

# National Cancer Institute common terminology criteria for adverse events

Successful management of treatment-related toxicities requires understanding standardized adverse event symptom grading.

Symptom	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
<b>Alanine aminotransferase increase</b>	<ul style="list-style-type: none"> <li>&gt;ULN -3.0 × ULN if baseline normal</li> <li>1.5-3.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;3.0-5.0 × ULN if baseline normal</li> <li>&gt;3.0-5.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;5.0-20.0 × ULN if baseline normal</li> <li>&gt;5.0-20.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;20.0 × ULN if baseline normal</li> <li>&gt;20.0 × baseline if baseline abnormal</li> </ul>	N/A
<b>Aspartate aminotransferase increased</b>	<ul style="list-style-type: none"> <li>&gt;ULN -3.0 × ULN if baseline normal</li> <li>1.5-3.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;3.0-5.0 × ULN if baseline normal</li> <li>&gt;3.0-5.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;5.0-20.0 × ULN if baseline normal</li> <li>&gt;5.0-20.0 × baseline if baseline abnormal</li> </ul>	<ul style="list-style-type: none"> <li>&gt;20.0 × ULN if baseline normal</li> <li>&gt;20.0 × baseline if baseline abnormal</li> </ul>	N/A
<b>Colitis</b>	<ul style="list-style-type: none"> <li>Asymptomatic</li> <li>Clinical, diagnostic observations only</li> <li>Intervention not indicated</li> </ul>	<ul style="list-style-type: none"> <li>Abdominal pain</li> <li>Mucus or blood in stool</li> </ul>	<ul style="list-style-type: none"> <li>Severe abdominal pain</li> <li>Peritoneal signs</li> </ul>	<ul style="list-style-type: none"> <li>Life-threatening consequences</li> <li>Urgent intervention indicated</li> </ul>	Death
<b>Diarrhea</b>	<ul style="list-style-type: none"> <li>Increase of &lt;4 stools per day over baseline</li> <li>Mild increase in ostomy output compared to baseline</li> </ul>	<ul style="list-style-type: none"> <li>Increase of 4 to 6 stools per day over baseline</li> <li>Moderate increase in ostomy output compared to baseline</li> <li>Limiting instrumental ADL</li> </ul>	<ul style="list-style-type: none"> <li>Increase of ≥7 stools per day over baseline</li> <li>Hospitalization indicated</li> <li>Severe increase in ostomy output compared to baseline</li> <li>Limiting self-care ADL</li> </ul>	<ul style="list-style-type: none"> <li>Life-threatening consequences</li> <li>Urgent intervention indicated</li> </ul>	Death
<b>Pneumonitis</b>	<ul style="list-style-type: none"> <li>Asymptomatic</li> <li>Clinical, diagnostic observations only</li> <li>No intervention indicated</li> </ul>	<ul style="list-style-type: none"> <li>Symptomatic</li> <li>Medical intervention indicated</li> <li>Limiting instrumental ADL</li> </ul>	<ul style="list-style-type: none"> <li>Severe symptoms</li> <li>Limiting self-care ADL</li> <li>Oxygen indicated</li> </ul>	<ul style="list-style-type: none"> <li>Life-threatening respiratory compromise</li> <li>Urgent intervention indicated (tracheotomy or intubation)</li> </ul>	Death
<b>Pruritis</b>	<ul style="list-style-type: none"> <li>Mild or localized</li> <li>Topical intervention indicated</li> </ul>	<ul style="list-style-type: none"> <li>Widespread and intermittent</li> <li>Skin changes from scratching (edema, papulation, excoriations, lichenification, oozing/crusts)</li> <li>Oral intervention indicated</li> <li>Limiting instrumental ADL</li> </ul>	<ul style="list-style-type: none"> <li>Widespread and constant</li> <li>Limiting self-care ADL or sleep</li> <li>Systemic corticosteroid or immunosuppressive therapy indicated</li> </ul>	N/A	N/A
<b>Rash (Maculopapular)</b>	<ul style="list-style-type: none"> <li>Macules/papules covering &lt;10% BSA with or without symptoms (pruritus, burning, tightness)</li> </ul>	<ul style="list-style-type: none"> <li>Macules/papules covering 10% to 30% BSA with or without symptoms (pruritus, burning, tightness)</li> <li>Limiting instrumental ADL</li> <li>Rash covering &gt;30% BSA with or without mild symptoms</li> </ul>	<ul style="list-style-type: none"> <li>Macules/papules covering &gt;30% BSA with moderate or severe symptoms</li> <li>Limiting self-care ADL</li> </ul>	N/A	N/A

ADL = activities of daily living, BSA = body surface area, ULN = upper limit of normal