
Guidance for Industry Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials

DRAFT GUIDANCE

This guidance document is being distributed for comment purposes only.

Comments and suggestions regarding this draft document should be submitted within 60 days of publication in the *Federal Register* of the notice announcing the availability of the draft guidance. Submit electronic comments to <http://www.regulations.gov>. Submit written comments to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. All comments should be identified with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions regarding this draft document contact Thomas Laughren at 301-796-2260.

**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)**

**August 2012
Clinical/Medical**

Revision 1

Guidance for Industry Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials

Additional copies are available from:

Office of Communications, Division of Drug Information

Center for Drug Evaluation and Research

Food and Drug Administration

10903 New Hampshire Ave., Bldg. 51, rm. 2201

Silver Spring, MD 20993-0002

Tel: 301-796-3400; Fax: 301-847-8714; E-mail: druginfo@fda.hhs.gov

<http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm>

**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)**

**August 2012
Clinical/Medical**

Revision 1

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	2
III.	PROSPECTIVE ASSESSMENT OF SUICIDAL IDEATION AND BEHAVIOR OCCURRENCE — GENERAL RECOMMENDATIONS	3
A.	Suicidal Ideation and Behavior Assessment Instruments	3
B.	Managing Suicidal Ideation and Behavior Data	6
C.	Specific Trial Considerations	7
	<i>1. Identifying Trials in Which Suicidal Ideation and Behavior Assessment Should be Carried Out</i>	<i>7</i>
	<i>2. Populations in Which Assessment of Suicidal Ideation and Behavior Would be Difficult</i>	<i>7</i>
	<i>3. Dosing Considerations</i>	<i>8</i>
	a. Single-dose trials	8
	b. Microdose trials	8
	<i>4. Timing of Assessments</i>	8
	<i>5. Implementation During Ongoing Trials</i>	9
	<i>6. Prospective Assessments in Large Simple Trials</i>	9
IV.	PROSPECTIVE ASSESSMENT OF SUICIDAL IDEATION AND BEHAVIOR OCCURRENCE — SPECIFIC INDICATION RECOMMENDATIONS	9
	REFERENCES	11
	APPENDIX A: SUICIDAL IDEATION AND BEHAVIOR CATEGORIES AND DEFINITIONS	12

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Guidance for Industry¹

Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials

15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

This draft guidance, when finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the FDA staff responsible for implementing this guidance. If you cannot identify the appropriate FDA staff, call the appropriate number listed on the title page of this guidance.

I. INTRODUCTION

34
35
36
37
38
39
40

The purpose of this guidance is to assist sponsors in prospectively assessing the occurrence of treatment-emergent suicidal ideation and behavior in clinical trials of drug and biological products.² The focus of this guidance is on clinical trials conducted under investigational new drug applications, or trials that are intended for submission in a new drug application or a biologics license application. Specifically, this guidance addresses the Food and Drug Administration's (FDA's) current thinking regarding the importance of assessment of suicidal ideation and behavior in psychiatric and nonpsychiatric drug trials falling under the authority of the FDA, and the general principles for how best to accomplish this assessment during drug development. This guidance is not intended to give advice on how best to screen patients for entry into clinical trials, even though instruments used for assessing patients during the conduct of trials can also be used for screening patients. Making decisions about which patients to enter into a particular trial is a separate matter that is determined largely by the questions that the trial is intended to address.

The principles discussed in this guidance for the prospective assessment of suicidal ideation and behavior involve actively querying patients about the occurrence of suicidal thinking and behavior, rather than relying on patients to report such occurrences spontaneously, followed by retrospective classification of events into appropriate categories. This guidance offers advice about criteria that should be met for a suicidal ideation and behavior assessment instrument that can be used to conduct such prospective assessments.

¹ This guidance has been prepared by the Division of Psychiatry Products in the Center for Drug Evaluation and Research (CDER) at the Food and Drug Administration.

² For the purposes of this guidance, all references to *drugs* include both human drugs and therapeutic biological products unless otherwise specified.

Contains Nonbinding Recommendations

Draft — Not for Implementation

41 This guidance is intended to serve as a focus for continued discussions among the FDA,
42 pharmaceutical sponsors, the academic community, and the public.³ This guidance does not
43 address the complex analytic issues involved in the analysis of the suicidal ideation and behavior
44 data that will be derived from prospective assessments of suicidal ideation and behavior; these
45 issues will be addressed in a separate guidance.

46
47 This guidance revises the draft guidance for industry *Suicidality: Prospective Assessment of*
48 *Occurrence in Clinical Trials* issued in September 2010. This revision:

- 49 • Replaces the term *suicidality* with the phrase *suicidal ideation and behavior*
- 50
51 • Provides an expanded set of the Columbia Classification Algorithm for Suicide
52 Assessment (C-CASA) categories, along with definitions and explanations
- 53
54 • Revises the advice on particular trials and patients that would need assessments of
55 suicidal ideation and behavior, and the timing of such assessments
- 56
57 • Addresses concerns about the time burden of assessments
- 58
59 • Addresses questions about the possible value of the assessments providing protection for
60 patients in the trials themselves
- 61
62 • Makes it clear that use of an assessment instrument that directly classifies relevant
63 thoughts and behaviors into C-CASA categories eliminates the need for any additional
64 coding
- 65
66 • Provides multiple additional references
- 67
68 • Revises advice on evaluation of alternative instruments
- 69
- 70

71 FDA's guidance documents, including this guidance, do not establish legally enforceable
72 responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should
73 be viewed only as recommendations, unless specific regulatory or statutory requirements are
74 cited. The use of the word *should* in Agency guidances means that something is suggested or
75 recommended, but not required.

76 77 78 **II. BACKGROUND**

79
80 There has been a great deal of attention paid to treatment-emergent suicidal ideation and
81 behavior in recent years, and to the question of how best to assess these types of events in future
82 trials. The attention has resulted in part from findings of apparent treatment-emergent suicidal
83 ideation and behavior caused by several different types of drugs. Meta-analyses of placebo-

³ In addition to consulting guidances, sponsors are encouraged to contact the relevant review division to discuss specific issues that arise during the development of specific drugs.

Contains Nonbinding Recommendations

Draft — Not for Implementation

84 controlled antidepressant trials, both pediatric (Hammad, Laughren, et al. 2006) and adult (Stone,
85 Laughren, et al. 2009), revealed a signal for drug-related treatment-emergent suicidal ideation
86 and behavior at the younger end of the age spectrum. A meta-analysis of placebo-controlled
87 trials of antiepileptic drugs, including drugs with diverse pharmacology in studies of epilepsy as
88 well as psychiatric indications, also revealed a signal for drug-related treatment-emergent
89 suicidal ideation and behavior.⁴ In all of the trials in these meta-analyses, the suicidal ideation
90 and behavior events were identified and classified retrospectively; that is, the trials were not
91 designed to identify such events prospectively. Perhaps as a result, relatively few cases were
92 identified in this effort, the case descriptions were not complete, and baseline status was not
93 well-defined.

94
95 The concern about treatment-emergent suicidal ideation and behavior has arisen for other drugs
96 as well, based largely on spontaneous reports and published case reports. Drugs with such
97 reports have included isotretinoin and other tretinoins, beta blockers, reserpine, smoking
98 cessation drugs, and drugs for weight loss. In view of the wide range of drugs involved, it is
99 reasonable to consider whether prospective assessments for suicidal ideation and behavior should
100 be included in clinical trials involving at least selected drugs for nonpsychiatric indications.

101
102 There are two reasons for prospectively assessing suicidal ideation and behavior in clinical trials.
103 The first is to ensure that patients in clinical trials who are experiencing suicidal ideation and
104 behavior are properly recognized and adequately treated. The second is to ensure the collection
105 of more timely (i.e., closer to the event) and more complete data on suicidal ideation and
106 behavior than have been collected in the past, so that increased suicidal ideation and behavior in
107 individual trials and in pooled analyses are easier to detect. This is important whether or not a
108 particular drug is known to be associated with treatment-emergent suicidal ideation and
109 behavior. Collection of such data will also provide scientifically sound evidence to evaluate
110 concerns about a possible association with suicidal ideation and behavior for a drug that is based
111 only on individual case reports.

112
113 The following sections provide general recommendations for prospective assessment of the
114 occurrence of suicidal ideation and behavior, applicable to any drug, followed by a discussion of
115 which drugs should be assessed for suicidal ideation and behavior in addition to drugs for
116 psychiatric indications.

117

118

119 **III. PROSPECTIVE ASSESSMENT OF SUICIDAL IDEATION AND BEHAVIOR** 120 **OCCURRENCE — GENERAL RECOMMENDATIONS**

121

122 **A. Suicidal Ideation and Behavior Assessment Instruments**

123

124 The Columbia-Suicide Severity Rating Scale (C-SSRS),⁵ one of several available suicidal
125 ideation and behavior instruments, defines five subtypes of suicidal ideation and behavior that

⁴ See the Suicidal Behavior and Ideation and Antiepileptic Drugs FDA Web page at <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM100190>.

⁵ See <http://www.cssrs.columbia.edu>.

Contains Nonbinding Recommendations

Draft — Not for Implementation

126 we consider important to capture in any prospective assessment. In addition, we believe it is
127 useful to capture instances of self-injurious behavior with no suicidal intent, because it is
128 important to distinguish these behaviors from actions with suicidal intent. The ability to make
129 this distinction helps ensure that what is labeled as a suicide attempt does in fact meet criteria for
130 such a designation. Thus, the current preferred terms that we consider important include five
131 levels of suicidal ideation, five levels of suicidal behavior, and the category *self-injurious*
132 *behavior, no suicidal intent*. We have adopted these 11 categories as the standard for classifying
133 suicidal ideation and behavior events. These categories are defined in Appendix A. It should be
134 noted that the definitions provided for the five levels of suicidal behavior have been adopted by
135 the Centers for Disease Control and Prevention (Crosby, Ortega, et al. 2011).

136

137

- Suicidal ideation
 1. Passive
 2. Active: Nonspecific (no method, intent, or plan)
 3. Active: Method, but no intent or plan
 4. Active: Method and intent, but no plan
 5. Active: Method, intent, and plan⁶
- Suicidal behavior
 1. Completed suicide
 2. Suicide attempt
 3. Interrupted attempt
 4. Aborted attempt
 5. Preparatory actions toward imminent suicidal behaviors
- Self-injurious behavior, no suicidal intent

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

We recommend use of a suicidal ideation and behavior assessment instrument that directly classifies suicidal ideation and behavior into the 11 preferred categories, defined in Appendix A. As stated above, the C-SSRS is a prospective assessment instrument that directly classifies suicidal ideation and behavior into these 11 preferred categories,⁷ and this instrument would be acceptable for the purpose of these studies. The C-SSRS involves a series of probing questions to inquire about possible suicidal thinking and behavior, and this process is conducted at baseline (this would be a lifetime suicidal ideation and behavior assessment) and at each patient visit. Although completion of the C-SSRS is, in many instances, based entirely on the patient interview, it also allows for integration of information from other sources (e.g., family, friends, or significant others; caregivers or health professionals; hospital or emergency room records; coroner's report or death certificate). In fact, the C-SSRS is not considered complete for any particular visit until information from all potential sources has been evaluated and integrated.

Important psychometric properties of the C-SSRS have been established and reported in several papers. A recent paper reported on the instrument's construct validity (its ability to detect

⁶ According to C-SSRS, the definition of *plan* includes intent (i.e., intent to complete the suicide is implicit with the concept of plan). Thus, there is no need for the category *method and plan, but no intent*. (See Appendix A.)

⁷ See <http://www.cssrs.columbia.edu>.

Contains Nonbinding Recommendations

Draft — Not for Implementation

168 suicidal ideation and behavior) based on correlation with other measures of suicidal ideation and
169 behavior assessed in three multisite clinical trials (Posner, Brown, et al. 2011). The instrument
170 performed well relative to other instruments, and had high sensitivity and specificity of suicidal
171 behavior classifications relative to another behavior instrument and to assessments by an
172 independent suicide evaluation board. Inter-rater reliability for the C-SSRS has been well-
173 established in earlier studies (Pumariega, Millsaps, et al. 2011; Brent, Greenhill, et al. 2009).

174

175 The information pertinent to suicidal ideation and behavior collected in the C-SSRS interview is
176 classified into the set of 11 preferred categories described above as the interview is conducted.
177 The direct classification of information collected in the C-SSRS interview into these 11
178 categories, along with integration of information about the event from other sources, renders it
179 unnecessary to conduct any other classification step (i.e., this process replaces the retrospective
180 classification of data that was needed for the FDA's meta-analyses of suicidal ideation and
181 behavior). For example, after it is determined, based on the C-SSRS interview and information
182 from other sources, that a potentially self-injurious event was an actual suicide attempt, this fact
183 is noted on the C-SSRS form, and no further classification is needed. It is important to note that
184 the C-SSRS form is not complete until all available relevant data have been accessed and
185 integrated into the assessment. Data entries for C-SSRS classified events then become the basis
186 for analyses of future trials focused on suicidal ideation and behavior.

187

188 The C-SSRS is a detailed interview, but the full interview is needed only if the initial screening
189 questions about suicidal ideation and behavior are positive. Although the screening questions
190 should be completed at baseline and at every visit for every patient, they are not by themselves
191 burdensome, typically taking only 1 to 2 minutes for patients who have no positive findings.
192 Even for a patient with multiple positive findings, the full interview typically takes less than 10
193 minutes. Data from almost 15,000 administrations of an electronic self-report version of the C-
194 SSRS (i.e., the eC-SSRS) found an average completion time of 3.5 minutes for patients without
195 positive findings, and about 7 to 8 minutes for patients with positive findings (Mundt, Greist, et
196 al. 2010a). The eC-SSRS uses probe questions similar to those used by a human interviewer in
197 the paper form of the C-SSRS. It is an alternative approach to obtaining data on suicidal ideation
198 and behavior (Mundt, Greist, et al. 2010b).

199

200 The following information can be used by sponsors to evaluate the appropriateness of other
201 proposed instruments:

202

203 • *Categories:* The instrument ideally should include all the categories of suicidal ideation
204 and behavior identified in the 11 preferred terms defined in Appendix A.

205

206 • *Definitions:* The instrument should include definitions for all of these categories (these
207 definitions ideally should coincide with the definitions in Appendix A).

208

209 • *Probes/Questions:* The instrument should include probes or questions that permit
210 determination of whether or not each of these ideas or behaviors occurred.

211

212 • *Other information:* The instrument should provide for integration of information from
213 other sources (e.g., family, friends, or significant others; caregivers or health

Contains Nonbinding Recommendations

Draft — Not for Implementation

professionals; hospital or emergency room records; coroner’s report or death certificate) to permit accurate completion of the assessment.

- *Direct classification into the 11 preferred terms (see Appendix A): Use of the C-SSRS instrument accomplishes this goal directly, and other instruments used for this purpose ideally would be capable of doing this as well. Other instruments that do not accomplish this classification directly can still be useful for the purpose of protecting patients in a trial. In these instances, however, it may not be possible to use data from these trials in future meta-analyses exploring for treatment-emergent suicidal ideation and behavior in multiple treatment programs.*
- *Training: There should be provisions for formal training of raters to ensure accuracy and consistency in application of the instrument.*

Although we consider the C-SSRS an acceptable prospective suicidal ideation and behavior assessment instrument, other instruments, as noted above, could also be acceptable if they directly classify events of interest into the 11 categories of suicidal ideation and behavior described above. Sponsors should, however, discuss the acceptability of alternative instruments with the FDA before using them in clinical trials. Although alternative instruments could be acceptable, it should be noted that the use of different assessment instruments in different programs is likely to increase measurement variability across programs, decreasing the opportunity to identify potential signals in future meta-analyses that include data from multiple programs. This type of imprecision is particularly problematic in dealing with events that have a low incidence, as is the case for suicidal ideation and behavior occurring in clinical trials.

B. Managing Suicidal Ideation and Behavior Data

This section provides general advice regarding management of data from prospective assessments of suicidal ideation and behavior in clinical trials. Detailed advice about the structure of data tables and other data recommendations for preparing a suicidal ideation and behavior submission to the FDA will be addressed in a separate guidance, as will analytic and statistical considerations. Although a composite of suicidal ideation and behavior was the primary endpoint in previous FDA meta-analyses, it is likely that future meta-analyses will consider suicidal behavior and ideation separately, because they may have different predictive value for subsequent suicidal behavior.

We believe that an important feature of an instrument used for prospective assessment of suicidal ideation and behavior, especially with regard to future meta-analyses, would be that it directly classifies events of interest into the 11 categories of interest as part of the assessment process. Such instruments would not require the creation of narratives for blinded assessment of suicidal ideation and behavior by experts, as was the case for previous FDA meta-analyses. The databases generated from use of the C-SSRS or other assessment instruments judged to be acceptable for this purpose would serve directly as the basis for any subsequent analyses.

It is possible for a patient to have more than one type of event during an interval. For example, during a reporting interval, a patient might have experienced separate instances of suicidal

Contains Nonbinding Recommendations

Draft — Not for Implementation

260 ideation, self-injury without suicidal intent, suicide attempt, and completed suicide. We
261 acknowledge that it is often difficult to determine whether a sequence of such events represents a
262 continuum of related events, in which case it would be most reasonable to classify such a
263 continuum according to the most serious event, or whether these are really distinct events, in
264 which case it would be reasonable to consider them separately. This is a judgment best made by
265 the interviewer, or if a self-reporting approach is used, by the patient. If the events are discrete,
266 they can still be captured in a single C-SSRS interview and rating form. In previous meta-
267 analyses, we counted only the most serious suicidal ideation or behavior event during an interval,
268 and this may still be the optimal approach. Nevertheless, different approaches might also be
269 used in future analyses. Consequently, all events that can be determined to be discrete events
270 should be separately classified and recorded for the interval being assessed.

271

C. Specific Trial Considerations

272

273

1. *Identifying Trials in Which Suicidal Ideation and Behavior Assessment Should be*

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

Carried Out

In general, suicidal ideation and behavior should be assessed in every trial after it has been determined that the drug is appropriate for this assessment (see section IV). The full assessment of suicidal ideation and behavior generally should involve a pooled analysis of all controlled trials, so that it will not be possible to conclude that a drug has no effect on suicidal ideation and behavior until a substantial database is available for this analysis. A separate guidance on statistical issues involved in the analysis of suicidal ideation and behavior will address general principles to consider in reaching a judgment on this issue. Sponsors who believe they have sufficient data to address this issue should seek advice from the relevant review division.

2. *Populations in Which Assessment of Suicidal Ideation and Behavior Would be Difficult*

It is reasonable to omit, or consider alternative assessments in, trials involving patients with cognitive impairment so substantial as to interfere with an understanding of the concept of suicide. Such populations can include certain patients with Alzheimer's disease (those with severe cognitive impairment), other dementias, mental retardation, and autism. Critically ill patients would also be difficult to assess for suicidal ideation and behavior.

Instruments such as the C-SSRS have been used successfully in children and adolescent patients with various psychiatric disorders that do not involve cognitive impairment. Nevertheless, assessing young children also can be challenging because many may not have reached sufficient cognitive maturity to understand the concept of death.

A sponsor considering the omission of standard suicidal ideation and behavior assessments (where these generally would be conducted) from a specific clinical trial in a particularly challenging population should discuss this omission with the review division to obtain prior agreement. In certain instances, alternative instruments may permit the assessment of suicidal ideation and behavior or other adverse psychological events.

Contains Nonbinding Recommendations

Draft — Not for Implementation

306 3. *Dosing Considerations*

307

308 a. Single-dose trials

309

310 Because the time course of the risk for drug-induced suicidal ideation and behavior is unknown
311 and likely differs by drug or drug class, it cannot be assumed that short-term trials pose no risk to
312 patients and healthy volunteers. However, treatment-emergent suicidal ideation and behavior
313 have rarely been reported in relatively short-term multiple-dose phase 1 trials in healthy
314 volunteers. The risk of such an event would be even lower in single-dose trials in healthy
315 volunteers. In addition, such trials are generally conducted in well-controlled settings with
316 almost continuous observation, so that any treatment-emergent events would be readily detected.
317 Therefore, we have concluded that multiple-dose trials in healthy volunteers should include such
318 assessments, but that it is reasonable to omit such assessments from single-dose trials in healthy
319 volunteers.

320

321 b. Microdose trials

322

323 It is reasonable to omit suicidal ideation and behavior assessments in microdose trials involving
324 low doses that are not expected to have any measurable pharmacological effects. Microdose
325 trials are typically employed for imaging agents in the assessment of receptor occupancy.

326

327 4. *Timing of Assessments*

328

329 In general, in outpatient trials for which assessment of suicidal ideation and behavior are
330 considered appropriate, assessments should be conducted at baseline (the lifetime suicidal
331 ideation and behavior assessment) and at all planned visits at which other clinical assessments
332 are to be carried out.⁸ For certain drugs (e.g., those with particularly long elimination half-lives),
333 it may make sense to include follow-up assessments even after dosing has stopped. These
334 assessments should also be conducted at any unplanned visits at which other clinical assessments
335 are needed.

336

337 Determining what constitutes a visit generally is straightforward for an outpatient trial, but not
338 necessarily for an inpatient trial. For an inpatient trial, suicidal ideation and behavior
339 assessments ordinarily would be done at the same times as other symptom assessments, but
340 would not be needed at the times of nonsymptom assessments (e.g., vital signs). Sponsors
341 should seek advice from the review division if there are questions about the appropriate
342 frequency and timing of assessments for particular trials.

343

⁸ Some have argued that there is no evidence that these types of assessments in the context of clinical trials provide any protection for patients in these trials, but are only useful for making population decisions about drugs over relatively long periods of time. Although earlier trials looking at suicidal ideation overall (without regard to severity) did not find evidence for the predictive value of detecting ideation for suicidal behavior over the short-term, two recent analyses from independent sources found that severity of suicidal ideation detected in baseline C-SSRS assessments predicted suicidal behavior over a relatively brief follow-up period (Posner, Brown, et al. 2011; Mundt, Posner, et al. 2011). These recent findings support the use of assessments for suicidal ideation and behavior in clinical trials as a way of providing additional protection for patients in the context of such trials.

Contains Nonbinding Recommendations

Draft — Not for Implementation

5. *Implementation During Ongoing Trials*

Determining how to implement suicidal ideation and behavior assessments in ongoing trials may involve some discussion with the FDA. Suicidal ideation and behavior data derived from a trial in which suicidal ideation and behavior assessments were added after the trial was well along would not be optimal for inclusion in a meta-analysis. It should be noted, however, that there is a version of the C-SSRS that is specifically designed for already-enrolled patients. Whether or not such data will be useful in a meta-analysis, it may still be important to add suicidal ideation and behavior assessments for the protection of patients involved in the ongoing trial. For a trial that is well along, it would not be feasible to go through the formal process of amending the protocol and obtaining investigational review board concurrence. Nevertheless, even in these instances, it may be useful to alert investigative sites of the general concern about possible drug-induced suicidal ideation and behavior, so they can individually decide how to address this issue.

6. *Prospective Assessments in Large Simple Trials*

The question has been raised as to whether prospective assessments for suicidal ideation and behavior would be needed in certain trials (e.g., a large simple phase 4 trial for which data collection is minimized). An instrument such as the C-SSRS adds little burden to such a trial, as long as visit frequency is not altered, and increasingly these types of assessments are becoming part of clinical practice. Nevertheless, sponsors who have questions about what might be needed in a particular trial should ask the relevant review division about this.

IV. PROSPECTIVE ASSESSMENT OF SUICIDAL IDEATION AND BEHAVIOR OCCURRENCE — SPECIFIC INDICATION RECOMMENDATIONS

Past experience specifically indicates that assessment of suicidal ideation and behavior should be a regular part of development programs involving antidepressants and antiepileptic drugs. But the heightened risk of suicide in most psychiatric illnesses strongly suggests that suicidal ideation and behavior should be assessed as part of the evaluation of any drug being developed for a psychiatric condition (i.e., those indications managed in the Division of Psychiatry Products). There are no data to support the view that patients with nondepressed psychiatric disorders have any lesser vulnerability to treatment-induced suicidal ideation and behavior than patients with overt depression. On the contrary, based on limited exploratory analyses of the trials using antidepressants in adults, including many trials in psychiatric patients with disorders other than depression, there is some evidence that the relative risk may actually be greater in nondepressed psychiatric patients (Stone, Laughren, et al. 2009). Moreover, in the meta-analysis for suicidal ideation and behavior with antiepileptic drugs, the odds ratio for suicidal ideation and behavior was greater for epilepsy patients than it was for the psychiatric patients treated with these drugs, even though the absolute rates were higher in psychiatric patients compared to epilepsy patients.⁹

⁹ See the Suicidal Behavior and Ideation and Antiepileptic Drugs FDA Web page at <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM100190>.

Contains Nonbinding Recommendations

Draft — Not for Implementation

387 Therefore, other than the exceptions noted in section III.C., prospective suicidal ideation and
388 behavior assessments should be carried out in all clinical trials involving any drug being
389 developed for any psychiatric indication, as well as for all antiepileptic drugs and other
390 neurologic drugs with central nervous system (CNS) activity, both inpatient and outpatient,
391 including multiple-dose phase 1 trials involving healthy volunteers. Questions about what
392 constitutes CNS activity should be addressed to the Division of Neurology Products.
393

394 Tempting as it may be to think that patients without a psychiatric condition receiving
395 nonpsychiatric drugs would not be at risk for drug-induced suicidal ideation and behavior,
396 experience suggests that this belief may be erroneous. Although there are few controlled trial
397 data in these settings, there has been long-standing concern about a variety of drugs, including
398 isotretinoin and other tretinoin, beta blockers (especially those entering the brain), reserpine,
399 drugs for smoking cessation, and drugs for weight loss, for which possible signals of risk for
400 suicidal ideation and behavior have already been identified. Therefore, at a minimum, we
401 recommend that prospective suicidal ideation and behavior assessments be carried out in all
402 clinical trials for all drugs that are pharmacologically similar to drugs in the above list. These
403 assessments, however, might reasonably be used more broadly, perhaps with any drug that
404 appears to have a CNS effect. Sponsors are encouraged to contact the relevant review division to
405 discuss whether these assessments are recommended for an individual drug.
406

407 Assessments should be conducted in both inpatient and outpatient trials, and even multiple-dose
408 phase 1 trials involving healthy volunteers, with the exceptions noted in section III.C. This list
409 of suspect drugs will expand if new possible signals are detected, and it is plausible that certain
410 drugs and pharmacologic profiles will prove not to be inducers of suicidal ideation and behavior.
411 This cannot be known if the drugs are not studied. One of the advantages of conducting suicidal
412 ideation and behavior assessments more broadly is that future meta-analyses may either confirm
413 the signal or provide reassurance that the signal is false. The possibility that suicidal ideation
414 and behavior assessments should be conducted as part of essentially all drug development
415 programs, even for drugs not yet recognized as having CNS effects, has also been considered,
416 but this guidance does not recommend that approach. Further experience may change our view
417 on this issue and comments on this current recommended approach are welcome. Questions
418 about whether a particular drug under development would need assessments for suicidal ideation
419 and behavior should be directed to the review division that has responsibility for the indication in
420 question.
421

Contains Nonbinding Recommendations

Draft — Not for Implementation

REFERENCES

- 422
423
424 Brent, DA, LL Greenhill, S Compton et al, 2009, The Treatment of Adolescent Suicide
425 Attempters Study (TASA): Predictors of Suicidal Events in an Open Trial, *J. Am Acad Child*
426 *Adolesc Psychiatry*, 48:987-96.
427
428 Crosby, A, L Ortega, and C Melanson, 2011, Self-Directed Violence Surveillance: Uniform
429 Definitions and Recommended Data Elements, version 1.0, Atlanta (GA): Centers for Disease
430 Control and Prevention, National Center for Injury Prevention and Control.
431
432 Hammad, TA, T Laughren, and J Racoosin, 2006, Suicidality in Pediatric Patients Treated With
433 Antidepressant Drugs, *Arch Gen Psychiatry*, 63:332-339.
434
435 Mundt, JC, JH Greist, M Federico, and K Posner, 2010a, Electronic Administration of the
436 Columbia-Suicide Severity Rating Scale (eC-SSRS): Results From 14,937 Administrations;
437 from poster presented at ISCTM meeting, Oct 13, 2010, Baltimore.
438
439 Mundt, JC, JH Greist, AJ Gelenberg et al, 2010b, Feasibility and Validation of a Computer-
440 Automated Columbia-Suicide Severity Rating Scale Using Interactive Voice Response
441 Technology, *J Psychiatric Res*, 44(16); 1224-1228.
442
443 Mundt, JC, K Posner, JH Greist, and M Federico, 2011, eC-SSRS Assessment of Lifetime
444 Ideation and Behavior Are Predictive of Suicidal Behavior Occurring During Trial Participation;
445 Poster presented at autumn meeting of ISCTM (Oct 3; Amelia Island, Fla).
446
447 Posner, K, GK Brown, B Stanley et al., 2011, The Columbia-Suicide Severity Rating Scale (C-
448 SSRS): Internal Validity and Internal Consistency Findings From Three Multi-Site Studies With
449 Adolescents and Adults, *Am J Psychiatry*, 168:1266-1277.
450
451 Posner, K, MA Oquendo, M Gould, B Stanley, and M Davies, 2007, Columbia Classification
452 Algorithm of Suicide Assessment (C-CASA): Classification of Suicidal Events in the FDA's
453 Pediatric Suicidal Risk Analysis of Antidepressants, *Am J Psychiatry*, 164:1035-1043.
454
455 Pumariega, A, U Millsaps, K Posner et al., 2011, C-SSRS: Evidence-Based Method for
456 Hospital-Based Suicide Screening; presented at Eastern Nursing Research Society 23rd Annual
457 Scientific Sessions, Philadelphia, PA.
458
459 Stone, M, T Laughren, ML Jones, M Levenson, PC Holland, A Hughes, TA Hammad, R
460 Temple, and G Rochester, 2009, Risk of Suicidality in Clinical Trials of Antidepressants in
461 Adults: Analysis of Proprietary Data Submitted to U.S. Food and Drug Administration, *BMJ*,
462 339:b2880.
463

464 **APPENDIX A:**
465 **SUICIDAL IDEATION AND BEHAVIOR CATEGORIES AND**
466 **DEFINITIONS (Posner, Oquendo, et al. 2007)¹⁰**
467

468 **Suicidal Ideation**
469

470 **Passive suicidal ideation: wish to be dead**
471

472 Patient has thoughts about a wish to be dead or not alive anymore, or wish to fall asleep
473 and not wake up.
474

475 **Active suicidal ideation: nonspecific (no method, intent, or plan)**
476

477 General nonspecific thoughts of wanting to end one's life or commit suicide (e.g., "I've
478 thought about killing myself") without general thoughts of ways to kill oneself/associated
479 methods, intent, or plan during the assessment period.
480

481 **Active suicidal ideation: method, but no intent or plan**
482

483 Patient has thoughts of suicide and has thought of at least one method during the
484 assessment period. This situation is different than a specific plan with time, place, or
485 method details worked out (e.g., thought of method to kill self but not a specific plan).
486 Includes person who would say, "I thought about taking an overdose but I never made a
487 specific plan as to when, where, or how I would actually do it . . . and I would never go
488 through with it."
489

490 **Active suicidal ideation: method and intent, but no plan**
491

492 Active suicidal thoughts of killing oneself, and patient reports having some intent to act
493 on such thoughts, as opposed to "I have the thoughts but I definitely will not do anything
494 about them."
495

496 **Active suicidal ideation: method, intent, and plan**
497

498 Thoughts of killing oneself with details of plan fully or partially worked out and patient
499 has some intent to carry it out (i.e., some degree of intent is implicit in the concept of
500 plan).
501

502 **Suicidal Behavior**
503

504 **Completed suicide**
505

506 A self-injurious behavior that resulted in fatality and was associated with at least some
507 intent to die as a result of the act. Evidence that the individual intended to kill him- or

¹⁰ See <http://www.cssrs.columbia.edu>.

Contains Nonbinding Recommendations

Draft — Not for Implementation

508 herself, at least to some degree, can be explicit or inferred from the behavior or
509 circumstance.

510

Suicide attempt

512

513 A potentially self-injurious behavior, associated with at least some intent to die as a result
514 of the act. Evidence that the individual intended to kill him- or herself, at least to some
515 degree, can be explicit or inferred from the behavior or circumstance. A suicide attempt
516 may or may not result in actual injury.

517

Interrupted suicide attempt

519

520 When the person is interrupted (by an outside circumstance) from starting a potentially
521 self-injurious act (if not for that, actual attempt would have occurred).

522

Aborted suicide attempt

524

525 When person begins to take steps toward making a suicide attempt, but stops before
526 actually engaging in any self-destructive behavior. Examples are similar to interrupted
527 attempts, except that the individual stops before being stopped by something else.

528

Preparatory acts toward imminent suicidal behaviors

530

531 This category can include anything beyond a verbalization or thought, but it stops short
532 of a suicide attempt, an interrupted suicide attempt, or an aborted suicide attempt. This
533 might include behaviors related to assembling a specific method (e.g., buying pills,
534 purchasing a gun) or preparing for one's death by suicide (e.g., giving things away,
535 writing a suicide note).

536

Self-Injurious Behavior Without Suicidal Intent

538

539 Self-injurious behavior associated with no intent to die. The behavior is intended purely for
540 other reasons, either to relieve distress (often referred to as *self-mutilation* (e.g., superficial cuts
541 or scratches, hitting or banging, or burns)) or to effect change in others or the environment.

542