

Supplemental Table1 Definitions of SSI

Type of SSI	Definition
Superficial incisional SSI	<p>Superficial incisional SSI must meet the following three criteria (A, B, and C).</p> <p>A) Infection occurred within 30 days postoperatively.</p> <p>B) The infection affects only the incision in the skin and the subcutaneous tissue.</p> <p>C) At least one of the following is applicable:</p> <ul style="list-style-type: none">a. purulent drainage is observed from the superficial incision,b. organisms are identified from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method, and/orc. the superficial incision is deliberately opened by a nonblinded investigators, and culture or non-culture based testing is not performed. <p>In addition, at least one of the following symptoms for infection must be applicable: pain, tenderness, localized swelling, erythema, or heat.</p>
Deep incisional SSI	<p>Deep incisional SSI must meet the following three criteria (A, B, and C).</p> <p>A) Infection occurred within 30 days postoperatively.</p> <p>B) The infection reaches the deep soft tissues of the incision (fascia or muscle layer).</p> <p>C) At least one of the following is applicable:</p> <ul style="list-style-type: none">a. purulent drainage is observed from the deep incision,b. the deep incision spontaneously dehisces, or is deliberately opened or aspirated by a nonblinded investigators, and/or

c. an abscess or other evidence of infection is present and involves the deep incision.

In addition, the organism is identified by a culture or non-culture based microbiologic testing method that is performed for purposes of clinical diagnosis or treatment, and symptoms for infection must be applicable: fever, localized pain, or tenderness. Negative finding of a culture does not meet this criterion.

Organ/space SSI

Organ/space SSI involves any part of the body other than the skin incision, fascia, or muscle layer that has been opened or manipulated during surgery. The specific site is classified as organ/space for the purpose of further identification of the infection site. Organ/space SSI must meet the following three criteria (A, B, and C).

A) Infection occurred within 30 days postoperatively.

B) The infection involves any part of the body that is opened or manipulated during the operative procedure (except for the facial/muscle layers).

C) At least one of the following is applicable:

a. purulent drainage is observed from a drain that is placed into the organ/space,

b. organisms are identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method, and/or

c. an abscess or other evidence of infection is present and involves the organ/space.

*Erythema; the skin redness of the skin that spreads away from the incision site, localized swelling; a bulge limited to the incision site, tenderness; pressured pain beyond normal for the operation.