

**Figure S1:** A meta-analysis of the studies that reported surgical site infection incidence by study design is shown. This figure indicates that there is no significant difference between the pooled incidence of surgical site infection in subgroups of retrospective or prospective cohort studies ( $P=0.92$ ).

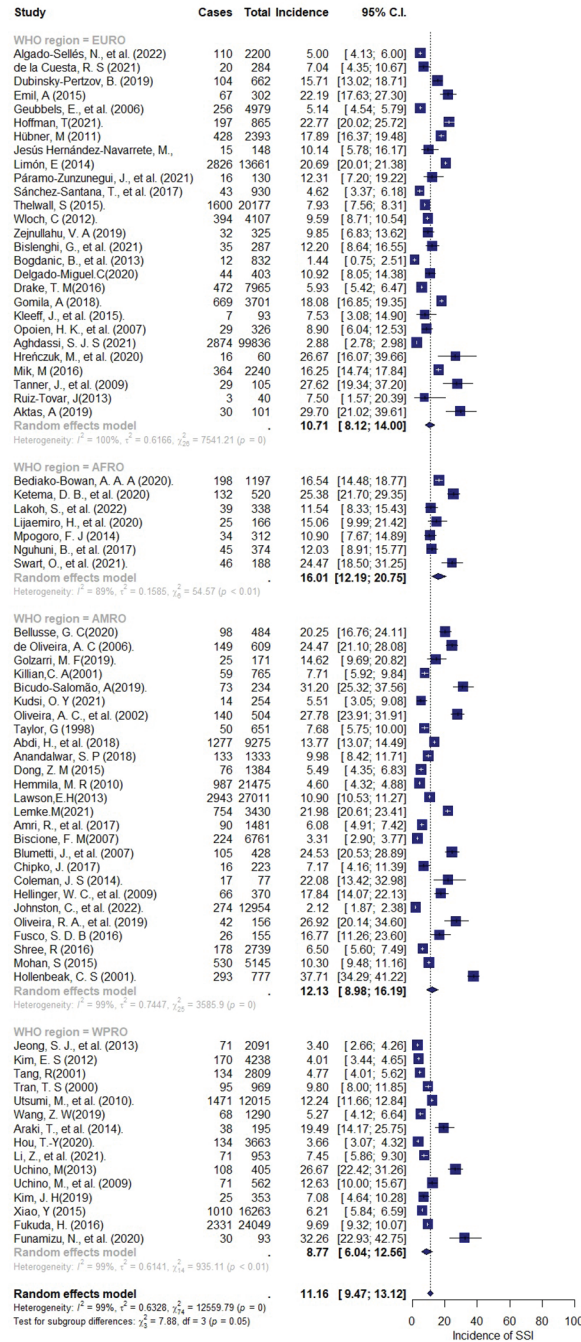


Figure S2: A meta-analysis of the studies that reported surgical site infection incidences by WHO regions is shown. This figure indicates that there is no apparent significant difference in the pooled incidences of surgical site infection among different regions of WHO (Test for subgroup differences was borderline significant,  $P=0.05$ ).

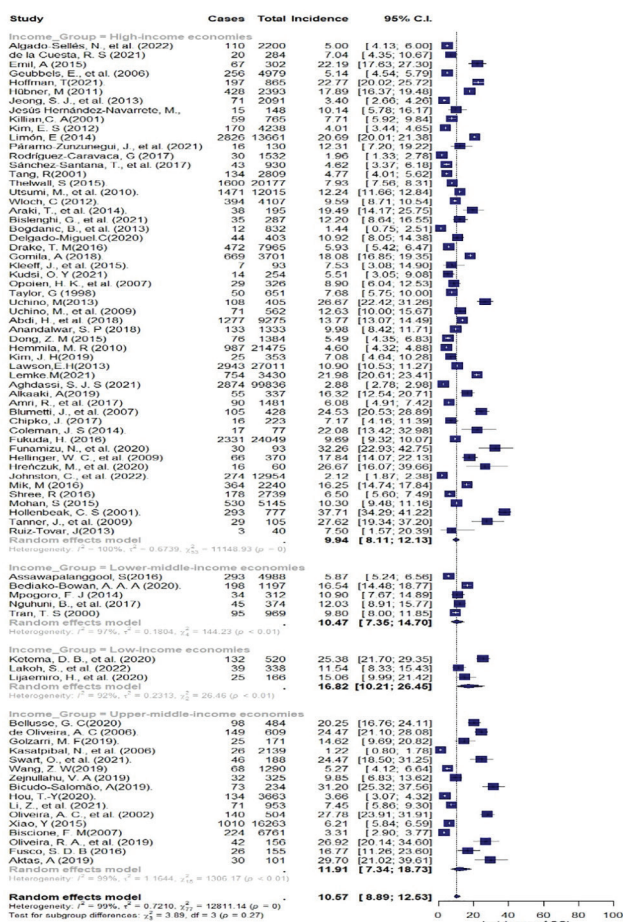
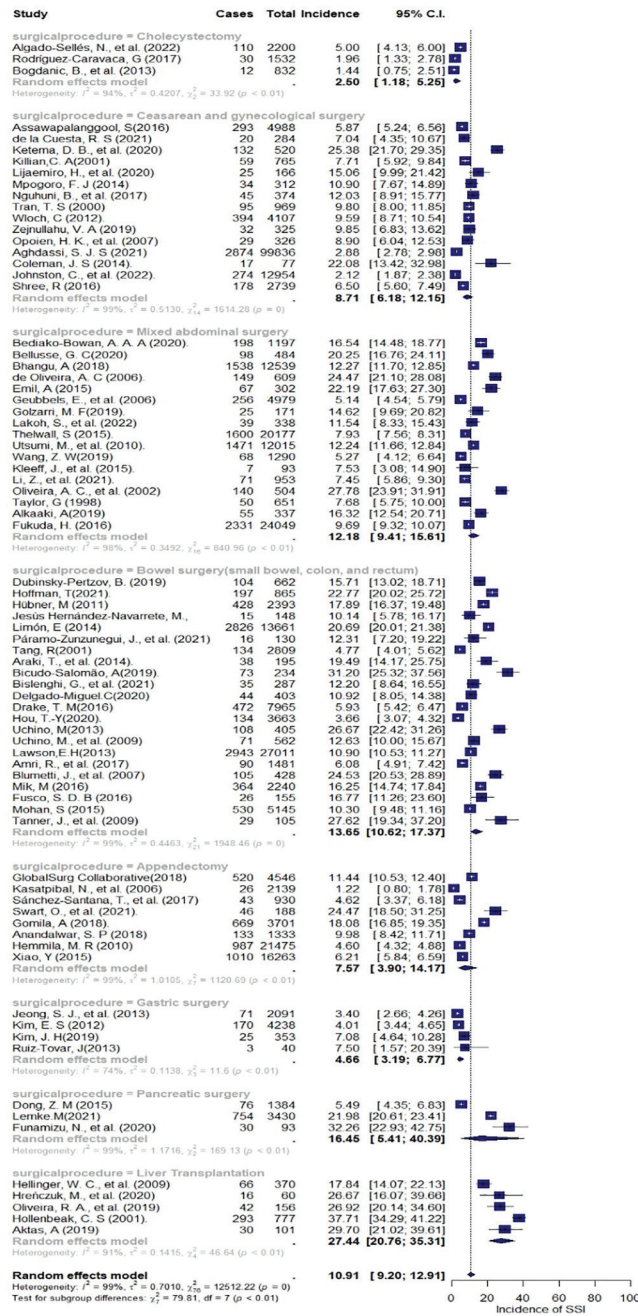
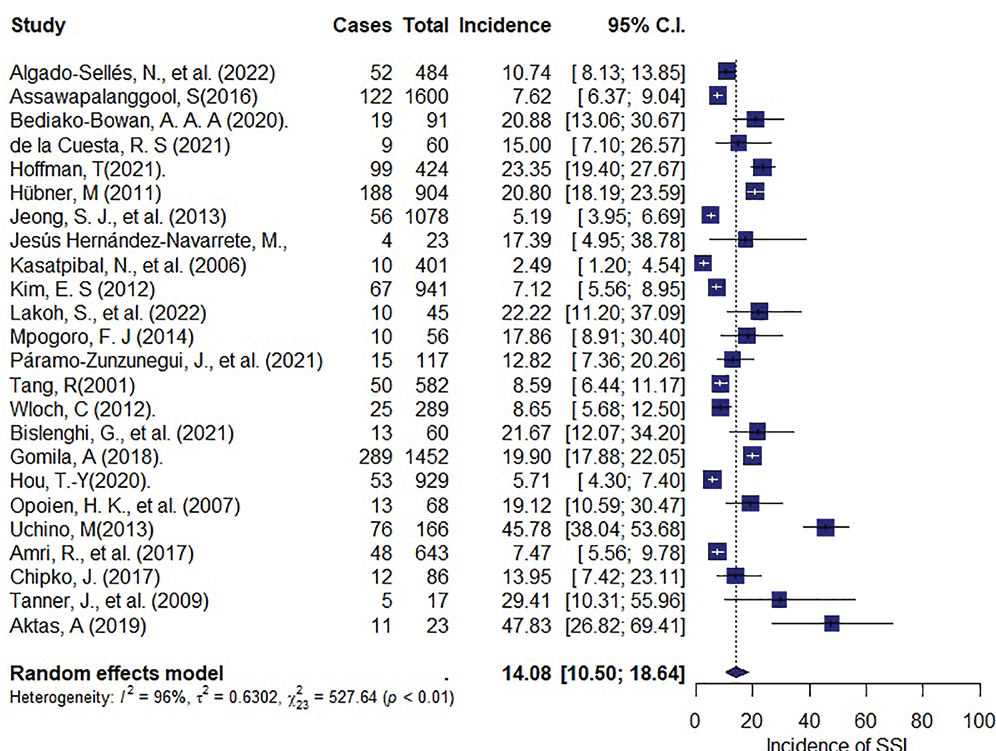


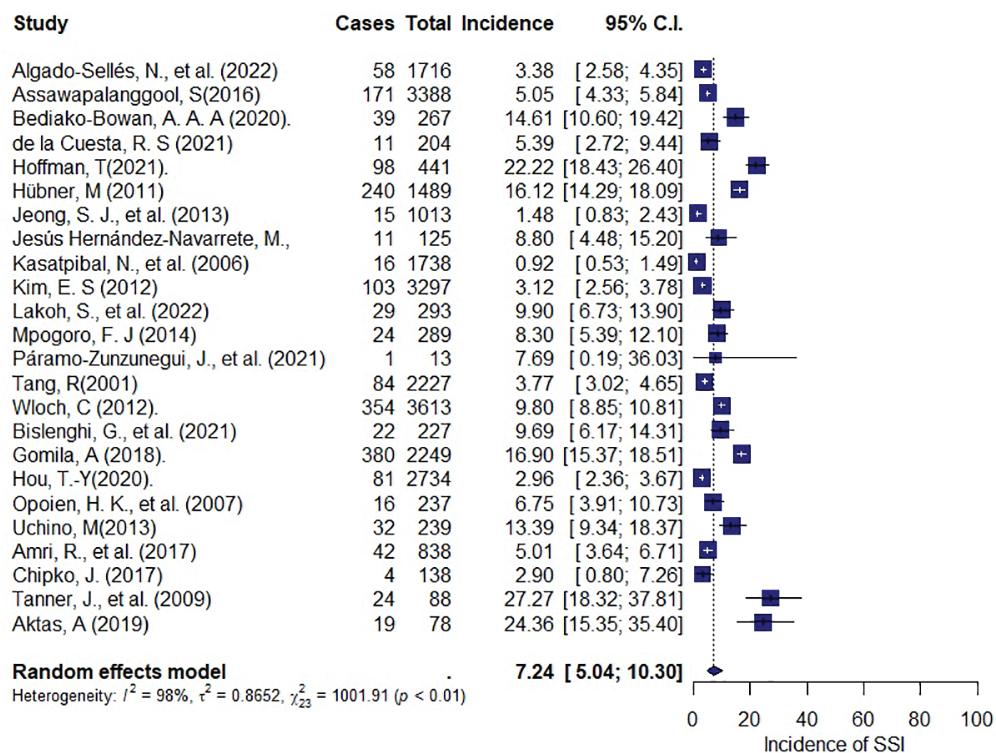
Figure S3: A meta-analysis of the studies that reported surgical site infection incidences by Income level is shown. This figure indicates that there is no significant difference in the pooled incidences of surgical site infection among countries with different income levels ( $P=0.27$ ).



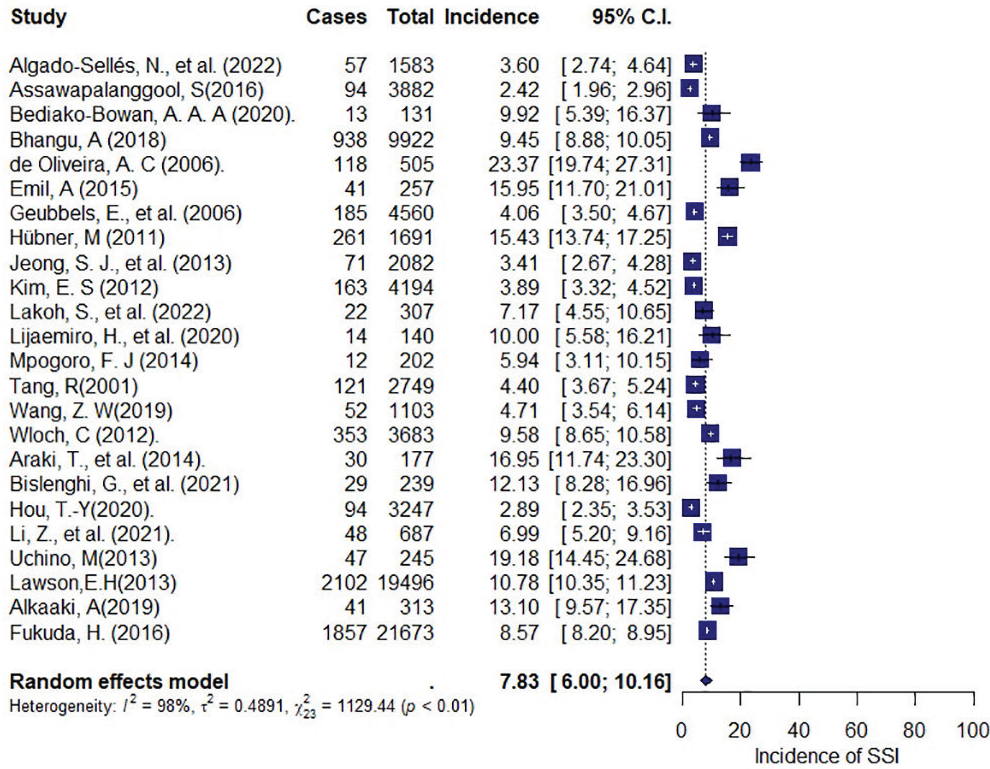
**Figure S4:** A meta-analysis of the studies that reported surgical site infection incidences by surgical procedure is shown. This figure indicates that there is a significant difference in the pooled incidences of surgical site infection among different surgical procedures ( $P < 0.01$ ).



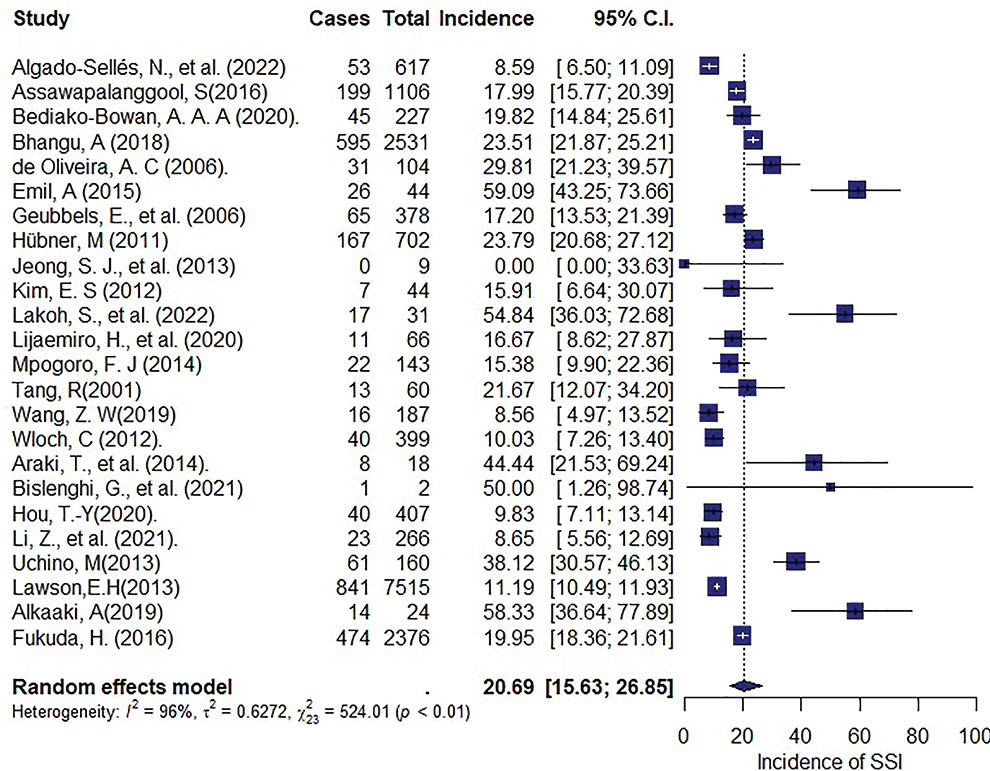
**Figure S5:** A meta-analysis of studies that reported surgical site infection in operation time>T (long operation time) is shown. This figure indicates high incidences of surgical site infection in surgeries with prolonged operation times.



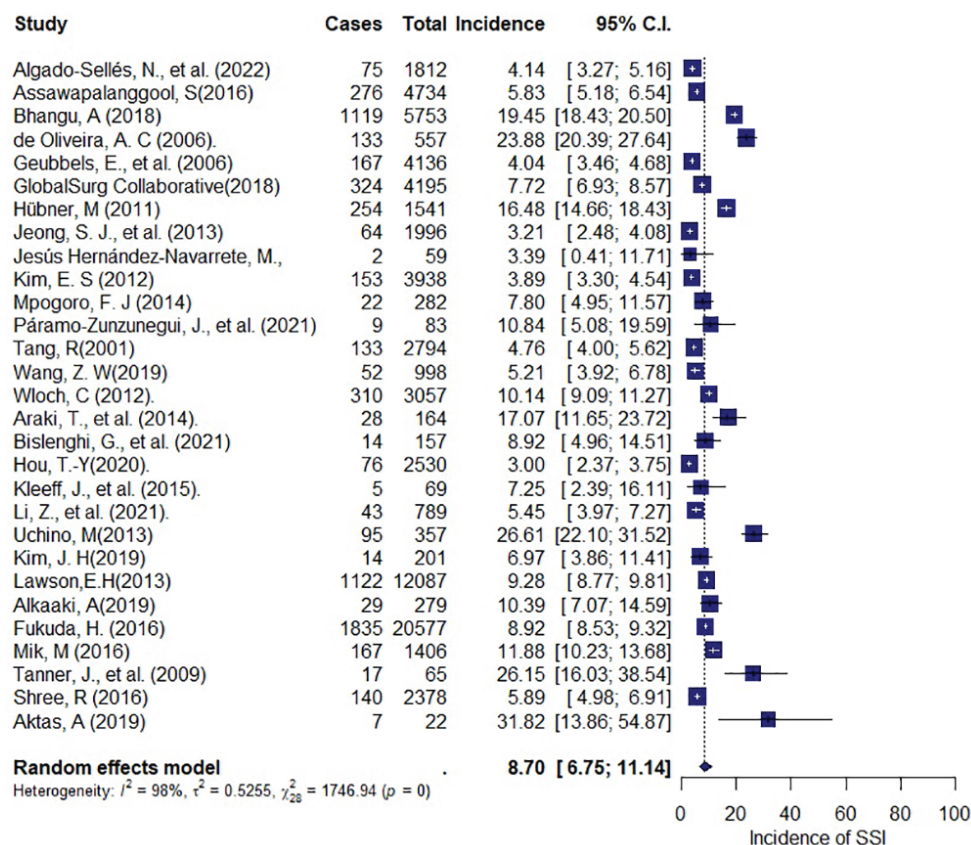
**Figure S6:** The pooled incidence of surgical site infection in operation time<T (low operation time) is shown. This figure indicates low incidences of surgical site infection in surgeries with low operation times in abdominal surgeries.



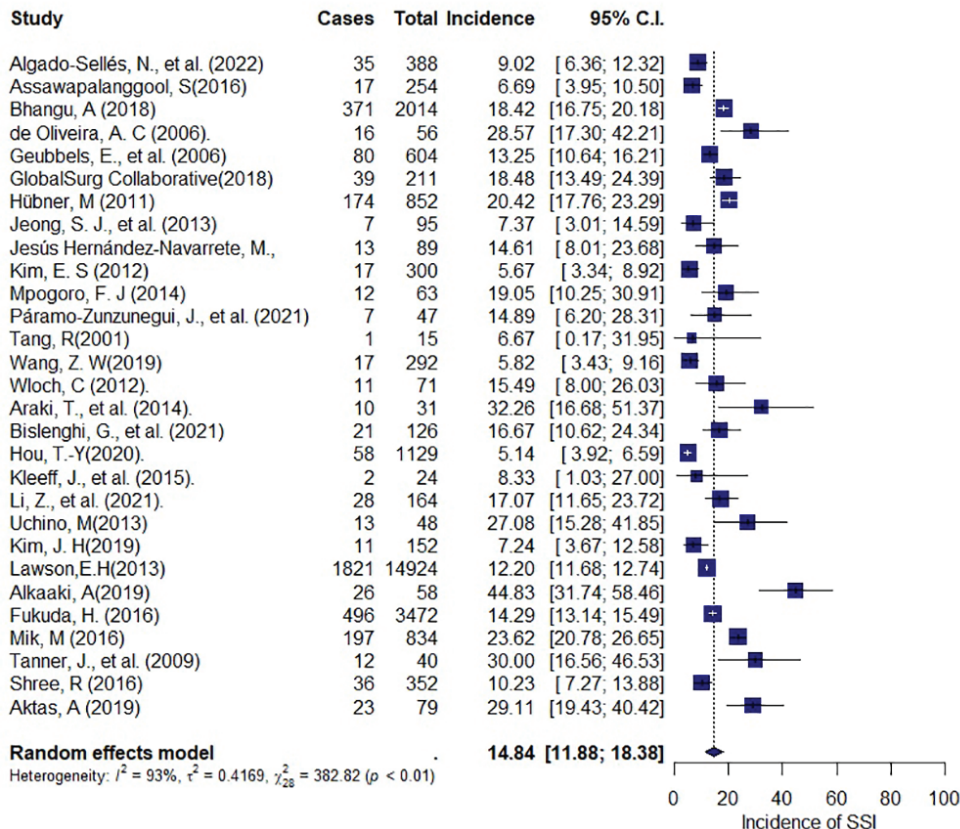
**Figure S7:** The pooled incidence of surgical site infection in clean or clean-contaminated abdominal surgeries is shown. This figure indicates low incidences of surgical site infection in surgeries with clean or clean-contaminated surgeries.



**Figure S8:** The pooled incidence of surgical site infection in contaminated or dirty abdominal surgeries is shown. This figure indicates high incidences of surgical site infection in surgeries with contaminated or dirty surgeries.



**Figure S9:** The pooled incidence of surgical site infection in patients with ASA<3 is shown. This figure indicates low incidences of surgical site infection in patients with ASA<3 undergone abdominal surgeries.



**Figure S10:** The pooled incidence of surgical site infection in patients with ASA≥3 is shown. This figure indicates high incidences of surgical site infection in patients with ASA≥3 undergone abdominal surgeries.