



COMMON TOXICITY CRITERIA MANUAL

**Common Toxicity Criteria, Version 2.0
June 1, 1999**

NCI CTEP Help Desk -
Telephone: (301) 840-8202
Fax: (301) 948-2242
E-mail: ncictephhelp@ctep.nci.nih.gov

Table of Contents

COMMON TOXICITY CRITERIA QUICK REFERENCE	1
1 INTRODUCTION.....	5
1.1 Purpose of this Manual.....	5
1.2 Making the Entire CTC Available to those Responsible for Grading Adverse Events	5
1.3 Defining Adverse Event.....	5
1.4 Specificity of the CTC	6
2 ORGANIZATION OF THE CTC.....	6
2.1 Adverse Event Categories in the Revised CTC	6
2.2 Adverse Event Listings	7
2.3 Grades of Adverse Events.....	7
2.4 Adverse Events Not Included in the CTC.....	8
2.5 Where to Find Adverse Events from the 1982 Version of the CTC	8
2.6 Highlights of Important Changes	9
2.7 Appendices to the CTC	10
3 HOW TO GRADE ADVERSE EVENTS	11
3.1 What Not to Grade	11
3.2 Attribution of Causality.....	11
3.3 Grading at Baseline	12
3.4 Documenting Related Adverse Events.....	12
3.5 Grading Adverse Events	17
3.6 Syndromes.....	18
3.7 Dose-limiting Adverse Event.....	18
4 SUPPLEMENTARY FORMS	19
4.1 Adverse Event Module.....	19
4.2 Infection Module.....	19
5 GRADING TOXICITIES IN SPECIAL POPULATIONS.....	19
5.1 Leukemia Special Adverse Event Criteria	19
5.2 Bone Marrow/Stem Cell Transplant	20
5.3 Pediatric Adverse Event Criteria.....	20
6 RADIATION THERAPY TOXICITIES	21
6.1 Acute Radiation Adverse Event	21
6.2 Late Radiation Effects.....	22
7 MULTIMODALITY THERAPIES	23
7.1 Grading Adverse Events in Multimodality Therapies when Options are Available..	23
8 HARMONIZATION WITH THE INTERNATIONAL MEDICAL TERMINOLOGY.....	23
9 CTC USER TOOLS	24
Appendix I: REVISION OF THE COMMON TOXICITY CRITERIA	25
COMMON TOXICITY CRITERIA QUICK REFERENCE GUIDE	

COMMON TOXICITY CRITERIA QUICK REFERENCE

Definition of Adverse Event

- **Toxicity** – Toxicity is NOT clearly defined by regulatory organizations. Toxicity has been described as an adverse event that has an attribution (the relationship to investigational agent) of possible, probable or definite. To minimize confusion, the NCI would recommend that the term toxicity NOT be utilized.

Note: The Cancer Therapy Evaluation Program, Common Toxicity Criteria, Version 2.0 (CTC, v2.0) uses the term “toxicity” for historical reasons, but recommends that the term “adverse event” with its attribution be used instead whenever possible.

- **Adverse Event** – Any unfavorable symptom, sign, or disease (including an abnormal laboratory finding) temporally associated with the use of a medical treatment or procedure that may or may NOT be considered related to the medical treatment or procedure.
- **Common Toxicity Criteria (CTC)**¹ – The CTC, v2.0 provides descriptive terminology for adverse event reporting. A grading (severity) scale is provided for each adverse event term.

Common Toxicity Criteria (CTC) Categories

- CTC, v2.0 contains 24 categories.
- CTC, v2.0 is organized by pathophysiology and anatomy.
- Alphabetical listings of adverse events are placed within categories.
- The entire CTC, v2.0 should always be available for grading adverse events; however, NCI only requires grading of adverse events that occur.

Changes to the CTC, v2.0

Major changes in the new version of the CTC, v2.0 are outlined in Sections 2.4 and 2.5 of this manual.

¹ All studies reviewed and approved after March 5, 1998 must utilize the CTC version 2.0 standards 1998 for adverse event grading and attribution.

Grades (General Definitions)

- 0 = No adverse event or within normal limits
- 1 = Mild adverse event
- 2 = Moderate adverse event
- 3 = Severe and undesirable adverse event
- 4 = Life-threatening or disabling adverse event
- 5 = Death related to adverse event

The definition of Dose-limiting adverse event is determined by the protocol and not by the CTC.

Grading Adverse Events

- Any treatment-related adverse event experienced by a patient is graded using the specific adverse event terms listed in the CTC, v2.0.
- Grading is not modified based on a patient's condition at baseline. Whenever possible, baseline data, including laboratory data and signs and symptoms noted at study entry, should be collected within the institution as course 0, although at present, there is no electronic reporting capability for baseline data within the Clinical Data Update System (CDUS).
- If a given adverse event is experienced more than once during a cycle, only the grade associated with the most severe adverse event is reported.
- Syndromes are graded only when diagnosed by a physician; notes within the CTC, v2.0 provide guidelines to determine when to grade components of each syndrome.
- Adverse events not included in the CTC, v2.0 should be reported and graded under the "Other" adverse event within the appropriate category and graded 1 to 5 according to the general grade definitions provided above.
- Several adverse events contain notes reminding the investigator of other related adverse events that may occur in association and should be considered for grading.
- Multimodality Therapies – Most adverse events and grading criteria are applicable to any treatment modality. Some are specified for a particular modality. The most relevant adverse event should be used to grade adverse events. When it is not possible to determine whether one or both contributed, use the most relevant description of the adverse event.

Scale for Attribution of Adverse Event

Assign attribution of each adverse event reported in an NCI-sponsored IND study using the following criteria:

ATTRIBUTION OF ADVERSE EVENTS		
Code	Descriptor	Definition
5	Definite	The adverse event is <i>clearly related</i> to the investigational agent(s)
4	Probable	The adverse event is <i>likely related</i> to the investigational agent(s)
3	Possible	The adverse event <i>may be related</i> to the investigational agent(s)
2	Unlikely	The adverse event is <i>doubtfully related</i> to the investigational agent(s)
1	Unrelated	The adverse event is <i>clearly not related</i> to the investigational agent(s)

What not to Grade

- Disease progression or signs and symptoms definitely related to disease should not be graded. Objective documentation of progression should always be sought.
- Treatment delivery system malfunctions should not be graded as adverse events.

Options for More Detailed Reporting

When required by the protocol, additional information may be collected using two special modules:

- Adverse Event Module
- Infections Module

Populations and Modalities

When selecting which criteria to use for an adverse event, use the one most consistent with the patient population or treatment modality.

Special criteria for pediatric populations and bone marrow transplant, leukemia, and radiation treatment modalities are shaded in the CTC, v2.0 for easy recognition.

Special Populations

- Pediatrics – Adverse events and adverse event criteria relevant only to children are identified by *italic type* for easy recognition.

Treatment Modalities

- Bone Marrow Transplant Adverse Events – Specialized criteria are included for grading Leukocytes, Platelets, Transfusion: platelets, Transfusion: pRBCs, Weight gain-Veno Occlusive Disease (VOD), Bilirubin-Graft Versus Host

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.