

**Table S1** Definitions and time frames complications

Complication	Definition
Superficial incisional SSI	<p>Infection that occurs within 30 days following surgery. Only skin or subcutaneous tissue are involved with at least one of the following:</p> <ul style="list-style-type: none"> <li>❖ Positive culture of the superficial incision or fluid;</li> <li>❖ Purulent drainage;</li> <li>❖ Pain or tenderness, localized swelling, redness, or heat is present in combination with the wound deliberately opened or a positive culture</li> </ul>
Deep incisional SSI	<p>Infection that occurs within 1 year following surgery. Deep soft tissues are involved and infection is related to the procedure with at least 1 of the following:</p> <ul style="list-style-type: none"> <li>❖ Wound is deliberately opened or spontaneous dehiscent with at least 1 of the following symptoms (in combination with a positive or absent culture): temperature &gt;38 °C, and pain or tenderness;</li> <li>❖ Purulent drainage from the deep incision;</li> <li>❖ Reoperation, direct examination, radiologic examination or histopathologic examination reveals an abscess or other evidence of a deep incisional SSI is found</li> </ul>
Organ/space SSI	<p>Infection that occurs within 1 year following surgery and involves any anatomy part (e.g., spaces or organs). Infection is related to the surgical procedure with at least one of the following:</p> <ul style="list-style-type: none"> <li>❖ Purulent drainage from a chest tube;</li> <li>❖ Positive culture from fluid or tissue in the organ/space;</li> <li>❖ Reoperation, direct examination, radiologic examination or histopathologic examination reveals abscess, or other evidence of an organ/space confining infection is found</li> </ul>
Pneumonia	New lung infiltrate within 30 days following surgery. There is clinical evidence that it is of an infectious origin (i.e., fever, leukocytosis, purulent sputum, and decline in oxygenation)
Empyema	Organ/space SSI definition
Pneumothorax requiring intervention	Pneumothorax occurring within 30 days following surgery that is radiographically confirmed and symptomatic (e.g., dyspnea, decline in oxygenation, tachypnea), an intervention is required (e.g., needle aspiration, chest tube drainage)
Reoperation for bleeding	A postoperative bleeding that occurs within 30 days following surgery requiring reoperation
SSI, surgical-site infection.	