ASH Guidelines on Sickle Cell Disease: Stem Cell Transplantation Supplement 2: Disclosure Forms of Panelists

Françoise Bernaudin, MD
Javier Bolaños-Meade, MD
Courtney Fitzhugh, MD
Jane Hankins, MD, MS
Julie Kanter, MD
Robert Liem, MD
Joerg Meerpohl, MD
Julie Panepinto, MD, MSPH
Damiano Rondelli, MD
Shalini Shenoy, MD
John Tisdale, MD
John Wagner, MD
Mark Walters, MD
Teonna Woolford
ASH Guideline Panel
Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:

Add rows as needed for each equity interest.
Patents, Royalties, and Other Intellectual Property
3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Personal Income or Other Direct Transfers of Value
4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

Column 1 Name the company.

Column 2 Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addmedica</td>
<td>Support for participation in ASH meeting in San Diego Travel, registration</td>
<td>Dec 2016</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Support for registration and travel to meeting in Strasbourg France March 2016</td>
<td>March 2016</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests
5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No
☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Françoise Bernaudin, MD (Hôpital Intercommunal de Créteil)
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novartis</td>
<td>Research funding</td>
<td>To provide anonymized data from our site data base</td>
<td>Sept 2014</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>
### Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☑ No

☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Column 1** Name the organization. If known to you, describe any industry funding or support.

**Column 2** Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

**Column 3** Indicate if your activity was paid or volunteered.

**Column 4** Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

### Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☑ No

☐ Yes

If yes, please explain:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

ASH Guideline Panel Declaration of Interests Form | Page 5
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   - ☐ No
   - ☒ Yes

   If yes, please explain: I believe that genoidentical HSCT is the best choice of treatment for a SCA-patient with severity markers such as frequent VOC or ACS or presence of cerebral vasculopathy

   Several publications (see below)

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   - ☐ No
   - ☒ Yes

   If yes, what were those views and where were they made?

   We have participated in the international trial reported by Mark Walters in NEJM 1996

   We have reported the French experience in Blood 2007 and in 2 abstracts at ASH meetings Blood 2010 and 2013

   We have participated in the European review about SCT for hemoglobinopathies published in “Haematologica” in 2014
A review has been recently invited and submitted to World Journal of Transplantation
Concerning haplo-identical transplantations, we have participated in the abstract presented at the last ASH meeting 2016 and I had been invited to write the “inside Blood” in 2012 concerning the first report by the Baltimore team of haplo-transplants for SCD patients

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?

☐ No
☒ Yes, as described below:

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>French government</td>
<td>DrepaGreffe is a national French multicenter prospective trial comparing chronic transfusion and stem cell transplantation for SCA-children on chronic transfusion for a history of abnormal-TCD</td>
<td>Principal investigator</td>
<td>January 2017</td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.
Institutional Relationships

4. Could your salary be affected by recommendations on this topic?
   - □ Don’t know
   - ☒ No
   - □ Yes

   If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
   - □ Don’t know
   - ☒ No
   - □ Yes

   If yes, please explain:

6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?
   - □ Don’t know
   - ☒ No
   - □ Yes

   If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?
   - Not applicable

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?
Françoise Bernaudin, MD (Hôpital Intercommunal de Créteil)

☐ No
☒ Yes, as described below:

Column 1 Name the organization.
Column 2 Describe or reference any policy position of the organization that is related to the topic of these guidelines.
Column 3 Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions.

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Policy Position</th>
<th>Your Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFGM-TC (Société Française de Greffe de Moelle et de Thérapie Cellulaire)</td>
<td>French society of HSCT</td>
<td>Member Coordinator of the work about HSCT for SCD (1992-2014)</td>
</tr>
<tr>
<td>DrepaGreffee association</td>
<td>Information, Education concerning SCT for SCD patients using ex-SCD patients transplanted testimonies</td>
<td>President</td>
</tr>
</tbody>
</table>

Clinical Practice

9. Do you see patients clinically?

☒ No because recently retired
☐ Yes

If yes, what is your primary specialty or subspecialty? Hemato-pediatrics

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☒ No
☐ Yes

If yes, please explain:
Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No

☐ Yes

If yes, please describe:
Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addmedica</td>
<td>Direct payment received for a conference talk given to scientists about HSCT and SCD in November 2017.</td>
<td>1/4/2018</td>
<td>Indirect conflict. Addmedica markets hydroxyurea (Siklos). Although hydroxyurea will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because patients with successful transplants would not be candidates for this drug.</td>
</tr>
<tr>
<td>Addmedica</td>
<td>Received a travel and registration grant to attend the ASH 2017 Annual Meeting</td>
<td>1/4/2018</td>
<td>Indirect conflict. Addmedica markets hydroxyurea (Siklos). Although hydroxyurea will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because patients with successful transplants would not be candidates for this drug.</td>
</tr>
<tr>
<td>Bluebird Bio</td>
<td>Scheduled to receive direct payment for consulting</td>
<td>1/4/2018</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Addmedica</td>
<td>Received a travel and registration grant to attend the ASH 2018 Annual Meeting</td>
<td>12/10/2018</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Addmedica</td>
<td>Received a travel and registration grant to attend the ASH 2019 Annual Meeting</td>
<td>9/25/2020</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Bluebird Bio</td>
<td>Direct payment for consulting</td>
<td>9/25/2020</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Global Blood Therapeutics</td>
<td>Direct payment for advisory board participation at EHA 2019 meeting</td>
<td>9/25/2020</td>
<td>Indirect conflict. GBT markets voxelotor. Although voxelotor will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation</td>
</tr>
</tbody>
</table>
because patients with successful transplants would not be candidates for this drug.
### Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</th>
</tr>
</thead>
</table>

#### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/2/17, Pai 3/13/17</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**Webb 1/4/18; Kunkle 1/16/18**

- **Direct Financial Conflicts**: No
- **Indirect Financial Conflicts**: Yes

Management Notes:

New disclosures, see Part D: Dr. Bernaudin reports direct payments or other transfers of value from Addmedica, Novartis, and Bluebird Bio. These companies are either marketing or developing disease-modifying therapies for SCD that could be viewed as competitive with transplantation.

These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.

“Other notes” added below.

| Lottenberg 1/24/17 | No | Yes |                  |

| Webb 12/12/18 | No | Yes | New disclosure, see Part D: Dr. Bernaudin reports receiving direct payments or other transfers of value from Addmedica. As noted above this is an indirect conflict and will be managed through disclosure and panel composition. Recusal will not be required. |

| Alexander 11/2/2020 | No | Yes | New disclosures. See Part D: Dr. Bernaudin reports receiving direct payments or other transfers of value from Addmedica, GBT and Bluebird Bio. As noted above these are indirect conflicts and will be managed through disclosure and panel composition. |
Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Notes

Dr. Bernaudin has participated in and published about seminal research on stem cell transplant for SCD. She was the principal investigator for a recently completed trial funded by the French government comparing chronic transfusion and stem cell transplantation for SCA-children on chronic transfusion for a history of abnormal TCD. Dr. Bernaudin is a recently retired pediatric hematologist. She is the president of DrepaGreff, a nonprofit advocacy organization that promotes information and education about transplantation for SCD. She reports that she believes that “genoidentical HSCT is the best choice of treatment for a SCA-patient with severity markers such as frequent VOC or ACS or presence of cerebral vasculopathy.”
ASH Guideline Panel
Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☐ No

☐ Yes, as described below:

Add rows as needed for each equity interest.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Patents, Royalties, and Other Intellectual Property**

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal Income or Other Direct Transfers of Value**

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☒ Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)
Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incyte</td>
<td>DSMB Monitor</td>
<td>12/31/16</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests
5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:
Add rows as needed for each interest.
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research
1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

| Column 1 | Name the company funding or supporting the research. |
| Column 2 | Briefly describe the research project. |
| Column 3 | Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 | Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry
2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

| Column 1 Name the organization. If known to you, describe any industry funding or support. |
| Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services. |
| Column 3 Indicate if your activity was paid or volunteered. |
| Column 4 Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

- Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

**Personal Beliefs**

1. Do you have strongly held beliefs related to the topic of these guidelines?

   ☒ No
   ☐ Yes

   If yes, please explain:

**Previously Published Opinions**

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?

   ☐ No
   ☒ Yes

   If yes, what were those views and where were they made?

   - Bloo Rev 2014; 28(6):243-8
   - Curr Opin Oncol 2009; 21(2):158-61

**Non-Industry Supported Research**

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
☒ No

☐ Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?

☒ Don’t know

☐ No

☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☒ Don’t know

☒ No

☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☑ Don’t know
☐ No
☐ Yes

If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

I am sure I will be fully backed.

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☑ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Policy Position</th>
<th>Your Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clinical Practice
9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?
Oncology/Haematology- Bone marrow transplantation

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain:
I am involved on recommending BMT to patients with sickle cell disease

Expected Interests
10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
## Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incyte</td>
<td>Dr. Bolaños-Meade expects to receive direct payment for his role on a Data Safety Monitoring Board (DSMB). The DSMB is for safety (not efficacy) monitoring of a phase 3 study (placebo controlled) for graft-versus-host disease therapy.</td>
<td>1/2/19</td>
<td>Indirect conflict. Incyte is investigating a variety of targeted therapies for cancer and other conditions. Two therapies in development are for graft-vs-host disease; a post-transplant complication relevant but not specific to SCD patients. These products are not yet to market and will not be addressed in the guidelines; however, the company could be indirectly affected by recommendations on transplant since patients with successful transplants would likely not need such therapies.</td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

### Name of guideline panel(s)
- ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/9/17; Pai 3/13/17; Kunkle 2/20/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 1/15/19</td>
<td>No</td>
<td>No</td>
<td>New disclosures. See part D. above. Dr. Bolaños-Meade reports future direct payment Incyte. The company could be indirectly affected by this guideline as it is developing therapies for graft-vs-host disease. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.</td>
</tr>
<tr>
<td>Alexander 10/27/2020</td>
<td>No</td>
<td>No</td>
<td>On 9/11/2020, Dr. Bolaños-Meade confirmed all information in this form.</td>
</tr>
</tbody>
</table>

### Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dr. Bolaños-Meade is an oncologist/hematologist who specializes in bone marrow transplantation. In his clinical practice, he is involved in recommending BMT to patients with sickle cell disease. He has previously published review articles about the use of BMT for patients with SCD.
# ASH Guideline Panel Declaration of Interests Form

## Part A. Direct Financial Interests in or Relationships With Companies

### Employment

1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equity

2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each equity interest.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Patents, Royalties, and Other Intellectual Property**

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal Income or Other Direct Transfers of Value**

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1 Name the company funding or supporting the research.</th>
<th>Column 2 Briefly describe the research project.</th>
<th>Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</th>
<th>Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Description of Research</td>
<td>My Role</td>
<td>End Date</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.
Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3 Indicate if your activity was paid or volunteered.
Column 4 Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs

1. Do you have strongly held beliefs related to the topic of these guidelines?

☐ No
☒ Yes

If yes, please explain: I believe that there should not be one conditioning regimen for all patients with sickle cell disease but the regimen should be tailored to the group being studied. Also, there should be appropriate stopping rules to prevent excessive complications such as graft rejection and graft-versus-host disease. Lastly, the eligibility criteria should be tailored so that the benefits to the population being studied outweigh the risks.

Previously Published Opinions

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?

☐ No
☒ Yes

If yes, what were those views and where were they made? The above views were shared at my ASH Educational Spotlight Session in 2016. Also similar views have been published in review articles and commentaries.
Non-Industry Supported Research

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?

☐ No
☒ Yes, as described below:

| Column 1 | Name the entity funding the research. |
| Column 2 | Describe the research project. |
| Column 3 | Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 | Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH intramural</td>
<td>Haploidentical transplant for SCD</td>
<td>Principal investigator</td>
<td>ongoing</td>
</tr>
</tbody>
</table>

Institutional Relationships

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know  ☒ No  ☐ Yes

If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

My views are similar to other investigators that I work with so my mentor would be supportive. I would also be clear that any views expressed are my own and not necessarily that of the NIH.

Involvement in Organizations With Relevant Policy Positions
8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No  ☐ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice
9. Do you see patients clinically?
   ☒ Yes

   If yes, what is your primary specialty or subspecialty?
   Adult Hematology

   If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?
   ☒ Yes

   If yes, please explain:
   My primary research involves nonmyeloablative haploidentical peripheral blood stem cell transplantation for patients with sickle cell disease

Expected Interests
10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?
    ☒ No

    ☐ Yes

    If yes, please describe:
Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</th>
</tr>
</thead>
</table>

Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 2/24/17; Pai 3/13/17; Kunkle 2/20/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 12/12/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Alexander 10/27/2020</td>
<td>No</td>
<td>No</td>
<td>On 9/11/2020, Dr. Fitzhugh confirmed all information in this form.</td>
</tr>
</tbody>
</table>

Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Notes

Dr. Fitzhugh is a hematologist and researcher at the National Institutes of Health. Her research is focused on nonmyeloablative haploidentical peripheral blood stem cell transplantation for patients with sickle cell disease. She is the principal investigator on NIH research related to haploidentical transplant for SCD. She has given talks and published review articles and commentaries on topics relevant to these guidelines, including tailored conditioning regimens, stopping rules to prevent complications such as graft rejection and graft-versus-host disease, and eligibility criteria for transplant.
## Part A. Direct Financial Interests in or Relationships With Companies

### Employment

1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equity

2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each equity interest.
### Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [X] No
- [ ] Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [X] No
- [ ] Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Part B. Indirect Financial Interests in or Relationships With Companies

#### Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [ ] No
- ☒ Yes, as described below:

| Column 1 | Name the company funding or supporting the research. |
| Column 2 | Briefly describe the research project. |
| Column 3 | Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 | Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
Indirect conflict. This research is not related to SCD. However, Novartis could be indirectly affected by this guideline: Novartis is partnering with Intellia Therapeutics to develop a gene editing platform for treatment of SCD. Novartis also markets deferasirox and deferoxamine for iron overload and is developing crizanlizumab to prevent vaso-occlusive crisis. Although neither gene therapy nor crizanlizumab will be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation and because patients with successful transplants would not be candidates for crizanlizumab. Usage of iron overload products could be indirectly affected by recommendations about transplant because in SCD, the major cause of iron overload is red blood cell transfusion – transplantation can influence the need for transfusion (pre-transplant and dependent on the outcome of transplant) as well as use of iron chelator therapy.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Blood Therapeutics</td>
<td>Phase III GBT440</td>
<td>PI</td>
<td>2018</td>
<td>Indirect conflict. Global Blood Therapeutics is developing GBT 440, a disease-modifying therapy for SCD. Although GBT 440 will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplant because patients with successful transplants would not be candidates for this drug.</td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

**Column 1** Name the organization. If known to you, describe any industry funding or support.

**Column 2** Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3  Indicate if your activity was paid or volunteered.

Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   ☒ No
   ☐ Yes
   If yes, please explain:

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   ☒ Yes
   ☐ No
   If yes, what were those views and where were they made?
   Book chapters: Winthrobe’s hematology textbook, and sickle cell anemia from science to clinical practice (Springer).

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
   ☒ No
☐ Yes, as described below:

| Column 1 Name the entity funding the research. |
| Column 2 Describe the research project. |
| Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?
   ☐ Don’t know
   ☒ No
   ☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
   ☐ Don’t know
   ☒ No
   ☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

St. Jude and my chair would support my work as long as it has strong scientific relevance and rationale.

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice
9. Do you see patients clinically?
   ☒ Yes

If yes, what is your primary specialty or subspecialty?
Pediatric and adult sickle cell disease.

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?
   ☒ Yes

If yes, please explain:
Currently I discuss bone marrow transplant with my patients as a therapy option.

Expected Interests
10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?
   ☒ No

If yes, please describe:
Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluebird Bio</td>
<td>Direct payment for consulting on phase III gene therapy. Role end December 2018.</td>
<td>1/17/2018</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>N/A</td>
<td>Direct payment for consulting role with the National Committee for Quality Assurance (NCQA). NCQA analyzed the patterns of opioid consumption in Medicare patients across the country. Dr. Hankins helped them interpret the data for pain and opioid utilization. Role ended August 2018.</td>
<td>12/27/18</td>
<td>Not a conflict. NCQA is a nonprofit organization.</td>
</tr>
<tr>
<td>MJ Lifesciences</td>
<td>Direct payment for presenting at education session</td>
<td>9/11/2020</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Vindico Medical Education</td>
<td>Direct payment for presenting at education session during ASH annual meeting</td>
<td>9/11/2020</td>
<td>Not a conflict. Vindico Medical Education is a ACCME accredited medical education company.</td>
</tr>
<tr>
<td>NHLBI</td>
<td>mHealth study to increase hydroxyurea adherence. Dr. Hankins is the PI.</td>
<td>9/11/2020</td>
<td>Not a conflict. NHLBI is a U.S. government agency.</td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

### Name of guideline panel(s)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</td>
</tr>
</tbody>
</table>

### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
</table>
| Webb 3/3/17; Pai 3/13/17; Webb 12/19/17; Alexander 1/10/18; Kunkle 1/16/18 | No | Yes | Dr. Hankins is receiving direct payment from Bluebird Bio. She also has a leadership role on research projects funded by Novartis and Global Blood Therapeutics. All three companies are developing disease-modifying therapies for SCD that could be viewed as competitive with transplantation. Novartis also markets iron overload products, which might be indirectly affected by recommendations about transplantation. Funding for these research projects goes to Dr. Hankins’ institution, not to her directly.
These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required. |
| Lottenberg 1/23/17 | No | Yes | See my comment on Novartis iron chelator trial |
| 1/13/19 | No | Yes | New disclosure. See Part D. above. Recusal not required. |
| Alexander 9/28/2020 | No | Yes | New disclosures. See Part D. On 9/11/2020, Dr. Hankins confirmed all information in this form. |

### Summary of Direct Financial Conflicts
Dr. Hankins reports previously published opinions (book chapters) about transplantation. As a clinical specialist in pediatric and adult SCD, she also reports that she discusses transplant with her patients as a therapy option.
ASH Guideline Panel Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:

Add rows as needed for each equity interest.
### Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

- ☒ No
- ☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- ☐ No
- ☒ Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astrazeneca</td>
<td>Steering Committee</td>
<td>July 2017</td>
<td>Indirect conflict. AstraZeneca markets ticagrelor for treatment of blockages of blood flow to the heart. Ticagrelor is being clinically trialed in SCD patients to reduce pain. Although the drug will not be addressed in this guideline, the company could be indirectly affected by recommendations on transplantation because patients with successful transplants would not be candidates for this drug.</td>
</tr>
<tr>
<td>Eli Lilly</td>
<td>Steering Committee</td>
<td>September 2016</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Imara</td>
<td>Advisory Board</td>
<td>September 2016</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Advisory Board</td>
<td>Ongoing</td>
<td>Indirect conflict. Novartis is partnering with Intellia Therapeutics to develop a gene editing platform for treatment of SCD. Novartis also markets deferasirox and deferoxamine for iron overload and is developing crizanlizumab to prevent vaso-occlusive crisis. Although neither</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pfizer</td>
<td>Grant review committee</td>
<td>November 2016</td>
<td>gene therapy nor crizanlizumab will be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation and because patients with successful transplants would not be candidates for crizanlizumab. Usage of iron overload products could be indirectly affected by recommendations about transplant because in SCD, the major cause of Iron overload is red blood cell transfusion – transplantation can influence the need for transfusion (pre-transplant and dependent on the outcome of transplant) as well as use of iron chelator therapy.</td>
</tr>
</tbody>
</table>

**Pfizer Grant review committee**

Ended before appointment.
My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No
☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eli Lilly</td>
<td>Phase III research on SCD drug development</td>
<td>Site PI</td>
<td>9.2016</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Astrazeneca</td>
<td>Phase I/II research on SCD drug development</td>
<td>Site PI</td>
<td>2.17.17</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Bluebird Bio</td>
<td>Phase I research on SCD drug development</td>
<td>Site PI</td>
<td>Ongoing</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations</td>
</tr>
<tr>
<td>Company</td>
<td>Description of Research</td>
<td>My Role</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Prolong Pharmaceuticals</td>
<td>Phase I research on SCD drug development</td>
<td>Site PI</td>
<td>Ongoing</td>
<td>Indirect conflict. Prolong Pharmaceuticals is developing PEGylated carboxyhemoglobin bovine (Sanguinate) for treating multiple comorbidities of SCD including vaso-occlusive crisis. Although this drug will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplant because patients with successful transplants would not be candidates for this drug.</td>
</tr>
<tr>
<td>Pfizer</td>
<td>Phase III research on SCD drug development</td>
<td>Site PI</td>
<td>Ongoing</td>
<td>Indirect conflict. Pfizer markets opioids, which are used to treat pain, and is developing rivipansel for treatment of vaso-occlusive crisis and PF-04447943 for SCD. Although none of these drugs will not be specifically addressed in this guideline, the company could be indirectly affected by</td>
</tr>
<tr>
<td>Company</td>
<td>Description of Research</td>
<td>My Role</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mast Therapeutics</td>
<td>Phase III research on SCD drug development</td>
<td>Site PI</td>
<td>11.2016</td>
<td>Indirect conflict. Suggestions for transplantation because patients with successful transplants would not be candidates for these drugs.</td>
</tr>
<tr>
<td>Apopharma</td>
<td>Phase III research on SCD drug development</td>
<td>Site PI</td>
<td>Ongoing</td>
<td>Indirect conflict. Apopharma markets deferiprone and deferoxamine for iron overload. Although deferiprone and deferoxamine will not be addressed in this guideline, usage of iron overload products could be indirectly affected by recommendations about transplant because in SCD, the major cause of iron overload is red blood cell transfusion – transplantation can influence the need for transfusion (pre-transplant and dependent on the outcome of transplant) as well as use of iron chelator therapy.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Phase III research on SCD drug development</td>
<td>Co-I</td>
<td>Ongoing</td>
<td>Indirect conflict. Novartis is partnering with Intellia Therapeutics to develop a gene editing platform for treatment of SCD. Novartis also markets deferasirox and deferoxamine for iron overload and is developing crizanlizumab to prevent vaso-occlusive crisis. Although neither</td>
</tr>
<tr>
<td>Company</td>
<td>Description of Research</td>
<td>My Role</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>gene therapy nor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>crizanlizumab will be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>addressed in this</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>guideline, the company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>could be indirectly</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>affected by</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>recommendations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>about transplantation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>because gene therapy is</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>being developed as an</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>alternative treatment to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>transplantation and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>because patients with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>successful transplants</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>would not be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>candidates for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>crizanlizumab. Usage of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>iron overload products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>could be indirectly</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>affected by</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>recommendations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>about transplant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>because in SCD, the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>major cause of Iron</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>overload is red blood</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>cell transfusion –</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>transplantation can</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>influence the need for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>transfusion (pre-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>transplant and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dependent on the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>outcome of transplant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>as well as use of iron</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>chelator therapy.</td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☒ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.
Column 2  Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

Column 3  Indicate if your activity was paid or volunteered.

Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pfizer</td>
<td>Council For Change, member</td>
<td>Paid</td>
<td>January 2017</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

- Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   - ☐ No
   - ☒ Yes
   If yes, please explain: I have strongly held beliefs based on current data on the utility and appropriateness of haploidentical transplant for sickle cell disease.

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   - ☒ No
   - ☐ Yes
   If yes, what were those views and where were they made?

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
☐ No
☒ Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI</td>
<td>Sickle cell disease implementation center (not related)</td>
<td>PI</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know
☒ No
☐ Yes
If yes, please explain:

6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

My institution would be proud to have me on this panel and support my role in the decisions.

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?

Hematology/Sickle Cell Disease

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain:

I routinely discuss treatment options (including stem cell transplant) for patients living with sickle cell disease.

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
## Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imara</td>
<td>Dr. Kanter reported receiving direct payment for an Advisory Board role for IMR687.</td>
<td>12/15/18</td>
<td>Indirect conflict. Imara is developing a disease-modifying therapy, IMR-687 (a selective phosphodiesterase-9 inhibitor) for the reduction of red blood cell sickling in SCD. This product is not yet to market and will not be addressed in these guidelines. However, the company could be indirectly affected by recommendations on transplant because patients with successful transplants would not need an anti-sickling therapy.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Dr. Kanter reported receiving direct payment for a Steering Committee role for Crizanlizumab.</td>
<td>12/15/18</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Global Blood Therapeutics</td>
<td>Dr. Kanter reported receiving direct payment for an Advisory Board role for GBT 440.</td>
<td>12/15/18</td>
<td>Indirect conflict. Global Blood Therapeutics is developing GBT 440, a disease-modifying therapy for SCD. This product is not yet to market and will not be addressed in this guideline. However, the company could be indirectly affected by recommendations.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ironwood</td>
<td>Dr. Kanter reported receiving direct payment for an Advisory Board role for IW-1701</td>
<td>12/15/18</td>
<td>Indirect conflict. Ironwood Pharmaceuticals is developing IW-1701, a therapy to increase the bioavailability of nitric oxide in the blood with the aim of decreasing complications of SCD. The product is not yet to market and will not be addressed in this guideline. However, the company could be indirectly affected by recommendations on transplant because patients with successful transplants would not be candidates for this drug.</td>
</tr>
<tr>
<td>AstraZeneca</td>
<td>Dr. Kanter reported she is now Co-Investigator of HESTIA 3.</td>
<td>12/15/18</td>
<td>Indirect conflict. AstraZeneca is investigating the use of their Brilinta product for the prevention of vaso-occlusive crises in pediatric patients with sickle cell disease. The product will not be addressed in these guidelines; however, the company could be indirectly affected because patients with successful transplants would have less vaso-occlusive crises. All</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AstraZeneca</td>
<td>Dr. Kanter reported receiving direct payment for a Steering Committee role.</td>
<td>12/27/18</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Prolong Pharmaceuticals</td>
<td>Dr. Kanter reported that her Phase 1 research on SCD drug development where she was previously the Site PI, ended in 12/2017.</td>
<td>12/15/18</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>ApoPharma</td>
<td>Dr. Kanter reported that her Phase III research on SCD drug development where she was the Site PI will end 01/2019.</td>
<td>12/15/18</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Editas</td>
<td>Dr. Kanter reported receiving direct payment for serving on a gene editing Advisory Board.</td>
<td>12/27/18</td>
<td>Indirect conflict. Editas is in the preclinical phase of using gene editing for the treatment of SCD. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Modus</td>
<td>Dr. Kanter reported receiving direct payment for an Advisory Board role for sevuparin.</td>
<td>12/27/18</td>
<td>Indirect conflict. Modus Therapeutics is developing sevuparin, an anti-adhesion agent with the potential to reduce vaso-occlusion and resulting painful...</td>
</tr>
</tbody>
</table>
## Declaration of Interests

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>PI for National Heart Lung and Blood Institute (NHLBI) RO1 on TCD implementation</td>
<td>12/15/18</td>
<td>NHLBI is a federal agency.</td>
</tr>
<tr>
<td>n/a</td>
<td>SCD Advisory Committee for National Heart Lung and Blood Institute (NHLBI)</td>
<td>12/15/18</td>
<td>NHLBI is a federal agency.</td>
</tr>
<tr>
<td>n/a</td>
<td>PI Health Resources and Services Administration (HRSA) sickle cell treatment project.</td>
<td>12/15/18</td>
<td>HRSA is a federal agency.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Dr. Kanter reported direct payment for consulting and ad board participation.</td>
<td>9/13/20</td>
<td>Indirect conflict as noted above.</td>
</tr>
<tr>
<td>Bluebird Bio</td>
<td>Dr. Kanter reported direct payments for consulting.</td>
<td>9/13/20</td>
<td>Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Guidepoint Global</td>
<td>Dr. Kanter reports being an employee of Guidepoint Global.</td>
<td>9/13/20</td>
<td>Not a conflict. Guidepoint Global is a consulting firm that connects advisors/experts, such as Dr. Kanter, with companies in various industries, including healthcare. Guidepoint Global does not market any products used in the diagnosis or treatment of SCD.</td>
</tr>
<tr>
<td>Sanofi</td>
<td>Dr. Kanter reports direct payment for advisory board participation.</td>
<td>9/13/2020</td>
<td>Indirect conflict. Sanofi is developing a gene therapies for treatment of SCD. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>AstraZeneca</td>
<td>Dr. Kanter reports receiving direct payments for advisory board participation.</td>
<td>9/13/2020</td>
<td>Indirect conflict as noted above.</td>
</tr>
</tbody>
</table>

recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NovoNordisk</td>
<td>Data safety and monitoring board participation.</td>
<td>9/13/2020</td>
<td>Indirect conflict. NovoNordisk is developing EPI01 for treatment of sickle cell disease. Although this guideline will not address treatments other than transplantation, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Beam Therapeutics</td>
<td>Dr. Kanter reports direct payment for consulting</td>
<td>9/13/2020</td>
<td>Beam Therapeutics is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Agios</td>
<td>Direct payment for an advisory board.</td>
<td>9/13/2020</td>
<td>Agios is not an affected company.</td>
</tr>
</tbody>
</table>

Julie Kanter, MD (Medical University of South Carolina)
### Part E. Summary (ASH Internal Use)

#### Name of guideline panel(s)
ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

#### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/9/17</td>
<td>No</td>
<td>Yes</td>
<td>Dr. Kanter reports direct payments from AstraZeneca and Novartis. She is also a site PI for research funded by Bluebird Bio, Prolong Pharmaceuticals, Pfizer, and Apopharma. These companies are developing disease-modifying therapies for SCD that could be viewed as competitive with transplantation (Novartis, Bluebird Bio), or they are developing or marketing products that could be indirectly affected by recommendations about transplantation (AstraZeneca, Novartis, Prolong Pharmaceuticals, Pfizer, Apopharma). Funding for the research projects goes to Dr. Kanter’s institution, not to her directly. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.</td>
</tr>
<tr>
<td>Pai 3/13/17; Webb 12/19/17; Alexander 1/10/18; Kunkle 1/16/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lottenberg 1/24/18</td>
<td></td>
<td></td>
<td>Please see my comments on requests for clarification and additional information</td>
</tr>
<tr>
<td>Webb 12/15/18</td>
<td>No</td>
<td>Yes</td>
<td>New disclosures. See Part D. above. Dr. Kanter reports direct payments from Imara, Global Blood Therapeutics, Novartis, Ironwood AstraZeneca, Editas, and Modus. She is also a Co-Investigator for AstraZeneca. These companies are developing or marketing disease modifying therapies that could be indirectly affected these guidelines.</td>
</tr>
</tbody>
</table>
Funding for the research project goes to Dr. Kanter’s institution, not to her directly. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required. Added “Other Notes” below.

| Alexander 9/28/2020 | No | Yes | New disclosures. See Part D. On 9/13/2020, Dr. Kanter confirmed all information in this form. |

**Summary of Direct Financial Conflicts**

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Notes**

Dr. Kanter is a specialist in adult SCD who reports routinely discussing treatment options (including stem cell transplant) for patients living with SCD. Dr. Kanter is the Principal Investigator on an RO1 grant on TCD implementation funded by the National Heart Lung and Blood Institute (NHLBI); and serves on an SCD Advisory Committee for NHLBI. She is also the Principal Investigator on a sickle cell treatment project funded by the Health Resources and Services Administration (HRSA).
# ASH Guideline Panel Declaration of Interests Form

## Part A. Direct Financial Interests in or Relationships With Companies

### Employment

1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equity

2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

   ☒ No

   ☐ Yes, as described below:

   Add rows as needed for each equity interest.
Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>

Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☒ Yes, as described below:

Column 1 Name the company.

Column 2 Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.

Column 3 Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresenius – Kabi</td>
<td>Honorarium for participating on DSMB for study</td>
<td>May 2016</td>
<td>Not a conflict. Fresnius Kabi markets transfusion products. However, this paid activity ended before Dr. Liem’s appointment to the guideline panel.</td>
</tr>
<tr>
<td>Global Blood Therapeutics</td>
<td>Honorarium for consulting on exercise studies for clinical trial</td>
<td>April 2016</td>
<td>Not a conflict. Global Blood Therapeutics is developing GBT 440, a potentially disease-modifying therapy for SCD. However, this paid activity ended before appointment.</td>
</tr>
</tbody>
</table>

**My Partner’s or Spouse’s Interests**

5. Currently or in the past 24 months has **your partner or spouse** had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.
Part B. Indirect Financial Interests in or Relationships With Companies

**Industry-Funded Institutional Research**

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

   - [x] Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Name the company funding or supporting the research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Briefly describe the research project.</td>
</tr>
<tr>
<td>Column 3</td>
<td>Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</td>
</tr>
<tr>
<td>Column 4</td>
<td>Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Blood Therapeutics</td>
<td>Phase 2a, Open-Label, Single and Multiple Dose Study to Evaluate the Pharmacokinetics, Safety, Tolerability, and Exploratory Treatment Effect of GBT440 in Adolescents with Sickle Cell Disease</td>
<td>Site-investigator</td>
<td>Ongoing</td>
<td>Indirect conflict. Global Blood Therapeutics is developing GBT 440, a potentially disease-modifying therapy for SCD. This product is not yet to market, and it will not be addressed specifically by these guidelines. However, the company could be indirectly affected by recommendations about the management of renal and pulmonary complications in that such recommendations could implicitly or explicitly identify a need for a disease-modifying therapy that might prevent the complications. Dr. Liem does not have a leadership role in this research.</td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

**Column 1** Name the organization. If known to you, describe any industry funding or support.

**Column 2** Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3  Indicate if your activity was paid or volunteered.

Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Sickle Cell Disease-Related Cardiopulmonary and Kidney Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs

1. Do you have strongly held beliefs related to the topic of these guidelines?

☑ No

☐ Yes

If yes, please explain:

Previously Published Opinions

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?

☐ No

☑ Yes

If yes, what were those views and where were they made?

The following are literature-supported review articles. However, they do not contain any personal opinions:


Non-Industry Supported Research

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?

☐ No
☒ Yes, as described below:

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI/NIH</td>
<td>K23 research project, entitled “The Physiologic Assessment of Exercise Capacity in Pediatric Sickle Cell Anemia”</td>
<td>Overall principal investigator</td>
<td>Grant ends 7/31/16</td>
</tr>
<tr>
<td>Stanley Manne Children’s Research Institute Internal Grant Award</td>
<td>Investigator-initiated study, entitled “Autonomic Nervous System Dysfunction and Its Relationship to Acute Vaso-Occlusive Pain episodes in Children with Sickle Cell Anemia: A Feasibility Study”</td>
<td>Overall principal investigator</td>
<td>Grant ends 9/31/16</td>
</tr>
<tr>
<td>Division of Hematology, Oncology and SCT Seed Grant</td>
<td>Investigator-initiated study, entitled “Flow-Mediated Dilatation and Arterial Health in Children and Young Adults with Sickle Cell Anemia”</td>
<td>Overall principal investigator</td>
<td>12/30/14</td>
</tr>
</tbody>
</table>
Institutional Relationships

4. Could your salary be affected by recommendations on this topic?
   ☐ Don’t know
   ☒ No
   ☐ Yes
   If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
   ☐ Don’t know
   ☒ No
   ☐ Yes
   If yes, please explain:

6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?
   ☐ Don’t know
   ☒ No
   ☐ Yes
   If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

   The support I receive would simply reflect their approval of my contribution to the field of hematology/sickle cell disease in helping to develop much needed evidence-based guidelines for management of this disease.
Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Name the organization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Describe or reference any policy position of the organization that is related to the topic of these guidelines.</td>
</tr>
<tr>
<td>Column 3</td>
<td>Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions.</td>
</tr>
</tbody>
</table>

Add rows as needed for each organization.

Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?

Pediatric hematology. I am the Director of the Comprehensive Sickle Cell Program at my institution.

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain:

These proposed guidelines relate directly to management of sickle cell disease. For this reason, many of the our current treatment and diagnostic strategies will be directly addressed by these guidelines.
Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Sickle Cell Disease-Related Cardiopulmonary and Kidney Disease</th>
</tr>
</thead>
</table>

### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 8/31/16; Kunkle 9/14/16; Kunkle 1/21/18; Panepinto 1/22/18</td>
<td>No</td>
<td>Yes</td>
<td>Dr. Liem is involved in a research study funded by Global Blood Therapeutics. This company is investigating a potentially disease-modifying therapy for SCD and therefore could be indirectly affected by these guidelines. Dr. Liem does not have a leadership role on the study, and all funding goes to his institution.</td>
</tr>
</tbody>
</table>

This indirect conflict will be managed by disclosure and panel composition. Dr. Liem is co-chairing the guideline panel with a methodologist who does not have direct or indirect financial conflicts with affected companies, and the majority of the panel does not have the same or similar conflict.

Recusal will not be required. |
| Webb 4/18/19 Panepinto 6/9/2019 | No | Yes | Other notes added below. On June 20, 2019 Dr. Liem confirmed all information in this form. |

### Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dr. Liem’s specialty is pediatric hematology, and as the director of a comprehensive SCD program, he sees and treats patients with SCD including for cardiopulmonary and renal complications. He has served as the principal investigator on research studies relevant to this guideline topic that were funded by nonprofit organizations and government agencies, including the physiologic assessment of exercise capacity in pediatric sickle cell anemia, the relationship of autonomic nervous system dysfunction to acute vaso-occlusive pain episodes in pediatric sickle cell anemia, and flow-mediated dilation and arterial health in children and young adults with sickle cell anemia. He has published review articles about managing atypical complications of SCD in the emergency department and about challenges of alloimmunization in patients with hemoglobinopathies. Dr. Liem is now overall principal investigator for a National Heart, Lung, and Blood Institute /National Institutes of Health R01 project, entitled “The Pro-Inflammatory Effects of Acute Exercise in Children with Sickle Cell Anemia.”
ASH Guideline Panel
Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment

1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ x No

☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity

2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☐ x No

☐ Yes, as described below:

Add rows as needed for each equity interest.
### Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [ ] No
- [x] Yes, as described below:

  Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [ ] No
- [ ] Yes, as described below:

  **Column 1** Name the company.

  **Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☐ x No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research
1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ x No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1 Name the company funding or supporting the research.</th>
<th>Column 2 Briefly describe the research project.</th>
<th>Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</th>
<th>Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</th>
</tr>
</thead>
</table>

Add rows as needed for each research project.

Paid and Volunteer Activities for Organizations Supported by Industry
2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ x No
☐ Yes, as described below:

Column 1  Name the organization. If known to you, describe any industry funding or support.
Column 2  Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3  Indicate if your activity was paid or volunteered.
Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ x No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

**ASH Guideline Panel on Sickle Cell Disease-Related Stem Cell Transplantation**

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

**Personal Beliefs**
1. Do you have strongly held beliefs related to the topic of these guidelines?
   - [ ] No
   - [X] Yes
   If yes, please explain:

**Previously Published Opinions**
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   - [ ] No
   - [X] Yes
   If yes, what were those views and where were they made?

**Non-Industry Supported Research**
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
☐ No
☐ x Yes, as described below:

Column 1 Name the entity funding the research.
Column 2 Describe the research project.
Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.
Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Commission</td>
<td>Project on Guideline Development in Rare Diseases</td>
<td>Co-Investigator; Development of Pilot Guideline using GRADE about transfusions and hydroxyurea therapy in people with SCD</td>
<td>31.12.2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Institutional Relationships

4. Could your salary be affected by recommendations on this topic?
   ☐ Don’t know
   ☐ x No
   ☐ Yes
   If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
   ☐ Don’t know
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ x Don’t know
☐ No
☐ Yes
If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

Don’t know.

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☐ x No
☐ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice

9. Do you see patients clinically?
   □ x No
   □ Yes

   If yes, what is your primary specialty or subspecialty?

   If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?
   □ x No
   □ Yes

   If yes, please explain:

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?
   □ x No
   □ Yes

   If yes, please describe:
Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Sickle Cell Disease-Related Stem Cell Transplantation</th>
</tr>
</thead>
</table>

#### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/7/17; Pai 3/13/17; Kunkle 2/20/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Alexander 10/27/2020</td>
<td>No</td>
<td>No</td>
<td>On 9/15/2020, Dr. Meerpohl confirmed all information in this form.</td>
</tr>
</tbody>
</table>

#### Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Other Notes

Dr. Meerpohl is a pediatric hematologist/oncologist but does not see patients clinically. He was a co-investigator on a project funded by the European Commission to develop a pilot guideline using GRADE about transfusions and hydroxyurea therapy in people with SCD.
Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?
   ☒ No
   ☐ Yes, as described below:

   Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.
   ☒ No
   ☐ Yes, as described below:
Add rows as needed for each equity interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Patents, Royalties, and Other Intellectual Property**

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal Income or Other Direct Transfers of Value**

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☒ Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.”
Column 3  Indicate when the activity ended, if applicable.  (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
| Hilton Publishing, Inc (http://www.hiltonpub.com/bookstore/aboutus.aspx) | I served as a consultant for this company on their NIH grant – see details of the award below.  
PINPOINT grant project (Federal Award # 1R43MD010746-01), for the development of gaming technology to engage adolescent sickle cell patients in precision pain management, has been awarded by the National Institute on Minority Health and Health Disparities (NIMHD). | 9/2016 when the NIH grant ended | Not a conflict. Ended before appointment and Hilton Publishing is not an affected company for this guideline. |
My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No
☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research
1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

| Column 1 | Name the company funding or supporting the research. |
| Column 2 | Briefly describe the research project. |
| Column 3 | Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 | Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.

Paid and Volunteer Activities for Organizations Supported by Industry
2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☑ No

☐ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.

Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

Column 3 Indicate if your activity was paid or volunteered.

Column 4 Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☑ No

☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs

1. Do you have strongly held beliefs related to the topic of these guidelines?

☐ No
☒ Yes

If yes, please explain: I believe there is a need for continued up to date guidelines for the care of patients with sickle cell disease.

Previously Published Opinions

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?

☒ No
☐ Yes

If yes, what were those views and where were they made?

Non-Industry Supported Research

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
☐ No
☒ Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI</td>
<td>Ancillary trial to assess health related quality of life of children admitted to the hospital for an acute vaso-occlusive crises</td>
<td>PI</td>
<td>5/2015</td>
</tr>
</tbody>
</table>
| NIAMS    | -Assessment of patient reported outcomes using the NIH PROMIS in children with sickle cell disease, asthma, and type 1 diabetes  
- Determination of the psychometric properties of the new domains of Pediatric PROMIS in children with sickle cell disease, asthma, and type 1 diabetes | PI      | 8/2019   |
| HRSA     | To improve the care of patients with sickle cell disease                                 | Site PI | 9/2017   |
Institutional Relationships
4. Could your salary be affected by recommendations on this topic?
   ☒ No
   ☐ Yes
   ☐ Don’t know
   If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?
   ☒ No
   ☐ Yes
   ☐ Don’t know
   If yes, please explain:

6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?
   ☒ No
   ☐ Yes
   ☐ Don’t know
   If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

   I would be supported by my mentors, institution, and colleagues given the important nature of the guidelines.
Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

Column 1  Name the organization.

Column 2  Describe or reference any policy position of the organization that is related to the topic of these guidelines.

Column 3  Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions.

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Policy Position</th>
<th>Your Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?

Pediatric Hematology

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes
If yes, please explain: I provide care to patients with sickle cell disease both in the hospital and the clinic setting. I follow recommended standards of care for these patients and expect the guidelines will address most aspects of care I am involved in clinically day to day in my care of these patients.

**Expected Interests**

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No

☐ Yes

If yes, please describe:
### Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>Site PI on research funded by the Health Resources and Services Administration (HRSA) to improve the care of patients with sickle cell disease</td>
<td>12/28/17</td>
<td>HRSA is a U.S. federal agency. Dr. Panepinto explained that grant renewal was requested by the main PI (located in Cincinnati) and has been renewed by HRSA, and the research will now end in 2021.</td>
</tr>
<tr>
<td>n/a</td>
<td>Site PI on research funded by the Health Resources and Services Administration (HRSA) to improve the care of patients with sickle cell disease</td>
<td>12/27/18</td>
<td>Update: the funding for this will end 09/2020 instead of 2021.</td>
</tr>
<tr>
<td>n/a</td>
<td>Co-Principal Investigator for National Heart Lung and Blood Institute (NHLBI), 1U01HL143477-01</td>
<td>12/27/18</td>
<td>NHLBI is a U.S. federal agency. Implementation of evidence-based care for the acute treatment of sickle cell disease pain. End date, 08/2020.</td>
</tr>
<tr>
<td>n/a</td>
<td>Co-investigator for National Heart Lung and Blood Institute (NHLBI), 1 R01 HL142657-01</td>
<td>12/27/18</td>
<td>NHLBI is a U.S. federal agency.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Doris Duke Charitable Foundation</td>
<td>Investigating the role of the microbiome and inflammation in acute and chronic pain in patients with sickle cell disease. End date: 07/2023</td>
<td></td>
<td>The Doris Duke Charitable Foundation is a 501(c)3 organization that provides funding to organizations in various arenas, including medical research. They do not market any products used in the diagnosis or treatment of SCD.</td>
</tr>
<tr>
<td>NIH, NINDS</td>
<td>Investigating the role of the microbiome and inflammation in acute and chronic pain in patients with sickle cell disease. End date: 07/2023</td>
<td>9/11/2020</td>
<td>NIH is a U.S. federal agency.</td>
</tr>
<tr>
<td>NIH, NHLBI</td>
<td>Implementing evidence based care for the acute treatment of sickle cell disease pain. Dr. Panepinto is co-PI.</td>
<td>9/11/2020</td>
<td>NHLBI is a U.S. federal agency.</td>
</tr>
<tr>
<td>HRSA</td>
<td>Sickle Cell Disease Treatment Demonstration Project, Sickle Treatment and Outcomes Research in the Midwest (STORM). Dr. Panepinto is site PI. This is an extension of previous funding (see above)</td>
<td>9/11/2020</td>
<td>HRSA is a U.S. federal agency.</td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

Name of guideline panel(s) | ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease
--- | ---

Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 2/23/17; Pai 3/13/17</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 2/14/18; Kunkle 2/20/18</td>
<td>No</td>
<td>No</td>
<td>New disclosure. See Part D above.</td>
</tr>
<tr>
<td>Webb 12/27/18</td>
<td>No</td>
<td>No</td>
<td>New disclosure. See Part D above.</td>
</tr>
<tr>
<td>Alexander 9/28/2020</td>
<td>No</td>
<td>No</td>
<td>New disclosures. See Part D. On 9/11/2020, Dr. Panepinto confirmed all information in this form.</td>
</tr>
</tbody>
</table>

Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
</table>

Other Notes

Dr. Panepinto is a specialist in pediatric hematology. In her clinical practice, she provides care to patients with sickle cell disease both in the hospital and the clinic setting. She is the principal investigator for research about patient-reported outcomes in children with SCD, funded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases, and she is a site investigator for research to improve the care of patients with SCD, funded by the Health Resources and Services
Administration (HRSA). She was previously the principal investigator for research related to SCD and vaso-occlusive crises, funded by HRSA. Dr. Panepinto is the co-principal investigator for research on the implementation of evidence-based care for the acute treatment of sickle cell disease pain, funded by the National Heart Lung and Blood Institute (NHLBI); and a co-investigator for research investigating the role of the microbiome and inflammation in acute and chronic pain in patients with sickle cell disease, also funded by NHLBI.
ASH Guideline Panel
Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No

☐ Yes, as described below:

Add rows as needed for each equity interest.
### Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [x] No
- [ ] Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- [ ] No
- [x] Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3   Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanofi</td>
<td>Speaker Bureau involvement</td>
<td>2015</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Incyte</td>
<td>Service in advisory board on Jakafi</td>
<td>2015</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Janssen</td>
<td>Service in advisory board for chronic GVHD drug Ibritnib.</td>
<td>1/2017</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests
5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No
☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Name the company funding or supporting the research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Briefly describe the research project.</td>
</tr>
<tr>
<td>Column 3</td>
<td>Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</td>
</tr>
<tr>
<td>Column 4</td>
<td>Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Column 1  Name the organization. If known to you, describe any industry funding or support.
Column 2  Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3  Indicate if your activity was paid or volunteered.
Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other
3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

**Stem Cell Transplantation for Sickle Cell Disease**

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

**Personal Beliefs**

1. Do you have strongly held beliefs related to the topic of these guidelines?
   - ☒ No
   - ☐ Yes
   If yes, please explain:

**Previously Published Opinions**

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   - ☒ No
   - ☐ Yes
   If yes, what were those views and where were they made?

**Non-Industry Supported Research**

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
   - ☒ No
☐ Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution? My institution would fully support me since our university leaders would trust my evidence-based scientific position and they trust fully an organization such as ASH.

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

| Column 1 Name the organization. |
| Column 2 Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice
9. Do you see patients clinically?
   ☒ Yes

   If yes, what is your primary specialty or subspecialty?
   Blood and Marrow Transplantation and hematology

   If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?
   ☒ Yes

   If yes, please explain:

Expected Interests
10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?
    ☒ No
    ☐ Yes

    If yes, please describe:
### Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incyte</td>
<td>Principal Investigator on INCB 18424-365- A phase III randomized open-label multi-center study of ruxolitinib vs. best available therapy in patients with corticosteroid – refractory chronic graft versus host disease after allogenic stem cell transplantation Dates: 08/29/2017-08/28/2022</td>
<td>1/9/19</td>
<td>Indirect conflict. Incyte is investigating a variety of targeted therapies for cancer and other conditions. Two products (Ruxolitinib and Itacitinib) in development are for graft-vs-host disease; a post-transplant complication relevant but not specific to SCD patients. These products are not yet to market and will not be addressed in this guideline; however, the company could be indirectly affected by recommendations on transplant since patients with successful transplants would not be candidates for these products.</td>
</tr>
<tr>
<td>Incyte</td>
<td>Principal Investigator on INCB 39110-301 GRAVITAS-301: A Randomized, Double-blind, Placebo-Controlled Phase 3 Study of Itacitinib or Placebo in Combination with Corticosteroids for the Treatment of First-Line</td>
<td>1/9/19</td>
<td>Indirect conflict. See above.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Acute Graft-Versus-Host Disease</td>
<td>Dates: 03/01/2018-02/28/26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexion Pharmaceuticals</td>
<td>Received direct transfers of value (food and beverage) for attending a meeting in 2016.</td>
<td>1/14/19</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Seattle Genetics</td>
<td>Received direct transfers of value (food and beverage) for attending a meeting in 2016 or 2017.</td>
<td>1/14/19</td>
<td>Not a conflict. Seattle Genetics does not have any products that could be affected by this guideline.</td>
</tr>
<tr>
<td>Vertex Pharmaceuticals</td>
<td><strong>CTX001 gene therapy clinical trial in sickle cell disease at UIC.</strong> Dr. Rondelli was appointed PI of this trial in 2018. As of 9/11/2020, not patients have been enrolled and no money has been given to the institution. Dr. Rondelli has also received direct payments for serving on a steering committee for this trial.</td>
<td>9/11/20</td>
<td>Indirect conflict. Vertex Pharmaceuticals is developing CTX001 (a gene therapy) for treatment of sickle cell disease. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

| Name of guideline panel(s) | ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease |

Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/9/17</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Pai 3/13/17; Webb 2/14/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 1/14/19</td>
<td>No</td>
<td>Yes</td>
<td>New disclosure. See Part D. above. Dr. Rondelli is the Principal Investigator on research funded by Incyte. The company could be indirectly affected by this guideline as it is developing therapies for graft-vs-host disease. Funding for the research projects goes to Dr. Rondelli’s institution, not to him directly. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.</td>
</tr>
<tr>
<td>Alexander 9/28/2020</td>
<td>No</td>
<td>Yes</td>
<td>New disclosure. See Part D. On 9/11/2020, Dr. Rondelli confirmed all information in this form.</td>
</tr>
</tbody>
</table>

Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Notes

Dr. Rondelli specializes in hematology and blood and marrow transplantation.
ASH Guideline Panel Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:

Add rows as needed for each equity interest.
3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

Column 1 Name the company.

Column 2 Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertex Pharmaceuticals Inc</td>
<td>Advisory Board Meeting</td>
<td>November 7, 2016</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
### Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- ☐ No
- ☒ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Name the company funding or supporting the research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Briefly describe the research project.</td>
</tr>
<tr>
<td>Column 3</td>
<td>Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</td>
</tr>
<tr>
<td>Column 4</td>
<td>Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>Indirect conflict. Therakos (owned by Mallinckrodt Pharmaceuticals) is developing a treatment for GVHD. Although the product will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because GVHD is a post-transplant complication.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therakos</td>
<td>Participating in clinical trial for treatment of GVHD</td>
<td>Site PI</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>Mesoblast</td>
<td>Participating in clinical trial for the treatment of GVHD</td>
<td>Site PI</td>
<td>Ongoing</td>
<td>Mesoblast is developing a treatment for GVHD. Although the product will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because GVHD is a post-transplant complication.</td>
</tr>
</tbody>
</table>

**Paid and Volunteer Activities for Organizations Supported by Industry**

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

**Column 1** Name the organization. If known to you, describe any industry funding or support.

**Column 2** Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

**Column 3** Indicate if your activity was paid or volunteered.

**Column 4** Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamida Cell</td>
<td>DSMB clinical trial for in vitro expanded cord blood transplantation for sickle cell disease</td>
<td>Unpaid</td>
<td>Projected end date 2018</td>
<td>Not a conflict. Gamida Cell sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, Gamida Cell will be considered an affected company, and this research activity will be considered an indirect conflict.)</td>
</tr>
<tr>
<td>Boston Children’s Hospital</td>
<td>DSMC member on a clinical trial of the use of plerixafor for stem cell</td>
<td>Fee per year for serving on</td>
<td>Has not started</td>
<td>Not a conflict. Boston Children’s Hospital is</td>
</tr>
<tr>
<td>Organization</td>
<td>Description and role</td>
<td>Paid or Unpaid?</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td>mobilization in patients with sickle cell disease</td>
<td>the DSMC after enrollment begins</td>
<td>enrolling yet</td>
<td>not an affected company.</td>
</tr>
<tr>
<td>University of Cincinnati</td>
<td>DSMB gene therapy trial for sickle cell disease</td>
<td>Fee per year for serving on the DSMC after enrollment begins</td>
<td>ongoing</td>
<td>Not a conflict. University of Cincinnati is not an affected company.</td>
</tr>
<tr>
<td>NYSTEM New York State Stem Cell Science</td>
<td>Member of review panel for a grant awarded to the Weill-Cornell Medical Center and MSKCC by NYSTEM for the development of gene therapy for sickle cell disease</td>
<td>Travel paid per diem to attend in person review meetings. American Institute of Biological Sciences provides Honorarium for meeting attendance and progress review.</td>
<td>2019</td>
<td>Not a conflict. NYSTEM New York State Stem Cell Science is not an affected company. American Institute of Biological Sciences is not an affected company.</td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs

1. Do you have strongly held beliefs related to the topic of these guidelines?

☐ No
☒ Yes

If yes, please explain: I am interested in defining guidelines for sickle cell disease transplants in the changing environment of the treatment for this disease. I have advocated for performing sickle cell disease transplants under the umbrella of formal clinical trials so that outcomes are tracked and reported.

Previously Published Opinions

2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?

☐ No
☒ Yes

If yes, what were those views and where were they made?

I have addressed transplantation for sickle cell disease in talks and review articles and have published results of clinical trials. As stated above, I have advocated for performing sickle cell disease transplants under the umbrella of formal clinical trials so that outcomes are tracked and reported.
Non-Industry Supported Research

3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?

☐ No
☒ Yes, as described below:

Column 1 Name the entity funding the research.
Column 2 Describe the research project.
Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.
Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI via the BMT CTN</td>
<td>Unrelated donor transplantation for severe sickle cell disease</td>
<td>PI</td>
<td>Study follow up completed in 2016</td>
</tr>
<tr>
<td>Children’s Discovery Institute, Washington University in St. Louis</td>
<td>Mismatched donor transplantation for non-malignant disorders including sickle cell disease</td>
<td>PI</td>
<td>June 2019</td>
</tr>
</tbody>
</table>

Institutional Relationships

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:
5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

I have addressed the topic previously. I am not aware of any change in support positive or negative that might be generated from this activity.

Involvement in Organizations With Relevant Policy Positions
8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

Column 1 Name the organization.

Column 2 Describe or reference any policy position of the organization that is related to the topic of these guidelines.
Column 3  Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions.

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Policy Position</th>
<th>Your Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston Children’s Hospital</td>
<td>I have been asked for an opinion on a clinical case related to a sickle cell disease transplant by legal counsel on behalf of the hospital</td>
<td>Provided an opinion after reviewing records.</td>
</tr>
</tbody>
</table>

Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?
Pediatric hematology oncology and transplant

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain:
I see patients with sickle cell disease referred for transplant, determine eligibility and enroll on relevant clinical transplant trials if considered eligible.

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes
If yes, please describe:
## Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazz Pharmaceuticals</td>
<td>Dr. Shenoy received direct payment for serving on an Advisory Board in December 2018. She facilitated a discussion regarding recognition and treatment of hepatic sinusoidal obstruction syndrome.</td>
<td>12/26/18</td>
<td>Indirect conflict. Jazz Pharmaceuticals markets defitelio for treatment of sinusoidal obstruction syndrome with renal or pulmonary dysfunction following hematopoietic stem cell transplantation. This product will not be addressed in this guideline. However, the company could be indirectly affected by recommendations on transplant since patients with successful transplants may not be candidates for these products.</td>
</tr>
<tr>
<td>Magenta Therapeutics</td>
<td>Dr. Shenoy is a Site PI on a clinical trial of umbilical cord blood transplant following in vitro expansion for sickle cell disease. The trial is expected to begin in the latter half of 2019, and last 12-18 months.</td>
<td>12/26/18</td>
<td>Indirect conflict. Magenta Therapeutics is developing gene and cell technologies and therapeutics, including for use in stem cell transplantation for SCD. The company is also in the early stages of developing an SCD clinical trial (trial not yet open) using expanded umbilical cord blood for transplantation. Although these guidelines will address...</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bluebird bio</td>
<td>Direct payment for serving on Advisory Board, September 2017.</td>
<td>1/14/19</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Vertex</td>
<td>Direct payment for serving on Advisory Board, December 2017.</td>
<td>1/14/19</td>
<td>Indirect conflict. Vertex and CRISPR Therapeutics is developing CTX001 a gene edited hematopoietic stem cell therapy for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation since SCD patients receiving transplants would be candidates for these technologies and therapy.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Novartis</td>
<td>Direct payment for serving on Advisory Board, February 2017.</td>
<td>1/14/19</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>n/a</td>
<td>The American Society of Pediatric Hematology/Oncology (ASPHO)/Pediatric Blood and Marrow Transplant Consortium (PBMTC) Bone Marrow Transplant Day – Organizing Chair – Clinical Events</td>
<td>1/14/19</td>
<td>Not a conflict. The American Society of Pediatric Hematology/Oncology is a nonprofit organization. Pediatric Blood and Marrow Transplant Consortium is a not for profit consortium.</td>
</tr>
<tr>
<td>Bard Pharmaceuticals</td>
<td>Dr. Shenoy reported that her spouse served on an Advisory Board for Bard.</td>
<td>1/14/19</td>
<td>Not a conflict. Bard markets various products for vascular urology, oncology and surgical management. These products will not be specifically addressed in these guidelines.</td>
</tr>
<tr>
<td>Therakos</td>
<td>Participating in clinical trial for treatment of GVHD.</td>
<td>9/17/20</td>
<td>This is an update to Part B, Question 1.</td>
</tr>
<tr>
<td>Mesoblast</td>
<td>Participating in clinical trial for treatment of GVHD.</td>
<td>9/17/20</td>
<td>This is an update to Part B, Question 1.</td>
</tr>
<tr>
<td>Aruvant</td>
<td>Chair of DSMB gene therapy trial for</td>
<td></td>
<td>Indirect conflict. This is an update to Part B, Question 1.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>sickle cell disease. This trial was formerly run by the University of Cincinnati and was taken over by Aruvant.</td>
<td></td>
<td></td>
<td>Question 2. Aruvant is developing a gene therapy for treatment of sickle cell disease. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation,</td>
</tr>
<tr>
<td>Gamida Cell</td>
<td>DSMB clinical trial for in vitro expanded cord blood transplantation for sickle cell disease. This study has closed.</td>
<td>9/17/2020</td>
<td>This is an update to Part B, Question 2.</td>
</tr>
<tr>
<td>Gerson Lehrman Group</td>
<td>Direct payment for consulting on sickle cell disease</td>
<td>9/17/2020</td>
<td>Not a conflict. GLG is consulting group that provides consulting services to several industries, including pharmaceutical companies. GLG does not market any products used in the diagnosis or treatment of sickle cell disease.</td>
</tr>
<tr>
<td>California Institute of Regenerative Medicine</td>
<td>Clinical advisor for the California Institute of Regenerative Medicine. This activity started in August 2020.</td>
<td>9/17/2020</td>
<td>Not a conflict. CIRM provides funding for stem cell research to academic centers and companies. CIRM does not conduct research. They do not market any products related to treatment of SCD.</td>
</tr>
</tbody>
</table>
### Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</th>
</tr>
</thead>
</table>

#### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/7/17; Pai 3/13/17; Webb 1/4/18; Kunkle 2/6/18; Lottenberg 2/6/18</td>
<td>No</td>
<td>Yes</td>
<td>Dr. Shenoy has research funding from Therakos and Mesoblast. Both companies are developing GVHD products, which might be indirectly affected by recommendations about transplantation. Funding for these research projects goes to Dr. Shenoy’s institution, not to her directly. These indirect conflicts will be managed by disclosure and by panel composition. Recusal will not be required. Dr. Shenoy is also involved in research funded by Gamida Cell. This company stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, Gamida Cell will be considered affected, and Dr. Shenoy’s research activity will be considered an indirect conflict.)</td>
</tr>
<tr>
<td>Webb 1/15/19</td>
<td>No</td>
<td>Yes</td>
<td>New disclosures. See Part D. above. Dr. Shenoy reports receiving direct payments from Jazz Bluebird bio, and Vertex. These companies are developing products for graft-vs-host disease or gene therapy and could be indirectly affected by this guideline. Dr. Shenoy also expects to begin a Site PI role with Magenta, a company that is developing gene and cell technologies and investigating umbilical cord blood use in SCD transplantation. This company could also be indirectly affected by this guideline.</td>
</tr>
</tbody>
</table>
Funding for the research project would go to Dr. Shenoy’s institution, not to her directly. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.

Alexander 9/28/2020

New disclosures. See Part D.

On 9/17/2020, Dr. Shenoy confirmed all information in this form.

Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Notes

Dr. Shenoy is the principal investigator on research about transplantation for SCD funded by the National Heart, Lung and Blood Institute and by the Children’s Discovery Institute. She reports that she has addressed the topic of transplant for SCD in talks and review articles. Dr. Shenoy specializes in pediatric hematology, oncology, and transplant. She sees patients with SCD who are referred for transplant, determines eligibility, and enrolls patients in trials. Dr. Shenoy serves as the Organizing Chair of the clinical events committee for the American Society of Pediatric Hematology/Oncology-Pediatric Blood and Marrow Transplant Consortium’s Bone Marrow Transplant Day.
ASH Guideline Panel Declaration of Interests Form

Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:
Add rows as needed for each equity interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patents, Royalties, and Other Intellectual Property
3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Personal Income or Other Direct Transfers of Value
4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Column 1 Name the company.

Column 2 Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Name the company funding or supporting the research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Briefly describe the research project.</td>
</tr>
<tr>
<td>Column 3</td>
<td>Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.</td>
</tr>
<tr>
<td>Column 4</td>
<td>Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)</td>
</tr>
</tbody>
</table>

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.

Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

Column 3 Indicate if your activity was paid or volunteered.

Column 4 Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   ☒ No
   ☐ Yes
   If yes, please explain:

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   ☐ No
   ☒ Yes
   If yes, what were those views and where were they made?
   BLOOD, 2011, Aug 4; 118(5) 1197-207

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
   ☐ No
Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th><strong>Funder</strong></th>
<th><strong>Description of Research</strong></th>
<th><strong>My Role</strong></th>
<th><strong>End Date</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH</td>
<td>Transplant for SCD</td>
<td>P.I.</td>
<td>No end date</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

My support is merit based and I am tenured in the federal government and this would not change.

Involvement in Organizations With Relevant Policy Positions
8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

<table>
<thead>
<tr>
<th>Column 1 Name the organization.</th>
<th>Column 2 Describe or reference any policy position of the organization that is related to the topic of these guidelines.</th>
<th>Column 3 Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Relevant Policy Position</td>
<td>Your Role</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add rows as needed for each organization.
Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?
Hematology

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain:
I perform bone marrow transplants in sickle cell disease.

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
### Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanofi and Genzyme US Companies</td>
<td>Dr. Tisdale is the Principal Investigator on an SCD study where Sanofi Genzyme donated the drug Plerixafor to the National Heart Lung and Blood Institute (NHLBI) on 7/20/2017.</td>
<td>1/8/2019</td>
<td>Very indirect conflict. Dr. Tisdale reports no funding was received by him or his institution. Sanofi markets plerixafor to prepare blood for hematopoietic stem cell transplant. In addition, Bioverativ, which was acquired by Sanofi in 2018, is developing a gene therapy for SCD. Neither plerixafor nor gene therapy will be addressed in this guideline. However, the company could be indirectly affected by recommendations on transplant since patients could receive plerixafor pre-transplant and because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
</tbody>
</table>
Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</th>
</tr>
</thead>
</table>

Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 8/26/16, Kunkle 8/26/16; Webb 1/9/18</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 1/16/19</td>
<td>No</td>
<td>Yes</td>
<td>New disclosures. See Part D. above. This very indirect conflict will be managed through disclosure and panel composition.</td>
</tr>
<tr>
<td>Alexander 10/27/1010</td>
<td>No</td>
<td>Yes</td>
<td>On 9/24/2020, Dr. Tisdale confirmed all information in this form.</td>
</tr>
</tbody>
</table>

Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Notes

Dr. Tisdale is a hematologist and researcher at the National Institutes of Health (NIH) who treats patients with SCD using bone marrow transplantation. He is the principal investigator on NIH research about transplant for SCD patients. He has published opinions and reviews about this topic.
Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?
   ☒ No
   ☐ Yes, as described below:

   Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.
   ☒ No
   ☐ Yes, as described below:

   Add rows as needed for each equity interest.
Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No

☒ Yes, as described below:

Column 1  Name the company.

Column 2  Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novartis</td>
<td>Consultancy</td>
<td>May 2015</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Consultancy</td>
<td>November 2015</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>CORD:USE</td>
<td>Scientific Advisor</td>
<td>Ongoing</td>
<td>Not a conflict. CORD:USE stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, CORD:USE will be considered an affected company, and Dr. Wagner’s paid relationship with the company will be considered a direct financial conflict requiring recusal.)</td>
</tr>
<tr>
<td>VidaCord</td>
<td>Scientific Advisor</td>
<td>Ongoing</td>
<td>Not a conflict. VidaCord stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>End Date</td>
<td>For ASH Internal Use</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>specific recommendation or as an aspect of implementation. (If this changes, VidaCord will be considered an affected company, and Dr. Wagner’s paid relationship with the company will be considered a direct financial conflict requiring recusal.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests

5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☐ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

Column 1   Name the company funding or supporting the research.

Column 2   Briefly describe the research project.

Column 3   Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

Column 4   Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
</table>

For ASH Internal Use
| Novartis | Use of StemRegenin-1 to expand Hematopoietic Stem Cells in Cord Blood Phase I-II Testing | PI | Enrollment ended 2016 Follow up work ended 11/2023 | Indirect conflict. This research is on hematological malignancies, not SCD. However, Novartis could be indirectly affected by this guideline: Novartis is partnering with Intellia Therapeutics to develop a gene editing platform for treatment of SCD. Novartis also markets deferasirox and deferoxamine for iron overload and is developing crizanlizumab to prevent vaso-occlusive crisis. Although neither gene therapy nor crizanlizumab will be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation and because patients with successful transplants would not be candidates for crizanlizumab. Usage of iron overload products could be indirectly affected by recommendations about transplant since in SCD, the |
### Company

**Gamida Cell**

### Description of Research

**Use of NiCord in Phase 2 Trial**

### My Role

**PI**

### End Date

**Enrollment ended 2/2017**  
**Follow up will end 2/2018**

### For ASH Internal Use

- major cause of iron overload is red blood cell transfusion – transplantation can influence the need for transfusion (pre-transplant and dependent on the outcome of transplant) as well as use of iron chelator therapy.
- Not a conflict. Gamida Cell sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, Gamida Cell will be considered an affected company, and Dr. Wagner’s leadership role on this research study will be considered an indirect financial conflict.) Note: this research is on hematological malignancies, not SCD.
2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

**Column 1** Name the organization. If known to you, describe any industry funding or support.

**Column 2** Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

**Column 3** Indicate if your activity was paid or volunteered.

**Column 4** Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   - ☒ No
   - ☐ Yes
   If yes, please explain:

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   - ☒ No
   - ☐ Yes
   If yes, what were those views and where were they made?

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
   - ☒ No
☐ Yes, as described below:

Column 1  Name the entity funding the research.

Column 2  Describe the research project.

Column 3  Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

Column 4  Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Institutional Relationships

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

I do not believe that there would be any impact positive or negative.

Involvement in Organizations With Relevant Policy Positions
8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice

9. Do you see patients clinically?
   ☐ No
   ☒ Yes

   If yes, what is your primary specialty or subspecialty?
   Blood and Marrow Transplant
   Pediatrics

   If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?
   ☐ No
   ☒ Yes

   If yes, please explain:
   These guidelines will likely lead to best practice that on how to best counsel and treat patients with sickle cell disease. For example, the guidelines could better define which patients should be considered optimal candidate for BMT vs other existing or emerging therapy (e.g. gene therapy)

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?
    ☐ No
    ☒ Yes

    If yes, please describe:
### Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th><strong>Company</strong></th>
<th><strong>Description</strong></th>
<th><strong>Disclosure Date</strong></th>
<th><strong>ASH Internal Notes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Magenta</td>
<td>Direct payment for consultant role (the contract is being finalized). Will be</td>
<td>2/15/2018</td>
<td>Indirect conflict. Magenta Therapeutics is developing gene and cell technologies and therapeutics, including for use in stem cell transplantation for SCD. Although these guidelines will address stem cell transplantation, these products are not yet to market and the above modalities will not be addressed in these guidelines. The company could be indirectly affected by recommendations on transplantation since SCD patients receiving transplants would be candidates for these technologies and therapies.</td>
</tr>
<tr>
<td>Magenta</td>
<td>As described in an email from Dr. Wagner: he has a university contract to develop the clinical trials for hematological malignancy and inborn errors of metabolism at his institution. Since he is taking on the consultant role with Magenta, he cannot be PI of the trials. Three of</td>
<td>2/15/2018</td>
<td>Indirect conflict. As described above, Magenta Therapeutics could be indirectly affected by these guidelines.</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>his colleagues will take on the role of PI and Co-PIs for the two trials.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gamida Cell</td>
<td>Dr. Wagner was previously the PI of a phase III trial for the use of Nicord. He reports that the study is still ongoing however he is no longer on the study as of 9/1/18.</td>
<td>12/22/18</td>
<td>Not a conflict as noted above.</td>
</tr>
<tr>
<td>Magenta</td>
<td>Dr. Wagner reports receiving stock options beginning in June 2018 for his role as a clinical consultant. He is working with the company to develop a new antibody as a way of replacing chemotherapy agents before transplant. He is also in the early stages of discussing a potential clinical trial for cord blood and SCD transplant.</td>
<td>12/22/18</td>
<td>Indirect conflict as noted above. In addition, Magenta is also in the early stages of developing an SCD clinical trial (trial not yet open) using expanded umbilical cord blood for transplantation.</td>
</tr>
</tbody>
</table>
## Name of guideline panel(s)

| ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease |

### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/9/17; Pai 3/13/17; Webb 12/19/17; Alexander 1/10/18; Kunkle 2/6/18; Lottenberg 2/6/18</td>
<td>No</td>
<td>Yes</td>
<td>Dr. Wagner has research that is funded by Novartis, which is developing a disease-modifying therapy for SCD that could be viewed as competitive with transplantation. Novartis also markets products used for iron overload. Funding for the research project goes to Dr. Wagner’s institution, not to him directly. This indirect conflict will be managed through disclosure and panel composition. Recusal will not be required. Dr. Wagner also reports direct payments from CORD:USE and VidaCord, and he is the principal investigator on research funded by Gamida Cell. All of these companies store and sell cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, the companies will be considered affected, and Dr. Wagner’s paid activities for the companies will be considered a direct financial conflict requiring recusal.)</td>
</tr>
<tr>
<td>Webb 2/15/18; Lottenberg 2/23/18</td>
<td>No</td>
<td>Yes</td>
<td>New disclosure. See Part D above. Dr. Wagner is receiving direct payments from Magenta Therapeutics, which is developing gene and cell technologies and therapeutics for use in stem cell transplantation. These guidelines will not provide recommendations on the use of these modalities.</td>
</tr>
</tbody>
</table>
This indirect conflict will be managed through disclosure and panel composition. Recusal will not be required.

**Webb 1/14/19**

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>

New disclosure. See Part D above. Dr. Wagner reports receiving direct payments (stock) from Magenta Therapeutics, which is developing gene and cell technologies and investigating umbilical cord blood use in SCD transplantation. This company could also be indirectly affected by this guideline.

This indirect conflict will be managed through disclosure and panel composition. Recusal will not be required.

**Webb 2/4/19; Lottenberg 2/4/19**

| Yes | Yes |

Dr. Wagner should have been recused for his direct financial relationships with VidaCord, CORD:USE, and Gamida Cell. However, he is in the minority of the panel and ASH is comfortable with how these conflicts were managed during the meeting through panel composition and disclosure.

**Alexander 9/28/20**

| Yes | Yes |

On 9/11/2020, Dr. Wagner confirmed all information in this form.

---

### Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
</table>

---

### Other Notes

Dr. Wagner is a pediatric hematologist/oncologist. In his clinical practice, he treats patients with SCD using bone marrow transplantation.
Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:

Add rows as needed for each equity interest.
### Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

- ☒ No
- ☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

- ☐ No
- ☒ Yes, as described below:

**Column 1** Name the company.

**Column 2** Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)
Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baxter</td>
<td>honorarium</td>
<td>Nov 2015</td>
<td>Ended before appointment.</td>
</tr>
<tr>
<td>Kiadis Pharma</td>
<td>consultant</td>
<td>Feb 2016</td>
<td>Ended before appointment.</td>
</tr>
</tbody>
</table>

**My Partner’s or Spouse’s Interests**
5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No
☐ Yes, as described below:
Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

Column 1 Name the company funding or supporting the research.

Column 2 Briefly describe the research project.

Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.
<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluebird bio, Inc</td>
<td>Gene therapy trials</td>
<td>PI</td>
<td>ongoing</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☐ No
☒ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.

Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.
Column 3  Indicate if your activity was paid or volunteered.

Column 4  Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ViaCord Processing Lab</td>
<td>Medical director</td>
<td>paid</td>
<td>ongoing</td>
<td>Not a conflict. ViaCord stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, ViaCord will be considered an affected company, and Dr. Walters’ role as a paid medical director will be considered a direct financial conflict requiring recusal.)</td>
</tr>
<tr>
<td>AllCells, Inc</td>
<td>Medical director</td>
<td>paid</td>
<td>ongoing</td>
<td>Not a conflict. AllCells stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific</td>
</tr>
</tbody>
</table>
Other

3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   ☒ No
   ☐ Yes
   If yes, please explain:

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   ☒ Yes
   ☐ No
   If yes, what were those views and where were they made?
   Peer-reviewed review articles in Curr Opin Heme and BBMT in the past 2 years in support of HCT for SCD as a therapeutic option that should be considered in children with a HLA-ID sib donor.

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
   ☐ No
☒ Yes, as described below:

Column 1 Name the entity funding the research.

Column 2 Describe the research project.

Column 3 Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

Column 4 Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI</td>
<td>BMT for adults with SCD</td>
<td>Co-PI</td>
<td>2020</td>
</tr>
<tr>
<td>CIRM</td>
<td>Genomic editing for SCD – pre-clinical</td>
<td>PI</td>
<td>2020</td>
</tr>
</tbody>
</table>

Institutional Relationships

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☒ Don’t know
☐ No
☐ Yes

If yes, please explain:

Career Advancement
7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution? I think it would be a neutral reaction that would not change the current level of support.

Involvement in Organizations With Relevant Policy Positions
8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☐ No
☒ Yes, as described below:

| Column 1 | Name the organization. |
| Column 2 | Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 | Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Policy Position</th>
<th>Your Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLBI</td>
<td>SCD advisory board</td>
<td>chair</td>
</tr>
</tbody>
</table>
Clinical Practice

9. Do you see patients clinically?

☐ No
☒ Yes

If yes, what is your primary specialty or subspecialty?

Pediatric hematology/oncology

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☐ No
☒ Yes

If yes, please explain: I treat patients with SCD by BMT.

Expected Interests

10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
## Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editas</td>
<td>Dr. Walters received direct payment for consulting.</td>
<td>1/14/19</td>
<td>Indirect conflict. Editas is in the preclinical phase of using gene editing for the treatment of SCD. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>AllCells, Inc</td>
<td>Dr. Walters received direct payment for consulting.</td>
<td>10/27/2020</td>
<td>Not a conflict. AllCells stores and sells cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation.</td>
</tr>
<tr>
<td>AllCells, Inc</td>
<td>Dr. Walters reports stock options in AllCells, Inc.</td>
<td>10/27/2020</td>
<td>COI. AllCells stores and sells cord blood stem cells for profit. This activity was reported after the</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Veevo/Ensoma</td>
<td>Dr. Walters received direct payment for consulting. Starting in January 2020.</td>
<td>10/27/2020</td>
<td>Indirect conflict. Veevo is developing in vivo gene therapies for potential use in sickle cell disease. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Editas Medicine</td>
<td>Dr. Walters received direct payment for consulting December 2018.</td>
<td>10/27/2020</td>
<td>Indirect conflict. Editas Medicine is developing ex vivo gene editing medicines for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
</tbody>
</table>
## Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Stem Cell Transplantation for Sickle Cell Disease</th>
</tr>
</thead>
</table>

### Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/3/2017; Pai 3/13/17; Webb 12/19/17; Alexander 1/10/18; Kunkle 1/31/18; Lottenberg 2/6/18</td>
<td>No</td>
<td>Yes</td>
<td>Dr. Walters has research that is funded by Bluebird Bio. The company is developing a disease-modifying therapy for SCD that will be competitive with transplantation. Funding for the research project goes to Dr. Walter’s institution, not to him directly. This indirect conflict will be managed through disclosure and panel composition. Recusal will not be required. Dr. Walters also has a paid role as the medical director of ViaCord and AllCell. Both companies store and sell cord blood stem cells for profit. These guidelines will provide recommendations about when to do stem cell transplantation in patients with SCD but will not address stem cell source, either as a specific recommendation or as an aspect of implementation. (If this changes, ViaCord and AllCell will be considered affected companies, and Dr. Walters’ paid role will be considered a direct financial conflict requiring recusal.)</td>
</tr>
<tr>
<td>Webb 1/16/19</td>
<td>No</td>
<td>Yes</td>
<td>New disclosures. See Part D. above. Dr. Walters reports receiving direct payment from Editas, which is developing a gene edited therapy for SCD. This company could be indirectly affected by these guidelines. These indirect conflicts will be managed through disclosure and panel composition. Recusal will not be required.</td>
</tr>
</tbody>
</table>
Dr. Walters should have been recused for his direct financial relationships with VidaCord and AllCell. However, he is in the minority of the panel and ASH is comfortable with how these conflicts were managed during the meeting through panel composition and disclosure.

On October 27, 2020, Dr. Walters confirmed all information in this form.

### Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other Notes

Dr. Walters treats patients with SCD using bone marrow transplantation, and as noted above, he is the medical director for two cord blood banks, ViaCord and AllCell. He has written peer-reviewed articles in support of HCT for SCD as a therapeutic option in children with a HLA-ID sibling donors. He has a leadership role on research on bone marrow transplant funded by the National Heart, Lung and Blood Institute and on genomic editing funded by the California Institute for Regenerative Medicine.
Part A. Direct Financial Interests in or Relationships With Companies

Employment
1. Are you currently or in the past 24 months have you been an employee of any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Add rows as needed for each employment relationship.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equity
2. Do you currently or in the past 24 months have you had equity in any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions? Equity includes stock, stock options, and other ownership interests but excludes diversified mutual fund shares.

☒ No
☐ Yes, as described below:
Add rows as needed for each equity interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patents, Royalties, and Other Intellectual Property

3. Do you currently or in the past 24 months have you owned patents for or received royalties from any intellectual property or product used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Add rows as needed for each patent or royalty interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Date Divested</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Personal Income or Other Direct Transfers of Value

4. Do you currently or in the past 24 months have you received any personal income or other direct transfers of value (e.g., honoraria, gifts, travel support, meeting registration, meals) from any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No

☐ Yes, as described below:

Column 1 Name the company.

Column 2 Describe the activity for which you received the income or other transfer of value, e.g., research, consultancy, speakers bureau involvement, service on an advisory committee or board, expert testimony.
Column 3  Indicate when the activity ended, if applicable. (If the activity has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each activity.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Partner’s or Spouse’s Interests
5. Currently or in the past 24 months has your partner or spouse had any of the interests or relationships described in questions 1-4?

☒ No

☐ Yes, as described below:

Add rows as needed for each interest.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part B. Indirect Financial Interests in or Relationships With Companies

Industry-Funded Institutional Research

1. Through your institution, do you currently or in the past 24 months have you been involved in research funded or supported (e.g., in kind support, such as provision of a study drug) by any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☑ No
☐ Yes, as described below:

| Column 1 | Name the company funding or supporting the research. |
| Column 2 | Briefly describe the research project. |
| Column 3 | Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe. |
| Column 4 | Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”) |

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paid and Volunteer Activities for Organizations Supported by Industry

2. Do you currently or in the past 24 months have you been involved in any volunteer or paid work for an organization that is wholly or partially funded by any for-profit company that develops, produces,
markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes, as described below:

Column 1 Name the organization. If known to you, describe any industry funding or support.

Column 2 Briefly describe your activity and role, e.g., employment, service on board of directors, other volunteer services.

Column 3 Indicate if your activity was paid or volunteered.

Column 4 Indicate when your involvement with the organization ended. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each organization.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description and role</th>
<th>Paid or Unpaid?</th>
<th>End Date</th>
<th>For ASH Internal Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other
3. Do you have other indirect interests in or relationships with any for-profit company that develops, produces, markets, or distributes drugs, devices, services, or therapies used to diagnose, treat, monitor, manage, or alleviate health conditions?

☒ No
☐ Yes

If yes, please explain:
Part C. Relevant Other Interests That Are Not Mainly Financial

You have been invited by ASH to participate in the development of clinical practice guidelines on the following topic(s):

ASH Guideline Panel on Sickle Cell Disease-Related Stem Cell Transplantation

The questions that follow are designed to elicit information about personal beliefs, intellectual positions or opinions, institutional relationships, and other interests that are not mainly financial and that may be relevant to guidelines on the above topic(s).

Personal Beliefs
1. Do you have strongly held beliefs related to the topic of these guidelines?
   ☒ No
   ☐ Yes
   If yes, please explain:

Previously Published Opinions
2. Have you ever authored, coauthored, or publicly provided an opinion related to the topic of these guidelines, e.g., a clinical practice guideline, textbook, review article, meeting poster or presentation, grand rounds talk, letter to the editor?
   ☒ No
   ☐ Yes
   If yes, what were those views and where were they made?

Non-Industry Supported Research
3. Currently or in the past 24 months, have you been involved in a leadership role in any research project not already reported under Part B, Question 1, relevant to the topic of these guidelines, e.g., a research project funded by a nonprofit or governmental organization?
☒ No

☐ Yes, as described below:

**Column 1** Name the entity funding the research.

**Column 2** Describe the research project.

**Column 3** Describe your role: (a) national or overall principal investigator, (b) member of a steering committee of a study that does not have a principal investigator, (c) site or local investigator. If other than these options, please describe.

**Column 4** Indicate when your involvement ended, if applicable. (If your involvement has not yet ended, indicate “current” or “ongoing.”)

Add rows as needed for each research project.

<table>
<thead>
<tr>
<th>Funder</th>
<th>Description of Research</th>
<th>My Role</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutional Relationships**

4. Could your salary be affected by recommendations on this topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:

5. Do you generate revenues for your institution or employer by clinical activity, teaching, speaking, consulting, testifying, writing, or otherwise sharing your knowledge or opinions about this guideline topic?

☐ Don’t know

☒ No

☐ Yes

If yes, please explain:
6. Could your institution benefit or be harmed by recommendations of guidelines on this topic?

☐ Don’t know
☒ No
☐ Yes

If yes, please explain:

Career Advancement

7. How would you characterize the support you would receive from your primary mentor, institution, or other entities if your work on this panel or authorship of these guidelines generated a strong reaction from peers outside your institution?

Involvement in Organizations With Relevant Policy Positions

8. Do you work for or are you a member of an organization with a stated position related to the topic of these guidelines, e.g., position statement, editorial, blog, amicus brief, or legislature or legal testimony?

☒ No
☐ Yes, as described below:

| Column 1 Name the organization. |
| Column 2 Describe or reference any policy position of the organization that is related to the topic of these guidelines. |
| Column 3 Describe your role at the organization, including your involvement in deciding, promoting, or implementing relevant positions. |

Add rows as needed for each organization.
Clinical Practice
9. Do you see patients clinically?

☒ No
☐ Yes

If yes, what is your primary specialty or subspecialty?

If yes, do you prescribe or otherwise recommend clinical interventions (e.g., screening or diagnostic tests, evaluations, treatments, procedures) that may be addressed by these guidelines?

☒ No
☐ Yes

If yes, please explain:

Expected Interests
10. Do you expect new financial or nonfinancial interests relevant to the topic of these guidelines not already declared in this form?

☒ No
☐ Yes

If yes, please describe:
## Part D. New Declarations (ASH Internal Use)

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Internal Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>Unpaid intern for Sickle Cell Community Consortium (SCCC) from March 2018-October 2018.</td>
<td>1/14/19</td>
<td>Not a conflict. The Consortium is a nonprofit organization and Ms. Woolford held an unpaid, non-leadership role.</td>
</tr>
<tr>
<td>Bluebird Bio</td>
<td>Direct payment for participation in clinical round tables.</td>
<td>10/13/2020</td>
<td>Indirect conflict. Bluebird Bio is developing a gene editing platform for use in SCD patients. Although gene therapy will not be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy is being developed as an alternative treatment to transplantation.</td>
</tr>
<tr>
<td>Novartis</td>
<td>Direct payment for speaking</td>
<td>10/13/2020</td>
<td>Indirect conflict. Novartis could be indirectly affected by this guideline: Novartis is developing a gene editing platform for treatment of SCD. Although gene therapy will be addressed in this guideline, the company could be indirectly affected by recommendations about transplantation because gene therapy</td>
</tr>
<tr>
<td>Company</td>
<td>Description</td>
<td>Disclosure Date</td>
<td>ASH Internal Notes</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>is being developed as an alternative treatment to transplantation.</td>
<td>10/13/2020</td>
<td>Agios is not an affected company.</td>
</tr>
<tr>
<td>Agios</td>
<td>Direct payment for advisory board participation.</td>
<td>10/13/2020</td>
<td>Agios is not an affected company.</td>
</tr>
</tbody>
</table>
# Part E. Summary (ASH Internal Use)

<table>
<thead>
<tr>
<th>Name of guideline panel(s)</th>
<th>ASH Guideline Panel on Sickle Cell Disease-Related Stem Cell Transplantation</th>
</tr>
</thead>
</table>

## Summary of ASH Judgments About Financial Conflicts

<table>
<thead>
<tr>
<th>Reviewer name and date</th>
<th>Direct Financial Conflicts?</th>
<th>Indirect Financial Conflicts?</th>
<th>Management Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webb 3/6/17, Pai 3/13/17</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Webb 1/14/19</td>
<td>No</td>
<td>No</td>
<td>New disclosure. See Part D. above.</td>
</tr>
<tr>
<td>Alexander 11/1/2020</td>
<td>No</td>
<td>Yes</td>
<td>New disclosures. See Part D. On 10/13/2020, Ms. Woolford confirmed all information in this form.</td>
</tr>
</tbody>
</table>

## Summary of Direct Financial Conflicts

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Disclosure Date</th>
<th>ASH Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Other Notes

Describe other disclosed interests or relationships that may be important to highlight to the guideline panel, guideline reviewers, and guideline users.