Consistency in Labeling and Methods to Optimize Communication in Labeling

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Disclaimer

• The views and opinions expressed in this presentation represent those of the presenter, and do not necessarily represent an official FDA position.

• The labeling examples in this presentation are provided only to demonstrate current labeling development challenges and should not be considered FDA recommended templates.

• Reference to any marketed products is for illustrative purposes only and does not constitute endorsement by the FDA.
Overview

1. Consistent message throughout prescribing information (PI)

2. Quality Check for Format/Appearance of PI

3. Additional Labeling Considerations
Topic #1: Consistent Message in PI
Examples

• Fictitious examples
  – May not include all regulatory/statutory requirements for each section/subsection

• Examples derived from approved labeling
Unclear Indicated/Approved Population
Approved/Indicated for (1) Only Pediatric Patients or (2) Adults and Pediatric Patients?

1 INDICATIONS AND USAGE
DRUG-X is indicated for the treatment of patients with Condition-Y.

2 DOSAGE AND ADMINISTRATION
Prior to treating adults with DRUG-X, assess for the presence of coronary artery disease [see Warnings and Precautions (5.1)].

The recommended dosage in pediatric patients is 100 mg orally once daily

14 CLINICAL STUDIES
The efficacy of DRUG-X in the treatment of Condition-Y was established from two randomized, placebo-controlled trials in pediatric patients aged 11 to 16 years old with Condition-Y.
1 INDICATIONS AND USAGE
DRUG-X is indicated for the treatment of pediatric patients 11 years of age and older with Condition-Y.

2 DOSAGE AND ADMINISTRATION
Prior to treating adults with DRUG-X, assess for the presence of coronary artery disease [see Warnings and Precautions (5.1)]

The recommended dosage in pediatric patients 11 years of age and older is 100 mg orally once daily.

14 CLINICAL STUDIES
The efficacy of DRUG-X in the treatment of Condition-Y was established from two randomized, placebo-controlled trials in pediatric patients aged 11 to 16 years old with Condition-Y.
Option #2: Indicated in Adults and Pediatric Patients ≥ 11 Years Old

1 INDICATIONS AND USAGE
DRUG-X is indicated for the treatment of adults and pediatric patients 11 years of age and older with Condition-Y.

2 DOSAGE AND ADMINISTRATION
Prior to treating adults with DRUG-X, assess for the presence of coronary artery disease [see Warnings and Precautions (5.1)]

The recommended dosage in adults and pediatric patients 11 years of age and older is 100 mg orally once daily.
Implied or Suggested Unapproved Dosage Regimen
2 DOSAGE AND ADMINISTRATION
2.1 Recommended Dosage
The recommended DRUG-X dosage is 10 mg once daily.

14 CLINICAL STUDIES
14.1 Clinical Studies in Ulcerative Colitis
Study 1 was a double-blind, placebo-controlled, dosage-ranging 6-week trial in patients with ulcerative colitis in which patients were randomized to receive placebo, DRUG-X 10 mg once daily, or DRUG-X 20 mg once daily.

Both DRUG-X groups showed improved Mayo scores compared to the placebo group at Week 6 (see Table 5).

Table 5: Efficacy Results at Week 6 in Patients with Ulcerative Colitis in Study 1

<table>
<thead>
<tr>
<th></th>
<th>Placebo (n=76)</th>
<th>DRUG-X 10 mg once daily (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Patients with Mayo Score ≤ 2</td>
<td>6%</td>
<td>19%</td>
</tr>
<tr>
<td>Proportion of patients with a decrease from baseline in the Mayo score by ≥ 30%</td>
<td>30%</td>
<td>52%</td>
</tr>
</tbody>
</table>
Avoid Implied or Suggested Unapproved Indication/Use/Dosage

Indications/uses and dosing regimens must not be implied or suggested in other sections of labeling if not included in I&U section or D&A section, respectively.¹

I&U = INDICATIONS AND USAGE; D&A = DOSAGE AND ADMINISTRATION

¹ 21 CFR 201.57(c)(2)(iv) and (v); 21 CFR 201.57(c)(3)(ii); 21 CFR 201.57(c)(15)(i); and 21 CFR 201.56(a)(3).
Option #1: Both Dosages Approved

2 DOSAGE AND ADMINISTRATION
2.1 Recommended Dosage
The recommended DRUG-X dosage is 10 mg or 20 mg once daily.

14 CLINICAL STUDIES
14.1 Clinical Studies in Ulcerative Colitis
Study 1 was a double-blind, placebo-controlled, dosage-ranging 6-week trial in patients with ulcerative colitis in which patients were randomized to receive placebo, DRUG-X 10 mg once daily, or DRUG-X 20 mg once daily. Both DRUG-X groups showed improved Mayo scores compared to the placebo group at Week 6 (see Table 5).

Table 5: Efficacy Results at Week 6 in Patients with Ulcerative Colitis in Study 1

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<th>DRUG-X 10 mg once daily (n=80)</th>
<th>DRUG-X 20 mg once daily (n=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Patients with Mayo Score ≤ 2</td>
<td>6%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>Proportion of patients with a decrease from baseline in the Mayo score by ≥ 30%</td>
<td>30%</td>
<td>52%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Option #2a: Only One Approved Dosage

2 DOSAGE AND ADMINISTRATION
2.1 Recommended Dosage
The recommended DRUG-X dosage is 10 mg once daily.

14 CLINICAL STUDIES
14.1 Clinical Studies in Ulcerative Colitis
Study 1 was a randomized, double-blind, placebo-controlled 6-week trial of DRUG-X in patients with ulcerative colitis. In this trial, patients who received DRUG-X 10 mg once daily showed improved Mayo scores compared to patients who received placebo at Week 6 (see Table 5).

Table 5: Efficacy Results at Week 6 in Patients with Ulcerative Colitis in Study 1

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Option #2b: Only One Approved Dosage (include disclaimer)

2 DOSAGE AND ADMINISTRATION
2.1 Recommended Dosage
The recommended DRUG-X dosage is 10 mg once daily.

14 CLINICAL STUDIES
14.1 Clinical Studies in Ulcerative Colitis
Study 1 was a randomized, double-blind, placebo-controlled, 6-week trial in patients with ulcerative colitis in which patients were randomized to receive placebo, DRUG-x 10 mg once daily, or DRUG-X 20 mg once daily. DRUG-X 10 mg once daily demonstrated improved Mayo scores compared to the placebo group at Week 6 (see Table 5).

Compared to DRUG-X 10 mg once daily, DRUG-X 20 mg once daily did not demonstrate significantly greater reductions in Mayo scores and had a greater incidence of adverse reactions. Therefore, DRUG-X 20 mg once daily is not recommended [see Dosage and Administration (2.1)].

Table 5: Efficacy Results at Week 6 in Patients with Ulcerative Colitis in Study 1

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</tr>
</tbody>
</table>
Unclear Recommended Duration of Use
What is the Recommended Duration of Use?

WARNING: ADVERSE REACTION-Y

Consider the risks of Adverse Reaction-Y and benefits of DRUG-X before using longer than 3 months [see Warnings and Precautions (5.1)].

2 DOSAGE AND ADMINISTRATION
If patients do not respond after several months of treatment, increase the dosage to 15 mg once daily.

5 WARNINGS AND PRECAUTIONS
5.1 Adverse Reaction-Y
Adverse Reaction-Y has occurred more commonly after the first 3 months of DRUG-X use. DRUG-X should not be used for longer than 3 months.
Recommended Duration of Use is Clear

WARNING: ADVERSE REACTION-Y

Avoid treatment with DRUG-X for longer than 3 months because of the increased risk of developing Adverse Reaction-Y with longer term use [see Warnings and Precautions (5.1)].

2 DOSAGE AND ADMINISTRATION
Avoid treatment with DRUG-X for longer than 3 months [see Warnings and Precautions (5.1)].

5 WARNINGS AND PRECAUTIONS
5.1 Adverse Reaction-Y
The risk of Adverse Reaction-Y increases with longer term use (> 3 months); therefore, avoid use of DRUG-X longer than 3 months.
Inconsistency Between Strengths and Recommended Dosage
Inconsistency Between Strengths and Recommended Dosage

2 DOSAGE AND ADMINISTRATION

- Recommended dosage of DRUG-X is 10 mg once daily.
- Recommended dosage of DRUG-X in patients with severe renal impairment (Clcr < 30 mL/minute; renal function estimated by Cockcroft-Gault using ideal body weight) is 5 mg once daily.
- Do not split tablets [see Warnings and Precautions (5.7)]

3 DOSAGE FORMS AND STRENGTHS

Tablets: 10 mg (light yellow, round, “Pharma” on one side)

5 WARNINGS AND PRECAUTIONS

5.7 Serious Adverse Reaction-Y with Inappropriate Administration

Serious Adverse-Reaction-Y has occurred in patients who split DRUG-X tablets.

1 Tablets are not functionally scored. See Tablet Scoring – Nomenclature, Labeling, and Data for Evaluation guidance
Consistency Between Strengths & Recommended Dosage

2 DOSAGE AND ADMINISTRATION
- Recommended dosage of DRUG-X is 10 mg once daily.
- Do not split tablets [see Warnings and Precautions (5.7)]

3 DOSAGE FORMS AND STRENGTHS
Tablets: 10 mg (light yellow, round, “Pharma” on one side)

5 WARNINGS AND PRECAUTIONS
5.7 Serious Adverse Reaction-Y with Inappropriate Administration
Serious Adverse Reaction-Y has occurred in patients who split DRUG-X tablets.

8 USE IN SPECIFIC POPULATIONS
8.6 Renal Impairment
The use of DRUG-X in patients with severe renal impairment (Clcr < 30 mL/minute; renal function estimated by Cockcroft-Gault using ideal body weight) is not recommended [provide a rationale] [see Warnings and Precautions (5.7)].
Unclear Risk Management
What are Prevention/Mitigation Recommendations in Patients with Severe Renal Impairment?

4 CONTRAINDICATIONS
DRUG-X should not be used in patients with severe renal impairment [see Warnings and Precautions (5.3)].

5 WARNINGS AND PRECAUTIONS
5.3 Increased Risk of Adverse Reaction-Y in Patients with Severe Renal Impairment
DRUG-X is not recommended in patients with severe renal impairment

8 USE IN SPECIFIC POPULATIONS
8.6 Renal Impairment
Initiation of DRUG-X in patients with severe renal impairment is not recommended. Discontinue DRUG-X if creatinine clearance remains persistently below 30 mL/minute.
Labeling Development Steps: Renal Impairment Information

First: data

Second: clinical implications of differences in response, safety, or recommendations for use

Third: Risk management
Step #1: Summarize Data - Severe Renal Impairment

12 CLINICAL PHARMACOLOGY
12.3 Pharmacokinetics

Specific Populations

Patients with Renal Impairment

Compared to patients with normal renal function, the AUC of drugoxide was increased by 1.2, 2, and 20 times in patients with mild renal impairment (Clcr 60 to 90 mL/minute), moderate renal impairment (Clcr 30 to 60 mL/minute), and severe renal impairment (Clcr < 30 mL/minute), respectively, following a single 50 mg dose of drugoxide [see Use in Specific Populations (8.6)].

Include PK differences in patients with renal impairment compared to patients with normal renal function

Clcr = creatinine clearance; ¹ Clinical Pharmacology Section of Labeling guidance
8 USE IN SPECIFIC POPULATIONS
8.6 Renal Impairment

DRUG-X is contraindicated in patients with severe renal impairment (Clcr < 30 mL/minute) because the use of DRUG-X in patients with severe renal impairment was associated with greater blood levels of drug oxide compared to patients with normal renal function (20 times greater) [see Clinical Pharmacology (12.3)].

Implications of differences in response, safety, or recommendations for use in patients with mild and moderate renal impairment (compared to patients with normal renal function) are included.

Clcr = creatinine clearance

1 draft Pharmacokinetics in Patients with Impaired Renal Function - Study Design, Data Analysis, and Impact on Dosing and Labeling
4 CONTRAINDICATIONS

DRUG-X is contraindicated in patients with severe renal impairment (Clcr < 30 mL/minute) [see Use in Specific Populations (8.6)].

Clcr = creatinine clearance

1 21 CFR 201.57(c)(5); W&P, Contraindications, and BW Sections of Labeling guidance; and draft Pharmacokinetics in Patients with Impaired Renal Function - Study Design, Data Analysis, and Impact on Dosing and Labeling
2 DOSAGE AND ADMINISTRATION

DRUG-X is contraindicated in patients with severe renal impairment (Clcr < 30 mL/minute).

The recommended once daily oral dosage of DRUG-X is (renal function estimated by Cockcroft-Gault using ideal body weight) [see Use in Specific Populations (8.6)]:

- 50 mg in patients with normal renal function or mild renal impairment (Clcr ≥ 60 mL/minute).
- 25 mg in patients with moderate renal impairment (Clcr 30 to 60 mL/minute)

4 CONTRAINDICATIONS

DRUG-X is contraindicated in patients with severe renal impairment (Clcr < 30 mL/minute) [see Use in Specific Populations (8.6)].

Clcr = creatinine clearance

1 21 CFR 201.57(c)(3); Dosage and Administration Section of Labeling guidance; and draft Pharmacokinetics in Patients with Impaired Renal Function - Study Design, Data Analysis, and Impact on Dosing and Labeling
Topic #2: Quality Check for Format/Appearance of PI
Selected Requirements of Prescribing Information (SRPI)\(^1\)

The Selected Requirements of Prescribing Information (SRPI) is a 41-item checklist of important format prescribing information (PI) items based on labeling regulations [21 CFR 201.56(d) and 201.57] and guidances. The word “must” denotes that the item is a regulatory requirement, while the word “should” denotes that the item is based on guidance. Each SRPI item is assigned with one of the following three responses:

- **NO**: The PI does not meet the requirement for this item (deficiency).
- **YES**: The PI meets the requirement for this item (no deficiency).
- **N/A**: This item does not apply to the specific PI under review (not applicable).

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Highlights

See Appendix for a sample tool illustrating Highlights format.

HIGHLIGHTS GENERAL FORMAT

1. Highlights (HL) must be in a minimum of 8-point font and should be in two-column format, with ½ inch margins on all sides and between columns.

   **Comment:**

2. The length of HL must be one-half page or less unless (the HL Boxed Warning does not count against the one-half page requirement).

   **Comment:**

3. A horizontal line must separate:
   - HL from the Table of Contents (TOC), **and**
   - TOC from the Full Prescribing Information (FPI).

\(^1\) SRPI on [PLR Requirements for Prescribing Information website](http://www.fda.gov)
Labeling Finalization During NDA/BLA Review Cycle

• After FDA and firm are close to an agreed-upon PI, remove all annotations from PI:
  – Line numbers
  – Headers and footers

• Ensure two column format for Highlights and Table of Contents; recommend one-column format for FPI
What Can be Improved?

NDA 0123456-S-030
NDA 023456-S-020
NDA 034567-S-18
FDA Draft Labeling Text 8/5/15

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use PROPRIETARY NAME safely and effectively. See full prescribing information for PROPRIETARY NAME.

PROPRIETARY NAME (non-proprietary name) dosage form, route of administration, controlled substance symbol
Initial U.S. Approval: YYYY

WARNING: TITLE OF WARNING
See full prescribing information for complete boxed warning.

• Text (4)
• Text (5.x)

RECENT MAJOR CHANGES
Section Title, Subsection Title (x x) M/201Y
Section Title, Subsection Title (x.x) M/201Y

INDICATIONS AND USAGE
PROPRIETARY NAME is a (insert FDA established pharmacologic class text phrase) indicated for ... (1)
Limitations of Use: Text (1)

DOSAGE AND ADMINISTRATION
• Text (2.x)
• Text (2.x)

Dosage form(s): strength(s) (3)

CONTRAINDICATIONS
• Text (4)
• Text (4)

WARNINGS AND PRECAUTIONS
• Text (5 x)
• Text (5.x)

ADVERSE REACTIONS
Most common adverse reactions (incidence > x%) are text (6.x)

To report SUSPECTED ADVERSE REACTIONS, contact name of manufacturer at toll-free phone # or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS
• Text (7 x)
• Text (7 x)

USE IN SPECIFIC POPULATIONS
• Text (8 x)
• Text (8 x)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling OR and Medication Guide.

Revised: 10/2015
HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use PROPRIETARY NAME safely and effectively. See full prescribing information for PROPRIETARY NAME.

PROPRIETARY NAME (non-proprietary name) dosage form, route of administration, controlled substance symbol
Initial U.S. Approval: YYYY

WARNING: TITLE OF WARNING
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RECENT MAJOR CHANGES
Section Title, Subsection Title (x.x) M/201Y
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Limitations of Use: Text (1)

DOSAGE AND ADMINISTRATION
- Text (2.x)
- Text (2.x)

DOSAGE FORMS AND STRENGTHS
Dosage form(s): strength(s) (3)

CONTRAINDICATIONS
- Text (4)
- Text (4)

WARNINGS AND PRECAUTIONS
- Text (5.x)
- Text (5.x)

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DRUG INTERACTIONS
- Text (7.x)
- Text (7.x)

USE IN SPECIFIC POPULATIONS
- Text (8.x)
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See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling OR and Medication Guide.
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PROPRIETARY NAME (non-proprietary name) dosage form, route of administration, controlled substance symbol
Initial U.S. Approval: YYYY

WARNING: TITLE OF WARNING
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- Text (4)
- Text (5.x)

RECENT MAJOR CHANGES
Section Title, Subsection Title (x.x) M/201Y
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INDICATIONS AND USAGE
PROPRIETARY NAME is a (insert FDA established pharmacologic class text phrase) indicated for ... (1)

Limitations of Use: Text (1)

DOSEAGE AND ADMINISTRATION
- Text (2.x)
- Text (2.x)

DOSEAGE FORMS AND STRENGTHS
Dosage form(s): strength(s) (3)

CONTRAINDICATIONS
- Text (4)
- Text (4)

WARNINGS AND PRECAUTIONS
- Text (5.x)
- Text (5.x)

ADVERSE REACTIONS
Most common adverse reactions (incidence > x%) are text (6.x)

To report SUSPECTED ADVERSE REACTIONS, contact name of manufacturer at toll-free phone # or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS
- Text (7.x)
- Text (7.x)

USE IN SPECIFIC POPULATIONS
- Text (8.x)
- Text (8.x)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling OR and Medication Guide.

Revised: M/201Y
Topic #3: Additional Labeling Considerations
General Considerations for All Sections of PI
Abbreviations and Symbols in PI (1 of 2)

• Institute for Safe Medication Practices: a list of error-prone abbreviations, symbols, and dose designations¹

• Consider whether these items will create potential for prescribing or administration errors in PI

• However, commonly used symbols may be preferable when there is minimal risk for medication error and where replacement of symbols would decrease readability

¹ http://www.ismp.org/tools/errorproneabbreviations.pdf
<table>
<thead>
<tr>
<th>Instead of</th>
<th>Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT greater than 3 times ULN to less than or equal to ALT 5 times ULN</td>
<td>ALT &gt; 3 times ULN to ≤ 5 times ULN</td>
</tr>
<tr>
<td>CrCl 30 mL per minute to 50 mL per minute</td>
<td>CrCl 30 mL/minute to 50 mL/minute</td>
</tr>
<tr>
<td>5 mg per kg per day</td>
<td>5 mg/kg/day</td>
</tr>
</tbody>
</table>
Use of “Studies” vs. “Trials” in PI

- Regulations do not define the terms “studies” and “trials” for use in labeling

- Labeling regulations use these terms inconsistently
  - Title of Section 14 must be “CLINICAL STUDIES”\(^1\)
  - Title of one of the Adverse Reaction subsections is “Clinical Trials Experience”\(^2\)
  - INDICATIONS AND USAGE section regulations uses both terms (e.g., “short term trial” and “adequate and well-controlled studies”)\(^3\)

- Consider using a consistent use of scientifically appropriate terminology throughout PI

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\(^1\) 21 CFR 201.56(d) and 21 CFR 201.57(c)(15); \(^2\) 21 CFR 201.57(c)(7)(ii)(A) \(^3\) 21 CFR 201.57(c)(2)
Use of “Subjects” vs. “Patients” in PI

• Regulations do not define the terms “subjects” and “patients” for use in labeling

• Labeling regulations use these terms inconsistently. For example, in the Geriatric Use subsection\(^1\) of the USE IN SPECIFIC POPULATIONS section both terms are used

• Consider using a consistent use of terminology throughout PI if scientifically appropriate

\(^1\) 21 CFR 201.57(c)(9)(v)
Metric System in PI

• Use metric system for dosage instead of British Imperial system. For example, use “kg” instead of “pounds.”

• Avoid use of both “kg” and “pounds” in DOSAGE AND ADMINISTRATION section because this may lead to medication errors.
Appropriate Units in PI

Recommend units in labeling are understood by U.S. healthcare providers. For example:

- Instead of LDL = 4.14 mmol/L
- Use LDL = 160 mg/dL
Format of Proprietary Name in PI

• Proprietary name should appear in UPPER CASE letters in ≥ 3 places in PI¹
  – Twice in Highlights Limitation Statement
  – Once in product title

• In other parts of PI, proprietary name can appear in other cases (e.g., UPPER CASE, Title Case)
  – Recommend consistency in use of letter case in other parts of PI (e.g., always UPPER CASE or always Title Case)

¹ Implementing the PLR Content and Format Requirements guidance
Generally Avoid in PI (1 of 3)

- Bold print (unless required by regulation)
- Text with all UPPER CASE letters
- Passive voice (use active voice), especially in DOSAGE AND ADMINISTRATION section
- Arbitrary categories of “mild,” “moderate,” and “severe” that do not have established definitions
- International spelling (e.g., use “hematologic,” not “haematologic”)

Generally Avoid in PI (2 of 3)

Vague, misleading, or promotional terms or terms that may lack meaning to U.S. healthcare providers, e.g.,¹,²

- Investigational drug names (e.g., T-20)
- “generally well-tolerated”, avoid “effective dosage” in D&A section because all recommended dosages are effective, instead of “optimal dose” consider using “target dose”
- “few patients” or “rare”

¹ Clinical Studies Section of Labeling guidance
² Adverse Reactions Section of Labeling guidance
Generally Avoid in PI\textsuperscript{1,2} (3 of 3)

- “frequent”, “large” “infrequent”, or “small” (instead, use actual amount)
- “mild”
- “potent” (instead give the size of the effect)
- “transient”, “rapid”, “rapid-onset”, or “rapidly absorbed”
- “well-designed” (instead, provide specifics about study design)

\textsuperscript{1} Clinical Studies Section of Labeling guidance
\textsuperscript{2} Adverse Reactions Section of Labeling guidance
Generally Avoid in PI (1 of 3)

- Bold print (unless required by regulation)
- Text with all UPPER CASE letters
- Passive voice (use active voice), especially in DOSAGE AND ADMINISTRATION section
- Arbitrary categories of “mild,” “moderate,” and “severe” that do not have established definitions
- International spelling (e.g., use “hematologic,” not “haematologic”)
Highlights of Prescribing Information (Highlights)
Periods in Highlights of Prescribing Information

- There is no regulatory requirement or guidance recommendation regarding use of periods in Highlights.
- FDA does not recommend any specific style guide for labeling.
- Consider using a consistent approach throughout Highlights. For example, include a period:
  - At end of numerical identifier “(2.1).”
  - Before numerical identifier “. (2.1)” or
  - Avoid use periods in Highlights except at end of a complete sentence.
Boxed Warning Heading in Highlights

• Summarize information in a bulleted format. Generally, each bullet should communicate a discrete warning or contraindication\(^1\)
  – However, for lengthy risk information, several bullets may be preferable to communicate the discrete warning or contraindication

• Consider including a white space between verbatim statement “**See full prescribing information for complete boxed warning**” and the summary to enhance effective communication of labeling information in Boxed Warning

\(^1\) [Implementing the PLR Content and Format Requirements](#) guidance
Initial U.S. Approval

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use PROPRIETARY NAME safely and effectively. See full prescribing information for PROPRIETARY NAME.

PROPRIETARY NAME (non-proprietary name) dosage form, route of administration, controlled substance symbol

Initial U.S. Approval: YYYYY

WARNING: TITLE OF WARNING
See full prescribing information for complete boxed warning.

- Text (4)
- Text (5.x)

RECENT MAJOR CHANGES

Section Title, Subsection Title (x.x) M/201Y
Section Title, Subsection Title (x.x) M/201Y

INDICATIONS AND USAGE
PROPRIETARY NAME is a (insert FDA established pharmacologic class text phrase) indicated for ... (1)

Limitations of Use: Text (1)

DOSAGE AND ADMINISTRATION

- Text (2.x)
- Text (2.x)

DOSAGE FORMS AND STRENGTHS

Dosage form(s): strength(s) (3)

CONTRAINDICATIONS

- Text (4)
- Text (4)

WARNINGS AND PRECAUTIONS

- Text (5.x)
- Text (5.x)

ADVERSE REACTIONS

Most common adverse reactions (incidence > x%) are text (6.x)

To report SUSPECTED ADVERSE REACTIONS, contact name of manufacturer at toll-free phone # or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS

- Text (7.x)
- Text (7.x)

USE IN SPECIFIC POPULATIONS

- Text (8.x)
- Text (8.x)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling OR and Medication Guide.

Revised: M/201Y
Initial U.S. Approval

• On line immediately beneath Product Title\textsuperscript{1}, “Initial U.S. Approval:” in bold type\textsuperscript{2} must be displayed:
  – Followed by four-digit year in which FDA initially approved NME, new biological product, or new combination of active ingredients\textsuperscript{1}
  – Irrespective of salt, dosage form, ROA, or indication

• Fixed Combination Drug Products (FCDP):
  – First time a new combination is approved, Initial U.S. Approval is 4-digit year of FCDP approval

• First time active moiety is approved alone (previously FCDP approved that contains active moiety), Initial U.S. Approval is 4-digit year of FCDP

\textsuperscript{1} 21 CFR 201.57(a)(3); \textsuperscript{2} 21 CFR 201.57(d)(5)
Highlights: Revision Date¹

Month/year of most recent revision of PI (including minor editorial changes)

<table>
<thead>
<tr>
<th>Type of Labeling Submission</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of an NDA, BLA, efficacy supplement, prior approval labeling supplement</td>
<td>Date of application approval</td>
</tr>
<tr>
<td>CBE labeling supplement</td>
<td>• Date of CBE labeling supplement receipt</td>
</tr>
<tr>
<td></td>
<td>• CBE labeling supplement approval date if labeling text subsequently changed</td>
</tr>
<tr>
<td>Annual report labeling</td>
<td>Date of annual report receipt</td>
</tr>
</tbody>
</table>

¹ 21 CFR 201.57(a)(15), Implementing PLR Content and Format Requirements guidance
Revision Date in PI vs. Revision Date in Patient Labeling

Revision Date at end of Highlights in PI may be different than Revision Date at end of FDA-approved patient labeling because these documents may have been updated at different times:

• Revision Date in PI:
  – Month/year of most recent revision of PI (any change to the PI including minor editorial changes)

• Revision Date at end of Medication Guide:\(^2\):
  – Date of most recent revision of patient labeling (e.g., Month/Year)

\(^1\) 21 CFR 201.57(a)(15) and Implementing PLR Content and Format Requirements guidance
\(^2\) 21 CFR 208.20(b)(8)(iv)
Full Prescribing Information
Format of Headings and Subheadings in Sections/Subsections

• Terms “heading” and “subheading” are titles that appear within a section or subsection of PI

• Assuming that heading is first level down from a section or subsection, and a subheading is second level down

• E.g., in Pharmacokinetics subsection, “Drug Interaction Studies” is the heading and “CYP3A4 Inhibitors” is the subheading:

  12 CLINICAL PHARMACOLOGY
  12.3 Pharmacokinetics
  Drug Interaction Studies
  CYP3A4 Inhibitors

1 Terms “heading” and “subheading” are not consistently defined in labeling regulations and guidances
2 Headings and subheadings are defined in this slide for the purposes of this presentation
Use Consistent Format for Headings and Subheadings in Sections/Subsections

• Use title case and either underlining or *italics* (but not both) for headings and subheadings

• Use a consistent approach (e.g., underlining for headings and *italics* for subheadings)
  – This is especially important for subsections 6.1 Clinical Trials Experience, 8.1 Pregnancy, and 12.3 Pharmacokinetics

1 Clinical Pharmacology Section of Labeling guidance
Table and Figure Titles

- Generally titles of tables and graphs should include type of data, time point, important features of patient population, and study name(s)\(^1\)

- Should use title case\(^1\) and consider using bold font

- Consider ensuring that titles of tables and figures represent content in table and figures

- Consider including at least one sentence about tables and figures in text, e.g., “Table 1 describes the dosage modifications for DRUG-X in patients with renal impairment”

- If proprietary name is used in labeling, consider using proprietary name in tables and figures

\(^1\) Clinical Studies Section of Labeling guidance
Additional Subsection Titles

• There are required subsection and subsection headings in PLR format labeling¹

• Additional subsections may be added (e.g., 5.1 Anaphylaxis)²

• Clearly identify content in subsection:
  – For example, use “5.3 Heart Failure” instead of “5.3 Cardiac Adverse Reactions” if the warning only describes cases of heart failure and does not describe other types of cardiac adverse reactions
  – Avoid using non-specific terminology such as “General” or “Adults” for title of a subsection

¹ 21 CFR 201.56(d)(1); 21 CFR 201.56(d)(2)
D&A Section

• For weight based dosage, consider identifying if dosage is based on ideal or actual weight

• If dosage adjustments in patients with renal impairment are described, include sufficient information needed to evaluate renal function, e.g., method used to calculate the creatinine clearance such as:\(^1\)
  – Cockcroft-Gault or Modification of Diet in Renal Disease (MDRD) estimated glomerular filtration rate equations for adults
  – Schwartz or Bedside Schwartz equations for pediatric patients

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\(^1\) draft guidance: [PK in Patients with Impaired Renal Function - Study Design, Data Analysis, and Impact on Dosing and Labeling](https://www.fda.gov)
W&P Section: Components for Describing a Warning\(^1\)

- Description of clinically significant AR or risk
- Risk factors, if known
- Incidence, if known and necessary for safe and effective use of drug
- Outcome (e.g., sequelae, hospitalization or time to resolution)
- Steps to prevent, reduce, or monitor risk
  - Avoid “use with caution”
- Management strategies if occurs

\(^1\) 21 CFR 201.57(c)(6) and W&P, Contraindications, and BW Sections of Labeling guidance
5 WARNINGS AND PRECAUTIONS

5.7 Embryo-Fetal Toxicity
Based on its mechanism of action and data from animal studies, YERVOY can cause fetal harm when administered to a pregnant woman. In animal reproduction studies, administration of ipilimumab to cynomolgus monkeys from the onset of organogenesis through delivery resulted in higher incidences of abortion, stillbirth, premature delivery (with corresponding lower birth weight), and higher incidences of infant mortality in a dose-related manner. The effects of ipilimumab are likely to be greater during the second and third trimesters of pregnancy. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment with a YERVOY-containing regimen and for 3 months after the last dose of YERVOY [see Use in Specific Populations (8.1, 8.3)].

¹ YERVOY approved PI (7/21/17)
YERVOY: Embryo-Fetal Toxicity W&P

Generally, subsection W&P title should be a clinically significant AR or risk

5 WARNINGS AND PRECAUTIONS

5.7 Embryo-Fetal Toxicity

Based on its mechanism of action and data from animal studies, YERVOY can cause fetal harm when administered to a pregnant woman. In animal reproduction studies, administration of ipilimumab to cynomolgus monkeys from the onset of organogenesis through delivery resulted in higher incidences of abortion, stillbirth, premature delivery (with corresponding lower birth weight), and higher incidences of infant mortality in a dose-related manner. The effects of ipilimumab are likely to be greater during the second and third trimesters of pregnancy. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment with a YERVOY-containing regimen and for 3 months after the last dose of YERVOY [see Use in Specific Populations (8.1, 8.3)].

Steps to reduce, monitor, or manage risk

1 YERVOY approved PI (7/21/17)
ADVERSE REACTIONS Section: When Do You Include AR from Related Drugs?

- According to the AR regulations, ADVERSE REACTIONS section “must list the adverse reactions that occur with the drug and with drugs in the same pharmacologically active and chemically related class, if applicable”

- Consider including AR from other related drugs (e.g., same active moiety but different dosage form, same class) when safety database for drug is limited

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1 21 CFR 201.57(c)(7)(i)
ADVERSE REACTIONS Section: Immunogenicity Statement¹

- Include following standard statement or appropriate modification at beginning of Immunogenicity subsection preceding the immunogenicity data
  - "As with all therapeutic proteins*, there is potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody (including neutralizing antibody) positivity in an assay may be influenced by several factors including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to [insert product’s nonproprietary name] in the studies described below with the incidence of antibodies in other studies or to other products may be misleading."

- * If product is a peptide, an oligonucleotide, or a heparin, instead of including the words “therapeutic proteins” insert the word “peptides”, “oligonucleotides”, and “heparins”, respectively.

¹ Labeling for Biosimilar Products draft guidance
Language for Situations When Use Generally Not Recommended

• Contraindications are “situations in which the drug should not be used because the risk of use … clearly outweighs any possible therapeutic benefit”\(^1\)

• For contraindications:\(^2\)
  – Instead of “DRUG-X should not be used in patients with Condition-Y”
  – State “DRUG-X is contraindicated in patients with Condition-Y”

• What terminology do you recommend for a subpopulation when use is generally not recommended but is not contraindicated?

\(^1\) 21 CFR 201.57(c)(5)
\(^2\) Warnings and Precautions, Contraindications, and Boxed Warning Sections of Labeling guidance
Summary

• Ensure a consistent message about conditions of use throughout PI
  – If inconsistent, determine appropriate message

• Perform a quality labeling check prior to approval