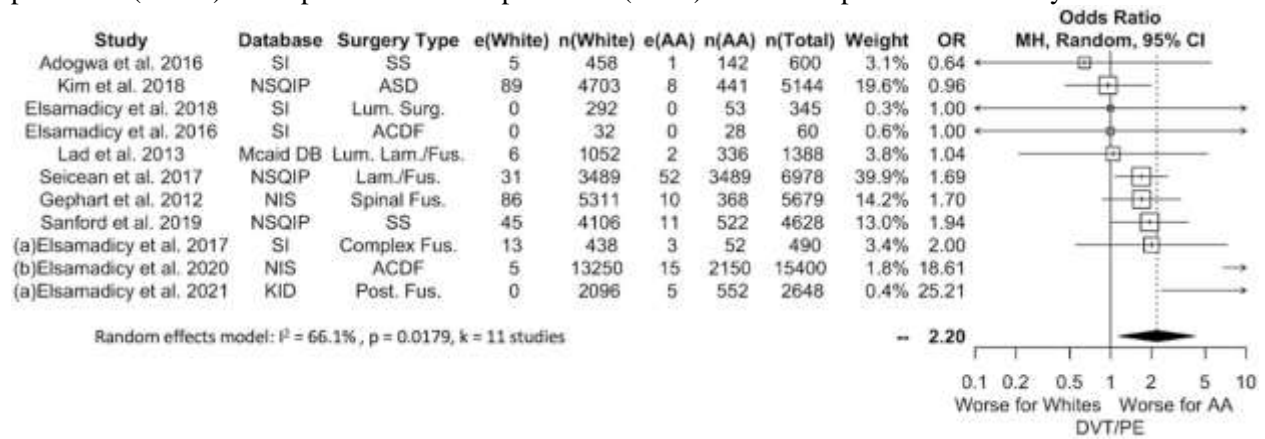
Appendix B2.5. Meta-analysis with a random effects model of studies with <100,000 patients reporting all medical complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



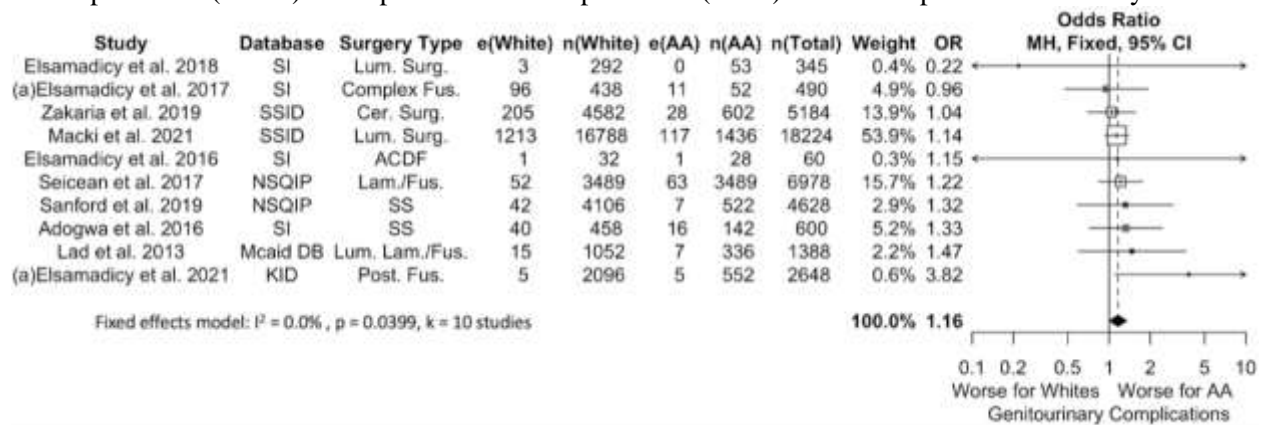
Appendix B2.6. Meta-analysis with a random effects model of studies with <100,000 patients reporting cardiovascular complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



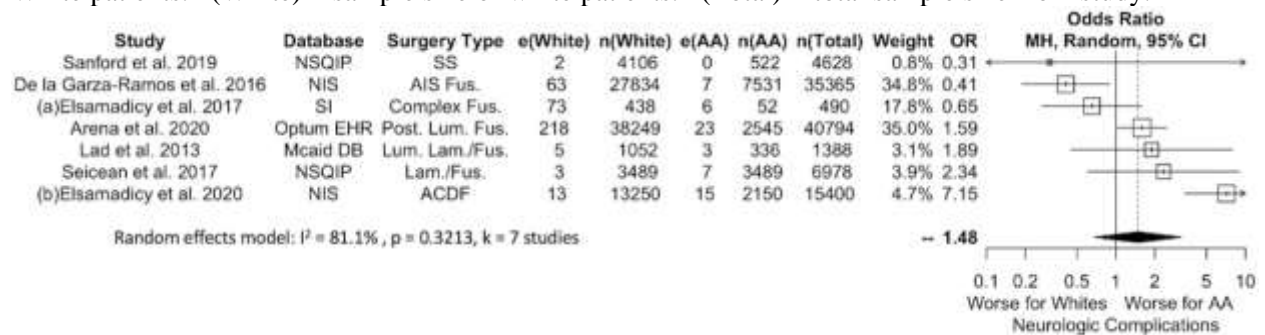
Appendix B2.7. Meta-analysis with a random effects model of studies with <100,000 patients reporting DVT/PE complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



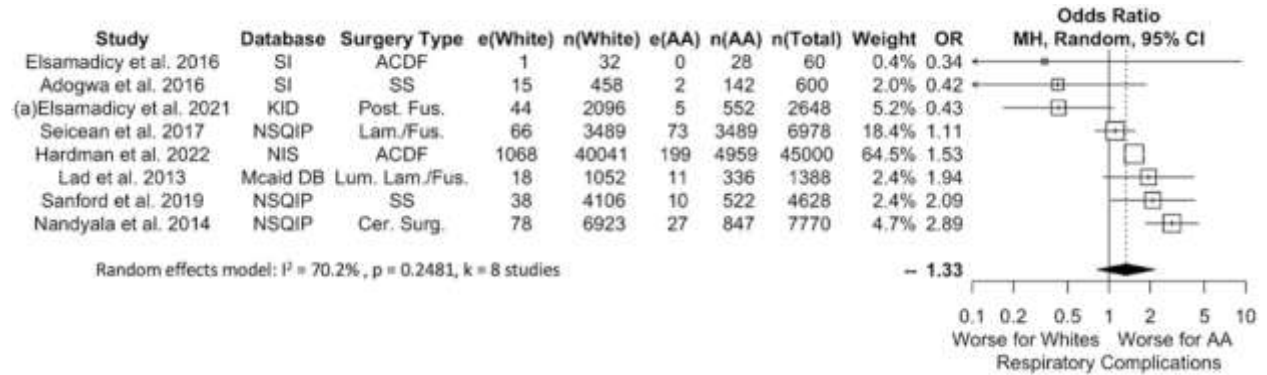
Appendix B2.8. Meta-analysis with a fixed effects model of studies with <100,000 patients reporting genitourinary complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



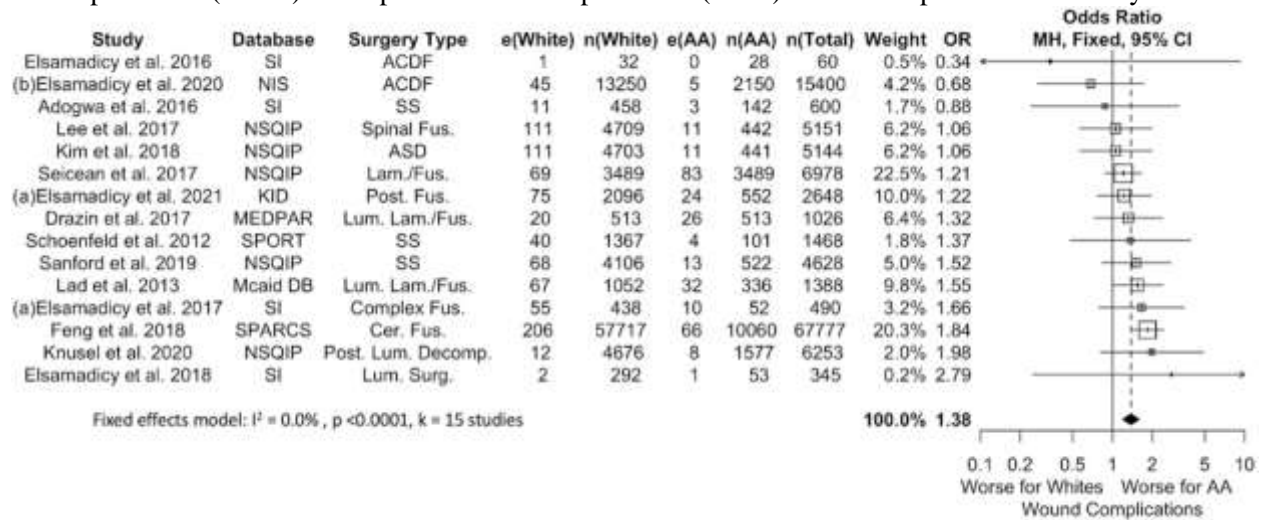
Appendix B2.9. Meta-analysis with a random effects model of studies with <100,000 patients reporting neurologic complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



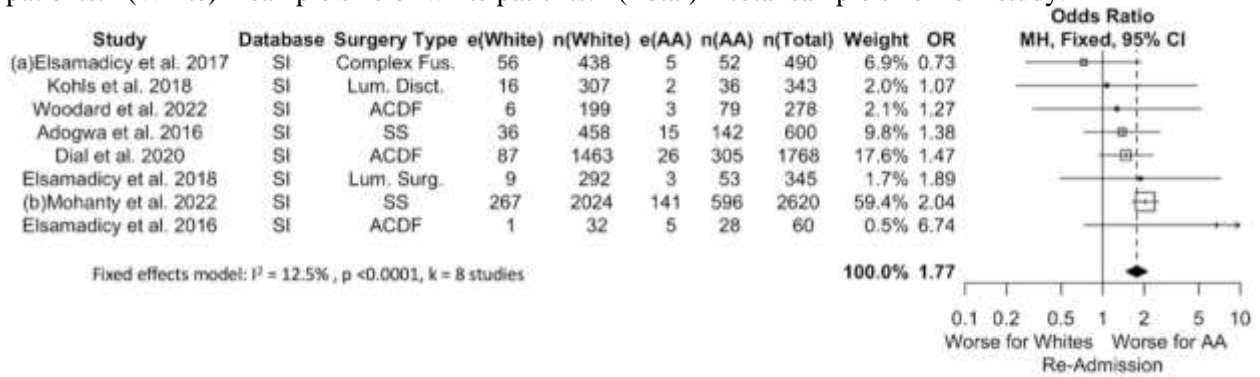
Appendix B2.10. Meta-analysis with a random effects model of studies with <100,000 patients reporting respiratory complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



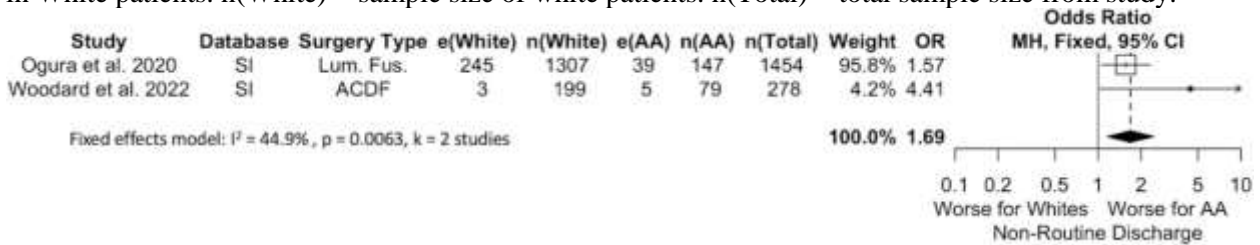
Appendix B2.11. Meta-analysis with a fixed effects model of studies with <100,000 patients reporting wound related complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



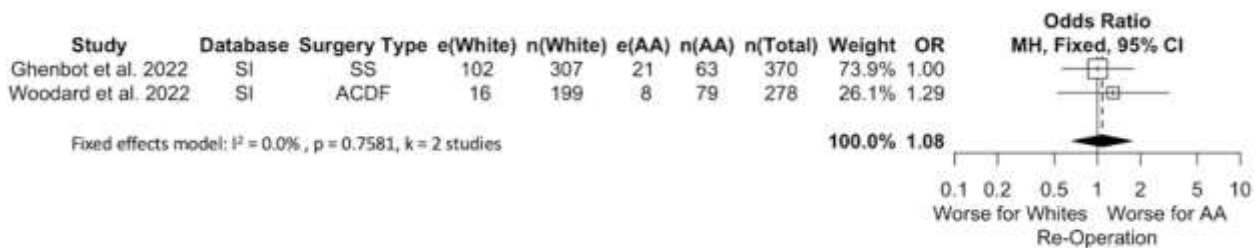
Appendix B3.1. Meta-analysis with a fixed effects model of single institution studies reporting re-admission complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



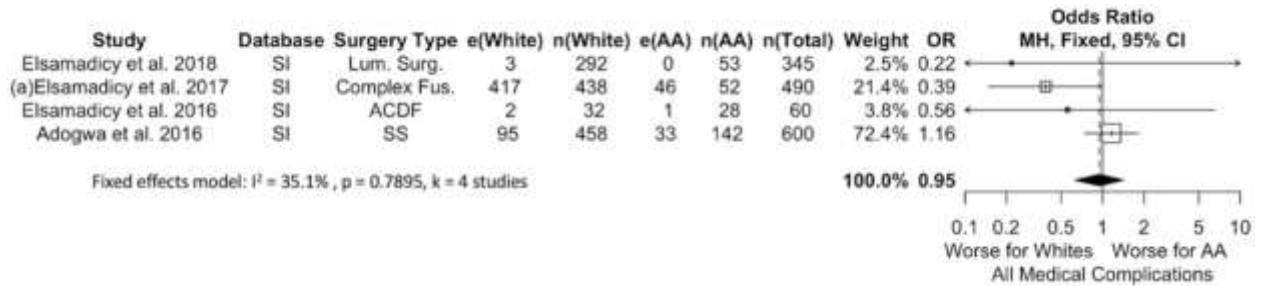
Appendix B3.2. Meta-analysis with a fixed effects model of single institution studies reporting non-routine discharge complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



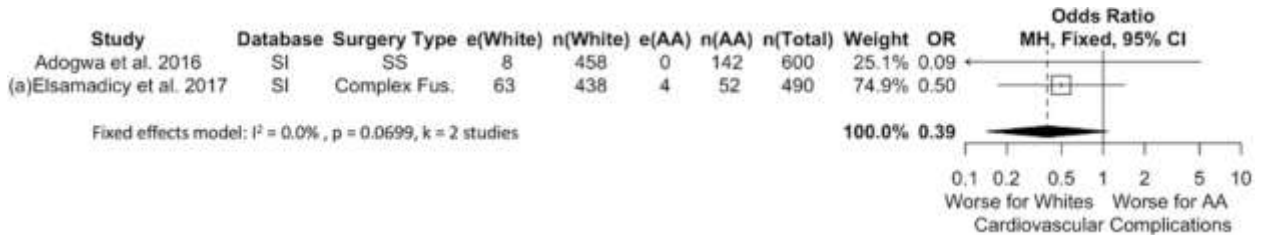
Appendix B3.3. Meta-analysis with a fixed effects model of single institution studies reporting re-operation complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



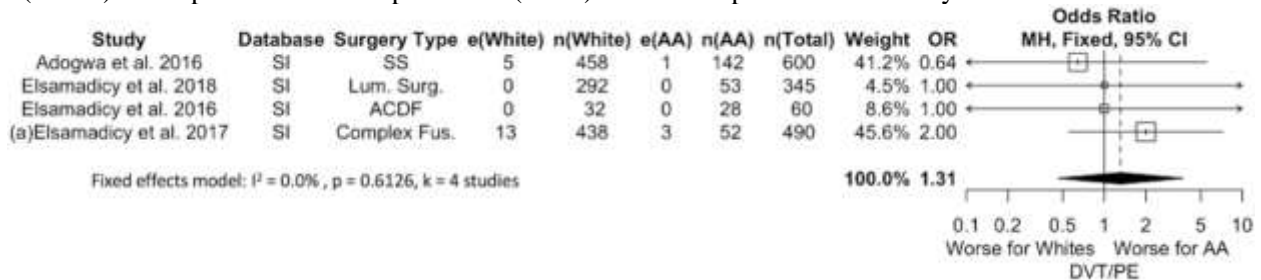
Appendix B3.4. Meta-analysis with a fixed effects model of single institution studies reporting all medical complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



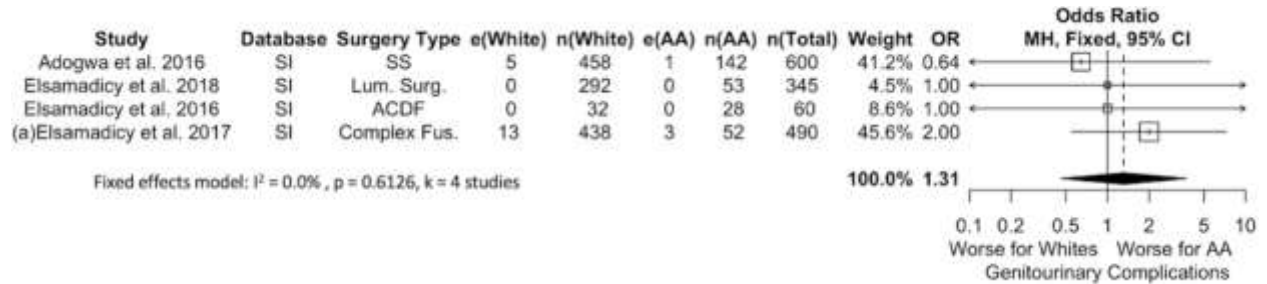
Appendix B3.5. Meta-analysis with a fixed effects model of single institution studies reporting cardiovascular complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



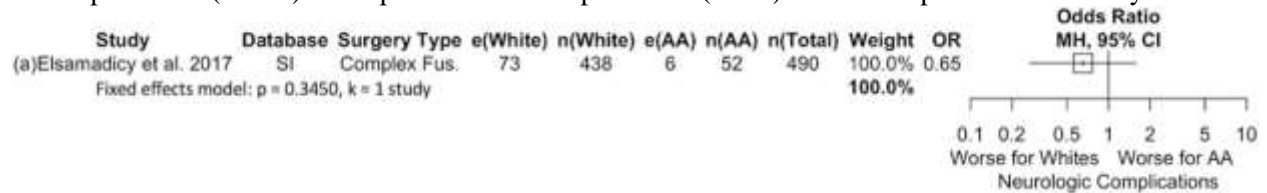
Appendix B3.6. Meta-analysis with a fixed effects model of single institution studies reporting DVT/PE complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



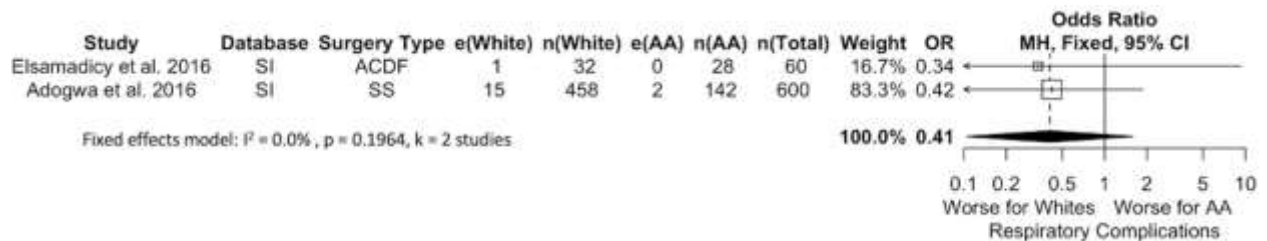
Appendix B3.7. Meta-analysis with a fixed effects model of single institution studies reporting genitourinary complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



Appendix B3.8. Meta-analysis with a fixed effects model of single institution studies reporting neurologic complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



Appendix B3.9. Meta-analysis with a fixed effects model of single institution studies reporting respiratory complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.



Appendix B3.10. Meta-analysis with a fixed effects model of single institution studies reporting wound related complications for AA versus White cohorts. OR=odds ratio. e(AA) = number of adverse events in AA patients. n(AA) = sample size of AA patients. e(White) = number of adverse events in White patients. n(White) = sample size of white patients. n(Total) = total sample size from study.

