

The BSMS

Trace bleeding

Minimal bleeding or bleeding detectable by laboratory measures only. Bleeding does not have any impact on patient or on the level of care provided to the patient.

Mild bleeding

Non-clinically significant bleeding. Bleeding does not have any impact on patient or level of care provided to the patient.

Serious bleeding

Bleeding directly resulting in one or more of the following:

- Significant pain (requiring medical treatment or intervention)
- Need for interventions (including transfusion, surgery, invasive procedures, administration of medication, etc.)
- Need for invasive investigations or increased monitoring

Serious bleeding with significant morbidity

Any bleeding meeting one or more of the following criteria:

- All central nervous system bleeding
- Resulting in hemodynamic instability:
 - Tachycardia (increase in resting heart rate by at least 20 bpm) or
 - Hypotension (decrease in systolic and/or diastolic BP by at least 20 mmHg)
- Resulting in vision loss
- Resulting in significant morbidity

Fatal bleeding

Any bleeding directly contributing to patient's death

General instructions

Type or site of bleeding: Answers are optional and **do not affect the BSMS Score**. This additional information might be interesting for research purposes.

1. In most instances, the scale is meant to document new or ongoing bleeding. For example, a bruise should be documented on its first occurrence. After initial documentation, it should only be documented if it is worsening in severity.
2. The highest scoring bleeding determines the patient's bleeding severity on that day.
3. Sources of information to help document bleeding include the patient (examination, history) and the hospital chart (medications prescribed, investigations ordered, physicians/nurses notes, etc.), and health care providers looking after the patient.
4. Note that an isolated decrease in Hb may not be considered sufficient evidence of a bleed.

Examples of bleeding signs or symptoms and their classification

Trace bleeding

Type or site of bleeding

Minimal bleeding or bleeding detectable by laboratory measures only. Bleeding does not have any impact on patient or care provided to patient.

Oral and nasal

- Trace blood in nasal secretions. Oral petechiae (new).
- Trace blood from gums with brushing teeth.

Skin, soft tissue, musculoskeletal

- Petechiae (new or increased in number).
- Bruising of skin (new or increased size).

Abdominal and GI

- Occult blood in stool.
- Mild hemorrhoidal bleeding (blood present on toilet paper only).
- Blood-tinged nasogastric drainage.
- Trace blood in peritoneal fluid.

Genitourinary

- Laboratory evidence of Hb or RBC in the urine.
- Vaginal spotting not at time of normal period.

Cardiopulmonary

- Blood-tinged sputum.
 - Trace blood in pleural fluid.
 - Trace blood in pericardial fluid.
-

Central nervous system

- Laboratory evidence of blood in CSF with no symptoms.

Related to invasive procedures

- Mild oozing at the site of a placement of venous catheter, venipuncture site, or other invasive surgical site.
-

Mild bleeding

Type or site of bleeding

Non—clinically significant bleeding. Bleeding associated with no impact on patient or level of care provided to patient. (Bleeding does not meeting criteria listed for "Grade 2/ Clinically significant bleeding.")

Oral and nasal

- Oral mucosal blood blisters (new or increased in number).
- Epistaxis not requiring intervention or transfusion.

Skin, soft tissue, musculoskeletal

- Hematoma (new or increased in size).

Abdominal and GI

- Melena or hematochezia.
- Hematemesis, coffee ground emesis.
- Frank blood in peritoneal fluid.

Genitourinary

- Gross hematuria.
- Vaginal bleeding not at time of normal period or vaginal bleeding at time of normal period but of greater quantity or duration than normal period.

Cardiopulmonary

- Hemoptysis (gross blood in sputum).
-

Central nervous system

- Retinal bleeding with no visual impairment.

Related to invasive procedures

- Brisk bleeding at the site of placement of a venous catheter, venipuncture site, or other invasive surgical site.
-

Serious bleeding

Type or site of bleeding

Any bleeding resulting in one or more of the following: pain; need for interventions (including transfusion, surgery, invasive procedures, administration of medication); or need for invasive investigations or increased monitoring.

Oral and nasal

- Epistaxis requiring intervention (i.e., nasal packing, cautery), medical treatment, transfusion.

Abdominal and GI

- GI bleeding requiring endoscopy to investigate.

Genitourinary

- Hematuria causing renal impairment or necessitating bladder irrigation.
- Vaginal bleeding requiring transfusion.

Cardiopulmonary

- Hemoptysis associated with shortness of breath, hypoxia, new or increased requirement of supplemental oxygen.
- Hemoptysis requiring bronchoscopy.
- Hemoptysis necessitating transfusion of blood product.

Related to invasive procedures

- Bleeding at surgical site necessitating return to OR to investigate.
-

Serious bleeding with significant morbidity

Type or site of bleeding

Any bleeding meeting one of the following criteria: all central nervous system bleeding, resulting in hemodynamic instability, resulting in vision loss, resulting in significant morbidity.

Skin, soft tissue, musculoskeletal

- Joint bleeding.
- Hematoma causing compartment syndrome.

Abdominal and GI

- GI bleeding resulting in hemodynamic instability

Central nervous system

- Retinal bleeding with visual impairment.
- Hemorrhagic stroke (asymptomatic, temporary symptoms, or permanent morbidity).

Other

- Bleeding occurring in critical area or organ (e.g., intraocular).

Fatal bleeding

Type or site of bleeding

Any bleeding directly contributing to patient's death